

## Chapter 26

# E–Collaboration for Management Information Systems Using Deep Learning Technique

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### ABSTRACT

*Universities are currently confronted with changing student needs, a competitive labour market, and a fast-paced environment. The advancement of communication technology has enabled us to address these issues. Collaboration advances are critical to the current learning process because they train students to work in groups on tasks. In this chapter, the authors present a thorough foundation for an e-collaboration platform that was established during the successful implementation of an e-collaboration solution at the management information systems. The solution makes use of cutting-edge web portal technology and a digital asset management system to create a uniform, centralised platform for system users to collaborate, communicate, and exchange information.*

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## INTRODUCTION

Since the beginning of computer use, there has been a need to encourage user cooperation to facilitate everyday chores, communication, work, and training. When computer networking became available, this requirement grew much more pressing. The widespread adoption of computer networks, the Internet, and the World Wide Web are just a few of the factors that have hastened the development of applications, technologies, standards, and systems that facilitate communication and e-collaboration (Muthukumaran V et al., 2021). These technologies, together with the widespread adoption of the Internet, prompted application designers to reconsider how they could employ Information and Communication Technologies (ICT) to assist groups of people. This has had an impact on the design and delivery of e-collaboration services, which enable geographically dispersed users in companies and/or organisations to communicate and collaborate to learn (Computer Supported Collaborative Learning-CSCL) or work (Computer Supported Collaborative Work-CSCW). There are numerous tools, protocols, and technologies available today that can be utilised to construct collaborative systems and applications that meet the criteria and special demands of end-users (Muthukumaran V et al., 2018). E-collaboration is a hot area in research, with a slew of experts contributing to various elements. The large topic's breadth, which includes not only technology but also social and psychological aspects, is the key cause for this major research activity. As a result, different people have different ideas about what e-collaboration is. More specifically, we may state that e-collaboration has been described in a variety of ways in the past, with the number of definitions increasing in recent years. The next section defines the key words in this field (Kumar, V et al., 2021).

Teams have evolved to include new types of contact and collaboration as new technologies, notably ICTs, have been developed. This group could be referred to as a virtual team. A virtual team, like any other team, is defined by (Lipnack and Stamps, 1997) as a group of people who engage through interdependent tasks driven by a common goal (Nagarajan, S. M et al., 2022). A virtual team, unlike traditional teams, collaborates beyond place, time, and organisational boundaries, with linkages strengthened by communication technologies. Virtual team members can work and cooperate in order to communicate with one another. Collaboration and cooperation are closely related concepts that are frequently interchanged. Working together on a common task or process is referred to as collaboration. Cooperation is when two or more people work together to achieve a common objective or advantage (Velliangiri, S et al., 2021). According to (Biuck-Aghai, 2004), we may better comprehend the distinction between collaboration and cooperation by looking at their antonyms: collaboration's antonym is "working alone," whereas cooperation's antonym is "competition." As a result, we believe that collaboration is a better phrase to characterise the pattern of interaction among virtual team members. According to the foregoing, we can consider Biuck Aghai's wide and descriptive word of virtual collaboration, which is defined as collaboration that is conducted without face-to-face interaction and is enabled by technology (Nagarajan, S. M et al., 2022). used a similar definition, stating that e-collaboration is "collaboration among individuals engaged in a common task using electronic technologies." This broad definition considers e-collaboration to be a word that encompasses more than only computer mediated communication (CMC) or computer-assisted collaborative work (CSCW). CSCW is a computer-assisted coordinated activity that involves a group of people working together. As a result, it should be apparent that CSCW is a broad word that encompasses knowledge of how people collaborate in groups, as well as the enabling technologies of computer networking and related hardware, software, services, and methodologies (Ezhilmaran, D., & Muthukumaran, V, 2017).

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