COMPETENCY MAPPING IN INFORMATION TECHNOLOGY SECTOR – AN EMPIRICAL STUDY

Thesis Submitted to the Kuvempu University for the award of Degree of

DOCTOR OF PHILOSOPHY
IN
COMMERCE

BY

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DEPARTMENT OF POST GRADUATE STUDIES AND RESEARCH IN COMMERCE, KUVEMPU UNIVERSITY, JNANA SAHYADRI, SHANKARAGHATTA-577451.

January - 2023

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DECLARATION

I hereby declare that the thesis entitled **"COMPETENCY MAPPING IN INFORMATION TECHNOLOGY SECTOR - AN EMPIRICAL STUDY"** is an authentic record of independent research work carried out by me under the guidance of **Dr. SHOBHARANI H,** Associate Professor and Research Supervisor, Department of PG Studies in Commerce, Kuvempu University, Post Graduate Centre, Kadur. I further declare that, this thesis or any part of it has not been submitted earlier to any other university/institute for the award of any degree, diploma, fellowship or other similar title.

Place: Kadur

Date: 16.01.2023

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CERTIFICATE

This is to certify that, the thesis entitled **"COMPETENCY MAPPING IN INFORMATION TECHNOLOGY SECTOR - AN EMPIRICAL STUDY"** submitted by **Mr. MITHOJI. S.** for the award of the Degree of Doctor of Philosophy in Commerce is an authentic work carried out by him under my guidance. I also certify that no part of this work has been presented for the award of any Degree or Diploma or other similar title to any other University/ Institute.

Place: Kadur

Date: 16.01.2023

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ACKNOWLEDGEMENT

It is my privilege to express a deep sense of gratitude to all those who have given their continuous encouragement, valuable suggestions and unstinted co-operation in the preparation of this thesis. I wish to acknowledge the help extended to me by these individuals and institutions.

At the outset, I want to thank the Kuvempu University and Department of P.G Studies and Research in Commerce for the opportunity given to me for pursuing Doctoral Work.

I express my deep sense of gratitude to my research guide **Dr. Shobharani H,** Associate Professor, Department of Post Graduate Studies and Research in Commerce, Post Graduate Centre, Kadur, Chikkamagalure district, under whose productive guidance and valuable suggestions, the present study has been completed. Her continues inspiration and support, perseverance and abundant knowledge what she embedded in me in the course of this research, is the force behind accomplishment of this research, for which I would be grateful throughout my life. Thank you, madam.

It is my duty to extend my gratitude to **Prof. S. Venkatesh,** Professor and Chairman, Post Graduate Department of Studies and Research in Commerce, Kuvempu University, Shankaraghatta for his support in completing my research work. I also like to extend my appreciation to all teaching and non-teaching staff of the Post Graduate Department of Studies and Research in Commerce, Kuvempu University, Shankaraghatta for their support.

I would like to convey my thanks to **Dr. L. B Banashankari,** Principal, Government First Grade College, Raibag. I also thank all teaching and non-teaching staff of Government First Grade college, Raibag for their kind support in completing this work.

It is my duty to extend heartfelt thanks to all the staff of the library, PG Centre Kadur and Kuvmepu University, Shankaraghatta in providing required materials and sources in the journey of my research work.

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LIST OF ABBREVIATIONS

Serial No.	Abbreviation	Expression Form
1	A	Agreed
2	BE	Batchelor of Engineering
3	BHEL	Bharat Heavy Electricals Ltd
4	BPO	Business Process Outsourcing
5	BPM	Business Process Management
6	CB	Compensation and Benefits
7	CEO	Chief Executive Officer
8	CM	Competency Mapping
9	CMQ	Common Metric Questionnaire
10	CSS	Cascading Style Sheets
11	DA	Disagreed
12	Df	Degree of Freedom
13	DOE	Department of Electronics
14	DPIIT	Department of Promotion of Industry And Internal Trade
15	EOU	Export Oriented Units
16	F	Frequency
17	FDI	Foreign Direct Investment
18	GDP	Gross Domestic Products
19	HCL	Hindustan Computers Limited
20	HMT	Hindustan Machine Tools
21	HR	Human Recourses
22	HRM	Human Resource Management
23	IBEF	India Brand Equity Foundation

24	**IISC**	Indian Institute of Science
25	**IPMA**	International Personnel Management Association
26	**IT**	Information Technology
27	**ITES**	Information Technology Enable Service
28	**ITI**	Industrial Training Institute
29	**KPO**	Knowledge Process Outsourcing
30	**KRA**	Key Result Area
31	**LE**	Large Extent
32	**MNC**	Multi National Corporation
33	**MOPSO**	Multi Objective Particle Swarm Optimization
34	**MOSAIC**	Multi-Purpose Occupational System Analysis Inventory
35	**MOU**	Memorandum of Understanding
36	**MSR**	Motivation, Satisfaction and Retention
37	**N**	Neutral
38	**N**	Number (Total)
39	**NO**	None
40	**NOCIL**	National Organic Chemical Industries
41	**PAQ**	Position Analysis Questionnaire
42	**PIQ**	Position Information Questionnaire
43	**PM**	Performance Management
44	**RS**	Recruitment &Selection
45	**SA**	Strongly Agreed
46	**SAP**	System Applications and Products in Data Sourcing
47	**SD**	Standard Deviation

48	SDA	Strongly Dis Agreed
49	SEZ	Special Economic Zone
50	SPSS	Statistical Package for The Social Sciences
51	STP	Software Technology Park
52	STPI	Software Technology Park of India
53	SWOT	Strength, Weakness, Opportunities and Threats
54	TCS	Tata Consultancy Services
55	TD	Training and Development
56	VLE	Very Large Extent
57	VLE	Very Low Extent
58	WPS	Work Profiling System
59	YOY	Year on Year

CONTENTS

CHAPTER-1

INTRODUCTION AND RESEARCH DESIGN

1.1 INTRODUCTION

Human resource management is one of the important management functions identified by successful organizations across the globe. Innovations and developments are being implemented day by day and disseminated to the subsidiary companies around the world. In this regard the competency mapping is one of the techniques adopted by the organizations now a days, further this technique is used as competitive advantage to compete in the market. The innovations are the order of the day as human resources has forever been duly concerned with getting the right person for the right job. It is traced that the multinational corporations have started their functioning through information technology sector, where the productivity is based on the human skills and knowledge. Hence, the employees working there must have required competencies. After 21st century the IT industry has been providing a drastic transformation to the developing countries like India in terms of export, employment and gross domestic product of the country.

In India this endeavor has necessitated several interventions and one of the most important of these has been competency-based HR. The effectiveness of an organization depends on its people particularly its leaders, which calls for closing the gap between the potential of the human resource of an organization and its delivered performance. This has led to significant interest in competency mapping and its subsequent use in performance management, training and development. Competency mapping and management are vital in the organizations which are operating in the service sector where human resources are the primary sources of value creation. In such firms, it is pivotal to be continually focused upon the impact of competency mapping and assessment on crucial aspects of organizations that determine the performance. Hence, it is not surprising to observe the tremendous amount of interest in realistically capturing successful leadership behavior and skills, and mapping them with greater precision to enable organizational learning and efficacy. Managers, particularly HR managers need to understand the real impact of competency mapping on performance, training and development and eventually on all the other HR initiatives. Competency mapping is a strategic HR framework for monitoring the performance and development of human resources in an organization.

It is often observed that the HR function can astutely use this paradigm to align the human resources to the super-ordinate objectives and the larger vision and mission of an organization. This has to be practiced with a strong emphasis on linking it with the tangible outcomes associated with employee performance. Competency mapping has been one of the most effective tools of human resources management, especially in the area of performance management, training and development. As work-based competencies have come to define job expectations and enable greater synthesis between jobs, roles and performance, competency mapping has become synonymous with organizational learning. The buzz around competencies has accentuated of late, drawing primarily from the context of the inevitableness of multiple skills and knowledge management where shared competencies and continuous development ensure organizational learning.

In a highly volatile business environment, it is often the mettle of the people of an organization, particularly of those who design its strategy and are responsible for its action planning, which defines its success. The success of a leader ultimately depends on how well he manages himself, his job and others. This requires that the entire gamut of competencies ranging from knowledge-level competencies to behavior-level competencies have to be mapped, developed and also successfully employed. The sureness of competency mapping impacting the strategic aspects of managerial scope is obvious. It definitely envelopes the entire gamut of HR activities and creates pre-determined impact which can ensure a highly fruitful efficacy-driven intervention. Evidently, the mandate for competency-based culture is a herculean challenge, but, if initiated the success is incidental since the value offered is phenomenally rewarding and evident to one and all. Many organizations all across the world have taken to doing the job 'the competency way' and if one is sure that performance is the only visible visage of organizational efficacy then competency driven paradigms could only foster greater precision in ascertaining both the employee and organization efficacy. If the challenge is to sustain competitive advantage, then competency-driven organizations have a better choice of surviving this juggernaut. The key to gain a competitive edge is the ability of the workforce in an organization to maximize the advantage of state-of-the-art technology, superior products, and steady source of capital to enter into the marketplace. A company's technological tools are only as useful as its employer's ability to employ them; they are perceived in terms of how effectively the benefits are communicated.

Competency mapping is one of the best ways of developing skills among employees. It is also helpful in identifying the right persons for the job through competencies of an individual in an organization and also for improving their skills. Every organization needs to understand that competency mapping is not a onetime consideration, it is not a reward, rather it is an essential tool for employee's skill development. Hence, it should be an ongoing exercise in the organizations.

1.2 INFORMATION TECHNOLOGY SECTOR IN INDIA

The Information Technology (IT) industry is an essential component of the technology-driven knowledge economy of the 21st century. In fact, globally India has been recognised as a knowledge economy due to its impressive IT industry. The IT industry mainly encompasses IT services, IT-enabled services (ITES), e-commerce (online business), Software and Hardware products. This industry is also instrumental in creating infrastructure to store, process and exchange information for important business operations and other organisations. The IT-based services and products have become indispensable for flourishing any business enterprise and achieving success. This industry has a conspicuous impact in improving the productivity of almost every other sector of the economy, it also has huge potential for further accelerating the growth and economic development. Information Technology not only contributed to the economic development of the country but it has also made governance more efficient and responsive. It has made access to government services and to get information easier and inexpensive. Information technology has also made management and delivery of government service (such as health services, consumer rights, etc.) more effective with enhancing transparency.

The growth of the IT industry in India is unprecedented across the economies of the world. All the sub-sectors of this industry (hardware products have relatively seen less progress) have made strides in revenue growth in the last two decades and fuelled the growth of the Indian economy. The rapid advancement within the IT industry and liberalisation policies such as reducing trade barriers and eliminating import duties on technology products by the Government of India are instrumental in the growth of this industry. Also, various other government initiatives like setting up Software Technology Parks (STP), Export Oriented Units (EOU), Special Economic Zones (SEZ) and Foreign Direct Investment (FDI) have helped this industry in achieving a dominant position in the world's IT industry.

The global sourcing market in India continues to grow at a higher pace compared to the IT-BPM (Business Process Management) industry. India is the leading in sourcing destination across the world, accounting for approximately 55% market share of the US$ 200-250 billion global services sourcing business in 2019-20. The IT industry accounted for 7.4% of India's GDP in 2022. According to STPI (Software Technology Park of India), software exports by the IT companies connected to it, stood at Rs. 1.20 lakh crore (US$ 16.29 billion) in the first quarter of FY22.

1.3 EVOLUTION OF INDIAN IT INDUSTRY

After independence till 1970, India did not have any guiding policy or framework for computer/software technology. However, the government had taken several initiatives for starting to design and production of computers in educational institutes during this period. In 1963, Bhabha Committee emphasized on the importance of electronics and computers for the development of India. On the recommendation of the Bhabha Committee, the Government of India established the department of electronic in 1970 for promoting the growth of electronics and computers in India. In 1972, the government formulated a new software scheme and allowed hardware import and export of software. This scheme is considered the first breakpoint in the history of the Indian IT industry as in 1974 Tata Consultancy Services (TCS) got its first foreign client Burroughs corporation from the United States.

For the next decade, though Indian companies viz. TCS, WIPRO, Infosys (1981) were exporting the software products but trade was not very encouraging. In 1978, IBM was forced to close its operations in India as the government had asked it to reduce its equity. However, in 1986 the government brought a liberalization policy for the IT industry which de-licensed hardware import and encouraged duty-free export. Further, due to liberalization in 1991 and opening of the Indian economy for foreign investment, intensified competition in the IT industry which resulted in standardization and productivity improvement. The IT industry has grown rapidly and earned large amounts of force exchange. The Information Technology Act of 2000, National Broadband Policy of 2004 and Special Economic Zone (SEZ) Act of 2005 gave a boost to the IT industry and resulted in an increase in the number of domestic and foreign software/IT companies in the country.

In the last decade, India has emerged as an IT hub for the software companies of the world and Indian software companies have taken prominent positions in the global IT sector. India has become the world's largest sourcing destination for the IT industry. Online retailing, cloud computing and e-commerce are all contributing to the speedy growth of the IT industry. The rate of growth in the IT sector for 2021-22 is approximately ten percent.

1.4 IT INDUSTRY BOOSTING INDIA'S GROWTH

Indian IT industry has grown rapidly with an exponential growth rate after the economic reform of 1991-92. Indian IT companies have set up thousands of centers within Indian and around 80 countries across the world. The majority of global corporations are sourcing IT-ITES from the Indian IT industry, it accounts for approximately 55 percent of the global service sourcing market (US$ 200-250 billion) in 2019-20. The market size (especially export) of the IT industry has grown manifold from approx. 67 billion US dollars in 2008-09 to 227 billion US dollars in 2021-22 (Graph 1). The revenue is further expected to grow in the coming years with an accelerating growth rate and expected to reach 350 billion US dollars by 2025.

The remarkable feature of India's IT industry is that along with its expansion in terms of market size it is also incrementally adding a significant share to India's gross domestic product (GDP) and consequently boosting the growth and development of the country. From a minuscule 0.4 percent in 1991-92, the IT industry contributed around 7.4 percent in 2021-22 to the total GDP of India (Graph 2). This share is expected to increase to ten percent by 2025.

India's digitally skilled pool has grown over the period and accounted for around 75 percent of global digital talent. India's four large IT companies (TCS, Infosys, Wipro, HCL Tech) have employed more than one million employees. New IT-based technologies such as telemedicine, remote monitoring, etc. are expanding and boosting the demand in the digital economy. The rollout of fifth-generation (5G) communication technology, growing adoption of Artificial Intelligence, Big Data analytics, Cloud Computing and Internet of Things (IoT) will further expand the size of the IT industry in India. As the size of India's digital economy is increasing, IT companies are establishing their Centre's in

tier II and tier III cities which will further enhance the growth and reduce the existing disparities.

1.5 THE STUDY OF MARKET SIZE

The IT & business service industry's revenue was estimated at ~US$ 6.96 billion in the first half of 2021, an increase of 6.4% YoY. The export revenue of the IT industry is estimated at US$ 150 billion in FY21. According to Gartner estimates, IT spending in India is estimated to reach US$ 93 billion in 2021 (7.3% YoY growth) and further increase to US$ 98.5 billion in 2022. The BPM sector in India currently employs >1.4 million people, while IT and BPM together have >4.5 million workers, as of FY21.

India's software services export (excluding exports through commercial presence) increased by 4% in FY21 compared with FY20 and are estimated at USD 133.7 billion during 2020-21. Indian software product industry is expected to reach US$ 100 billion by 2025. Indian companies are focusing to invest internationally to expand global footprint and enhance their global delivery centres. In line with this, in February 2021, Tata Consultancy Services announced to recruit ~1,500 technology employees across the UK over the next year. The development would build capabilities for TCS to deliver efficiently to the United Kingdom customers. As of FY21, the IT industry employed 4.5 million people. The data annotation market in India stood at ~ US$ 250 million in FY20, of which the US market contributed ~ 60% to the overall value. The market is expected to reach ~ US$ 7 billion by 2030 due to accelerated domestic demand for AI. Henceforth the market share of the IT sector in India in US$ in billions over the years are presented in the following figure.

Figure: 1.1 Market Share of IT Industry in India
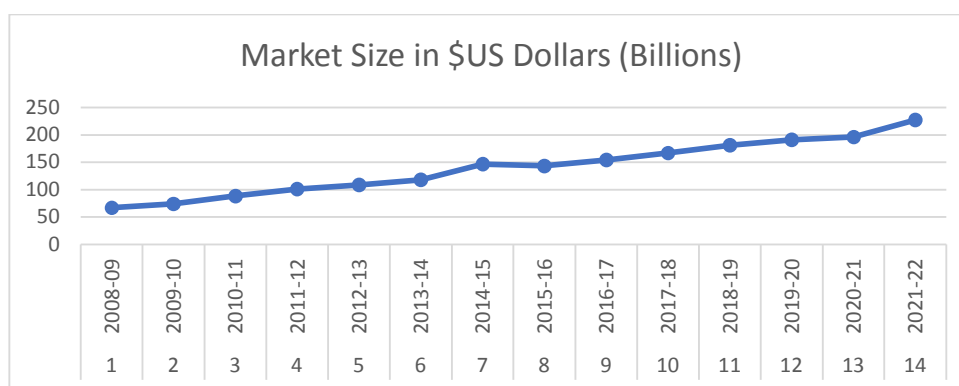
Source: IBEF Report, Ministry of Commerce and Industry, Govt of India.

The above figure 1.1 indicates that, in the financial year 2008-09 the market size or market share of IT industry in India was $66.87 billions of US dollars, where as in the financial year 2009-10 it was increased to $74.17 billions of US dollars, in the financial year 2010-11 it was raised to $88.45 billions of US dollars, in the year 2011-12 it was jumped to $100.87 billions of US dollars, in the financial year 2012-13 it was found that $108.51 billion of US dollars, in 2013-14 it was raised to $118.05 billion of US dollars, in the year 2014-15 it was uplifted to $146.4 billion of US dollars, in the year 2015-16 it was decreased to $143 billion of US dollars, in the financial year 2016-17 it was uplifted to $154 billion of US dollars, in the financial year 2017-18 it was step up to $167 billion of US dollars, in the year 2018-19 it was raised to $181 billion of US dollars, in the financial year 2019-20 it was enhanced to $191 billion of US dollars, in the financial year 2020-21 it was identified that the market size had reached to $196 billion of US dollars and in the financial year 2021-22 it was witnessed to raise $227 billion of US dollars.

Figure: 1.2 Contribution to GDP by IT Industry in India
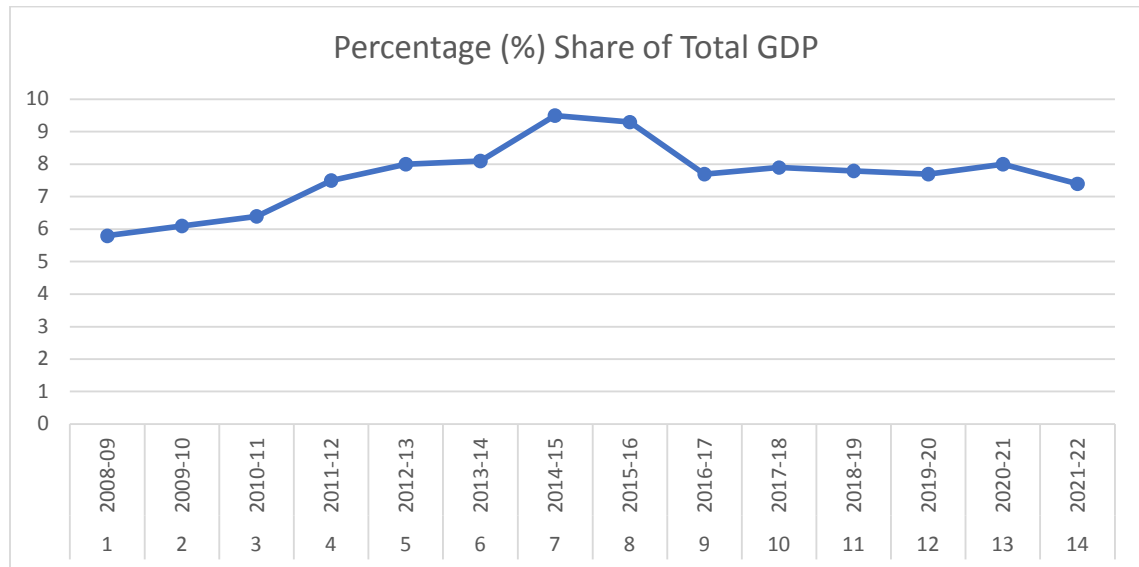
Source: IBEF Report, Ministry of Commerce and Industry, Govt of India.

The above figure 1.2 indicates that, in the financial year 2008-09 the contribution to GDP by information technology industry in India was 5.8%, where as in the financial year 2009-10 it was increased by 6.1%, in the financial year 2010-11 it was raised by 6.4%, in the financial year 2011-12 it was jumped to 7.5%, in the financial year 2012-13 the GDP was found to be 8.0%, in the financial year 2013-14 it was raised by 8.1%, in the year 2014-15 it was uplifted to 9.5%, in the financial year 2015-16 it was decreased by 9.3%, in the financial year 2016-17 it was down lifted to 7.7%, in the financial year 2017-18 it was step

up to 7.9%, in the year 2018-19 it was decreased to 7.8%, in the financial year 2019-20 it was step down to 7.7%, in the financial year 2020-21 it was identified that the GDP had reached to 8.0% and in the financial year 2021-22 it was step down to 7.4%.

1.6 INVESTMENTS/ DEVELOPMENTS

Indian IT's core competencies and strengths have attracted significant investment from major countries. The computer software and hardware sector in India attracted cumulative foreign direct investment (FDI) inflows worth US$ 74.12 billion between April 2000 and June 2021. The sector ranked 2nd in FDI inflows as per the data released by Department for Promotion of Industry and Internal Trade (DPIIT). Japanese investments in the Indian IT sector grew 4X between 2016 and 2020. Investments stood at US$ 9.2 billion in the review period.

Leading Indian IT firms like Infosys, Wipro, TCS and Tech Mahindra are diversifying their offerings and showcasing leading ideas in blockchain and artificial intelligence to clients using innovation hubs and research and development centres to create differentiated offerings.

Some of the major developments in the Indian IT sector are as follows:

- In November 2021, Wipro partnered with TEOCO to build solutions for communication service providers to improve network automation, efficiency, flexibility and reliability.
- In August 2021, Tata Consultancy Services was adjudged a leader in the Nelson Hall NEAT for CX Services in Banking, Financial Services and Insurance.
- In August 2021, SAP India and Microsoft announced the introduction of Tech Saksham, a collaborative skilling initiative aimed at enabling young women (from underprivileged regions) to pursue careers in technology. 62,000 women students will be trained in artificial intelligence, cloud computing, web design and digital marketing as a result of this collaboration.
- In August 2021, STARTEK, a business process management company, announced a plan to increase its minority stake in CSS Corp to reach a wider market. It also announced a plan to recruit >2,000 employees in India, in FY22.

- In July 2021, Wipro announced plans to invest US$ 1 billion over the next three years to expand its cloud technology capabilities through acquisitions and collaborations.

- In July 2021, Infosys announced that it has set up an Automotive Digital Technology and Innovation Centre in Stuttgart, Germany. Automotive IT infrastructure professionals stationed in Germany will transfer from Daimler AG to the new Digital Technology and Innovation Centre as part of Infosys' relationship with Daimler.

- In July 2021, TCS expanded its strategic partnership with Royal London, the largest mutual life insurance, pensions and investment company in the UK, to help the latter transform its pension platform estate and deliver market-leading services to members and customers.

- In July 2021, Tata Technologies partnered with Stratasys, a 3D printing technology company, to provide advanced additive manufacturing technologies to the Indian manufacturing ecosystem.

- In July 2021, Tech Mahindra Foundation and Wipro GE Healthcare have joined forced to offer skilling and upskilling courses to students and healthcare technicians.

- In July 2021, HCL announced a multi-year agreement with Fiskars Group, consisting of a family of lifestyle brands including Fiskars, Gerber, Iittala, Royal Copenhagen, Waterford and Wedgwood for digital transformation.

- In July 2021, TCS launched Jile 5.0, a key release of its Enterprise Agile, on-the-cloud services, planning and delivery tool that enables enterprises to meet the large-scale development needs of multiple distributed teams.

1.7 GOVERNMENT INITIATIVES

Some of the major initiatives taken by the Government to promote IT sector in India are as follows:

- In November 2021, the government launched Internet Exchange in Uttarakhand to enhance the quality of internet services in the state.

- The Karnataka government has signed three MOUs worth US$ 13.4 million (Rs. 100.52 crore) to help the state's emerging technology sector.

- In August 2021, the Union Minister of State for Electronics and Information Technology, Mr. Rajeev Chandrasekhar, announced that the IT export target is set at US$ 400 billion for March 2022. In addition, the central government plans to focus in areas, such as cybersecurity, hyper-scale computing, artificial intelligence and blockchain.
- In September 2021, the Indian government announced a plan to build a cyber lab for the 'Online Capacity Building Programme on Crime Investigation, Cyber Law and Digital Forensics' to strengthen cyber security capabilities.
- In September 2021, the Ministry of Electronics and Information Technology (MeitY) organised a workshop under the theme of 'Connecting all Indians', to promote public and private stakeholders' interest in the country and expand internet access to remote areas.
- In September 2021, the Indian government launched the Meghalaya Enterprise Architecture Project (MeghEA), to boost service delivery and governance in the state by leveraging digital technologies, to make Meghalaya a high-income state by 2030.
- In September 2021, the Indian government launched Phase II of Visvesvaraya PhD Scheme to encourage research in 42 emerging technologies in Information Technology (IT), Electronics System Design & Manufacturing and Information Technology Enabled Services (ITES).
- In September 2021, the Indian government inaugurated five National Institute of Electronics & Information Technology Centres, in three North Eastern states to boost availability of training centres and employment opportunities.
- In August 2021, the India Internet Governance Forum– 2021 was launched at Electronics Niketan in New Delhi by the National Internet Exchange of India (NIXI), the Ministry of Electronics and Information Technology and the Chairman of the Coordination Committee of the IIGF-2021. The event will take place over three days beginning October 20, 2021. The meeting's topic this year is Inclusive Internet for Digital India.
- On July 2, 2021, the Ministry of Heavy Industries and Public Enterprises launched six technology innovation platforms to develop technologies for globally competitive manufacturing in India. The six technology platforms have been developed by IIT Madras, Central Manufacturing Technology Institute,

International Centre for Automotive Technology, Automotive Research Association of India, BHEL and HMT in association with IISc Bangalore.

- In Budget 2021, the government has allocated Rs. 53,108 crore (US$ 7.31 billion) to the IT and telecom sector.
- Department of Telecom, Government of India and Ministry of Communications, Government of Japan signed a MoU to enhance cooperation in areas of 5G technologies, telecom security and submarine optical fibre cable system.

1.8 COMPETENCY MAPPING IN IT SECTOR

Indian IT industry has gained significant importance in Indian economy and its role in employment generation has been stellar. The success of Indian IT industry in terms of delivery and business models has been internationally appreciated. The main strength behind this success has been the intrinsic quality of the software development teams at work in the Indian IT firms. The team orientation, delivery approach, processes and customer focus of the Indian IT firms are regarded to be the crucial elements for the success of the Indian IT firms. However, the Industry is not free from drawbacks. Following are the most prominent among the various problems faced by the management of IT Industry:

1. Many IT companies at present do not have full knowledge of Competency Mapping.
2. Organizations are facing complications in finding suitable skilled workers who can help their organization build and sustain competitive advantage.
3. In today's intensively competitive and globalized market place, building and maintaining committed and competent workforce has become a herculean task.
4. There is a lack of well-established systems by which skills and distinctive planner, risk-taker, entrepreneur?

1.9 OPERATIONAL DEFINITIONS

- ❖ **Competency Mapping:** Competency mapping is a way of assessing the strengths and weaknesses of a worker or organization.
- ❖ **Information Technology Sector:** IT industry operates in domains like Software Development, Business Process Outsourcing, Knowledge Process Outsourcing, Hardware, Animation, Web development, etc. It is a knowledge-based sector. It is

a highly labour-intensive industry. Hence, employees are the key to the productivity of IT based organizations.

- ❖ **Business Process Outsourcing (BPO):** A BPO service provider usually administers and manages a particular business process for another company. BPOs either use new technology or apply an existing technology in a new way to improve a particular business process.

- ❖ **Knowledge Process Outsourcing (KPO):** Knowledge process outsourcing refers to performing high end knowledge or judgment services efficiency by delegating non-core activities to third-party service providers.

- ❖ **Organisational Culture:** An organization's culture defines the proper way to behave within the organization. This culture consists of shared beliefs and values established by leaders and then communicated and reinforced through various methods, ultimately shaping employee perceptions, behaviours and understanding.

- ❖ **Managerial Skill:** These skills are the knowledge and ability of the individuals in a managerial position to fulfil some specific management activities or tasks.

- ❖ **Technical Skill:** This is an employee's ability to use tools, procedures, or techniques in his/her specialized area.

- ❖ **Behavioural Skill:** These skills are one of the key factors used to assess one's performance and attitude. These skills are often termed as good character, friendliness, maturity, and common sense.

- ❖ **Conceptual Skill:** A conceptual skills are employee's ability to work with ideas and concepts as to understand the complex scenarios and identify the solution.

1.10 LITERATURE REVIEW

Literature review has been done which includes thesis, books and articles published by various authors in the field of competency mapping, further the available literature has been divided into three parts as competency, competency mapping and competency mapping in information technology sector. The thorough literature review has shown in the second chapter.

1.11 STATEMENT OF THE PROBLEM

The contribution of service sectors to the development of countries economy is immense, but the productivity and development of the sector is dependent on the skill set of the people working over there. The Competency is skills, knowledge, talent, potentiality and many more for an employee and organization. It is essential that every individual must have some skills among them which can meet the employer needs. Different types of competencies required by the employees to meet the requirement of both the organization and assigned responsibilities. In this regard the IT companies across the globe are implemented the competency-based HR practices to achieve the competitive edge, Indian organizations also have adopted these competency-based models to their HR functions, the same is identified by many studies. Even though the HR functions are upgraded in order to bring changes in the skill sets of the employees to meet the changing expectations of the clients, the challenges are still faced by the organization's implementation of these competency-based practices. If they have successfully implemented, for only specific reasons another part of the HR requirements cannot be met. In this regard the IT industry are seeking the best of competent employees in the organization who can create differences for them in value generation for the company. Today's workforce is going through continuous changes in the market which keeps the competencies growth and competencies evaluation a must for them. In this regard understanding various sources of those competencies become significant and their role in influencing the work culture of organization requires further research. As inability to understand the sources of competencies and work culture will only force on the demand side of the employee's but concentration on supply side will be completely missing. The competent workforce will strive to create professional values and will call in modification of behavior and attitudinal changes among the prospective, potential and existing employees which will have huge bearing in extracting best of performances from them.

1.12 NEED AND SIGNIFICANCE OF THE STUDY

Competency is a set of skills and knowledge which required to excel at any job. Especially in service sectors like IT and others it is very important to the employees to meet the requirement of both internal and external stakeholders. Therefore, in the present era, the organizations are in need of competency mapping and they have implemented it in all the functions of HRM. For instance, competency mapping is one of the techniques used by

the IT companies to get the competitive advantage. Therefore, the present study is important to study the models adopted by the IT companies in three different segments, meanwhile it is essential to study the competency mapping practices adopted by the IT companies in the study area.

1.13 RESEARCH QUESTIONS

The specific research questions have been recognized and studied are as follows:

1. What type of competencies considered as important to IT sector?
2. Is it the Competency mapping practices are different in IT, BPO and KPO sector?
3. Is the competency mapping have implemented in their different functions of HRM?
4. What are the steps followed by the organizations to develop competencies among their employees in all the three levels?
5. Is there any impact of competency mapping on Organization Culture?

1.14 RESEARCH OBJECTIVES

In order to fill the gap which is discussed based on the literature review the following objective have been set to study the Competency Mapping in Information Technology Sector.

The specific objectives are as follows:

- To study the competency requirement among IT professionals.
- To study the competency models adopted by the IT companies.
- To study the implementation of competency mapping in IT sector.
- To analyze the competency mapping practices at different levels of management in IT companies.
- To examine the value addition through competency mapping for both organization and employees at different level.
- To analyze the impact of competency mapping on organizational culture.

1.15 RESEARCH HYPOTHESIS

The following primary hypothesis have been formulated for testing in this study**:**

1.15.1 (Top and Middle level Employee)

1. H_1: There is a significant impact of technical competencies of top and middle level employees on organization culture.
2. H_2: There is a significant impact of managerial competencies of top and middle level employees on organization culture.
3. H_3: There is a significant impact of behavioral competencies of top and middle level employees on organization culture.
4. H_4: There is a significant impact of conceptual competencies of top and middle level employees on organization culture.
5. H_5: The competencies required by the top and middle level employees at three different strata of IT sector is different.

1.15.2 (Low-Level Employee)

6. H_6: There is a significant impact of technical competencies of low-level employees on organization culture.
7. H_7: There is a significant impact of job-oriented competencies of low-level employees on organization culture.
8. H_8: There is a significant impact of communication skills of low-level employees on organization culture.
9. H_9: There is a significant impact of team work of low-level employees on organization culture.
10. H_{10}: There is a significant impact of personal quality of low-level employees on organization culture.
11. H_{11}: The competency mapping practices at three different segments of IT sector is different.
12. H_{12}: There is a significant relationship between value addition through competency mapping by the employees and organization.

1.16 PILOT STUDY AND RELIABILITY AND VALIDITY ANALYSIS

Before finalizing the questionnaire, an original interview schedule was administered to 100 respondents and a preliminary study was conducted to get a depth knowledge about the present topic and study. Personally visited to the IT, BPO and KPO companies and discussed with the top middle and low-level employees. Moreover, the questionnaires were given to the employees for the response and their suggestions are considered to the finalize the questionnaire. The purpose of the pilot study is to test the adequacy of the items in the questionnaire and to confirm the feasibility of the study. The result of the pilot study questionnaire that was administered on the sample and the feedback from the respondents was incorporated in the final questionnaire. To check the feasibility of the data, feasibility analysis has been made for two sets of data collected for analysis. Cronbach's Alpha technique has been used to check the feasibility of the data, and presented in the given below table. Further the table shows that the values in both the tables are more than 0.5, hence, it is proved that the data is reliable for the analysis.

Table No: 1.1: Reliability Test Reset of Top and Middle Level Managers and Low-Level Employees

Reliability Statistics		
	Cronbach's Alpha	**Number of Items**
Top and Middle Level Managers	0.844	168
Low-Level Employees	0.832	169

Source: Compiled by the Researcher.

1.17 RESEARCH METHODOLOGY

The study on "**Competency mapping in informational technology sector**" is an empirical study. The present study is, descriptive and analytical in nature and is based on both quantitative and qualitative methodologies to investigate among different models conjectured. The study was conducted to analyze the research objectives and to frame the hypothesis. To have a scientific and significant outcome from the study and to draw a proper conclusion, the following research design were designed and followed in entire study.

> ➤ **Sources of Data collection**

For the study purpose, both the qualitative and quantitative data were used and analyzed by different statistical tools. The qualitative and quantitative data were gathered from both primary and secondary data source.

❖ **Primary Data:**

Primary data are collected through the interview schedules, interaction and observations. A self-structured Two set of questionnaires were prepared for the study which are given in (Annexure-I), one is for Top and Middle level managers, and the other is for Low level employees, who are working in various IT services, BPO and KPO companies in the study area. For the purpose of analysis, the opinions provided by the respondents are considered.

❖ **Secondary Data:**

Both qualitative and quantitative data collected from secondary data source for defining concept of competency, competency mapping and competency mapping in information technology sector in order to design conceptual framework on various issues and challenges to the said topic. The research questions and research gap is identified through review of previous studies. The secondary data is collected through published sources like Books, Journals and also Company Websites and other e-sources.

> ➤ **Sampling Design and Sampling Technique**

The sampling procedure followed in the present research study is that of Stratified simple random sampling. The study area (IT sector) is divided into three strata like IT Services, BPO and KPO, and then the employees are selected randomly to collect the opinion. Moreover, the employees include Top, Middle and Low levels.

> ➤ **Sample Size**

For the study, IT sector companies are selected randomly based on their nature of work, i.e., IT services, BPO and KPO. Further the companies are selected from the major cities, where the IT sector companies are doing their operations. Further the exact sample size is determined by using the following formula. For this study, confidence level is set as 95 % (Krejcie & Morgan 1970: Gill et al., 2010) with a 5 % level of precision or maximum allowable error margin(e). At 95% confidence level, Z=1.96 (From Normal distribution

table). We assumed the sample proportion to be 0.5 (p). Hence, the below formula is used to determine sample size. The detailed sample size is expressed in the below table, followed by detailed description.

- **Determination of Sample Size** $N = \frac{Z^2 * p * q}{E^2} \rightarrow N = \frac{1.96^2 * 0.5 * 0.5}{0.05^2} = 384.16$

In the above calculation, the calculated sample size is 384.16, and it is not feasible to cover the entire study area, hence, the sample size is taken separately for three strata i.e., IT, BPO and KPO. The structured competency mapping questionnaire developed by the researcher was sent to all the managerial employees and low-level employees of the IT, BPO and KPO companies, which constituted to around 1200 questionnaires. Out of which the researcher received 930 questionnaires and among them only 900 were properly filled and found usable for the competency mapping analysis and the number of sample size was also found sufficient for the study. Since stratified simple random sampling is used for the collection of data, equal opportunity is given to all the three strata, and the same is explained in the table given below.

Table No: 1.2: Distribution of Sample Size

Sl. No	Strata	Top and Middle Level Managers	Low Level
1	IT Services	100	200
2	BPO	100	200
3	KPO	100	200
Total		**300**	**600**

Source: Compiled by the Researcher

- **Analytical Techniques**

MS excel and SPSS 21 is used for the purpose of data analysis.

- **Descriptive Analysis**

Here simple statistical tools like percentages, mean and standard deviations are used to express the study findings.

➤ **Hypothesis Testing**

For the inferential analysis, the present study adopted suitable techniques like chi-square test, one-way ANNOVA and co-relation. t-test and rank correlation-t-test and, to test the set hypothesis.

1.18 SCOPE OF THE STUDY

This research intends to study, analyze and understand the requirement of competencies in the IT sector companies of the state of Karnataka. For the study, the geographic scope is confined to the major cities like Bangalore, Mysore, Hubli, Dharwad, Shivamogga and Mangalore, where majority of IT companies are located. The conceptual scope of the study is confined to the competency mapping practices by the IT sector companies, of the study area and also the importance of competency mapping in different HR functions. Further the study is limited to the opinion provided by the employees at different management levels. The different management levels are grouped into two, one is Top and Middle Level (includes software developers/ engineers/ senior managers/ supervisor/ team leaders/ office managers etc.) and the other is Low-level employees (analyst/backend office staffs etc.). Primary and secondary data for the present study is confined for the year 2014-2021 and collected during the year 2020-21.

1.19 LIMITATIONS OF THE STUDY

The study is limited to the major cities like Bangalore, Mysore, Hubli, Dharwad, Shivamogga and Mangalore, where the IT sector companies in three different segments like IT services, BPO and KPO are located. And the Stratified simple random sampling is used to select the respondents. Due to their busy work schedule the employees are not in a position to answer the questions asked. Other limitations are discussed as below

- Lack of awareness about the policies and practices of competency mapping used by the organizations.
- Due to the COVID-19 pandemic the data collection was quite difficult.
- Unwillingness of Top and middle level employees at management level, about the policies and practices of the organizations.
- The selected sample size in order to collect the primary data for the study is quite small. Hence, the suggestions and conclusions cannot be generalized to other organizations.

1.20 CHAPTER SCHEME OF THE STUDY

The Present study is divided into six chapters as given below:

Chapter-1-   Introduction and Research Design.

Chapter-2-   Review of Literature.

Chapter-3-   Competency Mapping-A Conceptual Analysis.

Chapter-4-   Competency Mapping Practices in IT Sector- An Analysis of Managerial Perspective.

Chapter-5-   Competency Mapping Practices in IT Sector- An Analysis of Employees Perspective.

Chapter-6-   Summary of Major Findings, Suggestions and Conclusion.

1.21 CHAPTER SUMMARY

The above chapter throws a light on two parts, first part of the chapter focuses on introduction about the information technology in India, evolution of Indian IT industry, the study of market size, IT industry boosting India's growth, investments/developments, government initiatives, competency mapping in IT sector. The second part depicts the research design by focusing on problem statement, objectives, hypothesis, research methodology, the model framework of the study and limitation of the study.

CHAPTER-2
LITERATURE REVIEW

2.1 INTRODUCTION

In this chapter research design framed for the study is shown clearly. First and foremost, literature review has been done from the thesis, books and articles published by various authors in the field of Competency mapping. Further the available literature was divided into three parts, 1) competency, 2) competency mapping and 3) competency mapping in information technology sector. Moreover, in this chapter the research design like statement of the problem, need and significance of the study, research questions, objectives of the study, Scope, methodology, sample size, statistical tools used for the study, limitations and chapter scheme are explained in detail.

2.2 REVIEW ON COMPETENCY

Spencer and Spencer (1993), the study found that, the competency as an "underlying characteristic of an individual that is related to criterion referenced effective and/or superior performance in a job or situation". They divided competencies into two groups viz threshold and differentiating competencies. Threshold competencies are "those essential characteristics that everyone must acquire to be minimally effective, but that does not difference superior performers from average performers". Differencing competencies are "those factors that distinguish superior from average perform.

Garry Holmes & Nick Hooper (2000), the study reveals that, the core competency is one of a range of concepts that deal with the idea of essential skills to support personal development, employability, and socialization. The research applied the management concept of core competence to post-compulsory education.

Maria T. & Afonso C. (2002), the study reveals that**,** the consequences of processes of formation of product chains and networks on the development of competencies at the firm level. The study was carried out for Brazil Plastic industry and results indicated that a very strong relationship exists between the competencies that are mastered by any given firm and its positioning in the various productive chains or networks.

Jennifer & et. al., (2006), the study reveals that, the competencies required for a project manager to be effective in the workplace. Delphi technique was used to identify what competencies do experienced project management professionals believe are necessary for an effective project manager. The authors organized 117 success factors into nine categories, eight of which included competencies that could be addressed effectively in an educational and training program. Problem-solving expertise, leadership skills, context knowledge, communication skills were identified as most important and required competencies for the project managers.

Cernusca and Dima (2007), the study reveals that, the conceptual framework of competency and how competency is linked to performance and one's career development. It is also looked into some models, methods of competency mapping and appraisal tools and techniques for performance management. An organization might possess utmost capable personnel resources, but they might not work on the position that suits them. This is where competency mapping and the appraisal tools come to help the human resource (HR) experts choose who should work on what position.

Vichita Vathanophas and Jintawee Thai-ngam (2007), the study reveals that, there were 23 competencies identified to perform the job effectively. The objective behind the study was to recognize the required competencies for the job and to develop a competency model for successful job performance. It is also found that, in the current era the importance of competency as primary information to recommend nine competencies in a competency model. The researcher considered nine competencies form the identified 23 competencies for developing job competency model.

Talbot & et. al., (2007), argued that competencies are a useful tool to assist the process of curriculum development, selection of assessment items, and ongoing quality assurance for health promotion education. The authors provided a case study that applied the competencies in curriculum development, assessment selection and quality assurance in an Australian University. Competencies set performance expectations for professionals working in the field

Divnie Kwaku & et. al., (2008), the study reveals that, the identification and development of appropriate competency-based measures was widely seen as the only viable means for validating and engendering managerial best practices. The research represented a proactive

effort to identify competency-based measures for Project Managers in construction industry within the context of developing country. The author highlighted that task competencies usually vary between different job descriptions in the same organization whereas contextual competencies are not job specific but usually common to many jobs. Task competencies would normally 50% of the managerial performance domain and contextual competencies would normally explain 30%. The remaining 20% is unexplained. Task competencies would normally be best predicted by individual differences in cognitive ability, knowledge, job Literature Review 45 proficiency and experience while contextual competencies would be best predicted by individual differences in job dedication and interpersonal facilitation.

Monica & et. al., (2008), the study found that, the competencies are emerging as a new learning paradigm, where approaches centered on the learner are increasingly important. The process was carried out for the identification of its own generic competencies map explaining its connections between learning outcomes, levels, descriptors, credits, methodology, learning activities and assessment.

Naval Lawande and Shubhangi Bhosale, (2011), The study reveals that, Self-Help Group members involved in honey enterprises. The motive of the study was to find whether there exists a correlation between technical and behavioral competencies for honey enterprises and to evaluate the most critical censorious and technical competency for the honey enterprises. The result drawn from the survey disclosed that there is a correlation between technical and behavioral competencies and the most critical technical competencies for of the organization is problem solving. From the oral conversation held with the SHG members, it is identified that the most critical behavioral competency is teamwork

Hani Abdulhafedh Thabit Yahya and Khaled Abdelhay Elsayed (2012), the study found that, the growth and development of small and medium enterprises were the huge effect by motivating the managers to grow managerial capabilities. The study used primary and secondary data. It is also found that, the SMEs required to identify the effect of managerial capability factors.

Shaw-Chiang Wong (2020), the study found that, the origins of competency and document various definitions and concepts of competency offered by different

academicians. The author used secondary data for the present study. In addition, the author focused to shed light on the processes, guidelines, and techniques for developing competencies hardheaded for a particular job or profession as well as the significance of competency-based assessment in organizations for today's HRM practices.

Khalil M. Dirani & et. al., (2020), the study reveals that, the objective of this study is to investigate the character of domestic and global leaders and operation to COVID-19 and to consider the new position(s) of Human Resource Development (HRD) based totally on the ramifications of pandemics in trendy, and COVID-19 specifically. The authors used secondary data for the study. In this manuscript, the authors offered several issues, primarily based on the literature and case studies from international and home contexts, that they see as critical competencies for leadership practices in reaction to a worldwide disaster. Authors explored leadership abilities required in the time of crises, observed by exploring cases of great practices of leadership in exceptional contexts, followed by using reflections on new roles for HRD researchers and practitioners put up a global crisis

Vidyut Rajhans & et. al., (2021), the study reveals that, Competency-based education and evaluation are globally trending, also welcomed by recently announced National education policy 2020, India. Medical Programs are quickly transforming to produce competent health professionals, to reassure public health requisites. This paper narrates Delphi study with a participatory approach, to come about a competency matrix required for training of eye care professionals. The author used secondary data for the study, the study highlighted that, in defining two competency clusters viz, Refraction with 10 units and 43 elements and Dispensing optics with 8 units and 54 elements. Knowledge, skills and attitude components of each of competency elements were recognized and mapped with applied optics curriculum in the optometry program.

Justin M. Nash & et. al., (2012), the study found that, the trainees aspiring to enter specialty areas of practice in professional psychology need to acquire both core competencies in professional psychology and focused on advanced levels of competencies associated with their area of specialty practice. It indicated that standards of competence are the foundation of credibility for any profession, including those in health care, education, legal and governmental service. The authors explained three major types of competencies including foundational competencies, functional competencies and

professional competencies with the help of competency cube model developed by E. Rodolfa & et. al.

Nadine J. Kaslow & et. al., (2012), the study reveals that, the need for competencies required for transformational leadership. The research was carried out to develop competency-based supervision in the field of professional psychology education and training. It addressed specific leadership competencies that facilitate change, with attention paid to the supervisory process. Various strategies were offered for implementing an approach to competency based clinical supervision.

Kevin Fuchs (2022), the study found that, Competencies get ready people to face the world, whether they end up working in something directly associated to their education or changing careers because there is a high expectation that they will change vocation at some point in their professional life. Competencies cover more common skills and develop the person for the contemporary world with all its high demands and requisites. The author used secondary data for the study. It is found that a competence-based model will be the future of all education, it is a better option at the moment. It strives to develop trendy abilities and responds to the needs of an increasing number of speedy-paced and changing global, so it higher serves college students and better mastering establishments. It may additionally higher help society, providing more human beings the hazard to increase abilities like verbal exchange, critical questioning, and past that can be implemented beyond an unmarried place of job. They can assist human beings make a alternate of their relationships, groups, and their projects as nicely.

2.3 REVIEW ON COMPETENCY MAPPING

Robert Zaugg & Norbert Thom (2002), The study reveals that organizational success can be achieved only through the establishment of implicit competencies in human resource management, organizational development and knowledge management. Competencies help to promote a configurationally model of change and further result in the excellence of a company. If implicit competencies are successfully developed into success potentials, and in addition to core competencies, then competitive advantage can be attained. Authors identified that there is a considerable need for organizational generalist who have a broad knowledge of organizational work. It therefore seemed reasonable to speak of a need for organizational competency on all levels a company, for

all categories of employees. Implicit competencies do not generate themselves; rather, they must be constantly developed and converted into competitive advantage.

Tobias Ley & Albert D. (2003), The study found that a formalization for employee competencies which was based on a psychological framework separating the overt behavioral level from the underlying competency level. On the competency level, employees draw on action potentials which in a given situation produce performance outcome on the behavioral level. The Skills Management approach was suggested to ensure that employee competencies are managed in line with the future needs of an organization. In the process of Skills Management, required individual competencies are defined in terms of required skills and knowledge, management skills and social and personal skills which were derived from job requirements and were influenced by the core competencies. As a result, a number of job profiles, sometimes also called competency models are obtained.

Vaishali DKK & Mohit Kumar (2004), The study reveals that**,** to develop competencies that are organization specific and link it with vision, mission and climate of organization. The authors developed a scientific competency evaluation tool to measure eighteen behavioural competencies. Bank and region wise training needs were derived based on the competency mapping for Indian bank managers. One of the most systematic and scientific methods of Training Need Assessment is through competency mapping. Thus, measuring the competency levels of employees can help in identifying the gaps between the competencies desired and current state of competencies.

Seema Sanghi (2006), The study reveals that**,** human capability is without a doubt the key and basic component for the progress of an organization and the person. It requires a right mix of right individual with right capabilities. Corporate center capabilities were recognized and endeavors were made to lay out center abilities all through the organization. The researcher has talked about the individual ability structure which embraces 45 capabilities examined under six wide boundaries like scholarly, individual, correspondence, relational, administration and result-oriented.

Ramakrishnan (2006), The study found that, competency mapping is recognized an individual's strength and weakness in order to make them understand themselves and to

show them where career development efforts need to be directed. It is used to recognize key attributes needed to perform effectively in a job classification.

Graham Coates, Clare Thompson and Richard De Leon (2007), the study reveals that, the need to measure the skills and competencies of employees. Continuous quantification of skills and competencies assist the organization to point out the skill gaps and also competency inadequacy among the employees. Recognition of skill helps organization to match the work load and skill strength of the workforce. Training strategies can also be developed to bridge the gaps of skills for future business needs and for the better presentation of the employees.

Micchele R Ennis (2008), The author suggests that the role of employment and training administration, with the purpose of examining the role of competency models in human resource practices. The employment training is never less than a competency. The trend for the increasing competency was created due to the increasing employee turnover, employee mobility, and retirement because the competency mapping was being used as the tool for succession planning. The author described that the competency model was became the choice for the practitioners as an assistive devise for the individuals to focus on enhancing the competencies as necessary.

Farah Naqvi (2009), The study reveals that the performance of the companies primarily depends on the quality of their human resource elements. For obvious business and economic reasons all organizations have always been concerned about the competence of its employees. This study seeks to deliver deeper into the concept of competency, tracking its history and its role in the present context. Study explains how the concept of competency mapping has evolved constantly over the time, its significant application on human resources, and development. It also sights at other areas like talent management

Ajay Pratap Singh (2010), the study found that, the author identified the most essential competencies for HR managers. It is noticed that that development of competency and outlining of effective strategy are considered as required competencies for HR professionals. It will be better if the industry designs various training Programmes for different categories of HR managers in order to improve their knowledge and skill.

Marja-Liisa Payne (2010), the study found that, the objective to examine the competencies that are required of human resource professionals in strategic management and to seek the competency gaps for human resource managers and non- human resource managers. The employees consider strategic management and information technology as important competencies for HR managers. The author recommended that HR professionals need to develop competencies in strategic management for fruitful performance.

Steven E. Abraham et al., (2010), The study reveals that the managerial competencies and managerial performance appraisal process. They analyzed that; the 6 competencies most often identified as critical to managerial success. The pilot study was conducted in an attempt to investigate which competencies are currently being used by organizations as part of their performance appraisal program for managerial employees. Study was conducted in connection with an MBA Class at a university located in upstate New York. It was found that the 23 managerial competencies that were identified by the pilot study are used by organizations nationwide.

Mily Velyudhan T K (2011), The study found that the competency mapping of the employees, the competencies of the employees critically evaluated in any of the organization because the entire organization productivity somewhere depends on the employee's competencies. Competency mapping is the strategic framework for monitoring the performance and development of human resources in organizations. But still the performance of the organizations lacks behind due to the gap between the competencies, and this study was conducted to identify the competency gap exists between the employee's current performance and the expected performance. For that purpose, two organizations were considered to make comparative evaluation, where it was realized that the performance level of employees in one organization is higher than the performance level of the employees in other organization.

R Yuvaraj (2011), The author suggests that the competency mapping is the most effective way to determine the personal and behavioural skills of an individual in the organization. This study was undertaken to determine the skill levels of workmen in the organization and to provide the suitable suggestions to the employees for multi-skill levels. Competency mapping is the very best tool to understand the training needs of the employees in the organizations, and also to make them realize the requirements of the career opportunities, this study explore that the competency mapping not only done to the permanent employees

of the organization but also to the contract employees also in fact it can be done to those who are seeking for employment to make sure the required skills for job are possessed by the employees. It was suggested to employees to go training needs as the gap analysis resulted that the gap existed among the several competencies of the employees.

Pooja Tripathi (2011), The study reveals that the competency mapping for educational institution, competence mapping is the thing which require the opinion and inputs from the experts, company, and employees. With this regard this study made to develop the approach of the experts to suggest in the management of the competence in the educational institutions. The knowledge-based competence can be managed by the education institutions, and the expert system approach in this study is called as the competence management advisor which majorly focuses on the problem solving in the competency mapping of the educational institutions.

Jimmy Kansal (2012), The study focuses on competency mapping in knowledge-based organizations. The competencies at work lead to significant organizational development that provides knowledge-based organizations with a competitive edge. The study analyzed in detail the competency mapping at various levels in a knowledge-based organization and discuss the gaps in required skill to improve the level of competency. The investigation was carried out by taking a study on a R&D laboratory based at Chandigarh, India as a model Knowledge Based organization.

Robert Gaspar. F (2012), the study focuses on the Perception of human resource directorial on competency mapping for higher results. It is noticed that the HR executives have right perception about their own competencies that are required in the present position of employment. Competency based selection is well arranged and comprehensive. Performance Management Competency System helps in recognizing future training and development needs of employees and also aid HR professionals in taking decisions like promotions and transfers.

S Arul Krishnan (2012), The study focuses on the competency mapping of BPO Sectors, in order deal with the components of the competency. For the purpose of the study the data was collected through by the questionnaire and applied statistical tools were chi-square test, ANOVA and Correlation analysis. No doubt that the competency mapping is the strategic HR tool for undertaking the recruitment and selection, training and development

and performance management. The different components of the competency mapping consider in this study are skills, knowledge, personal attributes and behaviour, but later this research able to describe the competencies required for the BPO companies are communication skills, Team work skills and Interpersonal skills.

S. S. Rout, S. Samanta and B. B. Misra (2012), The study found that the engineering college faculties with different kind of experience, expertise and research exposure. Authors considered the load assignment to the faculties at the beginning of a semester as the competency mapping task. Each faculty having capabilities of teaching different subjects out of the total set of papers needs to take about two theory paper with or without laboratory component. They tried to map the competency level of faculty members of an engineering college during allotment of subjects during starting of a semester. MOPSO is used to perform this competency mapping task. Simulation results show that the model performs efficiently to satisfy the requirements of a department.

S.Srividhya and P. Viji (2012), The study reveals that, the competencies expected within the industrial sector with special respect tower section as this directly enhances the competence level of the workers and thereby reducing the prevailing gap between their expectation and perception. For this study One hundred staff were selected who are operating within the floor level were surveyed through a structured form and three broad areas as well as the profile of the workers at the side of personal, institutional and environmental factors were studied. The study disclosed the amount of expectation is larger than the amount of perception all told the higher than aforementioned factors, since the mean of expectation is larger than the mean perception. The analysis disclosed that the antecedents of competence mapping associated with all the three factors taken for the survey isn't up to the bench mark level of expectation with reference to the interview session with the workplace staff.

Shaukat Ali (2012), the study reveals that, competency mapping helps out the organization to recognize the gaps and also bridges the gap by providing training to the employees. Competency mapping outcome in enhanced productivity for the organization and also for the growth of people. The author also proposed that competency mapping should be carried out on a regular basis which will benefit the organization and the employees.

S. Balaji and D Vimala (2012), The study reveals that, the difference between the performance of employees in Adecco service organizations and to identify the competency gap of employees based on 11 dimensions taken for competency mapping. To fulfill this the researchers have designed Questionnaires, the sample size was 48 and they made T test for the study. Simple random sampling technique was used. It is found that the competency levels of Adecco employees are found to be different among the employees. The competency gaps are found to be higher in job related skills, performance and meta qualities of employees of Adecco organizations.

Halil Zaim, Mehmet Fatih Yasar and Omer Faruk Unal (2013), The authors conducted survey research on analyzing the effects of individual competencies on performance in industry. The survey was conducted on the employees of the service sector. The service sectors covered in this study is banking, communication, food and catering, publishing, retail, IT and Tourism companies. It was further revealed that there is a positive relationship between the individual performances and the competencies, this leads to determine that there is an impact of individual competencies on the organizational performance.

Sree Latha.T, Savanam Chandra Sekhar (2013), the study reveals that, competence is essential for employees to attain present and future organizational goals. Competency mapping helps a company to identify competent employees to perform the task. It is also found that, organizations have to develop a channel of competent people for every position especially at senior level.

Naveed Saif, Muh Saqib Khan et. al., (2013), the study reveals that, the three factors namely knowledge, skill and attitude are very important for competency-based job analysis. Their results indicate that skills and performance are pivotal factors. The results also revealed that knowledge and job analysis were also connected to one another. The authors suggested that the organization can concentrate on knowledge, skill and more specifically on attitude which can be improved by giving training to the employees.

R. Kamala Saranya (2013), The study reveals that, the study was done to identify the gap between the competencies present and the competencies that are required for a person in the department, help the employees to understand the process and requirements of the organization, department more effectively and direct the training mechanism in the

organization, so that the training program that is being followed will be better suited to meet the employee's and organizational needs. The primary and secondary data were used with the help of Correlation analysis. It is found that there is some relationship between training and employee career development as the employees have utilized the training given to them in the right manner. The outcome of the study was as a result competency mapping, all the HR processes like talent induction, management development, appraisals and training yield much better results.

Jaideep Kaur & Vikas Kumar (2013), The study reveals that**,** what extent competency mapping would help in analyzing the gap in required skill and could be worked on improve the level of competency. Organizational employees have divided into three level of employees i.e., top, middle & low, each level of employees have possessed different types of competencies. The study had done with the help of questionnaire. The study was revealed that, the manager in higher level lacked in technical skills when compared to middle level employees. Planning and leadership skills were missing in middle and low-level employees.

Kishor Nivrutti Jagtap (2013), The study found that, the organization use competency mapping to analyze the combination of strength in different workers to produce the most effective team and the highest quality work. Competency mapping can also be done for contract or freelance workers or for those seeking employment to emphasize the specific skills which would make them valuable to a potential employer. For this study the primary data was collected in the form of Opinion Survey done in various departments to observe the level of understanding, involvement of employees in competency mapping and secondary data too. Random sampling technique was used with the sample size of 20. The result of the study was Competency mapping is a process through which one assesses and determines one's strength as an individual worker and in some cases, as part of an organization. It generally examines strength of the individual in areas like team structure, leadership and decision making.

Anisha. N (2014), The author made a study on the competency mapping of women teachers. The competencies are different pattern of performing in terms of acting, speaking that causes to the person to be successful. The competency can be measurable in terms of the individual success. The competency of the teachers can define in terms of confidence level, experience, time management, knowledge and instructional skills to students which

can work as efforts towards the student's development. This study suggested to the faculties to be more focused towards the students learning when they involve in the training.

K. Rajesh Kumar and M. Sivakumar (2014), The authors focuses on competency mapping in hotels. The author's aim is to identifying the deficiencies in required competencies. The period of study ranged for three years starting from August 2011 to August 2014. The area of the study is hotels in Madurai city. The sample size is 500, which would be the product of 25 employees selected from the 20 hotels in Madurai. Multistage sampling has been adopted. The analysis tools used are Mann Whitney U test, Kruskal Wallis test, Wilcoxon Signed Ranks test & Friedman test. A suitable model has also been framed by the authors. The authors feel that this study would be of ample use for the Hotel Industry towards developing the competencies of their employees. The outcome of the study is that, there has been a drastic change in the life style, consumption pattern & per capita income of customers. This reflects in their demands and expectations towards hotels. Hotel employees need to identify, understand and cater to the changing demands and expectations of customers. Hence, they need a set of competencies for achieving it.

Swati Bankar, M. D. Kakade and Sonam Kashilkar (2014), The study found that, a set of training need the after the evaluation done with the help of skill mapping through six sigma. The primary data was used for the study. It is found that, there is a gap between actual and required performance and it is the barrier affecting the individual development of the employees. These problems can be solved by providing proper training and mentoring the operators, which in return will help them to increase their skill and efficiency.

Anu Rousku (2014), The author focused on competence identification, assessment and development. The purpose of this research to study the individual skills and competences related to their organizational performance. The author has come through the various ways of identifying and examining the competencies. for the purpose of doing the same the author was collected the data from primary and secondary sources. The outcome of the study reveals that the when the employee competency mapping is taken place in the organizations the riskier and development directions were identified at both individual as well as group level. With regarding to the findings of the study it was suggested to

organizations to take feasible steps such as adoption of organizational strategy by taking due concern on the competency-based management strategy.

Sushri Samita Rout, Bijan Bihari Misra and Sasmita Samanta (2015), discussed on computational approaches to competency mapping. The study explored the basic premise that is competency but in terms of the computational approaches that can be used to solve problems related to mapping competency and studied evolutionary computing approaches to competency mapping. For this study different journal and conference papers and articles were searched. The outcome of the study reveals that in the last decade lot many studies have been carried out in the area of Competency Mapping. But it is clearly evident that there is a substantial lack of literature to validate most of the findings.

Soundara Rajan and Ananda Kumar A (2015), discussed on competency mapping in specific package industry with the intention to identify the individual's competency levels. For the purpose of the study questionnaire was administered and the statistical tolls used such as factor analysis, mean and standard deviation and chi-square analysis. Further to understand the competency level of individuals, the purpose of the study is to explore the factors underlying to the responses of employees on competency mapping. Based on the response it was suggested that the companies have to develop the competency mapping model for the existing employees.

Ali Sahin Omek, Tanju Colakoglu, Adem Sacan (2015), made a study on competency based human resource management in food industry with the aim of making evaluation of food industry workers regarding their perception about the various dimensions of skills. The result of the study indicates based on the employee perception the employers need to develop the desirable atmosphere for the employees. And the organization must be assertive about the ensuring the effectiveness of employees by concentrating on the sensitive factors.

Neha Sharma and Kavita Khanna (2015), the study reveals that, the competency mapping, it is the process of identifying the key competencies for an organization, where the competencies for each and every job in the organization is determines, and also it determines the strengths and weaknesses of employees. the identification of key competencies helps determining the technical and professional competencies in different departments. On the basis of the analysis made in this study, it was realised that the ever

firm should have the well-defined role and competencies for the job operations in the organization to perform each role very effectively.

Shraddha Awasthi and R C Sharma (2016), the study describes that the employee development through competency mapping to understand the effectiveness of competency mapping on employee development. The employee development is possible through the improvement of employee skills, knowledge and capabilities. The findings of this study reveal that the competency mapping has positive influence on the employee development and organizational growth. It was later concluded that the Human resource department should consider the competency mapping significantly for the sake of employee development and overall organizational development.

A Bhavani Shree, Dr Lakshmi P, and Ramya T J (2016), the study describes that, the "Competency mapping in Automobile industry", the competency mapping requires to identify the competencies required to perform a particular job. The purpose of the study is to evaluate the competencies of the employees in the Tyre industry, for the purpose of the study employee knowledge, skills, behaviour was measured. It was then revealed that the majority of the employees have the enough skills to perform the task and recommended to follow the job rotation, job enrichment and job enlargement techniques to make employees more experts in all the aspects of the organization performance.

Tilattama Singh and Snigdha Malhotra (2016), the study describes that, the competency mapping as a strategic HR tool towards effective skill mapping in the global market. The type of this study is descriptive to identify the competency own by the employees in the organization. The competencies are most important to create value, wealth creation, meeting competition and producing culture-based products at the global level, because competency differs from industry to industry. The long-term sustainability of the any of the industry is based on the effective competency of the employees. The present study aims at highlighting the significance of the effective competency mapping for strategic HR implementation. The study reveals that the still employees need to concentrate on the acquiring the competencies in diverse areas, and recommended to management to encourage the needs and help grievance resolution of the employees to develop their competencies.

Dario Russo (2016), the author reveals that, the study focused on the competency measurement model, which is have some key features to measure and manage the skills and knowledge to the employees for the effective performance of the organization. The author revealed that the competency mapping attracts the individuals and organization for the HR development and empowerment. The author made gap analysis and determine that the organizations need to analyses the gap time to time so that the existed can be balance by addressing the redesigning of the processes.

M Gayathri (2016), the author reveals that, in the study on competency mapping intent to identify the key competencies of the employees. The competency of the employees refers to the skills, knowledge, and intellectual capability, social and emotional competency. Usually, organization try to analyze the development needs of the employees to find out the gap exist among the employee potentiality. This study is descriptive in nature, based on the both primary and secondary data. The analysis made in this study leads to clear the training needs of employees so that the problem solving is done, and the study determines that the training is the appropriate solution for that.

Reshmi Manna and Ankit Singh (2016), the author reveals that, the research on training and need analysis help to minimize competency gap, with an intention to develop a competency frame work. In any organization the competencies were designed on the basis of its relevance to perform the particular job operations. The study is descriptive in nature and majorly focus on the training needs. This study was mainly focused on the manufacturing units, and the outcome of the study reveals that there was wide range of gap in managerial competencies and there less gaps in the personal competency.

Shraddha Avasti & Dr. Sunil Kumar (2016), the study reveals that, employee competencies are bases on various parameters such as knowledge, skill, motive attitude, traits etc. primary data had been used for the study. The difference of competency and performance had been studied. The study reveals competency mapping is necessary for the productivity and performance excellence. The analysis of primary data also reveals that, an organization can use tools for competency mapping which is very useful to enhance the efficiency of the employees.

David W. Holmes et. al., (2017), the authors reveal that, in the study on development of competency mapping tool for undergraduate professionals for degree Programmes, An

Australian engineering degree has been used as the case study for the mapping work presented in this paper, and describes a new mapping software tool that streamlines and standardizes the competency mapping process. For the study primary and secondary data were used. It reveals that CM is equally applicable to a wide range of professional degree Programmes, and in any country with comparable accreditation requirements and processes. In each case, by effectively mapping between a professional degree Programme and the associated professional competencies, the authentic job-readiness of graduates can be assured.

Nitin Chaurasiya and N L Mishra (2017), it is found that the, discussed the relevance of competency map in service sectors with the purpose of providing aid to the recruiters to recruit the right person for right job, for that the development of competency mapping is essential. To achieve the purpose of study the author collected secondary data. Recruitment become very challenging as the market expectation increases, at that juncture the availability the candidates those who can meet the market expectations is very less, due to this, it was suggested to the organizations to maintain competency mapping to measure, examine and manage the employee's potentialities by reminding the organization as well as market standards. Then the employees can be more assertive towards their competency improvement.

Loina Prifti, Marlene Knigge, Harald Kienegger and Helmut Krcmar (2017), the authors reveal that, in the study on competency model for industry 4.0 employees, the industry 4.0 competency model based on the behavioural approach consisted with the three varieties such as information system, information technology and engineering. To define the various competencies for the industry 4.0 employees the author conducted the review of literature. Based on the literature review this study able to found the 64 competencies in which most of them were based on the behavioural competencies.

Salmiaty Taty and Ahmad Mussenge (2017), it is identified that the competency model development, the competency system is very essentially needed in the organizations to determine the success and failure of the management functions of the organization, so that the quality improvement in the Human Resources is also major considerable factor. With this the organizations should be cautious while selecting the competencies so that the organization can focus on the value creation in the market. The findings of this study reveal

that the success and failure of the organization is mainly depends on the level of competencies in human resources and it was suggested to organization to focus on the quality improvement and quality maintenance of competencies among the Human Resources to maintain the sustainability of the organization performance.

Giang Thi Huong Vu (2017), the author reveals that, in a critical review of "Human Resource Competency Model: Evolvement in Required Competencies for Human Resource Professionals", with the purpose to analyze the changes in the required competencies. In the business organizations the HR professionals regard as the major source of the competitive advantage to implement their business strategies successfully in the business organizations. This study entirely based on the survey of HR professionals to identify the needed competencies for HR professionals. The findings of the study reveal that the most of the required HR competencies related to the strategic roles in the organizations, and suggested to focus on the more development towards the functional HR strategies as the future of the HR is going to be so challenging.

Mallika Worlikar and Artee Aggrawal (2017), it is found that, the competencies in today industry competition become apparent, because it is very critical for every organization to utilize the resources, and manpower talent. The organizations can also aware about the employee's talents, attitude and overall performance through competency mapping. It was realized that the competency mapping is so useful in understanding the skills of employees and making correction in them if it is needed, because the whatever the quality expect in the output of the organization that is actually generated through the employee performance, hence, the corrections are require in the employees to have refection in them and that is possible through by the analysis of the competencies.

Swetalina Mishra and RKS Mangesh Dash (2017), it is found that, the competency mapping in power sector in order to find out the impact of competency mapping on productivity of the employees in the power sector. As the competencies require are different as per the nature of the job, the organizations need to work for incorporating competencies among the employees to increase the productivity of employees as well as organization. In order to understand the impact, the attempt was made by the author to understand the practices of the competency mapping. It was discovered that the dynamic business environment is the major influential factor for the performance Excellency in organization.

Anjali Ganesh (2017), conducted a study on "Exploring to map competencies with specific application of 7S model". The 7S model consisted with the seven aspects of organizations and one of which fully related to the competencies, this helps to make difference in the skills require performing the particular ob operations as per the nature of the organization. This study conducted to make an analysis about the competency mapping in the Karnataka agencies by identifying the key competencies required to perform a task. And this discloses that the creativity and negotiation skills are the major key competencies used in Karnataka agencies.

P Nagesh, Sridevi Kulenur, and Keerthana Jagadeesh (2017), the authors found that, in the concentrate on the employee competency mapping with intention to analyze the employee competencies of training and development, because the skills or competencies are the major instruments for the producing quality in work, creating effectiveness, creating the operational efficiency and for high performance. Competency mapping helps the organization helps the employees to understand where they stand, and what actually they are producing for the organization, and totally the competency mapping helps them to identify the skill gaps. The study able to disclose competencies of the different people in the organizations as the competencies differ from the person to person due to the difference in the job profile with related to the same the study recommended that the areas where the training is needed those are, emotional resilience, stress tolerance capacity, time management skills, flexibility, technology, communication skills, passion, code of conduct, commitment, creativity, social skills.

Yogesh Misra and Vandana Sharma (2017), the authors reveal that, in the topic "An exploratory study on Business Strategy, Competency and Firm Performance", which is based on the literature review. The competency based Human Resource Management has been increasingly used in the many organizations over a period of time, because the competency-based system provides the complete picture for the organizations to get a proper system of recruitment, performance appraisal and feedback system in the organizations for the purpose of development. In this study the questionnaire was administered on the heads of HR with aim to get the response from the HR people who are the senior and involved in the decision making of the adoption of competency framework. The study discovered that the adoption of the competency mapping is fairly widespread among the Indian companies.

Ufuk Bolukbas and Ali Fuat Gungeri (2017), the study describes that, the competency and management frameworks for small and medium enterprises, to determine the gap exist between the management and technological capacity. The raise in technology forces the man power to change themselves. This study is exploratory and resulted with the impact of technology competency and management capabilities on the SMEs in manufacturing industry. The findings of the study reveal that the technology competency and the management capabilities based on the framework of the six dimensions such as process management, product competitiveness, information and communication technologies, marketing strategies, innovation and entrepreneurship activity and Research and development activity.

S Yogananth and G Galex Rajesh (2018), the authors reveal that, in the study on "Competency mapping of employees in Pump and Motor Manufacturing sector with special reference to Coimbatore" and described that the changes in environment is always the challenge for the businesses in different aspects of management such as human resource management, because the human resource area is the one where basically it deals with the competencies of the people to select the right person for the growth and development of the organization. By keeping this the study was made to measure the role of skill mapping in the employee existing skills. For the purpose of the study the data was collected from the primary sources and it was resulted that the skill mapping is necessary for the performance and future growth of the industry.

Arun Raghu Babu (2018), it is found that, the need for competency mapping of the employees in today's corporate world on the basis of the changing requirements of industry, the competency became the very basic need for every organization in the matter of meeting the global market. The author cleared that when the strategic intention of company changes due to the changes in the market the need for high potential arises, this led to have need for competency mapping, when this was created the scope for high skilled knowledge-based jobs increases and the low skilled jobs are decreases. It was recommended to the organization to have clear purpose of competency mapping.

S Gokul Kumar et. al., (2018), the author reveals that, in a study on developing competency mapping among employee. The competency mapping is the tool to identify the employee potentiality and also to identify the strengths and weaknesses of the employees so that the employee empowerment can be possible. This study is mainly based

on the eight dimensions and perceptions of the managers, supervisors, labour and administrative staff on the parameters called adoptability, initiative, judgement, planning and organization, problem solving, leadership quality, productivity and use of technology. This study is descriptive in nature to describe the characteristics of the variables. The findings of the study reveals that the competency is the group of talent, abilities, skills and knowledge that influence the employees to perform the job operations and enhance the employee productivity.

Riumani Kalita and Seema S Singha (2018), it is found that, the competency mapping and job performance of big bazar, no doubt that the competencies required are different from industry to industry because the job performance always look for technical, conceptual and human skills. Competency mapping helps organization to identify the skill gaps among the employees because of the effect of certain factors, related to this, this study was conducted to examine the certain factors affect the competencies of the employees to measure the competency of the organization. It was discovered that the dimension of attitude, managerial, supervisorial and operational level of management are the major influential factors. Skills of supervisorial employees, knowledge of managerial employees and knowledge of operational employees are the least influencing factors. It was later revealed that the overall level of competency of the employees of big bazaar were lack about the knowledge, skills and the attitude.

J Kansal and N Jain (2018), the author reveals that, in the study on development of competency model and mapping of employee's competencies for organizational development, no doubt that the competencies should be relevant to the specific job operations in the organizations, but the gap was identified in the employee's performance that is because of the employees have such competencies which are differ from the competencies require for the performing the job operation. The findings of this study reveals that the competency mapping not only enhance the employee potentiality but also help enhancing the organizational effectiveness. Hence, it is suggested to the organization to focus more on the management of competencies.

Smithesh G and A Shameem (2018), the author reveals that, in a study on competency mapping and its impact on deliverables with respect to the reality sector, competencies are the most relevant aspect of the human resource system, as it is associated with the training and development, staffing, compensation and performance management. This was able to

discover that the competency mapping highly influences on the performance appraisal process because due to gap between the acceptance of the competencies, this also clears that the competencies are differ from person to person so it become difficult to accept the competency mapping concept in the organization for managing the competencies.

J Rohit, P Singh et. al., (2019), the author suggests that, in the study on competency mapping of the extensionists working in Krishi Vigyan Kendra's in India, the changing situations and the market situations in the agricultural area leads to create the many challenges for the agriculturist, at this the need for the advisory agents and extensionist generated to assist the agriculturist and marketers. Hence, this study conducted to determine the competencies of the extensionist. This study conducted on the basis of both primary and secondary data. On the basis of the analysis, it was realized that the extensionist needed the new strategies for the development, so it was suggested to the policy makers to offer suitable strategies for the development of extensionist competencies.

Kalama Adefe, et. al., (2019), the authors reveal that, the influence of competency framework on the business performance to investigate and examine the existing competencies of employees in banks. For the purpose of the study data collected from primary and secondary sources. This study successfully determine that the employee competencies are the skills, knowledge and attributes of the staffs and managers which can help in building the organizational culture and also help in meeting the organizational goal, hence, the employee competencies positively influence on the business decisions.

Sateesh V Shet et. al., (2019), the authors reveal that, the relationship between competency-based performance management and organizational effectiveness. For the study the data were collected through the source of primary and secondary too. This study identifies that, performance management initiatives based on a leadership competency model is necessary for building performance culture in the organization. Hence, there is a positive relationship between competency based superior performance and organizational effectiveness with productivity, flexibility and adoptability.

Suresh Namdeo Mehetre et. al., (2019), the authors reveal that, the shown interest on the competency mapping, and said that the competence mapping is mainly based on the job analysis because the it helps to identify the work aspects or the parts of work so the

organization can understand the required elements in the job and at the same time it helps to design the job profile. The major objective of the study is to find out the level of competencies of employees in the organizations. This study is completely based on the secondary data sources such as research papers, booklets, brochures and websites. The study successfully determines that the competencies which are related to the knowledge, skills, and attitude are essential to perform work role, and realized that the competency mapping is very good method to identify the gap between the actual and expected level of employee performance.

Christoffer Johansson (2019), the author reveals that, how to assess and map employee's competencies due to increase in the management of employee competencies. This research made complete effort on investigating how competencies can be assess, evaluate and map in the best possible way followed by literature review and questionnaire. This research reveals that, to assess and evaluate the competency self-assessment can be undertaken later the challenges which associated with the competency assessment were seriously considered. This was resulted in having the system for competency mapping with having the process of assessment and evaluation for employee competency development.

Shivanjali, Mitushi Singh et. al., (2019), it is identified that, the competency mapping as a strategic perspective in employee retention. No doubt that the competency mapping is the strategic tool for the employee development in all the ways directly or indirectly. Now a day in the organizations the rate of employee turnover slightly increases due to the several factors and the competency of the employees is one among them. This denotes that the employee retention is majorly based on the competency mapping of the same and at the same time it leads to have an understanding that the employee competencies are the tool for retaining them in the organization, so the organization need to concentrate on the developing the competency among the employees. This study is mainly intended to study the factors associated with the competency mapping which can help employee to retain the talent in organization, and the study discover that the for any organization to survive in the market, to face the increasing competition, the companies require to identify the work-related competencies and work for enhancing the competencies.

Shobha Bharadwa, et. al., (2019), the authors suggest that, the competency mapping based on identifying the impact over the productivity of SMEs, the competencies in the Small Medium sized enterprises may differ from the other enterprises because the

applicability of the competency mapping sometimes depends on the size of the companies. This study is exploratory in nature, considered the both primary and secondary data and the statistical tools such as ANOVA test, correlation and chi-square was applied for the study purpose. The findings of the study suggested to focus on the job-related competency because the job-related competency was formulated by the manager but that should be assumed from the perspective of the individual one who perform the jobs.

Ruta Desai and Arun Mokashi (2020), the author reveals that, in their literature review on competency mapping with an aim to outline the use of competency mapping in organization. The need of the competency mapping is realized as a business strategy for the potential progress in the organization to create effectiveness. It was found that each and every employee in the organization different in terms of the potentiality, so it was realized that the competency mapping is the right tool to make evaluation of the employee's skills.

Surekhs Rana and Divya Pant (2020), the authors reveal that, the focus on measuring competency mapping identifying and selecting indicators with the purpose to explore the critical competencies in the ITes job for the success of the employees. For the purpose of the study primary data was collected through by the questionnaire. By this it was realized that the competencies are the individual's skills which are essentially required to deliver certain results, and that result is the evidence for the ones competencies. As well as it is believed that the success and failure of the business is depends on how effectively the competencies being explored in getting results.

K Suresh (2020), the study found that, in an empirical study on competency mapping of employees in the automotive sector. Understanding the employee competencies becomes the priority in any of the organization to focus on the key organization success, with regard to this the present study was conducted to investigate and analyze the level of competencies possess among the employees. For the purpose of the study the primary data with the help of questionnaire and statistical tools applied for the study was factor analysis and correlation. It was revealed that the variable such as communication, leadership, teamwork, decision making, creativity is perfectly correlated with competencies of employees and it was suggested to the practitioners, policy makers, administrators and companies to focus on the development of the competency-based model.

Mark H Strong, et. al., (2020), the study reveals that, a study on development and validation of a global competency framework for preparing new graduates for early career professional roles with the intention of developing the competency modelling framework. It is very essential for the students to incorporate the job skills during their learning stage. With this regard study critically evaluate the competencies such as problem-solving skills, change adopting sills, communication skills, learning skills, planning and organizing skills and decision-making skills and the evaluation resulted with highest ratings. Later it was suggested to the faculties and staffs to use the results of this study to concentrate on the other skills incorporation among the students which are most essential for the future working operations.

Swetalina Mishra, et. al., (2020), the study found that, the effort on exploring the success factors of competency mapping in captive power plants in India. This study explores the six major success factors which are result orientation, transparency, updated price, management support, employee participation and strategic orientation and these identified success factors bring positive impact on power sector. The happening of these success factors is because of the composition of the competencies and suggested to the organizations to concentrate on the consolidated view of practices and competencies as a continuous effort towards the business goal achievement.

Manodip Ray Chaudhuri and Sekh Raunak Mondal (2020), the authors suggest that, the study on competency mapping and its significance on teaching, based on literature review or conceptual analysis. The study is primarily focused on the link between competency mapping and human practice in the organization. Secondly the impact of competency mapping on individual and team and training provided to the employees. They discussed various methods adopted for competency mapping by renowned organizations. The study recognizes the success of quality teacher to encourage and maintain the standard of teaching competency.

Vikram Singh Chouhan et. al., (2020), the study found that, the competency mapping and training needs assessment in the context of Indian Manufacturing industry, based on the literature review and survey. This study is mainly based on the competencies of the HR Practitioners, and identified the major competencies impact on the performance in that technical competency and personal competency are the leading competencies. This study later recommended to the manufacturing sectors to offer the proficient economic services,

provide the competitive edge to enterprises and assist financial development. Hence, this major contribution can motivate the potential competencies among the people to enhance their performance.

Damaris Monari (2021), made a study on competency mapping and its influence on employee retention. Employee retention is a key driver to the success of any organization. The performance of organizations is greatly determined by the ability to attract, maintain and retain workers who can positively contribute to the goals of the organization. It is imperative that organizations establish talent management practices that can give it a competitive edge and lead to a high level of success The study adopted a descriptive survey design and Slovin's formula was used to calculate the sample size and used stratified random sampling method. the study reveals that, competency mapping has a positive influence on employee retention.

Saikumar V, et. al., (2021), the study reveals that, the Study on Effectiveness of Competency Mapping through Training and Development, with the aim of identifying the effectiveness of competency assessment as well as individual development plans towards employees in the organization, for this purpose the various competency skill owned by employees related to their work level in the organization is studies. It was identified that the employees believe that the competencies really help them to achieve the individual goal and organizational goal; with this it was suggested to the organization to focus more on providing the simulation method of training to improve the leadership skills among the employees.

Wandy Zulkarnaen (2021), the study found that, the result of this research paper is the need for someone's competence in working anywhere or in any field. This includes being in a pandemic and working with the WFH system. Therefore, employees must develop the competencies that exist within themselves and continue to show good performance. For this study the secondary data has been used which is obtained by the author through various literatures.

E. Shivakalyan Kumar & MVV Bhanu (2022), the study found that, a study on employee development through competency mapping, with the aim of finding the meaning of competency mapping and the challenges met to identify various competencies by the organizations and to trace how the organizations are viewing competency mapping as an

effective tool in developing their employees, for this purpose secondary data was used. The study reveals that the effective competency mapping helps the employees to get a broader perspective of how they are, and what competencies make them differ. Once the required competencies are obtained through various developmental sessions the employees can perform multi-tasks and be more competitive.

2.4 REVIEW ON COMPETENCY MAPPING IN IT SECTOR

Divya Sharma (2013), the study found that, the competency mapping to identify high performers in order to identify the skills for the IT professionals and also to analyze the effect of skills on the IT professional's performance. For the purpose of the study qualitative research was conducted and made literature review on the different aspects of the employee competency, later the author administers the questionnaire on the IT professionals in IT companies. Based on the literature review different variables was defined those are organizational environment, Individual performance, and technical competency. With the help of ANOVA test it was clear that the organization environment has significant effect on the individual performance and the technical competency not significant effect on the individual performance.

J K Raju, Chaya Bagrech et. al., (2014), the study found that, the effort on competency mapping in IT Industry, in order to find out the competency levels of the employees of IT Industry at different levels. In this research the competency levels different aspects were considered those are communication, job performance, team work skills and leadership skills among the different levels of management such as low level, middle level and the higher level of management. The study efforts are descriptive in nature, for the purpose of the study data was collected with the help of questionnaire. The study discovered with the help of ANOVA test that there is significance difference between the competencies of the different levels of management with respect to the job performance skills, communication skills, team work skills, and leadership and personality skills. Hence, the different management levels not possess the same kind of skills but certainly it differs.

D S Raval and S B Trivedi (2014), the authors reveal that in the study on HRM Practices prevailing in IT-ITES industry to point out the extent of human resource management practices and systems practiced by the IT-ITES industry. The outcome of the study makes known some HR Practices such as recruitment, performance appraisal, training and

development and compensation being implemented. The data was collected from 50 employees for the purpose of the study. This was then used for data analysis and reveal that the Human resource practices being used by the organizations to forecast the human resources and to promote the human resources.

Mohankumari and R Magesh (2016), the study found that, the competency mapping for ITS industry. This study carried out with the purpose of identifying the core competencies of employees in the IT sector at different levels. This study is descriptive in nature, for the purpose of the study questionnaire was administered. It was identified that the IT Industries involve in providing the training Programmes on regular base to their employees and that leads to make employees more competent in their work performance. This is because the competency mapping helps the employer in broader perspective to understand and industry requirements.

Deepti Sinha, et. al., (2016), the study reveals that, the research on application of competency mapping in the information technology, the strategic decision of applying the competency mapping in the IT industry is very important for the organizational development. The major reason behind this is the determination of the employee's strengths and weaknesses for evaluating themselves, by this employee evaluation they ca where they actually are in the organization, so that it is helpful to the organization to understand the employees training needs. This study successfully determine that the certain competencies exist among the employees of IT companies, and suggested to the employees the scope of the development is communication, knowledge and team orientation, and suggested to the organization to provide feedback regularly to their employees for their development.

Trisha Kumar, et. al., (2016), the authors suggest that, the study on behavioural competency mapping, with the aim to observe the performance of non-teaching staff, this study conducted survey and in that maximum respondent were male which derives that the male employees prefer the non-teaching jobs. It cried out the review with respect to determine the behavioural competencies regarding the job satisfaction, employee performance evaluation and problem solving. It was revealed that the employee competencies differ from one another and the solution for the same is strengthening the employee competencies.

Mangala A and K Ramachandra (2017), the study found that, the discussion on "Employee competency mapping as a mechanism to weed out competency gaps in information technology", the concept of competency mapping is simply applied in all the organizations because it helps to understand the ones job requirement. This study was made with an intention to understand how employee competency mapping has grown and implemented as the effective tool in creating and sustaining competitive advantage for the organizations. It was later revealed that the making employees perform in the organization is very challenging task in the same as the employee are unique in terms of their qualities, motivation, skills, and personality traits.

Gowrishankara R V and K Iyyappan (2017), the study reveals that, an effort on effectiveness of competency mapping in IT Industry to identify the individual strengths and weaknesses to help employees to understand themselves. When competency mapping implemented on the recruitment, selection, training and development, motivation and employee performance appraisal the entire human resource system turn into the modern way. Hence, this study made an attempt to understand the impact of the competency mapping on the overall performance of the organization. This study able to discover the impact of competency mapping that is, the implementation of competency mapping on HR System discovers the new era in the field of HR which can promises the best use of the human resources.

Rock Ravi Fernandes, et. al., (2018), the authors focus on mapping of required leadership competency of HR professionals of ITES and BPO companies. The ITES and BPO companies are the potential platforms for the employment. For the purpose of the study data was collected from the 380 sample respondents through the snow ball sampling technique. The leadership technique is one of the most essential qualities for the superiors of the organization which can describe as the process of the social influence. To the analysis of the leadership competency for HR Professionals, Decision making and Knowledge of company's vision and mission was considered as the variables and discovered that the decision making is the most expected variable from the e leader and reveal that the individuals highly influential towards the decision-making skill of leader.

R Gayatri and Purushothaman (2018), the study found that, the competency mapping for IT Professionals working in Indian IT Companies to discover the more essential competencies required for the information technology companies in India, and those

competencies are based on the key areas such as personal, technical, knowledge level, job related, interpersonal and management competencies. These competencies are inclusion of individual performance of IT company employees. To achieve the research objective the survey was conducted on the Indian IT Companies located in the Chennai location. The study able to discover the association between the listed competencies in this research with the demographic variables of the IT Professional, and it was suggested to the IT professionals to take proper training to develop their competencies.

S Manju, et. al., (2020), the authors opined that, the competency mapping is the well-recognized process to identify the strengths required for the organization. The success of the company depends on the effectiveness of the competencies. This study intent to know the success of competencies on the performance of the ITES companies. Data for the study purpose was collected from the employees of ITES, based on the data it was realized that the competency mapping is very effective on understanding the company requirements, goals and employee needs. This clears that the competency mapping is the very good tool in creating the effectiveness among the employees.

Yashwant Rao N et. al., (2020), the study found that, an impact of competency in creating organizational culture in KPO industries in Shivamogga city, by believing that the role of employees is inevitable in the organization as it is observed the lot of issues such as workforce diversity, stress management, employee turnover, workplace adoption issue. The purpose of this study is to study the influence of competencies of individual in upbringing the organizational culture which is essential for growth and development of organization, and it was revealed that the role of competent managers is very significant as it creates the growth opportunities and the manager is the most influential person in creating the perception of the employees for the job.

Merlin Apriliyanti, et. al., (2021), the study found that, a systematic literature review on the influence of information technology enabler and organizational learning on performance. The learning plays very important role in the organization development and the role of technology create scope for organizational learning. This study is completely based on the review of literature, based on the literature review it was concluded that there was indirect relationship between the information technology capabilities on performance through organizational learning.

A Report on Human Resource and Skill Requirements in the IT and ITES Industry sector 2022 (2021), reveals that**,** the overview of the entire IT and ITES industry where these two are different in their major segments. The identified skills required in the IT Industry are ability of logical thinking, programming skills, communication skills, competency in few technologies, ability of understanding the basic software architecture, ability of understanding customer needs, knowledge of designing applications, domain knowledge, team management skills and many more. The skill gap exist are lack of knowledge about the particular technology, inadequate soft skills, inadequate corporate culture, poor aware about the software, poor domain exposure, inadequate specialization and many more. The required skills in the ITES companies are ability to handle enquiries, computer skills, basic process knowledge, communication skills, listening skills and many more the skill gap exists in the ITES companies are inadequate process compliance, lack of attention, lack of understanding, inadequate communication skills, lack of multi skilling, lack of problem solving, and lack of business process understanding and many more. It was later suggested to IT and ITES companies to more focus on identifying the skill gaps exists that the gap can be balanced by addressing the problems behind the existed gap.

Rama et. al., (2022), the study found that, the competency mapping and employee performance, the study highlights the role of competencies possessed by every employee which brings out the empirical performance at work place of IT sector. In the study it was found that, there is a strong relationship among the competency variable and employee performance and hence, Identifying the required competencies for a job position and training the employees to achieve the required performance, which in turn organizational performance.

2.5 RESEARCH GAP

After an exhaustive literature survey, it is identified that many studies have been taken up by the experts in the field of IT and competency mapping too. But the studies focused on the concepts like contribution of IT sector to GDP, growth and development of economy and challenges faced by the industry, and importance of competencies and competency mapping among various organizations and specifically in the field of IT. At the same time the studies are not focused much on the analysis of the competency mapping practices in the different formats of IT sector and three different levels of management, as the practices

will be different for different levels of employees in the field. Hence, this study is in need to evaluate the competency mapping practices in the selected IT sector companies in three different segments of IT sector and also for three different levels of employees.

2.6 CHAPTER SUMMARY

This chapter consists of review of literature which is divided into three major Sections of literature followed by the research gap. The first section of review consists of the literature related to competency, the second section covers competency mapping in all fields except IT Sector and the third section covers competency mapping only in information technology (IT)sector.

CHAPTER-3

COMPETENCY MAPPING-A CONCEPTUAL FRAMEWORK

3.1 INTRODUCTION

Competency mapping is a way of assessing the strengths and weaknesses of a worker or organization. It is about identifying a person's job skills and strengths in areas like teamwork, leadership and decision making. Many competency mapping models break down strengths into two major areas- functional and behavioral. Functional skills include practical knowledge that a person needs to perform a job. For e.g., functional requirements for a secretary might include familiarity with computer systems and office machinery as well as bookkeeping knowledge. These skills are generally easy to measure through skill tests and can define whether a worker is capable of carrying out his or her responsibilities. Competency Mapping is a process of identifying key competencies for a company or an institution and the jobs and functions within it. Competency mapping is important and is an essential exercise. Every well managed firm should have well defined roles and list of competencies required to perform each role effectively. Such list should be used for recruitment, performance management, promotions, placement and training, needs identification.

The competency framework serves as the bedrock for all HR applications. As a result of competency mapping, all the HR processes like talent induction, management development, appraisals and training yield much better results.

Behavioral assessment is more difficult to quantify and is the focus of most competency studies. It examines personal skills such as leadership, active listening, teamwork and morale. This type of testing is important for getting a complete picture of an individual's skill set. The use of competencies can include, assessment during recruitment through specific work-based exercises and relevant, validated, psychometric tests, assessment of further development, as a profile during assessment to guide future development needs, succession planning and promotion, organizational development analysis.

Techniques used to map competencies include critical incident analysis and repertory grid. Competency mapping is an approach that has the objective of helping an organization align individual development with the strategic objectives of the company.

3.2 COMPETENCY MAPPING- THE CONCEPT

The term 'competency mapping' has gained a wider circulation and importance among academicians and businesses in recent times. In a competitive business scenario, organizations have felt the utmost need for procuring and retaining competent employees and developing distinct competencies. Most of the jobs contain some critical elements or parts.

To perform or fulfill these parts, it is important for the employees to have special competencies. It is also natural that some people perform a particular job more effectively than others. This difference exists because a particular individual may have certain competencies that other individuals might lack. This might help him/her to have an edge over the other in a particular job. An organization examines every job to ascertain the component parts and the work environment in which it is performed. The process of examining a job is termed as job analysis. Job analysis comprises two functions, namely, job description and job specification. These are interrelated, interactive, and interdependent. Job description comprises job orientation, whereas job specification is oriented towards the jobholder. In other words, job description is a broad statement, which consists of the purpose, duties, and responsibilities of a job, all taken together. Job specification, on the other hand, is also a broad statement, which specifies only the qualities required for a job holder. It is evidenced that in earlier days, people in an organization were convinced that technical skills of the people in the research and development team was primarily responsible for the increased performance/ output. On further exploration and extended study, it was revealed much to their surprise, that one of the most important differences between top performers and other was their presentation skill.

The key to validate these competencies is to determine the competencies (technical or interpersonal skills) and differentiate the best from the rest. Otherwise, one ends up with a very subjective data. Past experience shows that exceptional performers have used a

variety of approaches to get their job done. These approaches and behaviour chosen by these exceptional performers differ from those who perform at specified levels.

If one thinks about the teachers and doctors who are renowned in their fields, it can be observed that sound technical knowledge and skills are not the only basis of their distinctive competence. It is also their behaviour that has made them excellent, exceptional, and distinguished in their respective areas.

Figure: 3.1: Components of Competencies.

Source: R. Yuvraj (2011), Competency Mapping- A drive for Indian Industries.

3.2.1   Definitions

a. **Woodrufee (1991) defines:**

- **Competency:** A person related concept that refers to the dimension of behaviour lying behind competent performer.
- **Competence:** A work related concept that refers to area of work at which a person is competent
- **Competencies:** Often referred as the combination of the above two.

b. **Albanese (1989) defines:**

Competencies are personal characteristics that contribute to effective managerial performance.

c. **Shweta Chaudhary and Seema Singh (2016) defines:**

Competencies are components of a job which are reflected in behaviour that is observable in a work place.

d. **According to Hayes (1979):**

Competencies are generic knowledge motive, trait, social role or a skill of a person linked to superior performance in the job.

e. According to Unido (2002):

Competency is a set of Skills related, knowledge and attributes that allow an individual to successfully perform a task or an activity within a specific function or a job".

Figure: 3.2: Iceberg Model of Competencies.
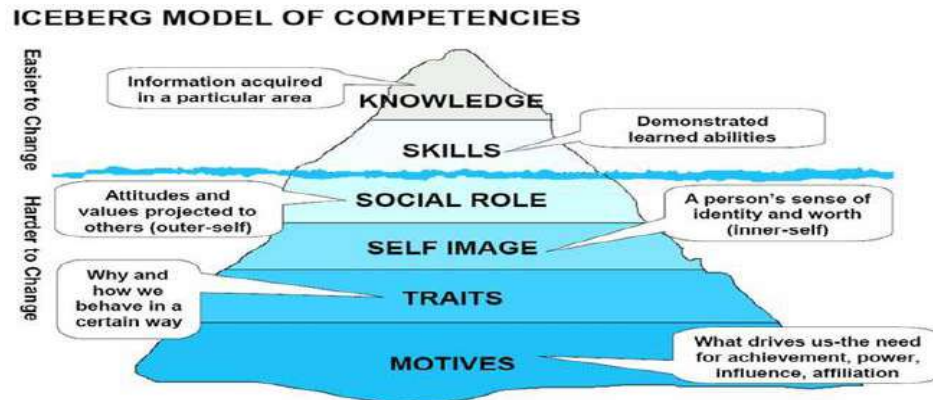
Source: Spencer L.M. & Spencer S.M, (1993)

3.3 NEED OF COMPETENCY MAPPING

Competency mapping has gained commonness, momentum, and popularity at present. The old maxim, 'Slow and steady wins the race' has lost its validity in view of the fast-changing business environment. In order to cope with the changing world's economy and keeping in view that the world is becoming a global village, companies have become more aware of the need of having competent employees and developing distinguished competencies in every organization. In terms of quality of people, organizations need fast and consistent manpower. As such, in the sharper focus of management, competency mapping is engaged in the collection and constellation of information about the appropriate talent in various levels.

3.3.1 The needs for competency mapping are enumerated below:

1. The cost of manpower is becoming increasingly high.
2. Realization of the truth that people can transform an organization.
3. Getting more from the people rather than getting more people.
4. Increased customer focus; identifying and fulfilling implied customer needs and expectations.

5. Recognizing the fact that the right kind of human resources can monitor and manage the technology, finance, market, customers, customer relationship, processes, procedures, and the system effectively.

6. Importance of role performer vis-a-vis time management.

   In the era of competitive business, hunting for talent and managing them properly is a crucial task for HR professionals. As a result, the top management and HRD directors or managers are paying attention to competencies of the workforce. Hence, competency and competency mapping are important and essential exercises.

3.4 KEY COMPONENTS OF COMPETENCY MAPPING

Competency mapping is the process of modelling the right set of competencies at the required proficiency levels for specific roles in an organization. The competency framework developed by an organization either internally or with the help of external HR consultants or through readily available off-the-shelf models, acts as a basis for this process.

3.4.1 Key components of competency mapping are:

a. Identification of Competencies:

Various competencies such as workplace competencies, core competencies, and threshold competencies, differentiating competencies, technical and behavioral competencies have to be identified by the organization. The competency framework must not just identify job specific competencies but also define those competencies that are essential for superior performance in the job.

b. Competency Models:

An organization can use an existing competency model often referred to as 'Off-the-shelf' ready to use models or can develop its own models. A popular approach is to customize an existing one as per organization's needs.

The competency framework must also draw synergies between various HR systems such as using the competency framework for selecting the most competent candidates (both internally and externally), training them on the gaps in competencies, measuring their on-the-job performance through competency-based objectives, and lastly and most

importantly, linking the competency framework to the career management systems in the organization.

c. Employee Competency Assessment:

The competency framework should also extend itself in developing the behavioral indicators for each of the identified competency so that observation and measurement of the identified competencies become possible. The HR department would create ways of measuring competencies so that the model can be actually put to use. Some methods include assessment centers, potential appraisals, 360-degree feedback, etc.

d. Competency Development:

The surest way of developing talent in any organization is by developing competencies of workforce. This has to be a continuous process and not a sporadic event or even series of events.

e. Linking Competency Framework to Other HR Systems:

A competency management framework should be synergized with other HR systems for optimal utilization of the same.

3.5 OBJECTIVES AND PURPOSE OF COMPETENCY MAPPING

The concept of competency mapping now exists in organizations with well-developed HR practices. HR directors and their top management have always paid attention to consider competencies and incorporated them in the appraisal forms in order to improve the performance in the management system. Companies such as Larsen & Toubro, National Dairy Development Board, Life Insurance Corporation of India, Hindustan Lever Ltd (presently Hindustan Unilever Ltd), NOCIL Ltd, Bharat Petroleum, and so on, have felt the utmost need of management competencies and have revised their performance appraisal systems.

3.5.1 Some of their objectives while performing the competency mapping are as follows:

1. Identifying the key success factors.
2. Pinpointing triggers for each role.

3. Laying direction for superior performance.

4. Setting defined expectations from employees.

5. Serving means for communicating performance expectations.

6. Ensuring that the employees obtain greater transparency about their roles.

7. Providing opportunities for development.

8. Creating a more empowered workforce.

9. Employing the workforce effectively.

3.5.2 Purpose:

The main purpose of competency mapping is to ensure effectiveness of an organization in terms of having a clear idea regarding the summation of the required competencies.

3.5.2.1 Other important purpose are as follows

1. Gap analysis in competencies.

2. Clarity of role.

3. Selection, potential identification, and growth plans.

4. Succession planning.

5. Restructuring.

6. Inventory of competencies for future planning.

3.6 APPROACHES OF COMPETENCY MAPPING

Competency analysis is concerned with behavioral dimensions of roles while competence analysis considers what people have to do to perform well. In an organization a tailor-made competency schedule is carried out by specialists or management consultants or both. Line managers may be consulted but the frameworks are issued to them in accordance with procedures laid down for such processes as performance management. Although the first draft may be developed in-house but when practiced the suggested changes can improve it further.

3.6.1 There are 6 approaches to competence analysis:

1. Seeking expert opinion.

2. Structuring of interviews.

3. Conducting workshops.

4. Use of critical incident techniques.

5. Using repertory grid analysis.

6. Assessment of job competency.

3.6.1.1 Expert Opinion:

This method involves an expert member of the HR dept. possibly discussing with the other experts and referring to the published list to draw up "What counts". The major drawback of this method is that it lacks detailed analysis and the line managers have not been involved at any step so it may be unacceptable.

3.6.1.2 Structured Interviews:

Here we require the list of competences prepared by experts and the job-holders. The key result areas of a particular are identified to analyze the behavioral characteristics, which distinguish performers at different levels of competence.

The positive and negative indicators required for achieving high levels of performance can be analyzed as:

- ➢ Personal drive (achievement motivation).
- ➢ Analytical power.
- ➢ Creative thinking.
- ➢ Team Management.
- ➢ Interpersonal skills.
- ➢ Communication skills.

This approach relies too much on the experts.

3.6.1.3 Workshops:

A team of experts (knowledge and experience holders), managers, job-holders along with a facilitator (not from personnel department) or a consultant work together in a workshop. The activities of workshop initiate with defining job related competence area. Then the members of the group develop examples of effective and less effective behavior recorded on flipcharts. The facilitators' job is to help the group to analyze its findings and assist generally to set competency dimensions which can be identified by behavior.

3.6.1.4 Critical Incident Technique:

This is a means of eliciting data about effective or less effective behavior related to actual events- critical incidents.

The technique is used with groups of job holders, their managers and expert in following ways:

a) Explain what the technique is and what are its uses. This helps to gather the real information regarding the behaviors constituting good or poor performance.

b) Listing the key areas of responsibilities for a particular job.

c) Each area of job can be discussed and relating to critical incidents.

d) Collect information about the critical incidents under the following headings.

e) Same process is repeated for each area of responsibility and various critical incidents are recorded.

f) On referring to the flipchart, analyzing the critical incidents, the recorded behavior is marked on a scale from one to five.

g) These ratings are discussed and re-discussed for reducing errors.

h) Final Analysis-It lists the desired competence, performance indicators for each principal accountability or main task.

3.6.1.5 Repertory Grid:

Repertory grid can be used to identify the dimensions that distinguishes good from poor standards of performance. This technique is based on Kelly's personal construct theory. Personal constructs are the ways in which we view the world. They are personal because they are highly individual and they influence the way we behave or view other people's behavior. The aspects of the job to which these 'constructs or judgements apply are called 'elements.

A group of people concentrate on certain elements (work or task of job holder) and develop constructs for them. This helps to define the qualities which indicate the essential requirements for successful performance.

The procedure being followed by an 'analyst' is called 'triadic' method of elicitation and involves following steps:

a) Identify the elements of the job to be analyzed.
b) List the tasks on cards.
c) Draw three cards randomly from the pack of cards and ask the group members to select the odd one out from the point of view of the qualities and characteristics needed to perform it.
d) Try to obtain more specific definitions of these qualities in the form of expected behaviour.
e) Again, draw three cards from the pack and repeat step c & d. Repeat the process unless all the cards have been analyzed.
f) List all the constructs and ask the group members to rate each task on every quality using a six- or seven-point scale.
g) Collect and analyze the scores in order to assess their relative importance.

The repertory-grid analysis helps people to articulate their views by reference to specific examples. It is easier to identify behavioral competences required in a job by limiting the area through the triadic technique. This method of analysis is quite detailed and time-consuming.

3.6.1.6 Job Competency Assessment:

The job competency assessment method as described by Spencer & Spencer (1993) and offered by Hay/McBer, is based on David Mc Cleland's research on what competency under six clusters-

a) Achievement Cluster.
b) Helping/Service.
c) Influence.
d) Managerial.
e) Cognitive.
f) Personal Effectiveness

The competency assessment method is used to model the competencies for a generic role i.e., for a position which is similar to many job holders and basic accountabilities are same.

The method begins with assembling a panel of expert managers to express their vision of the job, its duties, responsibilities, difficult job components, likely future changes to the role and the criteria against which the job-holders performance is measured. The members do nominate some members to be outstanding or satisfactory.

The next step is to conduct 'behavioral event interview' with nominated job-holders to focus upon the distinction between a person's concept and what a person actually does. This employs a structured probe strategy rather than a standard set of questions. This investigative interview helps to gather most accurate performance data.

Following this analysis, differentiations can be made between superior and average performers in the form of the:

(a) Competencies possessed by superior performers.
(b) Activities undertaken by average performers.
(c) Competency and average criteria for both superior and average performers.

3.7 COMPETENCY MAPPING FRAMEWORK

Competency framework refers to the conceptual structure in an organization related to the behavioral elements of the employees. It is an illustration of the softer skills that are essential for effective performance. The frameworks have slowly become broader and more ambitious in scope and include more technical competencies. This development has been given an even greater momentum by the use of personal computers and the intranet.

While designing a competency framework, care must be taken so that only measurable components are included. It is advised to restrict the number and complexity of competencies in a framework, typically aiming for not more than 12 for any particular role (preferably less), and arranging them into clusters to make the framework more accessible to the users. The definitions and examples for each competency must also be provided.

When supporting talent management, the competency framework is an essential resource for understanding the current performance of the employees. Of course, it is a recognized fact that talent management is a future-focused activity, and it measures an individual's future potential and motivation that are also embraced in the decision-making process.

Job descriptions are prepared considering the position in an organization, the associated nature of duty, and the competency framework developed for that particular position. We find job descriptions everywhere, in newspapers, on job search portals, and on a company's website as well. Nowadays, one can search job openings on the company's website by giving keywords, location, etc.

By adopting and applying a consistent competency framework across their organization, employers can ensure that they recruit the most suitable candidates, identify high potentials at an early stage, promote the right individuals, and increase retention through structured performance management and career development planning.

The competency framework holds many separate competencies that may be arranged into five core clusters—thinking, relating, leading, self-managing, and achieving.

1. **Thinking** – cognitive and intellectual competencies. This cluster includes competency identification skill, business understanding skill, organization behaviour understanding skill, project management skill, electronic system skill, facilities selection skill, etc.

2. **Relating** – social or interpersonal competencies. This cluster demands building bridges of relationship; creating networking and partnering.

3. **Leading** – managerial competencies (logical thinking, analytical thinking, stress management, leadership skills, planning and organizing skills, and problem analysis and decision-making). It comprises several skills—building a strong team of people, creating a learning environment, monitoring and reviewing business situations periodically, attracting talent, preventing attrition, recognizing innovative work done, sharing ideas regarding organizational growth, etc.

4. **Self-managing** – competencies relating to emotions, stimulation, motivation, driving forces, and reactions; the degree of influences on effectiveness and efficiency, and analysing how these influence effectiveness and efficiency.

5. **Achieving** – result-focused competencies relating to achievement of business goals. Negotiation skill, presentation skill, visioning skills, etc. are all essential to achieve business results.

Competency framework refers to a conceptual framework and it plays an important role.in all aspects of talent management, including talent acquisition, talent development, performance management, and talent separation. For studying the use of competency framework in an organization, one would need to glance into the detailed aspects of these processes. However, there might be one area where the linkage between competency framework and a process is visible, partially or fully.

3.8 DEVELOPING A COMPETENCY FRAMEWORK

An organization can develop its competency framework in different ways. Generally, companies draw their competency framework keeping in view of their occupational standards. Frameworks developed in this way are often linked with progression towards recognized qualifications.

Many organizations develop their competency frameworks through an internal research Programme for which they engage advisers from consultancy services. The method of developing a framework range from importing an existing and available package to develop the entire framework from scratch by departmental experts.

The best solution usually lies between these two extremes, namely, internally generated framework that builds relevance in business and done by adapting the existing models that have already been widely used and have been proved successful.

It is evident that many organizations develop a competency/behaviour framework with a view to effectively manage performance and progression. However, many managers find it difficult to use the frameworks and as such, fail to achieve their individual goals. Thus, the goals of the organization remain unachieved. The most common reason for this failure is that people are not adequately trained and they do not see the benefit of the framework.

In addition to this, people must be clear about the framework. In fact, many frameworks are a mix of different concepts. There are no clear links as to what the business is aiming to achieve; many frameworks are a mix of different concepts, which makes them clumsy and cumbersome.

The competency mapping process does not fit the one-size-fits all formula and it is to be specific to the user organization. It is better to develop models that draw from but are not defined by existing research, using behavioural interview methods so that the organization can create a model that reflects its own strategy, its own market, its own customers, and the competencies that bring success in that specific context (including national culture).

Start with small, discrete groups or teams, ideally in two directions-a 'horizontal slice' across the business that takes in a multi-functional or multi-site group, more or less at the same organizational level, and a 'vertical slice' taking in one whole department or team from top to bottom. From that, the organization can learn about the process of competency modeling, and how potential alternative formats for the models may or may not fit the needs of the business.

It is important to focus on one or two key areas of implementation rather than the whole HRD (Human Resource Development) agenda in one scoop. So, if recruitment and selection or performance management are the key strategic needs of the business, and where the pain is being felt, then start there. It is advisable to being with a 'horizontal' slice of the management or senior-most team as the benefits will percolate down to the whole organization.

Competency mapping refers to the process of identifying the key skills required for accomplishing tasks at a particular position. On completion of this process, the map becomes an input for several other HR processes such as job-evaluation; recruitment; training and development; performance management; and succession planning.

The mapping process starts with the understanding of the vision and mission of the organization, followed by translating them into specific, measurable, and time-bound business goals. It then moves towards clearly outlining an organization's structure, identifying various levels and positions, as well as reporting relationships obtained within the structure.

HR professionals initially draw a distinction between competencies and competences. Though these two terms are often used interchangeably, competency more precisely refers to employee behaviour whereas competence highlights on employee performances, skills, or their results.

3.9 THE COMPETENCY MAPPING PROCESS CONSISTS OF THE FOLLOWING STAGES

➢ **Stage 1:**

❖ Designing the questionnaire for data collection

While designing the questionnaire following factors are to be taken into consideration:

a. Knowing the Purpose of the job.

b. Identifying the Critical Success Factors.

c. Identifying the Key Result Areas.

d. Breaking KRAs into Key Activities.

➢ **Stage 2:**

❖ Data Collection:

a. Clarity of Organization Direction

b. Clarity of Organization Structure.

c. Interview Job Holder.

d. Interview Job Holder's Reporting Officer.

e. Discuss with the focus group if the job are of the same family.

➢ **Stage 3:**

❖ This Stage Involves:

a. Rank Order of the list of competencies (Guided/Unguided)

b. Comparing good performer and average performer with selected list of competencies.

c. Use research data and assign competencies to positions.

➢ **Stage 4:**

❖ Finalize Role Descriptions and Competencies-Job Wise.

3.10 THE FOLLOWING IS THE STEP-BY-STEP PROCESS FOR COMPETENCY MAPPING

➢ **Step I – Development of Core Competencies:**

In this step, the leadership of the organization meets to brainstorm which core competencies the organization requires in order to achieve its objectives, goals, and vision.

Examples of core competencies that are usually essential in organizations are problem-solving, team-building, decision-making, and communication skills.

> **Step 2 – Assessing Competency Levels Required Across Positions:**

After the leadership decides which competencies are essential, it is necessary to determine the degree to which, and manner in which, these competencies are required in each type of position (i.e., Sales Manager, Receptionist, and CEO). This assessment can be made through interviews with incumbents of sample positions, using a Position Information Questionnaire (PIQ).

> **Step 3 – Developing Competency-Based Job Descriptions:**

Following the interview process, job descriptions can be developed that include not only duties and reporting relationships but the core competency descriptions that are tailored to each position. The same competencies are included in each employee's performance appraisal instrument so that he/she is evaluated on the same criteria that are specified in the job description.

> **Step 4 – Competency-Based Matrix:**

For career development purposes, new employees (or potential employees) will be interested in career progression options available once they master different competency levels. As career options become more complex and sophisticated, the core competencies are elevated in terms of sophistication as well.

> **Step 5 – Individual Development Planning:**

Using the job-descriptions and the performance appraisal process as a foundation, Human Resources can provide coaching for individuals based on their unique developmental needs. For example- if a sales representative is interested in a position as Sales Manager, Human Resources professional can counsel this person about current strengths and areas for improvement and point out the competency levels required for the higher level position. Then the employee and the HR person can jointly map out a plan for the employee's development (courses, workshops, mentoring, etc.).

3.11 ASSESSMENT CENTRE AS A METHOD OF COMPETENCY MAPPING

"Assessment Centre" is a mechanism to identify the potential for growth. It is a procedure that uses a variety of techniques to evaluate employees for manpower purpose and decisions. It was initiated by American Telephone and Telegraph Company in 1960. An essential feature of the assessment center is the use of situational test to observe specific job behavior.

Since it is with reference to a job, elements related to the job are simulated through a variety of tests. The assessors observe the behavior and make independent evaluation of what they have observed, which results in identifying strengths and weaknesses of the attributes being studied?

3.12 ELEMENTS IDENTIFIED BY IPMA

The International Personnel Management Association (IPMA) has Identified the Following Elements, Essential for a process to be considered as assessment center:

1. Job analysis of relevant behavior to determine attributes, skills, etc., for effective job performance and what should be evaluated by assessment center.
2. Techniques used must be validated to assess the dimensions of skills and abilities.
3. Multiple assessment techniques must be used.
4. Assessment techniques must include job related simulations.
5. Multiple assessors must be used for each assesse.
6. Assessors must be thoroughly trained.
7. Behavioral observations by assessors must be classified into some meaningful and relevant categories of attributes, skills and abilities, etc.
8. Systematic procedures should be used to record observations.
9. Assessors must prepare a report.
10. All information thus generated must be integrated either by discussion or application of statistical techniques.

Data thus generated can become extremely useful in identifying employees with potential for growth.

Figure: 3.3: Steps of Competency Profiling

Source: Reetu and Satish (2018)

When the distinguishing proof of skills is finished, competency profiling is arranged which will set the normal key capabilities for a task. Expected or required skills are coordinated against the real skills of a task holder. The method involved with distinguishing the hole between expected and genuine skills is alluded to as Ability Planning. It has been demonstrated by different researchers that each individual has capabilities however is unique as far as blend and level of abilities contrasts from one person to another. Thus, associations need to distinguish the basic fundamental capabilities expected for person workers to convey their best in the association. The significance of planning the skills demonstrates basic for hierarchical achievement.

3.13 COMPETENCY MAPPING MODELS

Before discussing competency models, it is desirable to understand the term 'competency'. According to Morrelli et al., 'A competency is a measurable human capability that is required for effective performance. A competency may be comprised of knowledge, a single skill or ability, a personal characteristic, or a cluster of two or more of these attributes. This means that competencies facilitate and lead to superior results.

So far as a competency model is concerned, it lists the competencies required for delivering. It is essentially a model built on the foundation of inherent talents, incorporating the types of skills and knowledge, that can be acquired through learning, efforts and experience.

There are several competency models.

3.13.1 Some of the main ones are as follows:

❖ **Customized generic method** – As per this method, organizations use a probable list of competencies that are diagnosed internally to aid in their selection of a generic model and then validate it with the input of outstanding and average performers.

❖ **Job competence assessment method** – This is generated using interviews and observations of outstanding and average performers to determine the competencies that differentiates between them in critical incidents.

❖ **Flexible job competency model method** – This seeks to diagnose the competencies that will be required to perform effectively under different conditions in the future.

❖ **Accelerated competency system method** – This lays emphasis on the competencies that specifically support the production of output such as an organization's products, services or information.

❖ **Modified job competence assessment method** – This also identifies such behavioral differences as in the job competence assessment method, but to reduce costs, interviewees provide a written account of critical incidents.

❖ **Systems method** – This method requires reflecting on not only what exemplary performers do now, or what they do overall, but also behaviors that may be important in the future.

Which model or approach or method should be chosen depends on the circumstances of the organization concerned, but it should be ensured that it should be practically implementable and that the behaviors described in the model correlate with effectiveness on the job. In other words, it should be able to deliver the expected results.

3.14 COMPETENCY MAPPING AND ITS OUTCOMES IN THE ORGANIZATIONS

❖ **Enhancement of the Marketing Position:**

Competency-based applications can also improve the stature of an organization in terms of enhancing the employability brand of the organization.

❖ **Hiring Effectiveness:**

Competency-based efforts can have a positive effect on hiring and turnover. Improved recruiting and selection processes deliver employees who are more qualified for their new jobs.

❖ **Better Internal Placement:**

Similarly, positions can be filled more effectively with properly qualified internal candidates. Employees who are ready to move up can be readily identified and promoted. Employees who want to move up but are not qualified can be steered into necessary development activities. The result is more of the right people in the right jobs.

❖ **Training/Development Efficiencies:**

Organizations that train employees by title or by workgroup may be wasting a lot of productive time. Thirty-year employees may not need to be sitting next to new hires in some training class mandated by management. The goal for developing employees is just-in- time, just-as-needed. The immediate result of individual assessments is an easy win.

❖ **Increased Productivity:**

Productivity can be improved in three ways. First, enhanced selection of employees results in better across-the-board performance on the job. Second, time wasted in unnecessary development activities is converted into productive work time. Third, existing employees receive the development they want and need to be more effective in their jobs.

❖ **Better Organizational Performance:**

Competency-based HR applications can contribute to the overall performance of the organization, although they are hard to isolate as a direct cause. They can

deliver extremely large paybacks by helping organizations identify people who can help capture market share, shorten time to market, raise the level of customer service, be more innovative, improve efficiencies and make better decisions.

3.15 COMPETENCY-BASED HR PRACTICES – DESIRED OUTCOMES FOR THE EMPLOYEES

1. Understanding position requirements – Competency applications require a thorough grasp of the processes and skills/knowledge required to meet position performance standards.

2. Needed training – Competency assessments let employees indicate, in a low-risk manner, where they need help in getting their job done. It also lets them establish where they meet qualifications and where they need not waste time in unnecessary development activities.

3. Easier to show qualifications – When targeted business goals are not being met, the question arises whether the problem is people, processes, or uncontrollable outside factors. Competency assessments, along with the appraisal system, make it easier to show whether individual employees are properly trained and qualified.

4. Ability to prepare for the new/next job – Performance appraisals require that an employee be in a job for a period of time before the review takes place.

5. More rational HR decisions – Using competency assessment information, recruitment, hiring, placement, and promotion decisions are made much more objectively. Employees are hired, assessed, developed, and promoted based upon objective competencies rather than subjective preferences or unrelated factors such as seniority.

6. Assessment of competence makes it easy for the qualified worker to stand out and difficult for the unqualified worker to hide. Competency-based HR applications help migrate the responsibility for employee qualifications from management down to the individual worker (talent volatility).

3.16 METHODS OF COMPETENCY-BASED TRAINING NEEDS IDENTIFICATION

Because of highly competitive environment, it is becoming difficult for organizations to determine whether their employees have the capabilities required for success. Hence, a good number of companies are making use of competency models to help them identify knowledge, skills and personal characteristics needed for successful performance in a job. This, in turn, helps in identifying the training needs of the employees of the organization. First, identify the job or position to be analyzed and identify if there are any changes in the business strategy of the organization and whether such changes in the business strategy need new competencies or old competencies need to be altered.

The next step to follow is to identify effective and ineffective performers using the approaches such as analyzing one or more 'star' performers, surveying people who are familiar with the job and investigating benchmark data of good performers in other companies. The final step involves validating the model, that is, whether the competencies included in the model are really effective in getting the desired results.

3.17 SIGNIFICANT BENEFITS OF COMPETENCY MAPPING

Competency maps have many potential benefits for students and teaching staff. Of course, because staff and students share many goals, these benefits are not entirely divisible, some aspects of competency mapping will benefit both staff and students. A partial list of potential uses for competency mapping follows. It is likely that more benefits will be discovered as the technique matures.

I. Benefits for Staff:

If competency mapping can actually give a picture of the structure of the course as the students experience it, teaching staff will be able to use that picture as the basis for course refinement. The identification of key concepts is the first step towards designing a syllabus. The information gained can also be published to the students, for example by including it in the subject information handout that students usually receive in their first lecture, or by putting it on the courseware web page. Of course, it is quite possible that the structure revealed by analysis of student results does not match the lecturer's idea of the

conceptual structure of the course. In this case, the revealed structure may suggest ways in which the course can be improved. For example, if two competencies that should be revealed (for example, C pointers and passing by reference) are not clustered together, it could indicate a need to make the connection more explicit to the students.

If the competency map uses all the coursework marks as input, this will not help the students of that year; however, it may well help teaching staff to refine the coursework for the next delivery of the course. It would also be useful to staff who are teaching follow-on courses, as they would gain a better idea of which topics need revision. A competency map using only the marks for half of the course can be produced if staff wishes to refine the course on the fly, but care must be taken that the data are sufficient; if the only marks on record are the first six practical marks, it is unlikely that any useful conclusions can be drawn. It is not yet certain how many points are needed for competency mapping to be useful, but it is likely to depend on the amount and complexity of the course material.

These uses assume that competency mapping will educate the structure of the course. If, however, the technique does not do this, then there are still potential benefits; logically, it is expected that activities that test strongly related competencies should show correlation's in their marks; if this is not the case there must be some reason. For example, written exam questions about linked lists might not correlate strongly with practical questions about linked lists if success in practical is more closely related to factors other than subject knowledge.

This could be the case if some students find their work environment operating system, compiler and editor-difficult to use. In this case, practical questions will tend to cluster much more strongly with other practical questions, and much less strongly with theory questions. The competency map can show that there is a problem, it is then up to the teaching staff to investigate that problem. Of course, competency mapping over subsequent years of the course will help the staff to know when they have ameliorated the problem.

In a University setting, competency mapping can be used to compare demographic subsets of students to students' access to education, for example, if there is concern that students of non-English speaking background are finding a particular activity especially difficult because of the complex language used to explain it, then competency mapping can be

applied separately to the results from students belonging to that group and the results compared to a competency map derived from the marks of the rest of the student body.

In this case, a problem with English would result in a distorted cluster arrangement; written-answer questions and questions with complex requirements would tend to cluster together. The technique may also be used to determine whether female students conceptualize the subject differently to male students. Again, if a problem is found, competency mapping over subsequent years will show staff whether the remedies are working.

II. Benefits for the Students:

The primary benefit of competency mapping for students is the increased understanding of the student viewpoint that the teaching staff will have, and resulting in likely course improvements. However, students should also benefit directly from it. A constructivist's view of the teaching process suggests that students will assimilate new knowledge and gain new skills more readily if they can be made aware of how those new- competencies interrelate with knowledge and skills that are already mastered.

Of course, Lecturers know this, most new topics begin with an explanation is almost always exclusively verbal. Information about relationships is often best presented in visual form, especially if the relationships are multidimensional, but words are one-dimensional map of the course structure, may help students construct their understanding of the course material.

If it is possible to use competency mapping to break the subject down into components that are close to orthogonal, it should also be possible to design assessment on the basis of that break down. Once the components are known, assessment tasks can be designed that test them individually, or (since it is virtually impossible to test anything in isolation) as close to it as possible. Thus, a test can be delivered to students that are quite small, but gives results that are interpretable in terms of the course's competency map.

Because competency mapping measures correlation between task marks across students, it is obviously impossible to generate a competency map based on a single student's data, however, numeric results can be presented alongside the group competency map for example, by shading regions that correspond to topics that the student needs to work on.

In this way, a student may be able to use her test results to determine her own weaknesses, and then consult the map to see how they relate to the rest of the course; using this map and compass, she may find it easier to navigate through the material.

If she still has trouble understanding the material, she may ask a staff member for help. In this case, if the staff member has access to her test results, it would be easier to pinpoint the misconstruction that is at the heart of the problem. Experience shows that determining the problem is almost always harder and more time-consuming than solving it; figuring out what needs to be explained is more difficult than developing an explanation, especially considering that teachers can develop a set of explanations that work and reuse them.

This means that the student need not worry as much about coming to consultation, and (because consultation time can be used more effectively) the teaching staff are more likely to be free to help her.

To generate a concept map, cluster analysis and multidimensional scaling are applied to proximity data generated from the number of times, concepts were clustered together. Competency maps are generated in a similar way; after student marks, data is collected; cluster analysis and multidimensional scaling are applied to proximity data generated from the matrix of correlations between the marks.

3.18 SOME OTHER SIGNIFICANT BENEFITS

The advantages of having this kind of a competency management framework are:
1. Provides competency-based data on job specifications.
2. Allows organizations to use competency-based interviewing technique as a selection methodology.
3. Measures employee performance based on pre-identified competencies.
4. Permits measurement of competencies for current and future job roles.
5. Identifies learning needs based on competency gap.
6. Develops the organizational leadership by constantly developing competencies of employees at managerial levels and above.
7. Introduces skill-based rewards to encourage competency development among employees.
8. Manages employee career development initiatives by focusing on their competencies.

9. Encourages employees to initiate competency development plans to help them own and plan their career management.
10. Competency development leads to talent development which benefits both employees and the employer.

3.19 METHODS OF COMPETENCY MAPPING

It is not easy to identify all the competencies required to fulfill the job requirements. However, a number of methods and approaches have been developed and successfully tried out. These methods have helped managers to a large extent, to identify and reinforce and/or develop these competencies both for the growth of the individual and the growth of the organization. In the following section, some major approaches of competency mapping have been discussed.

Figure: 3.4 Methods of Competency Mapping

Source: https://www.geektonight.com/competency-mapping/
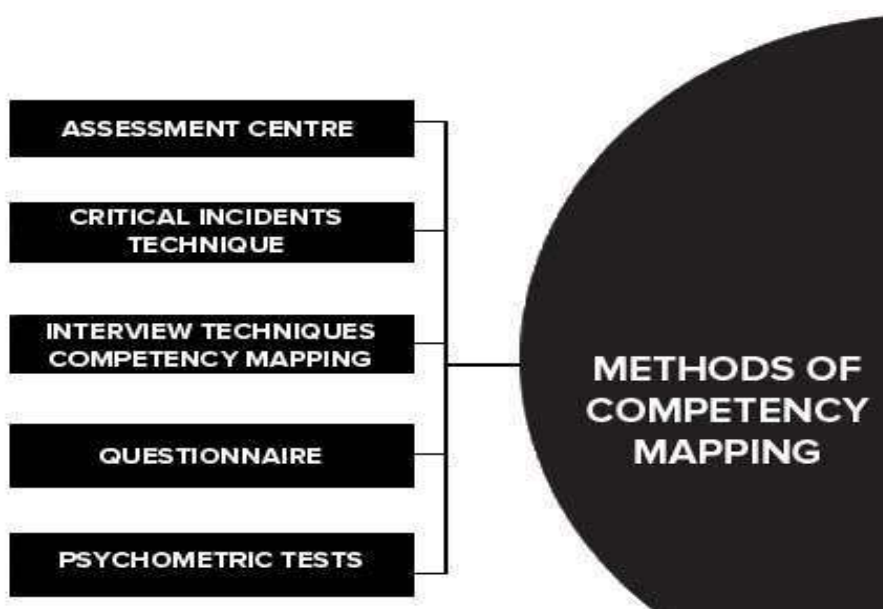
3.19.1 Assessment Centre

"Assessment Centre" is a mechanism to identify the potential for growth. It is a procedure (not location) that uses a variety of techniques to evaluate employees for manpower purpose and decisions. It was initiated by American Telephone and Telegraph Company in 1960 for line personnel being considered for promotion to supervisory positions. An

essential feature of the assessment center is the use of situational test to observe specific job behavior. Since it is with reference to a job, elements related to the job are simulated through a variety of tests. The assessors observe the behavior and make independent evaluation of what they have observed, which results in identifying strengths and weaknesses of the attributes being studied.

It is, however, worth remembering that there is a large body of academic research which suggests that the assessment centre is probably one of the most valid predictors of performance in a job and, if correctly structured, is probably one of the fairest and most objective means of gathering information upon which a selection decision can be based. From the candidate's perspective it is important to be natural and to be oneself when faced with an assessment centre, remembering always that you can only be assessed on what you have done and what the assessors can observe.

The International Personnel Management Association (IPMA) has identified the following elements, essential for a process to be considered as assessment center:

a) A job analysis of relevant behavior to determine attributes skills, etc. for effective job performance and what should be evaluated by assessment center.

- ➢ Techniques used must be validated to assess the dimensions of skills and abilities.
- ➢ Multiple assessment techniques must be used.
- ➢ Assessment techniques must include job related simulations.
- ➢ Multiple assessors must be used for each assessed.
- ➢ Assessors must be thoroughly trained.
- ➢ Behavioral observations by assessors must be classified into some meaningful and relevant categories of attributes, skills and abilities, etc.
- ➢ Systematic procedures should be used to record observations.
- ➢ Assessors must prepare a report.
- ➢ All information thus generated must be integrated either by discussion or application of statistical techniques.

b) Data thus generated can become extremely useful in identifying employees with potential for growth. Following are some of the benefits of the assessment center:

- ➢ It helps in identifying early the supervisory/ managerial potential and gives sufficient lead time for training before the person occupies the new position.

> ➢ It helps in identifying the training and development needs.
> ➢ Assessors who are generally senior managers in the organization find the training for assessor as a relevant experience to know their organization a little better.
> ➢ The assessment center exercise provides an opportunity for the organization to review its HRM policies.

c) Assessment Centre is a complex process and requires investment in time. It should safeguard itself from misunderstandings and deviations in its implementation. For this, the following concerns should be ensured:

> ➢ Assessment Centre for diagnosis is often converted as Assessment Centre for prediction of long-range potential.
> ➢ The assessors' judgment may reflect the perception of reality and not the reality itself.
> ➢ One is not sure if the benefits outweigh the cost.

Assessment Centre comprises a number of exercises or simulations which have been designed to replicate the tasks and demands of the job. These exercises or simulations will have been designed in such a way that candidates can undertake them both singly and together and they will be observed by assessors while they are doing the exercises. The main types of exercises are presented below. Most organizations use a combination of them to assess the strengths, weaknesses and potential of employees.

a) Group Discussions:

In these, candidates are brought together as a committee or project team with one or a number of items to make a recommendation on. Candidates may be assigned specific roles to play in the group or it may be structured in such a way that all the candidates have the same basic information. Group discussion allows them to exchange information and ideas and gives them the experience of working in a team. In the work place, discussions enable management to draw on the ideas and expertise of staff, and to acknowledge the staff as valued members of a team.

Some advantages of group discussion are:
> ➢ Ideas can be generated.
> ➢ Ideas can be shared.

- Ideas can be 'tried out'.
- Ideas can be responded to by others.
- When the dynamics are right, groups provide a supportive and nurturing environment for academic and professional endeavor.
- Group discussion skills have many professional applications.
- Working in groups is fun!

A useful strategy for developing an effective group discussion is to identify task and maintenance roles that members can take up. Following roles, and the dialogue that might accompany them in a group discussion have been identified.

I. Positive Task Roles:

These roles help in reaching the goals more effectively:

- **Initiator:** Recommends novel ideas about the problem at hand, new ways to approach the problem, or possible solutions not yet considered.
- **Information seeker:** Emphasizes "getting the facts" by calling for background information from others.
- **Information giver:** Provides data for forming decisions, including facts that derive from expertise.
- **Opinion seeker:** Asks for more qualitative types of data, such as attitudes, values, and feelings.
- **Opinion giver:** Provides opinions, values, and feelings.
- **Clarifier:** Gives additional information- examples, rephrasing, applications about points being made by others.
- **Summarizer:** Provides a secretarial function.

II. Positive Maintenance Roles:

These become particularly important as the discussion develops and opposing points of view begin to emerge:

- **Social Supporter:** Rewards others through agreement, warmth, and praise.
- **Harmonizer:** Mediates conflicts among group members.
- **Tension Reliever:** Informally points out the positive and negative aspects of the group's dynamics and calls for change, if necessary.
- **Energizer:** Stimulates the group to continue working when the discussion flags.

> **Compromiser**: Shifts her/his own position on an issue in order to reduce conflict in the group.

> **Gatekeeper:** Smoothens communication by setting up procedures and ensuring equal participation from members.

b) In Tray:

This type of exercise is normally undertaken by candidates individually. The materials comprise a bundle of correspondence and the candidate is placed in the role of somebody, generally, which assumed a new position or replaced their predecessor at short notice and has been asked to deal with their accumulated correspondence. Generally, the only evidence that the assessors have to work with is the annotations which the candidates have made on the articles of mail. It is important when undertaking such an exercise to make sure that the items are not just dealt with, but are clearly marked on the items any thoughts that candidates have about them or any other actions that they would wish to undertake.

c) Interview Simulations/Role Plays:

In these exercises candidates meet individually with a role player or resource person. Their brief is either to gather information to form a view and make a decision, or alternatively, to engage in discussion with the resource person to come to a resolution on an aspect or issue of dispute. Typically, candidates will be allowed 15 -30 minutes to prepare for such a meeting and will be given a short, general brief on the objective of the meeting. Although the assessment is made mainly on the conduct of the meeting itself, consideration are also be given to preparatory notes.

d) Case Studies / Analysis Exercises:

In this type of exercise, the candidate is presented with the task of making a decision about a particular business case. They are provided with a large amount of factual information which is generally ambiguous and, in some cases, contradictory. Candidates generally work independently on such an exercise and their recommendation or decision is usually to be communicated in the form of a brief written report and/or a presentation made to the assessors. As with the other exercises it is important with this kind of exercise to ensure that their thought processes are clearly articulated and available for the scrutiny of the assessors. Of paramount importance, if the brief requires a decision to be made, ensure that a decision is made and articulated.

3.19.2 Critical Incidents Technique

It is difficult to define critical incident except to say that it can contribute to the growth and decay of a system. Perhaps one way to understand the concept would be to examine what it does. Despite numerous variations in procedures for gathering and analyzing critical incidents researchers and practitioners agree the critical incidents technique can be described as a set of procedures for systematically identifying behaviors that contribute to success or failure of individuals or organizations in specific situations. First of all, a list of good and bad on the job behavior is prepared for each job. A few judges are asked to rate how good and how bad is good and bad behavior, respectively. Based on these ratings a check-list of good and bad behavior is prepared. The next task is to train supervisors in taking notes on critical incidents or outstanding examples of success or failure of the subordinates in meeting the job requirements. The incidents are immediately noted down by the supervisor as he observes them. Very often, the employee concerned is also involved in discussions with his supervisor before the incidents are recorded, particularly when an unfavorable incident is being recorded, thus facilitating the employee to come out with his side of the story.

The objective of immediately recording the critical incidents is to improve the supervisor's ability as an observer and also to reduce the common tendency to rely on recall and hence, attendant distortions in the incidents. Thus, a balance-sheet for each employee is generated which can be used at the end of the year to see how well the employee has performed. Besides being objective, a definite advantage of this technique is that it identifies areas where counseling may be useful.

In real world of task performance, users are perhaps in the best position to recognize critical incidents caused by usability problems and design flaws in the user interface. Critical incident identification is arguably the single most important kind of information associated with task performance in usability -oriented context. Following are the criteria for a successful use of critical incident technique:
- ➢ Data are center around real critical incidents that occur during a task performance.
- ➢ Tasks are performed by real users.
- ➢ Users are located in their normal working environment.
- ➢ Data are captured in normal task situations, not contrived laboratory settings.

- Users self-report their own critical incidents after they have happened.
- No direct interaction takes place between user and evaluator during the description of the incident(s).
- Quality data can be captured at low cost to the user.

Critical Incidents Technique is useful for obtaining in-depth data about a particular role or set of tasks. It is extremely useful to obtain detailed feedback on a design option. It involves the following three steps:

There are two kinds of approaches to gather information:

1) Unstructured approach:

where the individual is asked to write down two good things and two bad things that happened when one was carrying out an activity.

2) Moderate structured approach:

where the individual is asked to respond to following questions relating to what happened when he/she was carrying out an activity.

- What lead up to the situation?
- What was done that was especially effective or non- effective?
- What was the result (outcome)?

Step 1: Gathering facts:

The methodology usually employed through an open-ended questionnaire, gathering retrospective data. The events should have happened fairly recently: the longer the time period between the events and their gathering, the greater the danger that the users may reply with imagined stereotypical responses. Interviews can also be used, but these must be handled with extreme care not to bias the user.

Step 2: Content analysis:

Second step consists of identifying the contents or themes represented by the clusters of incidents and conducting "retranslation" exercises during which the analyst or other respondents sort the incidents into content dimensions or categories. These steps help to identify incidents that are judged to represent dimensions of the behaviour being considered. This can be done using a simple spreadsheet. Every item is entered as a

separate incident to start with, and then each of the incidents is compiled into categories. Category membership is marked as identical, quite similar and could be similar. This continues until each item is assigned to a category on at least a "quite similar" basis. Each category is then given a name and the number of the responses in the category are counted. These are in turn converted into percentages (of total number of responses) and a report is formulated.

Step 3: Creating feedback:

It is important to consider that both positive and negative feedback be provided. The poor features should be arranged in order of frequency, using the number of responses per category. Same should be done with the good features. At this point it is necessary to go back to the software and examine the circumstances that led up to each category of critical incident. Identify what aspect of the interface was responsible for the incident. Sometimes one finds that there is not one, but several aspects of an interaction that lead to a critical incident; it is their conjunction together that makes it critical and it would be an error to focus on one salient aspect.

A. Some of the advantages of critical incident technique are presented below:
- ➤ Some of the human errors that are unconsciously committed can be traced and rectified by these methods. For example, a case study on pilots obtained detailed factual information about pilot error experiences in reading and interpreting aircraft instruments from people not trained in the critical incident technique (i.e., eyewitness or the pilot who made the error)
- ➤ Users with no background in software engineering or human computer interaction, and with the barest minimum of training in critical incident identification, can identify, report, and rate the severity level of their own critical incidents. This result is important because successful use of the reported critical incident method depends on the ability of typical users to recognize and report critical incidents effectively.

B. Some of the disadvantages of critical incidents method are presented below:
- ➤ It focuses on critical incidents therefore routine incidents will not be reported. It is therefore poor as a tool for routine task analysis.
- ➤ Respondents may still reply with stereotypes, not actual events. Using more structure in the form improves this but not always.

➢ Success of the user reported critical incident method depends on the ability of typical end users to recognize and report critical incidents effectively, but there is no reason to believe that all users have this ability naturally.

3.19.3 Interview Techniques in Competency Mapping

Almost every organization uses an interview in some shape or form, as a part of competency mapping. Enormous amounts of research have been conducted an interviews and numerous books have been written on the subject. There are, however, a few general guidelines, the observation of which should aid the use of an interview for competency mapping.

➢ The interview consists of interaction between interviewer and applicant. If handled properly, it can be a powerful technique in achieving accurate information and getting access to material otherwise unavailable. If the interview is not handled carefully, it can be a source of bias, restricting or distorting the flow of communication.

➢ Since the interview is one of the most commonly used personal contact methods, great care has to be taken before, during and after the interview. Following steps are suggested:

➢ Before the actual interviews begins, the critical areas in which questions will be asked must be identified for judging ability and skills. It is advisable to write down these critical areas, define them with examples, and form a scale to rate responses. If there is more than one interviewer, some practice and mock interviews will help calibrate variations in individual interviewers' ratings.

➢ The second step is to scrutinize the information provided to identify skills, incidents and experiences in the career of the candidate, which may answer questions raised around the critical areas. This procedure will make interviews less removed from reality and the applicant will be more comfortable because the discussion will focus on his experiences.

➢ An interview is a face-to-face situation. The applicant is "on guard" and careful to present the best face possible. At the same time, he is tense, nervous and possibly frightened. Therefore, during the interview, tact and sensitivity can be very useful. The interviewer can get a better response if he creates a sense of ease and informality and hence, uncover clues to the interviewee's motivation,

attitudes, feelings, temperament, etc., which are otherwise difficult to comprehend.

➢ The fundamental step is establishing "rapport", putting the interviewee at ease; conveying the impression that the interview is a conversation between two friends, and not a confrontation of employer and employee. One way to achieve this is by initially asking questions not directly related to the job, that is, chatting casually about the weather, journey and so on.

➢ Once the interviewee is put at ease the interviewer starts asking questions, or seeking information related to the job. Here again it is extremely important to lead up to complex questions gradually. Asking a difficult, complex question in the beginning can affect subsequent interaction, particularly if the interviewee is not able to answer the question. Thus, it is advisable for the pattern to follow the simple-to-complex sequence.

➢ Showing surprise or disapproval of speech, clothes, or answers to questions can also inhibit the candidate. The interviewee is over-sensitive to such reactions. Hence, an effort to try and understand the interviewee's point of view and orientation can go a long way in getting to know the applicant.

➢ Leading questions should be avoided because they give the impression that the interviewer is seeking certain kinds of answers. This may create a conflict in the interviewee, if he has strong views on the subject. Nor should the interviewer allow the interview to get out of hand. He should be alert and check the interviewee if he tries to lead the discussion in areas where he feels extremely competent, if it is likely to stay away from relevant areas.

➢ The interviewer should be prepared with precise questions, and not take too much time in framing them.

Once this phase is over, the interviewers should discuss with the interviewee, identify areas of agreement and disagreement, and make a tentative decision about the candidate. It will be helpful if, in addition to rating the applicant, interviewers made short notes on their impression of candidates' behavior responses; which can then be discussed later. If the interview is to continue for many days, an evaluation of the day's work, content of questions and general pattern of response should be made for possible mid-course correction.

3.19.4 Questionnaires

Questionnaires are written lists of questions that users fill out questionnaire and return. You begin by formulating questions about your product based on the type of information you want to know. The questionnaire sources below provide more information on designing effective questions. This technique can be used at any stage of development, depending on the questions that are asked in the questionnaire. Often, questionnaires are used after products are shipped to assess customer satisfaction with the product. Such questionnaires often identify usability issues that should have been caught in-house before the product was released to the market.

a) Common Metric Questionnaire (CMQ):

They examine some of the competencies to work performance and have five sections: Background, Contacts with People, Decision Making, Physical and Mechanical Activities, and Work Setting. The background section asks 41 general questions about work requirements such as travel, seasonality, and license requirements. The Contacts with People section asks 62 questions targeting level of supervision, degree of internal and external contacts, and meeting requirements. The 80 Decision Making items in the CMQ focus on relevant occupational knowledge and skill, language and sensory requirements, and managerial and business decision making. The Physical and Mechanical Activities section contains 53 items about physical activities and equipment, machinery, and tools. Work Setting contains 47 items that focus on environmental conditions and other job characteristics. The CMQ is a relatively new instrument.

b) Functional Job Analysis:

The most recent version of Functional Job Analysis uses seven scales to describe what workers do in jobs. These are: Things, Data, People, Worker Instructions, Reasoning, Maths, and Language.

Each scale has several levels that are anchored with specific behavioral statements and illustrative tasks and are used to collect job information.

c) Multipurpose Occupational System Analysis Inventory (MOSAIC):

In this method each job analysis inventory collects data from the office of personnel management system through a variety of descriptors. Two major descriptors in each

questionnaire are tasks and competencies. Tasks are rated on importance and competencies are rated on several scales including importance and requirements for performing the task. This is mostly used for US government jobs.

d) Occupational Analysis Inventory:

It contains 617 "work elements." designed to yield more specific job information while still capturing work requirements for virtually all occupations. The major categories of items are five-fold: Information Received, Mental Activities, Work Behavior, Work Goals, and Work Context. Respondents rate each job element on one of four rating scales: part-of-job, extent, applicability, or a special scale designed for the element. Afterwards, the matching is done between competencies and work requirements.

e) Position Analysis Questionnaire (PAQ):

It is a structured job analysis instrument to measure job characteristics and relate them to human characteristics. It consists of 195 job elements that represent in a comprehensive manner the domain of human behavior involved in work activities. These items fall into following five categories:
  ➢ Information input (where and how the worker gets information),
  ➢ Mental processes (reasoning and other processes that workers use),
  ➢ Work output (physical activities and tools used on the job),
  ➢ Relationships with other persons, and
  ➢ Job context (the physical and social contexts of work).

f) Work Profiling System (WPS): It is designed to help employers accomplish human resource functions. The competency approach is designed to yield reports targeted toward various human resource functions such as individual development planning, employee selection, and job description. There are three versions of the WPS tied to types of occupations: managerial, service, and technical occupations. It contains a structured questionnaire which measures ability and personality attributes.

3.19.5 Psychometric Tests

Many organizations use some form of psychometric assessment as a part of their selection process. For some people this is a prospect about which there is a natural and understandable wariness of the unknown.

A psychometric test is a standardized objective measure of a sample of behavior. It is standardized because the procedure of administering the test, the environment in which the test is taken, and the method of calculating individual scores are uniformly applied. It is objective because a good test measures the individual differences in an unbiased scientific method without the interference of human factors. Most of these tests are time bound and have a correct answer. A person's score is calculated on the basis of correct answers. Most tests could be classified in two broad categories:

a) Aptitude Tests:

They refer to the potentiality that a person has to profit from training. It predicts how well a person would be able to perform after training and not what he has done in the past. They are developed to identify individuals with special inclinations in given abilities. Hence, they cover more concrete, clearly defined or practical abilities like mechanical aptitude, clinical aptitude and artistic aptitude etc.

b) Achievement Tests:

These tests measure the level of proficiency that a person has been able to achieve. They measure what a person has done. Most of these tests measure such things as language usage, arithmetic computation and reasoning etc.

3.20 ORGANIZATION EFFECTIVENESS

Organizations are becoming more fluid in the pursuit of maximum motivation, effective team work and higher organizational effectiveness. Organizational effectiveness can be measured in two forms: Financial effectiveness and non-financial effectiveness. Organization effectiveness is used to indicate the goal attainment of the organization. It indicates organizational growth, profitability and productivity and to some extent, employee satisfaction as well. According to S.P. Robbins, 'An organization is said to be effective if it is able to achieve its goals'. Jackson, Morgan and Paolillo defined it as 'effectiveness is commonly referred to as the degree to which predetermined goals are achieved'. organization effectiveness cannot be measured by a single criterion as it is multidimensional. According to Kondalkar, several factors need to be considered while measuring organizational effectiveness such as leadership style, organization citizenship, employee satisfaction level, customer satisfaction, skill variety, and quality management. Effectiveness considers the organization environment interface and also takes care of

human aspect of the organization. The fast pace of environmental changes in the global market makes managers increasingly aware of the importance of a high-caliber workforce in an organization's effort to attain its goals. Organizational researchers have always been looking for the answer to effectiveness of organizations. In spite of numerous efforts, there is a still confusion regarding what organizational effectiveness is. It has been not an easy task to compare studies of effectiveness, as only few researchers have focused on common criteria for measuring organizational effectiveness and effectiveness has been a tag attached on a wide variety of organizational phenomena from a wide variety of perspectives. Research conducted by various authors establish that no one ultimate criteria of organizational effectiveness exist, which increases the difficulty of organizational researchers. In fact, organizations may target for multiple and often contradictory goals, relevant effectiveness may change over the life cycle Introduction 32 of an organization, different constituencies may have particular importance at one time or with regard to certain organizational aspects and not others, and the relationships among various effectiveness dimensions may be difficult to discover. organization effectiveness includes various factors such as job satisfaction, organizational commitment, and employee turnover. Thus, organizational effectiveness can be understood as mutable (composed of different criteria at different life stages), comprehensive (including a multiplicity of dimensions), divergent (relating to different constituencies), trans positive (altering relevant criteria when different level of analysis is used) and complex (having non parsimonious relationship among dimensions).

Figure: 3.4 Approaches to Organisational Effectiveness

1 **The System Theory Appraoch**	**2** **Goal Attainment Approach**
3 **Behavioural Appraoch**	**4** **Strategic Constituency Approach**

Source:https://www.ifioque.com/library/measuring-approaches-to-organization-effectiveness

1. The system Theory approach: This approach to deal with authoritative viability center around inputs, that is, on the degree to which the association can obtain the assets it needs. This viewpoint credits adequacy to associations that display low execution or efficiency, insofar as they can get the important assets

2. Goal Attainment Approach: The Goal Approach is also called rational-goal or goal-attainment approach**,** it has its starting points in the robotic perspective on the association. This approach accepts that associations are arranged, consistent, objective looking for substances and they are intended to achieve at least one foreordained objective. Goal attainment is concerned with the result side and whether the association accomplishes its objectives regarding favored degrees of result. It sees adequacy concerning its inward authoritative goals and execution. Commonplace objective fulfillment factors incorporate benefit and effectiveness amplification.

3. Behavioural Approach: This approach manages the inward instruments of the association. The attention is on limiting strain, coordinating people and the association and directing smooth and effective activities. An association that centers essentially around keeping up with representative fulfillment and confidence, limiting clash and being productive buys into this view

4. Strategic Constituency Approach: This approach proposes that an effective association is one which satisfies the requests of those electorates in its current circumstance from whom it needs support for its endurance. It surveys the adequacy to fulfill numerous essential supporters both inside and outer to the association. Strategic Constituency Approach is great for associations which depend profoundly on reaction to requests. The Essential bodies electorate approach thinks about expressly that associations satisfy various objectives: every sort of authoritative voting demographic (like owners, laborers, shoppers, the neighborhood local area, and so forth) should have particular interests opposite the enterprise, and will in this way utilize different assessment standards.

3.21. CHAPTER SUMMARY

In the present serious market, the world is running behind changes, every single association needs to receive changes so as to accomplish their primary concern targets and to satisfy worldwide guidelines. These destinations will be accomplished through different unmistakable and elusive elements. Therefore, this chapter describes the different

definitions of competency and competency mapping by various thinkers and authors. It also covers the concept of competencies, need, components of competency mapping. It also describes the objective and purpose of competency Mapping, various Approaches, models, methods of Competency mapping. It also covers framework and process of CM. Competency mapping and its outcomes in the organization are also discussed in this chapter.

CHAPTER-4

COMPETENCY MAPPING IN IT SECTOR- AN ANALYSIS OF MANAGERIAL PERSPECTIVE

4.1 INTRODUCTION

In this chapter an effort is made to analyze the collected data to provide findings for the set of objectives. Further in this chapter both descriptive and inferential analysis have been made. For the descriptive analysis, simple percentage, mean and standard deviation techniques are used and for inferential analysis Chi-square, t-test, correlation and post hoc Duncan test have been used and presented below.

4.2 DESCRIPTIVE ANALYSIS

Table No: 4.1: Gender Status

Particulars			Nature of the Business			
			IT Services	BPO	KPO	Total
Gender	Male	Count	68	59	66	193
		% Within Nature of the Business	68	59	66	64.3
	Female	Count	32	41	34	107
		% Within Nature of the Business	32	41	34	35.7
Total		Count	100	100	100	300
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

From the above table 4.1 it is clear that out of 100 mangers from the IT services majority around 60% respondents are male and 32% respondents are female. In BPO 59% of the respondents are male and 41% of the respondents are Female. In KPO 66% respondents are male and 34% of the respondents are female. In total, out of 300 managers in IT sector 64.3% managers are male and 35.7% managers are female.

Table No: 4.2: Age Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Age	25-35	Count	49	41	47	137
		% Within Nature of the Business	49	41	47	45.7
	36-45	Count	46	57	48	151
		% Within Nature of the Business	46	57	48	50.3
	46-55	Count	5	2	5	12
		% Within Nature of the Business	5	2	5	4
Total		Count	100	100	100	300
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

Above table 4.2 depicts the age status of the managers in the study area. In IT sector 49% of the top-level managers are belongs to the age group of 25-35, 46% of the managers belongs to the age group of 36-45 and only 5% respondents belong to the age group of 46-55. In BPO 57% of the respondents belongs to 36-45 years of age group, 41% of the respondent's age is between 25-35 and only 2% respondents fall between 46-55. In KPO 48% mangers are between 36-45 age group, 47% are belongs to 25-35 and only 5% re belongs to 46 to 55 ages. In whole out of 300 managers 50.3% managers at the top level are belongs to the age group of 36-45, 45.7% managers are in the age between 25-35 and only 4% belongs to 46-55.

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Table No: 4.3: Education Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Educational Qualification	Graduation	Count	21	24	15	60
		% Within Nature of the Business	21	24	15	20
	Post-Graduation	Count	43	46	47	136
		% Within Nature of the Business	43	46	47	45.3
	Other Technical Courses	Count	36	30	38	104
		% Within Nature of the Business	36	30	38	104
Total		Count	100	100	100	300
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

Above table 4.3 describes the education qualification of the managers at the top level. In IT services 43% of the managers are post graduates, 36% of the managers have done other technical courses like BE, ITI, Diploma etc. In BPO 46% of the managers are post-graduates, 30% of the mangers have done technical courses, 24% of the managers are graduates. In KPO 47% of the managers are post-graduates, 38% of the managers are graduated in other technical courses, only 15% of the managers are graduates. On whole out of 300 managers 136% mangers are post-graduates. 104% managers are graduated in technical courses, and only 20 % the mangers are graduates.

Table No: 4.4: Monthly Income Status

<table>
<tr><td colspan="3" rowspan="2" style="text-align:center">Particulars</td><td colspan="3">Nature of the Business</td><td rowspan="2">Total</td></tr>
<tr><td>IT Services</td><td>BPO</td><td>KPO</td></tr>
<tr><td rowspan="16">Monthly Income</td><td rowspan="2">25000-35000</td><td>Count</td><td>2</td><td>0</td><td>0</td><td>2</td></tr>
<tr><td>% Within Nature of the Business</td><td>2</td><td>0</td><td>0</td><td>0.7</td></tr>
<tr><td rowspan="2">35001-45000</td><td>Count</td><td>3</td><td>0</td><td>0</td><td>3</td></tr>
<tr><td>% Within Nature of the Business</td><td>3</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td rowspan="2">45001 -55000</td><td>Count</td><td>3</td><td>0</td><td>0</td><td>3</td></tr>
<tr><td>% Within Nature of the Business</td><td>3</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td rowspan="2">55001 -65000</td><td>Count</td><td>3</td><td>0</td><td>0</td><td>3</td></tr>
<tr><td>% Within Nature of the Business</td><td>3</td><td>0</td><td>0</td><td>1</td></tr>
<tr><td rowspan="2">65001 -75000</td><td>Count</td><td>17</td><td>25</td><td>25</td><td>67</td></tr>
<tr><td>% Within Nature of the Business</td><td>17</td><td>25</td><td>25</td><td>22.3</td></tr>
<tr><td rowspan="2">75001 -85000</td><td>Count</td><td>37</td><td>46</td><td>43</td><td>126</td></tr>
<tr><td>% Within Nature of the Business</td><td>37</td><td>46</td><td>43</td><td>42</td></tr>
<tr><td rowspan="2">85001&
above</td><td>Count</td><td>35</td><td>29</td><td>32</td><td>96</td></tr>
<tr><td>% Within Nature of the Business</td><td>35</td><td>29</td><td>32</td><td>32</td></tr>
<tr><td colspan="2" style="text-align:center">Total</td><td>Count</td><td>100</td><td>100</td><td>100</td><td>300</td></tr>
<tr><td colspan="2"></td><td>% Within Nature of the Business</td><td>100</td><td>100</td><td>100</td><td>100</td></tr>
</table>

Source: Primary Data

Above table 4.4 depicts the monthly income status of the mangers in the study area. In IT services 37% of the mangers are getting salary from 75001-85000, 35% of the managers are getting 85001 and above, 17% mangers are getting 65001-75000 salary, 3% of the mangers are falling under 35000-55000 and only 2% of the managers are getting salary of 25000-35000. In BPO 46% mangers are getting salary of 75001-85000, 29% of the respondents are 85001 and above, 25% of the respondents are getting salary 65001-75000. In KPO 43% mangers are availing salary of 75001-85000, 32% managers are in the slab of 85000 and above, 25% of the managers are in the slab of 65001-75000. Total out of 300 respondent managers 42% are getting salary of 75001-85000, 32% of the managers are in

the slab of 85001 and above only 22.3% of the respondents are in the salary slab of 65001 -75000.

Table No: 4.5: Marital Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Marital Status	Married	Count	70	79	72	221
		% Within Nature of the Business	70	79	72	73.7
	Unmarried	Count	30	21	28	79
		% Within Nature of the Business	30	21	28	79
Total		Count	100	100	100	300
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

Above table 4.5 shows the marital status of the managers. In IT services 70% respondents are married and 30% of the managers are unmarried. In BPO 79% managers are married and 21% of the respondents unmarried. In KPO 72% of the managers are married, 28% of the managers are unmarried. In total 79% of the respondents are unmarried and 73.7% respondents are married.

Table No: 4.6: Family Structure

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Family Structure	Nuclear	Count	75	72	95	242
		% Within Nature of the Business	75	72	95	80.7
	Joint	Count	25	28	5	58
		% Within Nature of the Business	25	28	5	19.3
Total		Count	100	100	100	300
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

Table above 4.6 shows the Family structure of the mangers in the study area. In IT services 75% of the mangers belong to nuclear family, 25% of the mangers belong to Joint family. In BPO 72% of the managers belong to nuclear family, 28% of the managers belong to joint family. In KPO 95% of the managers belong to nuclear family, only 5% managers are in joint family. Out of 300 mangers 80.7% managers live in nuclear family and only 19.3% managers live in joint family.

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Locality	Rural	Count	19	10	6	35
		% Within Nature of the Business	19	10	6	11.7
	Semi-Urban	Count	46	51	60	157
		% Within Nature of the Business	46	51	60	52.3
	Urban	Count	35	39	34	108
		% Within Nature of the Business	35	39	34	36
Total		Count	100	100	100	300
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

The table above 4.7 indicates the locality status of the managers in the study area. In IT services sector 46% managers are from semi-urban area, 35% managers are from urban area and only 19% respondents are from rural area. In BPO 51% managers are from semi-urban area, 39% managers are from urban and only 10% managers are from rural background. In KPO 60% of the managers are from semi-urban area and 6% of the respondents are from rural area. Out of 300 managers 52.3% managers are from semi-urban area, 36% managers are from urban area and only 11.7% respondents are from rural area.

Table No: 4.8: Job Experience Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Experience	Below 5 years	Count	1	0	0	1
		% Within Nature of the Business	1	0	0	0.3
	6-10 years	Count	36	28	31	95
		% Within Nature of the Business	36	28	31	31.7
	11-15 years	Count	38	41	38	117
		% Within Nature of the Business	38	41	38	39
	15-20 years	Count	25	31	31	87
		% Within Nature of the Business	25	31	31	29
Total		Count	100	100	100	300
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

Above table 4.8 clearly explains the Job experience status of the managers. In It services 38% of the managers have 11-15 years of experience, 36% managers have 6-10 years of experience, 25% of the managers have 15-20 year of experience. In BPO 41% of the

managers have 11-15 years of experience, 31% of the managers have 15-20 years of experience, and only 28% of the managers have 6-10 years of experience. In KPO 38% of the managers have 11-15 years, 31% of the managers have experience about 15-20 and 6-10 years. In whole out of 300 man of experience, 39% managers have 11-15 years of experience, 31.7% of the managers have 6-10 years of experience and only 29% are having experience of 11-15 years.

Table No: 4.9: Type of Competency Model Used in the Organization

Competency Model	IT Services		BPO		KPO	
	F	Percentage (%)	F	Percentage (%)	F	Percentage (%)
Individualistic Model	50	50	54	54	42	42
Organization Model	54	54	60	60	60	60
HR System Model	58	58	58	58	62	62
Intellectual Capital Model	47	47	60	60	62	62

Source: Primary Data

Above table 4.9 clearly depicts the type of Competency Model Used in the organization. In IT sector, 58% of the mangers are said that they have adopted HR system model, 54% managers said that they have adopted organization model, 50% managers said that they have adopted individualistic model and 47% managers said that they have adopted intellectual capital model. in BPO, 60% managers said that they have adopted organization model, 58% are said that they have adopted HR system model, 54% have adopted individualistic model and 60% managers said that they have adopted intellectual capital model. where as in KPO, 62% have adopted HR system model, intellectual capital model, 60% have adopted organization model, 42% have adopted individualistic model and 62% managers said that they have adopted intellectual capital model.

Table No: 4.10: Purpose of Competency Mapping

Objectives	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Analyzing the Gap	100	1.67	0.47	100	1.56	0.49	100	1.53	0.50
Clarity in Role	100	1.80	0.71	100	1.80	0.67	100	1.69	0.63
Assortment of responsibility	100	2.08	0.87	100	1.62	0.61	100	1.83	0.80

	100	1.83	0.88	100	1.84	1.03	100	1.70	0.70
Identifying the potential, plan of growth	100	1.83	0.88	100	1.84	1.03	100	1.70	0.70
Succession forecasting	100	1.65	0.78	100	1.84	0.66	100	1.73	0.55
Re-organization	100	1.92	0.81	100	1.72	0.65	100	1.64	0.64
Competencies list for forecasted needs	100	1.81	0.80	100	1.66	0.62	100	1.62	0.60
Any other (Please Specify)	100	3.03	1.30	100	2.84	1.5	100	2.55	1.32

S*ource: Primary Data (1=Very Large Extent, 2=Large Extent, 3= Neutral, 4=Little Extent, 5=Very Little Extent)*

Above table 4.10 clearly indicates the purpose of competency mapping in IT sector. In IT services the mean value is less than 3 for all the variables asked to the Top and middle level managers, hence, it is clear that the competency mapping is done for different purposes accordingly. In BPO also for all the variable the mean value is less than 3, hence, it is proved that here also the competency mapping is used for above asked purposes. Where as in KPO for all the variables asked to check out the purposes for which the competency mapping is used, the mean value is less than 3, hence, it is said that here also the competency mapping is used for different purposes.

Table No: 4.11: Objectives of Competency Mapping Model

Competency Model	**IT Services**		**BPO**		**KPO**	
	F	**Percentage (%)**	**F**	**Percentage (%)**	**F**	**Percentage (%)**
Enhancing organizations competitive position	43	43	42	42	49	49
Right people in the right job internally	48	48	53	53	52	52
Improved recruitment and selection process	45	45	55	55	56	56
Reduced cost and time	51	51	53	53	52	52
Overall organizational performance by capturing market share	55	55	55	55	53	53
Any other (Please Specify)	51	51	54	54	52	52

Source: Primary Data

Above table 4.11 clearly depicts the objectives of competency mapping. In IT services 55% of the mangers said that main objectives behind competency mapping is overall organizational performance by capturing market share, 51% organizations adopted to reduce the cost and time, 51% of the organization adopted other than mentioned objectives like build trust between the employees, helps the employees to reach the organizational objectives and others, 48% organizations adopted for the purpose of right people in the right job internally, 45% for Improved recruitment and selection process, 43% organizations for Enhancing Organizations Competitive position. In BPO 55% of the organizations adopted for the purpose improved recruitment and selection process and overall organizational performance by capturing market share, 54% of the organization adopted other than mentioned objectives like build trust between the employees, helps the employees to reach the organizational objectives and others, 53% of the organization adopted for the purpose of right people in the right job internally and Reduced cost and time, 42% of the organizations have adopted for the purposes of Enhancing Organizations Competitive position. In KPO 56% organizations have adopted for the purpose of improved recruitment and selection process, 53% organizations adopted for the reason of overall organizational performance by capturing market share, 52% organizations have adopted for the objective of Right people in the right job internally and to reduce cost and time. 49% organizations have adopted for the reason of enhancing Organizations Competitive position.

Table No: 4.12: Core Competencies Considered while Mapping the Employees

Competency Mapping	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Functional Expertise	100	1.53	0.63	100	1.53	0.61	100	1.51	0.58
Personal Effectiveness	100	1.49	0.50	100	1.46	0.50	100	1.48	0.50.
Innovation	100	1.52	0.61	100	1.52	0.58	100	1.55	0.64
Team Effectiveness	100	1.49	0.54	100	1.52	0.58	100	1.48	0.50
Physical ability	100	1.52	0.61	100	1.52	0.58	100	1.55	0.64

Technical Knowledge	100	1.49	0.54	100	1.52	0.58	100	1.48	0.50
Self-Development	100	1.52	0.61	100	1.49	0.50	100	1.47	0.50
Communication	100	1.49	0.54	100	1.55	0.64	100	1.55	0.64
Knowledge and Aptitude	100	1.55	0.63	100	1.47	0.50	100	1.47	0.50
Leadership Skills	100	1.47	0.50	100	1.53	0.61	100	1.53	0.61
Managerial Ability	100	1.55	0.63	100	1.47	0.50	100	1.53	0.59
Supervision	100	1.47	0.50	100	1.53	0.61	100	1.53	0.61
Maintenance Skills	100	1.55	0.63	100	1.47	.50	100	1.48	0.50
Commitment	100	1.49	0.50	100	1.50	0.58	100	1.54	0.64
Time Management	100	1.53	0.63	100	1.52	0.59	100	1.48	0.50
Openness to receive criticisms and comments	100	1.49	0.50	100	1.46	0.50	100	1.48	0.50
Personality Traits	100	1.51	0.61	100	1.57	0.67	100	1.54	0.64

Source: Primary Data

Above table 4.12 clears about major competencies considered by the organizations while mapping their employees. In IT services based on the mean value (1.55) it is clear that skills like knowledge and ability, managerial ability, maintenance skill are very importantly considered as important while mapping employees mapping. (1.52) mean score says that innovation, physical ability, self-development are other important competencies, 1.51 and 1.53 mean score clears that Personality traits, and time management are also important, 1.47 and 1.49 mean scores says that leadership skills, supervision, personal effectiveness, team effectiveness, technical knowledge, communication, commitment, openness to receive criticism and commits. In BPO mean score of (1.57) confirms that personality traits, (1.55) communication, (1.53) functional

expertise, leadership skills and supervision are very important, (1.52) innovation, team effectiveness, physical ability, time management are very important, 1.46 to 1.50 mean scores says that personal effectiveness, self-development, knowledge and aptitude, managerial ability, maintenance skills, openness to receive criticism and comment are very importantly considered for employee mapping. In KPO (1.53) to (1.55) mean scores clears that Innovation, physical ability, communication, personality traits, leadership skills, managerial ability and supervision are important competencies while considered mapping the employees.

Table No: 4.13: Technical Competency Considered for HRM Functions

Description			HRM Functions					
			RS	TD	CB	PM	MSR	Total
Functional Expertise	IT Services	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	54	46	0	0	0	100
		% Within Nature of the Business	54	46	0	0	0	100
	KPO	Count	53	47	0	0	0	100
		% Within Nature of the Business	53	47	0	0	0	100
	Total	Count	158	142	0	0	0	300
		% Within Nature of the Business	52.7	47.3	0	0	0	100
Adoption of Technological change	IT Services	Count	53	41	6	0	0	100
		% Within Nature of the Business	53	41	6	0	0	100
	BPO	Count	53	43	4	0	0	100
		% Within Nature of the Business	53	43	4	0	0	100
	KPO	Count	54	38	8	0	0	100
		% Within Nature of the Business	54	38	8	0	0	100
	Total	Count	160	122	18	0	0	300
		% Within Nature of the Business	53.3	40.7	6	0	0	100
Knowledge about software	IT Services	Count	52	47	1	0	0	100
		% Within Nature of the Business	52	47	1	0	0	100
	BPO	Count	53	42	5	0	0	100
		% Within Nature of the Business	53	42	5	0	0	100
	KPO	Count	53	47	0	0	0	100
		% Within Nature of the Business	53	47	0	0	0	100
	Total	Count	158	136	6	0	0	300
		% Within Nature of the Business	52.7	45.3	2	0	0	100

			RS	T&D	CB	PM	MSR	Total
Skills to handle back office /front office jobs	IT Services	Count	53	41	6	0	0	100
		% Within Nature of the Business	53	41	6	0	0	100
	BPO	Count	53	43	4	0	0	100
		% Within Nature of the Business	53	43	4	0	0	100
	KPO	Count	54	38	8	0	0	100
		% Within Nature of the Business	54	38	8	0	0	100
	Total	Count	160	122	18	0	0	300
		% Within Nature of the Business	53.3	40.7	6	0	0	100
Attitude and skills related to implement technology	IT Services	Count	52	47	1	0	0	100
		% Within Nature of the Business	52	47	1	0	0	100
	BPO	Count	53	42	5	0	0	100
		% Within Nature of the Business	53	42	5	0	0	100
	KPO	Count	53	47	0	0	0	100
		% Within Nature of the Business	53	47	0	0	0	100
	Total	Count	158	136	6	0	0	300
		% Within Nature of the Business	52.7	45.3	2	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

From the above table 4.13 following is clear that,

Functional Expertise: In IT services 51% of organizations considered functional expertise while doing recruitment and selection, 49% organizations considered it on training and development. In BPO 54% organizations considered it while doing recruitment and selection 46% organizations considered at training development. In KPO 53% organizations considered more while doing recruitment selection, only 47% organizations used on training and development.

Adoption of Technological Change: In IT services, 53% of the organizations considered at the time of recruitment and selection, 41% of the organizations considered it at the training and development. In BPO 53% of the organizations considered at the time of recruitment and selection 43% of the organization considered at the time of training and development. In KPO 54% organizations considered at the time of recruitment and selection, 38% of the organizations used at the time of training and development.

Knowledge about software: In IT services 53% of the organizations are considered at the time of recruitment and selection, 41% of organizations are considered at the time of training and development. In BPO 53% of the organizations are considered at the time of

the recruitment and selection, 42% of the organizations considered at the time of the training and development. In KPO 53% of the organizations are considered this competency at the time of recruitment and selection, 47% of the organizations considered at the time of training and selection.

Skills to handle back office/ front office jobs: In IT Services 53% of the organizations considered at the time of recruitment and selection, 41% of the organizations using it at the time of training and development. In BPO 53% of the organizations considered at the time of recruitment and selection, 38% of the organizations use it at the time of training and development. In KPO 54% organizations use it at the time of recruitment and selection, 38% of the organizations use it at the time of training and development.

Attitude and Skills related to implement technology: In IT services 52% of the organizations use it at the time of recruitment and selection, 47% at the time of training and development. In BPO 53% of the organizations consider it at the time of recruitment and selection, 42% at the time of training and development. In KPO 53% of the organizations use it at the time recruitment and selection, 47% of the organizations consider at the time of training and development.

Hypothesis 1

H_0:   There is no significant impact of Technical Competencies of Top and Middle level Employees on Organization Culture.

H_1:   There is a significant impact of Technical Competencies of Top and Middle level Employees on Organization Culture.

To prove the above hypothesis Chi-square test has been used and presented in the below table followed by detailed analysis.

Table No: 4.14: Chi-Square Test for Technical Competency and Organization Culture.

Chi-square tests result of technical competency and organization culture.			
Technical Competency and Organization Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	62.29	25	0.000
Likelihood Ratio	67.443	25	0.000
N of Valid Cases	300		

(Source: Calculated Value)

Above table 4.14 clearly exhibiting the calculation of chi-square value to check the impact of technical competencies on organization culture. Here the calculated value is more than the table value (37.652) at 5% significance level. And the $p<0.05$, hence, it is proved that the null hypothesis is rejected and alternative hypothesis is accepted. therefore, it can be said that there is a significant impact of technical competencies on organization culture at Top and Middle level employees in IT sector.

Table No: 4.15: Managerial Competency Considered for HRM Functions.

Description			HRM Functions					
			RS	TD	CB	PM	MSR	Total
Knowledge to plan the major activities of business	IT Services	Count	53	41	6	0	0	100
		% Within Nature of the Business	53	41	6	0	0	100
	BPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	KPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	Total	Count	158	136	6	0	0	300
		% Within Nature of the Business	52.7	45.3	2	0	0	100
Knowledge to mobilize the resources	IT Services	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	KPO	Count	55	39	6	0	0	100
		% Within Nature of the Business	55	39	6	0	0	100
	Total	Count	158	136	6	0	0	300
		% Within Nature of the Business	52.7	45.3	2	0	0	100
Expertise knowledge in organizing resources	IT Services	Count	54	39	7	0	0	100
		% Within Nature of the Business	54	39	7	0	0	100
	BPO	Count	55	36	9	0	0	100
		% Within Nature of the Business	55	36	9	0	0	100
	KPO	Count	52	46	2	0	0	100
		% Within Nature of the Business	52	46	2	0	0	100

	Total	Count	161	121	18	0	0	300
		% Within Nature of the Business	53.7	40.3	6	0	0	100
Skills to handle resources	IT Services	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	KPO	Count	56	38	6	0	0	100
		% Within Nature of the Business	56	38	6	0	0	100
	Total	Count	159	135	6	0	0	300
		% Within Nature of the Business	53	45	2	0	0	100
Proper utilization of available resources Coordination	IT Services	Count	54	39	7	0	0	100
		% Within Nature of the Business	54	39	7	0	0	100
	BPO	Count	55	36	9	0	0	100
		% Within Nature of the Business	55	36	9	0	0	100
	KPO	Count	52	46	2	0	0	100
		% Within Nature of the Business	52	46	2	0	0	100
	Total	Count	161	121	18	0	0	300
		% Within Nature of the Business	53.7	40.3	6	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

Above table 4.15 clearly explains the Managerial competencies considered by the organizations at various HRM functions of the organization. Here different managerial functions are considered for the study as under.

Knowledge to plan the major activities of Business: in IT services 53% the organizations are considered at the time of recruitment and selection, 46% of the organizations consider at the time of training and development, only 6% organizations consider at the time of compensation and benefits. In BPO 52% of the organizations consider it at the time of the recruitment and selection, 52% organizations consider at the time of recruitment and selection, 48% organizations at the time of training and development, in KPO 52% organizations consider at the time of the recruitment and selection45% organizations consider at the time of training and development.

Knowledge to mobilize the resources: With respect to this competency in IT services 51% organizations consider at the time of recruitment and selection, 49% at the time of training and development. In BPO 52% organizations consider at the time of recruitment and selection and 49% at the time of training and development. In KPO 55% organizations consider at the time of recruitment and selection, 39% at the time of training and development.

Expertise knowledge in organizing resources: With reference to the said competency in IT services sector 54% organizations consider at the time of recruitment and selection, and 39% at the time of training and development. In BPO 55% organizations consider at the time of recruitment and selection, 36% at the time of training and development. In KPO 52% organizations at the time of recruitment and selection, 46% organizations at the time of training and development.

Skills to handle resources: For this competency in IT services 51% of the organizations consider at the time of recruitment and selection, 49% organization consider at the time of training and development. In BPO 52% organizations consider at the time of recruitment and selection, 48% organizations at the time of training and development. In KPO 56% organizations at the time of recruitment and selection, 38% organizations consider at the time of training and development.

Proper utilization of available resources: For this competency in IT services 54% organizations consider at the time of recruitment and selection, 39% organizations at the time of training and development. In BPO 55% of the organizations consider at the time of training and development and 36% organizations at the time of training and development. In KPO 52% organizations at the time of recruitment and selection, 46% organizations at the time of training and development.

Hypothesis 2

H_0: There is no significant impact of Managerial Competencies of Top and Middle level Employees on Organization Culture.

H_1: There is a significant impact of Managerial Competencies of Top and Middle level Employees on Organization Culture.

To prove the above hypothesis Chi-square test has been used and presented in the below table followed by detailed analysis.

Table No: 4.16: Chi-Square Test for Managerial Competency and Organization Culture.

Chi-square tests result of managerial competency and organization culture.			
Managerial Competencies and Organization Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	46.78	30	0.000
Likelihood Ratio	50.596	30	0.000
N of Valid Cases	300		

(Source: Calculated Value)

In the above table 4.16 calculations are made to prove the impact of managerial competencies on organization culture. Here the calculated value is more than the table value (43.773) and the p<0.05, hence, it is proved that the null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it is clear that there is an impact of Managerial Competencies on organizational culture.

Table No: 4.17: Behavioral Competency Considered for HRM Functions.

Description			HRM Functions					
			RS	TD	CB	PM	MSR	Total
Self-Motivated completion of goals Active	IT Services	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	KPO	Count	56	38	6	0	0	100
		% Within Nature of the Business	56	38	6	0	0	100
	Total	Count	159	135	6	0	0	300
		% Within Nature of the Business	53	45	2	0	0	100
Motivating other employees	IT Services	Count	53	41	6	0	0	100
		% Within Nature of the Business	53	41	6	0	0	100
	BPO	Count	54	42	4	0	0	100
		% Within Nature of the Business	54	42	4	0	0	100
	KPO	Count	51	47	2	0	0	100
		% Within Nature of the Business	51	47	2	0	0	100
	Total	Count	158	130	12	0	0	300
		% Within Nature of the Business	52.7	43.3	4	0	0	100

Developing skills and knowledge through proper training	IT Services	Count	50	50	0	0	0	100
		% Within Nature of the Business	50	50	0	0	0	100
	BPO	Count	54	46	0	0	0	100
		% Within Nature of the Business	54	46	0	0	0	100
	KPO	Count	52	42	6	0	0	100
		% Within Nature of the Business	52	42	6	0	0	100
	Total	Count	156	138	6	0	0	300
		% Within Nature of the Business	52	46	2	0	0	100
Interpersonal skills priorities, Goals	IT Services	Count	54	40	6	0	0	100
		% Within Nature of the Business	54	40	6	0	0	100
	BPO	Count	53	38	9	0	0	100
		% Within Nature of the Business	53	38	9	0	0	100
	KPO	Count	52	43	5	0	0	100
		% Within Nature of the Business	52	43	5	0	0	100
	Total	Count	159	121	20	0	0	300
		% Within Nature of the Business	53	40.3	6.7	0	0	100
Keeping peaceful environment at the workplace	IT Services	Count	50	50	0	0	0	100
		% Within Nature of the Business	50	50	0	0	0	100
	BPO	Count	54	46	0	0	0	100
		% Within Nature of the Business	54	46	0	0	0	100
	KPO	Count	52	44	4	0	0	100
		% Within Nature of the Business	52	44	4	0	0	100
	Total	Count	156	140	4	0	0	300
		% Within Nature of the Business	52	46.7	1.3	0	0	100
Handling grievances with proper channel	IT Services	Count	54	40	6	0	0	100
		% Within Nature of the Business	54	40	6	0	0	100
	BPO	Count	53	38	9	0	0	100
		% Within Nature of the Business	53	38	9	0	0	100
	KPO	Count	52	43	5	0	0	100
		% Within Nature of the Business	52	43	5	0	0	100
	Total	Count	159	121	20	0	0	300
		% Within Nature of the Business	53	40.3	6.7	0	0	100
Problem solving	IT Services	Count	50	50	0	0	0	100
		% Within Nature of the Business	50	50	0	0	0	100
	BPO	Count	54	46	0	0	0	100
		% Within Nature of the Business	54	46	0	0	0	100
	KPO	Count	50	50	0	0	0	100

		% Within Nature of the Business	50	50	0	0	0	100
	Total	Count	154	146	0	0	0	300
		% Within Nature of the Business	51.3	48.7	0	0	0	100
Achievement oriented	IT Services	Count	54	40	6	0	0	100
		% Within Nature of the Business	54	40	6	0	0	100
	BPO	Count	53	38	9	0	0	100
		% Within Nature of the Business	53	38	9	0	0	100
	KPO	Count	53	39	8	0	0	100
		% Within Nature of the Business	53	39	8	0	0	100
		Count	160	117	23	0	0	300
	Total	% Within Nature of the Business	53.3	39	7.7	0	0	100
Ability to take risk	IT Services	Count	50	50	0	0	0	100
		% Within Nature of the Business	50	50	0	0	0	100
	BPO	Count	54	46	0	0	0	100
		% Within Nature of the Business	54	46	0	0	0	100
	KPO	Count	50	50	0	0	0	100
		% Within Nature of the Business	50	50	0	0	0	100
		Count	154	146	0	0	0	300
	Total	% Within Nature of the Business	51.3	48.7	0	0	0	100
Capacity to work in a team	IT Services	Count	54	40	6	0	0	100
		% Within Nature of the Business	54	40	6	0	0	100
	BPO	Count	53	38	9	0	0	100
		% Within Nature of the Business	53	38	9	0	0	100
	KPO	Count	53	39	8	0	0	100
		% Within Nature of the Business	53	39	8	0	0	100
		Count	160	117	23	0	0	300
	Total	% Within Nature of the Business	53.3	39	7.7	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

Above table 4.17 clearly depicts the Behavioral Competency Considered for HRM Functions. For the purpose of studying the behavioral competency considered for HRM, above mentioned competencies studied and explained below.

Self-motivated completion of goals active: For this competency in IT sector 51% of the organizations are considered at the time of recruitment and selection 49% of the organization consider at the time of training and development. In BPO 52% organizations considered at the time of recruitment and selection and 49% organizations considered at the time of training and development. In KPO 56% organizations considered at the time of recruitment and selection only 38% organizations considered at the time of training and development.

Motivating other employees: In IT services 53% organizations considered at the time of recruitment and selection, 41% considered at the time of training and development. In BPO 54% organizations considered at the time of recruitment and selection and 42% at the time of training and development. In KPO 51% organizations consider at the time of recruitment and selection, 47% at the time of training and development.

Developing skills and knowledge through proper training: 50% organizations in IT services considered at the time of recruitment and selection and 50% at the time of training and development. In BPO 54% organizations considered at the time of recruitment and selection and 46% at the time of training and development. In KPO 52% organizations considered at the time of recruitment and selection and only 42% organizations considered at the time of training and development.

Interpersonal skills priorities, goals: For this competency in IT services 54% organizations have taken into consideration at the time of recruitment and 40% at the time of training and development. In BPO 53% organizations considered at the time of recruitment and 53% at the time of training and development. In KPO 52% of the organizations considered at the time of recruitment and selection and 43% at the time of training and selection.

Keeping peaceful environment at the workplace: With respect to this competency in IT services 50% organizations considered at the time of recruitment and selection and 50% at the time of training and development. In BPO 54% organizations considered at the time of recruitment and selection and 46% at the time of training and development. In KPO 52% organization considered at the time of recruitment and selection and 44% at the time of training and development.

Handling grievances with proper channel: In IT services 54% of the organizations considered at the time of recruitment and selection and only 40% organizations considered at the time of training and development. In BPO 53% organizations considered at the time of recruitment and selection and 53% organizations considered at the time of training and development. In KPO 52% organizations considered at the time of recruitment and selection, and 43% organizations considered at the time of training and development.

Problem solving: 54% IT services considered this competency at the time of recruitment and selection and 40% at the time of training and development. 53% BPO organizations considered at the time of recruitment and selection, and 40% at the time of training and development. In KPO 53% organizations considered at the time of recruitment and selection, and 38% organizations considered at the time of training and development.

Achievement oriented: In IT services 54% of the organizations considered at the time of recruitment and selection, and 40% at the time of training and development. In BPO 53% organizations at the time of recruitment and selection, and 38% at the time of training and development. In KPO 53% organizations considered at time of recruitment and selection and 39% at the time of training and development.

Ability to take risk: 50% organizations in IT services considered this competency at the of recruitment and selection, and 50% at the time of training and development. In BPO 54% organizations considered at the time of recruitment and selection and 46% at the time of training and development. In KPO 50% organizations considered at the time of recruitment and selection, and 50% at the time of training and development.

Capability to work in a team: With reference to the present competency, IT services 54% of the organizations considered at the time of recruitment and selection, and 40% organizations at the time of training and development. In BPO 53% organizations considered at the time of recruitment and selection, and 38% organizations at the time of training and development. In KPO 53% organizations considered at the time of recruitment and selection and only 39% of the at the time of training and development.

Hypothesis 3

H$_0$:   There is no significant impact of Behavioral Competencies of Top and Middle level Employees on Organization Culture.

H$_1$:   There is a significant impact of Behavioral Competencies of Top and Middle level Employees on Organization Culture.

To prove the above hypothesis Chi-square test has been used and presented in the below table followed by detailed analysis.

Table No: 4.18 Chi-Square Test for Behavioral Competency and Organization Culture.

Chi-square tests result of behavioral competency and organization culture.			
Behavioral Competency and Organization Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	80.56	50	0.000
Likelihood Ratio	82.626	50	0.000
N of Valid Cases	300		

(Source: Calculated Value)

From the above table 4.18 it is clear that the calculated chi-square value is more than the table value (79.490) at 5% significance level and p<0.05, hence, it is proved that the null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it is proved that there is an impact of Behavioral competency on organization Culture.

Table No: 4.19: Conceptual Competency Considered for HRM Functions.

Description			HRM Functions					
			RS	TD	CB	PM	MSR	Total
Visualizing the invisible	IT Services	Count	50	50	0	0	0	100
		% Within Nature of the Business	50	50	0	0	0	100
	BPO	Count	54	46	0	0	0	100
		% Within Nature of the Business	54	46	0	0	0	100
	KPO	Count	50	50	0	0	0	100
		% Within Nature of the Business	50	50	0	0	0	100
	Total	Count	154	146	0	0	0	300
		% Within Nature of the Business	51.3	48.7	0	0	0	100

Thinking at abstract level	IT Services	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	KPO	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	Total	Count	154	146	0	0	0	300
		% Within Nature of the Business	51.3	48.7	0	0	0	100
Future Oriented	IT Services	Count	54	39	7	0	0	100
		% Within Nature of the Business	54	39	7	0	0	100
	BPO	Count	53	39	8	0	0	100
		% Within Nature of the Business	53	39	8	0	0	100
	KPO	Count	53	39	8	0	0	100
		% Within Nature of the Business	53	39	8	0	0	100
	Total	Count	160	117	23	0	0	300
		% Within Nature of the Business	53.3	39	23	0	0	100
Execution of long- term strategies responsibility	IT Services	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	KPO	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	Total	Count	154	146	0	0	0	300
		% Within Nature of the Business	51.3	48.7	0	0	0	100
Goal oriented	IT Services	Count	54	39	7	0	0	100
		% Within Nature of the Business	54	39	7	0	0	100
	BPO	Count	53	39	8	0	0	100
		% Within Nature of the Business	53	39	8	0	0	100
	KPO	Count	53	39	8	0	0	100
		% Within Nature of the Business	53	39	8	0	0	100
	Total	Count	160	117	23	0	0	300
		% Within Nature of the Business	53.3	39	7.7	0	0	100

			RS	T&D	CB	PM	MSR	Total
Utilizing the knowledge and skills to plan for future	IT Services	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	KPO	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	Total	Count	154	146	0	0	0	300
		% Within Nature of the Business	51.3	48.7	0	0	0	100
Basic conceptual knowledge about the job responsibility	IT Services	Count	51	49	0	0	0	100
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	KPO	Count	52	48	0	0	0	100
		% Within Nature of the Business	52	48	0	0	0	100
	Total	Count	155	145	0	0	0	300
		% Within Nature of the Business	51.7	48.3	0	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

In the above 4.19 table an attempt is made to study the consideration of conceptual competencies at the time of different HR functions of the organizations in the study area.

Visualizing the invisible: For visualizing the invisible is an important competency considered by 50% IT services organizations at the time of recruitment and selection, and 50% at the time of training and development. In BPO 54% of the organizations considered at the time of recruitment and selection and 46% of the organizations at the time of training and development. In KPO 50% at the time of recruitment and selection and 50% at the time of training and development.

Thinking at abstract level: This is another important competency considered by 51% of the IT services companies at the time of recruitment and selection, 49% at the time of training and development. In BPO 52% organizations considered at the time of recruitment and selection, and 48% at the time of training and development. In KPO 51% organizations

at the time of recruitment and selection, and 49% organizations at the time of training and development.

Future oriented: This is the major competency considered by 54% of IT services at the time of recruitment and selection and 39% at the time of training and development. 53% of the BPO organizations considered at the time of recruitment and selection, and 39% organizations at the time of training and development. In KPO 53% organizations considered at the time of recruitment and selection and 39% organizations at the time of training and development.

Execution of long- term strategies responsibility: 51% of the IT services companies considered this competency at the time of recruitment and selection, and 49% organizations at the time of training and development. In BPO 52% of the organizations considered at the time of recruitment and selection, and 48% at the time of training and development. In KPO 51% organizations considered at the time of recruitment and selection, and 49% at the time of training and development.

Goal oriented: Goal oriented is an important competency for human resources, hence, 54% of the IT services companies considered at the time of recruitment and selection, and 39% considered at the time of training and development. In BPO 53% organizations considered at the time of recruitment and selection and 39% at the time of training and development. In KPO 53% organizations considered at the time of recruitment and selection and 39% organizations at the time of training and development.

Utilizing the knowledge and skills to plan for future: Planning for future is basic quality and considered as important competency by 51% of the IT services at the time of recruitment and selection and 49% at the time of training and development. 52% of the BPO's considered at the time of recruitment and selection and 48% at the time of training and development. 51% of KPO' s considered at the time of recruitment and selection and 49% of the organizations considered at the time of training and development.

Basic conceptual knowledge about the job responsibility: With reference to this competency 51% organizations considered at the time of recruitment and selection, and 49% of the organizations at the time of training and development. 52% of the BPO's considered at the time of recruitment and selection, and 48% at the time of training and

development. In KPO 52% of the organizations considered at the time of recruitment and selection, and 48% at the time of training and development.

Hypothesis 4

H_0:   There is no significant impact of Conceptual Competencies of Top and Middle level Employees on Organization Culture.

H_1:   There is a significant impact of Conceptual Competencies of Top and Middle level Employees on Organization Culture.

To prove the above hypothesis Chi-Square test has been used and presented in the below table followed by detailed analysis.

Table No: 4.20: Chi-Square Test for Conceptual Competency and Organization Culture.

Chi-square tests result of conceptual competency and organization culture.			
Conceptual Competency and Organization Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	65.23	35	0.000
Likelihood Ratio	66.977	35	0.000
N of Valid Cases	300		

(Source: Calculated Value)

From the above table 4.20 it is clear that the calculated value is more than the table value (49.802), at 5% significance level and $p<0.05$, hence, it is clear that the null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it is proved that there is an impact of conceptual competency on organization culture.

Hypothesis 5

H_0:   The Competencies required by the TOP and Middle level Employees at Three different Strata of IT sector is indifferent.

H_1:   The Competencies required by the TOP and Middle level Employees at Three different Strata of IT sector is different.

To prove the above hypothesis One-Way ANOVA test has been used and presented in the below table followed by detailed analysis.

Table No: 4.21 One-Way ANOVA for Differences in Competencies Required by the TOP and Middle Level Employees.

ANOVA test result of differences in competencies required by the top and middle level employees.							
Competency and Organization Culture		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**	**Status of Null Hypothesis**
Technical Competency	Between Groups	114.207	2	57.103	10.832	0.000	Rejected
	Within Groups	1565.740	297	5.272			
	Total	1679.947	299				
Managerial Competency	Between Groups	2.847	2	1.423	0.515	0.598	Accepted
	Within Groups	820.940	297	2.764			
	Total	823.787	299				
Behavioral Competency	Between Groups	0.047	2	0.023	0.001	0.999	Accepted
	Within Groups	5172.500	297	17.416			
	Total	5172.547	299				
Conceptual Competency	Between Groups	1.647	2	0.823	0.022	0.978	Accepted
	Within Groups	10927.270	297	36.792			
	Total	10928.917	299				

(Source: Calculated Value)

From the above table 4.21 it is clear that in all the cases the p>0.05 except technical competencies, hence, it is proved that the null hypothesis is accepted in all the cases and in the technical competency null hypothesis is rejected and alternative hypothesis is accepted, hence, it is proved that there is a difference in technical competency required by IT services, BPO and KPO. For all the remaining competencies there is no difference exists between the strata.

Table No: 4.22: Initiatives to Develop Competencies.

Competency Model	IT Services		BPO		KPO	
	F	**Percentage %**	**F**	**Percentage %**	**F**	**Percentage %**
Training based on requirement	57	57	55	55	60	60
Training provided by the Experts	57	57	56	56	59	59
Proper Performance appraisal and management is done	55	55	60	60	62	62

Compensation and benefits are provided based on ability and achievements	55	55	55	55	60	60
Motivations done by the authorities through Mentoring	58	58	62	62	61	61
Autonomy to take major decision based on the responsibilities assigned	57	57	56	56	59	59
Grievances are solved through proper channel and within prescribed time	58	58	62	62	61	61

Source: Primary Data

Above table 4.22 clears about the initiatives to develop competency by the organizations in the study area. In IT services 58% organizations are motivating their employees through mentoring, and their grievances are solved immediately. 57% of the organizations are provided autonomy to their employees to take decisions based on the responsibility assigned to them, and these organizations are providing training based on requirement and training is provided by the experts too.

In BPO 62% organizations solve the grievances immediately, motivates their employees through mentoring, 60% organizations are doing proper performance appraisal and management, in 56% organizations training is provided by the experts and Autonomy is provided to take major decision based on the responsibilities assigned, 55% organizations are provided by training based on requirement and Compensation and benefits are provided based on ability and achievements.

In KPO 62% organizations are doing Proper Performance appraisal and management, in 61% organizations Motivations done by the authorities through Mentoring, Grievances are solved through proper channel and within prescribed time. 60% of the organizations are providing Training based on requirement. In 59% organizations training is provided by experts and also autonomy is given to take major decisions based on the responsibilities assigned to them.

Table No: 4.23: Need and Importance of Competency Mapping.

Need and Importance	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Helps to gain a clearer sense of true marketability in today's job market	100	1.48	0.5	100	1.43	0.49	100	1.57	0.69
It helps to acquire the key positions of interest of the employee	100	1.46	0.5	100	1.56	0.67	100	1.46	0.58
It acts as a cutting edge and well-prepared candidate	100	1.48	0.50	100	1.57	0.63	100	1.55	0.68
It helps to investigate those in demand, and map their own competencies prior to interviewing	100	1.61	0.66	100	1.42	0.54	100	1.42	0.55
Helps in demonstrating self-confidence that comes from knowing one's competitive advantages more convincingly,	100	2.18	0.63	100	1.42	0.54	100	1.42	0.55
It Aid in securing essential input to resume development	100	1.63	0.74	100	1.57	0.64	100	1.55	0.69
Gains advanced preparation for interviews,	100	1.92	0.94	100	1.42	0.54	100	1.42	0.55
Helps in developing the capability to compare one's actual competencies to an organization or positions required/preferred competencies, in order to create, an Individual Development Plan.	100	2.18	0.61	100	1.57	0.64	100	1.57	0.7
It Aids in sustaining the transformation of the HR function	100	1.49	0.5	100	1.43	0.49	100	1.57	0.67

Source: Primary Data

Above table 4.23 shows mean and standard deviations for the Need and Importance of Competency Mapping. The variable that has highest mean scores (More than 2.00) shows that those are very important for competency mapping. 1.00 to 2.00 mean scores are also showing that the issues are asked in all the three organizations like IT services, BPO and KPO the competency mapping is needed to perform various tasks. Further the variables are asked to the managers of all the three set of organizations, the opinions are positive and they say that the competency mapping is very important for their organization.

Table No: 4.24: Initiatives to Retain Employees.

	Description	SA	A	N	DA	SDA	Total
IT Services	Employees are made to enter into contract	55	37	8	0	0	100
	Provided training to develop core competencies	56	40	4	0	0	100
	Training helps employees to work better and show maximum efficiency	55	37	8	0	0	100
	Mentoring initiatives taken by the organization helps to have a career path	56	40	4	0	0	100
	Grievance settlement procedure makes employees to have better environment	55	37	8	0	0	100
	Facilities provided by the organization makes employees to become loyal	56	40	4	0	0	100
	Performance management and benefits provided by the organization makes the employees engaged towards the organization	54	42	4	0	0	100
BPO	Employees are made to enter into contract	54	36	10	0	0	100
	Provided training to develop core competencies	51	41	8	0	0	100
	Training helps employees to work better and show maximum efficiency	60	38	2	0	0	100
	Mentoring initiatives taken by the organization helps to have a career path	51	41	8	0	0	100
	Grievance settlement procedure makes employees to have better environment	60	38	2	0	0	100
	Facilities provided by the organization makes employees to become loyal	51	41	8	0	0	100
	Performance management and benefits provided by the organization makes the employees engaged towards the organization	57	43	0	0	0	100

	Description		SA	A	N	DA	SDA	Total
KPO	Employees are made to enter into contract		57	40	3	0	0	100
	Provided training to develop core competencies		54	36	10	0	0	100
	Training helps employees to work better and show maximum efficiency		60	38	2	0	0	100
	Mentoring initiatives taken by the organization helps to have a career path		54	36	10	0	0	100
	Grievance settlement procedure makes employees to have better environment		60	38	2	0	0	100
	Facilities provided by the organization makes employees to become loyal		54	36	10	0	0	100
	Performance management and benefits provided by the organization makes the employees engaged towards the organization		53	35	12	0	0	100

Source: Primary Data (S- Strongly Agreed, A- agreed, N-Neutral, DA- Dis agreed and SDA- Strongly Dis agreed)

Above table 4.24 clearly depicts the Initiatives to Retain Employees. In It services, BPO and KPO the following initiatives are taken by 90% IT services, BPO and KPO organizations. The initiatives are explained as under, at the time of recruitment itself the organizations make their employees to enter into a contract for certain period, training is provided to develop core competencies, work better and to show maximum efficiency. Mentoring is done to show them career path, Grievance settlement procedures makes employees to have better environment in the organization, performance management and benefits provided by the organization, helps the employees to become engaged to words the organizational goals. Further the facilities provided by the organization makes the employees become loyal.

Table No: 4.25: Challenges faced by the organization while Mapping the Competencies.

	Description	SA	A	N	DA	SDA	Total
IT Services	Highly expertise knowledge is required to Map the competencies	55	37	8	0	0	100
	It is too expensive	56	40	4	0	0	100
	Lack of awareness about the competency mapping by the employees	55	37	8	0	0	100
	Some issues in mapping are not so effective from the point of view of the organization	56	40	4	0	0	100
	It is not possible to measure the performance of the employees in all the time	55	37	8	0	0	100
	It is not feasible to take major decisions only by considering the competency mapping	56	40	4	0	0	100

		S	A	N	DA	SDA	Total
BPO	If any others (please specify)	55	37	8	0	0	100
	Highly expertise knowledge is required to Map the competencies	54	36	10	0	0	100
	It is too expensive	51	41	8	0	0	100
	Lack of awareness about the competency mapping by the employees	60	38	2	0	0	100
	Some issues in mapping are not so effective from the point of view of the organization	51	41	8	0	0	100
	It is not possible to measure the performance of the employees in all the time	60	38	2	0	0	100
	It is not feasible to take major decisions only by considering the competency mapping	51	41	8	0	0	100
	If any others (please specify)	60	38	2	0	0	100
KPO	Highly expertise knowledge is required to Map the competencies	58	39	3	0	0	100
	It is too expensive	54	34	12	0	0	100
	Lack of awareness about the competency mapping by the employees	61	37	2	0	0	100
	Some issues in mapping are not so effective from the point of view of the organization	54	34	12	0	0	100
	It is not possible to measure the performance of the employees in all the time	61	37	2	0	0	100
	It is not feasible to take major decisions only by considering the competency mapping	54	34	12	0	0	100
	If any others (please specify)	61	37	2	0	0	100

Source: Primary Data (S- Strongly Agreed, A- agreed, N-Neutral, DA- Dis agreed and SDA- Strongly Dis agreed)

Above table 4.25 depicts the challenges faced by the organization while competency mapping. In all the three segments of IT sector more than 90% of the organizations are facing the challenges in competency mapping. Further the organizations says that it is expensive, highly expertise knowledge is required to map, lack of awareness among the employees. Major problem is that it is not possible to measure the efficiency, some issues of mapping are not so effective, not feasible to measure the employee performance in all the time, it is not feasible to take major decision only by considering the competency mapping.

4.3 CHAPTER SUMMARY

This chapter had five major hypotheses, that to be tested, the first being, there is a significant impact of technical competencies on organization culture at Top and Middle level employees in IT sector. The second being there is an impact of Managerial Competencies on organizational culture. The third being, there is an impact of Behavioural competency on organization Culture. The fourth being, there is an impact of conceptual competency on organization culture at top and middle level and the fifth being, that there is a difference in technical competency required by IT services, BPO and KPO. The results made all the null hypotheses to be rejected.

CHAPTER-5

COMPETENCY MAPPING IN IT SECTOR- AN ANALYSIS OF EMPLOYEE PERSPECTIVE

5.1 INTRODUCTION

This chapter presents the sample respondents profile, examined their opinion on the impact of competency mapping on the organizational culture and their perceived opinion on core competencies considered in HRM functions, competency mapping and its effect on organization as well as employees too. In the current competitive business environment, competencies play a crucial role to sustain the employees in the company for a long period. Hence, it is necessary to the employees to become competitive enough. Hence, in the current chapter, an attempt has been made to analyze the data collected from the employees at low level to draw findings of the study and to provide suggestions based on that. Further, the set hypothesis are proved by using suitable statistical techniques, like chi-square test, two-way ANOVA, co-relation and One way ANOVA. Conclusions are drawn based on the results and presented

5.2 DESCRIPTIVE ANALYSIS

Table No: 5.1: Gender Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Gender	Male	Count	96	81	100	277
		% Within Nature of the Business	48	40.5	50	46.2
	Female	Count	104	119	100	323
		% Within Nature of the Business	52.	59.5	50	53.8
Total		Count	200	200	200	600
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

The above table 5.1 indicates the gender wise classification of respondents. Bases on the nature of business and out of 600 respondents, the total 100 male employees from the KPO, 96 employees from IT Services and 81 employees from BPO, and in case of the female category 104 employees from the IT services, 119 employees from BPO and 100 employees from the KPO. On the basis of the above division, it leads to have an understanding that the majority of the male employees are form the KPO business and the majority of the female employees are from the BPO business.

Table No: 5.2: Age Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Age	21-30	Count	54	22	82	158
		% Within Nature of the Business	27	11	41	26.3
	31-40	Count	83	95	104	282
		% Within Nature of the Business	41.5	47.5	52	47
	41-50	Count	46	83	14	143
		% Within Nature of the Business	23	41.5	7	23.8
	51-60	Count	12	0	0	12
		% Within Nature of the Business	6	0	0	2
	61 and above	Count	5	0	0	5
		% Within Nature of the Business	2.5	0	0	0.8
Total		Count	200	200	200	600
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

In the above table 5.2 classification determines the age wise categorization of the employees. The 83 employees from the IT services belong to the age group of 31-40, and the second maximum 54 employees belong to the age group of 21-30, and the very minimum 5 employee belong to the age group of 61 and above in IT services. The maximum 95 employees belong to the age group of 31-40, the second maximum 83 employee belong to the age group of 41-50 and none of the employee belong to the age group of 51-60 and 61 above in the BPO sector. The maximum 104 employee belong to the age group of 31-40, second maximum 82 employees belong to the age group of 21-30 and none of the employee belong to the age group of 51-60 and 61 above in KPO sector. This is also clears that the in-IT services all age group employees are working than the BPO and KPO sector.

Table No: 5.3: Education Qualification Status

Particulars			Nature of the Business			
			IT Services	BPO	KPO	Total
Educational Qualification	Graduation	Count	20	37	35	92
		% Within Nature of the Business	10	18.5	17.5	15.3
	Post-Graduation	Count	95	80	79	254
		% Within Nature of the Business	47.5	40	39.5	42.3
	Other Technical Courses	Count	85	83	86	254
		% Within Nature of the Business	42.5	41.5	43	42.3
Total		Count	200	200	200	600
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

The above table 5.3 categorization indicates the education status of the respondents. Out of 200 employees 95 employee post graduated, 85 employees passed the other technical courses and the very least 20 employees are graduated in IT services. The highest 83 employees qualified in technical courses, and the second highest 80 employees post graduated and the minimum 37 employees are graduated in the BPO sector. In KPO sector maximum 86 employees hold other technical courses, the second highest 79 employees hold the post graduation degree and the very minimum 35 employees hold the graduation degree. This entire classification makes clear that the majority of the employees holds the post-graduation degree and other technical courses that the graduation on whole.

Table No: 5.4: Monthly Income Status

Particulars			Nature of the Business			
			IT Services	BPO	KPO	Total
Monthly Income	20001-30000	Count	39	31	5	75
		% Within Nature of the Business	19.5	15.5	2.5	12.5
	30001-40000	Count	92	84	96	272
		% Within Nature of the Business	46	42	48	45.3
	40001 and above	Count	69	85	99	253
		% Within Nature of the Business	34.5	42.5	49.5	42.2
Total		Count	200	200	200	600
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

The above table 5.4 tabulated data indicates the monthly income of the respondents. Out of the total respondents the maximum (92) respondents belong to the income group of 30001-40000, and very minimum (39) respondents belong to the income group of 20001-30000 in IT Services. Among the total respondents of the BPO sector, the majority (85) respondents lie in the income group of 40000 and above and the very less (31) of the respondents lie in the income group of 20001-30000 and in the KPO sector the highest (99) employees income level is 40000 and above and the very lowest (5) employees' level of income is 20001-30000. On a whole it determines that the majority (272) of the employees fall in the income group of 30001-40000 and the second majority (253) of the employee level of income is 40000 and above, and the very least (75) employees income level is 20001-30000.

Table No: 5.5: Marital Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Marital Status	Married	Count	114	96	95	305
		% Within Nature of the Business	57	48	47.5	50.8
	Unmarried	Count	86	104	105	295
		% Within Nature of the Business	43	52	52.5	49.2
Total		Count	200	200	200	600
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

Table 5.5 depicts the tabular forms of data represent the marital status of the respondents in IT services, BPO and KPO sector. In IT services maximum (114) respondents are married and the remaining (86) employees are unmarried. In BPO sector maximum (104) employees married and the remaining (96) employees are unmarried. In KPO sector maximum (105) employees married and the remaining (95) employees are unmarried. On a whole it indicates that, the majority (305) employees are married from all the sectors.

Table No: 5.6: Family Structure

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Family Structure	Nuclear	Count	118	116	120	354
		% Within Nature of the Business	59	58	60	59
	Joint	Count	82	84	80	246
		% Within Nature of the Business	41	42	40	41
Total		Count	200	200	200	600
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

In the above table 5.6 statistical data represents the family structure of the IT sectors employees. In IT services maximum (118) employees belong to the nuclear family and the remaining (82) belong to the joint family. In BPO maximum (116) employees related to the nuclear family and the remaining (84) employees related to the joint family. In KPO maximum (120) employees belong to the nuclear family and the remaining (80) employees belong to the joint family.

Table No: 5.7: Locality Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Locality	Rural	Count	62	58	71	191
		% Within Nature of the Business	31	29	35.5	31.8
	Semi-Urban	Count	94	101	91	286
		% Within Nature of the Business	47	50.5	45.5	47.7
	Urban	Count	44	41	38	123
		% Within Nature of the Business	22	20.5	19	20.5
Total		Count	200	200	200	600
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

The above table 5.7 determines the locality status of the employees. In IT services maximum (94) related to the Semi-Urban locality, second maximum (62) related to rural area and the remaining (44) related to the urban location. In BPO maximum (101) employees come from the Semi-urban location, second maximum (58) come from rural area and the very minimum (41) employees come from the Urban location. In KPO

maximum (91) associated with the Semi-urban area, second maximum (71) associated with the rural area and the minimum (38) associated with the urban area.

Table No: 5.8: Job Experience Status

Particulars			Nature of the Business			Total
			IT Services	BPO	KPO	
Experience	1 to 5 years	Count	67	49	62	178
		% Within Nature of the Business	33.5	24.5	31	29.7
	5-10 years	Count	83	99	101	283
		% Within Nature of the Business	41.5	49.5	50.5	47.2
	10-15 years	Count	47	52	37	136
		% Within Nature of the Business	23.5	26	18.5	22.7
	15-20 years	Count	3	0	0	3
		% Within Nature of the Business	1.5	0	0	0.5
Total		Count	200	200	200	600
		% Within Nature of the Business	100	100	100	100

Source: Primary Data

The above table 5.8 diversified data indicates the job experience of the employees. In IT services maximum (83) of employees hold the 5-10 years of experience, the second maximum (67) of employees hold the 1-5 years of experience, the next maximum (47) of employees holds the 10-15 years of experience and the very minimum (3) of employees hold the 15-20 years of experience. In BPO highest (99) of indicates employees have 5-10 years of experience, second highest (52) of employees have 10-15 years of experience, the next highest (52) of employees have 10-15 years of experience and the very lowest (49) of employees have 1-5 years of experience and none of employees have 15-20 years of experience. In KPO upper limit (101) of employees lie in the group of 5-10 years of job experience, the second upper limit (62) of employees lie in the group of 1-5 years of experience and the lower limit (37) of employees lie in the group of 10-15 years of job experience and none of the employee lie in the group of 15-20 years.

Table No: 5.9: Competency Model Used in HR Functional Area

Functional Area		IT Services		BPO		KPO	
		F	Percentage %	F	Percentage %	F	Percentage %
HRP	Yes	117	58.5	111	55.5	95	47.5
	No	83	41.5	89	44.5	105	52.5
	Total	200	100.0	200	100.0	200	100.0
Recruitment and Selection	Yes	103	51.5	98	49.0	106	53.0
	No	97	48.5	102	51.0	94	47.0
	Total	200	100.0	200	100.0	200	100.0
Training and Development	Yes	119	59.5	125	62.5	118	59.0
	No	81	40.5	75	37.5	82	41.0
	Total	200	100.0	200	100.0	200	100.0
Compensation and Benefits	Yes	135	67.5	131	65.5	134	67.0
	No	65	32.5	69	34.5	66	33.0
	Total	200	100.0	200	100.0	200	100.0
Performance Management	Yes	106	53.0	104	52.0	104	52.0
	No	94	47.0	96	48.0	96	48.0
	Total	200	100.0	200	100.0	200	100.0
Motivation, Satisfaction and Retention	Yes	98	49.0	94	47.0	95	47.5
	No	102	51.0	106	53.0	105	52.5
	Total	200	100.0	200	100.0	200	100.0

Source: Primary Data

The table 5.9 describes that the distinct data determine the use of competency model in the HR Functional areas. In IT Services the maximum (117) of employees said the competency mapping used in HRP and the minimum (83) of employees said no to the same. The maximum (103) of employees said that they use competency model in Recruitment and selection and the remaining (97) of employees said that the competency mapping is not used in recruitment and selection. The maximum (119) of employees indicates that the competency model used in training and development and the remaining (81) of employees indicate that the competency mapping is not used in training and development. The maximum (135) employees denote that the competency mapping is used in compensation and benefits and the minimum (65) of employees denotes that the competency mapping is not used in the compensation and benefits. The maximum (106) of employees indicates that the competency mapping used in the performance appraisal and the minimum (94) of employees indicates that the competency mapping is not used in the performance appraisal. The maximum (102) of employees not agreed that the competency mapping

used in the motivation, satisfaction and retention, and the minimum (98) agreed that the competency mapping used in Motivation, satisfaction and retention.

In BPO sector maximum (111) of employees said the competency mapping used in HRP and the minimum (89) of employees said no to the same. The maximum (102) of employees agreed that they not used competency model in Recruitment and selection and the remaining (98) of employees disagree that the competency mapping is used in recruitment and selection. The maximum (125) of employees indicates that the competency model used in training and development and the remaining (75) of employees indicate that the competency mapping is not used in training and development. The maximum (131) employees represent that the competency mapping is used in compensation and benefits and the minimum (69) of employees represent that the competency mapping is not used in the compensation and benefits. The maximum (104) of employees points out that the competency mapping used in the performance appraisal and the minimum (96) of employees point out that the competency mapping is not used in the performance appraisal. The maximum (106) of employees not agreed that the competency mapping used in the motivation, satisfaction and retention, and the minimum (94) agreed that the competency mapping used in Motivation, satisfaction and retention.

In KPO services maximum (105) of employees said the competency mapping not used in HRP and the minimum (95) of employees said yes to the same. The maximum (106) of employees said that they use competency model in Recruitment and selection and the remaining (94) of employees said that the competency mapping is not used in recruitment and selection. The maximum (118) of employees describe that the competency model used in training and development and the remaining (82) of employees describe that the competency mapping is not used in training and development. The maximum (134) employees signify that the competency mapping is used in compensation and benefits and the minimum (66) of employees signify that the competency mapping is not used in the compensation and benefits. The maximum (104) of employees said that the competency mapping used in the performance appraisal and the minimum (96) of employees said that the competency mapping is not used in the performance appraisal. The maximum (105) of employees accepted that the competency mapping not used in the motivation, satisfaction and retention, and the minimum (95) accepted that the competency mapping used in Motivation, satisfaction and retention.

Table No: 5.10: Importance of Competency Mapping Objectives

Objectives	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Increase in Competency levels and improved working conditions	200	1.89	.74	200	1.61	.66	200	1.53	.66
Determine competencies for job than an employee aspires for	200	1.67	.66	200	1.63	.62	200	1.67	.64
More opportunities in the form of new positions and available promotions with the growth of the organizations	200	1.69	.64	200	1.62	.64	200	1.66	.68
Clarity of skills, knowledge required to meet the established standards	200	1.70	.66	200	1.80	.83	200	2.00	.96
Knowledge about where the employees meet required qualifications thus not wasting time in unnecessary developmental activities	200	1.79	.70	200	1.89	.97	200	2.14	1.13

Source: Primary Data

The above data in the table 5.10 focus on the employee opinion about the importance of competency mapping objectives, the overall employee opinion was applied into statistical tool called mean based on the same in IT services, BPO services and KPO services. The mean of IT services is maximum (1.89), indicates that the highest increase in the competency level so that the highest improvement in the working conditions, the second maximum mean (1.61) of BPO sector also shows the improvement in the competency level to the medium extent, but the mean (1.53) of KPO indicates that the KPO sector is

backward in case of the increasing competency level and improved working conditions compare to IT services and BPO sector. The second objective called, to determine competencies for job than an employee aspires for, the IT sector and KPO shows the equal improvement in determining the competencies for job as its mean (1.67 and 1.67) values are maximum than the BPO (1.63) mean value, and also indicates that the BPO sector was just good in determining the competencies for the job than an employee aspires for.

With respect to the third objective called more opportunities in the form of new positions and available promotions and available positions with the growth of the organization. The mean of IT (1.69) services indicates that the IT services have got more serious about creating the more opportunities in the form new positions and promotions, the mean of KPO (1.66) describes that the KPO sector is the second more serious about achieving the third objective and the BPO (1.62) indicates that the BPO is less serious about achieving the third objective.

With related to the fourth objective, the maximum mean value (2.00) points out that the KPO sector has given much importance to the clarity of skills, knowledge required to meet the established standards, the second maximum mean value (1.80) point out that the BPO sector also consider the clarity of skills, knowledge required to meet the established standards important, and the lowest mean value (1.70) point out that the IT services give less importance to the clarity of skills, knowledge required to meet the established standards.

With regard to the fifth objective, the upper limit (2.14) of mean value determines that the KPO sector has given much importance to the Knowledge about where the employees meet requires qualifications thus not wasting time in unnecessary developmental activities, the second upper limit (1.89) mean value determines the BPO sector has given importance to the same, and the lower limit (1.79) of mean value determine that the IT services has given less importance to the fifth objective.

Table No: 5.11: Competency Mapping Considered for Employees Recruitment

Competency Mapping	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Qualification	200	1.60	.64	200	1.60	.62	200	1.60	.62
Technical knowledge/Skills	200	1.84	.90	200	1.81	.85	200	1.81	.85
Communication skills	200	2.00	1.05	200	1.97	1.00	200	1.97	1.01
Leadership qualities	200	1.59	.64	200	1.60	.62	200	1.60	.62
Problem solving skills	200	1.60	.64	200	1.60	.62	200	1.60	.62
Team building	200	1.84	.90	200	1.81	.85	200	1.81	.85
Interpersonal skills	200	2.00	1.05	200	1.97	1.00	200	1.97	1.01
Decision making skills	200	2.13	.61	200	2.16	.66	200	2.14	.62

Source: Primary Data

The above diversified data in the table 5.11 signify the competency mapping considered for employee recruitment in IT services, BPO and KPO sectors. The mean (1.60) in IT services, BPO and KPO sector indicates that the competency called qualification is equally considered in all the three sectors for employee recruitment.

In Technical knowledge/skills, the maximum mean (1.84) indicates that in IT services Technical Knowledge/skills are highly consider, the minimum (1.81) mean value of BPO and KPO sectors indicates that the Technical Knowledge/skills has little less considered for employee recruitment.

The maximum mean (2.00) signifies that the in-IT services communication skills are highly considered and the minimum (1.97) mean value of BPO and KPO signify that the communication skills are less considered for employee recruitment.

The greatest (1.60) value of mean specify that the both BPO and KPO sector highly considered the leadership qualities for employee recruitment, the lowest (1.59) of mean value specify that the leadership qualities less considered for the employee recruitment in IT service compare to the BPO and KPO.

The mean value (1.60) in all the three sectors indicates that the problem-solving skills are highly and equally considered in IT services, BPO sector and KPO sector for employee recruitment.

The highest (1.84) mean value determine that the team building skills are highly considered in IT services for employee recruitment, the lowest mean value (1.81) determines that the both BPO and KPO sectors less considered the team building skills for employee recruitment.

The maximum (2.00) of mean value points out that the IT services are highly considered the interpersonal skills for employee recruitment, the minimum (1.97) of mean value in both BPO and KPO sector point out that the interpersonal skills are considered for employee recruitment but not as much as IT services.

The maximum (2.16) of mean value indicates that the BPO sector highly considered the decision-making skills for employee recruitment, the second maximum (2.14) of mean value indicates that decision making skills are just considered for the employee recruitment in KPO, the minimum (2.13) indicates that the decision-making skills are less considered in IT services for employee recruitment comparatively with BPO and KPO sector.

Table No: 5.12: Competency Mapping Considered for Employees Training and Development

Competency Mapping	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Revising the skill sets	200	1.51	.50	199	1.45	.50	200	1.96	.69
Technical skills/Knowledge	200	1.64	.67	199	1.60	.67	200	1.50	.55
Interpersonal skills	200	1.51	.50	199	1.45	.50	200	1.56	.62
Behaviors at the work place	200	1.51	.50	199	1.45	.50	200	1.46	.50
Communication	200	1.51	.50	199	1.45	.50	200	1.46	.50

Source: Primary Data

The above data in the table 5.12 point out the response on the competency mapping for employees training and development. The maximum (1.96) of BPO sector indicates that the Revising the skill sets is the major competency for the employee training and development, the second maximum (1.51) of IT services indicates that the revising skill sets is somehow consider but the minimum (1.45) indicates that the revising skill sets in KPO sector is less considered for the employee training and development.

With respect to the technical skills/knowledge, the highest (1.64) point out that the IT services are more focused towards the technical skills/knowledge for the employee

training and development than the BPO and KPO sector as the BPO sector has got the second highest (1.60) mean and the KPO has got the lowest (1.50) mean value and indicates that the KPO is less considered the technical skills/knowledge for employee training and development.

With regard to the interpersonal skills, the greatest (1.56) mean value determines that the KPO is into highest considering the interpersonal skills for employee training and development, the second greatest (1.51) mean value of IT services determines that the IT services also consider the interpersonal skills but not as much as the KPO sector, the lowest (1.45) mean value determines that the BPO sector is into less using the interpersonal skills foe employee training and development.

With related to the Behaviours at the work place and communication skills, it signify that the IT services are highest in considering the behaviours at the work place and communication skills in employee training as its mean value is highest (1.51), the second highest (1.46) mean value determines that the KPO sector is also consider the behaviours at the work place and communication skills, and the lowest (1.45) determines that the BPO sector is into less considering the behaviours at the work place and work place.

Table No: 5.13: Qualities Considered for Employees Compensation

Qualities	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Experience	200	2.21	.60	200	2.24	.63	200	1.77	.71
Skill Sets	200	1.54	.58	200	1.68	.76	200	2.11	.72
Job knowledge	200	1.79	.79	200	1.92	.96	200	1.75	.83
Job position	200	2.16	.65	200	2.09	.67	200	2.15	.66
Results of appraisal	200	1.45	.50	200	1.46	.50	200	1.45	.50
Achievement/Target	200	1.60	.66	200	1.59	.65	200	1.60	.66

Source: Primary Data

The above numerical data represents the employee response on the qualities considered for employees' compensation. In BPO services, the maximum (2.24) of mean value indicates that the experience is highest consider for the employee compensation, the second maximum (2.21) indicates that IT services indicates that the IT services are second highest in considering the (1.77) of mean value indicates that the experience is less considered in the KPO sector.

About skill sets, the highest (2.11) signify that the skill sets are major considered in the KPO sector for employee compensation, the second highest (1.68) signify that the skill sets are considered in IT services but not as much as the KPO sector, and the lowest (1.54) signify that the BPO sector is less considering the skill sets for employee compensation.

With association to job knowledge, the maximum (1.92) mean value denotes that the BPO sector is great in considering the job knowledge for employee compensation, the second maximum (1.79) denotes that the IT services are also quite good in considering the job knowledge for employee compensation, but the minimum (1.75) mean value denotes that the KPO sector is quite less in considering the job knowledge for employee compensation.

With respect to the job position, the upper limit (2.16) describes that the IT services are very good in considering the job position for employee compensation, the second upper limit (2.15) describes that the KPO sector is also very good in considering the job position for employee compensation but only the little difference with the IT services, the lowest (2.09) indicates that the BPO sector are comparatively less with IT services and KPO sector while considering the job position for employee compensation.

With regard to the Results of appraisal, it indicates that the BPO sector is into highest considering the Results of appraisal for employee compensation as it has got the highest (1.46) mean value, both IT services and KPO sector are same and less in considering results of appraisal for employee compensation.

With related to the achievement/target, both IT services and KPO sector give highest preference to the achievements/target for employee compensation as it has got the highest (1.60) mean values, the less (1.59) mean value determines that the BPO sector is into less considering the achievements/targets for employee compensation.

Table No: 5.14: Qualities Considered for Employees Performance Management

Qualities	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Creative Thinking	200	1.45	.50	200	1.47	.52	200	1.45	.50
Technical capabilities	200	1.45	.50	200	1.51	.55	200	1.45	.50
Computer literacy	200	1.45	.50	200	1.45	.50	200	1.45	.50
Data management	200	1.60	.66	200	1.61	.67	200	1.60	.66
Equipment and program knowledge	200	2.25	.62	200	2.25	.62	200	2.25	.62
Policies and planning	200	1.70	.78	200	1.70	.78	200	1.70	.78

Source: Primary Data

In the above table 5.14 tabular represent the employee response on the qualities considered for the employee's performance management. Based on the highest (1.47) mean value, it clear that the BPO sector give much preference to creative thinking for employee performance management, and the IT services and KPO sector give less preference to the creative thinking as its mean value (1.45) is less.

The upper limit (1.51) determines that the technical capabilities much considered in the BPO services than the IT services and KPO sector as the mean (1.45) value of the both is less.

The mean value (1.45) in all the three services such as IT, BPO and KPO indicates that these three sectors are equally good in considering the computer literacy for employee performance management.

The maximum limit (1.61) determines that the BPO sector is good in considering the data management for the employee performance management, the mean value (1.60) indicates that the IT services and KPO sector are both equally give preference to the data management but not as much as BPO sector.

The mean value (2.25) describes that the IT services, BPO and KPO sector are equally good in considering the equipment and Programme knowledge related qualities for employee performance management as the mean value of all the three are same.

Based on the mean value (1.70) it clarifies that the policies and planning in IT services, BPO and KPO sector give much preference for the employee performance management.

Table No: 5.15: Qualities Considered for Employees Motivation Satisfaction Retention

Qualities	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Resourcefulness	200	2.13	.66	200	2.13	.64	200	2.16	.72
Trustworthiness	200	1.48	.50	200	1.49	.50	200	1.53	.56
Stress reduction	200	1.61	.66	200	1.62	.66	200	1.61	.65
Moral Principles and Ethical Standards	200	2.13	.66	200	2.13	.64	200	2.10	.68
Planning and Organization	200	1.48	.50	200	1.49	.50	200	1.53	.56
Business Acumen	200	1.61	.66	200	1.62	.66	200	1.61	.65

Source: Primary Data

In the above table 5.15 the maximum mean (1.53) is referred to be the KPO sector is highest considered for the trustworthiness among the employees for employee motivation, satisfaction and retention, but the second highest (1.49) indicates that the BPO is also consider the employee trustworthiness and the lowest (1.48) indicates that IT services give less preference for the employee trustworthiness for Motivation, satisfaction and retention.

The highest mean value (1.62) represents that the BPO sector stands first in considering the stress reduction qualities of employee, and the mean value (1.61) indicates the IT services and KPO sector give less preference for the stress reduction qualities of employees for employee Motivation, satisfaction and retention.

The maximum (2.13) mean value determines that both IT services and BPO sector give much preference for the moral principles and ethical standards of employee and the mean value (2.10) indicates that KPO sector prefers moral principles and ethical standards less for employee motivation, satisfaction and retention.

The maximum (1.53) mean value indicates that the KPO give much preference for the planning and organization skills of employees, the second highest (1.49) indicates that the BPO is also good in preferring the planning and organization skills of employees, but the lowest (1.48) indicates that the IT services give less preference for the planning and organization skills of employees for employee motivation, satisfaction and retention.

The maximum (1.62) mean value determines that the BPO sector give much preference for the business acumen skills among employees, and the second highest (1.61) indicates

that both IT services and KPO sector give equal preference for the business acumen skills among employees for employee motivation, satisfaction and retention.

Table No: 5.16: Need and Importance of Competency Mapping

Need and Importance	IT Services			BPO			KPO		
	N	Mean	SD	N	Mean	SD	N	Mean	SD
Helps to gain a clearer sense of true marketability in today's job market	200	1.48	.50	200	1.49	.50	200	1.48	.52
It helps to acquire the key positions of interest of the employee	200	1.46	.50	200	1.48	.50	200	1.45	.50
It acts as a cutting edge and well-prepared candidate	200	1.48	.50	200	1.49	.50	200	1.46	.50
It helps to investigate those in demand, and map their own competencies prior to interviewing	200	2.19	.63	200	2.20	.62	200	2.16	.65
Helps in demonstrating self-confidence that comes from knowing one's competitive advantages more convincingly,	200	1.63	.74	200	1.60	.68	200	1.74	.79
It Aid in securing essential input to resume development	200	1.92	.94	200	1.86	.88	200	1.93	.96
Gains advanced preparation for interviews,	200	2.19	.61	200	1.56	.57	200	1.50	.58
Helps in developing the capability to compare one's actual competencies to an organization or positions required /preferred competencies, in order to create, an Individual Development Plan.	200	1.49	.50	200	1.54	.61	200	1.58	.64
It Aids in sustaining the transformation of the HR function	200	1.64	.67	200	1.48	.52	200	1.48	.51

Source: Primary Data

The above tabular form of data in the table 5.16 represents the employee response on the need and importance of competency mapping; all the three sectors have received the different opinion about its importance.

The highest mean (1.49) determines that the in BPO sector the competency mapping is very important, the mean value (1.48) indicates that the competency mapping is also important but not as in BPO because it help to gain the clear sense of the true marketability in today's job market.

The maximum mean (1.48) value in BPO indicates that the competency mapping is very important to acquire the key positions of interest of the employee, and the second highest (1.46) indicates that the competency mapping in IT services is important but not as much important as the BPO sector, but the lowest (1.45) mean value indicates that the competency mapping in KPO is less important for acquiring the key positions of interest of the employee.

The maximum mean (1.49) value in BPO describes that the competency mapping is very important because it act as a cutting edge and help prepare employee, and the second highest (1.48) describes that the competency mapping in IT services is important but not as much important as the BPO sector, but the lowest (1.46) mean value describes that the competency mapping in KPO is less important compare to IT services and BPO sector.

The upper limit mean (2.20) value in BPO describes that the competency mapping is very important to investigate those in demand, and map their own competencies prior to interviewing them, and the second upper limit (2.19) describes that the competency mapping in IT services is important but not as much important as the BPO sector, but the lower limit (2.16) mean value describes that the competency mapping in KPO is less important compare to IT services and BPO sector.

Based on the maximum (1.74) mean value it leads to have a clarity that the KPO sector give much preference for the competency mapping as it helps in demonstrating self confidence that comes from knowing one's competitive advantages more convincingly, the second maximum (1.63) determines that the competency mapping in IT services also important, but the minimum (1.60) mean value determines that the competency mapping is less important in BPO sector compare to the IT service and KPO sector.

On the basis of greatest (1.93) mean value it leads to have a confirmation that the KPO sector give much preference for the competency mapping as it aid in securing essential input to resume development, on the basis of the second greatest (1.90) determines that the competency mapping in IT services also important, but the lowest (1.86) mean value determines that the competency mapping is less important in BPO sector compare to the IT service and KPO sector.

The highest (2.19) depicts that the IT services are first in considering the competency mapping is very important as it helps to gain advances preparation for interviews, but the second highest and lowest (1.56 and 1.50) mean value of BPO and KPO leads to have clarification that the competency mapping is important but not as much important as in IT services.

The highest (1.58) mean value of KPO indicates that the competency mapping is very important and it is essentially needed for developing the capabilities to compare one's actual competencies to an organization or positions required/preferred competencies in order to create an individual development, but the competency mapping in BPO sector is just important as its mean value (1.54) is has got the second position and the lowest (1.49) mean value indicates that the competency mapping is not so important.

The maximum (1.64) mean value of IT services determine that the competency mapping is so important as it aids in sustaining the transformation of the HR functions, the second highest (1.48) mean value of both BPO and KPO sectors determine that the competency mapping is not so important to create aid in sustaining the transformation of the HT functions.

➤ **Core Competencies:**

- Organizational awareness.
- Interpersonal skills.
- Spirit of Team Work.
- Adoptability.
- Communication.
- Initiatives.
- Professional knowledge.

Table No: 5.17: Organizational Awareness Considered for HRM Functions

Description			RS	TD	CB	PM	MSR	Total
Mission and Vision	IT Services	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	BPO	Count	99	90	11	0	0	200
		% Within Nature of the Business	50	45	6	0	0	100
	KPO	Count	96	84	20	0	0	200
		% Within Nature of the Business	48	42	10	0	0	100
	Total	Count	301	268	31	0	0	600
		% Within Nature of the Business	50	45	5	0	0	100
Policies Rules and Regulation	IT Services	Count	102	82	16	0	0	200
		% Within Nature of the Business	51	41	8	0	0	100
	BPO	Count	105	90	5	0	0	200
		% Within Nature of the Business	52.5	45	2.5	0	0	100
	KPO	Count	110	90	0	0	0	200
		% Within Nature of the Business	55	45	0	0	0	100
	Total	Count	317	262	21	0	0	600
		% Within Nature of the Business	52.8	43.7	3.5	0	0	100
Facilities	IT Services	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	BPO	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	KPO	Count	110	90	0	0	0	200
		% Within Nature of the Business	55	45	0	0	0	100
	Total	Count	322	278	0	0	0	600
		% Within Nature of the Business	53.7	46.3	0	0	0	100
Career Growth	IT Services	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	BPO	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	KPO	Count	110	90	0	0	0	200

			RS	T&D	CB	PM	MSR	Total
		% Within Nature of the Business	55	45	0	0	0	100
	Total	Count	322	2778	0	0	0	600
		% Within Nature of the Business	53.7	46.3	0	0	0	100
Job and Responsibilities	IT Services	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	BPO	Count	99	90	44	0	0	200
		% Within Nature of the Business	45.5	45	5.5	0	0	100
	KPO	Count	96	84	20	0	0	200
		% Within Nature of the Business	48	42	10	0	0	100
	Total	Count	301	286	31	0	0	600
		% Within Nature of the Business	50.2	44.7	5.2	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

The above table indicates the core competency considered for organizational HRM Functions. In IT Services the maximum (106), second maximum (94) employees accepted that Mission and Vision considered during Recruitment and selection, and the Training and development and none of the employees said during Compensation and benefits, Performance management and the Motivation, Satisfaction and Retention, the Mission and Vision statement is considered.

In BPO, the maximum (99), second maximum (90) employees accepted that Mission and Vision considered during Recruitment and selection, and the Training and development. The very minimum (11) mission and vision of organization is considerable during performing Compensation and Benefit function and none of the employees said during, Performance management and the Motivation, Satisfaction and Retention, the Mission and Vision statement is considered.

In KPO the maximum (96), second maximum (84) employees accepted that Mission and Vision considered during Recruitment and selection, and the Training and development. The very minimum (20) mission and vision of organization is considerable during performing Compensation and Benefit function and none of the employees said during, Performance management and the Motivation, Satisfaction and Retention, the Mission and Vision statement is considered.

In IT services the Highest (96), second Highest (84) employees accepted that Policies Rules and Regulation considered during Recruitment and selection, and the Training and development. The very lowest (20) Policies Rules and Regulation of organization is considerable during performing Compensation and Benefit function and none of the employees said during, Performance management and the Motivation, Satisfaction and Retention, the Policies Rules and Regulation statement is considered.

In BPO Sector the highest (105) said Policies Rules and Regulation are considered during Recruitment and Selection, the Second highest (90) said Policies Rules and Regulation considered during Training and Development, the very lowest (5) considered Policies Rules and Regulation during Compensation and Benefits, and no employees said Policies Rules and Regulation considered during Performance Management, Motivation, Satisfaction and Retention.

In KPO Sector, the highest (110) said Policies Rules and Regulation are considered during Recruitment and Selection, the Second highest (90) said Policies Rules and Regulation considered during Training and Development, and no employees said Policies Rules and Regulation considered during Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention.

About Facilities, in IT service upper limit (106) and the second upper limit (94) describe awareness about the facilities as the core competency during the Recruitment and selection, and the Training and development, and no employee describe that the facilities can be considered for Compensation and Benefits, Performance Management and Motivation, Satisfaction, and Retention.

In BPO services upper limit (106) and the second upper limit (94) describe awareness about the facilities are the core competency during the Recruitment and selection, and the Training and development, and no employee describe that the facilities can be considered for Compensation and Benefits, Performance Management and Motivation, Satisfaction, and Retention.

In KPO services upper limit (110) and the second upper limit (90) describe awareness about the facilities are the core competency during the Recruitment and selection, and the Training and development, and no employee describe that the facilities can be considered

for Compensation and Benefits, Performance Management and Motivation, Satisfaction, and Retention.

About Career Growth, in IT services and the BPO Services the greatest (106) employees said that the Career Growth is considered during Recruitment and Selection, the next greatest (94) considered Career Growth can be considered during Training and Development and no employees consider Career Growth is considered during the Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention.

In KPO, the greatest (110) employees said that the Career Growth is considered during Recruitment and Selection, the next greatest (90) considered Career Growth can be considered during Training and Development and no employees consider Career Growth is considered during the Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention.

About Career Growth, in IT Services the greatest (106) employees said that the Job and Responsibilities is considered during Recruitment and Selection, the next greatest (94) considered Job and Responsibilities can be considered during Training and Development and no employees consider Job and Responsibilities is considered during the Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention.

In BPO Services the greatest (99) employees said that the Job and Responsibilities is considered during Recruitment and Selection, the next greatest (90) considered Job and Responsibilities can be considered during Training and Development, the very smallest (44) number of employees indicates that the Job and Responsibilities are considered during the Compensation and Benefits and no employees consider Job and Responsibilities is considered during the Performance Management, Motivation, Satisfaction and Retention.

In KPO Services the greatest (96) employees said that the Job and Responsibilities is considered during Recruitment and Selection, the next greatest (84) considered Job and Responsibilities can be considered during Training and Development, the very smallest (20) number of employees indicates that the Job and Responsibilities are considered during the Compensation and Benefits and no employees consider Job and Responsibilities is considered during the Performance Management, Motivation, Satisfaction and Retention.

Table No: 5.18: Interpersonal Skills Considered for HRM Functions

Description			RS	TD	CB	PM	MSR	Total
Influencing Skills	IT Services	Count	102	82	16	0	0	200
		% Within Nature of the Business	51	41	8	0	0	100
	BPO	Count	51	105	44	0	0	200
		% Within Nature of the Business	25.5	52.5	22	0	0	100
	KPO	Count	19	117	64	0	0	200
		% Within Nature of the Business	9.5	58.5	32	0	0	100
	Total	Count	172	304	124	0	0	600
		% Within Nature of the Business	28.7	50.7	20.7	0	0	100
Stress Tolerance	IT Services	Count	21	116	63	0	0	200
		% Within Nature of the Business	10.5	58	31.5	0	0	100
	BPO	Count	65	103	28	4	0	200
		% Within Nature of the Business	32.5	51.5	14	2	0	100
	KPO	Count	98	90	6	6	0	200
		% Within Nature of the Business	49	45	3	3	0	100
	Total	Count	184	309	97	10	0	600
		% Within Nature of the Business	30.7	51.5	16.2	1.7	0	100
Relationship with Higher Authority	IT Services	Count	92	94	7	7	0	200
		% Within Nature of the Business	46	48	3.5	3.5	0	100
	BPO	Count	64	100	34	2	0	200
		% Within Nature of the Business	32	50	17	1	0	100
	KPO	Count	44	106	50	0	0	200
		% Within Nature of the Business	22	53	25	0	0	100
	Total	Count	200	300	91	9	0	600
		% Within Nature of the Business	33.3	50	15.2	1.5	0	100
Relationship with Co-Workers	IT Services	Count	47	99	54	0	0	200
		% Within Nature of the Business	23.5	49.5	27	0	0	100
	BPO	Count	81	97	22	0	0	200
		% Within Nature of the Business	40.5	48.5	11	0	0	100
	KPO	Count	103	97	0	0	0	200

			RS	T&D	CB	PM	MSR	Total
		% Within Nature of the Business	51.5	48.5	0	0	0	100
	Total	Count	231	293	76	0	0	600
		% Within Nature of the Business	38.5	48.8	12.7	0	0	100
Leadership and Coordination	IT Services	Count	104	96	0	0	0	200
		% Within Nature of the Business	52	48	0	0	0	100
	BPO	Count	99	90	11	0	0	200
		% Within Nature of the Business	49.5	45	5.5	0	0	100
	KPO	Count	96	84	20	0	0	200
		% Within Nature of the Business	48	42	10	0	0	100
	Total	Count	299	270	31	0	0	600
		% Within Nature of the Business	49.8	45	5.2	0	0	100
Presentation Skills	IT Services	Count	97	87	16	0	0	200
		% Within Nature of the Business	48.5	43.5	8	0	0	100
	BPO	Count	66	97	37	0	0	200
		% Within Nature of the Business	33	48.5	18.5	0	0	100
	KPO	Count	44	106	50	0	0	200
		% Within Nature of the Business	22	53	25	0	0	100
	Total	Count	207	290	103	0	0	600
		% Within Nature of the Business	34.5	48.3	17.2	0	0	100
Risk Taking	IT Services	Count	47	99	54	0	0	200
		% Within Nature of the Business	23.5	49.5	27	0	0	100
	BPO	Count	80	94	26	0	0	200
		% Within Nature of the Business	40	47	13	0	0	100
	KPO	Count	108	92	0	0	0	200
		% Within Nature of the Business	54	45	0	0	0	100
	Total	Count	235	285	80	0	0	600
		% Within Nature of the Business	39.2	47.5	13.3	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

In the above table 5.18 distinct data determines the consideration of the Interpersonal skills such as Influencing skills, Stress Tolerance skills, Relationship with higher authority, Relationship with Co-workers, Leadership and Coordination, Presentation skills and Risk-Taking skills during performance of HRM functions. IT services the maximum (102)

employees agreed that the Influencing skills considered during Recruitment and Selection, and the second maximum (82) employees agreed that the Influencing skills considered during Training and Development and the very minimum (16) employees said that the influencing skills considered during Compensation and Benefits. And no employee agreed that the Influencing skills considered during Performance Management, Motivation, Satisfaction and Retention.

In BPO, the maximum (105) employees agreed that the Influencing skills considered during Training and Development, and the second maximum (51) employees agreed that the Influencing skills considered during Recruitment and Selection and the very minimum (44) employees said that the influencing skills considered during Compensation and Benefits. And no employee agreed that the Influencing skills considered during Performance Management, Motivation, Satisfaction and Retention.

In KPO, the maximum (117) employees agreed that the Influencing skills considered during Training and Development, and the second maximum (64) employees agreed that the Influencing skills considered during Compensation and Benefits and the very minimum (19) employees said that the influencing skills considered during Recruitment and Selection. And no employee agreed that the Influencing skills considered during Performance Management, Motivation, Satisfaction and Retention.

About the Stress Tolerance, In IT service the maximum (116) employees said that the Stress Tolerance is considered during Training and Development, and the second maximum (63) employees agreed that the Stress Tolerance considered during Compensation and Benefits and the very minimum (19) employees said that the Stress Tolerance is considered during Recruitment and Selection. And no employee agreed that the Influencing skills considered during Performance Management, Motivation, Satisfaction and Retention.

In BPO the maximum (103) employees said that the Stress Tolerance is considered during Training and Development, and the second maximum (65) employees agreed that the Stress Tolerance considered during Recruitment and Selection, the third maximum (28) employees indicates that the Stress Tolerance considered during Compensation and Benefits, and the very minimum (04) employees said that the Stress Tolerance is

considered during Performance Management. And no employee agreed that the Stress Tolerance is considered during Motivation, Satisfaction and Retention.

In KPO the maximum (98) employees agreed that the Stress Tolerance considered during Training and Development, and the second maximum (90) employees agreed that the Stress Tolerance considered during Compensation and Benefits and the very minimum (06) employees said that the Stress Tolerance considered during Recruitment and Selection, the very minimum (06) indicates that the Stress Tolerance considered during Performance Management. And no employee agreed that the Stress Tolerance considered during Motivation, Satisfaction and Retention.

About Relationship with Higher Authority, in IT Services, the Maximum (94) employees specify that the Relationship with higher authority is considered during the Training and Development, the second maximum (92) employees specify that the Relationship with higher authority considered during the Recruitment and Selection, the third maximum (7 and 7) employees specify that the Relationship with higher authority is considered during the Compensation and Benefits, and Performance Management, and no employee specify that the Relationship with higher authority considered during the Motivation, Satisfaction and Retention.

In BPO Services, the Maximum (100) employees specify that the Relationship with higher authority is considered during the Training and Development, the second maximum (64) employees specify that the Relationship with higher authority considered during the Recruitment and Selection, the third maximum (34) employees specify that the Relationship with higher authority is considered during the Compensation and Benefits, the very minimum (2) indicates that the Relationship with higher authority considered during Performance Management, and no employee specify that the Relationship with higher authority considered during the Motivation, Satisfaction and Retention.

In KPO Services, the Maximum (106) employees specify that the Relationship with higher authority is considered during the Training and Development, the second maximum (50) employees specify that the Relationship with higher authority considered during the Compensation and Benefits, the very minimum (44) employees specify that the Relationship with higher authority is considered during the Recruitment and Selection and

no employee specify that the Relationship with higher authority considered during the Performance Management, Motivation, Satisfaction and Retention.

About the Relationship with Co-workers, In IT Services, the Maximum (99) employees specify that the Relationship with Co-workers is considered during the Training and Development, the second maximum (54) employees specify that the Relationship with Co-workers considered during the Compensation and Benefits, the very minimum (47) employees specify that the Relationship with Co-workers is considered during the Recruitment and Selection and none of the employee specify that the Relationship with Co-workers considered during the Performance Management, Motivation, Satisfaction and Retention.

In BPO Services, the Maximum (97) employees specify that the Relationship with Co-workers is considered during the Training and Development, the second maximum (81) employees specify that the Relationship with Co-workers considered during the Recruitment and Selection, the very minimum (22) employees specify that the Relationship with Co-workers is considered during the Compensation and Benefits and none of the employee specify that the Relationship with Co-workers considered during the Performance Management, Motivation, Satisfaction and Retention.

In BPO Services, the Maximum (103) employees specify that the Relationship with Co-workers is considered during the Recruitment and Selection, the second maximum (97) employees specify that the Relationship with Co-workers considered during the Training and Development, and none of the employee specify that the Relationship with Co-workers considered during the Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention.

About Leadership and Coordination, In IT Services, the Maximum (104) employees specify that the Leadership and Coordination is considered during the Recruitment and Selection, the second maximum (96) employees specify that the Leadership and Coordination considered during the Training and Development, and none of the employee specify that the Leadership and Coordination considered during the Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention.

In BPO Services, the Maximum (99) employees specify that the Leadership and Coordination is considered during the Recruitment and Selection, the second maximum

(90) employees specify that the Leadership and Coordination considered during the Training and Development, the very minimum (11) employees specify that the Leadership and Coordination is considered during the Compensation and Benefits, and none of the employee specify that the Leadership and Coordination considered during the Performance Management, Motivation, Satisfaction and Retention.

In KPO Services, the Maximum (96) employees specify that the Leadership and Coordination is considered during the Recruitment and Selection, the second maximum (84) employees specify that the Leadership and Coordination considered during the Training and Development, the very minimum (20) employees specify that the Leadership and Coordination is considered during the Compensation and Benefits, and none of the employee specify that the Leadership and Coordination considered during the Performance Management, Motivation, Satisfaction and Retention.

About Presentation skills, In IT Services, the Maximum (97) employees specify that the Presentation skills is considered during the Recruitment and Selection, the second maximum (87) employees specify that the Presentation skills considered during the Training and Development, the very minimum 16) employees specify that the Presentation skills is considered during the Compensation and Benefits, and none of the employee specify that the Presentation skills considered during the Performance Management, Motivation, Satisfaction and Retention.

In BPO Services, the Maximum (97) employees specify that the Presentation skills is considered during the Training and Development, the second maximum (66) employees specify that the Presentation skills considered during the Recruitment and Selection, the very minimum (37) employees specify that the Presentation skills is considered during the Compensation and Benefits, and none of the employee specify that the Presentation skills considered during the Performance Management, Motivation, Satisfaction and Retention.

In KPO, the Maximum (106) employees specify that the Presentation skills is considered during the Training and Development, the second maximum (50) employees specify that the Presentation skills considered during the Compensation and Benefits, the very minimum (44) employees specify that the Presentation skills is considered during the Recruitment and Selection, and none of the employee specify that the Presentation skills considered during the Performance Management, Motivation, Satisfaction and Retention.

About Risk Taking, In IT Services, the Maximum (99) employees specify that the Risk Taking skills is considered during the Training and Development, the second maximum (54) employees specify that the Risk Taking skills considered during the Compensation and Benefits, the very minimum (47) employees specify that the Risk Taking skills is considered during the Recruitment and Selection, and none of the employee specify that the Risk Taking skills considered during the Performance Management, Motivation, Satisfaction and Retention.

In BPO Services, the Maximum (94) employees specify that the Risk Taking skills is considered during the Training and Development, the second maximum (80) employees specify that the Risk Taking skills considered during the Recruitment and Selection, the very minimum (26) employees specify that the Risk Taking skills is considered during the Compensation and Benefits, and none of the employee specify that the Risk Taking skills considered during the Performance Management, Motivation, Satisfaction and Retention.

In KPO Services, the Maximum (108) employees specify that the Risk-Taking skills is considered during the Recruitment and Selection, the second maximum (92) employees specify that the Risk-Taking skills considered during the Training and Development, and none of the employee specify that the Risk-Taking skills considered during the Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention.

Table No: 5.19: Spirit of Team Work Considered for HRM Functions

Description			HRM Functions					
			RS	TD	CB	PM	MSR	Total
Active participation as a team member in completion of goals Active	IT Services	Count	108	92	0	0	0	200
		% Within Nature of the Business	54	46	0	0	0	100
	BPO	Count	102	88	10	0	0	200
		% Within Nature of the Business	51	44	5	0	0	100
	KPO	Count	100	82	18	0	0	200
		% Within Nature of the Business	50	41	9	0	0	100
	Total	Count	310	262	28	0	0	600
		% Within Nature of the Business	51.7	43.7	4.7	0	0	100

Proper Planning and execution of plan	IT Services	Count	96	85	19	0	0	200
		% Within Nature of the Business	48	42.5	9.5	0	0	100
	BPO	Count	105	85	10	0	0	200
		% Within Nature of the Business	52.5	42.5	5	0	0	100
	KPO	Count	108	92	0	0	0	200
		% Within Nature of the Business	54	46	0	0	0	100
	Total	Count	309	262	29	0	0	600
		% Within Nature of the Business	51.5	43.7	4.8	0	0	100
Organizing team activities	IT Services	Count	108	92	0	0	0	200
		% Within Nature of the Business	54	46	0	0	0	100
	BPO	Count	109	91	0	0	0	200
		% Within Nature of the Business	54.5	45.5	0	0	0	100
	KPO	Count	108	92	0	0	0	200
		% Within Nature of the Business	54	46	0	0	0	100
	Total	Count	325	275	0	0	0	600
		% Within Nature of the Business	54.2	45.8	0	0	0	100
More focused on setting priorities, Goals	IT Services	Count	108	92	0	0	0	200
		% Within Nature of the Business	54	46	0	0	0	100
	BPO	Count	109	91	0	0	0	200
		% Within Nature of the Business	54.5	45.5	0	0	0	100
	KPO	Count	108	92	0	0	0	200
		% Within Nature of the Business	54	46	0	0	0	100
	Total	Count	325	275	0	0	0	600
		% Within Nature of the Business	54.2	45.8	0	0	0	100
Motivating other members in the team to reach goals	IT Services	Count	108	92	0	0	0	200
		% Within Nature of the Business	54	46	0	0	0	100
	BPO	Count	102	88	10	0	0	200
		% Within Nature of the Business	51	44	5	0	0	100
	KPO	Count	100	82	18	0	0	200
		% Within Nature of the Business	50	41	9	0	0	100
	Total	Count	310	262	28	0	0	600
		% Within Nature of the Business	51.7	43.7	4.7	0	0	100

			RS	T&D	CB	PM	MSR	Total
Leadership in the team	IT Services	Count	96	85	19	0	0	200
		% Within Nature of the Business	48	42.5	9.5	0	0	100
	BPO	Count	58	98	44	0	0	200
		% Within Nature of the Business	29	49	22	0	0	100
	KPO	Count	20	117	63	0	0	200
		% Within Nature of the Business	10	58.5	31.5	0	0	100
	Total	Count	174	300	126	0	0	600
		% Within Nature of the Business	29	50	21	0	0	100
Taking challenging assignments, maintaining and coaching	IT Services	Count	19	117	64	0	0	200
		% Within Nature of the Business	9.5	58.5	32	0	0	100
	BPO	Count	61	104	32	0	0	200
		% Within Nature of the Business	30.5	52	16	0	0	100
	KPO	Count	94	92	7	0	0	200
		% Within Nature of the Business	47	46	3.5	0	0	100
	Total	Count	174	313	103	0	0	600
		% Within Nature of the Business	29	52.2	17.2	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

In the above table 5.19 tabular form of data indicates the core competency called Spirit of Team Work considered for HRM Functions. In Spirit of Team Work certain factors were identified those are Active Participation, Proper Planning and Execution, Organizing Team activities, Setting Priority Goals, motivating team members to reach the goal, Leadership in the team, Taking Challenges, where these factors considered for the different HRM Functions.

In IT Services, the maximum (108) employees and the Second maximum (92) employees said that the Active participation as team member is considered in Recruitment and Selection and the Training and Development. None of the employee said that the Active Participation as a Team member was considered in Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention.

In BPO Services, the maximum (102) employees and the Second maximum (88) employees said that the Active participation as team member is considered in Recruitment and Selection and the Training and Development, the very minimum (10) employees said

that the active participation is considered in Compensation and Benefits. None of the employee said that the Active Participation as a Team member was considered in Performance Management, Motivation, Satisfaction and Retention.

In KPO Services, the maximum (100) employees and the Second maximum (82) employees said that the Active participation as team member is considered in Recruitment and Selection and the Training and Development, the very minimum (18) employees said that the active participation is considered in Compensation and Benefits. None of the employee said that the Active Participation as a Team member was considered in Performance Management, Motivation, Satisfaction and Retention.

About Proper Planning and execution of Plan, In IT services, the highest (96) employees accepted that the Proper Planning and execution of Plan is applied in Recruitment and Selection, the second highest (85) employees accepted that the Proper Planning and execution of Plan is considered in Training and Development, the very lowest (19) of employees accepted that the Proper Planning and execution of Plan is considered in Compensation and Benefits, and no employees accepted that the Proper Planning and execution of Plan is considered in Performance management, Motivation, Satisfaction and Retention.

In BPO services, the highest (105) employees accepted that the Proper Planning and execution of Plan is applied in Recruitment and Selection, the second highest (85) employees accepted that the Proper Planning and execution of Plan is considered in Training and Development, the very lowest (10) of employees accepted that the Proper Planning and execution of Plan is considered in Compensation and Benefits, and no employees accepted that the Proper Planning and execution of Plan is considered in Performance management, Motivation, Satisfaction and Retention.

In KPO services, the highest (105) employees accepted that the Proper Planning and execution of Plan is applied in Recruitment and Selection, the second highest (85) employees accepted that the Proper Planning and execution of Plan is considered in Training and Development no employees accepted that the Proper Planning and execution of Plan is considered in Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention.

Whereas the Organizational team activities, In IT services, the greatest (108) employees accepted that the Organizational team activities is applied in Recruitment and Selection, the second greatest (92) employees accepted that the Organizational team activities is considered in Training and Development and no employees accepted that the Organizational team activities is considered in Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention.

In BPO services, the greatest (109) employees accepted that the Organizational team activities is applied in Recruitment and Selection, the second greatest (91) employees accepted that the Organizational team activities is considered in Training and Development and no employees accepted that the Organizational team activities is considered in Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention.

In KPO services, the greatest (108) employees accepted that the Organizational team activities is applied in Recruitment and Selection, the second greatest (92) employees accepted that the Organizational team activities is considered in Training and Development and no employees accepted that the Organizational team activities is considered in Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention.

About Motivating other members, In IT services the Upper limit (108) employees accepted that the Motivating other members is applied in Recruitment and Selection, the Lower limit (92) employees accepted that the Motivating other members is considered in Training and development no employees accepted that the Motivating other members is considered in Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention.

In BPO services the Upper limit (102) employees accepted that the Motivating other members is applied in Recruitment and Selection, the second upper limit (88) employees accepted that the Motivating other members is considered in Training and development, the lower limit (10) of employees said that the Motivating other member in team to reach the goal is considered in Compensation and Benefits and no employees accepted that the Motivating other members is considered in Performance management, Motivation, Satisfaction and Retention.

In KPO services the Upper limit (100) employees accepted that the Motivating other members is applied in Recruitment and Selection, the second upper limit (82) employees accepted that the Motivating other members is considered in Training and development, the lower limit (18) of employees said that the Motivating other member in team to reach the goal is considered in Compensation and Benefits and no employees accepted that the Motivating other members is considered in Performance management, Motivation, Satisfaction and Retention.

About Leadership in the team, In IT services the Maximum (96) employees accepted that the Leadership in the team is applied in Recruitment and Selection, the second maximum (85) employees accepted that the Leadership in the team is considered in Training and development, the minimum (19) employees accepted that the Leadership in the team is considered for Compensation and Benefits and no employees accepted that the Leadership in the team is considered in Performance management, Motivation, Satisfaction and Retention.

In BPO services the Maximum (98) employees accepted that the Leadership in the team is applied in Training and development, the second maximum (58) employees accepted that the Leadership in the team is considered in Recruitment and Selection, the minimum (44) employees accepted that the Leadership in the team is considered for Compensation and Benefits and no employees accepted that the Leadership in the team is considered in Performance management, Motivation, Satisfaction and Retention.

In KPO services the Maximum (98) employees accepted that the Leadership in the team is applied in Training and development, the second maximum (63) employees accepted that the Leadership in the team is considered in Compensation and Benefits, the minimum (44) employees accepted that the Leadership in the team is considered for Recruitment and Selection and no employees accepted that the Leadership in the team is considered in Performance management, Motivation, Satisfaction and Retention.

About Taking Challenging assignments, maintaining and coaching, In IT services, the Highest (117) employees accepted that the Taking Challenging assignments, maintaining and coaching is applied in Training and development, the second Highest (64) employees accepted that the Taking Challenging assignments, maintaining and coaching is considered in Compensation and Benefits, the lowest (19) employees accepted that the Taking

Challenging assignments, maintaining and coaching is considered for Recruitment and Selection and no employees accepted that the Taking Challenging assignments, maintaining and coaching is considered in Performance management, Motivation, Satisfaction and Retention.

In BPO services, the Highest (104) employees accepted that the Taking Challenging assignments, maintaining and coaching is applied in Training and development, the second Highest (61) employees accepted that the Taking Challenging assignments, maintaining and coaching is considered in Recruitment and Selection, the lowest (32) employees accepted that the Taking Challenging assignments, maintaining and coaching is considered for Compensation and Benefits and no employees accepted that the Taking Challenging assignments, maintaining and coaching is considered in Performance management, Motivation, Satisfaction and Retention.

Table No: 5.20: Adaptability Considered for HRM Functions

Description			HRM Functions					
			RS	TD	CB	PM	MSR	Total
Adoption of change	IT Services	Count	96	92	6	6	0	200
		% Within Nature of the Business	48	46	3	3	0	100
	BPO	Count	68	97	31	4	0	200
		% Within Nature of the Business	34	48.5	15.5	0	0	100
	KPO	Count	47	100	53	0	0	200
		% Within Nature of the Business	23.5	50	26.5	0	0	100
	Total	Count	211	289	90	10	0	600
		% Within Nature of the Business	35.2	48.2	15	1.7	0	100
Adjustment with the environment	IT Services	Count	44	104	52	0	0	200
		% Within Nature of the Business	22	52	26	0	0	100
	BPO	Count	75	99	26	0	0	200
		% Within Nature of the Business	37.5	49.5	13	0	0	100
	KPO	Count	103	97	0	0	0	200
		% Within Nature of the Business	51.5	48.5	0	0	0	100
	Total	Count	222	300	78	0	0	600
		% Within Nature of the Business	37	50	13	0	0	100

			RS	T&D	CB	PM	MSR	Total
Adjustment with the job responsibility	IT Services	Count	102	98	0	0	0	200
		% Within Nature of the Business	51	49	0	0	0	100
	BPO	Count	99	91	10	0	0	200
		% Within Nature of the Business	49.5	45.5	5	0	0	100
	KPO	Count	98	85	17	0	0	200
		% Within Nature of the Business	49	42.5	8.5	0	0	100
	Total	Count	299	274	27	0	0	600
		% Within Nature of the Business	49.8	45.7	4.5	0	0	100
Cooperation with the senior and junior workers	IT Services	Count	96	85	19	0	0	200
		% Within Nature of the Business	48	42.5	9.5	0	0	100
	BPO	Count	71	95	34	0	0	200
		% Within Nature of the Business	35.5	47.5	17	0	0	100
	KPO	Count	47	100	53	0	0	200
		% Within Nature of the Business	23.5	50	26.5	0	0	100
	Total	Count	214	280	106	0	0	600
		% Within Nature of the Business	35.7	46.7	17.7	0	0	100
Adoption of new technology	IT Services	Count	44	104	52	0	0	200
		% Within Nature of the Business	22	52	26	0	0	100
	BPO	Count	69	97	31	0	0	200
		% Within Nature of the Business	34.5	48.5	15.5	0	0	100
	KPO	Count	90	96	7	7	0	200
		% Within Nature of the Business	45	48	3.5	3.5	0	100
	Total	Count	203	297	90	10	0	600
		% Within Nature of the Business	33.8	49.5	15	1.7	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

In the above table 5.20 diversified data describes the Core competency called Adaptability is considered for HRM Functions, in that various adaptabilities were identified such as Adoption of change, Adjustment with the environment, Adjustment with the job, Cooperation with the senior and junior workers and Technology. Whereas in case of Adoption of change, In IT Services, the maximum (96) of employees believed that the Adoption of change is considered during Recruitment and selection, the second maximum (92) of employees believed that the Adoption of change is considered for Training and

Development, the minimum (6 and 6) of the employees believed that the Adoption of change is considered for Compensation and Benefits, and Performance Management, no employees believed that the Adoption of change is considered for Motivation, Satisfaction and Retention.

In BPO Services, the maximum (97) of employees believed that the Adoption of change is considered during Training and development, the second maximum (68) of employees believed that the Adoption of change is considered for Recruitment and selection, the minimum (31) of the employees believed that the Adoption of change is considered for Compensation and Benefits, the very minimum (4) of employees believed that the Adoption of change is considered for Performance management, and no employees believed that the Adoption of change is considered for Motivation, Satisfaction and Retention.

In KPO Services, the maximum (100) of employees believed that the Adoption of change is considered during Training and development, the second maximum (53) of employees believed that the Adoption of change is considered for Compensation and Benefits, the minimum (47) of the employees believed that the Adoption of change is considered for Recruitment and selection, and no employees believed that the Adoption of change is considered for Performance Management, Motivation, Satisfaction and Retention.

About the Adjustment with the environment, In IT Services, the maximum (104) of employees believed that the Adjustment with the environment is considered during Training and development, the second maximum (52) of employees believed that the Adjustment with the environment is considered for Compensation and Benefits, the minimum (44) of the employees believed that the Adjustment with the environment is considered for Recruitment and selection, and no employees believed that the Adjustment with the environment is considered for Performance Management, Motivation, Satisfaction and Retention.

In BPO Services, the maximum (99) of employees believed that the Adjustment with the environment is considered during Training and development, the second maximum (75) of employees believed that the Adjustment with the environment is considered for Recruitment and selection, the minimum (26) of the employees believed that the Adjustment with the environment is considered for Compensation and Benefits, and no

employees believed that the Adjustment with the environment is considered for Performance Management, Motivation, Satisfaction and Retention.

In KPO Services, the maximum (103) of employees believed that the Adjustment with the environment is considered during Recruitment and selection, the second maximum (97) of employees believed that the Adjustment with the environment is considered for Training and Development, and no employees believed that the Adjustment with the environment is considered during performance of Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention functions.

About the Adjustment with the job responsibility, In IT services, the maximum (102) of employees believed that the Adjustment with the job responsibility is considered during Recruitment and selection, the second maximum (98) of employees believed that the Adjustment with the job responsibility is considered for Training and Development, and no employees believed that the Adjustment with the job responsibility is considered during performance of Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention functions.

In BPO Services, the maximum (99) of employees believed that the Adjustment with the job responsibility is considered during Recruitment and selection, the second maximum (91) of employees believed that the Adjustment with the job responsibility is considered for Training and Development, the minimum (10) of employees believed that the Adjustment with the job responsibility is considered during the Compensation and Benefits, and no employees believed that the Adjustment with the job responsibility is considered during performance of Performance Management, Motivation, Satisfaction and Retention functions.

In KPO Services, the maximum (98) of employees believed that the Adjustment with the job responsibility is considered during Recruitment and selection, the second maximum (85) of employees believed that the Adjustment with the job responsibility is considered for Training and Development, the minimum (17) of employees believed that the Adjustment with the job responsibility is considered during the Compensation and Benefits, and no employees believed that the Adjustment with the job responsibility is considered during performance of Performance Management, Motivation, Satisfaction and Retention functions.

About the Cooperation with the senior and junior workers, In IT Services the maximum (96) of employees believed that the Cooperation with the senior and junior workers is can be happen during Recruitment and selection, the second maximum (85) of employees believed that the Cooperation with the senior and junior workers can be happen during Training and Development, the minimum (19) of employees believed that the Cooperation with the senior and junior workers happen during the Compensation and Benefits, and no employees believed that the Cooperation with the senior and junior workers is considered during performance of Performance Management, Motivation, Satisfaction and Retention functions.

In BPO Services the maximum (95) of employees believed that the Cooperation with the senior and junior workers is can be happen during Training and Development, the second maximum (71) of employees believed that the Cooperation with the senior and junior workers can be happen during Recruitment and Selection, the minimum (34) of employees believed that the Cooperation with the senior and junior workers happen during the Compensation and Benefits, and no employees believed that the Cooperation with the senior and junior workers is considered during performance of Performance Management, Motivation, Satisfaction and Retention functions.

In KPO Services the maximum (100) of employees believed that the Cooperation with the senior and junior workers is can be happen during Training and Development, the second maximum (53) of employees believed that the Cooperation with the senior and junior workers can be happen during Compensation and Benefits, the minimum (47) of employees believed that the Cooperation with the senior and junior workers happen during the Recruitment and Selection, and no employees believed that the Cooperation with the senior and junior workers is considered during performance of Performance Management, Motivation, Satisfaction and Retention functions.

About Technology, In IT services, the maximum (104) of employees believed that the Technology is used during Training and Development, the second maximum (52) of employees believed that the Technology is used during Compensation and Benefits, the minimum (44) of employees believed that the Technology is used Recruitment and Selection, and no employees believed that the Technology is considered during performance of Performance Management, Motivation, Satisfaction and Retention functions.

In BPO services, the maximum (97) of employees believed that the Technology is used during Training and Development, the second maximum (69) of employees believed that the Technology is used during Recruitment and Selection, the minimum (31) of employees believed that the Technology is used Compensation and Benefits, and no employees believed that the Technology is considered during performance of Performance Management, Motivation, Satisfaction and Retention functions.

In KPO services, the maximum (96) of employees believed that the Technology is used during Training and Development, the second maximum (90) of employees believed that the Technology is used during Recruitment and Selection, the minimum (7 and 7) of employees believed that the Technology is used Compensation and Benefits, and Performance management and no employees believed that the Technology is considered during performance of Motivation, Satisfaction and Retention functions.

Table No: 5.21: Communication Considered for HRM Functions

Description			RS	TD	CB	PM	MSR	Total
Interpersonal communication	IT Services	Count	96	93	6	5	0	200
		% Within Nature of the Business	48	46.5	3	2.5	0	100
	BPO	Count	72	96	28	4	0	200
		% Within Nature of the Business	36	48	14	2	0	100
	KPO	Count	47	98	55	0	0	200
		% Within Nature of the Business	23.5	49	27.5	0	0	100
	Total	Count	215	287	89	9	0	600
		% Within Nature of the Business	35.8	47.8	14.8	1.5	0	100
Communication with the co-worker	IT Services	Count	54	98	48	0	0	200
		% Within Nature of the Business	27	49	24	0	0	100
	BPO	Count	76	94	30	0	0	200
		% Within Nature of the Business	38	47	15	0	0	100
	KPO	Count	102	98	0	0	0	200
		% Within Nature of the Business	51	49	0	0	0	100
	Total	Count	232	290	78	0	0	600
		% Within Nature of the Business	38.7	48.3	13	0	0	100

The table header row for HRM Functions spans RS, TD, CB, PM, MSR, Total.

Communication with the higher authority	IT Services	Count	103	97	0	0	0	200
		% Within Nature of the Business	51.5	48.5	0	0	0	100
	BPO	Count	103	91	6	0	0	200
		% Within Nature of the Business	51.5	45.5	3	0	0	100
	KPO	Count	97	89	14	0	0	200
		% Within Nature of the Business	48.5	44.5	3	0	0	100
	Total	Count	303	277	20	0	0	600
		% Within Nature of the Business	50.5	46.2	3.3	0	0	100
Communication about job responsibilities	IT Services	Count	101	85	14	0	0	200
		% Within Nature of the Business	50.5	42.5	7	0	0	100
	BPO	Count	75	93	32	0	0	200
		% Within Nature of the Business	37.5	46.5	16	0	0	100
	KPO	Count	47	98	55	0	0	200
		% Within Nature of the Business	23.5	49	27.5	0	0	100
	Total	Count	223	276	101	0	0	600
		% Within Nature of the Business	37.2	46	16.8	0	0	100
Communication about compensation and benefits	IT Services	Count	63	98	38	0	0	200
		% Within Nature of the Business	31.5	49	19	0	0	100
	BPO	Count	77	93	30	0	0	200
		% Within Nature of the Business	38.5	46.5	15	0	0	100
	KPO	Count	104	96	0	0	0	200
		% Within Nature of the Business	52	48	0	0	0	100
	Total	Count	244	287	68	0	0	600
		% Within Nature of the Business	40.7	47.8	11.3	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

In the above table 5.21 data indicates the Core competency such as Communication considered for HRM Functions, whereas with respect to the communication various dimensions were identified those are interpersonal communication, communication with co-workers, communication with the higher authority, communication about job responsibilities, communication about compensation and benefits into different HRM functions, such as Recruitment and selection, Training and development, Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention.

In IT services, the maximum (96) of employees said that the interpersonal communication considered in Recruitment and selection, the second maximum (93) of employees said interpersonal communication is considered in Training and development, the third maximum (6) of employees said interpersonal communication is considered in Compensation and Benefits and the very minimum (5) employees said that the interpersonal communication is considered in Performance management and no employees said that the interpersonal communication is considered in Motivation, Satisfaction and Retention.

In BPO services, the maximum (96) of employees said that the interpersonal communication considered in Training and development, the second maximum (72) of employees said interpersonal communication is considered in Recruitment and selection, the third maximum (6) of employees said interpersonal communication is considered in Compensation and Benefits and the very minimum (5) employees said that the interpersonal communication is considered in Performance management and no employees said that the interpersonal communication is considered in Motivation, Satisfaction and Retention.

In KPO services, the maximum (98) of employees said that the interpersonal communication considered in Training and development, the second maximum (55) of employees said interpersonal communication is considered in Recruitment and selection, the minimum (47) of employees said interpersonal communication is considered in Compensation and Benefits and no employees said that the interpersonal communication is considered in Performance management, Motivation, Satisfaction and Retention.

In IT services, the highest (98) of employees said that the Communication with the co-worker considered in Training and development, the second highest (54) of employees said Communication with the co-worker is considered in Recruitment and selection, lowest (48) of employees said Communication with the co-worker is considered in Compensation and Benefits and none of the employees said that the Communication with the co-worker is considered in Performance management, Motivation, Satisfaction and Retention.

In BPO services, the highest (94) of employees said that the Communication with the co-worker considered in Training and development, the second highest (76) of employees said Communication with the co-worker is considered in Recruitment and selection, lowest

(30) of employees said Communication with the co-worker is considered in Compensation and Benefits and none of the employees said that the Communication with the co-worker is considered in Performance management, Motivation, Satisfaction and Retention.

In KPO, the highest (102) of employees said that the Communication with the co-worker considered in Recruitment and selection, the second lower limit (98) of employees said Communication with the co-worker is considered in Training and development, and Benefits and none of the employees said that the Communication with the co-worker is considered in Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention.

In IT, the upper limit (103) of employees said that the Communication with the higher authority considered in Recruitment and selection, the second upper limit (91) of employees said Communication with the higher authority is considered in Training and development, and none of the employees said that the Communication with the higher authority is considered in Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention.

In BPO, the upper limit (103) of employees said that the Communication with the higher authority considered in Recruitment and selection, the second upper limit (91) of employees said Communication with the higher authority is considered in Training and development, the lower limit (6) of employees accepted that communication with higher authority is considered in the Compensation and Benefits, and none of the employees said that the Communication with the higher authority is considered in, Performance management, Motivation, Satisfaction and Retention.

In KPO, the upper limit (97) of employees said that the Communication with the higher authority considered in Recruitment and selection, the second upper limit (89) of employees said Communication with the higher authority is considered in Training and development, the lower limit (14) of employees accepted that communication with higher authority is considered in the Compensation and Benefits, and none of the employees said that the Communication with the higher authority is considered in, Performance management, Motivation, Satisfaction and Retention.

In IT services, the greatest (101) of employees said that the Communication about job responsibilities considered in Recruitment and selection, the second upper limit (85) of

employees said Communication about job responsibilities is considered in Training and development, the lower limit (14) of employees accepted that Communication about job responsibilities is considered in the Compensation and Benefits, and none of the employees said that the Communication about job responsibilities is considered in, Performance management, Motivation, Satisfaction and Retention.

In BPO services, the greatest (93) of employees said that the Communication about job responsibilities considered in Training and development, the second upper limit (75) of employees said Communication about job responsibilities is considered in Recruitment and selection, the lower limit (32) of employees accepted that Communication about job responsibilities is considered in the Compensation and Benefits, and none of the employees said that the Communication about job responsibilities is considered in, Performance management, Motivation, Satisfaction and Retention.

In KPO services, the greatest (93) of employees said that the Communication about job responsibilities considered in Training and development, the second upper limit (55) of employees said Communication about job responsibilities is considered in Compensation and Benefits, the lower limit (47) of employees accepted that Communication about job responsibilities is considered in the Recruitment and selection, and none of the employees said that the Communication about job responsibilities is considered in, Performance management, Motivation, Satisfaction and Retention.

In IT services, the greatest (98) of employees said that the Communication about Compensation and benefits considered in Training and development, the second upper limit (63) of employees said Communication about Compensation and benefits is considered in Recruitment and selection, the lower limit (38) of employees accepted that Communication about Compensation and benefits is considered in the Compensation and Benefits, and none of the employees said that the Communication about Compensation and benefits is considered in, Performance management, Motivation, Satisfaction and Retention.

In BPO services, the greatest (93) of employees said that the Communication about Compensation and benefits considered in Training and development, the second upper limit (77) of employees said Communication about Compensation and benefits is considered in Recruitment and selection, the lower limit (30) of employees accepted that

Communication about Compensation and benefits is considered in the Compensation and Benefits, and none of the employees said that the Communication about Compensation and benefits is considered in, Performance management, Motivation, Satisfaction and Retention.

In KPO services, the greatest (104) of employees said that the Communication about Compensation and benefits considered in Recruitment and selection, the lower limit (96) of employees said Communication about Compensation and benefits is considered in Training and development, and none of the employees said that the Communication about Compensation and benefits is considered in, Compensation and benefits, Performance management, Motivation, Satisfaction and Retention.

Table No: 5.22: Initiatives Considered for HRM Functions

Description			HRM Functions					
			RS	TD	CB	PM	MSR	Total
Networking	IT Services	Count	93	94	12	1	0	200
		% Within Nature of the Business	46.5	47	6	0.5	0	100
	BPO	Count	105	88	7	0	0	200
		% Within Nature of the Business	52.5	44	3.5	0	0	100
	KPO	Count	102	82	16	0	0	200
		% Within Nature of the Business	51	41	8	0	0	100
	Total	Count	300	264	35	1	0	600
		% Within Nature of the Business	50	44	5.8	0.2	0	100
Result Oriented	IT Services	Count	80	97	27	0	0	200
		% Within Nature of the Business	40	46.5	13.5	0	0	100
	BPO	Count	102	91	7	0	0	200
		% Within Nature of the Business	51	45.5	3.5	0	0	100
	KPO	Count	104	96	0	0	0	200
		% Within Nature of the Business	52	48	0	0	0	100
	Total	Count	286	280	34	0	0	600
		% Within Nature of the Business	47.7	46.7	5.7	0	0	100

			RS	T&D	CB	PM	MSR	Total
Flexibility	IT Services	Count	102	93	4	1	0	200
		% Within Nature of the Business	51	46.5	2	0.5	0	100
	BPO	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	KPO	Count	104	94	0	0	0	200
		% Within Nature of the Business	52	48	0	0	0	100
	Total	Count	312	283	4	1	0	600
		% Within Nature of the Business	52	47.2	0.7	0.2	0	100
Achievement orientation	IT Services	Count	86	95	19	0	0	200
		% Within Nature of the Business	43	47.5	9.5	0	0	100
	BPO	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	KPO	Count	104	96	0	0	0	200
		% Within Nature of the Business	52	48	0	0	0	100
	Total	Count	296	285	19	0	0	600
		% Within Nature of the Business	49.3	47.5	3.2	0	0	100
Delegation	IT Services	Count	97	95	8	0	0	200
		% Within Nature of the Business	48.5	47.5	4	0	0	100
	BPO	Count	105	88	7	0	0	200
		% Within Nature of the Business	52.5	44	3.5	0	0	100
	KPO	Count	102	82	16	0	0	200
		% Within Nature of the Business	51	41	8	0	0	100
	Total	Count	304	265	31	0	0	600
		% Within Nature of the Business	50.7	44.2	5.2	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

The above table 5.22 the tabular form of data describes the employee response on core competency called initiatives taken into consideration to perform the HRM functions, whereas the different initiative dimensions has identified such as networking, result oriented, flexibility, achievement orientation, and delegation.

In IT services, the greatest (94) of employees said that the networking is considered in Training and development, the second maximum (93) of employees said networking

considered in Recruitment and selection, the third maximum (12) employees said networking is considered in Compensation and Benefits, the only (1) employee said that the networking is considered in Performance management, and none of the employees said that the networking is considered in Motivation, Satisfaction and Retention.

In BPO services, the greatest (105) of employees said that the networking is considered in Recruitment and selection, the second maximum (88) of employees said networking considered in Training and development, the lowest (7) employees said networking is considered in Compensation and Benefits, and none of the employees said that the networking is considered in Compensation and benefits, Motivation, Satisfaction and Retention.

In KPO services, the greatest (102) of employees said that the networking is considered in Recruitment and selection, the second maximum (82) of employees said networking considered in Training and development, the lowest (16) employees said networking is considered in Compensation and Benefits, and none of the employees said that the networking is considered in Compensation and benefits, Motivation, Satisfaction and Retention.

About Result oriented initiatives, In IT services, the upper limit (97) of employees indicates that the result oriented training and development activities considered, the second upper limit (80) of employees denotes result oriented recruitment and selection considered and the lower limit (27) of employees represent the result orient compensation and benefit activities considered, none of the employee represent that the result orient Performance management, Motivation, Satisfaction and Retention is considered.

In BPO sector, the upper limit (102) of employees indicates that the result oriented Recruitment and selection activities considered, the second upper limit (91) of employees denotes result oriented Training and development considered and the lower limit (7) of employees represent the result orient compensation and benefit activities considered, none of the employee represent that the result orient Performance management, Motivation, Satisfaction and Retention functions performed in organization.

In KPO sector, the upper limit (104) of employees indicates that the result oriented Recruitment and selection activities considered, the second lower limit (96) of employees denotes result oriented Training and development considered, none of the employee

represent that the result orient Compensation and Benefits, Performance management, Motivation, Satisfaction and Retention functions performed in organization.

About flexibility, In IT services, the maximum (102) employees represent that the initiatives must be flexible with respect to Recruitment and selection, the second maximum (93) of employees represents that the initiatives must be flexible with respect to Training and Development, and third maximum (4) employees represent initiatives flexible in case of Compensation and Benefits and the very least (1) employee represent that the initiatives flexible in case of Performance Management and the none of the employee represent initiative must be flexible in case of Motivation, Satisfaction and Retention functions to be performed in organization.

In BPO services, the maximum (106) employees represent that the initiatives must be flexible with respect to Recruitment and selection, the minimum (94) of employees represents that the initiatives must be flexible with respect to Training and Development, and none of the employee represent initiative must be flexible in case of Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention functions to be performed in organization.

In KPO services, the maximum (104) employees represent that the initiatives must be flexible with respect to Recruitment and selection, the minimum (96) of employees represents that the initiatives must be flexible with respect to Training and Development, and none of the employee represent initiative must be flexible in case of Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention functions to be performed in organization.

About Achievement oriented initiatives, In IT Services the maximum (95) of employees signify the achievement oriented initiatives considered in Training and development, the second maximum (86) of employees signify the achievement oriented initiatives considered in Recruitment and Selection, the very minimum (19) of employees signify the achievement oriented initiatives considered in Compensation and Benefits, and no employee signify the achievement oriented initiatives considered in Performance Management, Motivation, Satisfaction and Retention functions to perform in organization.

In BPO services the maximum (106) of employees signifies the achievement-oriented initiatives considered in Recruitment and Selection, the minimum (94) of employees

signifies the achievement-oriented initiatives considered in Training and Development, and no employee signify the achievement-oriented initiatives considered in Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention functions to perform in organization.

In KPO services the maximum (104) of employees signifies the achievement-oriented initiatives considered in Recruitment and Selection, the minimum (96) of employees signifies the achievement-oriented initiatives considered in Training and Development, and no employee signify the achievement-oriented initiatives considered in Compensation and Benefits, Performance Management, Motivation, Satisfaction and Retention functions to perform in organization.

About Delegation, In IT services, the maximum (97) of employees connote that the delegation initiative is considered in Recruitment and Selection, the second maximum (95) of employees connote that the delegation initiative is considered in Training and Development, the minimum (8) of employees connote that the delegation initiative is considered in Compensation and Benefits, and none of the employee connote that the delegation initiative is considered in Performance Management, Motivation, Satisfaction and Retention function to perform in organization.

In BPO, the maximum (105) of employees connote that the delegation initiative is considered in Recruitment and Selection, the second maximum (88) of employees connote that the delegation initiative is considered in Training and Development, the minimum (7) of employees connote that the delegation initiative is considered in Compensation and Benefits, and none of the employee connote that the delegation initiative is considered in Performance Management, Motivation, Satisfaction and Retention function to perform in organization.

In KPO, the maximum (102) of employees connote that the delegation initiative is considered in Recruitment and Selection, the second maximum (82) of employees connote that the delegation initiative is considered in Training and Development, the minimum (16) of employees connote that the delegation initiative is considered in Compensation and Benefits, and none of the employee connote that the delegation initiative is considered in Performance Management, Motivation, Satisfaction and Retention function to perform in organization.

Table No: 5.23: Professional Knowledge Considered for HRM Functions

Description			RS	TD	CB	PM	MSR	Total
Presentation Skills	IT Services	Count	100	85	15	0	0	200
		% Within Nature of the Business	50	42.5	7.5	0	0	100
	BPO	Count	63	101	36	0	0	200
		% Within Nature of the Business	31.5	50.5	18	0	0	100
	KPO	Count	20	119	61	0	0	200
		% Within Nature of the Business	10	59.5	30.5	0	0	100
	Total	Count	183	305	112	0	0	600
		% Within Nature of the Business	30.5	50.8	18.7	0	0	100
Problem Solving	IT Services	Count	50	105	45	0	0	200
		% Within Nature of the Business	25	52.5	22.5	0	0	100
	BPO	Count	54	105	38	3	0	200
		% Within Nature of the Business	27	52.5	19	1.5	0	100
	KPO	Count	90	96	7	7	0	200
		% Within Nature of the Business	45	48	3.5	3.5	0	100
	Total	Count	194	306	90	10	0	600
		% Within Nature of the Business	32.3	51	15	1.7	0	100
Customer Focus	IT Services	Count	100	91	5	4	0	200
		% Within Nature of the Business	50	45.5	2.5	2	0	100
	BPO	Count	72	96	28	4	0	200
		% Within Nature of the Business	36	48	14	2	0	100
	KPO	Count	47	98	55	0	0	200
		% Within Nature of the Business	23.5	49	27.5	0	0	100
	Total	Count	219	285	88	8	0	600
		% Within Nature of the Business	36.5	47.5	14.7	1.3	0	100
Leveraging Technology	IT Services	Count	72	97	30	1	0	200
		% Within Nature of the Business	36	48.5	15	0.5	0	100
	BPO	Count	67	94	37	2	0	200
		% Within Nature of the Business	33.5	47	18.5	1	0	100
	KPO	Count	93	93	7	7	0	200
		% Within Nature of the Business	46.5	46.5	3.5	3.5	0	100
	Total	Count	232	284	74	10	0	600
		% Within Nature of the Business	38.7	47.3	12.3	1.7	0	100

			RS	T&D	CB	PM	MSR	Total
Analytical thinking	IT Services	Count	90	96	11	3	0	200
		% Within Nature of the Business	45	48	5.5	1.5	0	100
	BPO	Count	74	96	25	5	0	200
		% Within Nature of the Business	37	48	12.5	2.5	0	100
	KPO	Count	49	98	53	0	0	200
		% Within Nature of the Business	24.5	49	26.5	0	0	100
	Total	Count	213	290	89	8	0	600
		% Within Nature of the Business	35.5	48.3	14.8	1.3	0	100
Technical/Legal/Financial Knowledge	IT Services	Count	70	97	33	0	0	200
		% Within Nature of the Business	35	48.5	16.5	0	0	100
	BPO	Count	69	97	34	0	0	200
		% Within Nature of the Business	34.5	48.5	17	0	0	100
	KPO	Count	103	97	0	0	0	200
		% Within Nature of the Business	51.5	48.5	0	0	0	100
	Total	Count	242	291	67	0	0	600
		% Within Nature of the Business	40.3	48.5	11.2	0	0	100
Building Trust	IT Services	Count	80	99	21	0	0	200
		% Within Nature of the Business	40	49.5	10.5	0	0	100
	BPO	Count	100	94	6	0	0	200
		% Within Nature of the Business	50	47	3	0	0	100
	KPO	Count	100	86	14	0	0	200
		% Within Nature of the Business	50	43	7	0	0	100
	Total	Count	280	279	41	0	0	600
		% Within Nature of the Business	46.7	46.5	6.8	0	0	100

Source: Primary Data (RS-Recruitment and Selection, T&D-Training and Development, CB- Compensation and Benefits, PM-Performance Management, MSR- Motivation, Satisfaction and Retention)

The above table 5.23 the data determines the core competency called professional knowledge considered for HRM functions, in which the presentation skills, problem solving, customer focus, leveraging technology, analytical, technical/legal/financial knowledge and building trust skills are identified as the professional skills which can be applied in performance of HRM functions. In IT services, the maximum (100) of employees determines that the presentation skills considered during the Recruitment and selection, the second maximum (85) of employees determine that the presentation skills considered in Training and development, and the very minimum (15) of employees determines that the presentation skills considered in Compensation and Benefits.

In BPO the maximum (101) of employee said that the presentation skills considered during Training and development, the second maximum (63) said presentation skills considered

in the Recruitment and selection, the very minimum (36) said that the presentation skills considered in Compensation and Benefits. None of the employees said that the presentation skills considered in Performance management, Motivation, Satisfaction and Retention.

In KPO the maximum (119) employees determine that the presentation skills considered during Training and development, the second maximum (61) of employees said that the presentation skills considered in the Compensation and Benefits, the very minimum (20) employees said that the presentation skills considered in Recruitment and selection. And no employee said that the consideration of presentation skills in Performance management, Motivation, Satisfaction and Retention.

In IT service, the maximum (105) said problem solving skills consider in Training and development, the second maximum (50) said the problem-solving skills consider in Recruitment and selection and the very minimum (45) said the problem-solving skills consider during the Compensation and Benefits, and none of the employee consider the same while doing Performance management, Motivation, Satisfaction and Retention.

In BPO service, the maximum (105) said problem solving skills consider in Training and development, the second maximum (54) said the problem-solving skills consider in Recruitment and selection and the very minimum (38) said the problem-solving skills consider during the Compensation and Benefits, and none of the employee consider the same while doing Performance management, Motivation, Satisfaction and Retention.

In KPO service, the maximum (96) said problem solving skills consider in Training and development, the second maximum (90) said the problem-solving skills consider in Recruitment and selection and the very minimum (7) said the problem-solving skills consider during the Compensation and Benefits, and none of the employee consider the same while doing Performance management, Motivation, Satisfaction and Retention.

In IT services, the upper limit (100) said that the customer focus skills considered in Recruitment and selection, the second upper limit (91) said the customer focus skills consider in Training and development, third upper limit (5) said the customer focus is considered in Compensation and Benefit and the very minimum (4) said the customer focus is considered in Performance management, and none of the employee said customer focus is considered in Motivation, Satisfaction and Retention.

In BPO services, the upper limit (96) said that the customer focus skills considered in Training and development, the second upper limit (72) said the customer focus skills consider in Recruitment and selection, third upper limit (28) said the customer focus is considered in Compensation and Benefit and the very minimum (4) said the customer focus is considered in Performance management, and none of the employee said customer focus is considered in Motivation, Satisfaction and Retention.

In KPO services, the upper limit (98) said that the customer focus skills considered in Training and development, the second upper limit (55) said the customer focus skills consider in Compensation and Benefits, very minimum (47) said the customer focus is considered in Recruitment and selection and none of the employee said customer focus is considered in Performance management, Motivation, Satisfaction and Retention.

About leveraging technology, in IT services, the maximum (97) employees indicates that the leveraging technology skills considered during the Training and development, second maximum (72) said leveraging technology skills considered during the Recruitment and selection, the third maximum (30) said leveraging technology skills considered in Compensation and Benefits, and the very minimum (1) said leveraging technology skills considered in Performance management, and none of the employee said leveraging technology skills considered in Motivation, Satisfaction and Retention.

In BPO services, the maximum (94) employees indicates that the leveraging technology skills considered during the Training and development, second maximum (67) said leveraging technology skills considered during the Recruitment and selection, the third maximum (37) said leveraging technology skills considered in Compensation and Benefits, and the very minimum (2) said leveraging technology skills considered in Performance management, and none of the employee said leveraging technology skills considered in Motivation, Satisfaction and Retention.

About leveraging technology, in KPO services, the maximum (93 and 93) employees indicates that the leveraging technology skills considered during the Recruitment and selection, Training and development, the minimum (7 and 7) said leveraging technology skills considered during the Compensation and Benefits and Performance management, and none of the employee said leveraging technology skills considered in Motivation, Satisfaction and Retention.

About Analytical skills, In IT Service, the greatest (96) of employees states that the Analytical skills considered during Training and development, the second greatest (90) of employees states that the Analytical skills considered in Recruitment and selection, the third greatest (11) states that the Analytical skills considered in Compensation and benefits and the lowest (3) employees states that the Analytical skills considered in Performance management and none of the employee said Analytical skills considerable in Motivation, Satisfaction and Retention.

In BPO Service, the greatest (96) of employees states that the Analytical skills considered during Training and development, the second greatest (74) of employees states that the Analytical skills considered in Recruitment and selection, the third greatest (25) states that the Analytical skills considered in Compensation and benefits and the lowest (5) employees states that the Analytical skills considered in Performance management and none of the employee said Analytical skills considerable in Motivation, Satisfaction and Retention.

In KPO Service, the greatest (98) of employees' states that the Analytical skills considered during Training and development, the second greatest (53) of employees' states that the Analytical skills considered in Compensation and benefits, the lowest (49) employees states that the Analytical skills considered in Recruitment and selection, and none of the employee said Analytical skills considerable in Performance management, Motivation, Satisfaction and Retention.

In IT Service, the greatest (97) of employees' states that the Technical/Legal/Financial considered during Training and development, the second greatest (70) of employees' states that the Technical/Legal/Financial considered in Recruitment and selection, the lowest (33) employees states that the Technical/Legal/Financial considered in Compensation and benefits, and none of the employee said Technical/Legal/Financial considerable in Performance management, Motivation, Satisfaction and Retention.

In BPO Service, the greatest (97) of employees' states that the Technical/Legal/Financial considered during Training and development, the second greatest (69) of employees states that the Technical/Legal/Financial considered in Recruitment and selection, the lowest (34) employees states that the Technical/Legal/Financial considered in Compensation and

benefits, and none of the employee said Technical/Legal/Financial considerable in Performance management, Motivation, Satisfaction and Retention.

In KPO Service, the greatest (103) of employees' states that the Technical/Legal/Financial considered during Recruitment and selection, the lowest (97) of employees' states that the Technical/Legal/Financial considered in Training and development, and none of the employee said Technical/Legal/Financial considerable in Compensation and benefits, Performance management, Motivation, Satisfaction and Retention.

About Trust Building skills, in IT services the highest (99) employees denotes that the Trust Building skills considered in Training and development, the second highest (80) employees denote Trust Building skills considered in Recruitment and selection, and the lowest (21) denotes that the Trust Building skills is considered in Compensation and benefits, and none of the employee said Trust Building skills considered in Performance management, Motivation, Satisfaction and Retention.

In BPO services the highest (100) employees denotes that the Trust Building skills considered in Recruitment and selection, the second highest (94) employees denote Trust Building skills considered in Training and development, and the lowest (6) denotes that the Trust Building skills is considered in Compensation and benefits, and none of the employee said Trust Building skills considered in Performance management, Motivation, Satisfaction and Retention.

In KPO services the highest (100) employees denotes that the Trust Building skills considered in Recruitment and selection, the second highest (86) employees denote Trust Building skills considered in Training and development, and the lowest (14) denotes that the Trust Building skills is considered in Compensation and benefits, and none of the employee said Trust Building skills considered in Performance management, Motivation, Satisfaction and Retention.

Table No: 5.24: Initiatives to Develop Competencies

Description			VLE	LE	NO	LE	VLE	Total
Training based on requirement	IT Services	Count	91	90	18	1	0	200
		% Within Nature of the Business	45.5	45	9	0.5	0	100
	BPO	Count	79	92	29	0	0	200
		% Within Nature of the Business	39.5	46	14.5	0	0	100
	KPO	Count	49	98	53	0	0	200
		% Within Nature of the Business	24.5	49	26.5	0	0	100
	Total	Count	219	280	100	1	0	600
		% Within Nature of the Business	36.5	46.7	16.7	0.2	0	100
Training provided by the Experts	IT Services	Count	71	96	32	1	0	200
		% Within Nature of the Business	35.5	48	16	0.5	0	100
	BPO	Count	70	96	34	0	0	200
		% Within Nature of the Business	35	48	17	0	0	100
	KPO	Count	107	93	0	0	0	200
		% Within Nature of the Business	53.5	46.5	0	0	0	100
	Total	Count	248	285	66	1	0	600
		% Within Nature of the Business	41.3	47.5	11	0.2	0	100
Proper Performance appraisal and management is done	IT Services	Count	94	93	12	1	0	200
		% Within Nature of the Business	47	46.5	6	0.5	0	100
	BPO	Count	104	90	6	0	0	200
		% Within Nature of the Business	52	45	3	0	0	100
	KPO	Count	102	81	17	0	0	200
		% Within Nature of the Business	51	40.5	8.5	0	0	100
	Total	Count	300	264	35	1	0	600
		% Within Nature of the Business	50	44	5.8	0.2	0	100
Compensation and benefits are provided based on ability and achievements	IT Services	Count	93	92	15	0	0	200
		% Within Nature of the Business	46.5	46	7.5	0	0	100
	BPO	Count	104	85	11	0	0	200
		% Within Nature of the Business	52	42.5	5.5	0	0	100
	KPO	Count	107	93	0	0	0	200
		% Within Nature of the Business	53.5	45.6	0	0	0	100
	Total	Count	304	270	26	0	0	600

		% Within Nature of the Business	50.7	45	4.3	0	0	100
Motivations done by the authorities through Mentoring	IT Services	Count	105	92	3	0	0	200
		% Within Nature of the Business	52.5	46	1.5	0	0	100
	BPO	Count	107	91	1	1	0	200
		% Within Nature of the Business	53.5	45.5	0.5	0.5	0	100
	KPO	Count	95	91	7	7	0	200
		% Within Nature of the Business	47.5	45.5	3.5	3.5	0	100
	Total	Count	307	274	11	8	0	600
		% Within Nature of the Business	51.2	45.7	1.8	1.3	0	100
Autonomy to take major decision based on the responsibilities assigned	IT Services	Count	96	91	13	0	0	200
		% Within Nature of the Business	48	45.5	6.5	0	0	100
	BPO	Count	89	95	13	3	0	200
		% Within Nature of the Business	44.5	47.5	6.5	1.5	0	100
	KPO	Count	49	98	53	0	0	200
		% Within Nature of the Business	24.5	49	26.5	0	0	100
	Total	Count	234	284	79	3	0	600
		% Within Nature of the Business	39	47.3	13.2	0.5	0	100
Grievances are solved through proper channel and within prescribed time	IT Services	Count	81	97	21	1	0	200
		% Within Nature of the Business	40.5	48.5	10.5	0.5	0	100
	BPO	Count	79	95	25	1	0	200
		% Within Nature of the Business	39.5	47.5	12.5	0.5	0	100
	KPO	Count	106	94	0	0	0	200
		% Within Nature of the Business	53	47	0	0	0	100
	Total	Count	266	286	46	2	0	600
		% Within Nature of the Business	44.3	47.7	7.7	0.3	0	100

Source: Primary Data (VLE- Very Large Extent, LE-Large extent, No- None, VLE- Very Low Extent and LE- Low Extent)

In the above table 5.24 depicts the numerical data represents the employees' response on the extent of initiatives to develop competencies in IT services, BPO and KPO services. In IT services, the maximum (91) said to the very large extent, the second maximum (90) said to the large extent and none of the employee said to the very low extent Training based on requirement to develop the employee competencies. In BPO services, the maximum (92) said to the large extent, the second maximum (79) said to the very large extent and

none of the employee said to the very low extent Training based on requirement to develop the employee competencies. In KPO services, the maximum (98) said to the very large extent, the second maximum (53) said not at all and none of the employee said to the very low extent Training based on requirement to develop the employee competencies.

With respect to the training provided by the experts, in IT services, the maximum (96) employees states that to the large extent, the second maximum (71) employees states to the very large extent, and none of the employee said to the very little extent training is provided by the experts. In BPO services, the maximum (96) employee determine to the large extent, the second maximum (71) determine to the very large extent, and none of the employee states to the very little extent training is provided by the experts. In KPO services, the maximum (107) employee denotes that to the very large extent, the second maximum (93) denotes to the large extent and none of the employee denotes to the very little extent training is provided by the experts.

With regard to the proper performance, in IT services the highest (104) employees indicates that to the very large extent, the second highest (90) indicates to the large extent, and very lowest (6) employees indicates not at all and none of the employee indicate to the very little extent and little extent proper performance appraisal and management is done in the organization to develop competencies. In BPO sector the maximum (94) indicates to the very large extent, the second maximum (93) to the large extent, the very minimum (1) indicate to the little extent and none of the employee said to the very little extent proper performance appraisal and management is done. In KPO the maximum (102) indicates to the very large extent, the second maximum (81) indicate to the large extent, minimum (17) indicates not at all and none of the employee said to the very little and little extent proper performance appraisal and management is done to develop the competencies.

With related to the Compensation and benefits are provided based on ability and achievements. In IT Services, the upper limit (93) signifies to the very large extent, the second upper limit (92) employees signify to the large extent, the lower limit (15) signify not at all and none of the employee signify to the very little and little extent Compensation and benefits are provided on the basis of ability and achievements. In BPO the upper limit (104) signifies to the very large extent, the second upper limit (85) signify to the large extent, the lower limit (11) signifies not at all and none of the employee signify to the very little and little extent Compensation and benefits are provided on the basis of ability and

achievements. In KPO services, the upper limit (107) signifies to the very large extent, the second upper limit (93) employees signify to the large extent, the lower limit (11) signify not at all extent and none of the employee signify to the very little and little extent Compensation and benefits provided based on ability and achievements to develop the competencies.

With respect to the Motivation done by the authorities through mentoring, the greatest (105) in IT services determine to the very large extent, the second greatest (92) determine to the large extent, the lowest (3) not at all extent and none of the employee determine to the very little extent and little extent Motivation done by the authorities through mentoring. In BPO services, the greatest (107) determine to the very large extent, the second greatest (91) determine to the large extent, the very (1 and 1) determine not all extent and to the little extent, and none of the employees said to the very little extent the Motivation done by the authorities through mentoring. In KPO, the greatest (95) determine to the very large extent, the second greatest (91) to the large extent, the lowest (7 and 7) of employees determine not at all extent and to the little extent and none of the employee determine to the very little extent Motivation done by the authorities through mentoring to develop the competencies.

With regard to the Autonomy to take major decision based on the responsibilities assigned, the maximum (96) in IT services, describe to the very large extent, the second maximum (91) describe to the large extent, the minimum (13) describes not at all, and none of the employee describe to the little extent and to very little extent Autonomy is considered to take major decisions. In BPO the maximum (95) describes to the large extent, the second maximum (89) to the very large extent, very minimum (3) employees describe to the little extent Autonomy is considered to take major decisions. In KPO the maximum (98) describes to the large extent, the second maximum (53) not at all, and minimum (49) of employees describe to the very large extent and none of the employee describe to the little extent to the very little extent Autonomy is considered to take the major decision based on the assigned responsibilities to develop the competencies.

With regard to the Grievances are solved through proper channel and within prescribed time. In IT services the largest (97) employees indicate to the large extent, the second largest (81) indicates to the very large extent and very smallest (1) indicates the little extent grievances solved through the proper channels within the time limit. In BPO the maximum

(95) employees said to the large extent, the second maximum (75) of employees said to the very large extent, and the very minimum (1) indicates to the very little extent Grievances solved through proper channels within the time limit. In KPO the highest (106) of employees' states to the very large extent, the lowest (94) employees states to the large extent and none of the employee said not at all, to the little extent, and to the very little extent Grievances solved through proper channel and within prescribed time.

Table No: 5.25: Initiatives to Retain Employees

	Description	SA	A	N	DA	SDA	Total
IT Services	Employees are made to enter into contract	39.5	47	13	0.5	0	100
	Provided training to develop core competencies	42	48.5	8	1.5	0	100
	Training helps employees to work better and show maximum efficiency	38	48	13.5	0.5	0	100
	Mentoring initiatives taken by the organization helps to have a career path	42.5	47.5	9.5	0.5	0	100
	Grievance settlement procedure makes employees to have better environment	42	47.5	10.5	0	0	100
	Facilities provided by the organization makes employees to become loyal	36	48.5	15.5	0	0	100
	Performance management and benefits provided by the organization makes the employees engaged towards the organization	47	45.5	7	0.5	0	100
BPO	Employees are made to enter into contract	45	47	7	1	0	100
	Provided training to develop core competencies	41	46	13	0	0	100
	Training helps employees to work better and show maximum efficiency	40	46	14	0	0	100
	Mentoring initiatives taken by the organization helps to have a career path	46	46.5	7.5	0	0	100
	Grievance settlement procedure makes employees to have better environment	48.5	43.5	8	0	0	100
	Facilities provided by the organization makes employees to become loyal	53	45	2	0	0	100
	Performance management and benefits provided by the organization makes the employees engaged towards the organization	53.5	45.5	1	0	0	100
KPO	Employees are made to enter into contract	49.5	42.5	8	0	0	100
	Provided training to develop core competencies	24.5	49	26.5	0	0	100
	Training helps employees to work better and show maximum efficiency	54.5	45.5	0	0	0	100
	Mentoring initiatives taken by the organization helps to have a career path	51	41	8	0	0	100

		SA	A	N	DA	SDA	Total
	Grievance settlement procedure makes employees to have better environment	54.5	45.5	0	0	0	100
	Facilities provided by the organization makes employees to become loyal	54.5	45.5	0	0	0	100
	Performance management and benefits provided by the organization makes the employees engaged towards the organization	54.5	45.5	0	0	0	100

Source: Primary Data (SA- Strongly Agree, A- Agree, N- Neutral, DA-Dis Agree and SDA- strongly Dis agree)

The above table 5.25 states the employee agreement on Initiatives taken to retain employees in organization. In IT services, the maximum (47%) Agree, the second maximum (39.5%) Strongly agree and the very minimum (0.5%) Disagree that the employees are made to enter into contract, on the basis of maximum (48.5%) agree, the second maximum (42) Strongly agree, the minimum (1.5%) disagree that the training is provided to develop the core competencies, the maximum (48%) agree, the second maximum (38%) strongly agree, the minimum (0.5) disagree about training helps employees to work better and show maximum efficiency, the maximum (47.5%) agree, the second maximum (42.5%) strongly agree, the minimum (0.5%) disagree about the mentoring initiatives taken by the organizations to help the employees to have the career path, the maximum (47.5%) agree, the second maximum (42%), the minimum (10.5%) are neutral about the Grievance settlement procedure, the maximum (48.5%) agree, second maximum (36%) strongly agree, minimum (15.5%)neutral about the facilities provided by the organization to help employees become loyal, the maximum(47%) strongly agree, second maximum (45.5%) agree and the minimum (0.5%) disagree about the performance management and benefits provided by the organization to help employees engaged towards the organization and none of the employee strongly disagree about the initiative taken by the organization to retain the employees.

In BPO services, the highest (47%) agree, the second highest (45%) strongly agree and the very lowest (1%) Disagree that the employees are made to enter into contract, on the basis of highest (46%) agree, the second highest (41%) Strongly agree, the lowest (13%) neutral that the training is provided to develop the core competencies, the highest (46%) agree, the second highest (40%) strongly agree, the lowest (13%) neutral about training helps employees to work better and show highest efficiency, the highest (46.5%) agree, the second highest (46%) strongly agree, the lowest (7.5%) neutral about the mentoring initiatives taken by the organizations to help the employees to have the career path, the

highest (48.5%) strongly agree, the second highest (43.5%) agree, the lowest (8%) are neutral about the Grievance settlement procedure helps the employees to have better working environment, the highest (53%) strongly agree, second highest (45%) strongly agree, lowest (2%)neutral about the facilities provided by the organization to help employees become loyal, the highest(53.5%) strongly agree, second highest (45.5%) agree and the lowest (1%) neutral about the performance management and benefits provided by the organization to help employees engaged towards the organization and none of the employee strongly disagree about the initiative taken by the organization to retain the employees.

In KPO services, the upper limit (49.5%) strongly agree, the second upper limit (42.5%) agree and the very lower limit (8%) neutral that the employees are made to enter into contract, on the basis of upper limit (49%) agree, the second upper limit (26.5%) neutral, the lower limit (24.5%) strongly agree that the training is provided to develop the core competencies, the upper limit (54.5%) strongly agree, the lower limit (45.5%) agree, about training helps employees to work better and show upper limit efficiency, the upper limit (51%) strongly agree, the second upper limit (41%) agree, the lower limit (8%) neutral about the mentoring initiatives taken by the organizations to help the employees to have the career path, the upper limit (54.5%) strongly agree, the lower limit (45.5%) agree, about the Grievance settlement procedure helps the employees to have better working environment, the upper limit (54.5%) strongly agree, lower limit (45.5%) agree, about the facilities provided by the organization to help employees become loyal, the upper limit(54.5%) strongly agree, lower limit (45.5%) agree about the performance management and benefits provided by the organization to help employees engaged towards the organization and none of the employee strongly disagree about the initiative taken by the organization to retain the employees.

Table No: 5.26 Competencies Considered by the Organization while Mapping

Competencies Considered While Mapping	IT			BPO			KPO		
	N	Mean	Std. Deviation	N	Mean	Std. Deviation	N	Mean	Std. Deviation
A. Technical Skills									
Competency to work with present skills and knowledge.	200	1.4600	.49965	200	1.5250	.61748	200	1.5900	.64340
Knowledge on Computer engineering elements like software, their implementation, and their testing procedures.	200	1.5600	.62317	200	1.4750	.52989	200	1.4550	.51896
Knowledge about different processes and various protocols in the area of work and importance	200	1.4600	.49965	200	1.4450	.49821	200	1.4450	.49821
follow the departmental / work level the various procedures, work instruction given Knowledge on Quality Control tools & techniques	200	1.4600	.49965	200	1.4450	.49821	200	1.4450	.49821
Constant up gradation of knowledge on software, with training and developments programs.	200	1.4600	.49965	200	1.5250	.61748	200	1.5900	.64340
B. Job Oriented Skills									
Knowledge on cost control activities.	200	1.5600	.62317	200	2.1200	.66921	200	2.1500	.65548
Knowledge about company policies, vision, mission, objectives & core values.	200	2.2150	.62508	200	1.7250	.74306	200	1.6800	.72818
Ability to plan & distribute the work.	200	1.6350	.71718	200	1.9400	.73423	200	1.9900	.71586
Ability to analyse and solve the problems during designing,	200	2.0150	.72623	200	1.5450	.56531	200	1.5400	.55673
Implementation, testing, & to take corrective & preventive actions during the process.	200	1.4600	.49965	200	1.5500	.61595	200	1.5950	.64268
Ability to tackle sudden critical problems in the software or the clients' requirements.	200	1.5600	.62317	200	1.9500	.72118	200	1.9800	.70860

	N	Mean	SD	N	Mean	SD	N	Mean	SD
Ability to implement time management philosophy in complying with work as per the needs of the company /manager.	200	2.0150	.72623	200	1.5600	.58146	200	1.4450	.49821
Excited about the job and look forward for new assignments.	200	1.4600	.49965	200	1.5850	.63624	200	1.6000	.65739
Provide training to peers in the work place about the work	200	1.5750	.63750	200	1.4850	.53966	200	1.4450	.49821
procedures and newer methods of doing a work.	200	1.4600	.49965	200	1.4500	.49874	200	1.4450	.49821
Technical knowledge leading to productivity	200	1.4600	.49965	200	1.4500	.49874	200	1.4450	.49821
Ability to adapt to the Change Management at various places of work and with people.	200	1.4600	.49965	200	1.5850	.63624	200	1.6000	.65739
C. Communication Skills									
Good Listening abilities.	200	1.5750	.63750	200	2.1200	.66166	200	2.2250	.61340
Understanding instructions/responses from Team Members & Superiors.	200	2.2150	.61699	200	1.7100	.72006	200	1.6200	.71985
Ability to explain the suggestions/activities/queries/problems effectively.	200	1.6350	.71718	200	1.9500	.71418	200	2.0300	.70111
Writing skills (Written communication to peer group/subordinates/superiors)	200	2.0300	.71530	200	1.5750	.57097	200	1.4800	.50085
Sharing the needed information with the people concerned.	200	1.4750	.50063	200	1.5950	.63481	200	1.6000	.65739
D. Team Work									
Coordinate & cooperate with team members to achieve the team objectives.	200	1.5850	.63624	200	1.9550	.71099	200	2.0300	.70111
Coordinate with other teams.	200	2.0300	.71530	200	1.6500	.62406	200	1.4700	.50035
Disciplined & self-motivated	200	1.4600	.49965	200	1.5550	.61552	200	1.5750	.64534
E. Personal Qualities									
Delegate the activities to team members & monitoring the progress.	200	1.6150	.65492	200	1.5200	.56675	200	1.4700	.50035
Learn from the mistakes & improve the management aspects.	200	1.4600	.49965	200	1.4600	.49965	200	1.4700	.50035

	N	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Mean	Std. Dev.
Maintain good relation with peers, subordinates & superiors.	200	1.4600	.49965	200	1.4600	.49965	200	1.4700	.50035
Adhere to the management directions & making others to understand them.	200	1.4600	.49965	200	1.5550	.61552	200	1.5750	.64534
Positive body language.	200	1.6150	.65492	200	2.0250	.68316	200	2.2050	.61225
Creative & innovative with idea generation	200	2.2250	.60515	200	1.8150	.72346	200	1.6450	.71522
Continuously learn from superiors/subordinates.	200	1.6100	.69304	200	1.9000	.72984	200	2.0350	.71155
Maintain Politeness during conversation.	200	2.0400	.69340	200	1.6700	.61888	200	1.4850	.50103
Facilitate & develop creative & innovative work culture.	200	1.4900	.50115	200	1.5550	.59897	200	1.5850	.62829
Upgrade personal intellectual skills for the development of the work/organization.	200	1.6150	.65492	200	1.9100	.71727	200	2.0350	.71155
Ability to deal with the cross-cultural adjustments with subordinates / peers / superiors.	200	2.0400	.69340	200	1.6750	.64922	200	1.4500	.49874
Valid N (listwise)	200			200			200		

Source: Primary Data.

Hypothesis 6

H$_0$: There is no significant impact of Technical Competency of Low- level Employees on Organization Culture.

H$_1$: There is a significant impact of Technical Competencies of Low-level Employees on Organization Culture.

To prove the above hypothesis Chi-Square test has been used and presented in the below table followed by detailed analysis.

Table No: 5.27: Chi-Square test for Technical Competencies and Organizational Culture.

Chi-square tests result of technical competencies and organizational culture.			
Technical Competencies and Organizational Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	48.459[a]	25	0.000
Likelihood Ratio	51.998	25	
Linear-by-Linear Association	0.931	1	
N of Valid Cases	600		

(Source: Calculated Value)

Above table 5.27 clearly depicts the calculation of Chi-square value to check out the impact of technical competency on the organization culture at low level employees. Here the calculated chi-square value is more than the table value at 5% significance level (37.652) and P<0.05, hence, the null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it is proved that the technical competencies of employees at low level in It sector companies effecting the organization culture.

Hypothesis 7

H_0: There is no significant impact of Job-Oriented Competency of Low- level Employees on Organization Culture.

H_1: There is a significant impact of Job-Oriented Competencies of Low-level Employees on Organization Culture.

To prove the above hypothesis Chi-Square test has been used and presented in the below table followed by detailed analysis.

Table No: 5.28: Chi-Square test for Job-Oriented Competencies and Organizational Culture.

Chi-square test result of job-oriented competencies and organizational culture.			
Job Oriented Competencies and Organization Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	156.21	75	0.000
Likelihood Ratio	79.63	75	
Linear-by-Linear Association	1.799	1	
N of Valid Cases	600		

(Source: Calculated Value)

Above table 5.28 clearly depicts the chi-square values to check out the impact of Job-oriented competencies on organization culture. Here the calculated chi-square value is more than the table value (96.22) and p<0.05 at 5% significance level. Hence, it is proved that the null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it is said that there is an impact of Job- oriented competencies and organization culture.

Hypothesis 8

H_0: There is no significant impact of Communication Skills on Low- level Employees on Organization Culture.

H_1: There is a significant impact of Communication Skills on Low-level Employees on Organization Culture.

To prove the above hypothesis Chi-Square test has been used and presented in the below table followed by detailed analysis.

Table No: 5.29: Chi-Square test for Communication Skills and Organizational Culture.

Chi-square test result of communication skills and organizational culture.			
Communication Skills and Organization Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	67.815[a]	35	0.001
Likelihood Ratio	65.877	35	
Linear-by-Linear Association	9.603	1	
N of Valid Cases	600		

(Source: Calculated Value)

The table 5.29 above clear the calculation of chi-square value for communication skills and organization culture at low level employees at IT sector organization. The calculated chi-square value is more than the table value (42.773) and p<0.05, hence, it is proved that the null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it is identified that there is an effect of communication skills on organization culture.

Hypothesis 9

H₀: There is no significant impact of Team Work on Low- level Employees on Organization Culture.

H₁: There is a significant impact of Team Work on Low-level Employees on Organization Culture.

To prove the above hypothesis Chi-Square test has been used and presented in the below table followed by detailed analysis.

Table No: 5.30: Chi-Square test for Team Work and Organizational Culture.

Chi-square tests result of work and organizational culture.			
Team Work and Organization Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	42.687	20	0.000
Likelihood Ratio	50.234	20	
Linear-by-Linear Association	0.573	1	
N of Valid Cases	600		

(Source: Calculated Value)

In the above table 5.30 the chi-square results have been exhibited to show the effects of team work on organization culture at IT sector organizations at low level employees. The table also shows that the table value is more than the calculated vale (31.410) and $p<0.05$ at 5% significance level. Hence, it is proved that the null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it is proved that there is an impact of team work on organization culture.

Hypothesis 10

H₀: There is no significant impact of Personal Quality on Low- level Employees on Organization Culture.

H₁: There is a significant impact of Personal Quality on Low-level Employees on Organization Culture.

To prove the above hypothesis Chi-Square test has been used and presented in the below table followed by detailed analysis.

Table No: 5.31: Chi-Square test for Personal Quality and Organizational Culture.

Chi-square test result of personal quality and organizational culture.			
Personal Quality and Organization Culture	**Value**	**Df**	**Asymptotic Significance (2-sided)**
Pearson Chi-Square	112.67	65	0.001
Likelihood Ratio	95.675	65	
Linear-by-Linear Association	4.819	1	
N of Valid Cases	600		

(Source: Calculated Value)

Above table 5.31 is an effort to prove the impact of personal qualities on organization culture. Here the chi-square calculated value is more than the table value (79.082) and $p<0.05$ at 5% significance level, hence, the null hypothesis is rejected and alternative hypothesis is accepted. Therefore, it is proved that there is an impact of personal qualities on organization culture.

Hypothesis 11

H_0: The Competency Mapping Practices at Three different Organizations in IT sector is indifferent.

H_1: The Competency Mapping Practices at Three different Organizations in IT sector is different.

To prove the above hypothesis One-Way ANOVA test has been used and presented in the below table followed by detailed analysis.

Table No: 5.32: One-Way ANOVA Table for Competencies and Nature of Organization.

ANOVA test result of competencies and nature of organization.						
Competencies and Nature of Organization		**Sum of Squares**	**Df**	**Mean Square**	**F**	**Sig.**
Technical skills	Between Groups	1.863	2	0.932	0.228	0.796
	Within Groups	2438.430	597	4.084		
	Total	2440.293	599			
Job Oriented Skills	Between Groups	0.493	2	0.247	0.019	0.981
	Within Groups	7577.825	597	12.693		
	Total	7578.318	599			

Communication Skills	Between Groups	0.070	2	0.035	0.012	0.989
	Within Groups	1813.115	597	3.037		
	Total	1813.185	599			
Team Work	Between Groups	0.963	2	0.482	0.401	0.670
	Within Groups	716.630	597	1.200		
	Total	717.593	599			
Personal Qualities	Between Groups	4.243	2	2.122	0.166	0.847
	Within Groups	7645.090	597	12.806		
	Total	7649.333	599			

(Source: Calculated Value)

In the above table 5.32 the difference in the competency mapping practices at three different strata selected for the study by using One way ANOVA, in all the cases the $p>0.05$, hence, it is proved that the null hypothesis is accepted and alternative hypothesis is rejected. Therefore, it is proved that there is no difference in the competency mapping practices of It sector organizations (IT Services, BPO, KPO) in the study area.

Hypothesis 12

H_0: There is an insignificant relationship between value addition through competency mapping by both the employees and organization.

H_1: There is a significant relationship between value addition through competency mapping by the employees and organization.

To prove the above hypothesis, rank co-relation and t-test has been used and presented in the below table followed by detailed analysis.

Table No: 5.33: Rank Co-relation Between the Value Addition to the Top, Middle (Organization) and Low-Level Employees

Competencies	Value Addition to the Top-Level Employees (Organization)		Value Addition to the Low-Level Employee	
	Response	Rank	Response	Rank
Increase in competency levels and improved working conditions	256(85.33%)	4	306(51%)	8
Determining competencies for the job that an employee aspires for.	234(78%)	7	390(65%)	9
Utilization of capacity to reach organizations Mission, Vision and Objectives	222(74%)	8	456(76%)	5

More opportunities in the form of new positions and available promotions with the growth of the organizations.	267(89%)	2	384(64%)	10
Clarity of skills, knowledge required to meet the established standards.	249(83%)	6	468(78%)	4
Helps in full capacity utilization to achieve desired target	174(58%)	10	438(73%)	6
Knowledge about where the employees meet required qualifications, thus not wasting time in unnecessary developmental activities.	204(68%)	9	432(72%)	7
Helpful to identify the SWOT	252(84%)	5	558(93%)	1
Helps to develop required competencies	261(87%)	3	474(79%)	3
Provides an opportunity for career growth	270(90%)	1	552(92%)	2
Co-relation	0.81			

Source: SPSS Output Compiled by Researcher, N=300 at Top and Middle, N=600 at Low Level

Above table 5.33 clearly speaks about the opinions given by the Employees at TOP, Middle and Low-level employees. The opinion given by the Top and Middle level is used to evaluate the value addition to the organization. And the opinion of the Lower-level employees is taken to analyze the value addition to the employees. At the Top and Middle level, 90% of the employees says that competency mapping provides an opportunity for career growth, 89% of the opinions are towards More opportunities in the form of new positions and available promotions with the growth of the organizations, and 87% of the responses are positive towards competency mapping helps to develop required competencies. For all other issues more than 50% of the Top and Middle level employees have provided positive opinion. Hence, it can be said that there is a value addition to the organization by the competency mapping initiatives taken by the organization.

At the low level the employees 93% of the respondents says that competency mapping is Helpful to identify the SWOT, 92% of the respondents opines that it provides an opportunity to identify the SWOT, 79% respondents says that it Helps to develop required competencies. And for all other benefits the employees are positive and given more than 50% of the responses.

With an objective to further prove these arguments and test the above hypothesis Rank Co-relation and t- test is used;

Tested at 5% significance level the degrees of freedom is (n-1) = (10-1) = 9. For 9 d.f the table value is 2.262.

Table No: 5.34: Relationship between Value Addition through Competency Mapping by both the Employees and Organization.

Between the Ranking by value driven by the Origination and Employees	$t = \dfrac{r\sqrt{n-2}}{\sqrt{1-r^2}}$ $t = \dfrac{0.81\sqrt{10-2}}{\sqrt{1-(0.81)^2}}$ t= 3.8952 $t_{0.05}$= 2.262

Source: Compiled by the Researcher.

From the above table 5.33 calculations it is clear that the table value is less than the calculated value. Hence, the null hypothesis stands rejected and alternate hypothesis is accepted. Therefore, it can be concluded that there is a significant relationship between values driven through competency mapping by both the employees and organization.

5.3 CHAPTER SUMMARY

This chapter mainly focused on the perceptive of low-level employees and it had six major hypotheses, that had been proved, the first being, the technical competencies of employees at low level in IT sector companies effecting the organization culture. The second being, there is an impact of Job- oriented competencies and organization culture. The third being, there is an effect of communication skills on organization culture. The fourth being, there is an impact of team work on organization culture. The fifth being, there is an impact of personal qualities on organization culture and the sixth being, there is no difference in the competency mapping practices of IT sector organizations (IT Services, BPO, KPO) in the study area.

CHAPTER-6

SUMMARY OF MAJOR FINDINGS, SUGGESSIONS AND CONCLUSION

6.1 INTRODUCTION

This chapter outlines the major findings of the study. Further the chapter includes the major findings from the Top and middle level manager's perspective, low level employee's perspective and findings from testing of hypothesis as well. Suggestions are also given based on the problems identified from the analysis of the opinion given by both the TOP Middle and Low-level employees in all the three segments of the IT sector.

6.2 FINDINGS BASED ON TOP AND MIDDLE LEVEL EMPLOYEES' RESPONSE

✓ Majority of the Employees at IT services (68%), BPO (59%) and KPO (66%) are Male at top and middle level management. This is because in the study area the availability of the respondents for the data collection is male.

✓ It is found from the study that in IT services, the majority (49%) of the employees lie in the age group of 25-35, this indicates that the existence of very young employers in the IT services. The majority (57% & 48%) of the employers in BPO and KPO lie in the age group of 36-45; this indicates that the both BPO and KPO sectors have the young people in the Top and Middle level management.

✓ Majority of the employees in IT services (43%), BPO (46%) and KPO (47%) are post graduates, this proves that qualification is one of the importance competencies considered by the organization for in the higher positions in the IT industry

✓ Majority of the employers in the IT service (75%), BPO (72%) and KPO (95%) are belonging to the nuclear family, and this indicates the changing life style of the people.

✓ Majority of employers in IT service (46%), BPO (51%) and KPO sector (60%) belong from semi-urban locality and urban very less from the rural area. This shows that people from semi-urban are migrated to the urban area to earn livelihood.

✓ It is identified that the Top and Middle level employees at IT service (38%), BPO (41%) and KPO (38%) are associated with the job for11-15 years and more than

that as per the majority. This shows that the employees wish to go for higher level jobs in the company need to have experience in addition to the qualification.

✓ Based on the majority opinion of Top and middle level employees it is identified that the type of competency mapping model used in IT services (58 %& 58%) and KPO is HR systems model, in BPO Organization model is used and in KPO Intellectual model is also used as per the majority opinion (60%). The differentiation in using the competency models in the organizations is because of the difference in the nature of job operations in these three sectors.

✓ It is identified that the intention behind using competency model have some objectives that are, Analyzing the Gap, Clarity in Role, Assortment of responsibility, Identifying the potential plan of growth, Succession forecasting, Re-organization, Competencies list for forecasted needs and other. Based on the mean score (1.67), In IT services the major purpose for competency mapping is Assortment of responsibility and other, because the IT sector focus on grouping the responsibility which is need to be integrate to make a job so that it is essential to have competency mapping. In BPO sector are identifying the potential plan of action, succession forecasting and other as per the mean score (1.84). In KPO the purpose behind competency mapping is Assortment of responsibility and other as per the maximum mean score (1.83).

✓ It is found from the opinion given by the top and middle level employees, the major objective behind competency mapping in IT services is overall organizational performance by capturing market share as per the maximum frequency (55%). As per the maximum frequency (55%) in BPO objective behind competency mapping is improvement in recruitment & selection process and overall organizational performance by capturing market share. The major objective of competency mapping in KPO is to improve the recruitment and selection process based on the maximum frequency (56%).

✓ There are various competencies considered at top and middle level employees in IT services, BPO and KPO, they are functional expertise, personal effectiveness, innovation, team effectiveness, technical knowledge, self-development, communication, knowledge and aptitude, leadership skills, managerial ability, supervision, maintenance skills, commitment, time management, openness to receive criticism and comments, and personality traits. The major competencies considered for mapping the employees in IT services are Knowledge and Aptitude,

Managerial ability, Maintenance skills as per he Mean score (1.55). The most considered competencies in BPO for mapping employees at top and middle level are communication and personality traits as per the Mean score (1.55 & 1.57). At KPO the competencies considered are Innovation, Physical ability, and Communication as per the Mean score (1.55). This is because the companies at three different segments of IT sector are followed different competency model.

- ✓ It is identified that at the time of Recruitment and selection the functional expertise is considered as an important technical competency by all the three segments of IT sector as per the frequency (51%, 54% & 53%). At the same time the functional expertise in technical competency is least preferred for the Training and development in IT services, BPO and KPO (49%, 46% & 47%). It is found that the 'Adoption of technological changes' is largest (53%, 53% & 54%) preferred competency at the time of Recruitment and selection and less (6%, 4% & 8%) preferred at the time of compensation benefits in IT services, BPO and KPO. It is observed that 'Knowledge about software' is prefer at the maximum extent (52%, 53% & 53%) for the purpose of Recruitment and selection in IT services, BPO and KPO, and it is less (1%,5% & 0%) preferred for the performance of compensation and benefits. It also identified that 'Skills to handle back office' are highest (53%, 53% & 54%) preferred technical competency for Recruitment and selection, and less (6%, 4% & 8%) preferred for Compensation benefits in IT service, BPO and KPO. It is found that 'Attitude and skills related to implement technology' is highest (52%, 53% & 53%) considered for Recruitment and selection function and less (1%, 5%& 0%) considered for Compensation benefits in IT services and BPO, whereas in all the three segments of IT sector none of the technical competency has preferred for the Performance management, Motivation satisfaction and retention of the employees at Top and Middle level management.

- ✓ With respect to the managerial competency, 'Knowledge to plan the major activities of businesses is highest (53%, 52% & 52%) preferred competency for performance of Recruitment and selection in all three IT sector, and considered less (6%) for compensation benefits in IT sector. It is found that 'Knowledge to mobilize the resources' is majorly (51%, 52% & 55%) preferred for Recruitment and selection and less (49%, 48% & 06%) preferred for Training and development in IT services and BPO and KPO. But this competency is not preferred for compensation and benefits. It is also found that 'The skills to handle resources' is

the major (51%, 52% & 56%) managerial competency for Recruitment and selection in IT services, BPO and KPO, and less (49% & 48%) considered for Training and development in IT services and BPO, as well as less (6%) considered in the KPO for Compensation benefits. But in KPO it is considered while Recruitment and selection but less considered for compensation and benefits. Even it is observed that 'The skills of Proper utilization of available resources' are highest (54%, 55% & 52%) preferred for Recruitment and selection and less (7%, 9% & 2%) preferred for the Compensation benefits in IT service, BPO and KPO.

✓ It is found that in Behavioral competencies, 'Self-motivation in completion of active goals' is most (51%, 52% & 56%) considered for Recruitment and selection in all the three sectors, and less (49% & 48%) considered for Training and development in IT sector and BPO and less (6%) considered compensation and benefits in KPO. It is found that 'motivating other employees' is highest (53%, 54% & 51%) preferred at the time of Recruitment and selection, and less (6%, 4% & 2%) considered for compensation benefits in IT services, BPO and KPO. It is found that Developing skills and knowledge through proper training' is highest (50%, 54% & 52%) considered for the Recruitment and selection in all the three sectors, less (6%) considered for compensation benefits at KPO. It is also found that Interpersonal skills are highest (54%, 53% & 52%) considered at the time of Recruitment and selection, less (6%, 9% & 5%) considered at the time of compensation benefits in IT services, BPO and KPO. The quality of keeping peaceful environment at the workplace' is another important behavioral competency at the time of Recruitment and selection by all the three segments of IT industry as per the maximum frequency (50%, 54% & 52%), and less (46%) considered for the Training and development in BPO, but very less (4%) considered for compensation and benefits at KPO. It is identified that the quality of handling grievances with proper channel' is the highest (54%, 53% & 52%) considered competency for Recruitment and selection, less (6%, 9% & 5%) considered for compensation benefits in IT services, BPO and KPO. It is found that Problem solving competency is the highest (54%) considered competency at the time of Recruitment and selection in BPO and equally (50% & 50%) considered for the Recruitment and selection and training and development in IT services and KPO. It is identified that Achievement oriented skills of Top and middle level employees are highest (54%, 53% & 53%) considered for the Recruitment and

selection, less (6%, 9% & 8%) considered for compensation benefits in IT services, BPO and KPO. It is found that, ability to take highest risk' is the most (54%) considered competency of employees for Recruitment and selection in IT BPO and equally (50% & 50%) preferred for the Recruitment and selection and Training and development in IT sector and KPO. It is found that, the capacity to work in a team' is most (54%, 53% & 53%) considered for Recruitment and selection, less (6%, 9% & 8%) considered for compensation benefits in IT Industry.

✓ It is found that, with respect to the conceptual skills of the employees at Top and Middle level employees, 'Visualizing invisible' is the important competency at the time of Recruitment and selection as per the maximum frequency (54) in BPO, and equally considered for the Recruitment and selection and Training and development in IT sector and KPO, less (46) considered for training and development in KPO. It is identified that, thinking at abstract level' is highly (51%, 52% & 51%) considered for Recruitment and selection and less considered for Training and development in all three segments of the study area. In IT services, BPO and KPO, 'Future oriented competency' among the employees at top and middle level management is preferred mostly (54%, 53% & 53%) for Recruitment and selection, less (7%, 8% & 8%) considered for compensation and benefits. It is observed that, the skills of 'execution of long-term strategies and responsibility' are prominently considered at the time of Recruitment and selection as per the maximum frequency (51%, 52% & 51%), less considered for Training and development in IT service, BPO and KPO. 'Goal oriented skills' are considered very much (54%, 53% & 53%) as an important competency at the time of Recruitment and selection, less (7%, 8% & 8%) considered for compensation and benefits in all the three sectors. It is found that, utilizing knowledge and skills to plan for future' is an important skill considered at the time of Recruitment and selection as per the maximum frequency (51%, 52% & 51%), less considered for the Training and development in all the three segments of IT industry. It is found that 'Knowledge about the job responsibility' is the highest (51%, 52% & 52%) preferred choice of organization for Recruitment and selection, less considered for Training and development in three segments.

✓ It is identified that in BPO; Grievances are solved through proper channel and within prescribed time and it is a better technique adopted at the top and middle level management to motivate and develop the required competency as per the

maximum frequency (62%). In KPO Proper performance appraisal is done for the purpose of development of competencies as per the maximum frequency (62%.).

✓ On the basis of the mean score (2.18) in IT services, the Competency mapping is very important because it helps in demonstrating self confidence that comes from knowing one's competitive advantages more convincingly and it also helps in developing the capability to compare one's actual competencies. As per the mean score (1.57) In BPO competency mapping is very essential because it acts as a cutting edge and well-prepared candidates, it aids in securing essential input to resume development and it helps in developing the capability to compare one's actual competencies to an organization or positions required. As per the mean score (1.57) In KPO the competency mapping is very important because it helps to gain a clearer sense of true marketability in today's job market, and it helps in developing the capability to compare one's actual competencies to the organization or positions required, and it aids in sustaining the transformation of the HR function.

✓ It is identified from the study that Mentoring is the initiatives taken to retain the employees, Training provided to develop core competencies, and the Grievance settlement procedure to provide better environment to the employees are major initiatives to retain employees. As per the maximum score (60% & 60%) Training and Grievance Settlement procedure are most considered factors for retaining the employees in KPO, because Training helps employees to work better and show maximum efficiency, and Grievance settlement procedure makes employees to become loyal.

✓ On the basis of the majority response (56%, 56% & 56%) In IT services the major challenges faced while competency mapping are high cost and mapping only cannot be considered while taking major decisions in management. As per the maximum response (60%) In BPO the major challenges faces are lack of awareness about the competency mapping by the employees, and not possible to measure the performance of the employees in all the time is the major challenges faced. The major challenges faced by the KPO while mapping the competency are lack of awareness about the competency mapping by the employees, and not possible to measure the employees' performance with the help of competencies and other challenges as per the maximum response (61%, 61% & 61%).

6.3 FINDINGS FROM HYPOTHESIS TESTING: (TOP AND MIDDLE LEVEL EMPLOYEES)

- ✓ It is found from the study that there is a significant impact of technical competencies on organization culture ($p<0.05$) at Top and Middle level employees in IT sector. Because to perform the responsibilities assigned to them, they need to be sound in technical competency (Table value 37.652 at 5% significance level)

- ✓ It is clear from the study that there is an impact of Managerial Competencies on organizational culture ($p<0.05$). This is because the managerial competencies like leadership qualities, team building are going to affect the next level employees in the organization. (Table value 43.773)

- ✓ It is proved from the study that there is an impact of Behavioural competency on organization Culture ($p<0.05$). Because the behaviour of the employees in all the levels are going to reflect on the organization culture. (Table value 79.490 at 5% significance level)

- ✓ The study identifies that there is an impact of conceptual competency on organization culture at top and middle level. Because conceptual competency is very base for the employees to perform assigned job to them. (Table value 49.802)

- ✓ It is studied that there is a difference in technical competency required by IT services, BPO and KPO ($p>0.05$) For all the remaining competencies there is no difference exists between the strata. This is because of the nature of work.

6.4 FINDINGS BASED ON LOW LEVEL EMPLOYEES' RESPONSE

- ✓ It is found from the study that majority of the employees at IT services (48%) and BPO (40.5%) are male and in KPO both male and female (50%) are equal in numbers, this may because the IT industry is an opportunity to both male and female because of its nature of work and facilities given by the IT companies.

- ✓ When it comes to the age group in all the three segments majority of the respondents belongs to the age group of 31-40 (47%) and next majority is 41-50 (23.8%) and 21-30 (26.3%) and very least employees belong to the age group of above 50 this shows that the retention rate is very less in IT sector. The employees are working till 50, this may be because of the nature of work and work stress.

✓ It is found from the study that majority (47.5%) of the employees in IT services are post graduates. This is because the nature of the work at the company is suitable to post graduates. Majority (41.5% and 40%) of the employees in BPO sector are qualified in other technical courses and post graduates, this is because of nature of work and preferences of the company. Majority (43%) of the employees in the KPO sector are graduated in other technical courses, this indicates that the in KPO the organizations are preferred the employees who are technically sound.

✓ The majority (46%) of the employees in the IT services belong to the monthly income between 30001-40000. Majority (42.5%) of the employees in BPO sector belong to the income group of above 40000. Majority (49.5%) of the people in KPO sector are above 40000 income group. This is because in all the three segments the employees are paid based on the designations, responsibilities assigned and experience.

✓ Majority (57%) of the employees in the IT services are married. Majority (52%) of the employees in BPO sector are unmarried. And the majority (52.5%) of the employees in KPO sector are unmarried.

✓ Majority of the people in IT services (59%), BPO (58%) and KPO sector (60%) belongs to the nuclear family. This indicates the changing life style of the people.

✓ It is noticed from the study that majority of the employees in IT services (47%), BPO (50.5%) and KPO (45.5%) are from semi-urban area. Very fewer employees are from urban area. Very few of the employees are from urban and rural areas this is because the people work at urban area but they belong to semi-urban. At the same time people get job opportunities in semi-urban and urban area.

✓ Majority of the employees in IT (41.5%), BPO (49.5%) and KPO services (50.5%) are associated between 5-10 years with the same organization. Very few of the employees in IT service (1.5%) are associated from 15-20 years. Very less percentage employees in BPO (4.5%) are associated from 1-5 years, in KPO (18.5%) very few of the employees are associated for 10-15 years. This shows that in all the three segments the employee turnover rate is very high because of huge opportunities and facilities employees shift from one company to another company.

✓ It is found from the study that majority of the employees say that in all the three segments the Competency mapping models are used for HRP, Recruitment and

Selection, Training and development The Competency mapping model is applied in the compensation and benefits and Performance Management.

✓ Based on the responses of employees at low level it is clear that in IT services the competency mapping is very important for increasing in employee competency levels and to improve working conditions as per the men score (1.89). But competency mapping is fewer important to determine the competencies for job than an employee aspiration. As per mean score (1.89), in BPO sector competency mapping is very important to have knowledge about where the employees meet required qualification by not wasting time in unnecessary developmental activities. But fewer important to increase the competency levels and to improve working conditions. Based on the mean score (2.14) in KPO sector the competency mapping is very important to have an understanding about where the employees meet required qualifications by not wasting time in unnecessary developmental activities. But in KPO sector the competency mapping is less important to increase competency levels and to improve the working conditions.

✓ It is identified from the study that the major objective behind the competency mapping is Increase in competency levels and improved working conditions of the employees and determining the job competencies to perform the given job by the employees, in all the three segments of the study area. Further unnecessary development activities are considered as waste and that is why they are implementing competency mapping. It is identified from the study that the employees at the low level have less clarity about the skills and knowledge required to meet the company established standards in terms of competency mapping.

✓ It is identified that in all the three segments qualification (mean value 1.60, 1.60 &1.60), technical skills (mean value1.84, 1.81&1.81), communication skills (mean value 2.00, 1.97 & 1.97), leadership qualities (mean value1.59, 1.60 &1.60), problem solving skills (mean value 1.60,1.60 & 1.60), team building skills (mean value 1.84,1.81 &1.81), interpersonal skills (mean value 2.00, 1.97 &1.97), decision making skills (mean value 2.13, 2.16 & 2.14), behavior at the work place etc. are considered as most important skills at the time of recruitment and selection, performance management, training and development.

✓ It is identified from the study that in all the three segments of the study area experience (mean value 2.21, 2.24 & 1.77), skill sets(mean value 1.54, 1.68 & 2.11), job knowledge(mean value1.79, 1.92 &1.75), job position(mean value2.16,

2.09 & 2.15), results of appraisal and achievement/targets and computer literacy are the major qualities considered at the time of employee's compensation.

✓ On the basis of mean score, it was identified that in IT services and KPO equipment knowledge (2.25), policy planning (1.70), are considered as an important competency, in BPO creative thinking (1.47), equipment knowledge (2.25), Data management (1.61), policies and planning (1.70), technical competency (1.51), is highest considered at the time of performance management.

✓ It is found from the mean score that in IT services and BPO Moral principles and ethical standards among the employees (2.13) are highly considered to motivate the employees. As per the mean score Resourcefulness (2.13), planning and organizing and stress reduction techniques (1.53 & 1.61) used by the employees are considered at the time of motivation and retention of the employees at KPO.

✓ On the basis of the mean score (1.48 & 1.49) in IT services and BPO the need and importance of competency mapping is gained a clearer sense of true marketability in today's job market. And it is also helpful to identify the key positions of employees and it act as a cutting edge and well-prepared candidate. It is found as per the mean score (2.20) that the Competency mapping is very helpful to investigate and map the employee competencies prior to interviewing in BPO than IT Services and KPO. It is studied that the competency mapping is highly considered in IT services than BPO and KPO as it aids in sustaining the transformation of the HR functions.

✓ It is identified that with respect to the core competency considered for HRM functions, the mission and vision is highest considered in IT services for recruitment and selection as per the majority of respondents (53%). In fact, the recruitment and selection, training and development function can be done by keeping mission and vision of organization in mind. It is found that the Mission and vision is majority considered in IT services, BPO and KPO for the performance of recruitment and selection (53%, 50% and 48%) as well as Training and development (47%,45% and 42%) than any other function of the organizations. Majority of respondents (51%, 52.5% & 55%) said that, while performing the HRM functions Policies, rules and regulations are considered as equally important in all the three sectors. Organizational facilities are also majorly considered for Recruitment and selection in KPO sector (110) than IT services (106) and BPO sector (106), again the organizational facilities majorly considered for the Training

and development function of the IT services and BPO. It is identified that Career growth competency has received major preference from the KPO sector (110) than the BPO (106) and IT services (106) for Recruitment and selection function. And again, career growth is almost highly considered for Training and development function of IT services and BPO. It is also found that Mission and vision, Policies rules and regulation, facilities, career growth and Job responsibility are less considered in IT services, BPO and KPO sector for the Training and development, motivation, satisfaction and Compensation benefits.

✓ It is identified that with respect to the interpersonal skills considered for the performance of HRM functions, the influencing skills, stress tolerance, relationship with higher authority, Relationship with co-workers, leadership and coordination, presentation skills, and risk-taking skills were identified.

✓ With respect to the above in IT services, influential skills are highest considered for the Recruitment and selection (102 respondents) (51%) and less considered for Compensation and benefits (16 respondents) (8%). In BPO sector influential skills highly (105respondents) (52.25%) considered for the performance of Training and development and less (44 respondents) (22%) considered for the performance of Compensation benefits. In KPO sector the influential skills are highest (117 respondents) (58.5%) considered for the performance of the Training and development and less (19 respondents) (9.5%) considered for the performance of the Recruitment and selection. It is also found that with regard to the stress tolerance, the IT sector (116 respondents) (58%) and BPO sector (103 respondents) (51.5%) highly considered for the training and development, and less considered for the Recruitment and selection in IT services (21 respondents) (10.5%) and less considered for performance management in BPO sector (4 respondents) (2%). In KPO sector the stress tolerance skills are highest (98 respondents) (49%) considered for Recruitment and selection and less (6 respondents) (3%) considered for performance management. It is observed that with related to the employee Relationship with higher authority, it is highly considered in IT services (94 respondents), BPO (100 respondents) and KPO sector (106 respondents) for performance of Training and development and less considered for performance management in IT services (7 respondents) and BPO sector (1 respondent), and it is less (44 respondents) considered for Recruitment and selection in KPO sector. It is found that with respect to the employee relationship with co-workers, in IT

services (99 respondents) and BPO sector (97 respondents) it is highly preferring for the performance of Training and development. In IT services the employee relationship with co-workers is less (47 respondents) considered for the performance of Recruitment and selection, and in BPO it is less (22 respondents) considered for the performance of the compensation and benefits. In KPO sector the employee relationship with co-workers is highly (103 respondents) considered for Recruitment and selection, and less (97 respondents) considered for the training and development. About leadership and coordination, the IT services (104 respondents), BPO (99 respondents) and KPO sector (96 respondents) highest considered for the performance of recruitment and selection, and less considered for training and development in IT services (96 respondents), and less considered for Compensation and benefits in BPO (11 respondents) and KPO sector (20 respondents). It is found that with respect to the presentation skills highly considered for Recruitment and selection in IT services (48.5%) and less (8%) considered for compensation and benefits. The presentation skills are highest considered in the BPO (48.5%) and KPO sector (53%) for Training and development, and less considered for compensation and benefits in BPO and Recruitment and selection in KPO. It is identified that Risk taking skills are highest (49.5%) considered in IT services for Training and development and less (23.5%) considered for Recruitment and selection. Risk taking skills are highly (47%) considered in BPO for Training and development and less (13%) considered for Compensation and benefits. The Risk-taking skills are highly (54%) considered for Recruitment and Selection, less (45%) considered for Training and development in KPO sector.

✓ With respect to the spirit of team work considered for the performance of HRM functions, in IT services Active participation of team members to completion of goals actively has received the highest preference for the performance of Recruitment and selection function as per the response (108 respondents), less (92 respondents) considered for Training and development. In BPO sector Active participation is highly (102 respondents) preferred for the performance of Recruitment and selection, less (10 respondents) considered for compensation and benefits. It is found that proper planning and execution of plan is very essential in IT services, BPO and KPO sector for Recruitment and selection as per the majority response (96, 105 & 108 respondents). Proper planning and execution of plan is

less considered in IT services (19 respondents) and BPO (10 respondents) for Compensation and benefits. Proper planning and execution of plan is less considered in KPO (92 respondents) for Training and development. It is studied that organizing team activities are very much considered for Recruitment and selection in IT services (108 respondents), BPO (109 respondents) and KPO (108 respondents), and less considered for Training and development. It is found from the study that in IT services (108), BPO (109) and KPO (108) much prefers their employees need to be more focused on setting priorities and goals for performance of Recruitment and selection function and less prefers for performance of Training and development function. It is identified that in IT service (108 respondents), BPO (102 respondents) and KPO (100 respondents) believe in motivating other members in the team to reach goals while doing the Recruitment and selection, and less considered same for performance of Training and development in IT services, and less considered same in the performance of compensation and benefits function. It is observed that in IT services Leadership in the team is highly (96 respondents) considered for Recruitment and selection, and less (19 respondents) considered compensation and benefits. The BPO and KPO sector highly (98 & 117 respondents) considers the leadership in the team for the performance of Training and development and less considered for compensation benefits (44 respondents) in BPO, and Recruitment and selection (20 respondents) in KPO. It is also noticed that in IT services and BPO sector Taking challenging assignments, maintaining and coaching among employees are highly (117 respondents) preferred for Training and development and less (19 respondents) considered for Recruitment and selection in IT services, Compensation and benefits in BPO sector. Taking challenging assignments, maintaining and coaching are highest (94 respondents) considered for Recruitment and selection in KPO and less (7 respondents) considered for compensation and benefits.

✓ It is found that none of the core competency related to the spirit of team work is considered for the performance of performance management functions and, motivation, satisfaction and retention functions in IT services, BPO and KPO. It is found that Adoptability considered for the performance of HRM functions, adoption of changes to the maximum extent while performance of Recruitment and selection and less (3%) consider for performance management in IT services. In BPO and KPO sector considers much (48.5%& 50%) adoption of changes for

Training and development and less considered for Performance management (2%) in BPO and Recruitment and selection (23.5%) in KPO. It is found from the study that Adjustment with the environment is highly (52% & 49.5%) considered for the performance of Training and development in IT services and BPO and less (22%) considered for the performance of Recruitment and selection in IT services, and Compensation and benefits (13%) in BPO. In KPO sector the Adjustments with the environment for Recruitment and selection and less (48.5%) considered for the performance of Training and development. It is identified that Adjustment with the job responsibility among the employees is highly (102 respondents) prefers for the performance of Recruitment and selection, and less (98 respondents) considered for Training and development in IT services, and less (10 & 17 respondents) considers for compensation and benefits in BPO and KPO. It is noticed that Cooperation with the senior and junior workers is highly (48%) considered for the performance of Recruitment and selection and less (9.5%) considered for compensation and benefits in IT services. Cooperation with the senior and junior workers is highest (47.5% & 50%) considered for the performance of Training and development in BPO and KPO, less (2%) considered for the performance of the compensation and benefits in BPO, and less (23.5%) considered for Recruitment and selection in KPO. It is identified from the study that, Technology is highest (104, 97 & 96 respondents) preferred for the performance of Training and development functions in IT services, BPO and KPO, less (44 respondents) considered for Recruitment and selection in IT services, less (31 & 7 respondents) considered for compensation and benefits in BPO and KPO.

✓ It is clear from the study that the interpersonal communication is highest (96 respondents) considered for the performance of Recruitment and selection and less (5 respondents) considered for the performance of Performance management functions in IT services. In BPO sector interpersonal communication is highest (96 respondents) considered for the performance of Training and development, less (2 respondents) considered for the performance management. In KPO interpersonal skills are considered into the maximum extent (98 respondents) for Training and development, less (47 respondents) considered for Recruitment and selection. It is found that Communication with co-workers is highly (49% & 47%) considered to perform Training and development function in IT services and BPO less (24% & 15%) considered for compensation and benefits. Communication with co-workers

is highest (51%) considered for the performance of Recruitment and selection, less (49%) considered for Training and development in KPO. It is noticed that in IT services, BPO and KPO, Ability of Communication with the higher authority is highest (103, 103 & 97 respondents) considered for the performance of Recruitment and selection and less considered for Training and development. It is also found that in IT services, Employee communication about the job responsibilities is highly (50.5%) considered for Recruitment and selection and less (07%) considered for compensation and benefits. Employee communication about the job responsibilities is highest (46.5%) preferred for the performance of Training and development, less (16%) considered for compensation and benefits in BPO. Employee communication about the job responsibilities is highest (49%) considered for the performance of Training and development and less (23.5%) considered for Recruitment and selection in KPO. It is noticed that Communication about the compensation and benefits is highest (98 & 93 respondents) considered for Training and development, and less (38 & 30 respondents) considered for compensation and benefits in IT services and BPO. In KPO, Communication about the compensation and benefits is highest (104 respondents) considered for Recruitment and selection and less (96 respondents) considered for Training and development.

✓ It is identified from the study that, Employee initiatives considered for the performance of HRM functions, in IT services Networking skills are highly (47%) considered for the Training and development, less (0.5%) considered for performance management. Networking skills are highest (52.5% & 51%) preferred for the performance of Recruitment and selection and less (3.5% & 08%) considered for compensation and benefits in BPO and KPO. It is found from the study that Result oriented initiatives are highly (97 respondents) considered for Training and development and less (27 respondents) considered for compensation benefits in IT services. Result oriented initiatives are highly (102 & 104 respondents) considered for Recruitment and selection in BPO and KPO, less (07 & 96 respondents) considered for compensation benefits in BPO, Training and development in KPO. It is identified that, Flexibility in the employee initiatives is highest (51%, 52% & 53%) considered for the performance of Recruitment and selection function in all the three sectors and, less (2%) considered for compensation benefits in IT services, and less (47% & 47%) considered for

Training and development in BPO and KPO. It is also described that Employee initiatives for achievements are highest (95 respondents) considered for the training and development and less (19 respondents) considered for compensation and benefits in IT services. Employee initiative for achievements is the highest (106 & 104 respondents) considered for the Recruitment and selection and less (94 & 96 respondents) considered for Training and development in BPO and KPO. It is also identified that the delegation among employees is largest (97, 105 & 102 respondents) considered for Recruitment and selection and less (8, 7 & 16 respondents) considered for the compensation benefits in IT services, BPO and KPO. None of the initiative is taken into consideration for the performance of Motivation, satisfaction and retention function of HRM in IT services, BPO and KPO.

✓ With respect to the professional knowledge considered for the performance of HRM functions, in IT services presentation skills considered into the maximum extent (50%) for Recruitment and selection and less (7.5%) considered for compensation benefits. Presentation skills are highest (50.5% & 59.5%) considered for the performance of Training and development in BPO and KPO, less (18% & 10%) considered for compensation benefits in BPO, recruitment and selection in KPO. It is found that in IT services, BPO and KPO Problem solving skills are highly (105, 105 & 96 respondents) preferred for the performance of Training and development, less (45 respondents) considered for compensation benefits in IT service, and less (3 & 7 respondents) considered for performance management function of HRM in BPO and KPO. It is noticed that Customer focus among the employees is highest (100 respondents) considered for Recruitment and selection and less (4 respondents) considered for performance management in IT services. In BPO and KPO Customer focus among the employees is highest (96 & 98 respondents) considered for training and development function and less (4 respondents) considered for performance management in BPO, and less (47 respondents) consider for Recruitment and selection in KPO. It is found that the quality of leveraging technology among employees is highest (48.5% & 47%) considered for employee training and development and less (0.5% & 1%) considered for performance management functions of HRM in IT services, BPO. The quality of leveraging technology among employees is highest (46.5% & 46.5%) considered for employee Recruitment and selection, and training and

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development, less (3.5% & 3.5%) considered for compensation benefits and performance management in KPO. It is identified that Analytical thinking among the employees is highest (96, 96 & 98 respondents) preferred for the performance of Training and development function in IT services, BPO and KPO. Less (3 & 5 respondents) considered in the same for the performance of performance management in IT services and BPO, and less (49 respondents) considered for Recruitment and selection in KPO. It is found that technical knowledge among the employees is highest (48.5% & 48.5%) considered for the performance of Training and development function and less (16.5% & 17%) considered for compensation and benefits in IT services, and BPO. Technical knowledge is highest (51.5%) considered for the performance of Recruitment and selection, less (48.5%) considered for Training and development in KPO. It is observed that Building trusts among employees is highest (99 respondents) considered for the Training and development, less (21 respondents) considered for compensation benefits in IT services. Building trust among the employees is highly (100 & 100 respondents) preferred for Recruitment and selection, less (6 & 14 respondents) preferred for compensation benefits in BPO and KPO.

✓ Based on the initiatives taken to develop the competencies, in IT services training based on the requirements is provided by the experts is into very largest extent on the basis of the majority response (91 respondents). In BPO services training based on the requirements is provided by the experts is into largest extent as per the majority response (96 respondents). The training based on the requirements is offered by the KPO is into very largest extent (107 respondents). It is found from the study that in all the three sectors the training is provided by the Experts is a technique used to develop the employee competency. Proper performance appraisal and management is done into very largest extent in IT services, BPO and KPO, as per the majority response (47%, 52% & 52%). It is identified that Compensation and benefits are provided based on ability and achievements are into very largest extent in IT services, BPO and KPO as per the majority response (93, 104 & 107 respondents). It is found that Employee Motivations done by the authorities through mentoring is into very largest extent in IT services, BPO and KPO as per the majority of the responses (52.5%, 53.5% & 47.5%). It is identified that Employee autonomy to take major decision based on the responsibilities assigned is considered into very largest extent in IT services as per the maximum

response (96 respondents). Employee autonomy to take major decision based on the responsibilities assigned is preferred into largest extent in BPO and KPO as per the majority response (95 & 98 respondents). It is also identified that In IT services and BPO grievances are solved into largest extent through proper channel within prescribed time as per the majority response (48.5% & 47.5%). Grievances are solved into very largest extent through proper channel and within the prescribed time in KPO as per the majority response (53%).

- ✓ In all the IT services, BPO and KPO agreed that the training provided to develop core competencies; it helps them to show maximum efficiency as per the maximum score (48.5 & 46 respondents). But in KPO the training provided is useful to work better and show the maximum efficiency as per the maximum score (49 respondents). It is observed that in all the three sectors the Mentoring initiatives taken by the organization is helpful in to have the career path of employees as per the maximum score (47.5, 46.5 & 51 respondents). It is found that in all the three sectors, the Grievance settlement procedure makes employees to have better environment in IT services as per the maximum score (47.5 respondents). It is identified that in all the three sectors the Facilities provided by the IT services are helpful for employees in IT services to become more loyal towards their job and organization as per the maximum score (48.5 respondents). It is found from the study that Performance management and benefits provided by the organization makes the employees to be very much engaged in the organization in IT services, BPO and KPO as per the maximum score (47, 53.5 & 54.5 respondents).

6.5 FINDINGS FROM HYPOTHESIS TESTING: (LOW LEVEL EMPLOYEES)

- ✓ It is proved from the study that the technical competencies of employees at low level in IT sector companies effecting the organization culture (Table value 37.652) ($p < 0.05$). This is because the technical knowledge is very important to perform the assigned job.
- ✓ It is found from the study that there is an impact of Job- oriented competencies and organization culture ($p < 0.05$). This is due to the importance of job-oriented skills of the employees.

- ✓ It is identified from the study that there is an effect of communication skills on organization culture ($p<0.05$). Because the communication is acting as a base for every action of the employee in the organization.
- ✓ It is proved from the study that there is an impact of team work on organization culture ($p<0.05$). Because of team work employees can show their maximum efficiency.
- ✓ It is proved from the analysis that there is an impact of personal qualities on organization culture ($p<0.05$). Because whatever may be the initiatives taken by the organization to develop the employees are depended on the behaviour of the employees.
- ✓ It is proved that there is no difference in the competency mapping practices of IT sector organizations (IT Services, BPO, KPO) in the study area ($p>0.05$). This may be because of the practices of the organization.

6.6 SUGGESTIONS

- ✓ It is suggested that instead of concentrating only on the core and technical competencies, the organizations need to concentrate on the training on information and network security, digital technologies and big data analytics etc., because in future it is expected that most of the IT jobs are in this domine.
- ✓ In order to develop the managerial competencies that organizations must be concentrate on the skills like Team leadership, Active listing, Mentorship and professional development. Further these skills must be trained frequently which would be helpful to the employees in identifying their weaker areas and developing themselves to attain the higher positions in the organization.
- ✓ It is suggested that the organizations at the time of training and development, need to give equal preference for all of the skills such as technical skills, interpersonal skills, behavioural skills, and communication skills, so that employees can have the equal consistency in their skills.
- ✓ It is identified from the study that, the major problem faced by the employees of middle and low level is lack of awareness. Therefore, it is suggested to the companies that they need to plan for creating awareness by doing group work, task forces, task analysis workshops, questionnaire, use of job descriptions, performance appraisal formats etc. and proper communication should be

developed through e-learning, e-mails and messages about competency mapping practices and its importance for the both organization as well as individual too.

✓ It is identified that the organizations of all the three segments of IT sector are practicing competency mapping at the time of recruitment, selection and training. Therefore, it is suggested to the organizations that they need to map the competencies at the time of performance management too henceforth the skill gaps can be identified.

✓ It is identified that most of the organizations considers the competencies at the time of recruitment and training, hence, it is suggested that they should consider the same at the time of compensation and benefits, so that the employee's compensations will be refined time to time and they will be satisfied.

✓ It is suggested to the organizations that if they implement proper and suitable competency model the employee turnover will be reduced and helpful for employee retention.

✓ IT companies need to focus on the HR functions such as Performance management and Motivation, Satisfaction and the Retention while meeting the mission and vision, while creation of policies rules and regulation, facilities, career growth, and Job responsibilities. As it was noticed that the Recruitment and selection, Training and development, and compensation functions were more considered for organizational intentions and interventions.

✓ It is suggested that competency mapping can be regularized instead of doing at the time of HR functions. This could be useful to the organization and individual in identifying the strengths and weakness.

✓ It is suggested to the organizations that if the proper communications should be made regarding the mapping practices of the international organizations, that will be useful at the time of employee mobility.

✓ It is suggested that the changing role and success factors of a particular positions should be identified and bring to the notice for employees so that they can develop the required competencies to perform the assigned job successfully.

✓ It is suggested that proper feedback mechanisms i.e., 360-degree feedback, continuous feedback mechanism, and employee performance evaluation can be developed, so that the employees will take feedbacks positively and develop the competencies where they are lagging behind.

- ✓ It is suggested that an organization should find out the strengths of the employees for better team management and help the employees to reduce their weaknesses.
- ✓ It is suggested that the organizations need to set more specific goals of competency mapping in order to improve the achievement orientation of employees.

6.7 CONCLUSION.

The primary objective behind the study is to identify the core competencies required by the IT sector in India. And whether these competencies have impact or organization culture. And also, the competency mapping practices by the IT companies in the study area. However, the Competency mapping is a process of identifying key competencies for an organization and/or a job and incorporating those competencies throughout the various processes (job evaluation, training, recruitment etc.) of the organization. The study identified eight major competencies in top, middle, and low-level employees followed by technical competencies, managerial competencies, behavioural competencies, and conceptual competencies, job-oriented competencies, communication skill competencies, team work competencies, and personal quality competencies. All eight competency groups have impact on organizational culture.

Use of a competency mapping model creates a difference in performance. It has multiple benefits. The missing links can then be taken care by organizing training programs. The competency framework forms the bedrock for all HR applications. As a result of competency mapping, all the HR processes like talent induction, management development, appraisal and training yield much better results. In all the three segments of the study area, at three levels of employee level the core competencies and additional competencies required are studies in detail and some of the challenges are faced by the employees and organization too. At the same time the organizations are also have taken some initiative to develop the competencies of the employees which would be affecting the organization culture and provides added value too, the same is suggested in the study.

From the aforementioned perspectives, it can thus be concluded that the study has met the objective of the research which was to measure the competencies of top, middle and low-level employees (IT, BPO and KPO) and its impact on organizational culture.

6.8 SCOPE FOR THE FURTHER RESEARCH

This study is limited to competency mapping in IT, BPO and KPO. There are numerous topics to explore further. A detailed study can be carried out to understand competency mapping among employees on a comparative basis between IT and ITES companies. The study was conducted only from the perception of employees and not from the employer perspective. A study from employer's perception on competency mapping in IT sector is also suggested. A comparative study on competency mapping between employees employed in public sector and private sector may also be carried out. Similar studies can also be extended to other manufacturing industries. The future research may be replicated in the government sector, and other small and medium scale industries, and in other countries to examine how culture influences perceptions of HR competencies, especially when studies compare countries with different cultural backgrounds.

BIBLIOGRAPHY

- A Bhavani Shree, Dr Lakshmi P, and Ramya T J (2016), "A Study on Competency Mapping in Automobile Industry", ISSN:2321-3361, Vol:06, Issue:07.

- A S Chellameena and S David Amritha Rajan (2014), "A Study on Competency Mapping of Women Teachers in Colleges in Madurai City", Shanlax International Journal of Management, ISSN:2321-4643, Vol:2, No:2.

- A.Tejeswari, T.V.Ambuli (2016), A Study On Competency Mapping of Employees With Reference To Murugappan And Company, International journal of research Science& Management, 3(8) 21-31

- Ahmat Allah Gholipur, Seid Mohammad Mahmoodi, Gholamreza Jandaghi, Haniyeh Fardmanesh (2012), Presentation Model of Managerial Competency Approach in Management Development, Vol :3, no. 9, pg. no. 506-518.

- Ajay Pratap Singh (2010), Competency Mapping: A Gap Analysis, Journal of social science, vol. II (2), June – Dec 2010 pg. no 144-154.

- Alainati, S., Alshawi, S., & Al-Karaghouli, W. (2010), The effect of education and training on competency.

- Ali Sahin Omek, Tanju Colakoglu, Adem Sacan (2015), "Competency Based Human Resource Management: A Study on Food Industry Firm", Global Business Research Congress, ISSN:2459-0762.

- Andrews, A. (2011), Why Competency-based Talent Management. Lexonis Limited.

- Anisha. N (2012), Competency Mapping of The Employees, International Journal of Advancements in Research and Technology, Volume-1, Issue-5, ISSN-2278 7763.

- Anitha, N. B. M. P., & Thenmozhi, D. (2011), Competency assessment: A gap analysis. Interdisciplinary Journal of Contemporary Research in Business, 3(4), 784-794.

- Anjali Ganesh (2017), "Exploring to map competencies with specific application of 7S model". International Journal on leadership, Vol: 05, Issue: 01.

- Ankush Puri and Asha Pachpande (2015), Competency Mapping: the Tool for Organizational Restructuring, IJRCSM, Volume-3(1), ISSN-2321 8088, and Page 32-34.

- Antonio Volpentesta, and Alberto Felicetti (2011), Competence Mapping through Analysing Research Papers of a Scientific Community, 2nd Doctoral Conference

on Computing, Electrical and Industrial Systems (DOCEIS), Costa de Caparica, Portugal. pp.33-44, 10.1007/978-3-642-19170-1_4. hal-01566580

- Anu Rouska (2014), "Competence Identification, Assessment and Development", International Business Administration Thesis.

- Arnold, S. B. (2001), Leader traits and leadership competencies necessary during organizational change (Doctoral dissertation, University of Tennessee, Knoxville).

- Arun Raghu Babu (2018), "Need for competency mapping of the employees in today's corporate world", Global Journal for Research Analysis, Vol:7, Issue:11, ISSN:2277-8160.

- Ashwatappa (2007), Organizational Behaviour, seventh edition, Himalaya publishing house, PP-249-250.

- Baharin, N. L., & Hanafi, W. N. W. (2018), Effects of talent management on employee retention: A case study of hospitality industry. Global Business and Management Research, 10(3), 697.

- Balaji, S., & Vimala, D., (2012), A Study on Competency Mapping in Adecco Service Organizations, Chennai, Asia Pacific Journal of Marketing & Management Review, Vol 1 (3), pp: 39-45

- Bals, L., Schulze, H., Kelly, S., & Stek, K. (2019), Purchasing and supply management (PSM) competencies: Current and future requirements. Journal of purchasing and supply management, 25(5), 100572.

- Banajit Changkakati and Bhaswati Kumar (2020), A Study on Relationship Between Demographic Variables of Employees and Different Dimensions of Competency Mapping with reference to the Public Sector Banks of Guwahati, Assam, India, International Journal of Scientific & Technology Research Volume 9, Issue 03, ISSN 2277-8616 3750

- Barman M., (2016), Technological Skill and Competency of College Librarians in Rural Kamrup District (Northern Part), Assam; 10th Convention Planner, NEHU, Shillong, Meghalaya, 161-170.

- Barron, M. (2007), Analyzing critical positions for talent needs. Organization Development Journal, 25(4), P115.

- Becker, B., Huselid, M., & Ulrich, D. (2001), The HR Scorecard: Linking People, Strategy, and Performance. Boston: Harvard Business School Press.

- Bordinat, L. (2014), New Types of Employee Assessments Offer Opportunities for Employers and Employees. Employment Relations Today, 41(2), 11-16.

- Boyatzis, R., & Boyatzis, R. E. (2008), Competencies in the 21st century. Journal of management development.

- Boyatzis, Richard (1982), The Competent Manager: A Model for Effective Performance. (Patricia McLagan's work was advanced by Richard Boyatzis in this book).

- Brière, S., Proulx, D., Flores, O. N., & Laporte, M. (2015), Competencies of project managers in international NGOs: Perceptions of practitioners. International Journal of Project Management, 33(1), 116-125.

- C. Sagunthala (2017), A Study on Competency Mapping Among Employees of Textile Mills in Coimbatore City, International Journal of Management Research & Review, 7(4), 466-474.

- Campion, M. A., Fink, A. A., Ruggeberg, B. J., Carr, L., Phillips, G. M., & Odman, R. B. (2011), Doing competencies well: best practices in competency modeling. Personnel psychology, 64(1), 225-262.

- Celia, B.R. & Karthick, M. (2012), Competency Mapping of Employees in the Power Sector with Special Reference to Chennai. ZENITH International Journal of Multidisciplinary Research, 2(1), pp. 307-320

- Cernusca, Lucian and Dima, Cristina (2007), Competency and Human Resource Management. International Journal of Psychology, 2.

- CHIB, S, Competency Mapping-A Tool to Place Right the Person at the Right Place: Prototype for Faculty Selection in B-Schools. ISSN 2026-691X Editorial Board.

- Chipulu, M., Neoh, J. G., Ojiako, U. U., & Williams, T. (2012), A multidimensional analysis of project manager competences. IEEE Transactions on Engineering Management, 60(3), 506-517.

- Chouhan, V. S., & Srivastava, S. (2012), Competencies and Competency Models: Development and Applications. International Journal of Research in Management, Economics and Commerce, 2(11), 575-583.

- Chouhan, V.S. & Srivastava, S. (2013), The Competency Mapping for HR Professionals in IT Sector. The International Journal of Management, 2(3), pp. 1-6.

- Christoffer Johansson (2019), "How to Assess and Map Employees Competencies", Department of Computer and Information Science, Master Thesis, 30 ECTS, Datateknik 2019, LIU-IDA/LITH-EX-A—19/081—SE.

- Connor, A. M. (2016), An Investigation into the Use of Competency Frameworks for Recruitment and Selection in a Financial Services Organization in Dublin (Doctoral dissertation, Dublin, National College of Ireland).

- Cortes, S. T. (2019), Needs Assessment on Action Research Competencies of Teacher-Researchers in Surigao Del Sur, Philippines. Journal of Education Naresuan University, 21(4), 1-19.

- Crouse, P., Doyle, W., & Young, J. D. (2011), Trends, roles, and competencies in human resource management practice: A perspective from practitioners in Halifax, Canada. In ASBBS Annual Conference Las Vegas, Vol. 18, No. 1.

- D S Raval and S B Trivedi (2014), "A Study of HRM Practices prevailing in IT-ITES Industry- A Case study of IT-ITES organizations of Vadodara city" Research Gate.

- Dario Russo (2016), "Competency Measurement Model", European Conference on Quality and Official Statistics.

- David C. McClelland (1973), "Testing for Competence Rather Than Intelligence". In: The American psychologist, pp. 1–14.

- De Bernardis, L., & Maiolini, R. (2013), A Design Theory for Dynamic Competencies Mapping Systems. In Designing Organizational Systems (pp. 123-141). Springer, Berlin, Heidelberg.

- Deepti Sinha, Sachin Sinha and Kalpana Singh (2016), "Applying Competency Mapping in the Information technology sector", Research gate.

- Divya Sharma (2013), "Competency Mapping to identify High performers: in Context of IT professionals", International Journal of science and research, ISSN(Online):2319-7064, Vol:4, Issue:3.

- Dr Ajay Kaushik (2014), Competency Mapping of Project and Delivery Management Sai Om Journal of Commerce & Management, A Peer Reviewed International Journal Volume 1, Issue 7 Online ISSN-2347-7571.

- Dr P Suguna and T Tamil Selvi (2013), Competency Mapping – A Drive for Garment Firms in Tirupur Dist. International Journal of Science and Research Publications, Vol 3, Issue 5, ISSN 2250 3153

- Dr Sweta Banerjee (2015), "Assessing Competency Mapping of Employees: A Case Study of An Electronic Company", ASM'S International E-Journal on Ongoing Research in Management and IT, ISSN: 2320-0065.

- Dr Y Nagaraju and V Sathyanarana Gowda (2012), "A Study of Employee Competency Mapping Strategies at Select Organizations of Bangalore", International Journal of Research in Commerce and Management, Volume -3, Issue-10, ISSN -0976-2183.

- Dr. Murulidhar Chandrashekar and Sunitha Khalod (2015), "Competency Mapping: A Strategic Tool in Employee Recruitment", Journal of Research in Management and Technology, Volume 4, Issue 1, ISSN 2320-0073.

- Dr. Nagaraju and V Sathyanarayana Gouda, (2012), A Study of Competency Mapping Strategies at Select Organizations of Bangalore, International Journal of Research in Commerce and Management, Vol-3, Issue-10, ISSN-0976-2183

- Dr. S S Khanka, (2008), Human Resource Management (Text and Cases), S Chand Company Ltd, Ramnagar, New Delhi.

- Dr. V. K. Jain (2013), Competency Mapping in Indian Industries - A Case Study International Journal of Emerging Research in Management &Technology ISSN: 2278-9359, Volume-2, Issue-10

- Dr.R.Gayatri and Purushothaman (2018), A Study on Competency Mapping for IT Professionals Working in Indian IT Companies, With Reference to Chennai, Journal of Management (JOM) Volume 4, Issue 2, May –June 2018, pp. 1–8, ISSN Print: 2347-3940 and ISSN Online: 2347-3959

- Dubey, R., & Ali, S. S. (2011), Study on effect of functional competency on performance of Indian manufacturing sector. International Journal of Engineering Business Management, 3(3), 1-15.

- Edwin B Flippo, (1884), Personel Management, 6th Addition, Mcgrow Hill Book Company, New York.

- Ekta Sharma (2015), "Role of Higher Education Institutions Towards Developing the Human Capital of The World Through Competency Mapping", Journals of Business Economics and Management Sciences, Volume-2(1), PP.1-9, Article ID-JBEMS 14/014.

- Fetter, M. S. (2009), Curriculum strategies to improve baccalaureate nursing information technology outcomes. Journal of Nursing Education, 48(2), 78-85.

- Ganesh, A. (2017), Exploring to map competencies with specific application of 7S model. International Journal on Leadership, 5(1), 31.

- Garry Holmes & Nick Hooper (2000), Core Competence and Education, Higher Education, 40(3), 247-258

- Gary Dessler, Human Resource Management, 11th Edition, Ashok K Gosh Phi Learning Pvt Ltd, M – 97, Cannought Circus, New Delhi.

- Giang Thi Huong Vu (2017), "A Critical Review of Human Resource Competency Model: Evolvement in Required Competencies for Human Resource Professionals", Journal of Economics, Business and Management, Vol:5, No:12.

- Gowrishankara R V and K Iyyappan (2017), "A Study on Effectiveness of Competency Mapping in IT Industry", International Journal of Scientific Research, Vol:6, Issue:5, ISSN: 2277-8179.

- Graham Coates, Clare Thompson and Richard de Leon (2007), A study of capturing the skill Competencies of the workforce within a small manufacturing engineering company, International Conference on Engineering Design, Pg. no 28-31.

- Gupta, S. K., & Narolia, V. (2015), Role of competency mapping in Indian companies. International Research Journal of Human Resources and Social Sciences, 2(10), 45-56.

- Halil Zaim, Mehmet Fatih Yasar and Omer Faruk Unal (2013), "Analyzing the effects of Individual competencies on performance: A Field study in services industries in Turkey", Journal of Global Strategic Management, Vol:7, N0:2.

- Hayes, J. L. (1979), A new look at managerial competence: the AMA model of worthy performance, Management Review, November, pp. 2 – 3.

- Hogg, C. (2008), Competency and competency frameworks factsheet. Chartered Institute for Personnel and Development. http://www. cipd. co. uk/subjects/perfmangmt/competnces/comptfrmwk.

- Holden, N., & Vaiman, V. (2013), Talent management in Russia: not so much war for talent as wariness of talent. Critical perspectives on international business, 9(1-2), 129-146.

- Hsieh, S. C., Lin, J. S., & Lee, H. C. (2012), Analysis on literature review of competency. International Review of Business and Economics, 2(1), 25-50.

- J K Raju, Chaya Bagrech and Ravi Kumar C (2014), "Competency Mapping in IT Industry-A roadmap for Future", Adarsh Journal of Management Research, Vol:7, Issue:1.

- J Kansal and N Jain (2018), "Development of Competency Model and Mapping of Employees competencies for organizational development: A New Approach", Journal of Scientific and Industrial Research, Vol:78, PP:22-25.

- J N Jain and Ajay Bhola, (2008), Modern Human Resource Management (Principles and Techniques), Regal Publications, F -159, Rajoury Garden, New Delhi.

- J Rohit, P Singh, S Satyapriya, V Sangeeta and N V Kumbhare (2019), "Competency Mapping of the extensionists working inKrishi Vigyan Kendra's in India", J. Agr. Sci. Tech. (2019) Vol. 21(4): 799-813.

- Jaideep Kaur & Vikas Kumar (2013), Competency Mapping: A Gap Analysis, International Journal of Education and Research, Vol. 1 No. 1

- Jain, V.K. (2013), Competency Mapping in Indian Industries - A Case Study. International Journal of Emerging Research in Management &Technology,2(10), pp. 10-21

- Janani, J., & Gomathi, S. (2015), "Formulating and Implementing Competency Modelling, Profiling and Mapping' 'at Private Limited, Ranipet, Vellore. Mediterranean Journal of Social Sciences, 6(1), 23-23.

- Jayasheela Patil and Dr D Masthan (2014), "Competency Mapping of Bank Managers an Empirical Study", International Journal and Magazine of Engineering, Technology, Management and Research, Volume - No.1 (2014), Issue No 8 (Aug), ISSN No. 2348-4845.

- Jennifer M. Brill, M.J. Bishop, and Andrew E. Walker (2006), The competencies and characteristics required for an effective project manager, Educational Technology Research and Development, 54(2), 115- 140.

- John Osteen B Rajagopal and Subramanian (2013), "Assessment Maturity Model for Competency Mapping- A Takent Management Enabler", IOSR Journal of Humanity and Social Science, Volume 15, Issue 1, ISSN 22790837.

- Justin M. Nash & Kevin L. Tarkin (2012), Geometric models of competency development in specialty areas of professional psychology, Training and Education in Professional Psychology, 6(1), 37-46.

- K Ashwathappa, (2007), Human Resources Management, Tata Mc graw Hill, Mumbai.

- K Suresh (2020), "An Empirical Study on Competency Mapping of Employees in the Automotive Sector with Specific Reference to Chennai", 141(2020) 54310-54315, Elixer International Journal.

- Kalama Adefe, Derek Watson and Joyce Liddle (2019), "Do Competency Frameworks Influence Business performance? An Empirical Study of the Nigerian Banking Sector", International Journal of HRD Practice, Policy and Research, Vol:4, No:1, Online DOI: 10.22324/ijhrdppr.4.101.

- Kaslow, N. J., Grus, C. L., Campbell, L. F., Fouad, N. A., Hatcher, R. L., &Rodolfa, E. R. (2009), Competency assessment toolkit for professional psychology. Training and Education in Professional, Psychology,3, S27–S45.

- Katz Daniel and Kahn Robert (1966), The Social Psychology of Organizations. John Wiley & Sons, New York.

- Kaur, J., & Kumar, V. (2013), Competency mapping: A gap Analysis. International Journal of Education and Research, 1(1), 1-9.

- Kaushik, A. (2014), ″Competency mapping of project and delivery management.

- Khalil M. Dirani & et. al (2020), Leadership competencies and the essential role of human resource development in times of crisis: a response to covid-19 pandemic, human resource development international, Print ISSN: 1367-8868 Online ISSN: 1469-8374

- Khanna, V. K., & Gupta, R. (2014), Comparative study of the impact of competency-based training on 5 "S" and TQM: a case study. International Journal of Quality & Reliability Management.

- Kodwani, Amitabh Deo (2009), "Competency Mapping." Paradigm (Institute of Management Technology) Vol. 13 Issue 2, pp. 117-118

- Krishnaveni.J, (2013), A Study on Mapping of Employees' Competency, Indian Journal of Economics and Development, Vol: 1, Issue: 3, ISSN 2320-9836

- Kruse, C. S., & Lieneck, C. (2019), Validating a Competency-Based HIT Curriculum in a BHA and MHA Program Through the Voice of the Customer. SAGE Open, 9(3), 2158244019861458.

- Kumar, S. Gokul, et al (2018), A Study on Developing Competency Mapping Among Employees Working in Shree Harie Steel and Alloys, Annur, IJARIIE, 4(3), 481-497 European Journal of Molecular & Clinical Medicine ISSN 2515-8260 Volume 07, Issue 03, 2020 2459

- L J Soundara Rajan and A Ananda Kumar (2015), "Competency Mapping Analysis: A Study Conducted in Specific Package Industry at Puducherry State of India", European Journal of Business and Management, ISSN:2222-1905(P), ISSN:2222-2839(Online), Vol:07, No:19.

- Lalithambigai, R. (2012), A study on Competency Mapping in Kone Elevators India Private Limited, Chennai. Unpublished master's thesis). Department of Management Studies, NPR College of Engineering & Technology, Natham.

- Lathitha, C. (2012), Managing employee attrition-The HR role and challenge. International journal of research in management, economics and commerce, 12.

- Ley, T., & Albert, D. (2003), Identifying Employee Competencies in Dynamic Work Domains: Methodological Considerations and a Case Study, Journal of Universal Computer Science, 9(12), 1500-1518.

- Lucia, A. D., & Lepsinger, R. (1999), The art and science of competency models: Pinpointing critical success factors in organizations New York: Pfeiffer.

- M Gayathri (2016), "A Study on Competency Mapping at Ultramarine and Pigments Limited, Ranipet", Vol:01, Issue:06, ISSN(Online):2455-7188.

- M. Farhana Fathima, (2016), Competency Mapping - An Overview, Imperil Journal of Interdisciplinary Research, Vol-2, Issue-11, ISSN-2454-1362

- M. Mustafa and Surbhi, (2014), Competency Mapping - A Drive for HR Excellence in IT Industry, IJABER, Vol-12, No-4, ISSN- 1343-1351.

- Mallika Worlikar and Artee Aggarwal (2017), "Review Study of Competency Mapping in the Organizations" IOSR Journal of Business and Management, e-ISSN:2278-487X, p-ISSN:2319-7668, PP:72-76.

- Mangala A and Dr. K Ramachandra (2017), "Employee competency mapping as a mechanism to weed out competency gaps in information technology- A Conceptual study", International Journal of Applied Research, 3(2), 219-223, ISSN:2394-7500, ISSN online:2394-5869.

- Mani, V. (2013), Assessing the Competencies and developing A competency mapping System for managing talent. International Journal of Scientific research, 8 (1).

- Marja-Liisa Payne (2010), A Comparative Study of HR Managers' Competencies in Strategic Roles, International Management Review, Vol. 6 No. 2. 2010, pg. no 5-12.

- McClelland, D. C. (1973), Testing for competence rather than for intelligence. American Psychologist, 28, pp. 1-14.

- Md. Ishtiak Uddin, et. al. (2012), Competency Mapping: A Tool for HR Excellence, European Journal of Business and Management, Vol 4, No.5.

- Merlin Apriliyanti, Ilham M, Dian Ekowati and Tanti Handriana (2021), "A Systematic Literature Review: The influence of information technology and organizational learning on performance", Library Philosophy and practice (e-journal), 4978.

- Micchele R Ennis (2008), "A Review of Literature and the Role of the Employment and Training Administration".

- Mily Velayudhan T.K (2011), Competency Mapping of the Employees- A Study 2011 International Conference on Information Communication and Management, IPCSIT 16 (2011) Singapore, 228-232

- Mohammad Ahmed Abdullah Alsabri and Belqes Mutar alaraqe (2015), "Core Competency Mapping and Skills of Employees for Enhancement in IBM, India", International Journal of Research and Management, Social Sciences and Technology, Volume- 10, No-10, ISSN: 2320-2939.

- Mohammad Hasan, (2016), Development of 21st Century School Teachers' Teaching Competencies in India, Indian Journal of Research, Vol-5, Issue-5, ISSN-2250-1991.

- Mohankumari and R Magesh (2016), "Competency mapping for ITS Industry", International Journal of Pharmacy and Technology, ISSN:0975-76X, Vol:08, Issue No:3.

- Moore, J. L. A. (2017), The Effectiveness of Competency Maps in the Hiring Process to Reduce Employee Turnover (Doctoral dissertation, Capella University).

- Mr Mily Velayudhan T K and Dr. Maran (2009), "A Study on Mapping Core Competencies and Development of Employees for Excellence with Reference to HCL Technologies", Journal of Contemporary Research in Management.

- Mr Vikram Singh Chouhan and Sandeep Srivastava, (2014), Understanding Competencies and Competency Modeling - A Literature Survey, IOSR Journal of Business and Management, Vol-16, Pp-14-22, ISSN-2319-7668.

- Mr. B R Celia and Mr. M Karthick (2012), "Competency Mapping of Employees in The Power Sector with Special Reference to Chennai", International Journal of Multidisciplinary Research, Volume 2, Issue 1, ISSN 2231-5780.

- Mr. Jaideep Kaur and Vikas Kumar, (2013), Competency Mapping- A Gap Analysis, International Journal of Education and Research, Vol-1, No-1.

- Mr. K. Rajesh Kumar and Dr. M Sivakumar, (2014), Competency Mapping in Hotels with Reference to Madhurai, Asia Pacific Journal of Research, Vol-1, Issue-15, ISSN-2320-5504

- Mr. Shampa Chakraberty and Mr. Aloke Kumar Sen, (2013), Global HR Management and Identification of Competencies for Organizational Development in the Information Technology Sector, Journal of Global Business, Vol. 2, No. 1.

- Mrs. B R Celis Mr M Karthick (2012), Competency Mapping of Employees in The Power Sector with Special Reference to Chennai. Zenith International Journal of Multidisciplinary Research Vol 2 Issue 1 ISSN 2231 5780

- Ms. Mallika Worlikar1 and Dr. Artee Aggrawal (2017), Review Study of Competency Mapping in the Organisations, IOSR Journal of Business and Management (IOSR-JBM), e-ISSN: 2278-487X, p-ISSN: 2319-7668, PP 72-76

- Ms. Sinchua and S. Bhuvaneshwary, (2015), A Study on Competency Mapping of Employees in Hero Best Motors with Special Reference to Malappuram District, International Journal of Scientific Engineering and applied Science, Vol-1, Issue-7, ISSN-2395-3470.

- Ms. Trisha Kumar and Dr. Sumita Mishra, (2016), Competency Mapping - A Review of Literature, International Journal in Management and Social Science, Vol-04, Issue-02, ISSN-2321-1784.

- N. Sandhya and Sundari Dadhabai (2017), A Study of Employees Competency Mapping, KAAV International Journal of Economics, Commerce and Business Management, Volume-4, ISSN-2348 4969, Page705-714.

- Nair VV (2014), Behavioral Competency Management with special reference to Commercial Banks headquartered in Kerela Ph. D. Thesis, Cochin University of Science and Technology, Kochi, pp 51-65.

- Nair, P. J. (2012), Is talent management accentuated by competency mapping? with special reference to educational sector. International Journal of Social Sciences & Interdisciplinary Research, 1(11), 132-147.

- Naqvi, Farah (January 2009), "Competency Mapping and Managing Talent." ICFAI Journal of Management Research, Vol. 8 Issue 1, pp. 85-94

- National Skill Development Corporation made a report on "Human Resource and Skill Requirements in the IT and ITES Industry Sector (2022).

- Naval Lawande and Shubhangi Bhosale, (2011), "An Analysis of the Critical competencies Relevant to Honey Enterprises in East Khasi Hills District of Meghalaya".

- Naveed Saif, Muh Saqid Khan, Khalid, Rehman, Shafiq Ur Rehman, Zia-UrRehman, Tufail Nawa, Muh Naqeeb (2013), Competency based Job Analysis, International Journal of Academic Research in Accounting, Finance and Management Sciences, Vol. 3, No.1, January 2013, pg. no. 105–111.

- Neha Sharma and Dr. Kavita Khanna (2015), "Competency Mapping", Indian Journal of Research-PARIPEX, Vol:4, Issue:1, ISSN: 2250-1991.

- Nigam et. al. (2009), "Competency Mapping: An Innovative Management Practice tool." Peoples' Journal of Management, Issue I, Biannual Journal, Jan 2009

- Nitin Chaurasiya and N L Mishra (2017), "Relevance of Competency Map in Service Sectors", International Journal of Technical Research and Science, Vol:2, Issue:1, ISSN Online:2454-2024.

- Orooj Siddiqui (2014), "Competency Mapping: An HR Practice Enhancing the Employee Productivity and Growth", Indian Journal of Applied Research, Volume 4, Issue 11, ISSN 2249-555x.

- Oshins, M. L. (2003), Identifying a competency model for hotel managers.

- Othman, N., Muhammad, R., Aishah, R. S., & Rahman, R. A. (2007), Entrepreneurial competency and tendencies among pre-university student. International Journal of Economic Research (IJER), 14(15), 55-56.

- P Subbarao, (2008), Human Resource Management and Industrial Relation (Text, Cases and Games), III Revised and Enlarged Edition, Himalaya Publishing House, "Ramdoot" Dr. Bhalerao Marg, Girgaon, Mumbai, PP-584-585

- P. Nagesh et al., (2017), Employee Competency Mapping, SDMIND Journal of Management, ISSN: 0976-0652 Online ISSN 2320-7906

- Payne, M. L. (2010), A comparative study of HR managers' competencies in strategic roles. International Management Review, 6(2), 5.

- Perera, S., Babatunde, S. O., Zhou, L., Pearson, J., & Ekundayo, D. (2017), Competency mapping framework for regulating professionally oriented degree Programmes in higher education. Studies in Higher Education, 42(12), 2316-2342.

- Pooja Tripathi (2011), "A Competency Mapping for Educational Institutions: Expert System Approach", International Journal of Computer and Communication Technology, Vol:02, Issue:04, ISSN:2231-0371.

- Prahalad, C K and Hamel, G (1990), "The Core Competence of the Corporation," Harvard Business Review, 68(3), 79-93.

- Preeti Jayachandran Nair (2012), Is Talent Management Accentuated by Competency Mapping? With Special Reference to Educational Sector, IRJC International Journal of Social Science and Interdisciplinary Research, Volume-1, Issue-11, ISSN-22773630.

- Prof. Suresh Namdeo Mehetre and Dr. Santosh Kalabhau Apte (2019), A study of competency mapping, International Journal of Multidisciplinary, Volume-04 ISSN: 2455-3085 (Online) Issue-01

- R Gayatri and Purushothaman (2018), "A Study on Competency Mapping for IT Professionals Working in Indian IT Companies, with reference to Chennai", Journal of Management, Vol:05, Issue:3, PP:1-8, ISSN print: 2347-3940, ISSN Online: 2347-3959.

- R Kamala Saranya (2013), "An Empirical Study on Role of Competency Mapping in Carrier Development of Employees", International Journal of Scientific Research, Volume -2, Issue - 11, ISSN: 2277-8179.

- R Yuvaraj (2011), "Competency Mapping-A Drive for Indian Industries", International Journal of Scientific and Engineering Research, Vol:02, Issue:8, ISSN:2229-5518.

- R. Sugumari and S. Rupa (2014), An Empirical Study on Competency Mapping-With Special Reference to Farida Classic Shoes Private, Global Journal for Research Analysis, volume-3, Issue-11, ISSN-22778160.

- Rajesh Kumar, K., & Karuppasamy, R. (2012), Competency Mapping among Women Literates–An Analysis. RVS Faculty of Management Journal for Research, 1(1), 10-15.

- Rajesh Kumar, K., & Sivakumar, M. (2013), Assessment of Competencies required by Undergraduate students in Autonomous Arts and Science Colleges in Madurai. International Journal of Current Research, 5(12), 4227-4232.

- Rajesh Kumar, K., & Sivakumar, M. (2014), A Study on the Competencies of Hotel Employees in Dindigul. Asian Journal of Multidisciplinary Studies, 2(6), 10-16.

- Reshmi Manna and Ankit Singh (2016), "Does Training Need Analysis Help to Minimize Competency Gap: An Investigation", Amity Journal of Training and Development, 1(1), (109-131), Vol:01, Issue:01.

- Rice, J. A. (2006), Career and competency mapping. Leaders embrace life-long learning for success. Healthcare executive, 21(6), pp-52.

- Rijumani Kalita and Dr. Seema S Singha (2018), Competency mapping and job performance: A case study of big bazaar, Jorhat, International Journal of Commerce and Management Research, ISSN: 2455-1627, Volume 4; Issue 6; November; Page No. 98-102

- Robert Gaspar. F, (2012), A Study on the Perception of Human Resource Executives on Competency Mapping for the Superior Results, International Journal of Social Science Tomorrow Vol.1. No. 8 (2012) Pg. no 1-8.

- Robert W. White (1959), "Motivation Reconsidered: The Concept of Competence". In: Psychological review 66, pp. 297–333.

- Rock Ravi Fernandes and Herald Ivan Moni's (2018), "Mapping of Required Leadership Competency of HR Professionals Employed in ITES-BPO Companies in Bangalore City", PARIPEX-Indian Journal of Research, Vol:7, Issue:11, ISSN:2250-1991

- Russo, D. (2016), Competency measurement model. In European Conference on Quality in Official Statistics (pp. 1-29).

- Ruta Desai and Arun Mokashi (2020), "Competency Mapping: A Literature Review", ISSN:2347-7180, Vol:10. Issue: 06, No: 13.

- S Arul Krishnan (2012), "Competency Mapping Towards BPO Sector in Chennai", IJEMR, Vol:2, Issue:12, ISSN:2249-2585.

- S Gokul Kumar, A Prasanth, P Arun Prakash, T Sisili, T Sushmitha, B Devi Abinaya, K M Nithya and R Krsihna Prakash (2018), "A Study on Developing Competency Mapping among Employees Working in Shree Harie Steel and Alloys, Annur", Vol:04, Issue:3, ISSN(O):2395-4396.

- S Manju, D Jayanth and K Kowsalya (2020), "Competency Mapping Among the ITES Sectors: A Study among the ITES Employees in Coimbatore", European Journal of Molecular and Clinical Medicine, ISSN:2515-8260, Vol:07, Issue:03.

- S Praveen and Dr. K Kuppasamy (2012), "Competency Mapping of the Employees in the Manufacturing Companies with Special Reference Coimbatore- A Study", International Journal of Social Science and Interdisciplinary Research, Volume 1, Issue 11, ISSN 2277-3630.

- S Yogananth and G Galex Rajesh (2018), "A Study of Competency mapping of employees in Pump and Motor Manufacturing sector with special reference to Coimbatore", ISSN: 2394-2770, Volume:05, Issue: 03, September 2018, Pages: 44-48.

- S. Balaji D. and Vimala (2012), A Study on Competency Mapping in Adecco Service Organizations, Chennai, Asia Pacific Journal of Marketing & Management Review Vol.1 No. 3, ISSN 2319-2836.

- S.V Shreedevi (2013), "A Study about Assessment on Competency of Employees (GAP Analysis) in Pharmaceutical Industry in Chennai", International Journal of Innovative Research and Development, Volume- 2, Issue- 5, ISSN: 2278-0211.

- Saguntala C (2015), "A Study on Competency Mapping among Employee of Textile Mills in Coimbatore", IJMRR, Volume-7, Issue-4 and ISSN- 2249 7196.

- Saikumar V, Ms Sunitha V, Kirthika S V, Jayakrishna A R and Lokeshwaran K (2021), "A Study on Effectiveness of Competency Mapping Through Training and Development", Turkish Journal of Computer and Mathematics Education, Vol:12, No:11, 411-41.

- Salmiaty Taty and Ahmad Mussenge (2017), "Competency Model Development: A Study of Conceptual Framework", International Journal of Business and Management Invention, Vol:6, Issue:5, ISSN(Online):2319-8028, ISSN(Print):2319-801X.

- Sanghi, S. (2006), The handbook of competency mapping: understanding, designing and implementing competency models in organizations. SAGE publications India, 2nd edition.

- Sarkar, S. (2014), Competency Mapping- Rejuvenating 'Knowledge based Development'. Drishtikon: A Journal of Management, Symbiosis Centre for Management & Human Resource Development Online access @ www.publishingindia.com, 1(2), pp. 435-464

- Shampa Chakraberty (2013), A Study of Competencies in the Information Technology Sector in Kolkata in the Era of Global HR, SAGE Publications Los Angeles, London, New Delhi, Singapore, DC, 38(3) 255–276 XLRI

- Sharma, E. (2015), Role of Higher Education Institutions towards developing the Human Capital of the world through competency mapping. Journal of Business Economics and Management Sciences, 2(1), 1-9.

- Sharma, R. R. (2002), 360 Degree Feedback Competency Mapping and Assessment Centers: For Personal and Business Development. Tata McGraw-Hill Publication.

- Shaukat Ali (2012), "Competency Mapping - A Case Study at Ambassadors sky chef, Mumbai" Abhinav national monthly refereed journal of research in commerce & management, volume no.1, Issue no.3 pg. no 157-169.

- Shaw-Chiang Wong (2020), Competency Definitions, Development and Assessment: A Brief Review International Journal of Academic Research in Progressive Education and Development Vol. 9, No. 3, 2020, E-ISSN: 2 226 -6348

- Shermon, G. (2004), Competency based HRM: A strategic resource for competency mapping, assessment and development centres. Tata McGraw-Hill Education.

- Shivanjali, Mitushi Singh and Tripti Singh (2019), "Competency Mapping: A Strategic Perspective in Employee Retention" International Journal of Recent Technology and Engineering (IJRTE), ISSN:2277-378, Vol:8, Issue:2.

- Shobha Bharadwa, Ajay Jain, Namita Gupta, and Praveen Kumar Pandey (2019), "Competency Mapping Based on Identifying the Impact over the Productivity of SMEs", International Journal of Innovative Technology and Exploring Engineering, ISSN:2278-3075, Vol:09, Issue:02.

- Shraddha Awasthi and R C Sharma (2016), "Employee development through competency mapping: A Way ahead for organizational growth", International Journal in Management and Social Science, Vol:04, Issue:06, ISSN:2321-1784.

- Shruthi Ahuja (2012), "Competency Mapping at Managerial Level in Special Reference to Hotel Clerks, Jaipur", Journal of Multidisciplinary Research, Volume 1, Issue 1.

- Shweta Chaudhary and Seema Singh (2016), A Study of Competency Mapping of Employees in Banking Sector (With Special Reference to ICICI Bank), International Journal of Human Resources Management (IJHRM) ISSN(P): 2319-4936; ISSN(E): 2319-4944 Vol. 5, Issue 3

- Sinchu. P and S. Bhuvaneswary (2015), A Study on Competency Mapping of Employees in Hero Best Motors with Special Reference to Malappuram District, International Journal of Scientific Engineering and Applied Science (IJSEAS) - Volume-1, Issue-7, ISSN: 2395-3470

- Singh, V., & Mehra, B. (2013), Strengths and weaknesses of the information technology curriculum in library and information science graduate programs. Journal of Librarianship and Information Science, 45(3), 219-231.

- Sinha, D., Sinha, S., & Singh, K. (2017), Applying Competency Mapping in The Information Technology Sector. Global HRM Review, 86.

- Skulmoski, G. J., & Hartman, F. T. (2010), Information systems project manager soft competencies: A project-phase investigation. Project Management Journal, 41(1), 61-80.

- Smithesh G and A Shameem (2018), "A Study on Competency Mapping and its impact on deliverables with respect to the Reality sector", International Journal of Civil Engineering and Technology", Vol:9, Issue:1, PP:179-190, ISSN Print: 0976-6308, ISSN Online: 0976-6316.

- Solomon, Daniel, M. (2013), "Competency Mapping – A Holistic Approach for Industries", PARIPEX – Indian Journal of Research, Volume 2, Issue 3, March 2013.

- Spencer, L. M. and Spencer, S. M. (1993), Competence at Work: Model for Superior Performance. New York: John Wiley and Sons

- Sree Latha. T, Savanam Chandra Sekhar (2013), Competency Mapping: cutting edge in business development, international journal of research in computer application & management volume no. 3 (2013), Issue no.1, pg. no 89-91.

- Srividya, N. & Basu, R. (2015), Competency Mapping Correctional Officers. SCMS Journal of Indian Management, January – March, 12(1), pp. 88-96.

- Suguna, P., & Selvisee, T. T. (2013), Competency mapping: a drive for garment firms in Tirupur district. International Journal of Scientific and Research Publications, 3(5), 1-6.

- Surekhs Rana and Divya Pant (2020), "Measuring Competency Mapping Identifying and Selecting Indicators", Journal of Critical Reviews, Vol:7, Issue:14, ISSN:2394-5125.

- Suresh Namdeo Mehetre and Santosh Kalabhau Apte (2019), "A Study of Competency Mapping", Research Review International Journal of Multidisciplinary, ISSN: 2455-3085, Volume-04, Issue-01.

- Swetalina Mishra and RKS Mangesh Dash (2017), "A Study on competency mapping in power sector Odisha" International Journal of Research and Scientific Innovation, Vol: IV, Issue: VIII, Page 102 ISSN:2321-2705.

- Swetalina Mishra, RKS Mangesh Dash and Supriya Pattanayak (2020), "Exploring the success factors of competency mapping in captive power plants in India", European Journal of Molecular and Clinical Medicine", Vol:07, Issue:02, ISSN:2515-8260.

- Takey, S. M., & de Carvalho, M. M. (2015), Competency mapping in project management: An action research study in an engineering company. International Journal of Project Management, 33(4), 784-796.

- Thamaraiselvi P et al., (2018), A Study on Competency Mapping in Manufacturing MSME Sector in Tamilnadu State, International Journal of Pure and Applied Mathematics, Volume 119 No. 12 2018, 909-922, ISSN: 1314-3395 (on-line version)

- Tilattama Singh and Snigdha Malhotra (2016), "Competency Mapping: A Strategic HR Tool towards Effective Skill Mapping in Global Market", International Journal of Humanities and Social Science Invention", ISSN(O):2319-7722, ISSN(P):23319-7714, Vol:5, Issue:5, PP:01-08.

- Tripathi, P., & Ranjan, J. (2010), A Competency Mapping for Educational Institution: Expert System Approach. Int. J. of Computer and Communication Technology, 2(1), 75-93.

- Trisha Kumar, Sumita Mishra and Srikant Charan Das (2016), "Behavioural Competency Mapping: designing and Achieving performance in educational sector- A case study of Birla Institute of Technology, Patna Campus", International Journal of Application or Innovation in Engineering and Management, Vol:5, Issue:2, ISSN:2319-4847.

- Trivedi, R. (2014), A Study on Competency Mapping and Gap Analysis: An Organizational Development Intervention.

- Ufuk Bolukbas and Ali Fuat Gungeri (2017), "A Brief overview of technology competency and management frameworks for small and medium-sized enterprises", Sigma Journal of Engineering and Natural Sciences, 36 (1), 2018, 123-139.

- Ulrich, D. (2010), Research on Asia: The Human Resource Competency Study Singapore. Singapore Human Capital Summit, Report, Retrieved October, 11, 2010.

- V S P Rao, (2010), Human Resources Management (Text and Cases), Excel Publications.

- Vathanophas, V. Jintawee Thai-ngam. (2007), Competency Requirements for Effective Job Performance in The Thai Public Sector. Contemporary Management Research, 45-70.

- Velayudhan, M.T.K & Maran, K. (2009), A study on Mapping Core Competencies and development of Employees for Excellence with reference to HCL Technologies. Journal of Contemporary Research in Management, pp. 53-67

- Vichita Vathanophas and Jintawee Thai-ngam, (2007), "Competency Requirements for Effective Job Performance in Thai Public Sector" – Contemporary Management Research, Volume 3, Issue 1.

- Vidyut Rajhans & et. al. (2021), Development and validation of competency framework for teaching management of refractive errors: A participatory Delphi approach, Indian Journal of Ophthalmology, Volume 69 - Issue 12 - p 3690-3696

- Vikram Singh Chouhan (2014), Competency Mapping for HR Professionals in IT Industry, The International Journal of Management, ISSN 2277-5846

- Vikram Singh Chouhan and Sandeep Srivastava (2020), "Competency mapping and training needs assessment in the context of Indian Manufacturing Industry", International Journal of Management, Vol: 11, Issue:9, PP:678-687, ISSN Print: 0976-6502, ISSN Online: 0976-6510.

- Vikram Singh Chouhan and Sudeep Srivastav (2014), "Understanding Competencies and Competency Modeling- A Literature Survey", IOSR Journal of Business and Management, Volume 16, Issue 1, ISSN 2319-7668.

- Vimala, A., & Rathnaraj, M. S. N. Managerial Competency Mapping and Gap Analysis Among the Middle Level Managers of Insurance Sector.

- Wei-Wen, W. (2009), Exploring core competencies for R&D technical professional. Expert Systems with Applications, 36(5), 9574-9579.

- Yashwant Rao N and R Hiremani Naik (2020), "A Study on impact of competency mapping in creating organizational culture in KPO industries in Shivamogga city",

International Journal of Commerce and Management Research, ISSN:2455-1627, Vol;06, Issue:04.

- Yogesh Misra and Vandana Sharma (2017), "An Exploratory study on Business Strategy, Competency and Firm Performance", SUMEDHA Journal of Management, Vol: 06, No:02.

- Zulfiqar Murtaza (2015), "An Empirical Study of Competency Mapping of The Employees in The Tourism Sector in Jammu and Kashmir – An Executive Level Perspective", Journal of Business Management and Social Sciences Research, Volume- 4, No-2, and ISSN: 2319-5614.

WEBSITES:

- http://ignited.in/I/a/109903

- http://projectmanagement.vinsys.in/competency,mapping.html

- http://strategichrinc.com/competency_mapping/

- http://www.thecompetencygroup.com/selection/competency-mapping.aspx

- http://www.whatishumanresource.com/ competency-mapping

- https://www.geektonight.com/competency-mapping/

- https://www.ibef.org/industry/information-technology-india

- https://www.whatishumanresource.com/competency-mapping

- https://www.businessmanagementideas.com/management/organizational-effectiveness-top-4-approaches-management/8009

- https://www.ifioque.com/library/measuring-approaches-to-organization-effectiveness

ANNEXURE

QUESTIONNAIRE FOR MANAGERS

I, **Mithoji.S,** Research scholar Department of Post Graduate Studies and Research in Commerce, Jnanasahyadri, Kuvempu University, Shankaraghatta, have Undertaken a research Study for the Doctoral Degree on **"Competency Mapping in Information Technology Sector- An Empirical Study",** under the guidance of Dr. H. Shobharani, Associate Professor, Department of Post Graduate Studies and Research in Commerce, Post Graduate Centre, Kadur, Chikkamagalure dist**, Karnataka, India.** Therefore, I request you to spend a few minutes with me for providing required information. The information provided by you will be used for only academic purpose and will be kept confidential**.**

Part- 1
General Information

1. Name:
2. Sex :   a)   Male   (   )   b)   Female (   )
3. Age: (In Years)

25-35	36-45	46-55	56-65	66 and Above

4. Educational qualification

Graduation	Post Graduation	Technical Courses (BE, Diploma)	Others (Please Specify)

5. Monthly Income

25000- 35000	35001- 45000	45001 - 55000	55001 and 65000	65001 and 75000	75001 and 85000	85001 and above

6. Marital Status

Single	Married

7. Family Structure

Nuclear Family	Joint family

8. Social Background

Rural	Semi-Urban	Urban

9. What is the nature of business of your organization?

Type of Industry	Yes	No
IT Services		
BPO		
KPO		

10. What is your designation in your organization? Please Specify?

Designation in Top Level	Yes

11. How long are you associated with your organization?

Duration	Yes	No
Below 5 Years		
6 to 10 Year		
11 to 15 Year		
16 Year-20 Year		
More than 21 Year		

Part- 2
Specific Information

12. Type of Competency Model used in your organization.

Competency Model	Yes	No
Individualistic Model		
Organization Model		
HR System Model		
Intellectual Capital Model		

13. What is the purpose of Competency Mapping in your Organization?

Purpose	Very Large Extent	Large Extent	Not at All	Little Extent	Very Little Extent
Analyzing the Gap					
Clarity in Role					
Assortment of responsibility					
Identifying the potential, plan of growth					
Succession forecasting					
Re-organization					
Competencies list for forecasted needs					
Any other (Please Specify)					

14. Objectives of Competencies mapping in your organization.

Objectives	Yes	No
Enhancing Organizations Competitive position		
Right people in the right job internally		
Improved recruitment and selection process		
Reduced cost and time		
Overall organizational performance by capturing market share		
Any other (Please Specify)		

15. Which are the core competencies considered as important by your organization while mapping your employees?

Competencies	Extremely Important	Important	Moderately Important	Not Important	Not at all Important
Functional Expertise					
Personal Effectiveness					
Innovation					
Team Effectiveness					
Physical ability					
Technical Knowledge					
Self-Development					
Communication					
Knowledge and Aptitude					
Leadership Skills					
Managerial Ability					
Supervision					

Maintenance Skills				
Commitment				
Time Management				
Openness to receive criticisms and comments				
Personality Traits				

16. What are the professional competencies considered by you as important to employees?

Professional Competencies	Extremely Important	Important	Moderately Important	Not Important	Not at all Important
Technical or Functional Competencies					
Functional Expertise					
Adoption of Technological change					
Knowledge about software					
Skills to handle back office /front office jobs					
Attitude and skills related to implement technology					
Managerial Competencies					
Knowledge to plan the major activities of business					
Knowledge to mobilize the resources					

Expertise knowledge in organizing resources					
Skills to handle resources					
Proper utilization of available resources					
Human or Behavioral Competencies					
Self-Motivated					
Motivating other employees					
Developing skills and knowledge through proper training					
Interpersonal skills					
Keeping peaceful environment at the workplace					
Handling grievances with proper channel					
Problem solving					
Achievement oriented					
Ability to take risk					
Capability to work in a team					
Conceptual Competencies					
Visualizing in invisible					
Thinking at abstract level					

Future oriented					
Execution of long-term strategies					
Goal oriented					
Utilizing knowledge and skills to plan for future					
Basic conceptual knowledge about the job responsibility					

17 Technical Competency considered at the time of various functions of HRM. Please give your opinion.

Technical Competency	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Functional Expertise					
Adoption of Technological change					
Knowledge about software					
Skills to handle back office /front office jobs					
Attitude and skills related to implement technology					

18. Managerial Competency considered at the time of various functions of HRM. Please give your opinion.

Managerial Competency	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Knowledge to plan the major activities of business					
Knowledge to mobilize the resources					
Expertise knowledge in organizing resources					
Skills to handle resources					
Proper utilization of available resources					

19. Human or Behavioral Competencies considered at the time of various functions of HRM. Please give your opinion.

Human or Behavioral Competencies	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Self-Motivated					
Motivating other employees					
Developing skills and					

knowledge through proper training				
Interpersonal skills				
Keeping peaceful environment at the workplace				
Handling grievances with proper channel				
Problem solving				
Achievement oriented				
Ability to take risk				
Capability to work in a team				

20. Conceptual Competencies considered at the time of various functions of HRM. Please give your opinion.

Conceptual Competencies	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Visualizing in invisible					
Thinking at abstract level					
Future oriented					
Execution of long- term strategies					

Goal oriented					
Utilizing knowledge and skills to plan for future					
Basic conceptual knowledge about the job responsibility					

21. What are the initiatives taken by the organization to develop the competencies? Give Correct Rating to the following issues regarding this?

Initiatives Taken	Very Large Extent	Large Extent	Not at All	Little Extent	Very Little Extent
Training based on requirement					
Training provided by the Experts					
Proper Performance appraisal and management is done					
Compensation and benefits are provided based on ability and achievements					
Motivations done by the authorities through Mentoring					
Autonomy to take major decision based on the responsibilities assigned					
Grievances are solved through proper channel and within prescribed time					

22. Give Ranking to the following issues regarding value addition through Competency mapping to the organization.

Competencies	Rank
Increase in competency levels and improved working conditions	
Determining competencies for the job that an employee aspires for.	
Utilization of capacity to reach organizations Mission, Vision and Objectives	
More opportunities in the form of new positions and available promotions with the growth of the organizations.	
Helps to have Clarity of skills, knowledge required to meet the established standards.	
Helps in full capacity utilization to achieve desired target	
Knowledge about where the employees meet required qualifications, thus not wasting time in unnecessary developmental activities.	
Helpful to identify the SWOT of the employees thereby the organization	
Helps to develop required competencies of the employees and organization too	
Provides an opportunity for career growth in the organization	

23. According to you what is the need and importance of competency mapping for employees. Give correct rating to the following statements.

Needs and Importance	Strongly Agree	Agree	Neutral	Disagreed	Strongly Disagree
Helps to gain a clearer sense of true marketability in today's job market					
It helps to acquire the key positions of interest of the employee					
It acts as a cutting edge and well-prepared candidate					
It helps to investigate those in demand, and map their own competencies prior to interviewing					

	Strongly Agree	Agree	Neutral	Disagreed	Strongly Disagree
Helps in demonstrating self-confidence that comes from knowing one's competitive advantages more convincingly,					
It Aid in securing essential input to resume development					
Gains advanced preparation for interviews,					
Helps in developing the capability to compare one's actual competencies to an organization or positions required/preferred competencies, in order to create, an Individual Development Plan.					
It Aids in sustaining the transformation of the HR function					

24. What are the initiatives taken by the organization to retain the employees? Please give correct rating to the following issues regarding this?

Initiatives Taken	Strongly Agree	Agree	Neutral	Disagreed	Strongly Disagree
Employees are made to enter into contract					
Provided training to develop core competencies					
Training helps employees to work better and show maximum efficiency					
Mentoring initiatives taken by the organization helps to have a career path					
Grievance settlement procedure makes employees to have better environment					
Facilities provided by the organization					

makes employees to become loyal					
Performance management and benefits provided by the organization makes the employees engaged towards the organization					

25. What are the challenges faced by the organization while Competency Mapping?

Challenges Faced	Strongly Agree	Agree	Neutral	Disagreed	Strongly Disagree
Highly expertise knowledge is required to Map the competencies					
It is too expensive					
Lack of awareness about the competency mapping by the employees					
Some issues in mapping are not so effective from the point of view of the organization					
It is not possible to measure the performance of the employees in all the time					
It is not feasible to take major decisions only by considering the competency mapping					
If any others (please specify)					

26. Please Give suggestions or discuss any other issues regarding competency mapping in your organization.

_____

_____

Thank You for your precious time spent in filling this questionnaire.

Mr.Mithoji.S

(Research Scholar)

QUESTIONNAIRE FOR EMPLOYEES

I, **Mithoji.S,** Research scholar Department of Post Graduate Studies and Research in Commerce, Jnanasahyadri, Kuvempu University, Shankaraghatta, have Undertaken a research   Study for the Doctoral Degree on **"Competency Mapping in Information Technology Sector- An Empirical Study",** under the   guidance of Dr. H. Shobharani, Associate Professor, Department of Post Graduate Studies and Research in Commerce, Post Graduate Centre, Kadur, Chikkamagalure dist, Karnataka, India**.** Therefore, I request you to spend a few minutes with me for providing required information. The information provided by you will be used for only academic purpose and will be kept confidential**.**

Part- 1
General Information

1. Name:

2. Sex: a) Male   (   )   b)   Female (   )

3. Age: (In Years)

21-30	31-40	41-50	51-60	61 and above

4. Educational qualification

SSLC	P.U.C	Graduation	Post Graduation	Other Technical Courses (Please specify)

5. Monthly Income

10000	10001-20000	20001-30000	30001-40000	35001 and above

6. Marital Status

Single	Married

7. Family Structure

Nuclear Family	Joint family

8. Social Background

Rural	Semi-Urban	Urban

9. Which type of the IT Company you are working for

Type of the Company	Yes	No
IT Services		
BPO		
KPO		

10. What is the category of employment you are into?

Designation	Yes	No
Middle Level		
Lower level		

11. How long are you associated with your organization?

Duration	Yes	No
Less than 1 year		
More than 1 less than 5		
6-10		
11-15		
More than 15 Years		

PART- 2
SPECIFIC INFORMATION

12. In which functional area of HR the competency mapping is done by your organization?

HR Functional Area	Yes	No
HRP		
Recruitment and Selection		
Training and Development		
Compensation and Benefits		
Performance Management		
Motivation, Satisfaction and Retention		

13. What is the importance of following objectives of competency mapping in your organization?

Objectives	Very Important	Important	Moderately Important	Not Important	Not at all Important
Increase in Competency levels and improved working conditions					
Determine competencies for job than an employee aspires for					
More opportunities in the form of new positions and available promotions with the growth of the organizations					
Clarity of skills, knowledge required to meet the established standards					
Knowledge about where the employees meet required qualifications thus not wasting time in unnecessary developmental activities					

14. Which are the competencies considered as important while recruiting employees for the organization?

Competencies	Very Important	Important	Moderately Important	Not important	Not at all Important
Qualification					
Technical knowledge/Skills					
Communication skills					
Leadership qualities					
Problem solving skills					
Team building					
Interpersonal skills					
Decision making skills					

15. Which are the competencies considered as important while Training and development employees for the organization?

Competencies	Very Important	Important	Moderately Important	Not important	Not at all Important
Revising the skill sets					
Technical skills/Knowledge					
Interpersonal skills					
Behaviours at the work place					
Communication					
Interpersonal skills					

16. Which are the qualities considered as important while Compensation and Benefits employees for the organization?

Competencies	Very Important	Important	Moderately Important	Not important	Not at all Important
Experience					
Skill Sets					
Job knowledge					
Job position					
Results of appraisal					
Achievement/Target					

17. Which are the qualities considered as important while Performance Management of employees for the organization?

Competencies	Very Important	Important	Moderately Important	Not important	Not at all Important
Creative Thinking					
Technical capabilities					
Computer literacy					
Data management					
Equipment and program knowledge					
Policies and planning					

18. Which are the qualities considered as important while Motivation, Satisfaction and Retention of employees for the organization?

Competencies	Very Important	Important	Moderately Important	Not important	Not at all Important
Resourcefulness					
Trustworthiness					
Stress reduction					

Moral Principles and Ethical Standards					
Planning and Organization					
Business Acumen					

19. According to you what is the need and importance of competency mapping for employees. Give correct rating to the following statements?

Needs and Importance	Strongly Agree	Agree	Neutral	Disagreed	Strongly Disagree
Helps to gain a clearer sense of true marketability in today's job market					
It helps to acquire the key positions of interest of the employee					
It acts as a cutting edge and well-prepared candidate					
It helps to investigate those in demand, and map their own competencies prior to interviewing					
Helps in demonstrating self-confidence that comes from knowing one's competitive advantages more convincingly,					
It Aid in securing essential input to resume development					
Gains advanced preparation for interviews,					
Helps in developing the capability to compare one's actual competencies to an organization or positions required/preferred competencies, in order to create, an Individual Development Plan.					
It Aids in sustaining the transformation of the HR function					

20. Give Ranking to the following issues regarding value addition through Competency mapping to the employees.

Competencies	Rank
Increase in competency levels and improved working conditions	
Determining competencies for the job that an employee aspires for.	
Utilization of capacity to reach organizations Mission, Vision and Objectives	
More opportunities in the form of new positions and available promotions with the growth of the organizations.	
Clarity of skills, knowledge required to meet the established standards.	
Helps in full capacity utilization to achieve desired target	
Knowledge about where the employees meet required qualifications, thus not wasting time in unnecessary developmental activities.	
Helpful to identify the SWOT	
Helps to develop required competencies	
Provides an opportunity for career growth	

21. Competencies considered by your organization while mapping (Give Correct Rating to the following issues 1-Strongly Agree, 2-Agree, 3-Neutral, 4-Disagree, 5-Strongly Disagree).

Competencies considered while mapping in you organization	1	2	3	4	5
A. Technical Skills					
Competency to work with present skills and knowledge.					
Knowledge on Computer engineering elements like software, their implementation, and their testing procedures.					
Knowledge about different processes and various protocols in the area of work and importance					
follow the departmental / work level the various procedures, work instruction given Knowledge on Quality Control tools & techniques					
Constant up gradation of knowledge on software, with training and developments programs.					
B. Job Oriented Skills					
Knowledge on cost control activities.					
Knowledge about company policies, vision, mission, objectives & core values.					

Ability to plan & distribute the work.					
Ability to analyse and solve the problems during designing, Implementation, testing, & to take corrective & preventive actions during the process.					
Ability to tackle sudden critical problems in the software or the clients' requirements.					
Ability to implement time management philosophy in complying with work as per the needs of the company /manager.					
Excited about the job and look forward for new assignments.					
Provide training to peers in the work place about the work procedures and newer methods of doing a work.					
Technical knowledge leading to productivity					
Ability to adapt to the Change Management at various places of work and with people.					
C - Communication Skills					
Good Listening abilities.					
Understanding instructions/responses from Team Members & Superiors.					
Ability to explain the suggestions/activities/queries/problems effectively.					
Writing skills (Written communication to peer group/subordinates/superiors)					
Sharing the needed information with the people concerned.					
D - Team Work					
Coordinate & cooperate with team members to achieve the team objectives.					
Coordinate with other teams.					
Disciplined & self-motivated					
E - Personal Qualities					
Delegate the activities to team members & monitoring the progress.					
Learn from the mistakes & improve the management aspects.					
Maintain good relation with peers, subordinates & superiors.					
Adhere to the management directions & making others to understand them.					
Positive body language.					
Creative & innovative with idea generation					
Continuously learn from superiors/subordinates.					
Maintain Politeness during conversation.					
Facilitate & develop creative & innovative work culture.					
Upgrade personal intellectual skills for the development of the work/organization.					
Ability to deal with the cross-cultural adjustments with subordinates / peers / superiors.					

22. Which are the Core competencies (Organizational Awareness) considered by the organization during various functions of HRM?

Organizational Awareness	Awareness about Organization				
	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Awareness about Organizations Mission and Vision					
Awareness of Organization's Policies, Rules and Regulations					
Aware of the facilities provided by the organization					
About career growth					
Awareness about the job and responsibilities to be preformed					

23. Which are the Core competencies (Interpersonal skills) considered by the organization during various functions of HRM?

Interpersonal Skills	Interpersonal Skills				
	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Influencing Skills					
Stress Tolerance					
relationship with higher authority					
Relationship with the co-workers					
Leadership and Coordination					
Presentation skills					
Risk taking					

24. Which are the Core competencies (Spirit of Team Work) considered by the organization during various functions of HRM?

Team Work	Spirit of Team Work				
	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Active participation as a team member in completion of goals					
Proper Planning and execution of plan					
Organizing team activities					
More focused on setting priorities, Goals, tracking, systems and timetables to achieve maximum priorities					
Motivating other members in the team to reach goals					
Leadership in the team					
Taking challenging assignments, maintaining and coaching					

25. Which are the Core competencies (Adaptability) considered by the organization during various functions of HRM?

Adaptability	Adaptability				
	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Adoption of change					
Adjustment with the environment					
Adjustment with the job responsibility					
cooperation with the senior and junior workers					
Adoption of new technology					

26. Which are the Core competencies (Communication) considered by the organization during various functions of HRM?

Communication	Communication				
	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
interpersonal communication					
Communication with the co-worker					
Communication with the higher authority					
Communication about job responsibilities					
Communication about compensation and benefits					

27. Which are the Core competencies (Initiatives) considered by the organization during various functions of HRM?

Initiatives	Initiatives				
	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Networking					
Result Oriented					
Flexibility					
Achievement orientation					
Delegation					

28. Which are the Core competencies (Professional Knowledge) considered by the organization during various functions of HRM?

Professional Knowledge	Professional Knowledge				
	Recruitment and Selection	Training and Development	Compensation and Benefits	Performance Management	Motivation, Satisfaction and Retention
Presentation Skills					
Problem Solving					
Customer Focus					
Leveraging Technology					
Analytical thinking					
Technical/Legal /Financial Knowledge					
Building Trust					

29. What are the initiatives taken by the organization to develop the competencies? Give Correct Rating to the following issues regarding this?

Initiatives Taken	Very Large Extent	Large Extent	Not at All	Little Extent	Very Little Extent
Training based on requirement					
Training provided by the Experts					
Proper Performance appraisal and management is done					
Compensation and benefits are provided based on ability and achievements					
Motivations done by the authorities through Mentoring					
Autonomy to take major decision based on the responsibilities assigned					
Grievances are solved through proper channel and within prescribed time					

30. What are the initiatives taken by the organization to retain the employees? Please give correct rating to the following issues regarding this?

Initiatives Taken	Strongly Agree	Agree	Neutral	Disagreed	Strongly Disagree
Employees are made to enter into contract					
Provided training to develop core competencies					
Training helps employees to work better and show maximum efficiency					
Mentoring initiatives taken by the organization helps to have a career path					
Grievance settlement procedure makes employees to have better environment					
Facilities provided by the organization makes employees to become loyal					
Performance management and benefits provided by the organization makes the employees engaged towards the organization					

31. Please Give suggestions or discuss any other issues regarding competency mapping in your organization

_____

_____

Thank You for your precious time spent in filling this questionnaire.

Mr.Mithoji.S

(Research Scholar)

COMPETENCY MAPPING IN INFORMATION TECHNOLOGY SECTOR – AN EMPIRICAL STUDY

Thesis Submitted to the Kuvempu University for the award of Degree of

DOCTOR OF PHILOSOPHY
IN
COMMERCE

BY

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January - 2023

CHAPTER-6

SUMMARY OF MAJOR FINDINGS, SUGGESSIONS AND CONCLUSION

6.1 INTRODUCTION

This chapter outlines the major findings of the study. Further the chapter includes the major findings from the Top and middle level manager's perspective, low level employee's perspective and findings from testing of hypothesis as well. Suggestions are also given based on the problems identified from the analysis of the opinion given by both the TOP Middle and Low-level employees in all the three segments of the IT sector.

6.2 FINDINGS BASED ON TOP AND MIDDLE LEVEL EMPLOYEES' RESPONSE

- ✓ Majority of the Employees at IT services (68%), BPO (59%) and KPO (66%) are Male at top and middle level management. This is because in the study area the availability of the respondents for the data collection is male.

- ✓ It is found from the study that in IT services, the majority (49%) of the employees lie in the age group of 25-35, this indicates that the existence of very young employers in the IT services. The majority (57% & 48%) of the employers in BPO and KPO lie in the age group of 36-45; this indicates that the both BPO and KPO sectors have the young people in the Top and Middle level management.

- ✓ Majority of the employees in IT services (43%), BPO (46%) and KPO (47%) are post graduates, this proves that qualification is one of the importance competencies considered by the organization for in the higher positions in the IT industry

- ✓ Majority of the employers in the IT service (75%), BPO (72%) and KPO (95%) are belonging to the nuclear family, and this indicates the changing life style of the people.

- ✓ Majority of employers in IT service (46%), BPO (51%) and KPO sector (60%) belong from semi-urban locality and urban very less from the rural area. This shows that people from semi-urban are migrated to the urban area to earn livelihood.

- ✓ It is identified that the Top and Middle level employees at IT service (38%), BPO (41%) and KPO (38%) are associated with the job for11-15 years and more than

that as per the majority. This shows that the employees wish to go for higher level jobs in the company need to have experience in addition to the qualification.

✓ Based on the majority opinion of Top and middle level employees it is identified that the type of competency mapping model used in IT services (58 %& 58%) and KPO is HR systems model, in BPO Organization model is used and in KPO Intellectual model is also used as per the majority opinion (60%). The differentiation in using the competency models in the organizations is because of the difference in the nature of job operations in these three sectors.

✓ It is identified that the intention behind using competency model have some objectives that are, Analyzing the Gap, Clarity in Role, Assortment of responsibility, Identifying the potential plan of growth, Succession forecasting, Re-organization, Competencies list for forecasted needs and other. Based on the mean score (1.67), In IT services the major purpose for competency mapping is Assortment of responsibility and other, because the IT sector focus on grouping the responsibility which is need to be integrate to make a job so that it is essential to have competency mapping. In BPO sector are identifying the potential plan of action, succession forecasting and other as per the mean score (1.84). In KPO the purpose behind competency mapping is Assortment of responsibility and other as per the maximum mean score (1.83).

✓ It is found from the opinion given by the top and middle level employees, the major objective behind competency mapping in IT services is overall organizational performance by capturing market share as per the maximum frequency (55%). As per the maximum frequency (55%) in BPO objective behind competency mapping is improvement in recruitment & selection process and overall organizational performance by capturing market share. The major objective of competency mapping in KPO is to improve the recruitment and selection process based on the maximum frequency (56%).

✓ There are various competencies considered at top and middle level employees in IT services, BPO and KPO, they are functional expertise, personal effectiveness, innovation, team effectiveness, technical knowledge, self-development, communication, knowledge and aptitude, leadership skills, managerial ability, supervision, maintenance skills, commitment, time management, openness to receive criticism and comments, and personality traits. The major competencies considered for mapping the employees in IT services are Knowledge and Aptitude,

Managerial ability, Maintenance skills as per he Mean score (1.55). The most considered competencies in BPO for mapping employees at top and middle level are communication and personality traits as per the Mean score (1.55 & 1.57). At KPO the competencies considered are Innovation, Physical ability, and Communication as per the Mean score (1.55). This is because the companies at three different segments of IT sector are followed different competency model.

✓ It is identified that at the time of Recruitment and selection the functional expertise is considered as an important technical competency by all the three segments of IT sector as per the frequency (51%, 54% & 53%). At the same time the functional expertise in technical competency is least preferred for the Training and development in IT services, BPO and KPO (49%, 46% & 47%). It is found that the 'Adoption of technological changes' is largest (53%, 53% & 54%) preferred competency at the time of Recruitment and selection and less (6%, 4% & 8%) preferred at the time of compensation benefits in IT services, BPO and KPO. It is observed that 'Knowledge about software' is prefer at the maximum extent (52%, 53% & 53%) for the purpose of Recruitment and selection in IT services, BPO and KPO, and it is less (1%,5% & 0%) preferred for the performance of compensation and benefits. It also identified that 'Skills to handle back office' are highest (53%, 53% & 54%) preferred technical competency for Recruitment and selection, and less (6%, 4% & 8%) preferred for Compensation benefits in IT service, BPO and KPO. It is found that 'Attitude and skills related to implement technology' is highest (52%, 53% & 53%) considered for Recruitment and selection function and less (1%, 5%& 0%) considered for Compensation benefits in IT services and BPO, whereas in all the three segments of IT sector none of the technical competency has preferred for the Performance management, Motivation satisfaction and retention of the employees at Top and Middle level management.

✓ With respect to the managerial competency, 'Knowledge to plan the major activities of businesses is highest (53%, 52% & 52%) preferred competency for performance of Recruitment and selection in all three IT sector, and considered less (6%) for compensation benefits in IT sector. It is found that 'Knowledge to mobilize the resources' is majorly (51%, 52% & 55%) preferred for Recruitment and selection and less (49%, 48% & 06%) preferred for Training and development in IT services and BPO and KPO. But this competency is not preferred for compensation and benefits. It is also found that 'The skills to handle resources' is

the major (51%, 52% & 56%) managerial competency for Recruitment and selection in IT services, BPO and KPO, and less (49% & 48%) considered for Training and development in IT services and BPO, as well as less (6%) considered in the KPO for Compensation benefits. But in KPO it is considered while Recruitment and selection but less considered for compensation and benefits. Even it is observed that 'The skills of Proper utilization of available resources' are highest (54%, 55% & 52%) preferred for Recruitment and selection and less (7%, 9% & 2%) preferred for the Compensation benefits in IT service, BPO and KPO.

✓ It is found that in Behavioral competencies, 'Self-motivation in completion of active goals' is most (51%, 52% & 56%) considered for Recruitment and selection in all the three sectors, and less (49% & 48%) considered for Training and development in IT sector and BPO and less (6%) considered compensation and benefits in KPO. It is found that 'motivating other employees' is highest (53%, 54% & 51%) preferred at the time of Recruitment and selection, and less (6%, 4% & 2%) considered for compensation benefits in IT services, BPO and KPO. It is found that Developing skills and knowledge through proper training' is highest (50%, 54% & 52%) considered for the Recruitment and selection in all the three sectors, less (6%) considered for compensation benefits at KPO. It is also found that Interpersonal skills are highest (54%, 53% & 52%) considered at the time of Recruitment and selection, less (6%, 9% & 5%) considered at the time of compensation benefits in IT services, BPO and KPO. The quality of keeping peaceful environment at the workplace' is another important behavioral competency at the time of Recruitment and selection by all the three segments of IT industry as per the maximum frequency (50%, 54% & 52%), and less (46%) considered for the Training and development in BPO, but very less (4%) considered for compensation and benefits at KPO. It is identified that the quality of handling grievances with proper channel' is the highest (54%, 53% & 52%) considered competency for Recruitment and selection, less (6%, 9% & 5%) considered for compensation benefits in IT services, BPO and KPO. It is found that Problem solving competency is the highest (54%) considered competency at the time of Recruitment and selection in BPO and equally (50% & 50%) considered for the Recruitment and selection and training and development in IT services and KPO. It is identified that Achievement oriented skills of Top and middle level employees are highest (54%, 53% & 53%) considered for the Recruitment and

selection, less (6%, 9% & 8%) considered for compensation benefits in IT services, BPO and KPO. It is found that, ability to take highest risk' is the most (54%) considered competency of employees for Recruitment and selection in IT BPO and equally (50% & 50%) preferred for the Recruitment and selection and Training and development in IT sector and KPO. It is found that, the capacity to work in a team' is most (54%, 53% & 53%) considered for Recruitment and selection, less (6%, 9% & 8%) considered for compensation benefits in IT Industry.

✓ It is found that, with respect to the conceptual skills of the employees at Top and Middle level employees, 'Visualizing invisible' is the important competency at the time of Recruitment and selection as per the maximum frequency (54) in BPO, and equally considered for the Recruitment and selection and Training and development in IT sector and KPO, less (46) considered for training and development in KPO. It is identified that, thinking at abstract level' is highly (51%, 52% & 51%) considered for Recruitment and selection and less considered for Training and development in all three segments of the study area. In IT services, BPO and KPO, 'Future oriented competency' among the employees at top and middle level management is preferred mostly (54%, 53% & 53%) for Recruitment and selection, less (7%, 8% & 8%) considered for compensation and benefits. It is observed that, the skills of 'execution of long-term strategies and responsibility' are prominently considered at the time of Recruitment and selection as per the maximum frequency (51%, 52% & 51%), less considered for Training and development in IT service, BPO and KPO. 'Goal oriented skills' are considered very much (54%, 53% & 53%) as an important competency at the time of Recruitment and selection, less (7%, 8% & 8%) considered for compensation and benefits in all the three sectors. It is found that, utilizing knowledge and skills to plan for future' is an important skill considered at the time of Recruitment and selection as per the maximum frequency (51%, 52% & 51%), less considered for the Training and development in all the three segments of IT industry. It is found that 'Knowledge about the job responsibility' is the highest (51%, 52% & 52%) preferred choice of organization for Recruitment and selection, less considered for Training and development in three segments.

✓ It is identified that in BPO; Grievances are solved through proper channel and within prescribed time and it is a better technique adopted at the top and middle level management to motivate and develop the required competency as per the

maximum frequency (62%). In KPO Proper performance appraisal is done for the purpose of development of competencies as per the maximum frequency (62%.).

✓ On the basis of the mean score (2.18) in IT services, the Competency mapping is very important because it helps in demonstrating self confidence that comes from knowing one's competitive advantages more convincingly and it also helps in developing the capability to compare one's actual competencies. As per the mean score (1.57) In BPO competency mapping is very essential because it acts as a cutting edge and well-prepared candidates, it aids in securing essential input to resume development and it helps in developing the capability to compare one's actual competencies to an organization or positions required. As per the mean score (1.57) In KPO the competency mapping is very important because it helps to gain a clearer sense of true marketability in today's job market, and it helps in developing the capability to compare one's actual competencies to the organization or positions required, and it aids in sustaining the transformation of the HR function.

✓ It is identified from the study that Mentoring is the initiatives taken to retain the employees, Training provided to develop core competencies, and the Grievance settlement procedure to provide better environment to the employees are major initiatives to retain employees. As per the maximum score (60% & 60%) Training and Grievance Settlement procedure are most considered factors for retaining the employees in KPO, because Training helps employees to work better and show maximum efficiency, and Grievance settlement procedure makes employees to become loyal.

✓ On the basis of the majority response (56%, 56% & 56%) In IT services the major challenges faced while competency mapping are high cost and mapping only cannot be considered while taking major decisions in management. As per the maximum response (60%) In BPO the major challenges faces are lack of awareness about the competency mapping by the employees, and not possible to measure the performance of the employees in all the time is the major challenges faced. The major challenges faced by the KPO while mapping the competency are lack of awareness about the competency mapping by the employees, and not possible to measure the employees' performance with the help of competencies and other challenges as per the maximum response (61%, 61% & 61%).

6.3 FINDINGS FROM HYPOTHESIS TESTING: (TOP AND MIDDLE LEVEL EMPLOYEES)

- ✓ It is found from the study that there is a significant impact of technical competencies on organization culture ($p<0.05$) at Top and Middle level employees in IT sector. Because to perform the responsibilities assigned to them, they need to be sound in technical competency (Table value 37.652 at 5% significance level)

- ✓ It is clear from the study that there is an impact of Managerial Competencies on organizational culture ($p<0.05$). This is because the managerial competencies like leadership qualities, team building are going to affect the next level employees in the organization. (Table value 43.773)

- ✓ It is proved from the study that there is an impact of Behavioural competency on organization Culture ($p<0.05$). Because the behaviour of the employees in all the levels are going to reflect on the organization culture. (Table value 79.490 at 5% significance level)

- ✓ The study identifies that there is an impact of conceptual competency on organization culture at top and middle level. Because conceptual competency is very base for the employees to perform assigned job to them. (Table value 49.802)

- ✓ It is studied that there is a difference in technical competency required by IT services, BPO and KPO ($p>0.05$) For all the remaining competencies there is no difference exists between the strata. This is because of the nature of work.

6.4 FINDINGS BASED ON LOW LEVEL EMPLOYEES' RESPONSE

- ✓ It is found from the study that majority of the employees at IT services (48%) and BPO (40.5%) are male and in KPO both male and female (50%) are equal in numbers, this may because the IT industry is an opportunity to both male and female because of its nature of work and facilities given by the IT companies.

- ✓ When it comes to the age group in all the three segments majority of the respondents belongs to the age group of 31-40 (47%) and next majority is 41-50 (23.8%) and 21-30 (26.3%) and very least employees belong to the age group of above 50 this shows that the retention rate is very less in IT sector. The employees are working till 50, this may be because of the nature of work and work stress.

✓ It is found from the study that majority (47.5%) of the employees in IT services are post graduates. This is because the nature of the work at the company is suitable to post graduates. Majority (41.5% and 40%) of the employees in BPO sector are qualified in other technical courses and post graduates, this is because of nature of work and preferences of the company. Majority (43%) of the employees in the KPO sector are graduated in other technical courses, this indicates that the in KPO the organizations are preferred the employees who are technically sound.

✓ The majority (46%) of the employees in the IT services belong to the monthly income between 30001-40000. Majority (42.5%) of the employees in BPO sector belong to the income group of above 40000. Majority (49.5%) of the people in KPO sector are above 40000 income group. This is because in all the three segments the employees are paid based on the designations, responsibilities assigned and experience.

✓ Majority (57%) of the employees in the IT services are married. Majority (52%) of the employees in BPO sector are unmarried. And the majority (52.5%) of the employees in KPO sector are unmarried.

✓ Majority of the people in IT services (59%), BPO (58%) and KPO sector (60%) belongs to the nuclear family. This indicates the changing life style of the people.

✓ It is noticed from the study that majority of the employees in IT services (47%), BPO (50.5%) and KPO (45.5%) are from semi-urban area. Very fewer employees are from urban area. Very few of the employees are from urban and rural areas this is because the people work at urban area but they belong to semi-urban. At the same time people get job opportunities in semi-urban and urban area.

✓ Majority of the employees in IT (41.5%), BPO (49.5%) and KPO services (50.5%) are associated between 5-10 years with the same organization. Very few of the employees in IT service (1.5%) are associated from 15-20 years. Very less percentage employees in BPO (4.5%) are associated from 1-5 years, in KPO (18.5%) very few of the employees are associated for 10-15 years. This shows that in all the three segments the employee turnover rate is very high because of huge opportunities and facilities employees shift from one company to another company.

✓ It is found from the study that majority of the employees say that in all the three segments the Competency mapping models are used for HRP, Recruitment and

Selection, Training and development The Competency mapping model is applied in the compensation and benefits and Performance Management.

✓ Based on the responses of employees at low level it is clear that in IT services the competency mapping is very important for increasing in employee competency levels and to improve working conditions as per the men score (1.89). But competency mapping is fewer important to determine the competencies for job than an employee aspiration. As per mean score (1.89), in BPO sector competency mapping is very important to have knowledge about where the employees meet required qualification by not wasting time in unnecessary developmental activities. But fewer important to increase the competency levels and to improve working conditions. Based on the mean score (2.14) in KPO sector the competency mapping is very important to have an understanding about where the employees meet required qualifications by not wasting time in unnecessary developmental activities. But in KPO sector the competency mapping is less important to increase competency levels and to improve the working conditions.

✓ It is identified from the study that the major objective behind the competency mapping is Increase in competency levels and improved working conditions of the employees and determining the job competencies to perform the given job by the employees, in all the three segments of the study area. Further unnecessary development activities are considered as waste and that is why they are implementing competency mapping. It is identified from the study that the employees at the low level have less clarity about the skills and knowledge required to meet the company established standards in terms of competency mapping.

✓ It is identified that in all the three segments qualification (mean value 1.60, 1.60 &1.60), technical skills (mean value1.84, 1.81&1.81), communication skills (mean value 2.00, 1.97 & 1.97), leadership qualities (mean value1.59, 1.60 &1.60), problem solving skills (mean value 1.60,1.60 & 1.60), team building skills (mean value 1.84,1.81 &1.81), interpersonal skills (mean value 2.00, 1.97 &1.97), decision making skills (mean value 2.13, 2.16 & 2.14), behavior at the work place etc. are considered as most important skills at the time of recruitment and selection, performance management, training and development.

✓ It is identified from the study that in all the three segments of the study area experience (mean value 2.21, 2.24 & 1.77), skill sets(mean value 1.54, 1.68 & 2.11), job knowledge(mean value1.79, 1.92 &1.75), job position(mean value2.16,

2.09 & 2.15), results of appraisal and achievement/targets and computer literacy are the major qualities considered at the time of employee's compensation.

✓ On the basis of mean score, it was identified that in IT services and KPO equipment knowledge (2.25), policy planning (1.70), are considered as an important competency, in BPO creative thinking (1.47), equipment knowledge (2.25), Data management (1.61), policies and planning (1.70), technical competency (1.51), is highest considered at the time of performance management.

✓ It is found from the mean score that in IT services and BPO Moral principles and ethical standards among the employees (2.13) are highly considered to motivate the employees. As per the mean score Resourcefulness (2.13), planning and organizing and stress reduction techniques (1.53 & 1.61) used by the employees are considered at the time of motivation and retention of the employees at KPO.

✓ On the basis of the mean score (1.48 & 1.49) in IT services and BPO the need and importance of competency mapping is gained a clearer sense of true marketability in today's job market. And it is also helpful to identify the key positions of employees and it act as a cutting edge and well-prepared candidate. It is found as per the mean score (2.20) that the Competency mapping is very helpful to investigate and map the employee competencies prior to interviewing in BPO than IT Services and KPO. It is studied that the competency mapping is highly considered in IT services than BPO and KPO as it aids in sustaining the transformation of the HR functions.

✓ It is identified that with respect to the core competency considered for HRM functions, the mission and vision is highest considered in IT services for recruitment and selection as per the majority of respondents (53%). In fact, the recruitment and selection, training and development function can be done by keeping mission and vision of organization in mind. It is found that the Mission and vision is majority considered in IT services, BPO and KPO for the performance of recruitment and selection (53%, 50% and 48%) as well as Training and development (47%,45% and 42%) than any other function of the organizations. Majority of respondents (51%, 52.5% & 55%) said that, while performing the HRM functions Policies, rules and regulations are considered as equally important in all the three sectors. Organizational facilities are also majorly considered for Recruitment and selection in KPO sector (110) than IT services (106) and BPO sector (106), again the organizational facilities majorly considered for the Training

and development function of the IT services and BPO. It is identified that Career growth competency has received major preference from the KPO sector (110) than the BPO (106) and IT services (106) for Recruitment and selection function. And again, career growth is almost highly considered for Training and development function of IT services and BPO. It is also found that Mission and vision, Policies rules and regulation, facilities, career growth and Job responsibility are less considered in IT services, BPO and KPO sector for the Training and development, motivation, satisfaction and Compensation benefits.

✓ It is identified that with respect to the interpersonal skills considered for the performance of HRM functions, the influencing skills, stress tolerance, relationship with higher authority, Relationship with co-workers, leadership and coordination, presentation skills, and risk-taking skills were identified.

✓ With respect to the above in IT services, influential skills are highest considered for the Recruitment and selection (102 respondents) (51%) and less considered for Compensation and benefits (16 respondents) (8%). In BPO sector influential skills highly (105respondents) (52.25%) considered for the performance of Training and development and less (44 respondents) (22%) considered for the performance of Compensation benefits. In KPO sector the influential skills are highest (117 respondents) (58.5%) considered for the performance of the Training and development and less (19 respondents) (9.5%) considered for the performance of the Recruitment and selection. It is also found that with regard to the stress tolerance, the IT sector (116 respondents) (58%) and BPO sector (103 respondents) (51.5%) highly considered for the training and development, and less considered for the Recruitment and selection in IT services (21 respondents) (10.5%) and less considered for performance management in BPO sector (4 respondents) (2%). In KPO sector the stress tolerance skills are highest (98 respondents) (49%) considered for Recruitment and selection and less (6 respondents) (3%) considered for performance management. It is observed that with related to the employee Relationship with higher authority, it is highly considered in IT services (94 respondents), BPO (100 respondents) and KPO sector (106 respondents) for performance of Training and development and less considered for performance management in IT services (7 respondents) and BPO sector (1 respondent), and it is less (44 respondents) considered for Recruitment and selection in KPO sector. It is found that with respect to the employee relationship with co-workers, in IT

services (99 respondents) and BPO sector (97 respondents) it is highly preferring for the performance of Training and development. In IT services the employee relationship with co-workers is less (47 respondents) considered for the performance of Recruitment and selection, and in BPO it is less (22 respondents) considered for the performance of the compensation and benefits. In KPO sector the employee relationship with co-workers is highly (103 respondents) considered for Recruitment and selection, and less (97 respondents) considered for the training and development. About leadership and coordination, the IT services (104 respondents), BPO (99 respondents) and KPO sector (96 respondents) highest considered for the performance of recruitment and selection, and less considered for training and development in IT services (96 respondents), and less considered for Compensation and benefits in BPO (11 respondents) and KPO sector (20 respondents). It is found that with respect to the presentation skills highly considered for Recruitment and selection in IT services (48.5%) and less (8%) considered for compensation and benefits. The presentation skills are highest considered in the BPO (48.5%) and KPO sector (53%) for Training and development, and less considered for compensation and benefits in BPO and Recruitment and selection in KPO. It is identified that Risk taking skills are highest (49.5%) considered in IT services for Training and development and less (23.5%) considered for Recruitment and selection. Risk taking skills are highly (47%) considered in BPO for Training and development and less (13%) considered for Compensation and benefits. The Risk-taking skills are highly (54%) considered for Recruitment and Selection, less (45%) considered for Training and development in KPO sector.

✓ With respect to the spirit of team work considered for the performance of HRM functions, in IT services Active participation of team members to completion of goals actively has received the highest preference for the performance of Recruitment and selection function as per the response (108 respondents), less (92 respondents) considered for Training and development. In BPO sector Active participation is highly (102 respondents) preferred for the performance of Recruitment and selection, less (10 respondents) considered for compensation and benefits. It is found that proper planning and execution of plan is very essential in IT services, BPO and KPO sector for Recruitment and selection as per the majority response (96, 105 & 108 respondents). Proper planning and execution of plan is

less considered in IT services (19 respondents) and BPO (10 respondents) for Compensation and benefits. Proper planning and execution of plan is less considered in KPO (92 respondents) for Training and development. It is studied that organizing team activities are very much considered for Recruitment and selection in IT services (108 respondents), BPO (109 respondents) and KPO (108 respondents), and less considered for Training and development. It is found from the study that in IT services (108), BPO (109) and KPO (108) much prefers their employees need to be more focused on setting priorities and goals for performance of Recruitment and selection function and less prefers for performance of Training and development function. It is identified that in IT service (108 respondents), BPO (102 respondents) and KPO (100 respondents) believe in motivating other members in the team to reach goals while doing the Recruitment and selection, and less considered same for performance of Training and development in IT services, and less considered same in the performance of compensation and benefits function. It is observed that in IT services Leadership in the team is highly (96 respondents) considered for Recruitment and selection, and less (19 respondents) considered compensation and benefits. The BPO and KPO sector highly (98 & 117 respondents) considers the leadership in the team for the performance of Training and development and less considered for compensation benefits (44 respondents) in BPO, and Recruitment and selection (20 respondents) in KPO. It is also noticed that in IT services and BPO sector Taking challenging assignments, maintaining and coaching among employees are highly (117 respondents) preferred for Training and development and less (19 respondents) considered for Recruitment and selection in IT services, Compensation and benefits in BPO sector. Taking challenging assignments, maintaining and coaching are highest (94 respondents) considered for Recruitment and selection in KPO and less (7 respondents) considered for compensation and benefits.

✓ It is found that none of the core competency related to the spirit of team work is considered for the performance of performance management functions and, motivation, satisfaction and retention functions in IT services, BPO and KPO. It is found that Adoptability considered for the performance of HRM functions, adoption of changes to the maximum extent while performance of Recruitment and selection and less (3%) consider for performance management in IT services. In BPO and KPO sector considers much (48.5%& 50%) adoption of changes for

Training and development and less considered for Performance management (2%) in BPO and Recruitment and selection (23.5%) in KPO. It is found from the study that Adjustment with the environment is highly (52% & 49.5%) considered for the performance of Training and development in IT services and BPO and less (22%) considered for the performance of Recruitment and selection in IT services, and Compensation and benefits (13%) in BPO. In KPO sector the Adjustments with the environment for Recruitment and selection and less (48.5%) considered for the performance of Training and development. It is identified that Adjustment with the job responsibility among the employees is highly (102 respondents) prefers for the performance of Recruitment and selection, and less (98 respondents) considered for Training and development in IT services, and less (10 & 17 respondents) considers for compensation and benefits in BPO and KPO. It is noticed that Cooperation with the senior and junior workers is highly (48%) considered for the performance of Recruitment and selection and less (9.5%) considered for compensation and benefits in IT services. Cooperation with the senior and junior workers is highest (47.5% & 50%) considered for the performance of Training and development in BPO and KPO, less (2%) considered for the performance of the compensation and benefits in BPO, and less (23.5%) considered for Recruitment and selection in KPO. It is identified from the study that, Technology is highest (104, 97 & 96 respondents) preferred for the performance of Training and development functions in IT services, BPO and KPO, less (44 respondents) considered for Recruitment and selection in IT services, less (31 & 7 respondents) considered for compensation and benefits in BPO and KPO.

✓ It is clear from the study that the interpersonal communication is highest (96 respondents) considered for the performance of Recruitment and selection and less (5 respondents) considered for the performance of Performance management functions in IT services. In BPO sector interpersonal communication is highest (96 respondents) considered for the performance of Training and development, less (2 respondents) considered for the performance management. In KPO interpersonal skills are considered into the maximum extent (98 respondents) for Training and development, less (47 respondents) considered for Recruitment and selection. It is found that Communication with co-workers is highly (49% & 47%) considered to perform Training and development function in IT services and BPO less (24% & 15%) considered for compensation and benefits. Communication with co-workers

is highest (51%) considered for the performance of Recruitment and selection, less (49%) considered for Training and development in KPO. It is noticed that in IT services, BPO and KPO, Ability of Communication with the higher authority is highest (103, 103 & 97 respondents) considered for the performance of Recruitment and selection and less considered for Training and development. It is also found that in IT services, Employee communication about the job responsibilities is highly (50.5%) considered for Recruitment and selection and less (07%) considered for compensation and benefits. Employee communication about the job responsibilities is highest (46.5%) preferred for the performance of Training and development, less (16%) considered for compensation and benefits in BPO. Employee communication about the job responsibilities is highest (49%) considered for the performance of Training and development and less (23.5%) considered for Recruitment and selection in KPO. It is noticed that Communication about the compensation and benefits is highest (98 & 93 respondents) considered for Training and development, and less (38 & 30 respondents) considered for compensation and benefits in IT services and BPO. In KPO, Communication about the compensation and benefits is highest (104 respondents) considered for Recruitment and selection and less (96 respondents) considered for Training and development.

✓ It is identified from the study that, Employee initiatives considered for the performance of HRM functions, in IT services Networking skills are highly (47%) considered for the Training and development, less (0.5%) considered for performance management. Networking skills are highest (52.5% & 51%) preferred for the performance of Recruitment and selection and less (3.5% & 08%) considered for compensation and benefits in BPO and KPO. It is found from the study that Result oriented initiatives are highly (97 respondents) considered for Training and development and less (27 respondents) considered for compensation benefits in IT services. Result oriented initiatives are highly (102 & 104 respondents) considered for Recruitment and selection in BPO and KPO, less (07 & 96 respondents) considered for compensation benefits in BPO, Training and development in KPO. It is identified that, Flexibility in the employee initiatives is highest (51%, 52% & 53%) considered for the performance of Recruitment and selection function in all the three sectors and, less (2%) considered for compensation benefits in IT services, and less (47% & 47%) considered for

Training and development in BPO and KPO. It is also described that Employee initiatives for achievements are highest (95 respondents) considered for the training and development and less (19 respondents) considered for compensation and benefits in IT services. Employee initiative for achievements is the highest (106 & 104 respondents) considered for the Recruitment and selection and less (94 & 96 respondents) considered for Training and development in BPO and KPO. It is also identified that the delegation among employees is largest (97, 105 & 102 respondents) considered for Recruitment and selection and less (8, 7 & 16 respondents) considered for the compensation benefits in IT services, BPO and KPO. None of the initiative is taken into consideration for the performance of Motivation, satisfaction and retention function of HRM in IT services, BPO and KPO.

✓ With respect to the professional knowledge considered for the performance of HRM functions, in IT services presentation skills considered into the maximum extent (50%) for Recruitment and selection and less (7.5%) considered for compensation benefits. Presentation skills are highest (50.5% & 59.5%) considered for the performance of Training and development in BPO and KPO, less (18% & 10%) considered for compensation benefits in BPO, recruitment and selection in KPO. It is found that in IT services, BPO and KPO Problem solving skills are highly (105, 105 & 96 respondents) preferred for the performance of Training and development, less (45 respondents) considered for compensation benefits in IT service, and less (3 & 7 respondents) considered for performance management function of HRM in BPO and KPO. It is noticed that Customer focus among the employees is highest (100 respondents) considered for Recruitment and selection and less (4 respondents) considered for performance management in IT services. In BPO and KPO Customer focus among the employees is highest (96 & 98 respondents) considered for training and development function and less (4 respondents) considered for performance management in BPO, and less (47 respondents) consider for Recruitment and selection in KPO. It is found that the quality of leveraging technology among employees is highest (48.5% & 47%) considered for employee training and development and less (0.5% & 1%) considered for performance management functions of HRM in IT services, BPO. The quality of leveraging technology among employees is highest (46.5% & 46.5%) considered for employee Recruitment and selection, and training and

development, less (3.5% & 3.5%) considered for compensation benefits and performance management in KPO. It is identified that Analytical thinking among the employees is highest (96, 96 & 98 respondents) preferred for the performance of Training and development function in IT services, BPO and KPO. Less (3 & 5 respondents) considered in the same for the performance of performance management in IT services and BPO, and less (49 respondents) considered for Recruitment and selection in KPO. It is found that technical knowledge among the employees is highest (48.5% & 48.5%) considered for the performance of Training and development function and less (16.5% & 17%) considered for compensation and benefits in IT services, and BPO. Technical knowledge is highest (51.5%) considered for the performance of Recruitment and selection, less (48.5%) considered for Training and development in KPO. It is observed that Building trusts among employees is highest (99 respondents) considered for the Training and development, less (21 respondents) considered for compensation benefits in IT services. Building trust among the employees is highly (100 & 100 respondents) preferred for Recruitment and selection, less (6 & 14 respondents) preferred for compensation benefits in BPO and KPO.

✓ Based on the initiatives taken to develop the competencies, in IT services training based on the requirements is provided by the experts is into very largest extent on the basis of the majority response (91 respondents). In BPO services training based on the requirements is provided by the experts is into largest extent as per the majority response (96 respondents). The training based on the requirements is offered by the KPO is into very largest extent (107 respondents). It is found from the study that in all the three sectors the training is provided by the Experts is a technique used to develop the employee competency. Proper performance appraisal and management is done into very largest extent in IT services, BPO and KPO, as per the majority response (47%, 52% & 52%). It is identified that Compensation and benefits are provided based on ability and achievements are into very largest extent in IT services, BPO and KPO as per the majority response (93, 104 & 107 respondents). It is found that Employee Motivations done by the authorities through mentoring is into very largest extent in IT services, BPO and KPO as per the majority of the responses (52.5%, 53.5% & 47.5%). It is identified that Employee autonomy to take major decision based on the responsibilities assigned is considered into very largest extent in IT services as per the maximum

response (96 respondents). Employee autonomy to take major decision based on the responsibilities assigned is preferred into largest extent in BPO and KPO as per the majority response (95 & 98 respondents). It is also identified that In IT services and BPO grievances are solved into largest extent through proper channel within prescribed time as per the majority response (48.5% & 47.5%). Grievances are solved into very largest extent through proper channel and within the prescribed time in KPO as per the majority response (53%).

✓ In all the IT services, BPO and KPO agreed that the training provided to develop core competencies; it helps them to show maximum efficiency as per the maximum score (48.5 & 46 respondents). But in KPO the training provided is useful to work better and show the maximum efficiency as per the maximum score (49 respondents). It is observed that in all the three sectors the Mentoring initiatives taken by the organization is helpful in to have the career path of employees as per the maximum score (47.5, 46.5 & 51 respondents). It is found that in all the three sectors, the Grievance settlement procedure makes employees to have better environment in IT services as per the maximum score (47.5 respondents). It is identified that in all the three sectors the Facilities provided by the IT services are helpful for employees in IT services to become more loyal towards their job and organization as per the maximum score (48.5 respondents). It is found from the study that Performance management and benefits provided by the organization makes the employees to be very much engaged in the organization in IT services, BPO and KPO as per the maximum score (47, 53.5 & 54.5 respondents).

6.5 FINDINGS FROM HYPOTHESIS TESTING: (LOW LEVEL EMPLOYEES)

✓ It is proved from the study that the technical competencies of employees at low level in IT sector companies effecting the organization culture (Table value 37.652) ($p<0.05$). This is because the technical knowledge is very important to perform the assigned job.

✓ It is found from the study that there is an impact of Job- oriented competencies and organization culture ($p<0.05$). This is due to the importance of job-oriented skills of the employees.

- ✓ It is identified from the study that there is an effect of communication skills on organization culture ($p<0.05$). Because the communication is acting as a base for every action of the employee in the organization.

- ✓ It is proved from the study that there is an impact of team work on organization culture ($p<0.05$). Because of team work employees can show their maximum efficiency.

- ✓ It is proved from the analysis that there is an impact of personal qualities on organization culture ($p<0.05$). Because whatever may be the initiatives taken by the organization to develop the employees are depended on the behaviour of the employees.

- ✓ It is proved that there is no difference in the competency mapping practices of IT sector organizations (IT Services, BPO, KPO) in the study area ($p>0.05$). This may be because of the practices of the organization.

6.6 SUGGESTIONS

- ✓ It is suggested that instead of concentrating only on the core and technical competencies, the organizations need to concentrate on the training on information and network security, digital technologies and big data analytics etc., because in future it is expected that most of the IT jobs are in this domine.

- ✓ In order to develop the managerial competencies that organizations must be concentrate on the skills like Team leadership, Active listing, Mentorship and professional development. Further these skills must be trained frequently which would be helpful to the employees in identifying their weaker areas and developing themselves to attain the higher positions in the organization.

- ✓ It is suggested that the organizations at the time of training and development, need to give equal preference for all of the skills such as technical skills, interpersonal skills, behavioural skills, and communication skills, so that employees can have the equal consistency in their skills.

- ✓ It is identified from the study that, the major problem faced by the employees of middle and low level is lack of awareness. Therefore, it is suggested to the companies that they need to plan for creating awareness by doing group work, task forces, task analysis workshops, questionnaire, use of job descriptions, performance appraisal formats etc. and proper communication should be

developed through e-learning, e-mails and messages about competency mapping practices and its importance for the both organization as well as individual too.

- ✓ It is identified that the organizations of all the three segments of IT sector are practicing competency mapping at the time of recruitment, selection and training. Therefore, it is suggested to the organizations that they need to map the competencies at the time of performance management too henceforth the skill gaps can be identified.

- ✓ It is identified that most of the organizations considers the competencies at the time of recruitment and training, hence, it is suggested that they should consider the same at the time of compensation and benefits, so that the employee's compensations will be refined time to time and they will be satisfied.

- ✓ It is suggested to the organizations that if they implement proper and suitable competency model the employee turnover will be reduced and helpful for employee retention.

- ✓ IT companies need to focus on the HR functions such as Performance management and Motivation, Satisfaction and the Retention while meeting the mission and vision, while creation of policies rules and regulation, facilities, career growth, and Job responsibilities. As it was noticed that the Recruitment and selection, Training and development, and compensation functions were more considered for organizational intentions and interventions.

- ✓ It is suggested that competency mapping can be regularized instead of doing at the time of HR functions. This could be useful to the organization and individual in identifying the strengths and weakness.

- ✓ It is suggested to the organizations that if the proper communications should be made regarding the mapping practices of the international organizations, that will be useful at the time of employee mobility.

- ✓ It is suggested that the changing role and success factors of a particular positions should be identified and bring to the notice for employees so that they can develop the required competencies to perform the assigned job successfully.

- ✓ It is suggested that proper feedback mechanisms i.e., 360-degree feedback, continuous feedback mechanism, and employee performance evaluation can be developed, so that the employees will take feedbacks positively and develop the competencies where they are lagging behind.

- ✓ It is suggested that an organization should find out the strengths of the employees for better team management and help the employees to reduce their weaknesses.
- ✓ It is suggested that the organizations need to set more specific goals of competency mapping in order to improve the achievement orientation of employees.

6.7 CONCLUSION.

The primary objective behind the study is to identify the core competencies required by the IT sector in India. And whether these competencies have impact or organization culture. And also, the competency mapping practices by the IT companies in the study area. However, the Competency mapping is a process of identifying key competencies for an organization and/or a job and incorporating those competencies throughout the various processes (job evaluation, training, recruitment etc.) of the organization. The study identified eight major competencies in top, middle, and low-level employees followed by technical competencies, managerial competencies, behavioural competencies, and conceptual competencies, job-oriented competencies, communication skill competencies, team work competencies, and personal quality competencies. All eight competency groups have impact on organizational culture.

Use of a competency mapping model creates a difference in performance. It has multiple benefits. The missing links can then be taken care by organizing training programs. The competency framework forms the bedrock for all HR applications. As a result of competency mapping, all the HR processes like talent induction, management development, appraisal and training yield much better results. In all the three segments of the study area, at three levels of employee level the core competencies and additional competencies required are studies in detail and some of the challenges are faced by the employees and organization too. At the same time the organizations are also have taken some initiative to develop the competencies of the employees which would be affecting the organization culture and provides added value too, the same is suggested in the study.

From the aforementioned perspectives, it can thus be concluded that the study has met the objective of the research which was to measure the competencies of top, middle and low-level employees (IT, BPO and KPO) and its impact on organizational culture.

6.8 SCOPE FOR THE FURTHER RESEARCH

This study is limited to competency mapping in IT, BPO and KPO. There are numerous topics to explore further. A detailed study can be carried out to understand competency mapping among employees on a comparative basis between IT and ITES companies. The study was conducted only from the perception of employees and not from the employer perspective. A study from employer's perception on competency mapping in IT sector is also suggested. A comparative study on competency mapping between employees employed in public sector and private sector may also be carried out. Similar studies can also be extended to other manufacturing industries. The future research may be replicated in the government sector, and other small and medium scale industries, and in other countries to examine how culture influences perceptions of HR competencies, especially when studies compare countries with different cultural backgrounds.