

Adoption of E-Learning among Employees in Nepalese Commercial Banks of the Kathmandu Valley

Rajak Bishwokarma*¹,
Sujan Chaulagain² and Sita Acharya³

*Corresponding Author

Abstract

E-learning systems have emerged as essential tools for boosting the productivity of banking professionals in Nepal. Nonetheless, there is a notable deficiency in research investigating the adoption of e-learning within commercial banks in the country. The study aimed to examine e-learning adoption in Kathmandu Valley's banking institutions. Utilising a cross-sectional survey with purposive sampling, the researchers collected data from 250 bank employees. Partial Least Squares Structural Equation Modelling (PLS-SEM) were using to test their hypotheses. This study found that Management Support (MS) significantly enhances both the perceived usefulness (PU) and perceived ease of use (PEU) of an e-learning system. Prior Experience (PE) and Computer Proficiency (CP) also showed strong positive effects on these perceptions. Computer Anxiety (CA), however, showed no significant influence on the perceptions of users. In all, the findings underscore the importance of organisational support, user experience, and technical skills in successful e-learning adoption. The study is expected to provide both banking managers and policymakers and represent one of the earliest investigations into e-learning adoption within Nepal's banking sector, specifically in the Kathmandu valley.

Keywords: behavioural intention, computer anxiety, computer proficiency, management support, prior experience

Cite as: Bishwokarma, R, Chaulagain, S., & Acharya, S. (2025). Adoption of e-learning among employees in Nepalese commercial banks of the Kathmandu Valley. *Journal of Business and Social Sciences Research*, 10(1) 141-160. <http://doi.org/10.3126/jbssr.v10i1.80312>

INTRODUCTION AND STUDY OBJECTIVES

In modern workplaces, acquiring digital knowledge and skills is increasingly common, highlighting the growing

need to “reskill individuals to gain new competencies and adapt to change, as work and learning should become more interconnected” (Hamburg, 2021). It is well-known that most of the organisations actively involve e-learning application

¹Mr. Bishwokarma is an MBA graduate from SAIM College, Pokhara University. He can be contacted at: rajakbishowkarma7@gmail.com

²Mr. Chaulagain is an MBA graduate from SAIM College, Pokhara University. His email ID is: sujan.chaulagain21@gmail.com

³Ms. Acharya is an MBA graduate from SAIM College, Pokhara University. Her email ID is: sitaacharya234@gmail.com

as a part of their policy on employee training and development (Nurhayati & Rachmawati, 2021). E-learning is currently the most important and adaptive system in the context of the workplace. Furthermore, most economic studies testify that e-learning is crucial for workplace organisations. Studies show that in 1999, only 8% of U.S. companies used e-learning in the workplace, while in 2006, this number rose to 29% (Jan et al., 2012).

In today's highly competitive business environment, companies, especially in the banking sector, must strive to strengthen their market competitiveness. Employees' knowledge fast becomes outdated, and the knowledge embedded in people has become an important measure of the strength of an organisation (Glass 1998). Consequently, e-learning emerges as a pivotal tool in ensuring bank employees stay abreast of advancements in the field (Karaaslan, 2013). In the competitive realm of banking, Information Technology (IT) stands as a pivotal asset. The emergence of the internet has redefined banking practices, with institutions leveraging internet banking to promote services and offer remote training, leading to time and cost savings (Karaaslan, 2013). Further, E-learning has extensively penetrated the realm of work to facilitate the lifelong learning of employees and their development (Nurhayati & Rachmawati, 2021). The advantages of e-learning include flexibility, autonomy, and collaborative features that enable employees to control the timing, location, and continuity of their training (Martins et al., 2019). Additional benefits include cost-effectiveness, as it minimises travel expenses by allowing training to be conducted for employees at any time and from any location (Burgess & Russell, 2003).

E-learning is significant, but it appears that some countries are lagging facing challenges of low productivity, insufficient service delivery, and poor performance (Nurhayati & Rachmawati, 2021). In Nepal, the integration of Information and Communication Technology (ICT) in banking has revolutionised operations, offering enhanced visibility, financial options, and convenience, especially for overseas customers (Sapkota et al., 2018). The shift towards e-learning in Nepalese banks mirrors global trends in digital education and career advancement (Sapkota et al., 2018). Furthermore, Strategic e-learning adoption will improve Nepal's banking industry's productivity, competitiveness, and professional growth. Banks may make sure their employees are knowledgeable, flexible, and equipped to handle changing business expectations in a highly technology world by attending to training needs and utilising digital platforms. Nonetheless, several obstacles prevent e-learning from gaining widespread recognition across different industries. High implementation and training program costs may be a deterrent. Employee resistance to switching from traditional training techniques to digital platforms also necessitates mind-set changes. Ineffective learning and disengagement can result from inadequate understanding of e-learning resources and subpar content. Inadequate IT proficiency among employees may result in technical challenges, and training materials that don't address the unique requirements of the banking sector may cause relevance problems. Finally, inadequate infrastructure such as obsolete devices or erratic internet can hinder employees' ability to fully engage in e-learning initiatives (Ahmad et al., 2023; Msomi et al., 2016). Furthermore, Baral et al., (2024) stated that e-learning adoption may be hampered by issues in Nepal like

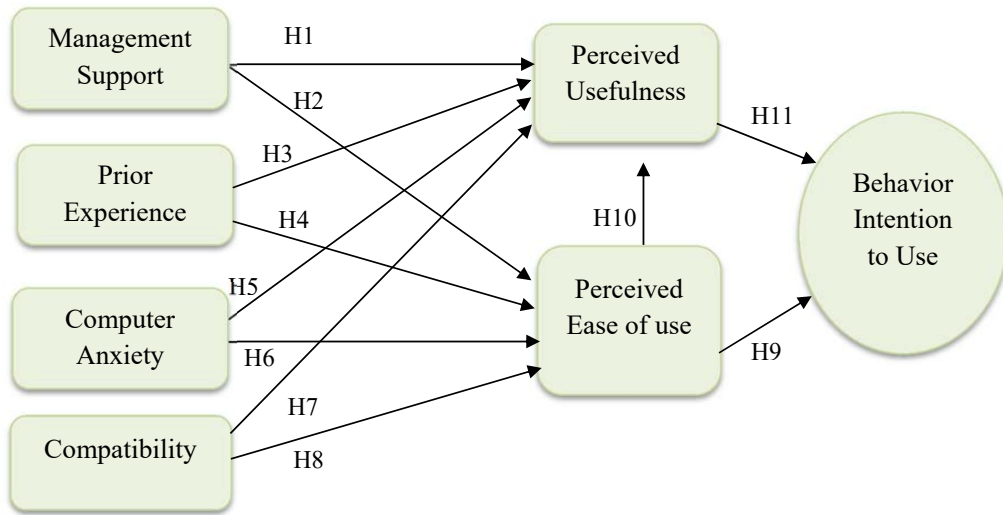


Figure 1. *Conceptual Framework*

erratic electrical supply, scarce user resources, and poor logistic support, sluggish internet connectivity, and a lack of technical assistance. These challenges may be linked in part to the inadequacy of research concerning adoption and utilisation of E-learning practices in organisations in the public sector. It therefore becomes necessary to further investigate the literature on this area and gain insight into the experience. Consequently, this paper aims to examine the adoption of e-learning among employees in commercial banks located in the Kathmandu Valley of Nepal.

LITERATURE REVIEW

The adoption of information technology is commonly examined using two theories: Technology Acceptance Model (TAM) and Diffusion of Innovations. Even though TAM and DOI share several concepts in common, they provide different strands of applicability (Hardgrave et al., 2003). As a result, components from both models are combined to create a distinct set of factors influencing technology acceptance. DOI identifies five key characteristics of

innovation: relative advantage, compatibility, complexity, trialability, and observability. Extensively applied to education, sociology, communication, and marketing (Rogers, 1995), the TAM thus offers a comprehensive framework for understanding technology acceptance by suggesting perceived usefulness and perceived ease of use as the main factors of user acceptance (Davis, 1989). Past studies show that the TAM may be extended to include variables such as organisational support and individual differences, like computer experience, that affect the use of information systems (Igbaria et al., 1995; Chau, 2001; Mun and Hwang, 2003). Thus, the current study investigates four major factors that directly influence e-learning adoption within the banking sector: management support, prior experience, computer anxiety, and compatibility. Management support is considered a type of organisational support, while prior experience and computer anxiety are classified as individual differences. Compatibility, on the other hand, is a component of the DOI framework.

Few studies of e-learning acceptance have been done in Nepali literature. Some important articles on e-learning acceptance exist. For instance, [Sthapit and Shrestha \(2020\)](#) assessed that online learning experiences among management students at Nepal Open University were comparable to face-to-face instruction, with interaction and class accessibility positively influencing knowledge gain. In another similar study, [Subedi \(2020\)](#) used the technology acceptance model to assess willingness to use online classes and perceived ease of use and usefulness were key drivers for this. Likewise, in another study, [Shrestha and Sthapit \(2021\)](#) found intensity of interaction and access to have significant impacts on the amount of knowledge gained but found that perceived effectiveness of online learning was decreased with lower intensities. Likewise, [Baral et al., \(2024\)](#) found that while both teachers and students were generally positive about e-learning, students showed greater acceptance, with senior and part-time teachers from non-ICT backgrounds being less supportive. These studies emphasise the necessity of more research on e-learning, particularly regarding its adoption among employees in Nepalese commercial banks within the Kathmandu Valley.

Hypotheses Development

Management Support and Perceived Usefulness

The theoretical foundation employed in this study was UTAUT theory ([Venkatesh et al., 2003](#)). This theory posits that management support influences individuals' views of the utility of a technology, which affects their adoption and usage of that technology. This perceived usefulness has a beneficial impact on their propensity to use technology efficiently. Not only should managers and

supervisors encourage self-directed learning through the Internet, they should also help change the attitudes of employees toward web-based training ([Purnomo et al., 2013](#)). Management support was also seen to affect perceived usefulness ([Purnomo et al., 2013](#)). The study proposes hypotheses based on the assumption that:

H₁: MS has a positive effect on PU of an e-learning system.

Management Support and Perceived Ease of Use

The theoretical foundation employed in this study was UTAUT theory ([Venkatesh et al., 2003](#)). This theory suggests that management support positively influences perceived ease of use by providing facilitating condition and reducing perceived effort associated with using the technology. [Igarria et al. \(1995\)](#) argued that such management support is to be obtained, top management encouragement, allocation of resources, and instructional development assistance would be needed. Such management support is said to appear in terms of their perceptions about the ease of use, importance, and effectiveness of web-enhanced instruction ([Purnomo & Nastiti, 2019](#)). Furthermore, previous studies have found a relationship between management support and perceived ease of use ([Ndubisi & Jantan, 2003](#); [Venkatesh, 2000](#)). In UTAUT theory Management support is a fundamental enabling condition that impacts users' perceptions of ease of use, which in turn determines their intention to adopt and use a technology. Drawing on the findings of prior research, this paper proposed the following hypothesis:

H₂: MS has a positive effect on PEU of an e-learning system.

Prior Experience and Perceived Usefulness

The theoretical framework utilised in this study was Technology Acceptance Model (TAM) (Davis, 1989). The TAM model suggests that prior experience with technology positively impacts perceived usefulness, because users who have had favourable experiences are more likely to see the technology as beneficial and worthwhile for their duties or activities. A learner who has previously experienced easily using technology in everyday devices tends to feel less effort to adopt e-learning. Moreover, the experienced learner benefits from e-learning which then enhances the perceived usefulness of e-learning in working life (Purnomo & Nastiti, 2019). Furthermore, earlier studies showed that previous experience with computers has been found to affect the intention to use an array of technology applications, including microcomputer and Internet banking services, and e-learning (Lee et al., 2010; Purnomo et al., 2013). Consequently, the subsequent hypothesis was developed:

H₃: PE has a positive effect on PU of an e-learning system.

Prior Experience and Perceived Ease of Use

The theoretical framework utilised in this study was Technology Acceptance Model (TAM) developed by Davis by a host of researchers. Taylor and Todd, (1995) found that although the TAM model can help in prediction of intention and behaviour among experienced and inexperienced users, they found that the relationship was stronger for the experienced users than for those who were inexperienced (Ramayah, 2006). Similarly, Users with prior e-commerce experience report higher perceived ease of use in

subsequent online transactions (Sun et al., 2010). Based on the findings of prior research, this paper proposed the following hypothesis:

H₄: PE has a positive effect on PEU of an e-learning system.

Computer Anxiety and Perceived Usefulness

The theoretical framework utilised in this study was Technology Acceptance Model (TAM) developed by Fred Davis (Davis, 1989). The Technology Acceptance Model (TAM) proposes that computer anxiety can influence users' views of a technology's usefulness, with greater levels resulting in poorer utility and reducing anxiety can increase people's acceptance and adoption of technology. Previous studies have linked computer anxiety to negative beliefs and attitudes about computers, difficulties in experimentation, and avoidance of technologies (Igarria & Iivari, 1995). In the earlier studies, there are much research works study the direct effect of the anxiety on perceived usefulness, these research works show obviously the negative impact of anxiety (Alrajawy et al., 2018). In the same way, Aggelidis and Chatzoglou (2009) discovered that anxiety had a negative impact on usefulness. Based on it, the following hypothesis was developed:

H₅: CA has a negative effect on PU of an e-learning system.

Computer Anxiety and Perceived Ease of Use

The theoretical framework utilised in this study was Technology Acceptance Model (TAM) developed by Fred Davis (Davis, 1989). TAM model posits that higher levels of computer anxiety relate to lower perceived ease of use in banking e-learning, since

worry about utilising technology can make the learning process appear more complex or demanding to employees.

Computer anxiety is another influential factor that has been frequently adopted in the extended TAM. Computer anxiety has been found to be a determining factor of perceived ease of use in the accepting of technology (Saadé & Kira, 2009). Similarly, Chen and Tseng (2012) findings reveal, there is a negative effect of anxiety on ease of use. The following hypothesis was developed based on the results of the previously mentioned literature review:

H₆: CA has a negative effect on PEU of an e-learning system.

Compatibility and Perceived Usefulness

The theoretical framework utilised in this study was Diffusion of Innovation theory (Rogers, 1995). This theory posits that degree to which e-learning platforms match with existing banking procedures and employee demands (compatibility) determines their perceived usefulness for learning and skill development. Compatibility typically leads to a higher degree of system acceptability. (Tung & Chang, 2008). In the same way, Numerous researchers have discovered a noteworthy relationship between compatibility and perceived usefulness (Karahanna et al., 2006; Gerlach & Buxmann, 2013), whereas the diffusion of innovation theory groups the features of inventions according to their relative benefit, compatibility, trialability, complexity, and observability. Based on it, the following hypothesis was put out in this study:

H₇: CP has a positive effect on PU of an e-learning system.

Compatibility and Perceived Ease of Use

The theoretical framework utilised in this study was Diffusion of Innovation theory (Rogers, 1995). This theory persists that the degree to which e-learning platforms correspond with existing banking procedures and employee compatibility significantly influences their perceived ease of use by lowering perceived complexity and increasing user adoption. Compatibility (CP) increases the likelihood of adoption of a technology since it permits advancements to be perceived in a more common manner (Raza et al., 2017). If a technology is easy to use, the user can spend more cognitive effort on the actual task, increasing his or her net gains (Gerlach & Buxmann, 2013). Diffusion of Innovations, Rogers (2003) defines CP as the extent to which an innovation is perceived as consistent with the existing values and current practices of potential adopters. The hypothesis outlined below was derived from the findings of the aforementioned literature review:

H₈: CP has a positive effect on PEU of an e-learning system.

Perceived Ease of Use and Behavioural Intention to Use

The theoretical foundation employed in this study was Technology Acceptance Model (TAM) developed by Fred Davis (Davis, 1989). The TAM model shows that in banking, perceived ease of use positively impacts the behavioural intention to use technology, meaning that if banking staff view a technology as easy to use, they are more likely to plan to utilize it for their jobs or activities. Perceived ease of use in using technology-based products significantly enhances consumers' interest in using those products. This ease-of-use construct is also related to the decision-making process; if a user feels comfortable with using an

information system, the user is likely to adopt that system, but if this is not the case, the user will reject the system. Perceived ease-of-use is related to the decision-making process towards using information technology; whether this information technology is easy to work with and will help complete the job (Wiprayoga et al., 2023).

Several researchers had found significant relationship between Perceived ease of use and behaviour intention to use. In context of exploring the acceptance of online classes in Nepal, Subedi (2020) found that perceived ease of use significantly influence intention to use. The following hypothesis emerges from the reviewed literature:

H₉: PEU has a positive effect on BIU of an e-learning system.

Perceived Ease of Use and Perceived Usefulness

The theoretical foundation employed in this study was Technology Acceptance Model (TAM) developed. The model posits that perceived ease of use directly impacts perceived usefulness in banking, suggesting that if banking personnel see a technology as simple to use, they are more likely to see it as beneficial for increasing job efficiency or effectiveness. In the meantime, the aspect of ease-of-use has been widely associated with predicting perceived usefulness. Bishwokarma and Pokhrel (2024) found that perceived ease of use positively influenced perceived usefulness. Similarly, Pokhrel (2022) found that perceived ease of use has significant influence on perceived usefulness in the context of social media adoption. In other words, according to TAM theory, perceived ease-of-use has been regarded as an important determinant of perceived usefulness (Davis, 1989). The relationship between these parameters has

been statistically established in almost all empirical adoption analysis implemented in different fields of information technologies and in different social and cultural settings. Based on the preceding literature review, the following hypothesis has been formulated:

H₁₀: PEU has a positive effect PU of an e-learning system.

Perceived Usefulness and Behavioural Intention to Use

This means that if banking personnel see a technology as beneficial for their jobs or activities, they are more likely to plan to utilise it. The first will lead to the second, saying that if they perceive that this system is easy to use, they will find it important and will be willing to use technology for e-learning (Purnomo et al., 2013). Furthermore, Shrestha and Kayestha (2024) found that perceived usefulness positively influences behavioural intention to use mobile banking in the Kathmandu valley. Similarly, Parajuli and Thapa, (2023) found that perceived usefulness significantly influence intention to use E-learning platform. Moreover, in context of exploring the acceptance of online classes in Nepal, Subedi, (2020) found that perceived usefulness significantly influence intention to use. Therefore, the following hypothesis was formulated:

H₁₁: PU has a positive effect on BIU of an e-learning system.

RESEARCH METHODS

This section outlines the research methods employed in this study.

Research Design

For this study, a cross-sectional survey was selected because it enables data collection

at a particular moment in time without requiring the tracking of changes over time (Simkus, 2021). This strategy is warranted since the study attempts to investigate the present attitudes and behaviours of 250 employees from different commercial banks in the Kathmandu Valley, Nepal, with relation to e-learning, rather than to prove causation. The authors suggest that the implementation of E-learning in banking firms is a relatively recent research topic, and this paper does not seek to establish causal relationships. Furthermore, previous studies have employed a similar approach to examine technology acceptance (Bishowkarma & Pokhrel, 2024; Ooi et al., 2021), making the use of a cross-sectional design appropriate for testing the proposed model.

Population and Sample

The target population for this study comprises employees working in various commercial banking institutions within the Kathmandu Valley of Nepal. This includes management, customer service, IT, HR, and operational staff with experience in e-learning tools like Learning Management Systems, webinars, virtual classrooms, mobile learning apps, and interactive multimedia. The service sector drives e-learning adoption in banking by providing platforms, software, and support tailored to industry needs, covering regulations, compliance, customer service, and financial products. According to NRB estimates for 2022, Nepal's service sector accounts for 61.76 percent of the country's GDP, highlighting its importance as a future field of study. Similarly, the financial and insurance sector contributed approximately 8.4 percent to GDP in FY 2022/23 (Ministry of Finance Nepal, 2023). Moreover, the main regulatory body of banking institutions is in the Kathmandu Valley, making the selection of this population a rational decision for

the study. Likewise, there was no available sampling frame or active list of employees using E-learning, this paper employed purposive sampling. Unlike probability approaches that might involve individuals who are not qualified, it guarantees pertinent and comprehensive data. Given the limitations of time and resources, this method is also more effective and practical (Palinkas et al., 2015). Purposive sampling, according to this research, is the best technique for choosing a sample from a population based on inclusion criteria (Pokhrel & K.C., 2023). According to Hair et al. (2016), the range for sample size in this study can go from 185 to 370, out of which 250 was assessed as sample size. Given the level of homogeneity among the e-learning user population, the researchers proceeded with the assumption that this sample size would represent the population well enough. The justification for the chosen sample size resonates well with earlier works (Pokhrel & K.C., 2023; Bishowkarma & Pokhrel., 2024).

Measurement

This study used seven measures with 24 items to measure E-learning adoption in banking workplaces. The survey made use of the 5-point Likert Scale, in which 1 represented "strongly disagree" and 5 represented "strongly agree." The researcher adapted the questionnaires that were used from different sources to measure constructs such as Behavioural Intention, Perceived Ease of Use, and Perceived Usefulness (Lee, 2006), Management Support (Ali, 2005), Prior Experience (Walker, 2004), Computer Anxiety (Hardgrave et al., 2003), and Compatibility (Sun et al., 2008).

Pilot Testing

A pilot test was carried out on the revised questionnaires to assess their reliability, face

validity, and readability. The pilot study comprised thirty bank employees from the various banks of the Kathmandu Valley. The primary survey was scheduled between January 11, 2024, and March 29, 2024, following the feedback and confirmation of the values of Cronbach alpha as above 0.65.

privacy of all the respondents was ensured with voluntary participation from all the respondents and, they might extract at any time for any reason.

DATA ANALYSIS AND DISCUSSION

The printed digital questionnaire was distributed to 250 respondents from the period of December 2023 to March 2024. The

Demographic variables including age, gender, occupation, and education were examined to understand the characteristics

Table 1
Reliability and Validity of Model

Constructs	Indicators	Loading	CA	CR (rho_a)	CR (rho_c)	AVE
Behaviour intention to use	BIU1	0.764				
	BIU2	0.717	0.699	0.702	0.815	0.525
	BIU3	0.710				
	BIU4	0.705				
Computer Anxiety	CA1	0.796				
	CA2	0.927	0.883	1.012	0.914	0.728
	CA3	0.862				
	CA4	0.822				
Compatibility	CP1	0.747				
	CP2	0.846	0.863	0.887	0.906	0.707
	CP3	0.884				
	CP4	0.880				
Management Support	MS1	0.848				
	MS2	0.864	0.819	0.820	0.892	0.734
	MS3	0.859				
Perceived Ease of Use	PEU1	0.883				
	PEU2	0.869	0.697	0.699	0.868	0.768
Prior Experience	PE1	0.812				
	PE2	0.870	0.825	0.846	0.885	0.661
	PE3	0.886				
	PE4	0.666				
Perceived Usefulness	PU1	0.799				
	PU2	0.864	0.778	0.781	0.871	0.692
	PU3	0.832				

Note. Based on the researcher's calculation

Table 2

Discriminant Validity (Fornell and Larcker's Criterion and HTMT Ratios)

Latent Constructs	1	2	3	4	5	6	7
1. BIU	0.725	0.153	0.828	0.653	0.839	0.688	0.920
2. CA	-0.11	0.853	0.092	0.096	0.188	0.069	0.157
3. CP	0.658	-0.012	0.841	0.367	0.635	0.487	0.638
4. MS	0.502	-0.099	0.311	0.857	0.498	0.495	0.586
5. PE	0.644	-0.179	0.535	0.41	0.813	0.539	0.682
6. PEU	0.483	-0.064	0.387	0.376	0.408	0.876	0.560
7. PU	0.687	-0.15	0.537	0.471	0.552	0.409	0.832

Note. Based on the researcher's calculation; BI= Behavioural Intention to Use, CA=Computer Anxiety, CP=Compatibility, MS=Management Support, PE=Prior Experience, PEU= Perceived Ease of Use, PU=Perceived Usefulness. The values below diagonals are showing Fornell and Larcker's Criteria and above are showing HTMT Ratios

of the 250-person sample. Most of the respondents in the study were between the age of 21-30 (n=149 or 59.6 percent) with male respondents (n=138 or 55.2 percent) and female respondents (n=112 or 44.8 percent). Most of the respondents have completed their Master's degree (n=178 or 71.2 percent) and bachelor's degree (n=64 or 25.6 percent). Many respondents have their job positions at the Officer Level (n=117 or 46.8 percent) and Assistant Level (n=113 or 45.2 percent). Finally, the highest number of respondents have been using a computer for more than 9 years (n=102 or 40.8 percent).

Common Method Biases

To reduce method variance, the study adopted the surveys developed by different authors. After the collection of data, the authors performed Harman's single-factor test as it is traditionally done and found that there was an un-rotated single factor of 33.204, which is below the threshold criterion of 50 (Podsakoff et al., 2003). Consequently, with the application of a structural equation model, the authors

concluded that there were no common method biases in the dataset.

Structural Equation Modelling (SEM)

Structural Equation Modelling (SEM) is recognised as one of the best techniques in research, which helps capture underlying variables, reduce errors in measurement, and evaluate collective hypotheses (Henseler et al., 2016). SEM has two major approaches: Covariance-based SEM (CB-SEM) and Variance-based SEM (PLS-SEM). PLS-SEM is the preferred method when confronted with many variables and complicated interrelations among constructs, as stated by Hair et al. (2020). Thus, the PLS-SEM integrated measurement and path modelling is well suited for researchers (Bishowkarma & Pokhrel, 2024; Pokhrel & K.C., 2023).

Measurement Model

Measurement models were estimated using reliability and validity procedures (Bido et al., 2014). Both Cronbach Alpha (CA) and Composite Reliability (CR) values were above the threshold value of 0.744, confirming reliability (Hair et al., 2011). Convergent

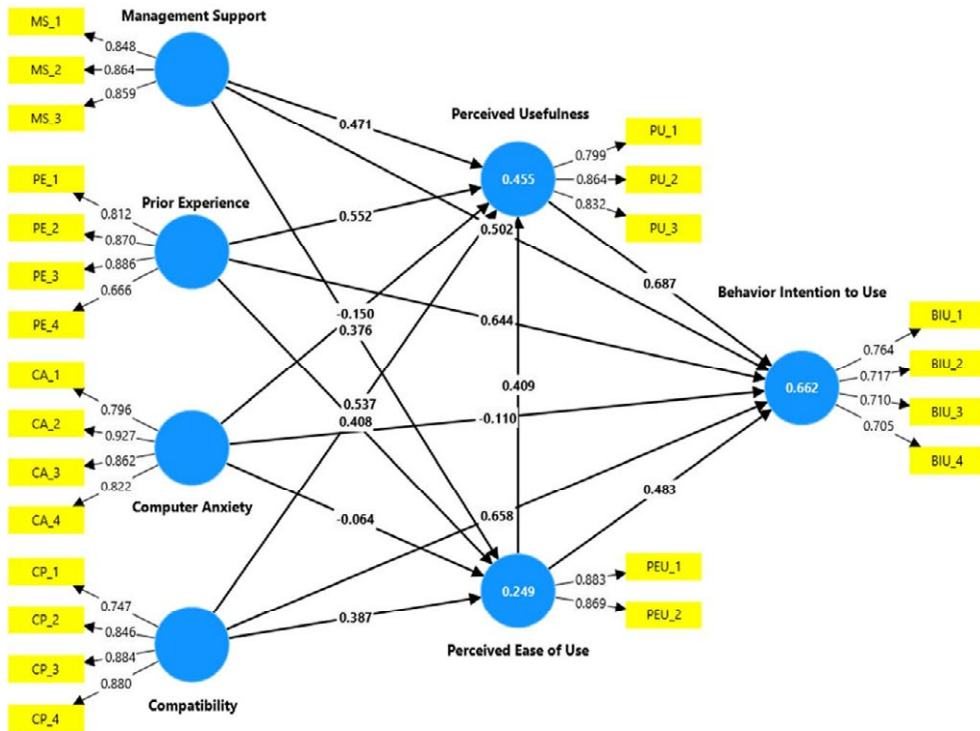


Figure 2. *Measurement Model*

validity was assessed using Average Variance Extracted (AVE), with values distributed in the range of 0.535-0.670 across constructs, well above the cut-off threshold value of 0.50 (Fornell & Larcker, 1981).

Discriminant Validity

Fornell and Larcker's (1981) and the Heterotrait-Monotrait Ratio (HTMT) criteria were used to test discriminant validity. This validity is confirmed when the square root of AVE for a construct is greater than its correlations with all other constructs. This study found that the square root of AVE was found to be higher than those correlations with respect to other constructs, thus satisfying Fornell and Larcker's criteria. Furthermore, a criterion of 0.90 or below is advised for discriminant validity by Teo et al. (2008). The HTMT scores for all constructs

in the context of this paper were higher than this threshold (Table 2). Thus, these results suggest no issues with discriminant validity in this research.

Structural Model

Prior to estimate the stated hypotheses using the structural model, this paper assessed multicollinearity assumptions. The assessment has demonstrated that all the values of VIF were below 5, which is an indicator that even multicollinearity was not really evident (Hair et al., 2019). Therefore, the structural model estimation proceeded. Figure 3

Structural Models

The results from Table 3 reveal that H1, H3 and H7 are supported in the study. The results implied that one unit change in MS, PE and CP will increase PU by 0.233, 0.244

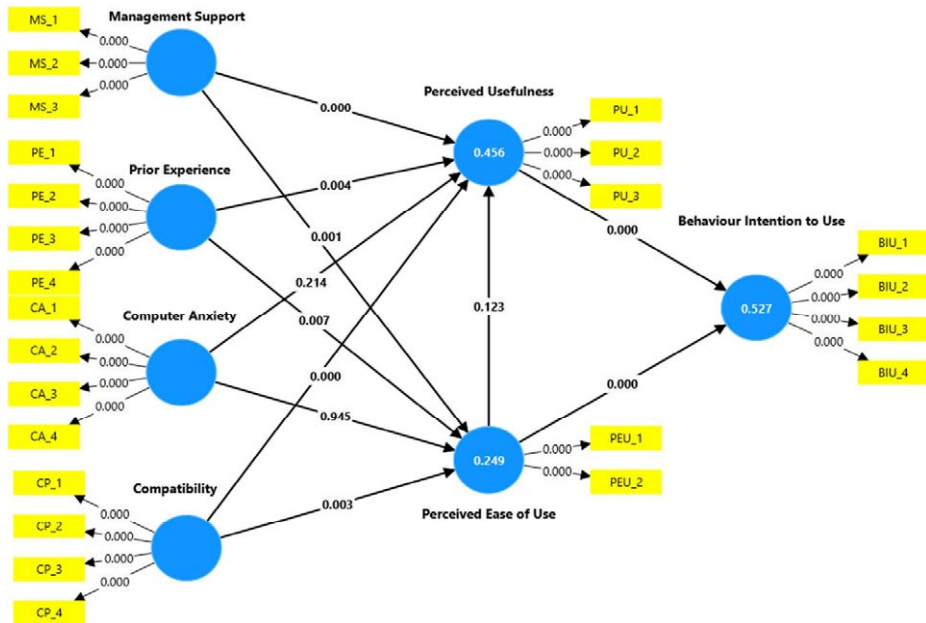


Figure 2. Measurement Model

and 0.293 respectively. Furthermore, H2, H4 and H8 are supported in the study. From this results, it can be concluded that one unit change in MS, PE and CP will increase PEU by 0.228, 0.201 and 0.209 respectively. Similarly, H9 and H11 are supported in the study. The results implied that one unit change in PEU and PU will increase BIU by 0.241 and 0.593 respectively. However, H5, H6 and H10 was not supported in the study.

Discussion

The rapid advancements in information technology have left banks with little time to adequately train their personnel on its usage and productivity. Hence, e-learning plays a crucial role in keeping bank staff updated with developments in the field (Karaaslan, 2013). In Nepal, the adoption of ICT in banking has transformed operations, providing greater visibility, financial options, and convenience, especially for customer's abroad (Sapkota et al., 2018). This paper

highlights the critical roles of Management Support (MS), Prior Experience (PE) and Computer Proficiency (CP) in enhancing Perceived Usefulness (PU) and Perceived Ease of Use (PEU), emphasising that managerial backing and employees' technical skills are essential for effective technology adoption. The research model of this study, along with the hypotheses concerning the directional relationships among the model's variables, are discussed as follows:

Management Support

The results confirm that MS significantly influences PU and PEU in e-learning, consistent with prior studies (Venkatesh et al., 2003; Ndubisi & Jantan, 2003; Purnomo et al., 2013; Purnomo & Nastiti, 2019). MS enhances the perceived usefulness and ease of use of e-learning, boosting employee engagement and training outcomes, in line with the unified theory of acceptance and use of technology (UTAUT). It seems

that perceived ease of use ($\beta = 0.288$, $p < 0.005$) appears to be more strongly predicted by management support than perceived usefulness ($\beta = 0.233$, $p < 0.005$). The finding indicated that, when employees feel strong management support for online training activities, they are more likely to see e-learning platforms as easy to use, effective and valuable for skill development and knowledge growth in Nepalese banks.

Prior Experience

This study found that PE positively influences PU ($\beta = 0.244$, $p < 0.005$) and PEU ($\beta = 0.201$, $p < 0.005$) in e-learning adoption in the banking sector, consistent with previous research (Purnomo et al., 2013; Purnomo & Nastiti, 2019; Ramayah, 2006). Enhancing PE through e-learning platforms boosts PU and PEU among banking staff, increasing training efficacy and efficiency. This aligns with Davis's (1989) technology acceptance model (TAM), suggesting that greater PE with e-learning improves perceived ease

of use and usefulness, leading to higher adoption rates and system effectiveness.

Computer Anxiety

This study found that CA significantly reduces both PU ($\beta = -0.073$, $p > 0.005$) and PEU ($\beta = -0.004$, $p > .005$) of e-learning systems in the banking sector. This aligns with previous research (Igbaria & Iivari, 1995; Alrajawy et al., 2018; Purnomo & Nastiti, 2019; Sun et al., 2010;) and the technology acceptance model (TAM) (Davis, 1989), which suggests that negative feelings towards technology such as fear, might hamper the perceived ease of use and adoption of new systems can hinder its adoption. Furthermore, computer anxiety is a type of state anxiety that reflects attitudes and sentiments around computers, according to Heijnsen et al., (1987). Additionally, their research revealed that learning satisfaction decreases with increased computer fear. This research validates that the degree of anxiety influences employees' perception

Table 3
Results of Structural Model

Endogenous Variables	Hypotheses	Beta (B)	T statistics	P values	Decision
Perceived Usefulness = 0.456)	H1. MS	0.233	4.282	0.000	Significant
	H3. PE	0.244	2.878	0.004	Significant
	H5. CA	-0.073	1.243	0.214	Insignificant
	H7. CP	0.293	4.092	0.000	Significant
	H10. PEU	0.103	1.544	0.123	Insignificant
Perceived Ease of Use = 0.249)	H4. PE	0.201	2.680	0.007	Significant
	H6. CA	-0.004	0.069	0.945	Insignificant
	H2. MS	0.228	3.206	0.001	Significant
	H8. CP	0.209	3.020	0.003	Significant
Behavioural intention to use = 0.527)	H9. PEU	0.241	4.178	0.000	Significant
	H11.PU	0.593	12.281	0.000	Significant

Note. Based on the researcher's calculation; BI= Behavioural Intention to Use, CA=Computer Anxiety, CP=Compatibility, MS=Management Support, PE=Prior Experience, PEU= Perceived Ease of Use, PU=Perceived Usefulness.

of satisfaction and ease when utilising the e-learning system. The practices and training will help employees feel less anxious about using the technologies and will give them a better understanding of their features and advantages. Therefore, to increase acceptance and engagement, Nepali financial institutions should concentrate on improving e-learning's PU and PEU while tackling computer fear.

Compatibility

The study found that CP has a positive and direct effect on employees PU ($\beta = 0.293$, $p < 0.005$) and PEU ($\beta = 0.209$, $p < .005$) of e-learning platforms in the banking workplace. The findings align with previous research (Gerlach & Buxmann, 2013; Karahanna et al., 2006). This study supports the diffusion of innovation theory (Rogers, 1995), which claims that innovation traits such as compatibility play a major role in the adoption of new technologies. The findings revealed that when workers perceive a high level of CP between e-learning platforms and their work processes, they are more likely to regard these platforms as valuable tools for skill development and knowledge advancement in Nepalese banks. Therefore, Nepalese banking institutions should integrate e-learning platforms with existing procedures, offer personalised learning routes, and ensure relevance to workers' everyday responsibilities to enhance their PU and PEU.

Perceived Ease of Use, Perceived Usefulness and Intention to Use

This study discovered that perceived ease of use PEU did not significantly affect perceived PU of e-learning systems in this study ($\beta = 0.103$, $p > .005$). This does not align with prior research showing varied influence of PEU on PU based on context (Parajuli & Thapa, 2023; Shrestha & Kayestha 2024).

Therefore, boosting employees' PEU may not necessarily enhance PU for e-learning systems. This finding resonates with the technology acceptance model (TAM) (Davis, 1989), suggesting factors like system relevance and user motivation may have a greater impact on PU. This might be the employees may prioritise factors such as content quality, relevance, and organisational expectations over ease of use when determining the usefulness of an e-learning system. Additionally, prior familiarity with technology could reduce the impact of PEU, as employees who are already comfortable with digital tools may focus more on the system's benefits rather than how easy it is to navigate. Nepalese banking institutions should prioritise content relevance and offer incentives for participation to improve PU of e-learning, rather than solely focusing on ease of use.

This study found that PEU and PU positively influence employees BIU ($\beta = 0.241$, $p < 0.005$) and ($\beta = 0.593$, $p < 0.005$) towards e-learning platforms in the banking workplace. The findings align with previous research (Basuki, 2022; Bishowkarma & Pokhrel, 2024; Pokhrel, 2022; Setyawati et al., 2022; Subedi, 2020; Wiprayoga et al., 2023). This study complies with the technology acceptance model (TAM), which states that PEU influences employees' attitudes and actions toward new technology (Davis, 1989). The findings showed that when employees found e-learning systems easy to use and useful, they are more inclined to use them in Nepalese banks. Therefore, to boost e-learning adoption, Nepalese banking institutions should prioritise user-friendly interfaces, comprehensive training, and dependable technical support to enhance employees' ease of use and perceived value of e-learning programs.

CONCLUSION AND IMPLICATIONS

The study aimed to examine e-learning adoption in the commercial banking institutions of Kathmandu Valley, investigating whether management support (MS), perceived ease (PE), and compatibility (CP) positively affect employees' perceived usefulness (PU) and ease of use (PEU), and whether computer anxiety (CA) negatively impacts them. Additionally, it explored the relationship between PU, PEU, and employees' behavioural intention to use (BIU) e-learning systems. From this study, e-learning adoption in the banking sector within the Kathmandu Valley resulted in several significant factors. MS, CP and PE were found to have a significant relationship with employees' PU and PEU, indicating that active endorsement from management and the alignment of e-learning systems with employees' work processes are crucial for successful e-learning adoption. Additionally, CA significantly reduces employees' PU and PEU, suggesting that negative feelings towards technology hinder e-learning adoption. There is also a significant relationship between employees' PU and PEU and their BIU e-learning systems, emphasising the importance of perceived benefits and ease of use in driving adoption.

To apply these above findings, Nepalese banking institutions should ensure strong MS for e-learning initiatives, invest in training programs to enhance CP with work processes, and design engaging e-learning content that builds on employees' PE. Addressing CP is also crucial, which can be done by providing supportive environments and technical assistance. Improving PU can be achieved by ensuring the relevance of e-learning content and offering participation incentives. On the

other hand, this study finds CA significantly reduces employees' PU and PEU, suggesting, employees who have high levels of CA are more likely to view e-learning systems as challenging to use and less helpful, which in turn lowers their willingness to interact with such technologies. This suggests that negative emotions related to technology, like fear or discomfort, can impede the adoption of e-learning platforms. Additionally, there was no significant relationship between PEU and PU, suggesting that increases in PEU do not lead to changes in PU. Despite the positive direct relationship between PEU and PU, there was no significant impact on e-learning adoption in banking workplaces. This implies that banks should focus on other factors like content relevance and incentives to improve PU, rather than solely enhancing PEU.

It is expected that the study will provide both managers and banks with some interesting insights from a contextual and management perspective. The findings of this study suggest that the banks should encourage their employees to use e-learning more. Top management and decision-makers must understand the idea of management support and how it affects people's willingness to adopt new technological solutions. The study emphasises the crucial role of human resource, marketing, finance, and IT managers in fostering e-learning adoption within Nepalese banks. The human resource managers should focus on enhancing employees' technical skills and securing management support based on positive relationships between CP, MS, PE, PU, PEU and other factors. Marketing should highlight e-learning benefits like enhanced competency, lower training costs, and flexibility. Finance can leverage cost savings and invest in supportive technology, while IT improves platform usability and

analytics. These strategies collectively aim to strengthen the banking sector by fostering a skilled, efficient workforce and enhancing long-term competitiveness.

While this study offers valuable insights, it is constrained by several limitations. First, conceptually, it may not have captured all factors influencing e-learning adoption in the banking sector, omitting aspects like corporate culture, employee motivation, and external technical improvements. Second, methodologically, the cross-sectional design does not definitively

show causality; future studies might use longitudinal designs for better insights. Third, while the large sample size from the Kathmandu valley improves generalisability in that area, it may not reflect the diversity of banking institutions elsewhere. Qualitative methods like interviews or focus groups could provide a deeper understanding of employees' experiences. Finally, focusing on the Kathmandu Valley limits applicability to other regions. Future research should explore e-learning adoption across various cultural settings and industries to enhance generalisability.

Funding

The authors declare having no funding support for this study.

Conflict of interest

The authors declare having no conflict of interest.

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