

# ANALYSIS OF E-MENTORING PLATFORM FOR FUTURE LEADERS' DEVELOPMENT: A COMPREHENSIVE LITERATURE

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**Abstract.** The study aims to analyze the role of e-mentoring in developing leadership skills between mentors and mentees, particularly in global environment. This research is using qualitative approach that work on a comprehensive literature development on e-mentoring platform for future leaders. The COVID-19 pandemic has disrupted the labour market, making it difficult for young people to secure productive employment. They often lack experience, talents, and social networks, making it difficult to find suitable candidates. Informational asymmetry and limited access to resources further exacerbate these employment obstacles. A significant proportion of youth are not employed, in school, or training, resulting in diminished employment prospects and challenges in adapting to the workplace. The result shown that e-mentoring offers numerous advantages, including accessibility, professional development, and enhanced communication skills. It allows mentees to ask questions anytime, anywhere, and can be used for professional growth. E-mentoring also improves teamwork and accessibility, allowing for diverse collaboration and breaking down sociocultural barriers. However, it also presents challenges, such as ensuring proper communication and addressing cultural differences. Overall, e-mentoring offers a more accessible and effective mentoring system. Keywords: *E-Mentoring, Technology, Leadership, And Future Leaders*

## 1 INTRODUCTION

Mentoring programmes have been established within institutions and organizations in which individuals are mentored in an asynchronous environment. In

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traditional mentoring relationships, the essential outcome for protégés is a combination of interpersonal skill (communicating, listening, problem-solving, and creating connections) and relational learning (understanding the interdependence of one's task to others) [1,2]. Furthermore, mentoring is an essential growth process for everyone involved [3]. Personnel who have been mentored are able to develop a greater passion for their work and seek out more opportunities to innovate, which results in cost-savings and benefits for the organisation as well as future leadership development [4]. In the creation of desirable future leaders for a sustainable organization, however, it is unavoidable for any organization to avoid the elements of the mentoring platform within the organisation. The top-level management officers of today are required to keep in mind the significance of providing proper guidance and systematic training to the current low- and medium-level human resources within their organisation in order to develop new future leaders who will soon replace them [5].

In the development of prospective leaders, the benefits of mentoring on an individual's academic achievement, professional aspirations, and personal growth are widely acknowledged. Consequently, the frequency and convenience of interaction and communication are essential for a successful mentoring relationship [6]. Technological aids and specifically technology-mediated types, such as e-mail, social media, discussion groups, and virtual meetings, have a tremendous capacity for enhancing the mentoring approach. However, little is known about how technology is likely to be incorporated into the mentoring process for the development of future leaders [7]. Technology-mediated mentoring may be implemented by empowering the e-mentoring platform through e-learning, e-coaching, or e-mentoring in order to create favorable opportunities for future leadership development. An online or technology-mediated approach to learning, training, and development is typically associated with 'anytime, anywhere' learning opportunities [8,9]. Occasionally, these opportunities prove to be "nowhere, no time" failures. These respective studies on the literature review analysis of mentoring platforms utilizing digital-technology mentoring and monitoring their processes identify the benefits and challenges of e-mentoring platform performance on future leader development.

Mentoring is a training process that entails acquiring knowledge from a more experienced worker and is widely utilized for professional development and career advancement [10]. The mentor and protégé may interact formally or informally, and the mentoring process may span months or even years. The focus varies and consists of assisting those who are new to an organization or function, those dealing with specific tasks or responsibilities, or as part of an expert management programmed that prepares individuals for promotion. Mentoring also occurs within organizations, for instance as a proportion of a company's social responsibility programmed in which employees work with individuals tackling specific tasks to help them find employment or seize an educational opportunity [11]. In their mentoring strategies, mentors and mentees may use an expansion of the conventional range of communication-mediated strategies, such as e-mail, phone sessions, face-to-face conferences, and others of e-mentoring apparatus. Numerous in-house programmes are essentially face-to-face mentoring programmes with the addition of email support. In addition, e-mentoring may be conducted via email, chatrooms, virtual meetings, or technological software such as Skype, Zoom, Cisco Webex, numerous social networking sites, or professional mentoring websites with an added layer of security [12,13].

Based on the preceding arguments, this study intends to analyses e-mentoring as a platform for developing future leaders. How does e-mentoring facilitate the development of leadership skills between mentor and mentee or protégé? Particularly in the current context, online communication tools are crucial for permitting busy managers and leaders

to provide mentoring support. Some supervisors or mentors must continue to provide mentoring even though they may be working and travelling the globe.

## **2. Transforming Mentoring to E-Mentoring**

Mentoring has been defined in many ways, but it generally involves the beneficiary receiving official or unofficial knowledge and psychosocial support for their work progress and professional development [12]. Mentoring also involves unofficial communication between two groups: one with more knowledge, awareness, or experience on an organization (mentor) and one with much less (protégé) [13]. Mentoring is informal, one-on-one, and may incorporate psychosocial and professional help.

Employee career advancement is the main benefit of mandatory mentoring practices [14]. E-mentoring apps, like traditional mentoring, help new hires adapt to an organization's culture [15]. Social and professional networks [16], advanced personal communication skills [16], and advanced written communication skills are essential for an organization to develop future leaders [17]. Mentoring has grown increasingly significant in business since many employees are now independent contractors that focus on projects rather than companies [17]. The majority of prior research had examined the importance of mentoring for better pay, promotion opportunities, job performance, job satisfaction, profession mobility, and leadership qualities [17,18,19]. Mentoring may have improved job satisfaction, work dedication, development process, employee retention, internal communication, and organizational culture [20].

Mentoring practices remain untested despite significant research on mentoring results [21]. Career-oriented and psychosocial movements dominated mentorship research. Mentor's coach, protect, challenge, and expose protégés to work [22]. Psychosocial perceptions and evaluations determine how much a protégé views a mentor as a friend, counsellor, role model, and positive figure [23]. These duties and activities often overlap, yet they reveal a complete mentoring relationship guidance. Mentoring is based on the social exchange theory, which views mentor-mentee relationships as the basis for the exchange of factors (e.g., aid, information, etc.). Mentoring connections increase young people's self-confidence in many ways. Youth mentorship should help vocational training and growth. Beginner finishing touch. Academic literature may not define mentoring precisely [24]. Mentoring as "assisting, coaching, tutoring, counselling, sponsoring, sharing experience, and mutual learning" defines mentoring as a relationship that arises from effective connections between mentor and protégé. Mentoring success depends on mentor-mentee relationships.

Mentoring is often defined as an older, more experienced person guiding a younger, less skilled person. The conventional or traditional mentoring perspective views this relationship as hierarchical and deficit-based, assuming the mentor has age, experience, abilities, financial, or social advantages that the mentee lacks. Deficit-based mentorship schemes are popular in schools and workplaces. E-mentorship uses technology to assist mentoring and training when face-to-face contact is impractical [25,26]. However, e-mentoring as a computer-mediated connection between a more experienced mentor and a less experienced protegee to share career-successful practices [27]. Later, e-mentoring is officially distinguished. Mentor training and evaluation setting.

E-mentoring is sometimes called tele mentoring, cyber-mentoring, digital mentoring, and online mentoring. Telementoring might involve a more experienced individual helping a new practitioner or a less experienced person get a job or obtain access to the mentor's field. Email, Internet, social media, and meeting equipment can help achieve this goal. E-mentoring is new and understudied [28]. Mentors are usually more experienced than their protégés, who are often beginners [28]. E-mentoring as the result

of digital communications between a more experienced person (mentor) and a less professional or inexperienced person (protégé) to help the protégé develop skills, understanding, self-confidence, and cultural knowledge to succeed. Mixed mentoring allows mentors and mentees to communicate directly and indirectly via email, social media, and in-person meetings [29]. A blended model in which people engage in face-to-face interactions (such as lunch conferences, focus group discussions, or technology training classes) and virtual reality interactions (such as virtual human conferences in virtual life, internet contextual content exchanges, and live streaming video) to improve beginner basic-level technology including face-to-face contacts (lunch conferences, focus groups).

### **3 Mentoring in The Context of Technology Integration for Future Leader**

E-mentoring and mentor-protégé relationships depend on technology. E-mentoring helps people build occupational, psychological, and transformative abilities. Digital interactions can provide vocational guidance. Psychosocial viewpoints include digital life conversations that assist mentor and protégé. Management structures affect virtual digital learning technology. Web 2.0 software and technology helps mentors and mentees connect. Web 2.0 emphasises user-generated content, information and content sharing, participative effort, modern methods of engaging with internet-based programmes, and using the internet as a socialisation medium for creating, modifying, and understanding content. Web 2.0 technologies evolved from Wikipedia, which allows anyone to contribute to or modify content with up-to-date information, blogs, which allow people to respond, and RSS feeds, which allow users to download media files and listen to audiobooks (for example, YouTube). Web 2.0 applications like Facebook, WhatsApp, Twitter, and others allow users to communicate regardless of location. Differentiating evaluation elements include e-mentoring learning structures. Electronic mail, discussion groups, social media, and virtual conferencing can improve e-mentoring. In fact, despite the existence of that technology and its potential to improve e-mentoring, those who are not technologically savvy or lack the equipment to take advantage of it appear apathetic towards the hardware [30].

Technology-based e-mentoring also eliminates a linguistic corpus. Computerized communication's lack of visual clues, including language and tone, makes language understanding harder. Communication's compatibility energy can be emphasized without physical contact. Webcams and emoticons can help mentors and mentees improve communication. Emoticons with motions and smiley faces can be confusing, making recipients doubt the message's mockery [31]. In other words, the language used may be as significant as what is said, which may generate trust issues and communication difficulties in the digital world.

Myths, legends, religious writings, famous novels, and social science literature have all defined leadership [32]. The authors discussed these complicated leadership ideas and found major tendencies and causes of variety in these class structures due to theoretical framework and research method issues. The authors noted that they may have missed alternate category structures in the large literature, which has only grown since their review.

Four leadership characteristics in his leadership theory and practices book. First, leaders and followers interact bidirectionally. Leadership requires influence. Thirdly, leadership impacts a group of people with a common aim. Finally, leadership involves pursuing common goals. Leadership as influencing a group to achieve a goal [32]. The

procedure perspective emphasises that (a) anyone can demonstrate leadership behaviors to varying degrees in their interactions with others and (b) such behaviours can be learned. The trait perspective emphasizes innate leadership traits. These themes align with counseling's leadership and leadership development discourse. This leadership concept was developed based on Bass' (2008) suggestion that scholars choose a term that matches their methodological and important interests. Leadership may be developed, is embedded in a desire to serve others, occurs on the individual and relational levels, and causes change for consumers, careers, and wider communities.

Mentoring can help overcome technology integration challenges [31]. Workers who learned how to combine technology with a mentoring process gained advantages without difficulty in overcoming obstacles, such as taking a long time to integrate technology, troubleshooting technology issues in mentoring, and integrating technology into a real-world workplace environment. In his study of 139 teachers who got mentoring, In technological comfort zones, self-perception, and innovation integration into job applications. E-mentoring is different from traditional mentoring in terms of relationship-building. HRD specialists may need to examine certain challenges while launching an e-mentoring programme. These include acknowledging mentoring as essential to professional progress, preparing and establishing mentors and protégés, sticking to the approach, helping a multiethnic workforce, and learning. E-mentoring is increasingly seen as essential to e-tutoring and lifelong education in companies; therefore, it is being invested in. Our high-tech, globalising world is computerising learning.

E-mentoring has great potential as a global, low-cost, high-impact career development tool. E-mentoring programmes may require mentors and protégés to learn the method and use a system. Recognising that formal e-mentoring platforms may have a lot of effort may be an HRD assurance centre. Half the research group to a condition where intelligent online mentoring preparing to be an e-mentor was supplied [32]. MentorNet undergraduate e-mentors completed a case study to consider educational exercises. Another group had optional preparation. The fundamental training group emails their e-mentors more often, suggesting its impacts have extended to relationships training.

Training is important when implementing e-mentoring, but HRD professionals should also consider organisational culture, structure, assistance with mentoring programme implementation, and potential career development outcomes for protégés [33]. A five-level e-mentoring approach [33]. Level 1 encourages mentorship and participation. Level 2 cultivates online socialisation, whereas Level 3 facilitates data-driven socialisation. Information is created, communicated, and amended in Level 4. Level 5 allows the protégé to challenge the mentor by testing a modern understanding rather than asking for assistance.

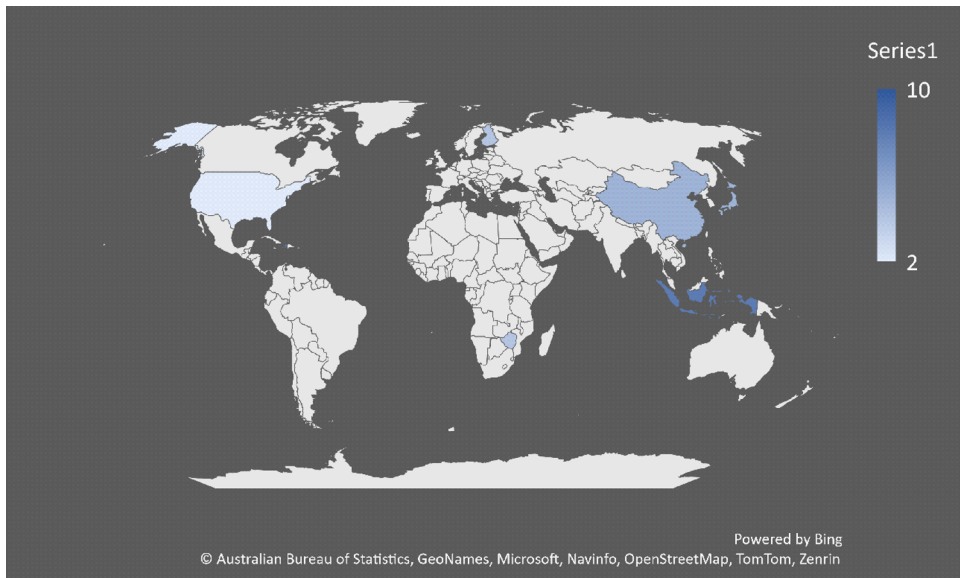
This model also shows a significant development advance, contrary to the belief that mentorship begins with mutual contacts. Every organization must recognize and encourage this development. The extra steps needed to manage e-mentoring assure their longevity. Digital connections seem to make growing connections harder. Building a basis for e-mentoring by meeting in person or over the phone. Mentor-mentee responsibilities and goals should be discussed. Each side must minimize communication hurdles during e-mentoring. Mentors and mentees need

The protégé must be willing to practice and grow to succeed in partnerships based on reciprocal commitment. In a study of online mentoring including students, teachers, and concern dependence professionals (Harris, 1996), differing expectations about turnaround time and frequency of connection were the biggest obstacles to success. E-mentoring can help multicultural employees by giving mentoring to women, persons of varied skin tones, and other minorities. E-mentoring can lessen uneven mentoring relationships and feelings of discomfort. However, an e-mentoring platform may be able

to use the internet's connectedness to speed the establishment of different partnerships. In the global technology society, e-mentoring builds, captures, and shares knowledge. E-mentoring can help a learning organization develop and share knowledge. From another perspective, the move from conventional to digitalize-technology training or mentorship is vital for building more inclusive future leaders who will manage the organization.

#### 4 E-Mentoring platform Leveraging Technology Deliver Mentoring

Rapid changes in the labour market over the past decade have posed new obstacles for young people seeking productive employment. Finding productive employment with secure income has become progressively more difficult. As industries become increasingly specialised in segments and require very specific skill sets, it becomes increasingly difficult to find qualified candidates. The COVID19 pandemic has significantly disrupted the labour market and exacerbated existing difficulties. Young people, who frequently lack experience, talents, and social networks, find it especially challenging to enter the job market and secure productive employment. Moreover, youth may be unaware of the types of jobs and careers that are in demand, the industry in which they are available, or the location of prospective employment opportunities. Informational asymmetry combined with limited or nonexistent access to resources such as networks, assets, and credit frequently exacerbates the employment obstacles confronted by youth. Significant proportion of young people are neither employed nor in school or training (NEET).



**Fig 1.** Share of Youth Not in Employment Education or Training (NEET)

The world's youth are currently NEET, meaning they are neither acquiring experience in the labour market nor earning an income from work nor improving their education and skills. This indicates that they are not realizing their maximum potential. All these forms of labour underutilization in the early phases of a young person's career can result in a variety of scarring effects, including diminished employment and income prospects decades later. Youth frequently struggle to adapt to the workplace and satisfy the expectations of their new employers, even when they do find employment. Multiple studies demonstrate that it is difficult for employers to locate workers with the necessary skills.

**Table 1.** Share of Youth Not in Employment Education or Training (NEET) %

Country	Share of Youth Not in Employment Education or Training (NEET) %
Northern Africa	10
South Eastern Asia and The Pacific	5
Central and Western Asia	5
Eastern Europe	4
Northern, Southern and Western Europe	5
Southern Asia	8
Northern America	2
World	4
Sub-Sahara Africa	4
Arab States	7
Latin America and The Carribean	8
	62

This skills gap can be technical, relating to specific job tasks, generic competences such as literacy, numeracy, and Information and Communication Technology (ICT) literacy in more developed countries, advanced cognitive skills such as problem solving, and socio-emotional skills or traits that are important in the workplace, such as the ability to stay on task, work and network with others, work towards long-term goals, or manage time effectively. There is substantial evidence that socioemotional skills are crucial for success on the long-term labour market, Moreover, youth frequently lack these essential abilities for success in the workplace.

## 5 Positive Aspects of E-Mentoring and Obstacles

There are numerous advantages associated with e-mentoring. One of the most obvious benefits of the e-mentoring platform is that it is accessible whenever and wherever [33]. In other words, the possibility of minimising time and location (e.g., geographical) constraints is one of the numerous advantages that can be realised. According to Guy (2002), the mentee may also have a particular query at the end of the day. The protégé can simply send an e-mail, ask a question via a social media platform (such as WhatsApp, Messenger, and others), or post the question to an online bulletin board as opposed to waiting until the next face-to-face meeting with the mentor at some distant location. Modern technology enables the mentor to respond to the query when it is convenient for them to do so. E-mentoring can make continued professional development more accessible and, in some cases, feasible (Boyd & Jackson, 2004) because it is accessible whenever and wherever the mentor is. Regardless of one's professional level, continuous leadership and career development through e-mentoring can facilitate optimal performance [34]. From this perspective, this can increase the value for both parties who possess and utilise technology. The mentor can teach the protégé how to use new

technology, for example, if the protégé is just beginning to use these tools.

In addition, there are a number of capabilities that have been identified as being enhanced by traditional face-to-face mentoring relationships that appear to benefit from the e-mentoring session. Improved writing skills is one area of skill development frequently identified in the literature [34]. Moreover, e-mentoring can enhance a student's general communication skills. Due to the prevalence of written communication, it is even more vital to be aware of what is said and how it may be interpreted in order to avoid miscommunication and misunderstanding in face-to-face conversations. Ultimately, e-mentoring can also enhance teamwork. The only criteria of collaboration that can be enhanced are the independence of time and space. This method for enhancing teamwork: the ability to include individuals who may not have been included in the past (for example, one team member may be in Canada while another is in New Zealand and yet another is in Malaysia). Enhanced accessibility of mentors to protégés is another advantage of e-mentoring usage. Therefore, online technology can facilitate a strong mutual connection between mentors and mentees regardless of their races, genders, physical, abilities, or other personal settings. This can increase egalitarianism, which can help break down sociocultural barriers and increase access for all to be included in the mentoring system.

E-mentoring also possesses the capacity to reimagine the mentor from a traditional, more astute mentor to a person who can provide assistance in an environment where the protégé's age and level of experience may not be immediately apparent. Typically, a benefit of younger people is that they have more experience in a particular area; however, this advantage may be diminished by their age. Additionally, e-mentoring can advance the mentor's understanding foundation or make both parties more educated and diverse. In depicting the mentor-mentee relationship. Rather than "understanding" being a one-way process, mentor and protégé may be capable of learning from one another in the future. Even though a mentor-mentee relationship is typically a one-on-one direct relationship, e-mentoring can help expand the perception of a learning group within the leadership of the workplace. Increased accessibility and simplicity of e-mentoring could make the process more easily engaged through numerous networks, thereby enhancing the learning of all [35].

Unquestionably, e-mentoring platforms offer a multitude of benefits and opportunities. However, the platform is not always devoid of its own unique issues. For instance, the extensive use of online technologies for e-mentoring creates a challenging situation. Utilization cost is an issue frequently mentioned in the literature. Before the system can be correctly validated and implemented, a careful evaluation of the advantages and disadvantages of e-mentoring from a particular perspective must be conducted. Additionally, an additional technical issue may be associated with the access issue. Numerous scholars and specialists have described the issue of enhanced access to mentors and mentees via the technology platform. However, the convenience of technology as a communication instrument and method may be more important. The technology divide in the social context remains a gaping hole in the workplace environments for the mentor-protégé connection process. Furthermore, accessibility issues are not always limited to material access. A technology issue may also be one of the most significant barriers to the use of online technology in the mentoring process; that is, some individuals may lack the information literacy skills necessary for a successful attachment in the e-mentoring process. The issue must be considered when implementing a proper and effective e-mentoring procedure for the long-term development of future leaders. From a different perspective, online communication skills are an additional obstacle to e-mentoring implementation. In a virtual world, the use of technology equipment may impede communication with a high risk of misunderstanding, as discovered by a variety of researchers reporting on virtual learning-related research [36]. Prior to the establishment



of the mentor-protégé relationship, e-mentoring is more likely to occur, which encourages more prudent instruction in online communication capabilities.

It is undeniable that the issue of privacy in a virtual world and the lack of a corresponding security level are significant obstacles to the implementation of online mentoring. In contrast to face-to-face mentoring, where interactions "disappear" once they occur (unless they are taped), e-mentoring through e-mail, media-based, or news forums can frequently be recorded [37]. The mentors and mentees should keep in mind this issue may also want to know how to use the equipment to get the guidance they require while minimising the risks of using the technology [38]. In addition, training is a significantly larger issue involving numerous aspects of the mentoring procedure. Numerous pieces of literature, such as Smink (1999) and Brown (2001), have been penned to assist in facilitating the mentoring process. Current research is examining a number of the presumptions traditionally associated with mentoring, such as the parental role of a mentor towards a protégé and the attempt to inspire a more inclusive approach to the procedure, where both mentor and protégé can benefit from learning together [39]. In this context, work is particularly useful as an introduction to the expansion of the e-mentoring procedure. Developing a digital equivalent and establishing mutual connections based on reliance can be challenging at times. Certainly, these issues have made face-to-face mentoring more challenging. Nonetheless, this appears to be an unexpectedly increased focus on e-mentoring. The demonstrated that for the e-mentoring process, locating approaches for ensuring that the mutual equivalent is appropriate and operating activities to build reliance are essential. Consequently, finding a suitable way to maintain the mutual relationship is another challenge associated with e-mentoring [40]. In face-to-face mentoring, contact must be maintained not only in the beginning but throughout the entire mentoring process. When it comes to maintaining contact, e-mentoring presents unique challenges. Email text, media text, and news forum displays are more likely to be disregarded than a person standing at the door. Finding strategies and incentives to maintain the mentor-mentee relationship is particularly important.

## 6 CONCLUSION

Future effective leaders may be introduced through the process of mentoring. People should not be able to ignore the future of technology's manifestation in our daily lives in the current environment. Now that technology has found its way into the twenty-first century, businesses must increase their utilization in order to facilitate innovation and workforce growth. E-mentoring could become a revolutionary tool for the transmission of shared knowledge in a synchronous and asynchronous format through the use of electronic-based tools such as email, social media, live streaming video meetings, and other digital methods. With the current prevalence of virtual and digital media, this e-mentoring technique could have a greater impact on a social media user. E-mentoring was able to promote a beneficial information-rich developing procedure within the science management discipline. E-mentoring can also provide an additional opportunity and access to the transfer of knowledge, particularly for the protégé, who constitutes the majority of the younger generation. These days, digital technologies can effectively delegate the development of those positions to more innovative and engaging methods. The potential of e-mentoring is vast, but it may not be beyond its current limitations. If we are to fully comprehend the advantages (and disadvantages) of e-mentoring, we must conduct additional exhaustive research. In general, the literature on e-mentoring demonstrates the best exploratory efforts into what is likely a major career motivator and a promising area for future leadership development among today's youth. A substantial amount of work remains to be done in identifying those aspects of the digital medium that prevent and foster an appropriate mentoring relationship.

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