



“EFFECTIVENESS OF E-LEARNING PLATFORM IN TRAINING AND DEVELOPMENT OF EMPLOYEES IN I.T SECTOR AT BANGALORE CITY”

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Abstract:

In this era E-Learning plays vital role in the Organizations. Because E-Learning helps employees to access the wide range of resource materials, improve their knowledge, skills and Ability (KSA) and E-Learning helps employees to learn things at their own phase. This leads to reduce the cost, save the time of travelling and any point of time employee can be continuing their learning process etc. The effective Training leads to the development of employees, helps in career opportunities, enhancement of KSA, retaining top talents, Completion of work on time, provides best services to the clients, etc. When the Training and Development is comes in effective way, it is important that what way of training is necessary, where it is necessary and for whom the training is given, then the Training need assessment/analysis (TNA) is takes place. A well planned and designed assessment helps the organization to reach a greater height.

The main objective of the study is to understand and investigate how E-Learning is effective in Training and Development of employees and how E-Learning impacting on employees. Whether E-Learning is more effective than Onsite training, how the issues can be sort out and Suggestions to the top MNC's in Bangalore such as Deloitte, EY, Northern Trust and Oracle.

Keywords: - E-Learning, Employees, Development, Platform, Training

Chapter- 1 Introduction

1. Introduction

In recent years, the field of Information Technology (I.T.) has witnessed rapid advancements and innovations, transforming the way businesses operate and creating a strong demand for skilled professionals. As a result, organizations in the I.T. sector are faced with the ongoing challenge of training and developing their employees to keep up with the dynamic nature of the industry. In this context, E-Learning platforms have emerged as a promising solution for delivering effective training and development programs.

Bangalore, often referred to as the "Silicon Valley of India", is a major hub for the I.T. sector. The city is home to numerous technology companies, ranging from startups to multinational corporations, and attracts a large pool of talented professionals seeking employment opportunities. The continuous evolution of the I.T. sector in Bangalore necessitates organizations to invest in the training and development of their employees to ensure they possess the relevant skills and knowledge.

E-Learning platforms offer a flexible and accessible approach to training and development, allowing employees to learn at their own pace and convenience. These platforms leverage digital technologies to deliver a wide range of learning materials, such as interactive modules, video tutorials, quizzes, and virtual simulations. Furthermore, E-Learning platforms often incorporate features like progress tracking, performance assessment, and personalized learning paths, enhancing the effectiveness of training programs.

The effectiveness of E-Learning platforms in the training and development of employees in the I.T. sector at Bangalore city is a topic of significant interest and relevance. Understanding the impact and benefits of E-Learning platforms can provide valuable insights to organizations, enabling them to make informed decisions regarding their employee training strategies. Additionally, it can aid in identifying potential challenges and areas for improvement to optimize the utilization of E-Learning platforms.

This research aims to explore and evaluate the effectiveness of E-Learning platforms in training and development initiatives within the I.T. sector in Bangalore city. By examining the experiences and perceptions of employees who have undergone training through E-Learning platforms, this study seeks to assess the impact of such platforms on their knowledge acquisition, skill development, and overall professional growth.

The findings of this study have the potential to contribute to the existing body of knowledge in the field of training and development, specifically within the I.T. sector in Bangalore city. The insights gained from this research can assist organizations in formulating strategies to leverage E-Learning platforms effectively, ultimately leading to enhanced employee performance, improved productivity, and a competitive advantage in the rapidly evolving I.T. industry.

In the book "Employee training and Development" written by Raymond A Neo, refers that Training and Development are the key components of learning and overall goal of the training development is learning. Learning refers to the acquiring of skills, knowledge, Attitudes and behaviors etc.

Example

A. Tata group started Tata Management Training Centre long back in 2009 which provided E-Learning platform for its employees in different modules such as leadership programmes for all executive levels including live online classes, live broadcasts of videos, and self-paced E-Learning opportunities. For the learning of Tata employees, this self-paced E-Learning program offers 44 distinct courses. Access to a range of interactive, multilingual, e-learning courses on a number of subjects that include activities, videos, audio clips, articles, and tools to let you learn at your own speed. Soft skills training and program-based training are also included in e-learning. Programs include executive courses in management development, strategy, and innovation. According to the kind of leadership talent one wants to improve,

the Leadership Essentials courses are arranged. Executive briefings, change management, and integration are all included in customer programs.

B. In an instance of corporate e-learning, IBM started the Basic Blue management training program as a pilot. The "4- Tier" blended learning approach served as its foundation. Manager Quick Views, a database of queries, responses, and sample scenarios, were made available to the managers in the first tier. This material addressed concerns that managers had with things like evaluation, retention, and conflict resolution, among other things. The managers dealt with the simulated circumstances in the second tier. The managers were online educated by senior managers. The managers engaged in interactive learning regarding work/life balance, compensation and benefits, intercultural issues, employee skill development, and other related topics. The group members started communicating online in the third tier. The Team Room, Customer Room, and Lotus Learning Space are among the IBM E-Learning products utilized in this tier. Chats are also used. Even if e-learning was incredibly effective, IBM still thought that in-person training was crucial for the growth of employees.

Outcome of the IBM E-Learning are

- I. Cut back on training expenses while also considerably raising worker output.
- II. In the year 2000, Basic Blue may save \$16 million compared to \$21 million saved by Sales Compass.
- III. In 2001, IBM reported a ROI of 22.84 percent from their Basic Blue E-Learning program, with training costs per employee falling from \$400 to \$135.
- IV. The E-Learning programs also allowed the corporation to deliver corporate internal knowledge as the majority of the information they used came from the internal content specialists. IV. E-Learning also helped managers have a deeper comprehension of the learning content.
- V. IBM creates courses for both its clients and the general public. To develop a long-lasting competitive edge, learning and forward-thinking firms prioritize continual education, just-in-time training, and employee skill enhancement. Through e-learning, firms are closing educational gaps and giving their workers the knowledge mix they need to succeed in a competitive environment.

1.1 Importance of the topic

I. Advancement in Technology:

The IT sector is characterized by rapid advancements and innovations. E-Learning platforms provide a convenient and efficient way to impart knowledge and skills required to keep up with the evolving technology landscape. It ensures that employees in the IT sector stay updated and competitive in their field.

II. Cost and Time Efficiency:

E-Learning platforms offer significant cost and time savings compared to traditional training methods. With the IT sector's fast-paced nature, organizations can efficiently train a large number of employees simultaneously, reducing both training costs and time spent away from work. This is particularly crucial in Bangalore City, known as the "Silicon Valley of India," where numerous IT companies operate.

III. Continuous Learning and up skilling:

In the IT sector, continuous learning and up skilling are essential to stay relevant and meet industry demands. E-Learning platforms enable employees to access training materials anytime and anywhere, fostering a culture of continuous learning. This promotes professional growth and enhances employee's ability to take on new challenges and responsibilities.

IV. Flexibility and Accessibility:

E-Learning platforms provide employees with flexibility and accessibility to training resources. Bangalore City, being a bustling hub for IT professionals, often faces challenges related to traffic congestion and commute times. E-Learning allows employees to access training materials remotely, eliminating the need for physical travel and allowing them to learn at their own pace.

V. Personalized Learning Experience:

E-Learning platforms can offer personalized learning experiences tailored to individual employee's needs and learning styles. Through assessments and adaptive learning features, employees can focus on areas where they need improvement, enhancing the overall effectiveness of training programs.

VI. Global Collaboration:

E-Learning platforms facilitate collaboration and knowledge sharing among employees across different locations. This is particularly relevant in Bangalore City, which attracts talent from around the world. E-Learning platforms break down geographical barriers, enabling employees to collaborate on projects, exchange ideas, and learn from diverse perspectives.

1.2 Types/forms of E-Learning

Here are some of the main types of E-Learning

I. Blended Learning:

Online learning and conventional face-to-face training are combined in blended learning. It combines both in-person and online interactions for learners by integrating both classroom-based activities and E-Learning elements. This strategy offers adaptability and individualized learning opportunities.

II. Mobile Learning (M-Learning):

Mobile learning refers to the use of mobile devices, such as smart phones or tablets, for learning purposes. It allows learners to access educational content on the go, enabling flexible and convenient learning experiences. Mobile learning can involve various formats, including apps, mobile websites, or text messages.

III. Adaptive Learning:

Adaptive learning systems use technology to tailor instruction and content based on learners' individual needs, preferences, and performance. These systems collect data on learners' progress and adjust the content and delivery methods accordingly. Adaptive learning aims to provide personalized learning experiences and optimize learning outcomes.

IV. Gamification:

Gamification involves the integration of game elements and mechanics into the learning process. It utilizes game-like features such as points, badges, leader boards, and challenges to engage learners and motivate them to progress through the content. Gamification can enhance learner engagement, interaction, and retention of knowledge.

V. Virtual Reality (VR) and Augmented Reality (AR): An immersive digital environment inspired by real-world experiences is created via virtual reality. Digital information is superimposed over the physical world in augmented reality. Particularly in professions that call for practical training or simulations, VR and AR can be employed in e-learning to deliver interactive and engaging learning experiences.

1.3 Advantages of E-Learning

I. Cost-effectiveness

E-Learning platforms offer significant cost-effectiveness compared to traditional training methods. By eliminating the need for physical classrooms, travel expenses, and printed materials, organizations can achieve substantial cost savings. E-Learning allows for scalability, enabling training of a large number of employees without incurring additional expenses. Moreover, the cost of developing and updating E-Learning content is often lower than continually delivering in-person training sessions.

II. Up-to-date learning

E-Learning platforms facilitate up-to-date learning by providing access to the latest information and resources. With rapidly evolving technologies and industry practices, it is crucial for employees in the IT sector to stay updated. E-Learning platforms allow organizations to quickly update training content to reflect the latest trends and advancements. This ensures that employees receive the most current information and skills, enhancing their professional growth and keeping them competitive in the industry.

III. Self-paced learning

The flexibility of e-learning allows students to advance at their own rate of learning, which is one of its main benefits. Employees can successfully manage their time using self-paced learning, which takes into account their unique learning preferences and styles. Students can go over difficult material again, go over content as needed, and devote more time to subjects that call for in-depth study. This flexibility improves learning retention and engagement, which produces better training results.

IV. Interactive and collaborative

E-Learning platforms promote interactive and collaborative learning experiences. Through features such as discussion forums, virtual classrooms, and social learning tools, employees can engage in discussions, share insights, and collaborate with peers and instructors. This interactive and collaborative environment fosters knowledge sharing, problem-solving, and critical thinking, enabling employees to learn from each other and develop a deeper understanding of the subject matter.

V. Gamification

Gamification is the integration of game elements and mechanics into E-Learning platforms to enhance motivation and engagement. By incorporating elements such as badges, leader boards, and rewards, E-Learning platforms can make the learning experience more enjoyable and immersive. Gamification techniques tap into individuals' intrinsic motivation, encouraging active participation, healthy competition, and a sense of achievement. This approach promotes higher levels of engagement, knowledge retention, and overall effectiveness of training programs.

1.4 Limitations of employee training through E-learning

I. Highly technology dependent

E-Learning platforms heavily rely on technology for content delivery, communication, and interaction. While this dependence on technology enables the convenience and accessibility of online learning, it also poses challenges such as technical issues, connectivity issues, and the need for digital literacy. Organizations must ensure robust technological infrastructure and provide necessary support to address any technological barriers that learners may encounter.

II. Lack of face-to-face interaction

The lack of direct communication between students and teachers on online learning platforms is one of its drawbacks. Although there is some engagement possible in virtual classrooms and discussion boards, it's possible that in-person training sessions' personal connection

and immediate response are lacking. To overcome this restriction and encourage a sense of connection and engagement among learners, firms might implement live video sessions, webinars, and virtual mentorship programs.

III.Lack of concentration, distraction etc.

E-Learning can be susceptible to distractions and reduced concentration levels due to the remote learning environment. Learners may face challenges in maintaining focus and managing time effectively, especially when working from home or in non-traditional learning environments. Organizations can address this by providing clear guidelines, time management strategies, and incorporating interactive elements in the E-Learning content to keep learners engaged and motivated.

IV.Some courses like technical courses are tough to teach without traditional approach.

Certain technical courses, particularly those involving hands-on practical skills, may be challenging to teach solely through E-Learning platforms. The absence of physical equipment and direct supervision can limit the effectiveness of online instruction in such cases.

1.5 Theoretical background of the study

The following theories provide a foundation for understanding the factors that contribute to the effectiveness of E-Learning platforms in this specific context:

I.Technology Acceptance Model (TAM):

According to Fred Davis's Technology adoption Model, two important factors perceived usefulness and perceived ease of use have an impact on people's adoption of and use of technology. Employee adoption and engagement with training programs can be influenced by their judgments of the usefulness and usability of e-learning platforms. E-learning systems' efficacy for training and development can be better understood by analyzing the attitudes and opinions of employees.

II.Social Learning Theory:

The importance of observation and modeling in learning is emphasized by Albert Bandura's Social Learning Theory. This hypothesis contends that people pick up new skills through watching others and modeling their conduct. Social learning tools can improve the effectiveness of e-learning platforms by encouraging engagement and shared learning experiences, such as discussion forums, team projects, and knowledge sharing among employees. According to the notion, social learning components can aid in the development of knowledge and skills when used in the design and use of e-learning platforms.

III.Adult Learning Theory: Andragogy, or adult learning theory

Adult Learning Theory: Malcolm Knowles' andragogy, or adult learning theory, emphasizes the unique traits of adult learners as well as their preferences for problem- and self-directed learning. This theory contends that adults learn best when they believe the instruction is pertinent to their needs and objectives. The efficiency of training and development programs for staff working in the IT industry can be improved by E-Learning platforms that provide individualized, self-paced, and useful training modules. These platforms can be aligned with the concepts of adult learning theory.

IV.Cognitive Load Theory: Cognitive Load Theory

It was created by John Sweller and focuses on the cognitive resources that people have at their disposal for learning. This hypothesis contends that people have finite cognitive capacity and that learning might be hampered by a heavy cognitive load. By improving learners' information processing and retention capacities, e-learning platforms that use instructional tactics including chunking information, giving clear directions, and minimizing unnecessary cognitive load can maximize the effectiveness of training programs.

V.Self-Determination Theory (SDT):

Edward Deci and Richard Ryan's self-determination theory highlights the significance of intrinsic drive in learning and behavior. According to the theory, people are motivated by three basic psychological needs: relatedness, competence, and autonomy. E-learning platforms can promote intrinsic motivation and improve the efficacy of training and development initiatives by giving employees a sense

of autonomy in choosing their learning paths, chances to develop and demonstrate competence, and opportunities for social interaction and collaboration.

1.6 Context of Macro level

E-Learning has gained significant traction in training and development, especially in the context of the macro or international level. This summary explores the implications and benefits of E-Learning in a global training and development setting, considering its impact on organizations, industries, and learners worldwide.

At the macro level, E-Learning offers numerous advantages for training and development initiatives. The accessibility and flexibility of online learning platforms transcend geographical boundaries, allowing organizations to deliver training programs to a diverse and dispersed workforce. E-Learning eliminates the constraints of time and location, enabling employees from different countries and time zones to access training materials at their convenience. This global reach facilitates consistent training experiences, ensuring that employees across multiple locations receive the same quality of education.

In an international context, E-Learning contributes to the standardization and alignment of training programs. Organizations can develop centralized E-Learning modules that adhere to global standards and best practices, ensuring consistency in training content, delivery, and assessment. This alignment fosters a cohesive organizational culture and enhances knowledge transfer across borders.

Moreover, E-Learning provides cost-effective solutions for international training and development. Traditional face-to-face training methods often incur substantial expenses related to travel, accommodation, and instructor fees. By leveraging E-Learning platforms, Organizations can significantly reduce these costs while delivering high-quality training experiences to their global workforce. The scalability of E-Learning allows for training thousands of employees simultaneously, maximizing efficiency and cost savings.

E-Learning also promotes cultural sensitivity and inclusivity in training and development. By incorporating localized content and language options, organizations can cater to the specific needs and preferences of learners from different cultural backgrounds. This approach enhances engagement and knowledge retention by providing training materials that resonate with learner's cultural contexts.

Collaborative learning and knowledge sharing are critical aspects of E-Learning at the macro level. Online platforms enable learners from diverse backgrounds to connect, interact, and exchange ideas, fostering a global learning community. This collaboration transcends borders, facilitating the sharing of best practices and innovative approaches to problem-solving. Additionally, E-Learning platforms can serve as repositories of knowledge, storing and disseminating Organizational expertise across international locations.

In the context of international training and development, E-Learning can address the challenges of language barriers. With the availability of translation tools and multilingual interfaces, Organizations can deliver training content in multiple languages, accommodating learners who are not proficient in the Organization's primary language. This inclusivity promotes equal access to training opportunities and ensures that language does not become a barrier to professional development.

1.7 Top 10 Countries with the highest rate of E-Learning adoption and advantages for corporate training

The top 10 nations with the highest rates of e-learning adoption are shown in the graph. Lockdown restrictions have strengthened the online learning sector. The LMS market is expected to increase from a global market size of 13.38 billion dollars in 2021 to 44.49 billion dollars by the year 2028. The main driver of this expansion, according to edX, is worker upskilling concerns. The expectation of job obsolescence has also had a significant impact on the rise in interest in e-learning, motivating workers to gain knowledge in cutting-edge fields like AI and machine learning.

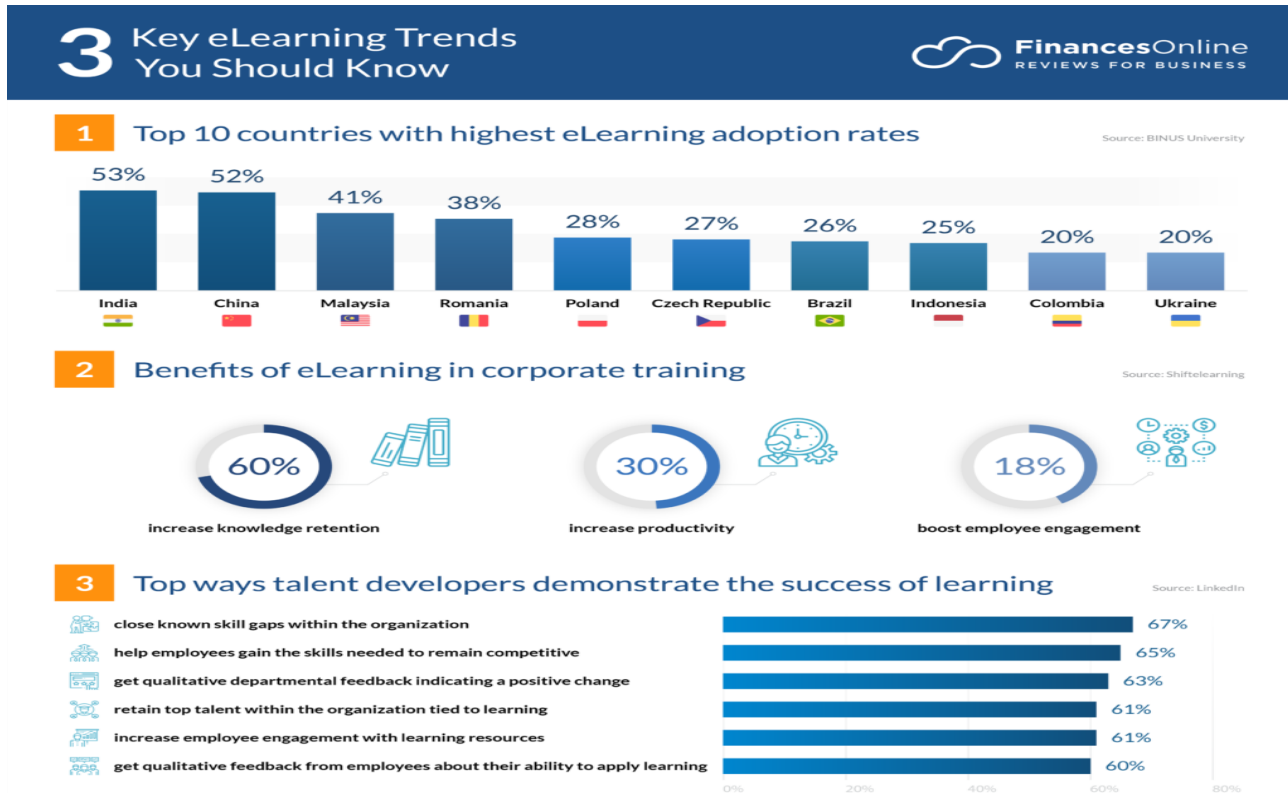
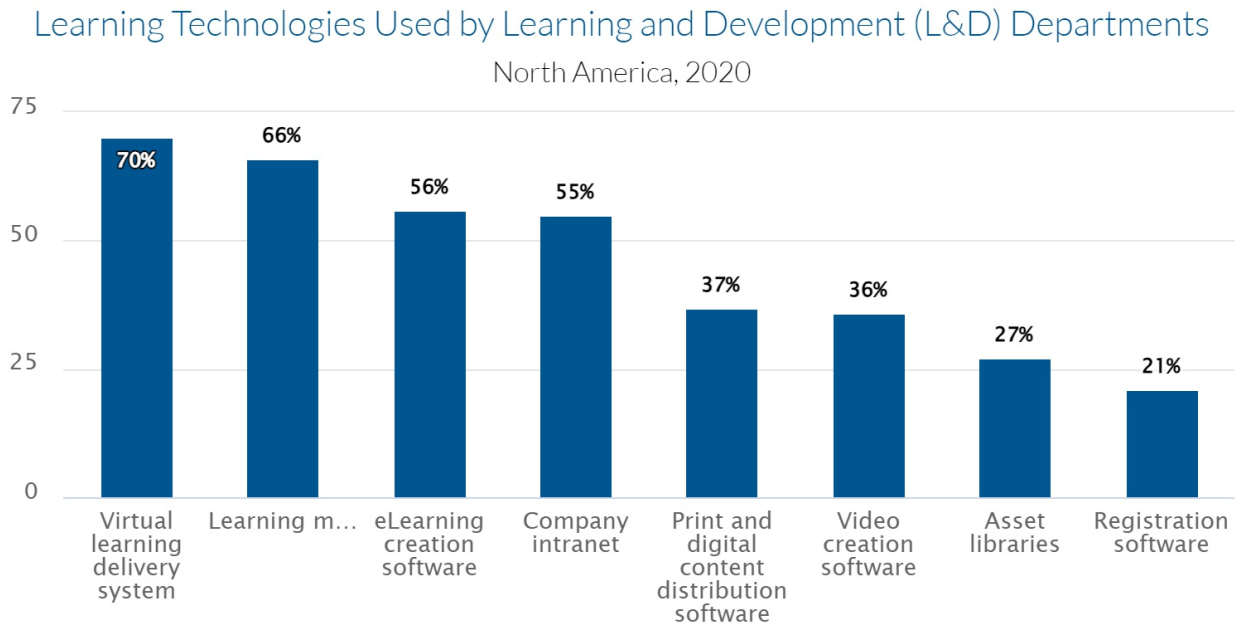


Figure-1.8FA

The disruption in learning brought by COVID-19 has brought E-Learning tools to greater public attention and critical scrutiny. India is at the top position compare to China and Malaysia in E-Learning adoption rates we can demonstrate that how much E-Learning is effective and necessary for the Organizations and employees. Corporate found that E-Learning enhances the knowledge of employees and retain their knowledge; through this production also increases and the involvement of employee’s ratio will also be increases.

1.8 Technologies used by L&D Departments in E-Learning



Designed by  FinancesOnline

Figure-1.9FB

Above figure shows that learning technologies used by Learning and Development departments in North America (International level). In the future of corporate learning, virtual and augmented reality will both play a key role. VR has the unique capacity to bring together the elements of E-Learning, micro learning, hands-on training and personalization. VR use within business is forecast to reach 4.26B in 2023.

A projection in 2020 showed that the growth of the VR market will surpass \$24.5 billion in revenue by 2024 (ABI Research, 2020). VR has significantly evolved and has made its way into the corporate world. VR transforms passive training into an immersive experience. Other forms of virtual training cannot provide what VR is able to do-engaging the senses while at the same time learning the crucial aspects of the job.

1.9 Factors affecting E-Learning in Training and Development

I.Content quality:

Quality of the content is one of the important factors that will contribute to E-Learning in effective way. The quality of the content should be strong, it should be understandable and also the content should be up to date to the market.

II.Technological Infrastructure:

Technological infrastructure helps the E-Learning platforms for its effectiveness. Such as Internet connections, compatible with devices sufficient bandwidth, server reliability this should be need for E-Learning for its effectiveness.

III.Learners' motivation and engagement:

This plays a crucial role while training and Development via E-Learning, involvement of learner motivation as well as engagement increases the desire of learning of the candidate, easy understanding of concepts or modules and avoid biases.

IV.Evaluation and continues improvements”

Due to the technological changes continues improvement should be necessary and in order to know the knowledge skills of the learners evaluated through assessment, feedback etc. these are the main factors that affect E-Learning.

V.Learner support and Interaction:

One of the major factors that can contribute to E-Learning for its effectiveness, in E-Learning platforms interactions tools plays major role in terms of clarification of biases and clarification of doubts and to do the day today activities.



Chapter-2 Review of literature and Research methodology

2.1 Review of literature

1. Rohini Sharma and Pallavi Banjare conducted a study on “E Learning an effective tool of training employees for learning organizations advocates the implementation of the technology driven learning and training methodologies in the workplaces”. With the help of E-training in an organization, the workforce is being tuned into a tangible return on investment by attaining higher quality output, even with fewer resources and lower budgets. Training is now involved with the help of diverse technologies including internet, CD-ROM, Sate light, intranet and audio video. This kind of best multimedia, interactive E-Platforms are available instead to face to face training. E-training has enabled organizations to deliver just-in-time tools, learning-on-demand, and self-paced online learning to ensure learning events immediately relevant, with a bonus of cost savings and flexibility due to reduced travel and allowing people to be on the job. The learning and progressive organizations are focusing on ongoing education, just in time training and enhancing employee skills to create a sustainable competitive advantage. By reducing knowledge gap and overcoming educational deficiencies through E-Learning, the organizations are providing the workforce with right knowledge mix to lead the competitive world.

2. Deepshika Aggarwal in the year 2009 conducted a study on “Role of E-Learning in a developing country like India”. This study based on the education scenario in India, the scope of E-Learning in India can be examined at two levels. The first one is education and another one is training. For education, it can be used at both elementary and higher levels. In training, it can be used by companies to both upgrade and train their employees. Tata group started Tata Management Training Centre long back in 2009 which provided E-Learning platform for its employees in different modules such as leadership programmes for all executive levels including live E-classroom, live video broadcast and self-paced E-Learning earning programmes. This self-paced E-Learning programme provides 44 different courses for Tata employees. Training & Development Programs by GE capital India: GE Capital is an expert providing a variety of training programs to help executives at all levels to develop their leadership and general business skills including E-training, soft-skills training and program-based training. Programs include executive courses in leadership, innovation, and strategy and managerial development.

3. Nishikant Waikar conducted a study on “Healthcare-Learning in India” aimed to provide an effective and efficient system to introduce a premium quality-based E-education in health sector. This study reveals that online learning experiences can be highly engaging and thus highly conducive to learning. In short, global investigation into any area of knowledge is quite possible with the help of a computer with Internet communication. It has made professional and technical education more comfortable and uniform all over the world.

4. Pramila Rao in the year 2011 conducted a study “E-Learning in India: the role of national culture and strategic implications”. The main objective of this study is to understand the impact of national cultural dimensions on E-Learning practices in India. This research indicates that national cultural dimensions of power distance, uncertainty avoidance, group collectivism, and future orientation influence E-Learning practices. This study distinguishes between synchronous and asynchronous methods of E-Learning and the role of culture on the same. Study provides strategic implications for MNCs with a guide sheet identifying the role of the various cultural dimensions on E-Learning. This study further suggests a theoretical E-Learning model identifying the impact of national cultural dimensions on E-Learning practices. This research is also helpful to practitioners as it suggests implementation of a strategic model for E-Learning initiatives in multinationals.

5. Anand Rimmi, Saxena Sharad, Saxena Shilpi conducted study in June 2012 on “E-Learning and its impact on rural areas”. The study about the awareness and impact of E-Learning in selected rural areas in India. The result shows that E-Learning is found to be highly emerging knowledge tool today. In developed as well as in developing countries E-Learning can bring lot of benefits. E-Learning has

much wider scope in the areas which are undeveloped and are not so educated. The main limitation of this method is the availability of proper bandwidth, readiness of E-Learners and a set of skills to deliver the content to learners. Overall, almost 48 per cent providers reported that E-Learning is beneficial to rural gentry for advance knowledge, promotions and better job opportunities, and to learn new developing technologies in the market.

6. Amita Maxwell Conducted the research in July 2012 on “Technological advancements in methods of training with reference to Online Training”. Impact and Issues for Organizations. The paper considers the increasing impact of information and communication technologies (ICT) and the associated rise in E-Learning which is now recognized worldwide for transforming training and learning. Online training is also not free from certain limitations; it has some issues and challenges to be dealt. Organizations need to weigh the cost and benefits in order to make use of the latest form of training.

7. Ekta Srivastava and Dr Nisha Agarwal conducted the research in October 2013 on “E-Learning new trend in Education and Training”. This study deals with the concept of E-Learning, its history, its impact on employee and student performance, its difference with traditional learning, and its future. More and more companies are using E-Learning in order to provide training to their employees and also various Universities are providing education through E-Learning. It has more advantages than disadvantages like it is cost effective, saves time, 24x7 access facilities, learn your own speed, quick answer of any problem etc.

8. Y. Vijaya Lakshmi conducted the research in March 2014 on “E-Learning an Emerging Trend in Education and Training”. This study examines the need, concept and importance of E-Learning. E-Learning is used by various corporate like TCS, Wipro, Patni Software Developers, General Motors, call centers like Emphasis etc., and also Many other educational institutions like ICFAI, Company Secretaries, MICA, IIM-A, and NIIT etc. The quality of higher education is constantly improving in our country. We have established our superiority in the Silicon Valley. Implementation of E-Learning has been the most successful in the corporate sector in India where it is used as a tool of meeting business goals and motivating employees. The quality of higher education is constantly improving in our country. We have established our superiority in the Silicon Valley. Implementation of E-Learning has been the most successful in the corporate sector in India where it is used as a tool of meeting business goals and motivating employees. Although E-Learning can never replace conventional classroom training but can be blended to use both the methods for the ease of trainee (Sheikh Mohd Imran, 2012).

9. S.M Imran Naushad Ali P.Misdone the study in June 2014 on “E-Learning strategies for Imparting LIS Education in India-Learning are now the global scenario and we must avoid confrontation. The LIS education is responding to these changes by making appropriate changes in its teaching-learning strategies. To add momentum to LIS E-Learning in India an appropriate and adequate infrastructure is desirable. Web-based or electronic mode of teaching has become an important component of LIS Education in India.

10. Renju Mathai conducted the research in July 2014 on “Impact of Robust Technology Training through E-Learning in Corporate Hotels in India”. This study reveals the impact of E-Learning in the corporate training process in hospitality Industry. There are several factors that can affect implementation of E-Learning in an organization such as economic factors, environmental factors, individual factors, technological factors and industrial factors. Considering these factors, various sections of an organization can be dealt like, economy in operations, positive personal outcomes, gender-based scenarios, and changes can be reached out to the employees in well updated manner. Through constant use of E-Learning system, employees can easily transfer what they have acquired from the training to their job which eventually leads to enhance their productivity. Thus, it requires less time, cost saving and provide efficient and skilled employees.

11. Priyanka Chauhan Indora conducted the research in September 2014 on “Training, E-Training and Technological Advancements in Cement Industries-Training is a part of training programme. E-Training programme is easy to conduct but successful program is a challenge for management too. With the ongoing changes in technology, it's important that organizations need to be aware of the technological advancements and changes in Information technology and provide training according to the Technological advancement but E-training cannot train in technical aspects like involvement of machineries, equipment's this requires a physical appearance to gain the practical Knowledge. It has guided a new path in cement industry also and this paper focuses on the technological advancement and how these advancements can be managed by training program. And E-training was hard to manage because of keep on changing of technological advancement. E-training is very useful but it has also its limits. As per the survey, technical aspects should be dealt with training and E-training both as per the need.

12. A Bindhu and Dr. Hansa Lysander Manohar conducted the research in the year 2015 on “Dimensions of E-Learning effectiveness”. A theoretical perspective stated that corporate and educational institutions are increasingly adopting E-Learning as an effective alternative to conventional methods of learning and training. Adopting an E-Learning system faces challenges at various stages of its development, implementation and usage. The article explores the various dimensions of E-Learning effectiveness - System quality, Content quality, Service quality, learner characteristics, organizational characteristics, system use, learner satisfaction, learning outcomes, and economic benefits.

13. R Suhasini and Dr. T Suganthalakshmi conducted the research in March 2015 on “Emerging Trends in Training and Development”. The study defines the attention towards the growth of training and its significance to the present time and also describes the current technological trends in training. Organizations will become more accepting to modify T&D policies and practices. Employees will expect better transparency from executives about criteria for performance review, changes in corporate strategy, career advancement opportunities, high potential program selection and even succession planning by management.

14. Naresh B and Dr. Bhanu Sree Reddy conducted the research in June 2015 on “Challenges and Opportunity of E-Learning in Developed and Developing Countries”. This study compares the E-Learning environment and its difference between the developing countries. This paper identifies the problems faced by those countries. The developing country faces more challenges like lack of infrastructure, trained instructors, lack of financial support, Government policies and less student readiness. But E-Learning provides more opportunity since it is in developing stage. Even though developed countries are strong in infrastructure, the challenges faced are found related to student engagement, student motivation, and high student drop out ratio. Opportunity for the developed countries is to implement successful E-Learning models, which in turn improves the economic growth of the country. Developing countries like India the premium institution (IIT's) taking some initiation towards implementing E-Learning in an Indian context. NPTEL is the portal created by IIT's and they have started offering online courses across the world.

15. Arun Gaikwad and Vrishali Surndra Randhir conducted a study in December 2015 on “E-Learning in India”. This study examines the many types of e-learning and the idea behind it. The contrast between classic and contemporary learning methods also exposes the thoughts of many people. According to research findings, India's rapid expansion of internet connectivity is a key factor in the development of e-learning there. E-learning has assisted in improving educational, literate, and economic levels in developing and impoverished nations.

Research undertaken on E-Learning in Abroad

16. Allison Hodges conducted the research in 2009 on “Corporate E-Learning”. This study examines How E-Learning was developed, implemented, and assessed in three separate healthcare-related firms, as well as how those health-care companies adopted and measured the effectiveness of E-Learning. The primary purpose of this research is to discover how firms determine the effectiveness of their programs and knowledge transfer to the workplace. According to the findings, evaluation and measurement must be integral parts of the training process in order to improve individual and organizational performance.

17. Ozturan M and Kutlu B did the study in 2010 on “Employee satisfaction of corporate E-Training programs”. The efficiency of e-learning as a corporate training tool and its effect on employee satisfaction are the subjects of this study. According to this study, trainee reaction-based satisfaction can be measured via end-user surveys because the model utilized for this is significant. E-Learning is gaining ground in workplaces at a faster rate, according to a survey of 800 employers from all 50 states and all the territories, representing all business sizes and industrial sectors. 40% of employers assessed their employees' understanding of e-learning as 4 or 5 out of 5; the average score was 3.2 out of 5; compared to the year 2009, this year's score increased to 0.2 from the previous year's 3.0.

18. Yap, Holmes, Hannanand Cukier conducted the study in 2010 on “attempted to investigate the relationship between effectiveness of training and organizational commitment and satisfaction”. This study revealed that employees who perceived training to be effective were more committed to their organizations than those who saw training as ineffective. The contributing factors of employee’s satisfaction and commitment include physical environment, internal support, job level, training level, organizational support, and learning flow.

19. Kristal Teresa Reynolds did the research in 2012 on “Critical Success Elements for the Design and Implementation of Organizational E-Learning”. This study explores that in the context of Organizational E-Learning how existing evaluation models apply and leads to develop Organizational E-Learning success framework, which defines the vital elements for success in an E-Learning environment. This study aims on the critical importance of three elements of an E-Learning success framework; system quality, information quality, and support quality. This study pointed out the need for a holistic approach to E-Learning evaluation. This study concluded the need for Organizations to evaluate the outcome at all stages of E-Learning from design through to implementation.

20. Juha P Lahti and Taminee Shinasharkey did the research in February 2012 on “Corporate E-Learning Position in Finnish Energy Business-Power Market Perspective”. The research paper’s main objective is to assess position of E-Learning as used in Finnish energy companies, particularly from power market perspective. It also reviews the relevant challenges faced by the companies under study and presents future scope of E-Learning in the energy sector. Results show that in the companies under study average 7 per cent of the total training and learning is done through E-Learning. The main objective of this study is to know how well E-Learning is accepted in this specified field. The researcher result show that in general the participants estimated their acceptance slightly more positive than average. Majority of the interviewees opines that traditional learning less risky to the core business as compared to E-Learning.

21. Ying Chieh Liu, Yu-An Huang did the research on “Organizational Factors' effects on the success of E-Learning Systems and Organizational Benefits”. An Empirical Study in Taiwan” develops a framework to assess the organizational factors that affect the quality and service of E-Learning systems and to know how these factors affect organizational benefits considering IS success model and resource-based theory. The results explore that top management support, information security policy, and institutional policy are positively related to system quality, while organizational learning culture is equally important for system service. Furthermore, system service leads to organizational benefits.

22. Pi-Tzong Jan, Hsi-Peng Lu and Tzu-Chuan Chou did the research in July 2012 on “The Adoption of E-Learning”. The main aim is to investigate the social forces that may influence employee's attitude and intention to adopt E-Learning with an organizational

perspective. The results indicate that normative and mimetic pressures have significant impact on the attitude and intention of adopting E-Learning. The result of the study shows that E-Learning can get benefitted from social influences that could result in employee's preference to adopt E-Learning in an organization. This study suggests that training managers may be required to work on improving normative and mimetic forces. The outcomes clearly show a system in which the institutional forces, particularly normative and mimetic, influence employee's attitudes toward using E-Learning, which in turn determine the intention of using E-Learning.

23. Kimiloglu H, Ozturan M and Kutlu B conducted the research in September 2013 on "E-Learning for corporate trainings in Turkey". The main objective of the study is to identify the amount of E-Learning used for organizational training projects, ICT tools used for E-Learning and the outcome attained and obstacles experienced by companies using E-Learning in Turkey. This study involved the data collection from 106 Companies out of the top 500 companies in Turkey and results revealed that the use of E-Learning is still at ground level. Companies that use E-Learning prefer it mainly for developing specific skills such as foreign language or advanced information technologies rather than the areas requiring managerial skills or customized programs. Outcome of the study have shown that E-Learning is still adopted at a quite basic level. This study has also tried to identify the level of E-Learning usage in various subject areas for corporate training.

24. Prince F Ellis and Kevin D Kuznia conducted the research in the year 2014 on "Corporate E-Learning Impact on Employees". This study emphasizes how the E-Learning impacted on the employee's productivity, Job performance, and Job satisfaction. Corporates use various forms of E-Learning processes and applications, such as computer-based training, Internet-based training, web-based training and many others. The research result says that E-Learning had varying correlations with employee productivity, job performance, job satisfaction and organizational commitment. It was concluded that the use of technology alone would not produce desired results corporations need to balance between E-Learning strategies and managerial support.

25. Josephine Nyokabi Mwangi conducted the study in the year 2014 on "An Investigation towards E-Learning at the Workplace". The main objective of this study was to investigate the adoption and use of E-Learning at the workplace with a focus on UNEP staff members working in Gigiri and This research was done to enhance the effectiveness of E-Learning. This study results reveals that 56 per cent of the employees indicated that they somewhat agreed that the most effective training tool for an organization is E-Learning and 34% of them are strongly agreed that the most effective training tool is E-Learning. The study tried to establish some of the organizational challenges faced in adopting and using E-Learning. The findings indicate that per cent of the respondents felt that E-Learning practices are not just geared towards impacting technical knowledge. The study also found whether E-Learning had an impact on staff personal career progression or work environment.

2.1.1 Statement of the problem

The Major issue is ensuring the widespread access to the internet connectivity and E-Learning is too dependent on the technology this results into lack of interest of employees in accessing training through E-Learning, this leads to decrease in Organization growth, decline in Organizational performance, enhance the chances of accidents, errors and decline in employee development and growth, in order to addressing this effectiveness of Learning is to be fulfill in order to meet the objectives.

2.1.2 Need of the study

This study provides an understanding about that Effectiveness of E-Learning towards the Training and Development of Employees in I.T Sector at Bangalore. This thesis helps to identify the how the Training is impact on employee development in I.T sector at Bangalore City. Also, this study talks about that what are the factors that influencing the Training in E-Learning Platforms in I.T sector at Bangalore City

and to address the issues faced by the employees so far by the E-Learning in I.T sector at Bangalore City.

2.1.3 Objective of the study

- i.To understand about the Effectiveness of E-Learning towards the Training and Development of Employees in I.T Sector at Bangalore.
- ii.To identify how the Training is impacting on employee development.
- iii.To evaluate the factors that influence the Training in E-Learning Platforms
- iv.To address the issues are to be faced by the employees
- v.To suggest that various ways to enhance the effective training and development through E-Learning.

2.2 Research methodology

2.2.1 Hypothesis

To prove the significance of objective in a local and well-oriented way hypothesis were formulated and tested, as the study deals on “Effectiveness of E-Learning Platform in Training and Development of Employees in I.T sector at Bangalore City”.

A. Hypothesis-1

H0: There is a no significant association between gender and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

H1: There is a significant association between gender and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

B. Hypothesis-2

H0: There is a no significant association between Age and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

H1: There is a significant association between Age and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

2.2.2 Research Design

The Research Design of this study will be the Descriptive research. The Methodology was used in this research is combine of both Quantitative and Qualitative research. The primary data has been used to determine objectives and the secondary information has been used to gather the required information to devote time, money and energy etc.

2.2.3 Sampling technique

This study involves in gathering a data from various I.T Sector such as Oracle, EY, Northern Trust and Deloitte employees. The technique was used in this study is Convenience Sampling. This sampling technique helps to collecting the unbiased responses from the employees. The Sample size is 100, and that 100 responses are collected in I.T Sector at Bangalore.

2.2.4 Population

The populations for this Research are the employees who are working in Deloitte, Northern Trust, E.Y and Oracle.

2.2.5 Sample size

Convenience sampling was the method employed in this investigation, and the sample size was 100.

2.2.6 Sources of data

i.Primary Data Collection

To obtain the response, primary data were gathered by questionnaires, interviews, and observations.

ii.Secondary Data Collection

Through journals, research papers, articles, newspapers, etc., secondary data was gathered.

2.2.7 Tools of data collection

Tools used for collection of data is Interview and Structure questionnaires

Structure Questionnaire: A bunch of Questionnaires are created in the Google form and circulated the link amongst to the respondents.

2.2.8 Tools of data collection

The Data which has been collected conversion of all data into tabular form with their appropriate percentages, Chi-square technique and analyzing it using a simple technique namely Pie chart and Bar graph.

2.2.9 Scope of the study

i. Participants:

The study will focus on employees working in the IT sector in Bangalore City. The participants may include professionals from various roles and levels within IT companies, such as software engineers, system administrators, data analysts, project managers, and quality assurance specialists.

ii. Training and Development Programs:

The study will evaluate how the E-Learning platform has affected employee development and training initiatives. This covers training in both technical and non-technical skills, such as project management, software tools, programming languages, and leadership development.

iii. Learning Outcomes:

The scope may include evaluating the learning outcomes achieved through the E-Learning platform, such as knowledge acquisition, skill enhancement, and competency development among employees in the IT sector.

iv. Performance Outcomes:

The study will investigate the connection between employee performance outcomes and the use of the e-learning platform. Improvements in productivity, efficiency, problem-solving skills, task performance, and overall job performance may be measured in order to accomplish this.

v. Employee Engagement:

The scope may encompass assessing the level of employee engagement with the E-Learning platform. This includes measuring the frequency of platform usage, participation in learning activities, interaction with course materials, and feedback or reviews provided by employees.

vi. Organizational Context:

The study will consider the organizational context within the IT sector in Bangalore City. This may involve exploring factors such as company size, industry sub-sector, organizational culture, management support, and resources available for training and development initiatives.

vii. Timeframe:

The scope of the study may focus on a specific timeframe, such as assessing the effectiveness of the E-Learning platform over certain duration (e.g., six months, one year). The study may also consider the long-term impacts and sustainability of the E-Learning platform's effectiveness over an extended period.

2.2.10 Limitations of the study

- i. The study is conducted and limited to the I.T sector.
- ii. The study was conducted and it's Limited only to the Bangalore City.
- iii. The study is conducted only top 4 I.T/MNC's Companies such as Deloitte, Northern Trust, E.Y and Oracle.
- iv. The information given by the respondents based on their opinion during the time of their work and that may not be generalized as the base for future study relevant to this topic.
- v. Limited Time for data collection – I had the limited time period to collect the data from 100 respondents it's quite difficult for the given time frame. But still manage to collect the data by the 100 employees who work in Deloitte, Northern trust, E.Y and Oracle and also manage to collect the secondary data from Magazines, E-papers, Internet, Articles, Magazines, Research papers and Books.
- vi. The study was not done on the entire population

Chapter - 3

Profile of the selected respondents

3.1 Revolution of I.T sector in Bangalore City

Bangalore I.T City: The Silicon Valley of India

The IT hub of Bangalore City has significantly impacted India's technological landscape. There are two parts to the Indian IT sector: business process outsourcing and IT services. More than 4.36 million people are employed in the sector nationwide. Bangalore contributes more than 38% of all IT exports, taking a sizable piece of the I.T. pie.

I.Early Development:

The IT revolution in Bangalore can be traced back to the early 1980s when several multinational corporations, including Texas Instruments, IBM, and Hewlett-Packard, established their presence in the city. This marked the beginning of Bangalore's journey as a major IT hub in India.

II.Infrastructure and Connectivity:

Bangalore's rapid growth as an IT hub has been supported by the development of world-class infrastructure and excellent connectivity. The city has well-established technology parks and special economic zones (SEZs) that provide state-of-the-art facilities for IT companies. The presence of an international airport and good road and rail networks further facilitate connectivity.

III.Growth of IT Parks:

Bangalore is home to several prominent IT parks, such as Electronics City, Manyata Tech Park, and Whitefield, which have played a crucial role in accommodating numerous IT companies. These parks offer a conducive environment for businesses, with amenities like office spaces, IT infrastructure, and recreational facilities.

IV.Talent Pool:

Bangalore's educational institutions, including prestigious engineering and technical colleges, have been instrumental in nurturing a skilled and talented workforce. The city attracts graduates from across India, who contribute to the growth of the IT sector with their knowledge and expertise.

V.Start-up Ecosystem:

Bangalore has emerged as a thriving start-up ecosystem, with a vibrant entrepreneurial culture. The city has witnessed the establishment of numerous start-ups across various domains, including technology, e-commerce, and fin-tech. This start-up culture has fostered innovation, collaboration, and the exchange of ideas.

VI.Global Presence:

Many global IT giants have set up their operations in Bangalore, recognizing its potential as a hub for cutting-edge technology and software development. These companies bring in investments, expertise, and global exposure, contributing to the growth of the IT sector and positioning Bangalore as a global IT destination.

VII.Diversification of IT Services:

Beyond software creation and IT services, Bangalore's IT industry has developed. With the emergence of new technologies like machine learning, data analytics, artificial intelligence, cloud computing, and the IoT (Internet of Things), it has expanded its focus. Bangalore has been able to keep on the cutting edge of technical breakthroughs thanks to its variety.

VIII.Collaboration and Networking:

The IT sector in Bangalore thrives on collaboration and networking. The city hosts numerous tech events, conferences, and meetups, providing opportunities for professionals to connect, share knowledge, and explore potential collaborations. These events contribute to the growth of the IT community and promote innovation.

3.2 About Deloitte.

“Always one step ahead”

Deloitte provides audit and assurance services beside this also provides financial advising, risk advisory, consulting, tax, and various services. At present, total no. of employees in Deloitte about 330,000 employees across more than 150 countries and territories.

The Headquarters in England, London Deloitte is an international professional services network that is British. Deloitte, together with EY, KPMG, and PWC, is regarded as one of the Big Four consulting and accounting companies and has the largest services providers in the world in terms of employees and revenue.



Figure 3.2.FA

Deloitte was originally founded by William Deloitte in London in 1845, and it extended its operations to the US in 1890. The company's global presence led to its rebranding as Deloitte Tohmatsu in 1993, which was later shortened to Deloitte. Today, Deloitte boasts a vast network of over 415,000 professionals worldwide.

3.2.1 Services provided by the Deloitte.

- I. Audit
- II. Consulting
- III. Financial Advisory
- IV. Risk Advisory
- V. Tax and Legal

3.2.2 Learning and Development in Deloitte.

Deloitte increase to offer virtual learning because it's a part of hybrid approach to professional career development after the initial COVID-19 pandemic lockdowns were lifted. Employees at Deloitte were able to react fast and give their virtual products to professionals as a supplement to in-person training sessions.

CURA – E-Learning Platform provided by the Deloitte.

Cura, an innovative digital learning platform developed by Deloitte, utilizes artificial intelligence to deliver personalized and customized online development options to its users. This platform offers access to an extensive library of over 400,000 learning assets from both internal and external sources, catering to diverse interests and requirements.

One of the key strengths of Cura is its ability to tailor learning experiences based on individual needs and interests, ensuring that each learner receives relevant and engaging content. This personalized approach democratizes the learning process, empowering Deloitte's professionals to have a voice in their development journey and make choices that align with their career goals.

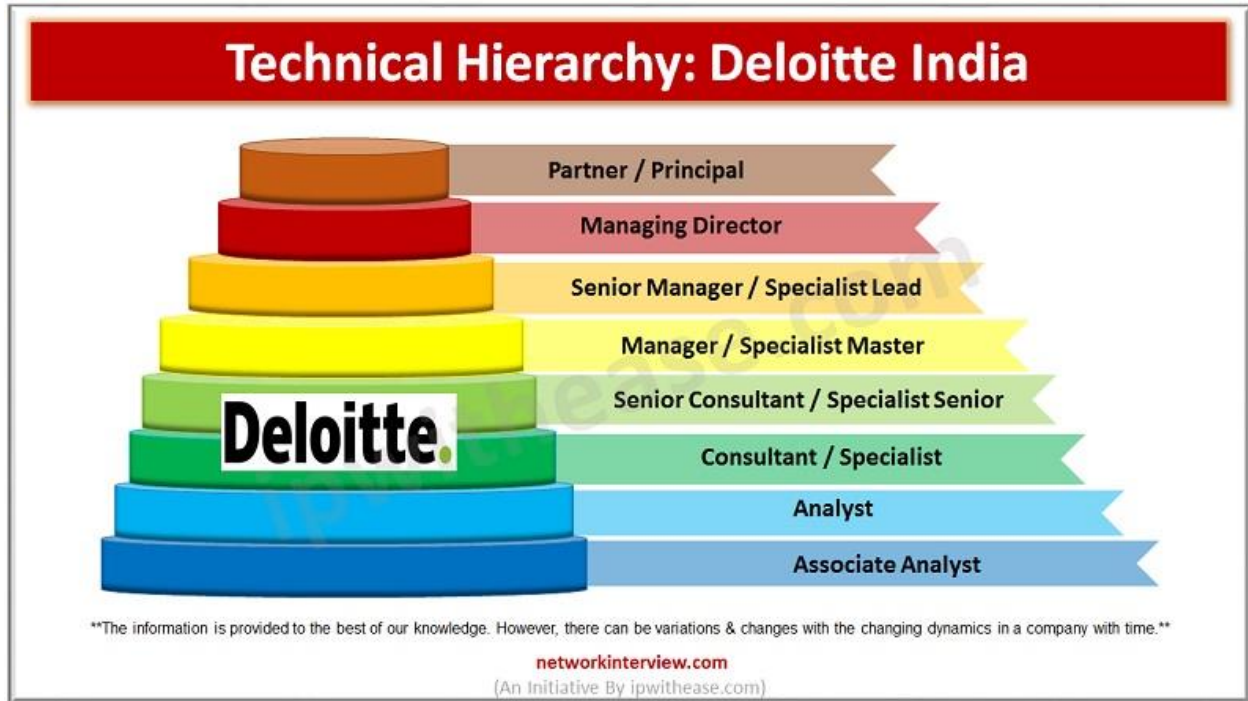
DU (Deloitte University) and Deloitte's learning teams strived to find the right balance between conducting in-person classroom activities and delivering virtual learning experiences across their offices throughout the world reopened. Deloitte's cultural home is DU, which offers meaningful in-person moments supported by Cura. DU will be an even more crucial location for Deloitte employees to gather as the pandemic moves into its next phase in a culture that emphasizes personal safety, inclusion, and physical and mental wellbeing. At DU, face-to-face time is spent on relationship building, skill development, coaching and mentoring, and role-playing.



Figure 3.2.2FB

Despite the pandemic's impact on DU's operations, we predict that Deloitte will invest an average of US\$1,150 per person in learning globally over the course of FY2022. The "opportunity cost" of sending professionals away for formal training, which amounts to an average of 42 developmental hours per person per year and \$5.12 billion in the US, is not included in this. Additionally, this figure does not include additional independent learning time invested by Deloitte employees in activities that are essential to their professional growth at the company, such as using Cura resources and pursuing on-the-job coaching and mentorship.

3.2.3 Profile of the respondents



Job profiles/Designation in Deloitte

Figure 3.2.3FC

The above chart showing that Technical Hierarchy practiced by the Deloitte. From the Associate Analyst up-to the Managing director and Partner level based on the skills, experience of the candidate/employee the posts/designation to be given. Always fresher's start with the designation from the Associate Analyst.

Responses gathered from below designations

Sl. No	Job Profiles & Names	Age of the Respondents	Gender of the Respondents	No. of Responses Received
1	<u>Consultant</u>			5
	1. Lakshmikantha L	18-30	Male	
	2. Charitya	31-40	Female	
	3. Ranjith	18-30	Male	
	4. Syed Usman	18-30	Male	
5. Shashi Ranjan	18-30	Male		
2	<u>Analyst</u>			8
	1. Madhuri	18-30	Female	
	2. Akshith	18-30	Male	
	3. Maria	31-40	Female	
	4. Sadvik	18-30	Male	
	5. Anagha	31-40	Female	
	6. Keerthi	18-30	Female	
	7. Faisal Shadab	18-30	Male	
8. Chenna Keshav Patil	18-30	Male		
3	<u>EFA Analyst</u>			7
	1. Kishore	18-30	Male	
	2. Hemalatha	18-30	Female	
	3. Anvitha	31-40	Female	
	4. Deepika	31-40	Female	
	5. Ashwini B	18-30	Female	
	6. Raviteja N	18-30	Male	
7. Gaurav Goswami	18-30	Male		
4	<u>Associate Analyst</u>			5
	1. Rashmi	18-30	Female	
	2. Ramkumar M	18-30	Male	
	3. Vinay Gupta	18-30	Male	
	4. Abdul Bais	18-30	Male	
5. AnaghaRamesan	18-30	Male		
TOTAL RESPONSES				25

Table 3.2.3TA

Above table data showing from the position of Associate Analyst up-to the position of consultant including male and female responses between the age of 18 – 30 & 31 – 40. The total no. of responses collected is 25 from the employees. The responses collected from Associate analyst is 5, from EFA (Engagement Financial Analyst) Analyst is 7, from Analyst is 8 and finally response from the Consultant grade employee is 5.

Twenty replies are gathered from respondent's ages 18 to 30, while the final five are gathered from respondent's ages 31 to 40. The total number of female responses ranges from 10 at the top to 10 at the bottom, while the total number of male responses ranges from 15 at the bottom to 17 at the top.

3.3 About Ernst & Young (EY) "Building a better working world"

In terms of revenue, EY ranks third among professional services worldwide. As a market leader, EY offers services like assurance, consulting, law, strategy, tax, and transactions, all of which contribute to the development of confidence in the economy and the capital markets.

EY is a UK-based multinational services company with its main headquarters situated in London, England. As part of the Big Four accounting firms, EY offers a diverse range of services to its clients, including assurance financial audit, tax consulting, and advisory services. EY operates in over 700 and 312,250, offices and professionals spanning across 150 countries.



Figure 3.3.FA

In 2019, EY secured the seventh position among the largest privately-owned companies in the United States. As of 2023, EY holds a remarkable distinction by being the only accounting firm to maintain a place on Fortune magazine's prestigious list of the 100 Best Companies to Work for, continuously for the past 25 years.

3.3.1 Services provided by the EY.

- I. Assurance,
- II. consulting,
- III. Law,
- IV. strategy,
- V. tax and transactions

3.3.2 Learning and Development in EY.

EY provides a strategic knowledge management strategy to ensure that the correct knowledge is delivered to employees at the right time. It enables workers to make better use of internal data in order to improve corporate performance.

UDEMY–E-Learning Platform provided by the EY & Tech MBA

- I. EY focuses more on E-Learning, but also EY provides all kinds of training such as on the job, off the job training etc.
- II. Based on the role EY provides training and usually more on Skill development programs this focus on enhancing the skills according to the job role an individual is playing.
- III. It is also providing an opportunity to Cross skill development (Learning or acquiring knowledge from other stream/apart from employee domain) and up skill development and EY mandate 40 hours of training (Technical & Non-technical domain)
- IV. Training/ Learning will be takes place through UDEMY software (Includes so many courses with certification) &
- V. EY also focusing on Tech MBA with free of cost, and if needed Company will re-embers the cost of courses.
- VI. E-Learning is accessible 24/7 employee can manage to take it up within working hours. Thus, managing work life balance, enhancing productivity so on. Employee also can access the training courses such as skill development courses or career development courses etc. in outside the working hours.
- VII. Comparing the both On the Job Training, E-Learning well as off the job training. EY following all this three but most the EY offers E-Learning courses.

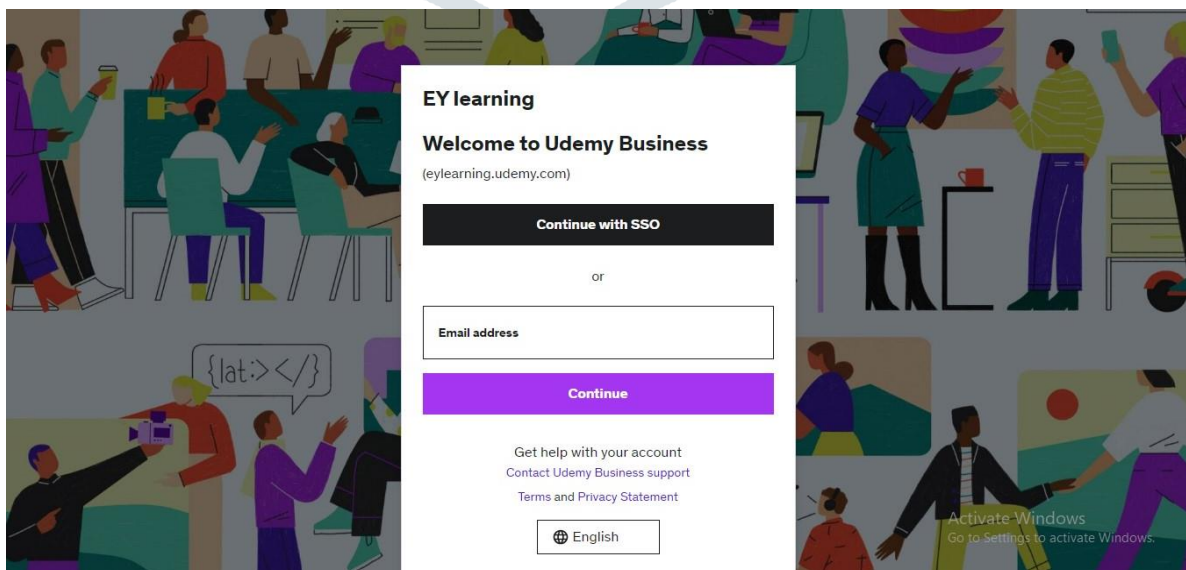


Figure 3.3.2FB

3.3.3 Profile of the respondents

Job profiles/designations in EY

Figure 3.3.3FC

The above chart showing that Technical Hierarchy practiced by the EY. From the Associate Consultant up-to the Associate director and Partner level based on the skills, experience of the candidate/employee the posts/designation to be given. Always

fresher's start with the designation from the Associate Consultant.

Responses gathered from below respondents

Sl. No	Job Profiles & Names	Age of the Respondents	Gender of the Respondents	No. of Responses Received
1	<u>Manager</u> 1. Latha	31-40	Female	1
2	<u>Senior Consultant</u> 1. Vishnu 2. Netravathi 3. Yamakrishna	18-30 31-40 18-30	Male Female Female	3
3	<u>Consultant</u> 1. Nikitha 2. Bhoomika 3. Samitha 4. Anand 5. Lakshmeesha 6. Shwetha 7. Palakshi 8. Syed Najib pasha 9. Mohammed Amanullah	18-30 18-30 18-30 41-60 18-30 31-40 18-30 18-30 18-30	Female Female Female Male Male Female Male Male Male	12

	10. Ashish Lyer	18-30	Male	
	11. Chethan Prabhu	18-30	Male	
	12. Reet Chandani	18-30	Female	
4	<u>Associate Consultant</u>			
	1. Bharath	18-30	Female	
	2. Deepthi	18-30	Male	
	3. Ankith Agarwal	18-30	Male	
	4. Pavan Kumar B	18-30	Male	
	5. Praveen Kumar	18-30	Male	9
	6. Deepa	18-30	Female	
	7. Ranozoy Mandal	18-30	Male	
	8. MD saquib	18-30	Male	
	9. Suryapatha	18-30	Male	
TOTAL RESPONSES				25

Table-3.3.3TA

Above table data showing from the position of Associate Consultant up-to the position of Manager including male and female responses between the age of 18 – 30, 31 – 40 & 41-60. The total no. of responses collected is 25 from the employees. The responses collected from Associate Consultant is 9, from consultant is 12, from Senior Consultant is 3 and finally response from the top-level employee is 1.

21 responses were obtained from respondents aged 18 to 30, 3 responses were received from respondents aged 31 to 40, and the remaining 1 response was collected from the Manager aged 41 to 60. Total female responses range from the top to the bottom, while total male responses range from the bottom to the top.

3.4 About Northern Trust

“Connect-whenever you are”

Northern Trust is a renowned global financial institution providing a comprehensive range of services, including asset servicing, investment management, and wealth management to institutions, high-net-worth individuals, and families worldwide. Based in Chicago, Northern Trust Corporation is an US financial services firm catering to corporations, institutional investors, and ultra-high net worth individuals.

*Figure 3.4.FA*

As one of the oldest continuously operating banks, Northern Trust holds a prominent position among the largest banking institutions in the United States. As of June 30, 2022, the bank managed an impressive \$1.7 trillion in assets and had custody over \$17 trillion in assets.

3.4.1 Services provided by the Northern Trust.

- I.Trust,
- II.Custody,
- III.Treasury,
- IV.Banking services,
- V.Analytical/reporting solutions.

3.4.2 Learning and Development in Northern Trust.

The oversight of the talent management department at Northern Trust rests with the Chief Talent Officer, who directly reports to the Chief Human Resources Officer. These team plays a crucial role in devising policies, programs, and practices related to talent acquisition, learning and development, talent planning, and organizational success.



Figure 3.4.2FB

As indicated by figure 3.4. CB, Northern Trust facilitates employees' access to a tailored portfolio of core professional, manager, sales, and client service training options through the Northern Trust University (NTU) portal. Moreover, NTU is responsible for conducting and monitoring mandatory compliance training, as well as functional training related to various vocations and tasks. In the year 2021, employees collectively devoted more than 520,000 hours to training, making use of self-paced, virtual, and instructor-led methods.

In addition to these offerings, Northern Trust actively encourages its workforce to pursue further education outside of the company. Through the Education Assistance Program, employees worldwide are eligible for tuition reimbursement to support their pursuit of degrees. The program also extends support for certain industry certifications, fostering continuous learning and professional development among its staff.

Few leadership development programs provided by the Northern Trust to their employees they are:

- I.Talent Planning and Organizational Effectiveness
- II.The Rotational Development Program
- III.The A Approach for Managers Summit
- IV.The Enterprise Talent Leadership Program
- V.The Senior Leadership Development Program

3.4.3 Profile of the respondents

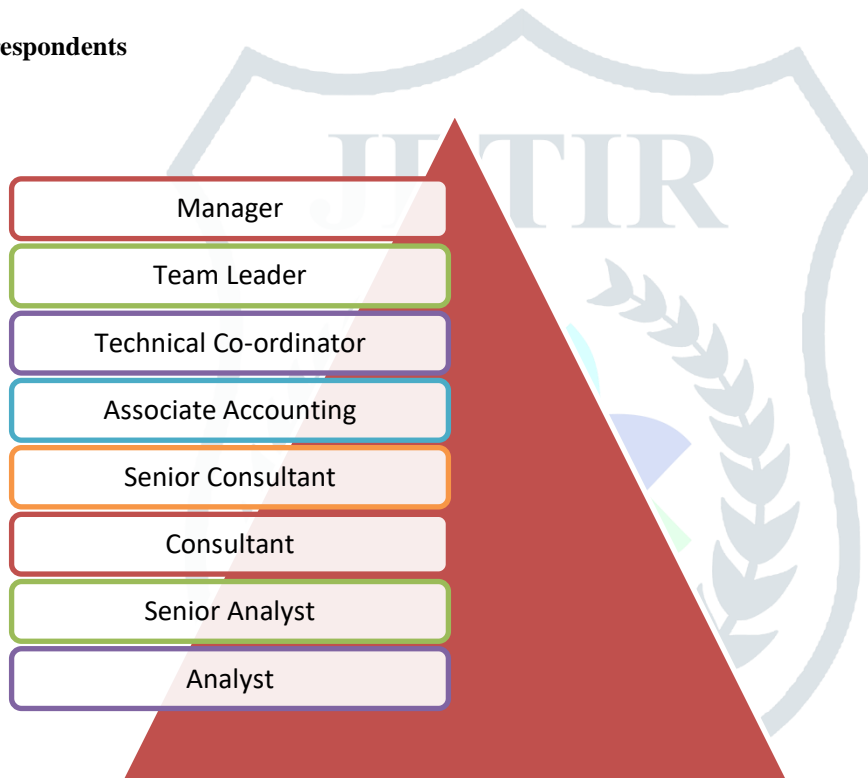


Figure 3.4.3FC

The above chart showing that Technical Hierarchy practiced by the Northern Trust. From the Analyst position up-to the Manager based on the skills, experience of the candidate/employee the posts/designation to be given. Always fresher's start with the designation from the Analyst position.

Responses gathered from below designations

Sl. No	Job Profiles & Names	Age of the Respondents	Gender of the Respondents	No. of Responses Received
1	<u>Senior Analyst</u>			8
	1. Shankar	31-40	Male	
	2. Pavan	18-30	Male	
	3. Dennis D Souza	31-40	Male	
	4. Bharath M	18-30	Male	
	5. Syed Asif	18-30	Male	
	6. Mayuri	31-40	Female	
	7. Deekshith	31-40	Female	
8. Anurag	18-30	Male		
2	<u>Finance Analyst</u>			3
	1. Lalit Horo	18-30	Male	
	2. Anand V Krishna	18-30	Male	
3. Akilesh	18-30	Male		
3	<u>Analyst</u>			14
	1. Nithin	18-30	Male	
	2. Smitha Bhandary	31-40	Female	
	3. Shifasakur babu	31-40	Female	
	4. Dhanush Gowda	18-30	Male	
	5. Nandana Narayan	31-40	Male	
	6. Bhuvana	18-30	Female	
	7. Pavan Kamat	18-30	Male	
	8. Anusha	18-30	Female	
	9. Nikhitha Raj	18-30	Female	
	10. Naveen S	18-30	Male	
	11. Radhika Kadam	18-30	Female	
	12. Amruth V	18-30	Male	
	13. Sanjana Kumari	18-30	Female	
14. Reena	18-30	Female		
TOTAL RESPONSES				25

Table-3.4.3TA

Above table data showing from the position of Analyst up-to the position of Senior Analyst including male and female responses between the age of 18 – 30 & 31 – 40. The total no. of responses collected is 25 from the employees. 14 responses are collected from the respondents in the role of analyst, 3 responses are collected from the respondents they are belongs to the finance position, and finally 8 responses are collected from the top level of employees they are belongs to senior analyst position.

18 responses are collected from respondents between the age of 18-30 and remaining 7 responses are collected from respondents between the ages of 31 - 40. Total female respondents are 10 from the top position to lower position and the total male responses are 15 from lower position to the top position.



3.5 About Oracle

“Hardware and Software, engineered to work together”

Founded in 1977 by Ellison and Miner, Oracle Corporation, originally known as Software Development Laboratories (1977-1979), gained widespread recognition for its flagship product, Oracle Database software. This multinational computer technology company, now headquartered in Austin, Texas, emerged as the world's third-largest software firm in terms of sales and market capitalization in the year 2020.

Figure 3.5.FA

In 1989, Oracle made the significant decision to move its global headquarters to Redwood Shores, located in Redwood City, California. However, the full completion of the campus was accomplished later, in 1995. At that time, Oracle Systems Corporation underwent a name change, becoming officially recognized as Oracle Corporation, although it is commonly referred to simply as Oracle.

3.5.1 Services provided by the Oracle.

The company offers a diverse range of products and technologies, including database software and its own proprietary brands, cloud engineered systems, and various enterprise software products. These enterprise software products encompass ERP (enterprise resource planning) software, HCM (human capital management) software, CRM (customer relationship management) software also referred to as customer experience, EPM (enterprise performance management) software, and SCM (supply chain management) software.

3.5.2 Learning and Development in Oracle.

build your talent with a unified and tailored learning solution that eliminates compliance risk while also empowering your team to build the skills required for innovation. Oracle Learning (a component of Oracle Cloud Human Capital Management) enables businesses to grow and adapt in a quickly changing business environment.

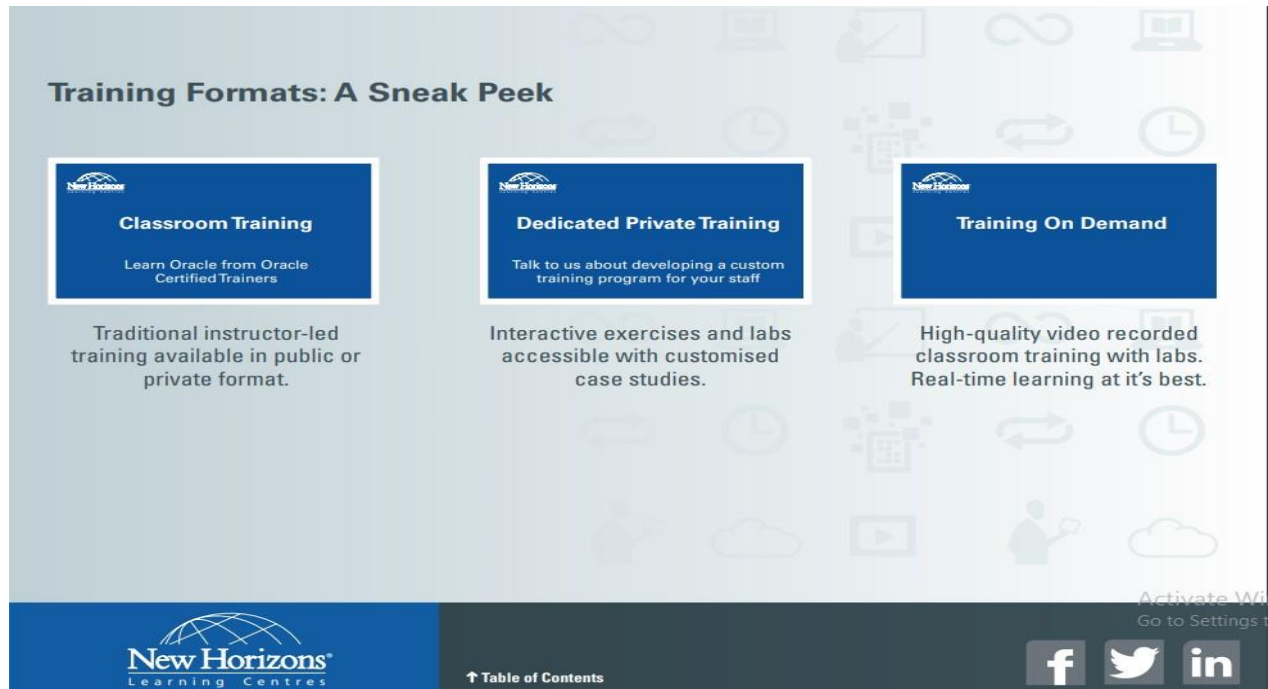


Figure 3.5.2FB

Integrating traditional, compliance-based learning with social, unstructured learning will help your organization reach its full potential. Oracle Learning, as a key component of your growth and learning strategy, helps your organization to respond swiftly to changes in the business environment, boost productivity through collaboration, and enable knowledge exchange across diverse communities.

Few kinds of learning programs following in Oracle

- I. Self-directed skills development
- II. Mobile learning
- III. Blended learning
- IV. Social learning
- V. Coaching and mentoring
- VI. Learning E-Commerce
- VII. Assessments and Evaluations

3.5.3 Profile of the respondents

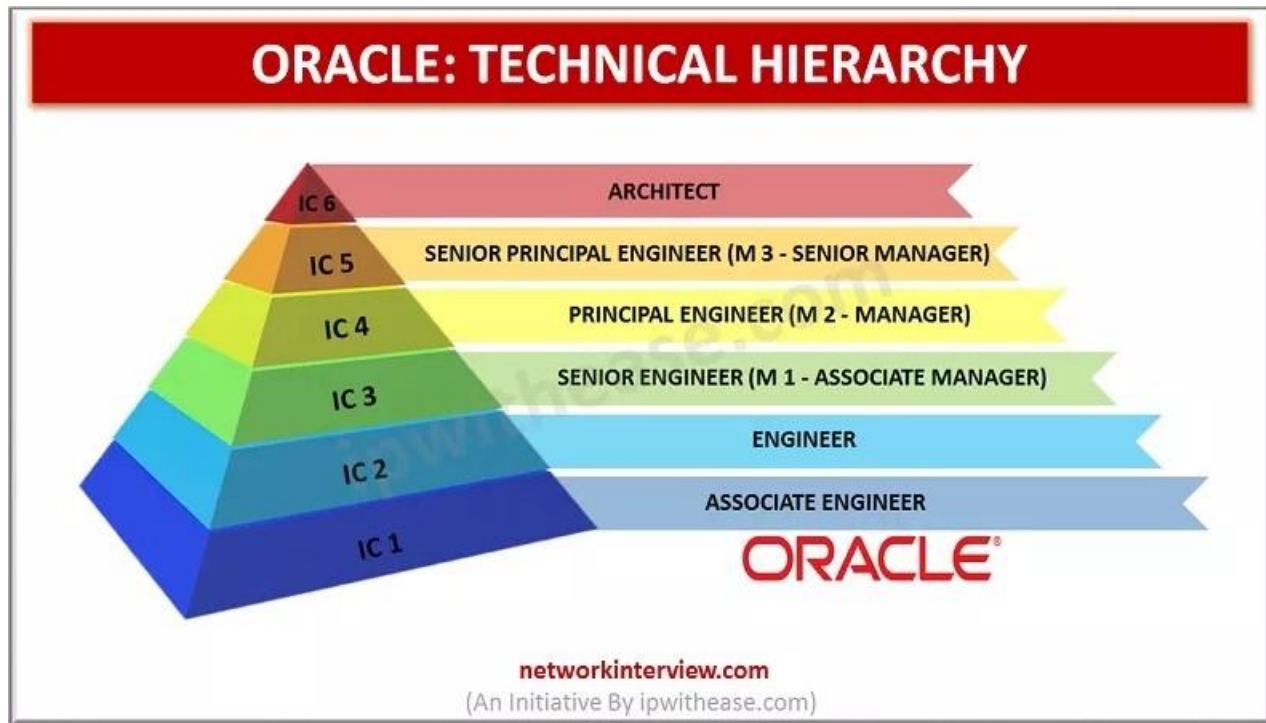


Figure 3.5.3FC

The above chart showing that Technical Hierarchy practiced by the Oracle. From the Associate Engineer up-to the Architect based on the skills, experience of the candidate/employee the posts/designation to be given. Always the Engineer stream fresher start with the designation from the Associate Engineer.

Responses gathered from below respondents

Sl. No	Job Profiles & Names	Age of the Respondents	Gender of the Respondents	No. of Responses Received
1	<u>Senior Consultant</u>			5
	1. Nanma	31-40	Female	
	2. Roopam Singh	31-40	Female	
	3. Uma Shankari	31-40	Female	
	4. Subham	18-30	Male	
5. Ravi Nigam	31-40	Male		
2	<u>Associate Consultant</u>			2
	1. Sandeep Hegde	31-40	Male	
	2. Chandan	18-30	Male	

3	<u>Business Analyst</u>				
	1.	Charvika	18-30	Female	
	2.	Anand Sharma	18-30	Male	
	3.	Saran C K	31-40	Male	
	4.	Chaitra	18-30	Female	
	5.	Pooja Madhu	18-30	Female	
	6.	Aravinth	18-30	Male	10
	7.	Prekshithcariappa	31-40	Male	
	8.	Bindu Reddy	18-30	Female	
	9.	Nidhi Krishna	18-30	Female	
10.	Loganathan	31-40	Male		
4	<u>Project Accounting Analyst</u>				
	1.	Salman Khan	18-30	Male	
	2.	Shree Lakshmi	18-30	Female	
	3.	Bhuvan	18-30	Male	
	4.	Bhavyashree B	18-30	Female	
	5.	Arjun	18-30	Male	8
	6.	Deepak Garg	31-40	Male	
	7.	Theerthesh	18-30	Male	
8.	Vinay G	18-30	Male		
TOTAL RESPONSES				25	

Table-3.5.3TA

Above table data showing from the position of Project Accounting Analyst up-to the position of Senior Consultant including male and female responses between the age of 18 – 30 & 31 – 40. The total no. of responses collected is 25 from the respondents. 8 responses are collected from the respondents in the role of Project Accounting Analyst, 10 responses are collected from the respondents they are belongs to the Business Analyst position, 2 response are collected from the respondents they belong to the category of Associate Consultant and finally 5 responses are collected from the top level of employees they are belongs to senior Consultant position.

16 responses were acquired from respondents between the ages of 18 and 30, while the remaining 9 responses were collected from respondents between the ages of 31 and 40. The total female responses range from top to bottom, whereas total male responses range from bottom to top.

Chapter - 4
Data analysis and
Interpretation

4A. Data analysis and interpretation

4.1 The Table showing the age of the respondents.

Sl.	Variables	Responses	Percentage %
A.	18-30	70	70%
B.	31-40	28	28%
C.	41-60	2	2%
D.	Above 60	-	-
TOTAL		100	100%

Table-4.1

Analysis:

The above table represents that largest proportion of responses collected from the age group of 18-30 which is 70% of total responses. This suggest that I.T sector attracts young candidates/employees, there is a decline in the no. of responses to 28 which is lower than category A, but still represents the substantial portion of the respondents.

Further downfall in responses from the age group of 41-60, only 2 responses are collected and no responses received from the category D.

4.1 The Chart showing the age of the respondents.

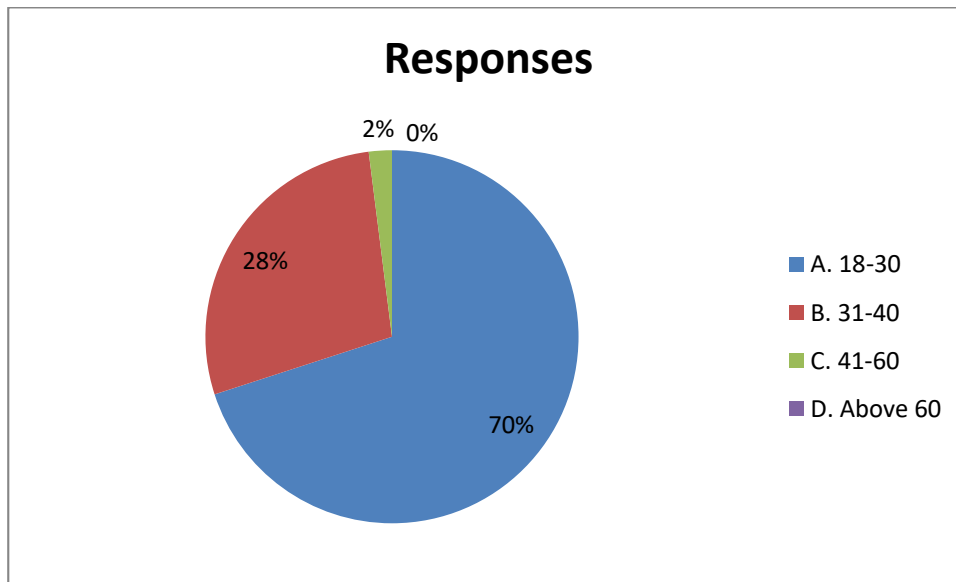


Chart-4.1

Interpretation

The Chart inferred that the I.T sector in Bangalore attracts more young professionals between the age group of 18-30. This aligns with the perception that the IT industry often appeals to and employs younger individuals who are more likely to possess technical skills and adaptability to emerging technologies.

The bit lower responses received from Category B and C compare to the category A, suggest a potential age-related trend in I.T sector, while older professionals might less represented. It could indicate might be the Career shift, Attrition rate, Work pressure etc. in I.T sector Bangalore City.

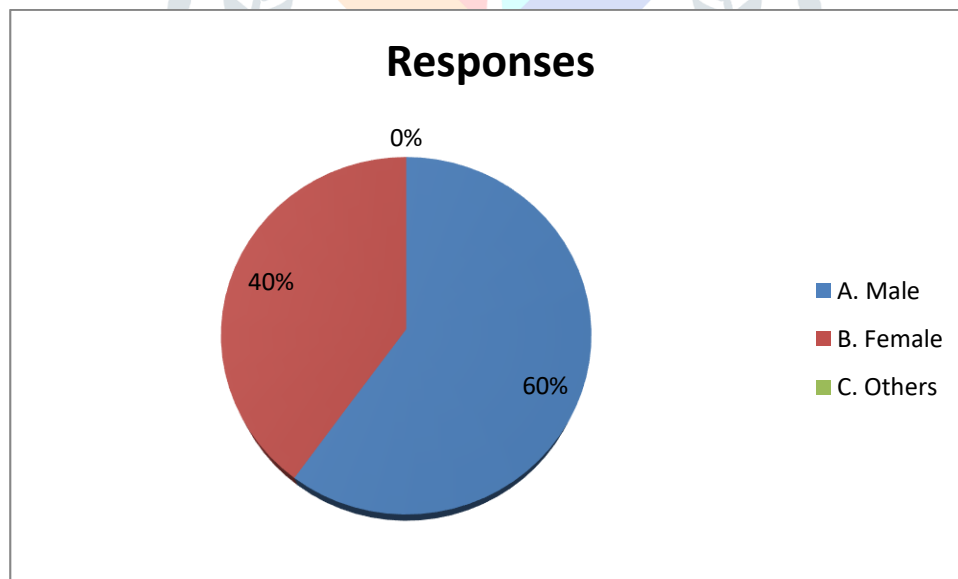
4.2 The Table showing the gender of the respondents.

Sl.	Variables	Responses	Percentage %
A.	Male	60	60%
B.	Female	40	40%
C.	Others	-	-
TOTAL		100	100%

*Table-4.2***Analysis**

The above table represents that 60% of responses are from Male category and 40% of responses from the female category in the in I.T Bangalore. This indicates that there is a relative balanced between male and female in I.T sector Bangalore City.

There are no responses are recorded from the others category in I.T sector Bangalore City, so this represents they didn't participate in this survey or were not included.

4.2 The Chart showing the gender of the respondents.*Chart-4.2***Interpretation**

The charts inferred that the IT sector in this particular survey or data collection has a relatively balanced gender distribution between males and females. This suggests that both genders have a significant presence and involvement in the IT industry.

However, it's crucial to recognize that the absence of data for the "Others" category limits the complete understanding of gender diversity within the IT sector Bangalore City. To have a comprehensive understanding and ensure inclusivity, it is essential to consider and provide options for individuals who identify outside the binary genders (Other Category).

4.3 The Table showing that name of the Organization employees is working in.

Sl.	Variables	Responses	Percentage %
A.	Deloitte	25	25%
B.	EY	25	25%
C.	Northern Trust	25	25%
D.	Oracle	25	25%
TOTAL		100	100%

Table-4.3

Analysis

The above table represents those equal responses had collected from Deloitte, EY, Northern trust and Oracle in total of 100 sample size 25% of responses are gathered from each 4 esteemed Organizations in I.T Sector Bangalore City.

This indicates that thoroughly understand of all 4 Organizations only limited to 25 responses each in I.T sector Bangalore City.

4.3 The Chart showing that name of the Organization employees is working in.

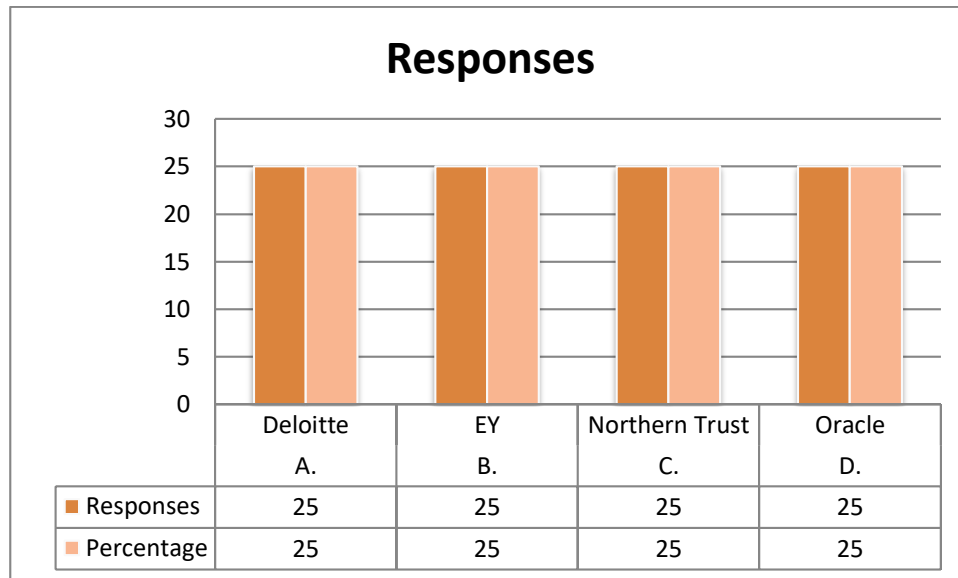


Chart-4.3

Interpretation

The chart inferred that in this survey or data collection within the IT sector, the respondents were evenly distributed among the mentioned companies (Deloitte, EY, Northern Trust, and Oracle). This indicates a relatively balanced representation of employees or professionals working in these organizations with respect to the sample size.

To gain a deeper understanding of the IT sector and the distribution of employees across different companies, additional context and data related to the survey's purpose and methodology would be necessary.

4.4 The Table showing the work mode of the respondents.

Sl.	Variables	Responses	Percentage %
A.	Onsite	19	19%
B.	Hybrid	74	74%
C.	Work From Home	7	7%
TOTAL		100	100%

Table-4.4

Analysis

The above table represents that Work mode in the I.T sector Bangalore City. Majority that 74% of responses are account to “Hybrid Work Mode” and followed by the 19 % of Onsite work mode and 7% of respondent working from home.

The hybrid work mode emerges as the most prevalent work mode among the surveyed I.T sector respondents, with 74% of respondents indicating a combination of onsite and remote work. This suggests that the hybrid model has gained popularity and adoption within the IT industry, potentially due to the flexibility and benefits it offers in terms of work-life balance and productivity.

4.4 The Chart showing the work mode of the respondents.

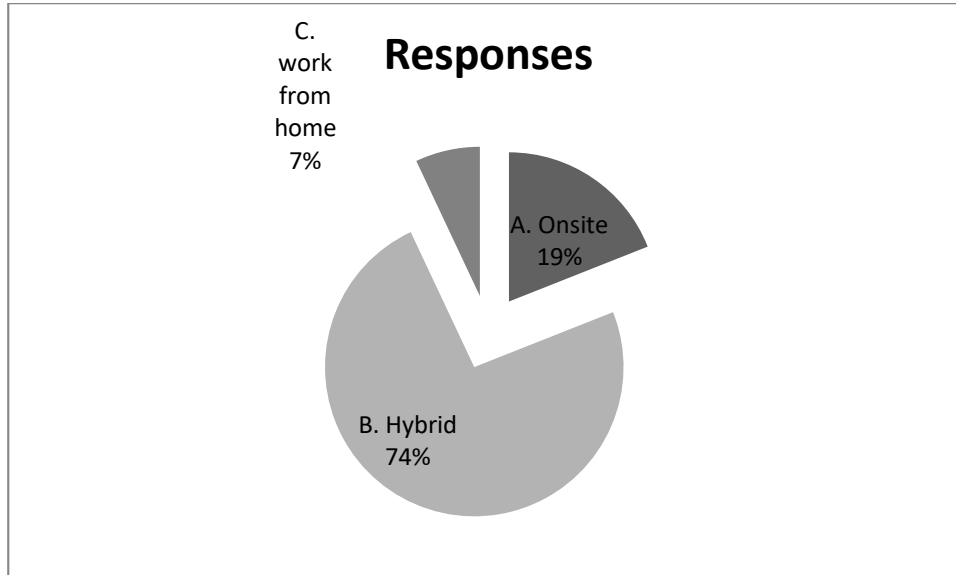


Chart-4.4

Interpretation

Based on the above chart it can be interpreted that the IT sector has embraced a hybrid work model, which combines both onsite and remote work. This indicates a shift towards more flexible work arrangements, allowing employees to work from both office premises and remotely.

The relatively lower percentages of respondents working onsite (19%) and working from home (7%) suggest that pure onsite work and full-time remote work are less common in the IT sector among the surveyed population. This could be attributed to the industry's nature, which often requires collaboration etc.

4.5 The Table showing the whether E-Learning plays a vital role in enhancing your knowledge either not.

Sl.	Variables	Responses	Percentage %
A.	Yes	74	74%
B.	No	11	11%
C.	Maybe	15	15%
TOTAL		100	100%

Table-4.5

The above table represents that weather the E-Learning plays a vital role in enhancing employee knowledge or not at Deloitte, EY, Northern Trust, and Oracle. Most of 74% of respondents are accepted that E-Learning plays a vital role in enhancing employee knowledge. Only 11% of respondents are stated that E-Learning does not play's vital role.

While 15% of respondents are expressed the E-Learning may be or may not be plays vital role in enhancing skills and knowledge across I.T sector in Bangalore City.

4.5 The Chart showing the whether E-Learning plays a vital role in enhancing your knowledge either not.

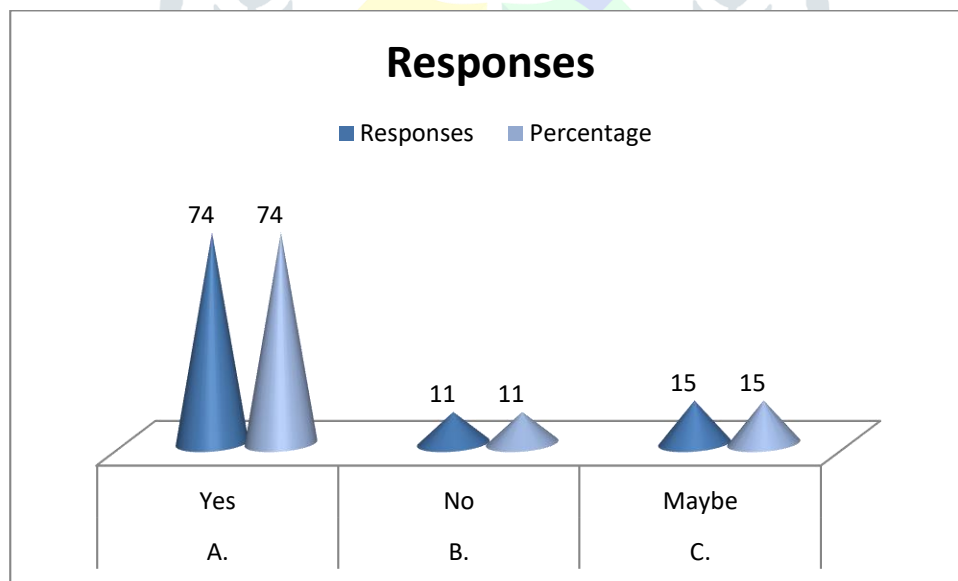


Chart-4.5

Interpretation

The chart inferred that Most of 74% of respondents agreed that E-Learning plays a vital role in Training and Development of employees at Deloitte, EY, Northern Trust, and Oracle. This reflects that through E-Learning employees can enhance their knowledge skills abilities and

is required for Development of employees. It's easily measured that those employees are look for gaining knowledge skills etc. and also E-Learning is widely recognized

In another hand 11% of respondents are stated that E-Learning does not play's vital role. While 15% of respondents are expressed the E-Learning may be or may not be plays vital role in enhancing skills and knowledge this could be attributed to various factors such as individual learning preferences, lack of suitable E-Learning resources in I.T sector Bangalore city.

4.6 The Table showing in which way does E-Learning is necessary.

Sl.	Variables	Responses	Percentage %
A.	To enhance the skills and knowledge	27	27%
B.	To save the time	14	14%
C.	To learn at our own phase	19	19%
D.	All the above (a, b &c)	34	34%
E.	Just for gaining certifications not for knowledge & training purpose	6	6%
TOTAL		100	100%

Table-4.6

Analysis

The above table represents that what can be the reason for utilizing the E-Learning in Deloitte, EY, Northern Trust, and Oracle at Bangalore city. Most of the 34 % of respondents are chosen “category D” this shows that to enhance the skills and knowledge, to save time, and to learn at our own phase E-Learning is necessary.

In other hand 6% of responses from “category D” which shows E-Learning are required only because of gaining the certifications and not for the purpose of gaining knowledge and training

4.6 The Chart showing in which way does E-Learning is necessary.

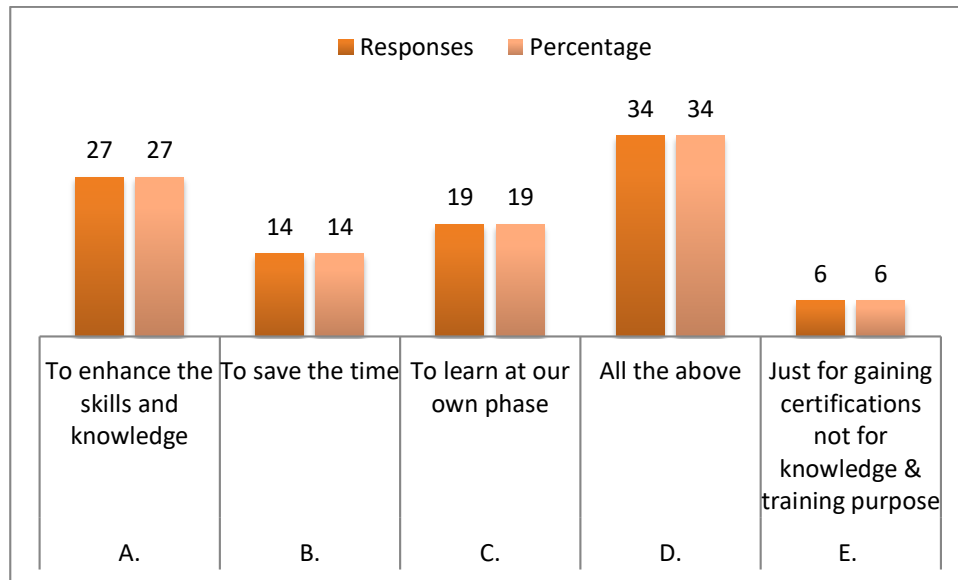


Chart-4.6

Interpretation

The above chart Interpret that 34 % of responses are responded to “category D” shows E-Learning platform is necessary to enhance the skills and knowledge, save the time, and learn at own phase. At the same time 27% of respondents agreed that E-Learning is necessary to enhance the skills and knowledge. This reflects the perception that E-Learning provides a comprehensive solution for various learning needs in the IT sector in Bangalore City.

Other reasons selected by respondents include save time (14%), learning at their own pace (19%), and solely focusing on gaining certifications without an emphasis on knowledge and training purposes (6%).

4.7 The Table showing whether E-Learning is more effective than on-site learning either not.

Sl.	Variables	Responses	Percentage %
A.	Strongly disagree	19	19%
B.	Disagree	16	16%
C.	Neutral	30	30%
D.	Agree	23	23%
E.	Strongly agree	12	12%
TOTAL		100	100%

Table-4.7

Analysis

The table presents the weather E-Learning is more effective than onsite learning either not, at Deloitte, EY, Northern Trust, and Oracle. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The replies are divided into five categories, with varied percentages for each. The majority of replies fell into "category C," which is neutral (30%), with 23% choosing "Agree" and 19% choosing "Strongly disagree." 16% of respondents answered "Disagree," while 12% chose "Strongly agree."

4.7 The Chart showing whether E-Learning is more effective than on-site learning either not.

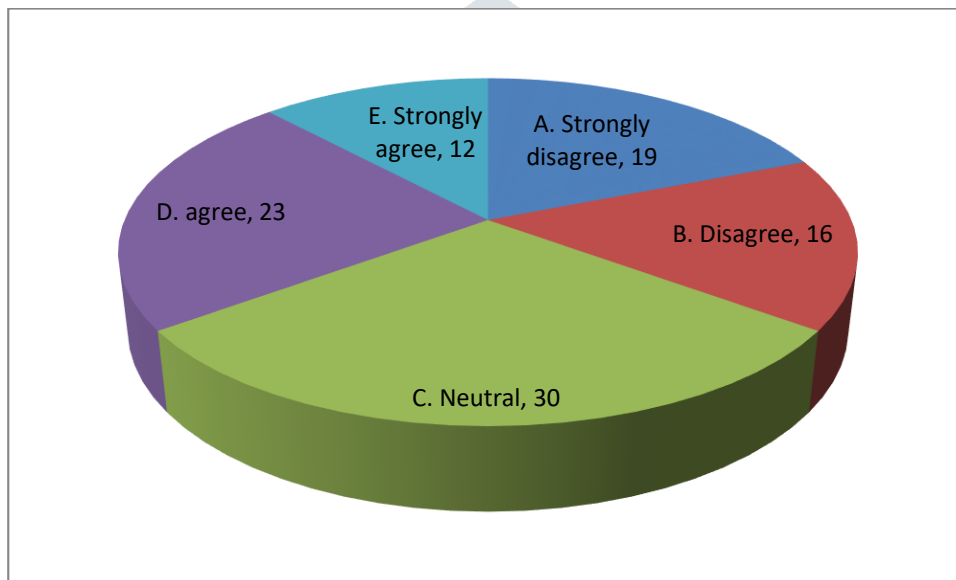


Chart-4.7

Interpretation

The above chart interpreted that opinion regarding the effectiveness of E-Learning compared to on-site learning in the IT sector. 30 % of respondents expressed a neutral stance, indicating no strong preference or opinion either in favor or against the effectiveness of E-Learning.

Other respondents were distributed across the categories, with 19% respondents strongly disagreeing, 16% respondents disagreeing, 23% respondents agreeing, and remaining 12% respondents strongly agreeing with the notion that E-Learning is more effective than on-site learning.

4.8 The Table showing whether E-Learning in the I.T sector in Bangalore provides a wide range of resource and topics to cater to employees' diverse needs either not.

Sl.	Variables	Responses	Percentage %
A.	Strongly disagree	16	16%
B.	Disagree	12	12%
C.	Neutral	25	25%
D.	Agree	43	43%
E.	Strongly agree	4	4%
TOTAL		100	100%

Table-4.8

Analysis

The table presents the responses related to the perception of whether E-Learning platform provides a wide range of resources and topics to cater to employee's diverse needs in I.T sector in Bangalore City. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The responses are spread across five categories, with varying percentages for each category. The highest 43 percentage of responses comes under the category D which is "Agree", 25% respondents agreed "Neutral", 16% respondents chosen "Strongly disagree", 12% respondents chosen "Disagree", and remaining 4% respondents chosen "Strongly agree".

4.8 The Chart showing whether E-Learning in the I.T sector in Bangalore provides a wide range of resource and topics to cater to employee diverse needs either not.

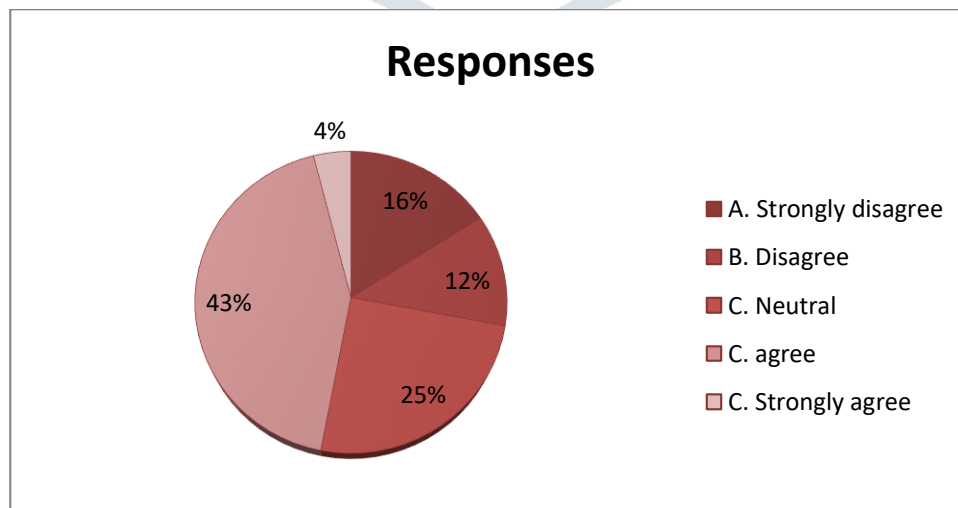


Chart-4.8

Interpretation

The above chart interpreted that perceptions regarding the availability of a wide range of resources and topics in E-Learning for employee's diverse needs in the IT sector in Bangalore are varied. The largest group of respondents which is 43% agreed that E-Learning provides a wide range of resources and topics to cater to diverse needs.

In another hand other respondents were distributed across the various categories, with 25% expressing a neutral stance, 16% strongly disagreeing, 12% disagreeing, and 4% strongly agreeing with the notion that E-Learning provides a wide range of resources and topics. This specifically denotes that I.T sectors focusing on employee's development/Up-skill, career growth of the employees and also to meet their organizational objectives.

4.9 The Table showing the rate of satisfactory level of employees regards with Training and Development through E-Learning.

Sl.	Variables	Responses	Percentage %
A.	**	7	7%
B.	***	41	41%
C.	****	39	39%
D.	*****	13	13%
TOTAL		100	100%

Table-4.9

Analysis

The table represents the satisfactory level of the employees regards with Training and Development through E-Learning. The percentages represent the distribution of responses across those options. The responses are from four different categories with varying percentages for each category.

The highest percentage of responses falls under the "category B" which is 41% that shows 3 ratings out of 5 ratings chosen by the respondents, 39% of responses chosen 4 rating, 13% of responses chosen 5 ratings, finally 7% of responses chosen 2 ratings.

4.9 The Chart showing that rate of satisfactory level of employees regards with Training and Development through E-Learning.

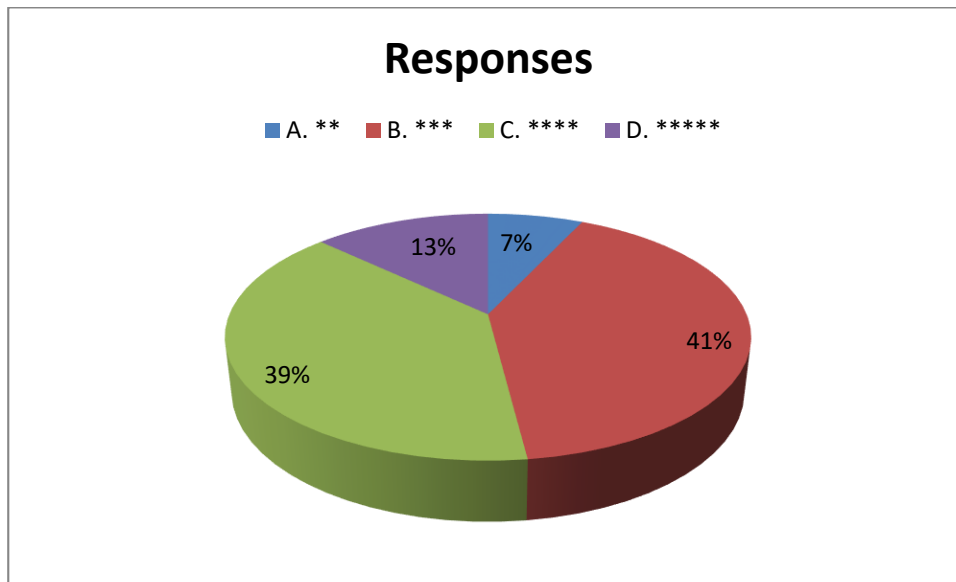


Chart-4.9

Interpretation

The Chart inferred that employees in the IT sector have varying levels of satisfaction regarding training and development through E-Learning. 41 % is the largest group of respondents rated their satisfaction at *** (3), this indicating a moderate level of satisfaction in the view of materials, resources, access of various E-Learning courses etc.

Other respondents were distributed across the categories, with 39% expressing a higher level of satisfaction rated 4 ("****"), 13% expressing the highest level of satisfaction rated 5("*****"), and 7% expressing a lower level of satisfaction rated 2 ("**").

4.10 The Table showing that employees applied their skills on the job learned from E-Learning either not.

Sl.	Variables	Responses	Percentage %
A.	Yes	53	53%
B.	No	15	15%
C.	Maybe	32	32%
TOTAL		100	100%

Table-4.10

Analysis

The table presents the responses related to employees applying the skills they learned through E-Learning on the job in the Deloitte, EY, Northern Trust, and Oracle at Bangalore city. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The responses are spread across the three options, with different percentages for each option. 53% of responses falls under the category of A which is "Yes", 32% followed by the category C which is "Maybe", and 15 % responses from category B "No".

4.10 The Chart showing that employees applied their skills on the job learned from E-Learning either not.

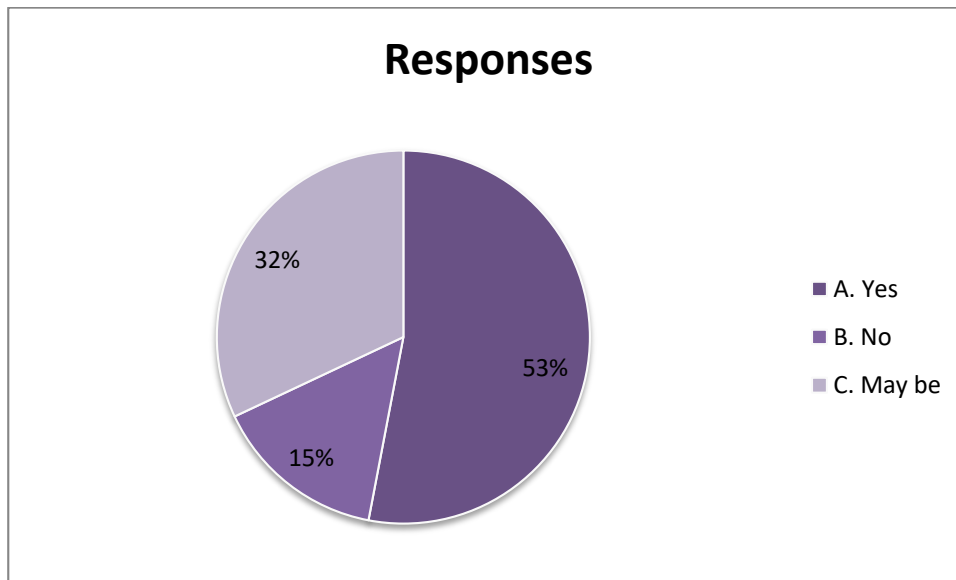


Chart-4.10

Interpretation

The above chart inferred that employees in the IT sector have varying degrees of application of skills learned from E-Learning on the job. The majority of respondents are 53% reported applying the skills they learned from E-Learning in their work, indicating a positive impact of E-Learning on their job performance. It indicates that E-Learning modules are relevant to their job roles and it helps employees to avoid mistakes enhance the knowledge skills and reduce the cost of operations by the firm.

In another view respondents were distributed across the categories, with 32% expressing uncertainty or a mixed response which is option C ("Maybe") regarding the application of skills learned from E-Learning, and 15% indicating that they have not applied the skills on the job which is option B "No" this indicates based on individual learning enthusiastic or they might be the high motivated and experienced employees.

4.11 The Table showing how often employee participate in the training Program offered by the Organization.

Sl.	Variables	Responses	Percentage %
A.	Rarely	11	11%
B.	Occasionally	43	43%
C.	Frequently	33	33%
D.	Regularly	13	13%
TOTAL		100	100%

Table-4.11

Analysis

The table presents the responses related to how often employees participate in the training programs offered by the organization in the IT sector. The respondents were given multiple options to choose from.

The responses are spread across the four categories, with varying percentages for each category. 43% is the highest percentage of responses falls under the option of B which is "Occasionally", 33% of respondents chosen option C which is "Frequently", 13% of respondents chosen option D which is "Regularly", and finally 11% of respondents chosen option A which is "Rarely".

4.11 The Chart showing how often employee participate in the training Program offered by the Organization.

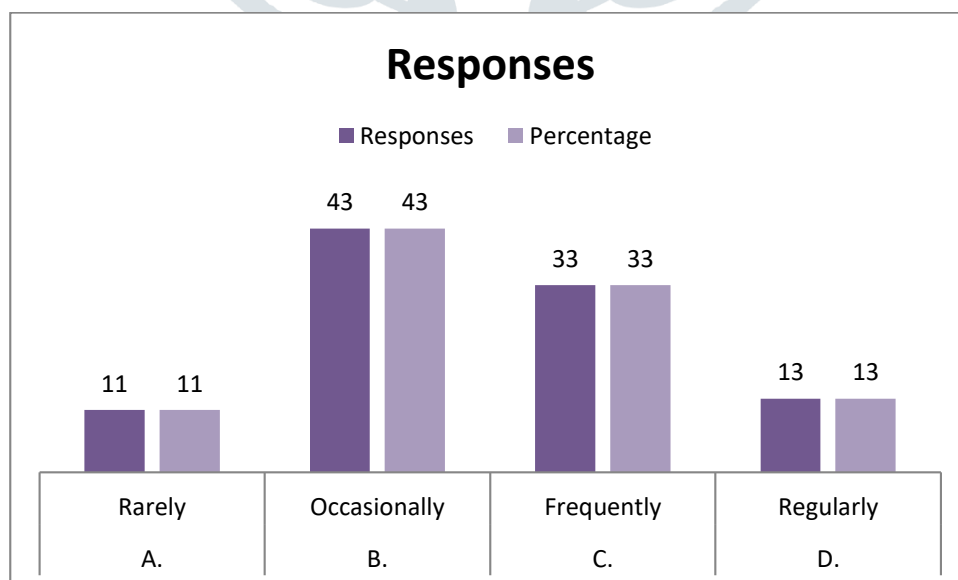


Chart-4.11

Interpretation

The above chart interprets that employee participation in training programs offered by organizations such as Deloitte, EY, Northern Trust and Oracle in the IT sector varies in terms of frequency. 43% is the largest group of respondents reported participating in training programs occasionally, indicating that they engage in training activities but not on a consistent basis due to more work, need to give time to family's friends and other factors especially to women's etc.

Other respondents were distributed across the categories, with 33% participating frequently, 13% participating regularly, and 11% participating rarely in training programs this indicates it would be the time/work factors or they might be the high motivated and experienced employees' other factors.

4.12 The Table showing that whether Training from E-Learning declines the development of employees either not.

Sl.	Variables	Responses	Percentage %
A.	Strongly disagree	21	21%
B.	Somewhat disagree	34	34%
C.	Neutral	16	16%
D.	Somewhat agree	19	19%
E.	Strongly agree	10	10%
TOTAL		100	100%

Table-4.12

Analysis

The table presents the responses related to the perception of whether training from E-Learning declines the development of employees in the IT sector. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The responses are spread across the five categories, with varying percentages for each category. 34% is the highest responses falls under the option B option which is "Somewhat disagree", 21% of responses chosen option A which is "Strongly disagree", 16% of responses chosen option C which is "Neutral", 19% of responses chosen option D which is "Somewhat agree", and finally 10% of responses chosen option E which is "Strongly agree".

4.12 The Chart showing that whether Training from E-Learning declines the development of employees either not.

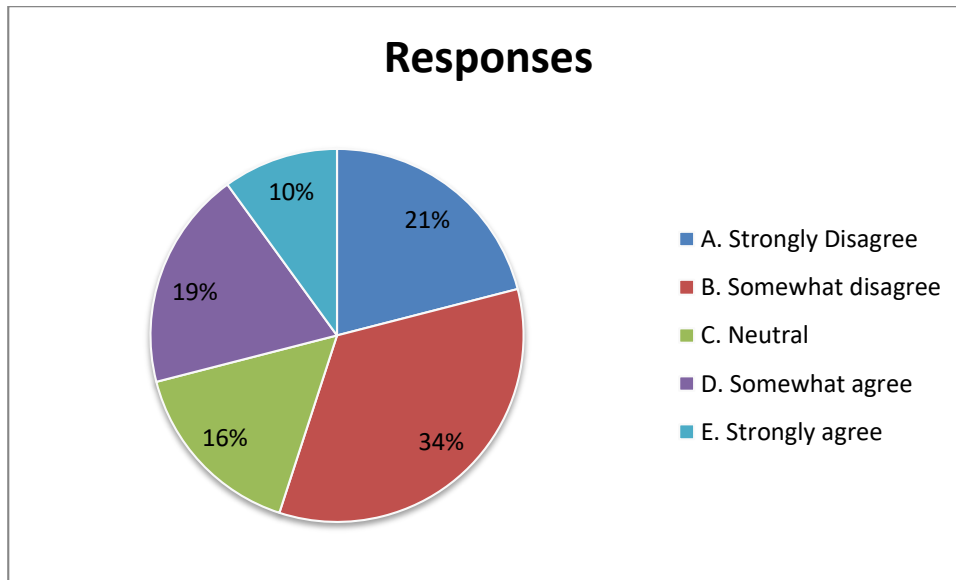


Chart-4.12

Interpretation

The above chart inferred that opinions regarding the impact of training from E-Learning on the development of employees in Deloitte, EY, Northern Trust, and Oracle are varied. 34% is the largest group of respondents expressed a somewhat disagreement, indicating that they do not believe that E-Learning training declines employee development this is the positive sign.

Other respondents were distributed across the categories, 21% of responses strongly disagreeing, 16% of responses expressing a neutral stance, 19% of responses expressing somewhat agreeing, and 10% of responses strongly agreeing with the notion that E-Learning training declines employee development.

4.13 The Table showing the changes in employee's career path as a result of participating in E-Training.

Sl.	Variables	Responses	Percentage %
A.	Yes	56	56%
B.	No	22	22%
C.	May be	22	22%
TOTAL		100	100%

Table-4.13

Analysis

The above table showing the changes in employee's career path as a result of participating in E-Training, most of the 56% of respondents are agreed that participating in E-Training changes the employee's career path.

In another view 22% of responses are chosen option B which is “NO”, and finally again 22% of responses are chosen option C which is “maybe”

4.13 The Chart showing the changes in employee’s career path as a result of participating in E-Training.

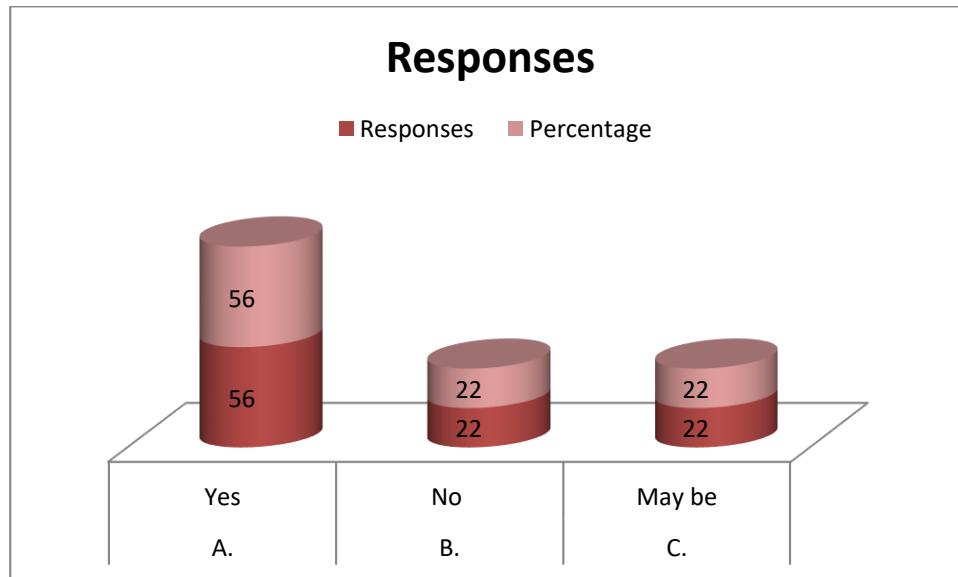


Chart-4.13

Interpretation

Based on the above chart it can be interpreted that employees in the IT sector have experienced varying degrees of changes in their career paths as a result of participating in E-Training. The majority of respondents 56% reported experiencing changes in their career paths, suggesting that E-Training has had a positive impact on their professional growth and advancement.

Another hand the respondents were distributed across the categories, with 22% indicating no changes in their career paths and 22% expressing uncertainty or a mixed response regarding the impact of E-Training on their career paths.

4.14 The Table showing in which way does training through E-Learning helps employees.

Sl.	Variables	Responses	Percentage %
A.	Improves the job satisfaction	8	8%
B.	Improves the KSA (Knowledge, Skills, Ability)	31	31%
C.	Enhance the work life balance	22	22%
D.	All the above	27	27%
E.	Not much helpful compare to Onsite Training	12	12%
TOTAL		100	100%

Table-4.14

Analysis

The above table shows in which way does training through E-Learning helps employees, most of the 31% of respondents chose the option B which is Improves the KSA (Knowledge, skills, ability). The followed by option D which is 27% of responses indicates All the above, 22% responses chosen option C which is “To enhance the work life balance”.

In another hand 12% of responses are chosen option E which is not much helpful compare to onsite training, finally 8% of responses are chosen option A which is responses improves the job satisfaction.

4.14 The Chart showing in which way does training through E-Learning helps employees.

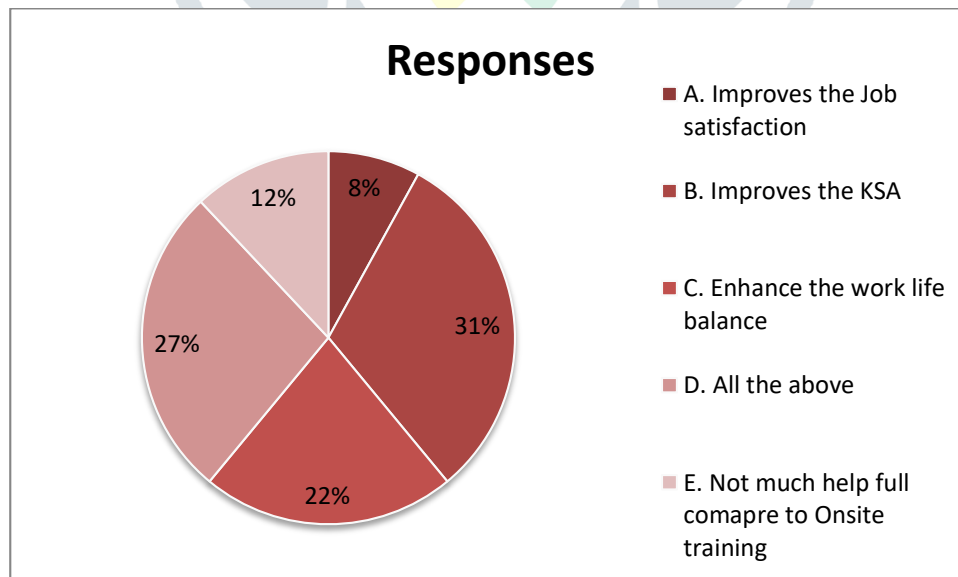


Chart-4.14

Interpretation

The above chart interpreted that employees in the IT sector (Deloitte, EY, Northern Trust, and Oracle) perceive various ways in which training through E-Learning helps them. 31% is the highest percentage of respondents believe that E-Learning training improves their knowledge, skills, and abilities (KSA), highlighting the impact of E-Learning on their professional development and indicates the I.T sector Bangalore City focusing on employee career development, talent attraction, Talent retention.

Other respondents were distributed across the categories, with 27% stating that E-Learning helps them in all of the mentioned ways, 22% indicating that it enhances their work-life balance, 12% representing that E-Learning is not much helpful compared to onsite training, and 8% found that it improves job satisfaction.

4.15 The Table showing how does the design and user interface of an E-Learning platform impact the effectiveness of training.

Sl.	Variables	Responses	Percentage %
A.	Positive	62	62%
B.	No impact	24	24%
C.	Negatively	14	14%
TOTAL		100	100%

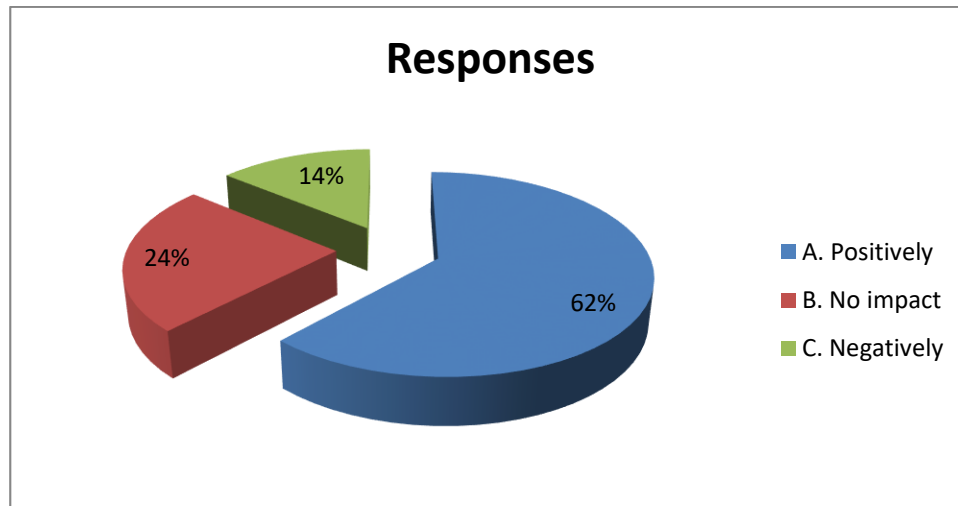
Table-4.15

Analysis

The above table showing how does the design and user interface of an E-Learning platform impact the effectiveness of training in I.T sector Bangalore city. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The responses are distributed across the three options, with varying percentages for each category. 62% of responses are chosen option A which is “positive”, 24% of responses are chosen option B which is “No impact”, and finally 14% of responses are chosen option C which is “Negativity”,

4.15 The Chart showing how does the design and user interface of an E-Learning platform impact the effectiveness of training.

*Chart-4.15***Interpretation**

The above chart interpreted that employees in the Deloitte, EY, Northern Trust, and Oracle perceive the design and user interface of an E-Learning platform to have a significant impact on the effectiveness of training. The majority of respondents 62% believe that the design and user interface of an E-Learning platform have a positive impact on the effectiveness of training, indicating that a well-designed and user-friendly platform enhances the learning experience.

Other respondents were distributed across the categories, with 24% stating that the design and user interface have no impact on the effectiveness of training and 14% perceiving a negative impact. These responses suggest that some employees may not attribute much importance to the design and user interface, or they may have encountered challenges or difficulties with poorly designed platforms.

4.16 The Table showing which way do you agree that E-Learning influences the training and Development of employee's

Sl.	Variables	Responses	Percentage %
A.	By Enabling self-paced learning	16	16%
B.	By providing a wide range of materials	24	24%
C.	By reducing the cost and time of employees	20	20%
D.	By facilitating the continues learning	15	15%
E.	All the above	25	25%
TOTAL		100	100%

Table-4.16

Analysis

The above table represents that which way that E-Learning influences the training and Development of employees in I.T sector Bangalore city. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The highest respondents 25% agreed that option E which is “All the above”, 24% agreed that option B which is “By providing wide range of materials”, 20% agreed that option C which is “By reducing cost and time of employees”, 16% agreed that option A which is “By enabling self-paced learning”, and finally 15% agreed that option D which is “By facilitating the continues learning”,

4.16 The Chart showing which way do you agree that E-Learning influences the training and Development of employee’s

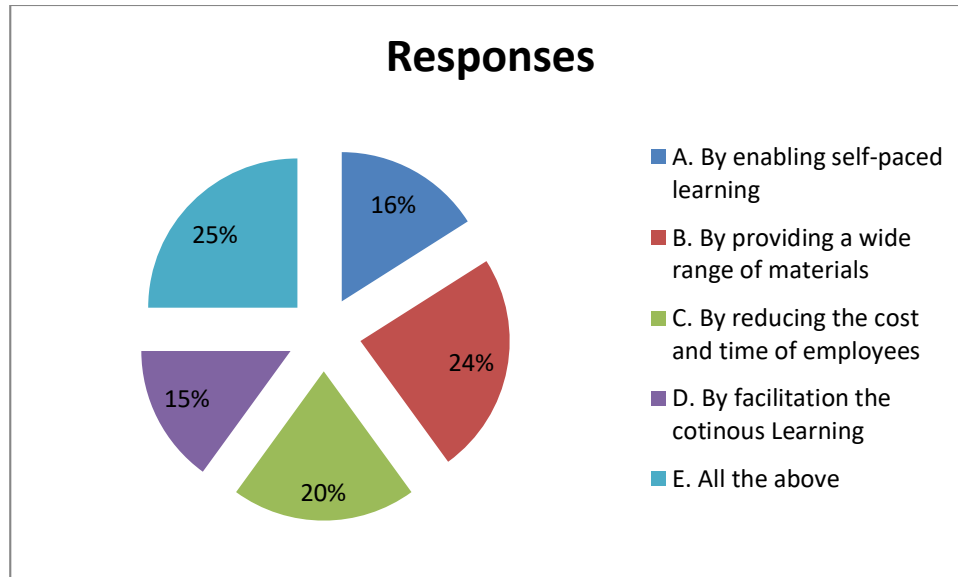


Chart-4.16

Interpretation

The above chart interprets that employees in the IT sector perceive multiple ways in which E-Learning influences their training and development. The highest percentage of respondents 25% believe that E-Learning influences training and development through all the mentioned ways, indicating a comprehensive impact on their learning and growth.

In another way the responses distributed across the various categories, with 24% highlighting the influence of E-Learning in providing a wide range of materials, 20% recognizing its role in reducing the cost and time of employees, 16% emphasizing the enabling of self-paced learning, and 15% acknowledging the facilitation of continuous learning through E-Learning.

4.17 The Table showing that whether social interaction features, such as discussion forums or live chat contribute to effective training in E-Learning either not.

Sl.	Variables	Responses	Percentage %
A.	Strongly agree	22	22%
B.	Agree	56	56%
C.	Strongly disagree	15	15%
D.	Disagree	7	7%
TOTAL		100	100%

Table-4.17

Analysis

The above table shows that whether social interaction features, such as discussion forums or live chat contribute to effective training in E-Learning either not in Deloitte, EY, Northern Trust, and Oracle at Bangalore city. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The highest responses are 56% agreed that option B which is “Agree”, 22% respondents agreed that option A which is “Strongly agree”, 15% respondents agreed that option C which is “Strongly disagree”, and finally 7% of respondents agreed that option D which is “Disagree”

4.17 The Chart showing that whether social interaction features, such as discussion forums or live chat contribute to effective training in E-Learning either not.

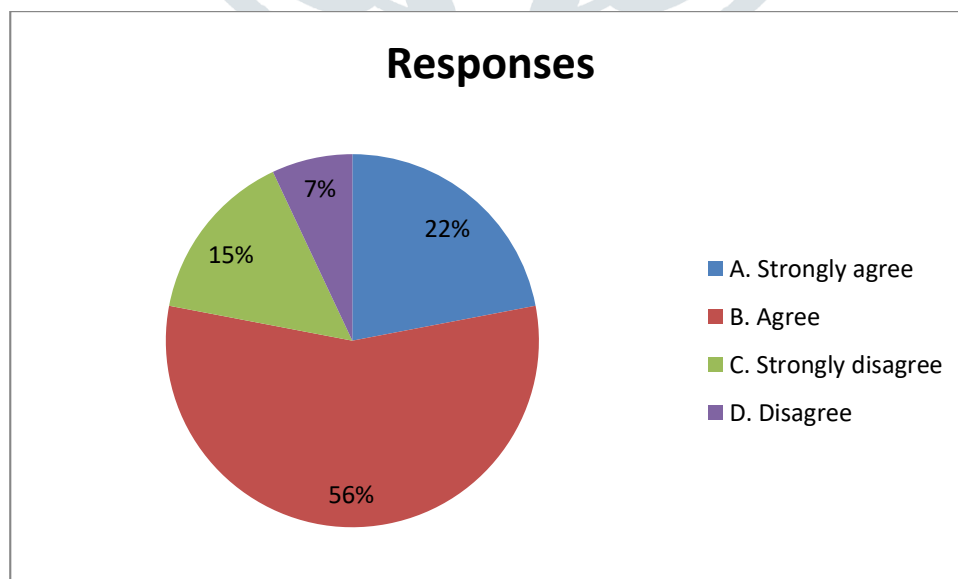


Chart-4.17

Interpretation

The above chart interpreted that employees in the Deloitte, EY, Northern Trust, and Oracle perceive social interaction features as contributing to effective training in E-Learning. The majority of respondents 56% agree that social interaction features enhance the effectiveness of training, indicating that these features facilitate engagement, collaboration, and knowledge sharing among learners.

A significant 22% percentage of respondents strongly agree that social interaction features contribute to effective training. This suggests that these features play a crucial role in fostering a sense of community, promoting interaction between learners, and providing opportunities for discussion and clarification of concepts.

4.18 The Table showing how important is Instructor/Trainer/Guide's qualifications, expertise, knowledge, and communication skills to influence the effectiveness of training in E-Learning.

Sl.	Variables	Responses	Percentage %
A.	Very important	45	45%
B.	Moderately important	45	45%
C.	Not important	10	10%
TOTAL		100	100%

Table-4.18

Analysis

The above table shows how important is Instructor/Trainer/Guide's qualifications, expertise, knowledge, and communication skills to influence the effectiveness of training in E-Learning in Deloitte, EY, Northern Trust, and Oracle Bangalore city. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The highest responses from both option A "very important" and option B "Moderately important" which is 45% each, and finally 10% of responses are chosen option C which is "Not important".

4.18 The Chart showing how important is Instructor/Trainer/Guide's qualifications, expertise, knowledge, and communication skills to influence the effectiveness of training in E-Learning.

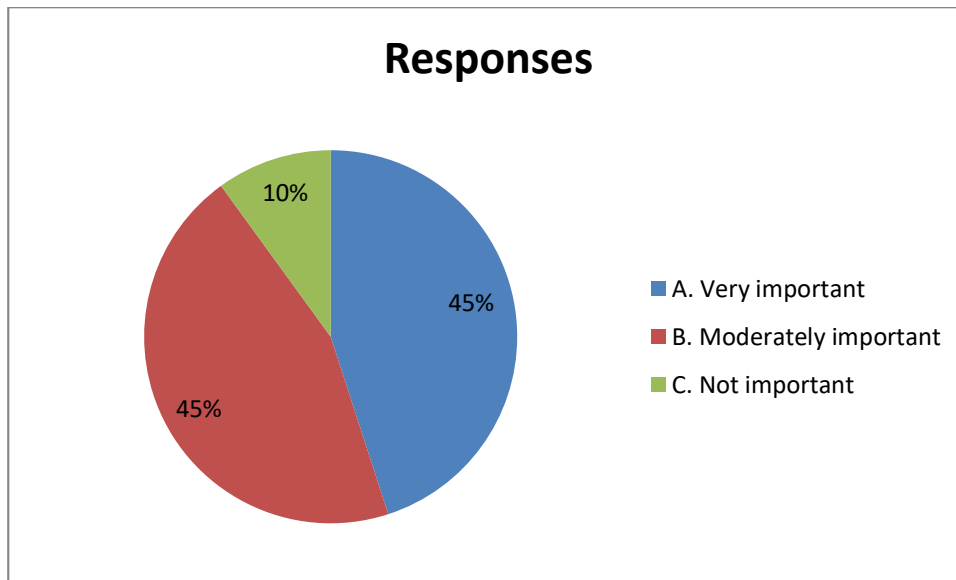


Chart-4.18

Interpretation

The above chart inferred that Based on the data provided, it can be interpreted that employees in the Deloitte, EY, Northern Trust, and Oracle perceive the qualifications, expertise, knowledge, and communication skills of the instructor/trainer/guide as important factors influencing the effectiveness of training in E-Learning.

The equal distribution of responses between "Very important" and "Moderately important" which is 45% each suggests that a significant portion of respondents highly value these attributes in instructors/trainers/guides. This indicates that they recognize the importance of having well-qualified and knowledgeable individuals who possess strong communication skills to deliver effective training in E-Learning environments.

4.19 The Table showing reasons for employees to accept E-Learning is better compare with Onsite training in Bangalore city.

Sl.	Variables	Responses	Percentage %
A.	Due to traffic in Bangalore City	13	13%
B.	Flexible and Convenience	33	33%
C.	Cost effectiveness	20	20%
D.	Access to a wide range of Resources	14	14%
E.	All the above	20	20%
TOTAL		100	100%

Table-4.19

Analysis

The above table shows reasons for employees to accept E-Learning is better compare with Onsite training in I.T sector Bangalore city. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The most of the 33 % of respondents are agreed that option B which is Flexible and Convenience, 20% of responses each equally from option C which is “Cost effectiveness” and Option E which is “All the above”, 14% of responses from Option D which is “Access to a wide range of resources”, and the least responses is 13% from option A which is “Due to traffic in Bangalore City”.

4.19 The Chart showing reasons for employees to accept E-Learning is better compare with Onsite training in Bangalore city.

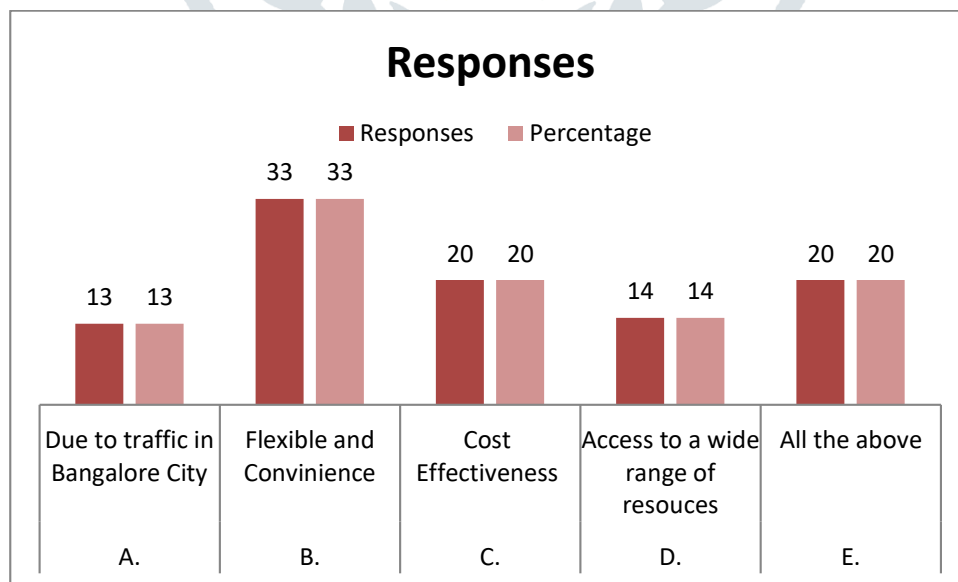


Chart-4.19

Interpretation

The above chart inferred that employees in the IT sector in Bangalore city have specific reasons for preferring E-Learning over onsite training. The largest 33% percentage of respondents indicates that the flexibility and convenience of E-Learning are the primary reasons for their preference. This suggests that employees value the ability to learn at their own pace, access training materials remotely, and fit learning into their busy schedules.

20% respondents selected "All the above", indicating that they find multiple reasons for choosing E-Learning. 20% of respondents chosen "cost effectiveness", 14% of responses from Option D which is "Access to a wide range of resources", and the least responses are 13% from option A which is "Due to traffic in Bangalore City". This suggests that employees in the IT sector appreciate the combined benefits of flexibility, cost-effectiveness, access to resources, and the avoidance of traffic-related issues.

4.20 The Table showing the challenges/issues faced by employees through E-Learning.

Sl.	Variables	Responses	Percentage %
A.	Technical Difficulties	36	36%
B.	Lack of Motivation or engagement	47	47%
C.	Distraction and interruption	49	49%
D.	Limited feedback and clarification doubt	28	28%
E.	No such issues	14	14%
F.	Bad quality of content	4	4%
TOTAL		100	100%

Table-4.20

Analysis

The above Table represents challenges/issues faced by employees through E-Learning in Deloitte, EY, Northern Trust, and Oracle at Bangalore City. The most 49% of the respondents chosen category C which is "Distraction and interruption", and followed by the other options 47% of responses are chosen option B which is "Lack of motivation or engagement".

36% of the respondents chosen category A which is "Technical difficulties", 28% of the respondents chosen category D which is "Limited feedback and clarification doubt", 14% of the respondents chosen category E which is "No such issues", and finally the least 4% of responses chosen option F which is bad quality of content.

4.20 The Chart showing the challenges/issues faced by employees through E-Learning.

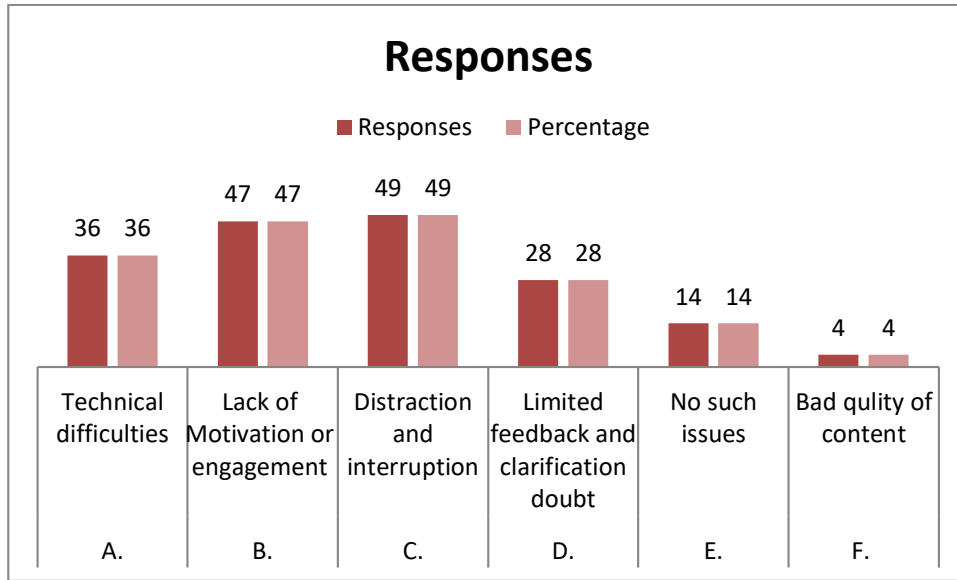


Chart-4.20

Interpretation

The above chart represents that the challenges faced through E-Learning by the employees in Deloitte, EY, Northern Trust, and Oracle at Bangalore city. The majority of respondents 49% identified distraction and interruption as a significant challenge, affecting their ability to maintain focus.

Additionally, 47% reported a lack of motivation and engagement, impacting their overall learning experience. Technical difficulties, including connectivity issues, were mentioned by 36% of respondents, while 28% struggled with limited feedback and clarification of doubts.

However, 14% of participants did not encounter any issues, indicating a relatively smooth E-Learning experience. Only a minority 4% highlighted concerns about the quality of content provided.

4.21 The Table showing how employees address the issues faced through E-Learning.

Sl.	Variables	Responses	Percentage %
A.	To regularly Contact with Trainer/HR/colleagues	38	38%
B.	To seek technical support	50	50%
C.	Develop self-motivation strategies	41	41%
D.	Seek feedback and clarifications	18	18%
TOTAL		100	100%

Table-4.21

Analysis

The above Table represents how employees address the issues faced through E-Learning in Deloitte, EY, Northern Trust, and Oracle at Bangalore City. The most 50% of the respondents chosen category B which is “To seek technical support”, and followed by the other options 41% of responses are chosen option C which is “Develop self-motivation strategies”.

38% of the respondents chosen category A which is “To regular contact with HR/Trainer/Colleagues”, and finally the least 18% of respondents chosen option D which is “Seek feedback and clarification”.

4.21 The Chart showing how employees address the issues faced through E-Learning.

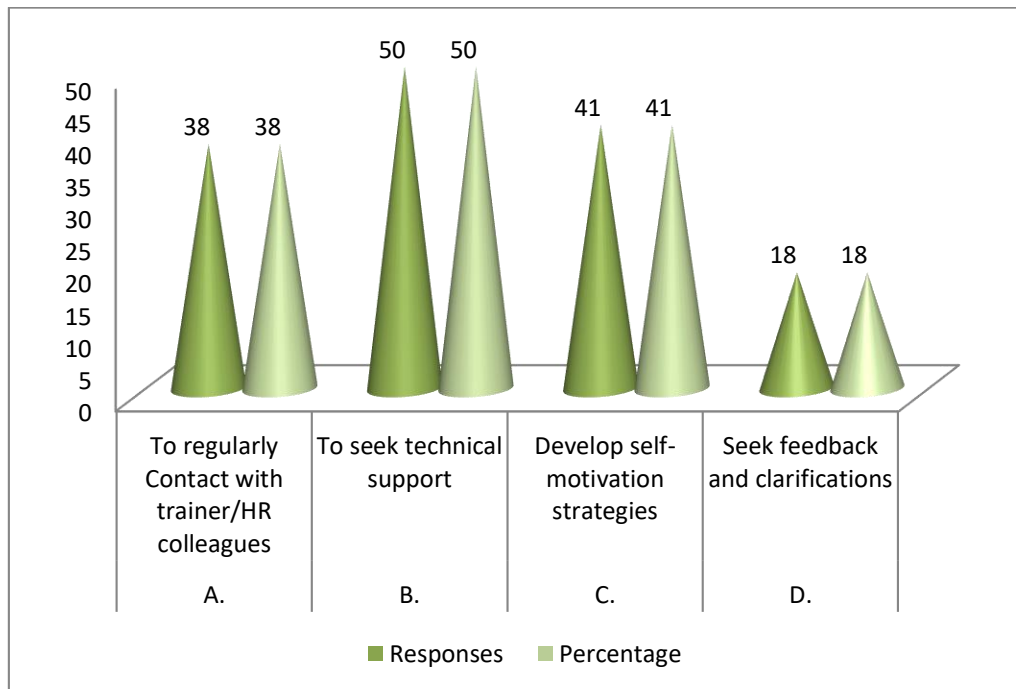


Chart-4.21

Interpretation

The above chart interprets that most commonly used approach is to seek technical support, with 50% of employees choosing this option. most frequently chosen option is to develop self-motivation strategies, with 41% of employees employing this approach, around 38% of employees prefer to regularly contact their trainer, HR, or colleagues to address their issues, seeking feedback and clarifications is the least selected option, with only 18% of employees using this approach

This suggests that technical difficulties or challenges related to the E-Learning platform play a significant role in the issues faced by employees and maintaining motivation and engagement in E-Learning may be a common concern for employees. This highlights the importance of communication and collaboration in resolving problems and obtaining support.

4.22 The Table showing in which way do E-Learning issues impact on employees

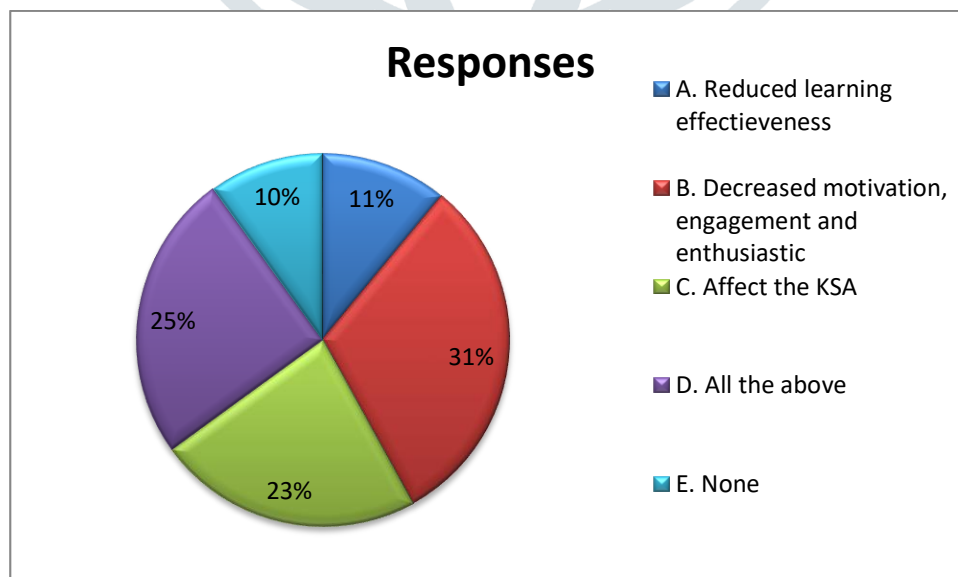
Sl.	Variables	Responses	Percentage %
A.	Reduced learning effectiveness	11	11%
B.	Decreased motivation, engagement and enthusiastic	31	31%
C.	Affect the KSA	23	23%
D.	All the above	25	25%
E.	None	10	10%
TOTAL		100	100%

*Table-4.22***Analysis**

The above Table shows in which way do E-Learning issues impact on employees in I.T sector at Bangalore City. The most 31% of the respondents chosen category B which is “Decreased motivation, engagement and enthusiastic” and followed by the other options 25% of responses are chosen option D which is “All the above”.

23% of the respondents chosen category C which is “Affect KSA”, 11% of the respondents chosen category A which is “Reduced learning effectiveness”, and finally the least 10% of respondents chosen option E which is “None”.

4.22 The Chart showing in which way do E-Learning issues impact on employee's

*Chart-4.22*

Interpretation

The chart shows that in which way E-Learning issues impact on employees in Deloitte, EY, Northern Trust, and Oracle at Bangalore City. The highest percentage 31% of employees reported that E-Learning issues lead to decreased motivation, engagement, and enthusiasm. Around 25% of employees indicated that E-Learning issues impact them in all of the mentioned ways, including reduced learning effectiveness, decreased motivation, engagement, and enthusiasm, as well as affecting their knowledge, skills, and abilities. Additionally, 23% of employees reported that E-Learning issues specifically affect their knowledge, skills, and abilities. It's important to note that 10% of employees stated that E-Learning issues do not impact them in any of the mentioned ways.

This suggests that challenges faced in the E-Learning environment can have a significant effect on employee motivation and engagement levels and highlights the multi-dimensional impact of E-Learning issues on employees' overall learning experience and performance.

4.23 The Table showing whether Organization tried to solve the issue faced by the employees either not.

Sl.	Variables	Responses	Percentage %
A.	Strongly agree	25	25%
B.	Disagree	31	31%
C.	Strongly disagree	13	13%
D.	Agree	31	31%
TOTAL		100	100%

Table-4.23

Analysis

The above Table shows whether Organization tried to solve the issue faced by the employees either not in I.T sector at Bangalore City. The respondents were given multiple options to choose from, and the percentages represent the distribution of responses across those options.

The respondents chosen 31% equally for both category B which is “Disagree” and category D which is “Agree”, and followed by the other options the 25% of the respondents chosen option A which is “Strongly agree”, 13% of responses are chosen option C which is “Strongly disagree”,

4.23 The Chart showing whether Organization tried to solve the issue faced by the employees either not.

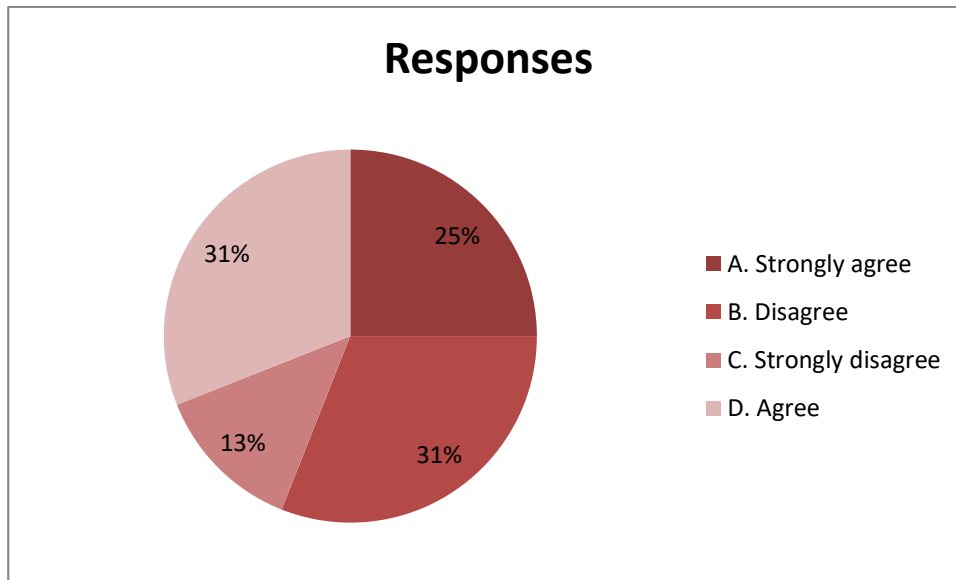


Chart-4.23

Interpretation

The chart represents that employee's perceptions regarding the organization's efforts to solve the issues they face. 25% of respondents strongly agree that the organization has made efforts to address their issues. Similarly, 31% agree that the organization has tried to solve the issues they faced. On the other hand, 31% of employees disagree with the statement, 13% of employees strongly disagree that the organization has made any attempts to solve the issues they face.

This suggests that a significant portion of employees perceives proactive actions taken by the organization to solve their problems. This further reinforces the notion that a considerable number of employees perceive the organization's attempts to address their concerns.

4B. Chi-square test

Hypothesis-1

H0: There is a no significant association between gender and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

H1: There is a significant association between gender and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

Hypothesis-2

H0: There is a no significant association between Age and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

H1: There is a significant association between Age and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

Step -1

Observed Frequency

Step -2

Expected frequency in (Row a and column b)

Table-

4B.1

Step -3

Chi-

(Grand total row a) (Grand total column b)
Total number of observations

square –

Applicable to Critical value method

$$\chi^2 = \sum \frac{(f_o - f_e)^2}{f_e}$$

Table-4B.2

Hypothesis-1

H0: There is a no significant association between gender and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

H1: There is a significant association between gender and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

1. SL NO	2. RESPONDENTS AGE	3. RESPONDENTS GENDER	11. RATE OF SATISFACTORY LEVEL REGARDS WITH TRAINING AND DEVELOPMENT THROUGH E-LEARNING
1	A. 18 to 30	A. Male	C. ****
2	A. 18 to 30	A. Male	B. ***
3	A. 18 to 30	B. Female	C. ****
4	A. 18 to 30	B. Female	C. ****
5	A. 18 to 30	A. Male	C. ****
6	A. 18 to 30	B. Female	C. ****
7	A. 18 to 30	B. Female	B. ***
8	B. 31 to 40	A. Male	C. ****
9	A. 18 to 30	A. Male	C. ****
10	A. 18 to 30	A. Male	B. ***
11	A. 18 to 30	B. Female	C. ****
12	A. 18 to 30	A. Male	B. ***
13	A. 18 to 30	B. Female	B. ***
14	B. 31 to 40	B. Female	C. ****
15	A. 18 to 30	B. Female	C. ****
16	A. 18 to 30	A. Male	B. ***
17	B. 31 to 40	B. Female	C. ****
18	C. 41 to 60	A. Male	B. ***
19	A. 18 to 30	B. Female	B. ***

20	A. 18 to 30	A. Male	C. ****
21	B. 31 to 40	B. Female	B. ***
22	B. 31 to 40	B. Female	A. **
23	B. 31 to 40	A. Male	B. ***
24	A. 18 to 30	A. Male	B. ***

25	A. 18 to 30	B. Female	A. **
26	A. 18 to 30	A. Male	B. ***
27	A. 18 to 30	A. Male	C. ****

28	B. 31 to 40	B. Female	B. ***
29	B. 31 to 40	B. Female	B. ***
30	B. 31 to 40	B. Female	A. **
31	A. 18 to 30	B. Female	A. **
32	A. 18 to 30	B. Female	C. ****
33	B. 31 to 40	B. Female	A. **
34	A. 18 to 30	A. Male	B. ***
35	A. 18 to 30	A. Male	C. ****
36	A. 18 to 30	B. Female	C. ****
37	A. 18 to 30	A. Male	C. ****
38	A. 18 to 30	A. Male	D. *****
39	A. 18 to 30	A. Male	C. ****
40	A. 18 to 30	A. Male	A. **
41	A. 18 to 30	B. Female	B. ***
42	A. 18 to 30	A. Male	B. ***
43	A. 18 to 30	A. Male	B. ***
44	A. 18 to 30	A. Male	C. ****
45	A. 18 to 30	A. Male	B. ***
46	A. 18 to 30	A. Male	C. ****
47	A. 18 to 30	A. Male	B. ***
48	A. 18 to 30	A. Male	C. ****
49	A. 18 to 30	A. Male	B. ***
50	A. 18 to 30	A. Male	B. ***
52	A. 18 to 30	A. Male	B. ***
52	A. 18 to 30	A. Male	B. ***
53	A. 18 to 30	B. Female	C. ****
54	A. 18 to 30	A. Male	B. ***
55	A. 18 to 30	A. Male	B. ***
56	A. 18 to 30	A. Male	C. ****
57	A. 18 to 30	A. Male	B. ***
58	A. 18 to 30	A. Male	B. ***
59	A. 18 to 30	A. Male	B. ***
60	A. 18 to 30	B. Female	C. ****
61	B. 31 to 40	A. Male	C. ****
62	A. 18 to 30	A. Male	D. *****
63	B. 31 to 40	A. Male	C. ****
64	B. 31 to 40	B. Female	C. ****

65	B. 31 to 40	B. Female	A. **
66	B. 31 to 40	B. Female	B. ***
67	A. 18 to 30	B. Female	B. ***
68	B. 31 to 40	B. Female	B. ***
69	B. 31 to 40	B. Female	D. *****
70	B. 31 to 40	A. Male	C. ****
71	A. 18 to 30	A. Male	B. ***
72	A. 18 to 30	A. Male	D. *****
73	B. 31 to 40	A. Male	C. ****
74	A. 18 to 30	A. Male	D. *****
75	B. 31 to 40	A. Male	B. ***
76	B. 31 to 40	A. Male	B. ***
77	A. 18 to 30	B. Female	B. ***
78	A. 18 to 30	B. Female	B. ***
79	B. 31 to 40	A. Male	D. *****
80	B. 31 to 40	A. Male	C. ****
81	B. 31 to 40	B. Female	B. ***
82	A. 18 to 30	A. Male	D. *****
83	A. 18 to 30	A. Male	C. ****
84	B. 31 to 40	A. Male	C. ****
85	B. 31 to 40	B. Female	C. ****
86	B. 31 to 40	A. Male	C. ****
87	A. 18 to 30	A. Male	D. *****
88	A. 18 to 30	A. Male	C. ****
89	C. 41 to 60	B. Female	D. *****
90	A. 18 to 30	B. Female	C. ****
91	A. 18 to 30	A. Male	D. *****
93	A. 18 to 30	B. Female	B. ***
93	A. 18 to 30	A. Male	D. *****
94	A. 18 to 30	A. Male	C. ****
95	A. 18 to 30	B. Female	C. ****
96	A. 18 to 30	B. Female	B. ***
97	A. 18 to 30	A. Male	D. *****
98	B. 31 to 40	B. Female	C. ****
99	A. 18 to 30	B. Female	B. ***
100	A. 18 to 30	A. Male	D. *****

Table-4B.3

Step-1**Observed frequency**

Row Labels	A. **	B. ***	C. ****	D. *****	Grand Total
A. Male	1	25	23	11	60
B. Female	6	16	16	2	40
Total	7	41	39	13	100

Table-4B.4**Step-2****Expected frequency**

Row Labels	A. **	B. ***	C. ****	D. *****	Grand Total
A. Male	4.2	24.6	23.4	7.8	60
B. Female	2.8	16.4	15.6	5.2	40
Total	7	41	39	13	100

Table-4B.5**Step-3****Chi-square – Applicable to Critical value method**

Row Labels	A. **	B. ***	C. ****	D. *****	Grand Total
A. Male	2.44	0.01	0.01	1.31	3.76
B. Female	3.66	0.01	0.01	1.97	5.65
Total (X²)					9.41

Table-4B.6**I. Chi-square distribution Under Critical Value (CV) approach**

Degree of freedom	$(r-1)*(c-1)$ $(2-1)*(4-1)$
Degree of freedom	3
(X²)	9.41
Critical value	7.81

Table-4B.7

Here, (X²) 9.41 is > 7.81, hence reject H₀ (null hypothesis), accept H₁ (alternate hypothesis)

II. Chi-square distribution under “P” Value approach

Based on Expected & Observed table values, the “P” is = **0.02**

Because the "P" value is 0.05, we reject the null hypothesis (H0) and accept the alternate hypothesis (H1), which is There is a significant association between gender and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

Interpretation

This suggests that individual's gender influences their perception of the effectiveness of E-Learning in the I.T sector. This implies that men and women may have different viewpoints or experiences that shape their perception of E-Learning's effectiveness and gender plays a vital role in how employees perceive the effectiveness of E-Learning. This implies that gender-related factors, such as societal expectations, cultural norms, or personal experiences, may impact an individual's perception of E-Learning. Understanding these factors can help organizations tailor their training and development programs to address potential gender-related differences. Significant association between gender and the perception of E-Learning effectiveness suggests that organizations should consider gender-specific strategies when implementing E-Learning programs in the I.T sector. This could involve adapting the content, delivery methods, or support systems to better meet the needs and preferences of different genders, ultimately enhancing the overall effectiveness of training and development initiatives.

Hypothesis-2

H0: There is a no significant association between Age and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

H1: There is a significant association between Age and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

Step-1

Observed frequency

Row Labels	A. **	B. ***	C. ****	D. *****	Grand Total
A. 18-30	3	31	26	10	70
B. 31-40	4	9	13	2	28
C. 41-60	-	1	-	1	2
Total	7	41	39	13	100

Table-4B.8

Step-2

Expected frequency

Row Labels	A. **	B. ***	C. ****	D. *****	Grand Total
A. 18-30	4.9	28.7	27.3	9.1	70
B. 31-40	1.96	11.48	10.29	3.64	28
C. 41-60	0.14	0.82	0.78	0.26	2
Total	7	41	39	13	100

Table-4B.9

Step-3**Chi-square – Applicable to Critical value method**

Row Labels	A. **	B. ***	C. ****	D. *****	Grand Total
A. 18-30	0.74	0.18	0.06	0.09	1.07
B. 31-40	2.12	0.54	0.40	0.74	3.79
C. 41-60	0.14	0.04	0.78	2.11	3.07
Total (X²)					7.93

Table-4B.10**I. Chi-square distribution Under Critical Value (CV) approach**

Degree of freedom	$(r-1) * (c-1)$ $(3-1) * (4-1)$
Degree of freedom	6
(X ²)	7.93
Critical value	12.59

Table-4B.11

Here (X²) 7.93 is <12.59, hence fails to reject H₀ null hypothesis, accept H_o null hypothesis

II. Chi-square distribution Under P Value approach

Based on Expected & Observed table values, the “P” is = **0.32**

Because the "P" value is greater than 0.05, we cannot reject the null hypothesis and must accept the null hypothesis (H₀), which is there is a no significant association between Age and the perception of the effectiveness of E-Learning in Training and Development of employees in I.T sector at Bangalore city.

Interpretation

The p-value, which is greater than 0.05, indicates that the observed results, or more extreme results, have a higher probability of occurring if the null hypothesis were true. As a result, we fail to reject the null hypothesis (H₀) and conclude that there is no statistically significant association between age and the perception of E-Learning effectiveness. The employees of different age groups in the I.T sector at Bangalore city may have similar perceptions of the effectiveness of E-Learning in training and development programs. Regardless of age, individuals within this sector seem to have consistent views on the effectiveness of E-Learning initiatives. These results have several implications for organizations and policymakers in the I.T sector. Firstly, it implies that age is not a critical factor to consider when designing and implementing E-Learning programs for training and development purposes. Instead, organizations can focus on other relevant factors such as content relevance, delivery methods, and support systems to enhance the effectiveness of their programs.

Chapter - 5

Summary of findings, Conclusion and suggestions

Summary of findings

1. From the study the majority of respondents which is 70% fall in the age range of 18-30, indicating a relatively younger workforce in the IT sector at Bangalore.
2. Based on the study gender distribution among respondents shows that 60% are male and 40% are female.
3. The majority of respondents (74%) believe that E-learning plays a vital role in enhancing knowledge.
4. 53% of participants have applied the skills learned from E-learning in their job, indicating the practical applicability of the training.
5. 74% of respondents agree that E-Learning is more effective than onsite training, showing a positive perception of the training method.
6. 56% of participants noticed changes in their career path as a result of participating in training.
7. Training through E-Learning has been helpful in improving job satisfaction (8%), enhancing knowledge, skills, and abilities (31%), and enhancing work-life balance (22%).
8. A majority of respondents 43% agree that E-Learning in the IT sector provides a wide range of resources and topics to cater to employees' diverse needs.
9. Respondents identified several reasons why E-Learning is necessary, with 34% indicating that it encompasses all the above aspects: enhancing skills and knowledge, saving time, and learning at one's own pace.
10. 62% of participants believe that the design and user interface of E-Learning platforms positively impact the effectiveness of training.
11. Features such as enabling self-paced learning (16%), providing a wide range of materials (24%), reducing the cost and time of employees (20%), and facilitating continuous learning (15%) are identified as key ways that E-Learning influences training and development.
12. The most common challenges faced in E-Learning are lack of motivation or engagement (47%), distraction and interruption (49%), and technical difficulties (36%).
13. Employees address these issues by seeking technical support (50%), developing self-motivation strategies (41%), and regularly contacting trainers or HR colleagues (38%).
14. Over half of the respondents which are 56% have noticed changes in their career paths as a result of participating in E-Learning training.
15. The majority 31% believes that training through E-Learning helps improve the knowledge, skills, and abilities (KSA) required for their jobs.
16. From the above study Respondents agree that E-Learning influences training and development by enabling self-paced learning which is 16%, providing a wide range of materials that is 24%, and reducing the cost and time for employees which is 20%.
17. Social interaction features, such as discussion forums or live chat, are perceived to contribute to effective training in E-Learning by the majority of respondents which is 56%.

18. From the study reasons for accepting E-Learning as better compared to onsite training in Bangalore include flexible convenience which is 33%, cost-effectiveness that is 20%, and access to a wide range of resources which is 14%.

19. In the Chi-square technique it is found that individual's gender influences their perception of the effectiveness of E-Learning in the I.T sector. This implies that men and women may have different viewpoints or experiences that shape their perception of E-Learning's effectiveness and gender plays a vital role in how employees perceive the effectiveness of E-Learning.

20. In the Chi-square technique it is found that employees of different age groups in the I.T sector at Bangalore city may have similar perceptions of the effectiveness of E-Learning in training and development programs. Regardless of age, individuals within this sector seem to have consistent views on the effectiveness of E-Learning initiatives.

This are the findings that would help the Organization's such as Deloitte, EY, Northern Trust, and Oracle to enhances effectiveness of E-Learning platform in training and development of employees in I.T sector at Bangalore city.

Conclusions

In conclusion, the effectiveness of E-Learning platforms in training and developing employees in the IT sector in Bangalore City has been established through this study. E-Learning has proven to be a valuable and impactful tool for delivering training content conveniently and flexibly.

E-Learning platforms have demonstrated high effectiveness in training and developing employees in the IT sector. They offer convenience, flexibility, and personalized learning experiences, leading to increased engagement and knowledge retention. Training through E-Learning has a positive impact on employee development. It equips employees with essential skills, enhances problem-solving abilities, and fosters overall professional growth, thereby improving their readiness to perform effectively in their roles. Several factors influence the effectiveness of training in E-Learning platforms, including high-quality and relevant course content, interactive and engaging learning modules, effective communication channels, regular feedback and assessment mechanisms, and support from trainers and management. Employee challenges in E-Learning include technical difficulties, lack of motivation, potential distractions, and the need for self-discipline and time management. Addressing these challenges is crucial for successful implementation of E-Learning initiatives. To enhance effective training and development through E-Learning, organizations should consider strategies such as providing personalized learning paths, fostering a supportive learning environment, gamifying the learning experience, utilizing multimedia and interactive content, offering continuous learning opportunities, and regularly evaluating and updating training content.

Suggestions to the Organization

"These are the few suggestions to the Organizations to enhance the effectiveness of Training and Development of employees in I.T sector at Bangalore city" these suggestions also helpful to other Organizations besides Deloitte, EY, Northern Trust, and Oracle.

1. Based on the study, I suggest that Organization provides a diverse range of resources and topics on E-Learning platforms to cater to the diverse needs of employees.
2. Enhance the design and user interface of the E-Learning platform to positively impact the effectiveness of training.
3. Based on the study, enable self-paced learning options to allow employees to learn at their own pace and grasp concepts thoroughly.
4. Incorporate social interaction features, such as discussion forums and live chat, to encourage collaboration and knowledge sharing among employees.

5. Based on the research, ensure qualified instructors/trainers/guides with expertise, knowledge, and strong communication skills to deliver effective training.
6. From the study, address technical difficulties promptly by providing technical support to employees participating in E-Learning.
7. Based on the study, implement strategies to foster motivation and engagement among employees during E-Learning, such as Gamification elements, rewards, and regular communication.
8. Establish channels for employees to seek feedback and clarification on training materials, creating a supportive learning environment.
9. From the study, it is important to regularly evaluate and monitor the career impact of training programs conducted through E-Learning to assess effectiveness and make necessary improvements.
10. Continuously improve the quality of E-Learning content based on employee feedback and industry advancements.
11. Offer flexibility in training programs to accommodate employee's schedules and availability.
12. From the study, it is important for the Organization to collaborate with subject matter experts and industry professionals to ensure the relevance and up-to-date nature of the training content.
13. Conduct regular assessments and quizzes to gauge employee learning progress and provide timely feedback.
14. Offer a mix of multimedia content, including videos, interactive modules, and case studies, to cater to different learning preferences.

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ANNEXURE - 1

"EFFECTIVENESS OF E-LEARNING PLATFORM IN TRAINING AND DEVELOPMENT OF EMPLOYEES IN I.T SECTOR AT BANGALORE CITY"

The main objective of this study is to understand the Effectiveness of E-Learning towards the Training and Development of Employees in the I.T Sector in Bangalore City also to identify how the Training is impacting on employee development then to evaluate the factors that influence Training in E-Learning Platforms even to address the issues are to be faced by the employees in e-learning and the main motive is that to suggest that various ways to enhancing the effective training and development of employees through E-Learning.

1. What is your name? _____
2. What is your age?
 - A. 18 to 30
 - B. 31 to 40
 - C. 41 to 60
 - D. Above 61
3. What is your Gender?
 - A. Male
 - B. Female
 - C. Other
4. Name of the Organization you are working in
 - A. Oracle
 - B. Northern Trust
 - C. EY
 - D. Deloitte
5. What is your Job Title in the Organization? _____
Ex. Finance Analyst, Associate 1, Senior Associate.
6. What is your way of work mode?
 - A. Onsite
 - B. Hybrid
 - C. Work from home
7. Does E-Learning plays a vital role in enhancing your Knowledge
 - A. Yes
 - B. No
 - C. May be
8. In which way does E-Learning is necessary
 - A. To enhancing of skills, knowledge
 - B. To save time
 - C. To learn at our own pace

- D. All the above (a,b&c)
E. Just for gaining certificates and not for knowledge and Training purposes
9. Does E-Learning is more effective than on-site learning
A. Strongly disagree
B. Disagree
C. Neutral
D. Agree
E. Strongly agree
10. Does E-Learning in the I.T sector in Bangalore provides a wide range of resource and topics to cater to employee's diverse needs
A. Strongly disagree
B. Disagree
C. Neutral
D. Agree
E. Strongly agree
11. Rate the satisfactory level of your regards with Training and Development through E-Learning
A. **
B. ***
C. ****
D. *****
12. Rate the applied skills in your job learned from E-Learning?
A. Yes
B. No
C. May be
13. How often do you participate in the training Program offered by the Organization
A. Rarely
B. Occasionally
C. Frequently
D. Regularly
14. Do you believe that Training from E-Learning declines the development of employees?
A. Strongly disagree
B. Somewhat disagree
C. Neutral
D. Somewhat agree
E. Strongly agree
15. Have u noticed any changes in your career path as a result of participating in Training?
A. Yes
B. No
C. May be
16. Training through E-Learning helps employees in _____
A. Improve the Job satisfaction
B. Improve the KSA (Knowledge, skills, Ability)
C. Enhance the work-life balance
D. All the above
E. Not much helpfully compare to onsite training
17. How does the design and user interface of an E-Learning platform impact the effectiveness of training?
A. Positively
B. No Impact
C. Negatively
18. Which way do you agree that E-Learning influences the training and Development of employees?
A. By enabling self-paced learning
B. By providing a wide range of materials
C. By reducing the cost and time of employees



- D. By facilitation the continues learning
E. All the above
19. Does social interaction features, such as discussion forums or live chat contribute to effective training in E-Learning
A. Strongly agree
B. Agree
C. Strongly disagree
D. disagree
20. How important are the Instructor/Trainer/Guide's qualifications, expertise, knowledge, and communication skills to influence the effectiveness of training in E-Learning?
A. Very important
B. Moderately important
C. Not important
21. What is the reason for you to accept E-Learning is better compare with onsite training in Bangalore city
A. Due to traffic in Bangalore City
B. Flexible and Convenience
C. Cost-effectiveness
D. Access to a wide range of resource
E. All the above
22. What are the challenges/issues faced you through E-Learning
A. Technical difficulties
B. Lack of Motivation or engagement
C. Distraction and interruption
D. Limited feedback and clarifications/doubt
E. No such issues
F. Bad quality of content
23. How can you address the issues faced through E-Learning
A. To regularly contact with Trainer/HR/Colleagues
B. To seek technical support
C. Develop self-motivation strategies
D. Seek feedback and clarifications
24. In which way do E-Learning issues impact you, as an employee?
A. Reduced learning effectiveness
B. Decreased Motivation, Engagement, and enthusiastic
C. Affect the KSA (Knowledge, Skill, and Abilities)
D. All the above
E. None
25. If you faced these challenges then Organization tried to solve them.
A. Strongly agree
B. Disagree
C. Strongly disagree
D. Agree
26. Suggest any measures to enhance the effective training and development through E-Learning.
A. _____
27. Suggest various ways to enhance the effectiveness of E-Learning Platforms
A. _____