

**ANALYSIS OF TOOLS AND METHODS EMPLOYED BY THE IT SECTOR
COMPANIES TO ACCOMPLISH SUCCESSFUL KNOWLEDGE TRANSFER
IN IT COMPANIES OF BENGALURU**

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Abstract

Knowledge transfer is regarded as the process that is applied to transmit, convey and reassign the knowledge among the different groups of people. The transfer of knowledge could be done by using tools, structures, approaches which would help to enhance, augment, renew and share the application and usage of knowledge such that human efficiency gets increased. The effective implementation of knowledge management system will help the employees in the IT sector to establish a strong base of communication with each other. The current study explores the concept, application, and benefit of knowledge transfer within IT sector companies and assesses the knowledge transfer tools adopted by the IT companies of Bengaluru. The study also ascertains all the strategies which can be utilized in the field of knowledge transfer and determines the factors that impact the successful transfer of knowledge.

Keywords: IT Sector, Knowledge transfer, strategies, tools, success, & productivity.

Introduction

The information and technology (IT) sector play an important role in contributing to the growth and development of the Indian economy. IT sector and its allied segments contributed 8% towards the Gross Domestic Product of the country in the year 2017. It generated total revenue of 180 billion US \$ through exports and 50 billion US\$ in the form of domestic revenue in the year 2019. Due to a high rise in the end-user spending in the IT sector, the total spending was recorded to be 67 billion US \$ in 2013 which reduced to 17 billion US \$ in the year 2020. The major portion of IT spending is vested in the telecommunication and device market. The major IT service provider firms in India are HP, Wipro, IBM, Infosys, and Tata Consultancy Services (TCS). The sector employs more than 4 million individuals through direct job placements and 10 million through indirect individual associations. TCS employs 420,000 individuals and Infosys employs more than 228,000 individuals in its Bangalore based unit. TCS held the highest position and known to be the world's largest IT service provider by earning INR 1.5 trillion revenues in the year 2019. While focusing on the knowledge transfer, it is defined as the process through which knowledge is transferred or disseminated between a root and a recipient. It is practiced to transfer learning between the individuals that are working in different hierarchal orders, units, or departments of the firm (Goh, 2002). The application of knowledge transfer promotes the value knowledge process which enhances the decision making and problem-solving attitude of the employees. Systematic transfer of knowledge within the firm improves competitiveness and efficacy levels. It synchronizes all the sections or departments such as information technology, human

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resource, finance, and marketing, reduces gap, and facilitates better firm performance (Gera, 2012).

Aims and Objectives

The objectives of the study are:

- To assess the knowledge transfer tools adopted by the IT companies of Bengaluru.
- To examine tools and methods for knowledge assessment.
- To determine the effectiveness of the knowledge transfer tools employed in the IT sector.

Research Methodology

The research methodology is a process through which facts related to the research are collected and analyzed based on the several approaches, philosophies, and beliefs of the investigator. The study analyzes the tools and methods that are employed by the IT sector companies to accomplish successful knowledge transfer in IT companies of Bengaluru. The study adopts a positivism research philosophy as it based on quantitative analysis of facts by using a numerical expression that increases the reliability of the facts. The descriptive research design is to be included in the study as it provides a concise outline from the systematic conduction of the research process. It helps in determining the effectiveness of the knowledge transfer tools employed in the IT sector. Additionally, the deductive research approach is to be included in the research as it is based on predetermined assumptions that analyze the facts numerically. It helps in analyzing facts related to knowledge transfer tools adopted by the IT companies of Bengaluru and examines tools and methods for knowledge assessment. The data collection method includes the collection of facts by using the primary method of data collection through a focus group, interview, and questionnaire. It includes a close-ended questionnaire that is based on the 5-point Likert Scale so that the respondents could provide their responses precisely in a single attempt. The study includes a simple random sample method as it helps in selecting a sample from the populace in an unbiased manner. The sample unit for the current study includes 200-250 respondents that are working as executives, employees, managers, and branch managers in different IT firms. The respondents are both male and female belonging to the age group of 21 to 60 years working in the top 10 IT companies in Bengaluru. Data analysis methods such as ANOVA, Chi-Square, and factor analysis are to be included in the study so that facts related to studying are analyzed precisely.

Knowledge Transfer Strategies

According to Albino, Garavelli, & Gorgoglione, (2004) different strategies such as ostrich approach, osmosis, lottery, old school, deliberate can be utilized in the field of knowledge

transfer. Firms adopting the ostrich strategy avoid the problem by assuming it would not knock them or will not create any sustainability issues in the future. On the other hand, the firm adopting osmosis presumes that putting employees together will help in knowledge transfer. It does not consider the issues or comfortlessness that is faced by the employees while interacting with others. In the lottery strategy, the less experienced employees are grouped with experienced employees randomly so that less experienced workers will acquire learning from experienced peers by following their instruction or observing decision-making techniques. Old school strategy includes organizing seminars and mentorship programs so that knowledge is transferred to employees by senior and experienced executives or managers. The deliberate strategy provides practical learning to the less experienced workers by providing specific learning opportunities. It includes exposure, coaching, and providing performance feedback to the worker so that strengths and weaknesses are identified and strengthened. strategies such as job tailing line up, the society of following, job assistance, narration, and counseling are also used to transfer knowledge. Job tailing includes job shadowing programs in which less experienced employee is teamed with an experienced worker so that less experienced employee learns or gains knowledge from an experienced worker. Additionally, in society to follow, firm forms society or community to transmit knowledge to employees through one-one interaction or online tools such as blogs, emails, and articles. Job assistance helps in transferring knowledge by supporting the task accomplishment process. The storyboard process is used to stockpile and transfer the information through presentations and realistic demonstration. Counseling or mentorship is also provided to the less experienced employees so that they gain knowledge and expertise to perform organizational tasks. Infosys in Bengaluru has implemented a knowledge transfer model such as K-shop so that employees are provided with learning and knowledge. Under the K-shop program, employees are provided project experiences through research papers provided by the senior managers. The research papers are uploaded on the company website so that knowledge is provided to all company employees. It also allows the employees to converse, provide feedback, or seek help by discussing with other company members.

Knowledge Transfer Tools Employed In It Companies

According to Szulanski, (2000) different tools such as communication model, spiral model, elicitation model, and Kolb learning cycle are used by the firm to transfer knowledge. Chini, (2004) examined that due to implementation of the communication model there is recognition of information source and then transferring it in the form of a message to the receipt. Additionally, the spiral model includes the conversion of tacit and explicit knowledge

through socialization, externalization, combination, and internalization so that knowledge is transferred between the workers effectively. Additionally, the elicitation process is also adopted by the firm so that knowledge is transferred among the workers exponentially. The model includes human knowledge as an input receiver and transfers knowledge through communication filters. Once the information is received by the recipient, the usefulness of the information is validated by testing and checking the application of knowledge. Smith, M. K. (2001) examined that Kolb's learning cycle is adopted by the firm to explore, analyze, decide, and act by watching, thinking, feeling, and doing the tasks. The different models help in creating a framework that transfer knowledge in an organized and systemized manner.

IT-based company Wipro Technologies, Bengaluru has adopted a global delivery model strategy to perform knowledge transfer process within the firm. The model helps the experienced employees to transfer information about infrastructure management (IM) by creating an IM service delivery platform. Additionally, the company has also implemented advanced technologies and strengthened digital infrastructures such as WAN and LAN so that employees are provided 24 x 7 on-site learning, education, and training. TCS adopted a memory system to carry out knowledge transfer activities. It includes transferring knowledge by providing and system roll-out management system so that transfer of onsite and offsite knowledge takes place effectively. Additionally, TCS has also established knowledge transferring units such as Centres of Excellence with computer expertise system so that knowledge is transferred between offsite and onsite teams effectively.

Factors Impacting the Successful Knowledge Transfer

Lack of proper learning about the knowledge transfer technique creates a challenge that hampers the success of knowledge transfer in the IT sector. Due to the lack of knowledge transfer techniques, knowledge could not be transferred properly that decreases the effectiveness of learning transmissions. As a result, there is misrepresentation, misinterpretation, and deformation of facts that makes knowledge transfer difficult. Another factors such as culture variation, geographic distribution, lack of communication channels, synchronization issues, lack of teamwork, and the difference in time zones highly impact the knowledge transfer process. knowledge transfer activities within the firm are also impacted by different challenges such as coordination issues, communication issues, and cultural issues. While focusing on coordination challenges, it includes issues related to processing mismatches, technical vulnerabilities, incompatible environment, and lack of infrastructure. Due to a lack of proper infrastructure such as digital tools, internet services, the transmission of knowledge becomes difficult. Communication challenges include lack of interactive tools,

language differentiation issues, lack of documentation, and lack of technical skills to transfer knowledge by using advanced means. As a result, due to inadequate use of knowledge transfer platform and poor communication skills, transfer of knowledge becomes difficult. Additionally, cultural challenges are faced by the firm in the form of cultural diversity, social limitation, community obligations, and diversified political philosophy which hampers the transfer of knowledge. Due to the presence of such challenges, it becomes difficult for the firm to send and receive information properly. Challenges such as team conflicts, peer conflicts, burnout, and unsupportive management are faced by individuals when transferring knowledge among the teammates within the firm. Due to the lack of knowledge transfer, the less experienced employees or fresh joiners do not acquire adequate training or guidance required for the performance of the task. Moreover, when the senior employees retire or leave the organization, he/she takes valuable organization information that remains unutilized by others. It causes knowledge loss to the firm and reduces its speed of growth and prosperity.

Improvement in The Knowledge Transfer Strategies

Knowledge transfer activity can be improved by recognizing, recording, and communicating the learning by using different interactive techniques such as chats, blogs, one-to-one interaction, and group discussion. It includes training and education so that technical, as well as conceptual learning, is transferred effectively. Simonin, (1999) examined that IT managers can also use a rotational assignment strategy to adequately transfer knowledge in the working system among the employees. It includes rotating assignments among the employees at regular intervals or the completion of the projects so that the employees could gain learning and knowledge about various projects and office work. The managers may also shift the employees from one department to another so that a diversified set of knowledge and learning is gained by them. HCL, Bengaluru, adopted Knowledge Management System (KMS) to transfer knowledge and enhance the skill set of the employees. The expert employees are grouped into different teams along with less-experienced workers in which all the members together on live projects. It provides a learning experience to the entire team and the inexperienced workers acquire guidance and learning about working under pressure conditions. The employees also acquire learning about handling sensitive projects and deal with customer-centric data properly. Carrillo, P., & Chinowsky, P. (2006) examined that coaching and mentoring techniques are also adopted by managers to provide adequate knowledge to the employees. The IT managers identified the weaknesses of the employees and encouraged them to overcome and increase their abilities by providing them the required guidance and support. It creates a positive learning environment that encourages the

employees to grasp knowledge more constructively. Additionally, apprenticeships, role building, and job shadowing techniques can also be implemented to enhance the levels of knowledge transfer in the organization. It will help in the proper transfer of knowledge and enhance the capabilities of employees to perform tasks with time constraints successfully.

Discussion

As per the above-discussed facts, it can be said that knowledge transfer is an important aspect for a firm so that the skills and capabilities of the employees enhance. When an experienced employee provides learning, mentorship, coaching, or guidance to the employees, it not only enhances the competencies of the employees but also make them confident to handle projects. Knowledge transfer facilitates work performance which reduces delays in project submission and reduces the energy, time, resources, or effort that is wasted on reworking and rectifying the work (Arvanitis, S., Sydow, N., & Woerter, M. 2008). The study examined that knowledge transfer enhances the working capabilities of employees because of which there is the optimum usage of the resources as the right person can do the right job at the right time. As a result, there is a reduction in waste generation in IT companies by making effective use of knowledge. The study also found that there are certain challenges such as coordination issues, communication issues, and cultural issues that are faced by the firm while transferring knowledge. The challenges must be reduced and eliminated by adopting rightful communication channels and infrastructure that promotes knowledge transfer procedures.

Conclusion

As per the above-discussed facts, it can be concluded that knowledge transfer is an essential part of the organizational functionalities that helps in facilitating organizational overall performance. Knowledge transfer improves the working of the IT firm by enhancing the skills and capabilities of employees. Due to adequate knowledge and skills, the employees perform the tasks properly which not only enhances their productivity but also augment firm performance and profitability levels. The adequate transfer of knowledge increases the working speed of the employees and they work with more vigor and power. The study examined that knowledge transfer empowers the employees and they take business decisions properly. It also encourages them to adopt a problem-solving attitude and contribute to firm growth through teamwork and increased productivity. The study examined that due to certain challenges such as team conflicts, peer conflicts, burnout, and unsupportive management transferring of knowledge became difficult among the teammates within the firm. However, such issues can be resolved by adopting proper knowledge transfer techniques such as

apprenticeships, role building, and job shadowing. The techniques will help to strengthen the knowledge transfer process within the firm and provide it an edge in the competitive market.

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