

The Role of Online Education in Encouraging Employee Empowerment in the Digital Era : A Study on E-commerce companies

Eri Mardiani¹, Eva Yuniarti Utami²

¹Universitas Nasional

²Universitas Sebelas Maret

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ABSTRACT

In the rapidly evolving landscape of the digital age, employee empowerment within organizations has become a critical success factor. This research explores the role of online education in enhancing employee empowerment, focusing on an e-commerce company operating in Indonesia. A quantitative method approach, and a quantitative survey to collect data from 100 respondents. Findings showed that most participants perceived the online education program to have a positive impact on their empowerment. This perception underscores the value of online education in providing employees with the necessary skills, knowledge and autonomy to thrive in the digital age. This study contributes valuable insights for organizations looking to leverage online education as a means to empower their workforce and navigate the challenges of the digital age.

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Corresponding Author:

Name: Eri Mardiani

Institution: Universitas Nasional

e-mail: erimardiani1@gmail.com

1. INTRODUCTION

Employee empowerment is crucial in today's digital age, as it fosters a sense of ownership, engagement, and innovation among employees, contributing to an organization's ability to thrive in a competitive environment. Research has shown that employee empowerment has a positive impact on individual and organizational performance. A study on commercial banks in Bangladesh found that job satisfaction, employee empowerment, and emotional intelligence positively and significantly affect employee performance, with employee empowerment having the highest impact [1]. Empowerment creates

encouragement among employees, which is essential in increasing employee performance in an organization [1]–[4]. Moreover, employee empowerment is viewed as essential to organizational development, efficiency, accomplishment, and employee performance [1]. Employee empowerment strategies can also impact job satisfaction. A study conducted on private university teachers in Punjab, India, found that there is a positive impact of employee empowerment strategies on job satisfaction [5]. In the hospitality sector, employee empowerment has been found to have a close relationship with job-related outcomes such as job satisfaction, job performance, and organizational commitment [6]. In the context

of human resource management, empowering leadership has been found to have a positive effect on intrinsic motivation, with psychological empowerment partially mediating this positive effect [7]–[9]. Empowering leadership is a leader behavior that influences employee performance by providing autonomous support and supporting development [10]. In summary, employee empowerment is an essential factor in improving individual and organizational performance in today's digital age. It fosters a sense of ownership and engagement among employees, contributing to an organization's ability to innovate and thrive in a competitive environment. Empowerment has been found to have a positive impact on job satisfaction, job performance, and organizational commitment across various sectors, making it a crucial aspect of effective human resource management.

Indonesia, with its vibrant and growing e-commerce sector, is indeed an interesting place to investigate the relationship between employee empowerment and the digital age. Indonesian e-commerce companies have been at the forefront of adopting innovative strategies to remain competitive in the ever-evolving digital landscape. One strategy that has gained prominence is the utilization of online education as a means to enhance employee skills, knowledge, and ultimately, empowerment.

Some of the leading e-commerce companies in Indonesia, such as Shopee, Tokopedia, and Bukalapak, have employed market penetration strategies to improve their competitiveness [11]. These strategies include price adjustments, cooperation or collaboration, offering special promos, developing features and services, and using artists and influencers as brand ambassadors. In addition, e-commerce companies such as Lazada Indonesia have also implemented innovative strategies, consumer bargaining power, and supplier bargaining power to become the largest online shopping company in Indonesia [12]. However, the company still has some weaknesses, such as the security system and

many consumers experiencing fraud [12]. In the context of employee empowerment, e-commerce companies in Indonesia can utilize online education to improve their employees' skills and knowledge. One example is a digital education company in Jakarta that has conducted a study on the effect of Emotional Exhaustion on the relationship between Psychological Contract Breach and Turnover Intention in employees [13]. This study shows the importance of understanding the emotional and psychological impact that employees experience in a dynamic and digital work environment. In addition, e-commerce companies also need to pay attention to improving the quality of human resources to create tourism products that can compete in national and international markets [14], [15]. Improving the quality of human resources can be achieved through community empowerment and family education in the digital era [16]. In order to face the challenges of the digital era, e-commerce companies in Indonesia need to continue to innovate and develop effective strategies to improve their competitiveness. Employee empowerment through online education and improving the quality of human resources are important steps in achieving this goal.

This research study seeks to explore the role of online education in driving employee empowerment in the specific context of an e-commerce company operating in Indonesia. By focusing on this unique situation, we aim to gain insights into the effectiveness of online education programs in driving employee empowerment, and the implications for individual employees and the organization as a whole. While the potential benefits of online education and employee empowerment have been widely recognized in the literature, there are still gaps in our understanding of how these two concepts intersect, especially in the context of a developing country like Indonesia. As digital technology transforms the way organizations operate, it is imperative to investigate whether online education initiatives can lead to tangible improvements in employee

empowerment and, subsequently, organizational performance.

2. LITERATURE REVIEW

2.1 *Online Education in the Digital Age*

The evolution of online education has been driven by technological advances, such as high-speed internet, mobile devices, and sophisticated Learning Management Systems (LMS). This has democratized access to education, transcending geographical boundaries and time constraints, thus making learning more convenient and inclusive. The COVID-19 pandemic has significantly disrupted higher education, forcing institutions to shift from traditional face-to-face learning to online learning [17]. This rapid transition has highlighted the need for educators and administrators to reassess their existing practices and protocols, and to reimagine how to operate in a world of remote presence, social distancing, and economic stress [17]. Online education has enabled new business models and transformed traditional sectors, such as the emergence of Massive Open Online Courses (MOOCs) [18]. Digital platforms have facilitated the expansion of MOOCs, allowing the provision of complementary services and attracting renowned educational institutions to offer online courses [18].

Online education has also been applied in various fields, such as surgical skills training [19], and has been found to be effective in various aspects, including student performance and satisfaction [20]. However, challenges such as communication and engagement persist [20]. The shift to online education has also revealed digital gender divide issues, particularly in developing countries like India, where girls from low-income families face challenges in accessing digital devices and learning opportunities [21]. Despite the challenges, online education has the potential to enhance diversity and equity among students, and to provide a balance between face-to-face and digital education, possibly in the form of blended learning [22]. This transformation has also led

to a change in the role of educators, from traditional face-to-face teaching to content production, material delivery, and technical problem-solving in online environments [23]. In conclusion, the evolution of online education has been driven by technological advances and the need for more accessible, flexible, and inclusive learning experiences. The COVID-19 pandemic has accelerated this transition, highlighting the potential benefits and challenges of online education. As the world continues to adapt to this new reality, it is crucial for educators, administrators, and policymakers to address these challenges and harness the potential of online education to create more equitable and effective learning opportunities for all.

2.2 *Employee Empowerment*

Employee empowerment is a crucial factor in enhancing job satisfaction, motivation, and organizational commitment, which in turn can lead to a more sustainable workforce [24]. Empowered employees are more likely to take initiative, contribute innovative ideas, and adapt to change [25]. They feel a stronger commitment to their organization and are better equipped to deal with the demands of the digital age [26]. Employee empowerment is often associated with increased organizational agility, as it enables rapid response to changing market conditions and customer needs [26]. There are two main approaches to employee empowerment: structural and psychological [25]. Structural empowerment focuses on organizational policies and practices that share power and authority with employees, while psychological empowerment focuses on the employee's perceptions and feelings of empowerment [25]. Both approaches are essential for achieving a higher level of employee empowerment.

Research has shown that employee empowerment has a positive impact on individuals' performance, their attitudes toward work, and the performance of organizations [6]. Empowerment creates a sense of autonomy for workers, which increases job satisfaction and self-confidence [27]. Moreover, employee empowerment is positively related to job tenure and negatively

related to emotional exhaustion [24]. In the context of remote work, employee empowerment is manifested through the availability of opportunities, information, resources, and support within the organization [25]. The study conducted on Lithuanian companies found that all dimensions of remote work are interlinked, and only when they are sufficiently fulfilled, a higher manifestation of employee empowerment can be achieved [25]. In the hospitality sector, employee empowerment has been linked to more input of ideas, growth of interpersonal and guidance skills [6]. However, there can also be drawbacks, such as the negative use of power received, high risk of failures without supervision, and conflicts resulting from less supervision [6]. Overall, employee empowerment is a vital aspect of modern organizations, as it leads to increased motivation, job satisfaction, and performance. By focusing on creating work with meaning and instilling a sense of belonging in the workforce, organizations can reduce employee turnover intentions and build a more sustainable workforce [28].

2.3 Online Education and Employee Empowerment

Online education contributes to employee empowerment in various ways, including skills development, knowledge sharing, and collaboration among employees. Online courses and training programs allow employees to acquire new skills and improve existing ones, increasing their value to the organization [29]. Virtual learning environments encourage interaction, discussion, and exchange of ideas, fostering a culture of continuous learning and empowerment [30]. For instance, online platforms for public speaking skills development have been analyzed and found to be advantageous for both classroom and independent work on rhetoric at higher education institutions [29]. Online faculty development programs have also been acknowledged as an important component for the acquisition of skills for new faculty, refinement of skills, and better delivery of the medical curriculum [31]. Moreover, Web 2.0 technologies and principles present new

digital platforms enabling generation and sharing of knowledge in a distributed manner, which can be beneficial for knowledge management within organizations [32]. Team-based learning in online education has been shown to contribute to the development of students' creative thinking skills in digital art [33]. This approach is based on the interaction of groups of students and educators, which helps unlock the potential of students and train highly qualified professional [33]. Furthermore, online education can help motivate employees to engage in online knowledge sharing, which can improve organizational performance [34]. In summary, online education plays a significant role in employee empowerment by offering opportunities for skills development, knowledge sharing, and collaboration among employees. This not only benefits the individual but also increases their value to the organization, promoting a culture of continuous learning and empowerment.

3. METHODS

To investigate the role of online education in driving employee empowerment in the digital age, a mixed-methods research approach will be used. This approach combines qualitative and quantitative research methods to provide a comprehensive understanding of the research problem.

3.1 Case Study Design

This research utilizes a case study design, focusing on a specific e-commerce company operating in Indonesia. The case study design is appropriate as it allows in-depth exploration of the research problem in a real-life context. The selected e-commerce company will serve as the case, and data will be collected from various sources within the organization.

3.2 Data Collection Methods (Quantitative and Qualitative)

3.2.1 Semi-structured Interviews

Semi-structured interviews will be conducted with employees and management personnel involved in the online education program at the selected e-commerce

company. The interviews will be designed to gain insight into the experiences, perceptions, and impact of online education on employee empowerment. A purposive sampling strategy will be used to select interview participants, to ensure representation from different levels and departments.

3.2.2 Content Analysis of Relevant Documents

Relevant documents, such as training materials, feedback from employees, and reports relating to online education initiatives, will be collected and subjected to content analysis. This analysis will help identify key themes and patterns regarding online education and its impact on employee empowerment.

3.2.3 Survey/Questionnaire

A survey questionnaire is administered to a sample of 100 employees within the e-commerce company. The questionnaire will be designed to collect quantitative data on employees' perceptions of online education, their level of empowerment, and their demographics. The target population for the survey will be determined based on the size and structure of the organization, and stratified random sampling techniques will be used to select survey participants.

3.3 Data Analysis (Quantitative and Qualitative)

3.3.1 Thematic Analysis

Interview transcripts and content analysis findings will be thematically analyzed. This method involves identifying recurring themes and patterns in the qualitative data. The themes will be derived through a systematic process of coding and categorization, allowing the extraction of meaningful insights and narratives related to online education and employee empowerment.

3.3.2 Descriptive Analysis

Descriptive statistics, such as frequency, mean, and standard deviation, will be calculated to summarize the survey data. This analysis will provide an overview of employee perceptions and experiences regarding online education and empowerment.

3.3.3 Inferential Analysis

Regression analysis tests, will be conducted to explore potential relationships between variables, specifically testing the effect of online education on employee empowerment. Hypotheses will be tested to assess the statistical significance of this relationship.

4. RESULTS AND DISCUSSION

This section presents the research results and provides a comprehensive discussion of the findings. The results are divided into quantitative findings, qualitative findings, and a discussion that synthesizes both types of data.

Before delving into the findings, it is important to provide an overview of the participants who contributed to the study. This study involved employees and management personnel from selected e-commerce companies in Indonesia. The demographics of the participants are as follows:

Table 1. Demographic Respondent

Demographic	Number of Participant	Percentage
Age		
22-25 years	10	12%
26-35 years	43	53%
36-45 years	30	30%
46-55 years	17	17%
Gender		
Male	52	52%
Female	48	48%
Job Position		
Junior Staff	32	32%
Mid-Level Managers	48	48%
Senior Managers	20	20%
Years of Experience		
1-5 years	41	41%
6-10 years	32	32%
11-15 years	27	27%

Source : Primary Data (2023)

4.1 Quantitative Findings

Before delving into the findings, it is important to provide an overview of the participants who contributed to this study. This study involved employees and management personnel from selected e-commerce companies in Indonesia. The demographics of the participants are as follows:

4.1.1 Perceived Impact of Online Education on Employee Empowerment

To assess the perceived impact of online education on employee empowerment, participants were asked to rate their agreement with the statement "The online education program has a positive impact on my empowerment" on a Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The following table summarizes these responses:

Table 2. Skala Likert

Response	Number of Participants	Percentage
Storngly Agree	31	31%
Agree	31	31%
Neutral	28	28%
Disagree	10	10%
Strongly Disagree	3	3%

Source : Primary Data (2023)

The quantitative findings show that most participants (62%) agreed or strongly agreed that the online education program had a positive impact on their empowerment. Only a small proportion of participants (13%) disagreed or strongly disagreed with the statement.

4.1.2 Relationship between Age and Perceptions of Online Education

A correlation analysis was conducted to explore whether age has a significant relationship with the perceived impact of online education on employee empowerment. The analysis found a weak positive correlation ($t = 0.231$, $\text{sig} < 0.01$), indicating that older participants tend to have slightly more positive perceptions of the impact of online education on empowerment.

4.2 Qualitative Findings

Themes from the Semi-structured Interviews

The qualitative data from the semi-structured interviews provided insights into participants' experiences and perceptions of online education. There were several themes that emerged:

Convenience and Accessibility: Participants highlighted the convenience and accessibility of online education, which allows them to access learning resources at their convenience and from various locations.

Empowerment through Skill Development: Many participants emphasized how online education helps them acquire new skills, which they believe empowers them to take on more responsibilities and contribute effectively to the organization.

Autonomy and Self-Learning: Online education is seen as a platform that empowers employees to take control of their learning journey, allowing them to choose courses that align with their career goals.

Discussion

The quantitative findings confirmed that the majority of participants perceived online education as a positive influence on their empowerment within the organization. This suggests that online education programs, if implemented effectively, have the potential to increase employees' skills, knowledge, and autonomy, contributing to their sense of ownership and engagement.

Qualitative findings complement these quantitative results, offering deeper insights into how employees perceive online education programs. The convenience and accessibility of online learning was highlighted, allowing employees to engage in self-directed learning. This autonomy is an important component of empowerment.

The weak positive correlation between age and the perceived impact of online education on empowerment suggests that older participants tend to have slightly more positive views. This suggests that online education may be particularly valuable for employees at different career stages.

Overall, these findings emphasize the symbiotic relationship between online education and employee empowerment. Organizations that prioritize online education as a strategic tool can empower their

employees, fostering a workforce that is adaptable to change and ready to drive innovation and success in an ever-evolving digital landscape.

As the digital age continues to reshape organizations, the role of online education in employee empowerment becomes increasingly important [35]–[38]. Insights from this study offer practical implications for organizations in Indonesia's e-commerce sector and beyond, providing a path to empowering employees in the digital age [39], [40].

6 Developing a New Marketing Approach to Enhance Brand Awareness: Case Study of an E-commerce Enabler Company in Indonesia

CONCLUSION

In an era characterized by digital transformation and the imperative for continuous learning, the empowerment of employees is integral to an organization's resilience and competitiveness. This study, conducted within the realm of an Indonesian e-commerce enterprise, offers valuable insights into the role of online education in enhancing employee empowerment. Quantitative findings reveal that a substantial majority of participants perceive online education programs as positively impacting their empowerment within the organization. This underscores the value of online learning in equipping employees with the skills, knowledge, and autonomy essential for thriving in a dynamic digital environment. Qualitative insights gleaned from interviews complement these findings by shedding light on the convenience, accessibility, and skill development aspects of online education. These facets are integral to employee empowerment, fostering a culture of continuous learning and self-directed development. The presence of a weak positive correlation between age and the perception of online education's impact suggests that online learning may be especially advantageous across various career stages. This underscores its relevance not only to younger, digitally native employees but also to more

experienced individuals seeking to adapt to changing professional landscapes.

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