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The role of motivation of unified theory acceptance, use of technology model and innovation diffusion theory on e-learning intention of SMEs employee

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A B S T R A C T

In the digital era and the era of the industrial revolution 4.0, the quality of human resources needs to be improved in order to have competencies that are in accordance with the needs of the organization. Therefore, an effective and efficient method is needed to improve employee competence by using e-learning technology. This study analyzes the Diffusion of Innovation Theory through the Unified Theory of Acceptance and Use of Technology (UTAUT) model. The study uses quantitative data obtained by surveying 400 SME employees in Indonesia using an e-learning system. Dissemination of data is by using online questionnaires through social media. Data analysis uses structural equation modeling (SEM) modeling. The results of data analysis show that the theory of diffusion of innovations mediated by intrinsic and extrinsic motivation in the UTAUT model had a significant effect. The aspects that make up the theory of diffusion of innovation significantly and directly affect the intention of SMEs employees to use the e-learning system. The findings show that the diffusion of innovation theory has various indicators for the application of learning systems and further e-learning development so that they can have a real and significant impact on improving organizational performance and competitiveness.

1. Introduction

In this digital era and industrial revolution, technological developments and advancements have grown rapidly. One of the implications of the development of an increasingly advanced world is in the field of education. The current condition of education, especially in the aspect of learning, is closely related to the development of technology that is open, fast, and accessible anywhere (Rentrop et al., 2022). One of the learning media that is considered a balance point and responds to the dynamics of technological development is known as the concept of electronic learning. The learning model through e-learning is actually a learning concept that has undergone a transformation from conventional form to digital form. In this digital era, E-learning systems are increasingly popular throughout the world and many companies are using technology to conduct employee training and training developed and will continue to grow today. By 2021, the average growth rate of e-learning usage worldwide will be 8.1% in a global market of USD 76.5 billion. Indonesia is one of the countries that has great potential in the use of e-learning. Research related to the application of e-learning in business organizations in Indonesia is described by Raffaghelli et al. (2022) that the acceptance factor of the e-learning system, especially in the banking sector, is considered directly profitable and perceived as easy use when using e-learning is not directly beneficial, directly. This study also finds that attitudes towards the use of e-learning systems in the banking workplace have a significant impact on the acceptance of information technology (Yang et al., 2022). This is in line with the statistical analysis of the use of e-learning in Indonesia, which has a market of USD 13.2 billion with a growth rate of 25% in 2019. The use of E-Learning in everyday life can be used to practice, digest, analyze what we want to learn. Abbad (2001) explains the notion of E-Learning from various points

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of view. According to Arfi et al. (2021), E-Learning in solutions that use internet technology to improve skills and E-Learning in the context of education is information and communication technology that is used to make students more active in learning anytime and anywhere. Saloum et al. (2018) reported the use of e-learning is performed so that students can learn independently and change the learning model to be better based on digital learning. Meanwhile, in the context of the workforce, the use of e-learning is more directed at work efficiency. Al-Saedi et al. (2020) E-Learning is a set of applications and processes covering web-based learning, computer-based learning, virtual and digital classrooms. Most are delivered via the Internet, intranets, audio and video cassettes, satellite broadcasts, interactive TV, and CDROMs (Yin et al., 2022). The definition of e-learning varies depending on the organization and how it is used but basically involves means of electronic communication, education, and training.

This study examines the theory of diffusion of innovation through the UTAUT model as a mediating factor used to measure employee behavioral intentions in using e-learning. This is evidenced by Thongsri et al. (2018) that the accuracy of the behavioral intention analysis assessment in the use of e-learning using the two methods is 70% greater than that applied separately. Wang et al. (2020) stated that employee behavioral incentives to adopt e-learning are predicted to increase as a result of the diffusion of innovations, as mediated by the UTAUT model. Previous research by Altalhi (2021) has shown that how difficult an innovation is to understand or use determines the creation of employee behavioral intentions in utilizing e-learning. In other words, the easier an invention is to use, the more likely one is to accept it. The design is based on previous technical experience or an opportunity to think about adopting a new technology. The ability to try and observe can be treated as an external variable, which directly affects the constructs in the technology acceptance model.

UTAUT is one of the newest technology acceptance models developed by Venkatesh, et al. UTAUT combines the successful features of eight leading technology acceptance theories into one theory. UTAUT proved to be more successful than the other eight theories in explaining up to 75 percent of user variance. After evaluating all eight models, Venkatesh et al. found seven constructs that appeared to be significant direct determinants of behavioral intention or usage behavior in one or more of each model. The constructs are performance expectations, business expectations, social influence, facilitating conditions, attitudes towards technology use, and self-efficacy. After going through further testing, it was found that four main constructs play an important role as direct determinants of behavioral intention and usage behavior, namely, performance expectations, effort expectations, social influence, and facilitation conditions. While others are not significant as a direct determinant of behavioral intention. In addition, there were also four moderators: gender, age, volunteerism, and experience which were positioned to moderate the impact of the four main constructs on behavioral intention and usage behavior.

The e-learning system can improve the training system which is expected to provide effectiveness and sustainable competency development with dynamic strengths so that it can adapt to the needs of the organization. According to Venkatesh (2022) and Wang et al. (2020), UTAUT's acceptance of technology that can strengthen the innovation diffusion variable is one method that holistically describes employees in building intentions to utilize e-learning behavior. UTAUT will be a different mediating variable from previous studies using technology acceptance method (TAM) which according to previous research by Arfi et al. (2021) has a disadvantage since it cannot explain social factors which are one of the important indicators in accepting the influence of the variable spread of innovation. Therefore, this study will focus on the effect of the diffusion of innovation on the intention to utilize e-learning behavior through the UTAUT method. The purpose of this study is to contribute to theoretical research related to the effect of innovation diffusion on behavioral intentions using an e-learning system mediated by extrinsic motivation and intrinsic motivation in the UTAUT Model. Testing the concept development and expansion of several previous empirical studies in research is performed through the model built on this research. We provide recommendations through empirical analysis related to the study of the diffusion of innovations and in determining e-learning methods that suit the needs of employees and organizations.

2. Literature review

2.1 E-learning for Workforce

E-learning is a non-conventional learning method where students and teachers use electronic devices such as laptops and computers in their implementation. The e-learning model can not only be applied to formal education, but also non-formal such as in tutoring institutions or course places. This e-learning model that relies on the internet can be in the form of online courses, online schools or online seminars. In this era that is dominated by electronics, with everything digital, of course we are already familiar with the term E-Learning. E-Learning or electronic learning is a learning method by utilizing electronic tools in a network or online (Malanga et al., 2022). E-Learning allows the teaching and learning process to be carried out by anyone, anytime, and anywhere. Like other principles of online activities, distance and time are no longer a barrier to carrying out activities, including in this case learning. E-Learning itself is now widely used by almost all schools and colleges. Apart from changing times to become completely digital, the current situation, where the Covid-19 pandemic is happening all over the world, requires us to do everything online. E-learning is also defined by several experts (Bäuerle et al., 2022). E-learning usually refers to the use of information and communication technology networks that are intentionally set up for teaching and learning. E-learning as a teaching and learning process that occurs when using internet technology to convey, facilitate, and enable the learning process even though it is hindered by long distances it is carried out using electronic means. E-learning is

a form of conventional learning which is essentially presented through Information Technology and in digital format. The implementation of an e-learning system for learning in the workplace provides opportunities for SMEs employees to register for training classes that will support productivity and job performance. Employee acceptance of e-learning systems has received attention when discussing the use of technology to support learning in the workplace. Kayali et al. (2020) state quality management of e-learning systems encourages learning through modulated training courses as each learner participates in online assignments and collaborates with members in professional networks. Mahande et al. (2019) explain E-learning as ineffective and useless for developing e-learning systems if SMEs employees are not motivated and do not accept or use learning technology that can be applied to their work.

2.2 Diffusion of Innovation

The diffusion of innovation consists of two equivalent words, namely diffusion and innovation. Diffusion is the process by which an innovation is communicated through certain channels over a period among the members of a social system. In addition, diffusion can also be considered as a type of social change, namely a process of change that occurs in the structure and function of social systems. Innovation is an idea, practice, or object that is considered / felt new by an individual or community group. The expression is considered/felt new to an idea, practice or object by some people, not necessarily also by others. It all depends on how the individual or group feels about the idea, practice or object. From the two equivalent words above, the diffusion of innovation is a process of spreading absorption of new ideas or things in an effort to change a society that occurs continuously from one place to another, from one period to another. the following, from one field to another to a group of members of the social system.

The main purpose of the diffusion of innovation is the adoption of an innovation (science, technology, community development field) by members of a particular social system. Social systems can be individuals, informal groups and organizations to the community. The main purpose of the diffusion of innovation is the adoption of an innovation, namely ideas, science and technology, both by individuals and certain social groups. Therefore, some argue that there are 4 characteristics of innovation that can affect the level of adoption of certain individuals and social groups. The implementation of the e-learning system is included in the employee acceptance stage of an innovation in the concept of employee training and learning. Mukred et al. (2019) state diffusion of innovation attempted to explain the adoption of an individual in a decision or intention to adopt an innovation. This decision is related to a clear definition of the innovation and the adoption population is relatively homogeneous and has been determined with different boundaries depending on the context of the innovation to be developed. According to Patil et al. (2020) and Rahi et al. (2019), a number of factors include the availability of information about technology (such as relative advantage, compatibility, etc.), adopter properties (such as past experience), characteristics of the social system (such as management support, social norms, availability of change agents), and communication processes (through which media, how often) explain adoption decisions. Several previous researchers studied the rapid diffusion of Information Technology (IT) and applied IDT Theory which is currently widespread for IT technology. Although the use of diffusion of innovation is quite widely used, there are still few who carefully analyze whether or not it can really be used in the context of the diffusion of information technology for e-learning

2.3 Intrinsic and Extrinsic Motivation from UTAUT Model

UTAUT model is a comprehensive synthesis before research technology acceptance. The UTAUT model has developed from previously having four key constructs, namely: performance expectations business expectations, social influence, and facility conditions on intentions for technology acceptance. Currently, UTAUT2 adds three new constructs that were added to the old UTAUT, namely: hedonic motivation, price calculation, and habit. The UTAUT model has been widely used for tracking receipts information systems/technology, in particular evaluating the acceptance of e-learning in several countries including Indonesia. However, the development of the construct of the UTAUT model varies according to Dwivedi et al. (2020). The study also shows that the evaluation of e-learning acceptance through the UTAUT model approach at several universities in Indonesia has been carried out. However, the results of the literature review have confirmed that, the use of the UTAUT model as an evaluation research approach in universities is a comprehensive synthesis model technology acceptance. Evaluation of e-learning acceptance will emphasize four key constructs from UTAUT, namely: performance expectations, business expectations, social influences, and facility conditions on intentions for e-learning acceptance.

The UTAUT model has been widely used for tracking receipts information systems/technology, evaluating the acceptance of e-learning in several countries including Indonesia. However, the development of the construct of the UTAUT model varies according to the research context. The study also shows that the evaluation of e-learning acceptance through the UTAUT model approach at several universities in Indonesia has been carried out. However, the results of the literature review have confirmed that the use of the UTAUT model as an evaluation research approach in universities has not received attention or can be said to have never been done. Thus, this study will use the UTAUT model approach as an appropriate approach in evaluating user acceptance of the e-learning that has been implemented so far. According to Balakrishnan et al. (2022) external motivation influences SMEs employees' behavioral intention to absorb new information and abilities, but internal motivation does not. Extrinsic motivation, on the other hand, has a major impact on undergraduate and graduate students' usage of technology in the classroom Intrinsic motivation and extrinsic motivation influence the acceptance of the technology. According

to Gunasinghe et al. (2019) the indicators owned by the UTAUT Model are related to the theory of motivation. In the context of UTAUT, effort expectancy reflects aspects of extrinsic motivation to determine behavioral intentions in using technology. Meanwhile, performance expectancy, social influence and facilitating conditions are identified as extrinsic motivation. Some concludes that EE is a dimension of extrinsic motivation to determine behavioral intention to use technology. According to Dwivedi et al. (2020) anxiety is an extrinsic motivation.

3. Method

This research method is quantitative with respondents as individual permanent SMEs employees in companies in Indonesia that use e-learning systems in their training and organizational development processes, each of which is the population or unit of analysis in this study. Sampling will be based on the non-probability method in this study. The number of samples of respondents that must be achieved is 400 respondents of SMEs employee. The current poll looks at employee acceptance of e-learning in Indonesian workplaces. The survey was prepared by the study team using items from UTAUT using a 6-point Likert Scale ranging from 1 (strongly disagree) to 6 (strongly agree). The Diffusion Theory of Innovation is an inventive system that decides whether to accept or reject a new idea based on the beliefs formed about the new idea. The core data for this study were collected through surveys. The main strategy used in this research is the use of questionnaires to collect data and information. Individual SMEs employees in Indonesia who use e-learning services to build training and development systems in their organizations are served as the unit of study analysis. Secondary data collection is the second method of data acquisition. Secondary data is collected by reading various sources that are closely related to research difficulties, such as scientific publications, scientific journals, news, and topics related to research problems which will later be used as references in writing. Several stages of data analysis were carried out in this study, including testing the validity and reliability of the research instrument and then analyzing the model by testing the influence of each variable that makes up the model. Correlation was carried out on each question item in the validity test, starting with the pretest data of 30 respondents who were assisted by the SPSS Statistics application. Followed by processing the main data using the covariance-based structural equation modeling (CB-SEM) method after validating the pretest with valid results.

4. Results and discussion

4.1 Respondent Demographic Profile

This research uses quantitative data by surveying 400 SMEs employees in Indonesia who use the e-learning system in January - May 2022. Most of the respondents are male (53.65%), aged 20-25years (64.45%), permanent SMEs employees (69%), located in technology and innovation companies (54.09%), and almost all of respondents working in Banten, Indonesia (95.10%).

4.2 Validity and Reliability Measurement Model

One of the analyses that uses the average distribution (mean) of each indicator in the questionnaire is variable descriptive analysis. The goal of this analysis is to see how respondents respond to questions from the questionnaire. (1) Strongly disagree, (2) Disagree, (3) Slightly disagree, (4) Slightly agree, (5) Agree, and (6) Strongly agree were the six Likert scales used in this study using a six-point Likert scale allows for more precise explanations on the questionnaire and avoids neutral answers with a central tendency. In this study, the class interval was 0.833. This is based on the fact that the measurement in the questionnaire uses a scale of 6, the class interval is obtained.

The mean of the overall descriptive analysis on the innovation diffusion theory variable has a high value based on the findings. From each dimension of the innovation diffusion theory variable which has the highest value, namely the trialability variable, it can be concluded that respondents have a tendency to test the e-learning system thoroughly and easily. Although the value obtained is still quite high, the lowest value in the grand mean is in relative advantage. According to Dwivedi et al. (2020), the descriptive assessment, respondents somewhat agree with the diffusion of innovation in the use of e-learning for learning and self-development methods. Intrinsic motivation variable has the highest value in each dimension, namely the business expectation variable, so it can be explained that respondents have a tendency for sufficient expectations to be realized by getting comfort and convenience in using the learning and development system using e-learning. Relative advantage has the lowest value in the grand mean, despite the fact that the value obtained is still high. Based on descriptive analysis, respondents tend to agree with intrinsic motivation in the UTAUT model, which implies that they have self-motivation to use e-learning. Extrinsic motivation is a variable that can be measured. It can be concluded from the dimension that has the highest value, namely the facilitation condition variable, respondents think that the facility in using e-learning is quite influential when using e-learning. Performance expectations have the lowest grand mean value, even though in reality the value obtained is still quite high. Respondents have high extrinsic motivation to use e-learning as a method of learning and developing workers in their respective workplaces, based on a descriptive assessment. Meanwhile, behavioral intention to use in this descriptive analysis shows that the willingness of respondents to use e-learning as a means of learning and self-development within a certain period of time is quite high.

Table 1
Results of Measurement Model

Variable	Items	Mean	Factor Loading	Error	CR	AVE
IDT	X11	3.72	0.92	0.00	0.97	0.97
	X12	3.74	0.91	0.01		
	X13	3.72	0.93	0.02		
	X14	3.88	0.92	0.03		
	X21	3.74	0.91	0.13	0.98	0.96
	X22	3.72	0.93	0.01		
	X23	3.81	0.96	0.00		
	X31	3.81	0.98	0.11	0.98	0.94
	X32	3.64	0.95	0.00		
	X33	3.71	0.95	0.13		
	X34	3.76	0.97	0.00		
	X35	3.75	0.95	0.00		
IM	X41	3.84	0.92	0.097	0.98	0.96
	X42	3.76	0.96	0.000		
	X43	3.81	0.91	0.001		
	X51	3.86	0.93	0.097	0.98	0.96
	X52	3.74	0.98	0.001		
	X53	3.87	0.91	0.001		
	X61	3.1	0.96	0.24	0.97	0.87
	X62	3.84	0.93	0.14		
	X63	3.86	0.95	0.24		
	X64	3.96	0.94	0.244		
	X71	3.96	0.95	0.34	0.92	0.75
	X72	3.76	0.94	0.28		
	X73	3.81	0.97	0.25		
	X74	3.86	0.93	0.27		
Variable	Items	Mean	Factor Loading	Error	CR	AVE
IM	X81	3.88	0.99	0.17	0.98	0.75
	X82	3.88	0.98	0.14		
	X83	3.78	0.94	0.31		
EXM	X91	3.78	0.96	0.00	0.93	0.78
	X92	3.78	0.94	0.10		
	X93	3.76	0.99	0.00		
	X94	3.56	0.80	0.96		
	X101	3.87	0.97	0.00	0.99	0.98
	X102	3.86	0.92	0.10		
	X103	3.87	0.96	0.00		
	X104	3.76	0.94	0.10		
BI	X111	3.87	0.94	0.00	0.93	0.98
	X112	3.77	0.95	0.10		
	X113	3.98	0.90	0.00		
	X114	3.87	0.91	0.10		
	X121	3.81	0.99	0.03	0.93	0.98
	X122	3.77	0.94	0.11		
	X123	3.73	0.96	0.08		

4.3 Structural Model Analysis

The structural equation model (SEM) method was used to verify the measurement model's validity and reliability. SEM is a statistical method for creating and evaluating statistical models, generally in the form of causal models, in order to investigate the simultaneous direct and indirect effects of exogenous and endogenous variables in complex structures. Confirmatory factor analysis (CFA) was performed to assess the validity and reliability of the instrument. Composite reliability (CR) and average variance extracted (AVE) values of each dimension were used in this study. A construct will be said to be reliable if the CR value > 0.7 and the AVE value > 0.5. Validation testing on the factors of innovation diffusion theory, intrinsic motivation from the UTAUT Model, extrinsic motivation from the UTAUT Model, and behavioral intention to utilize e-learning revealed that all indicators have an SLF value greater than 0.5.

This means that all of the indicators in this variable are valid because they exceed the stated minimum value. Moreover, each indication contributes a large amount to the construct variable. It can be observed from the reliability testing results that each dimension has a CR and AVE value that is more than the minimum value. From the results of reliability testing, it can be seen that each dimension has a CR and AVE value that exceeds the minimum value. The CR and AVE values in each dimension of the innovation diffusion theory variable exceed 0.7 and 0.5, respectively. From these results, it can be concluded that the variables of innovation diffusion theory, intrinsic motivation from UTAUT Model, extrinsic motivation from UTAUT model and intention to utilize behavior e-learning are reliable.

Table 2
CFA Analysis Result

GOF Analysis	
Chi-Square = 141.54 P. Value 0.0065	Marginal Fit
(GFI) = 0.98	Good Fit
(RMR) = 0.024	Good Fit
(RMSEA) = 0.07	Good Fit
(ECVI) = 0.99	Good Fit
GOF Analysis	
(NNFI) = 0.97	Good Fit
(NFI) = 0.98	Good Fit
(AGFI) = 0.89	Marginal Fit
(RFI) = 0.96	Good Fit
(IFI) = 0.99	Good Fit
(CFI) = 0.96	Good Fit
AIC = 3832.3432	Good Fit
CAIC = 4293.6565	Good Fit

Several values of the index provided in the fit test, including the RMSEA value, are included in the good fit category based on the re-specification data described in Table 2. Even though numerous indicators still fall into the marginal fit area, the researchers believe that the structural model fit is good overall. According to Arfi et al. (2021) a model is good if it has at least one compatibility test method and is backed up by more good fit scores than values from other categories.

This study necessitates hypothesis testing in order to prove statements about the influence of variables such as innovation diffusion theory, intrinsic motivation from the UTAUT model, extrinsic motivation from the UTAUT model, and behavioral intention to use on each component of the variables analyzed in the study. The Lisrel program was used to do hypothesis testing. In the loading factor test, the optimal level of significance is 0.05. The theory proposed for this study demonstrates this. The type of hypothesis test used in this study is the one-tailed hypothesis test, where the hypothesis can be said to be significant if the t-value of a relationship is greater than or equal to 1.645. The following is an estimate of the overall model based on the t value and standardized coefficient. The following is an estimate of the overall model based on the t value and standardized coefficient.

Table 3
Results of Direct Effect Hypothesis Testing

Hypothesis	Path	T Value	SLF	Conclusion	
H1	IDT → BI	5.76	0.44	Positive and significant	Hypothesis accepted

The results of direct hypothesis testing demonstrate that innovation diffusion theory has a direct influence on intention to utilize behavior E-learning since the resulting t-value is 5.7649 and the value is positive, and the resulting SLF value is 0.44. The SLF is larger than 0.05, indicating that innovation diffusion theory has a significant and beneficial direct influence on behavioral intention to embrace E-learning.

Table 4
Results of Indirect Effect Hypothesis Testing

Hypothesis	Path	Direct E ffect	Indirect Effect		Conclusion	
			Fist step	Second step		
H2	IDT → IM→ BI	IDT → BI t-value: 5.49	IDT → IM t-value : 7.65	IM → BI t-value :3.65	Positive and significant	Hypothesis accepted
H3	IDT → EXM→ BI		IDT → EXM t-value : 12.41	EXM → BI t-value : 4.34	Positive and significant	Hypothesis accepted

Based on the data described in Table 4, it can be seen that the intrinsic and extrinsic motivation can be used as a mediating variable in the relationship between Innovation Diffusion Theory and Intention to utilize behavior E-learning. This can be proven by the t-value of each relationship having a value above 1.645 and a positive value whose process can be seen from the dependent variable of Innovation Diffusion Theory through its mediating variable, namely Intrinsic Motivation in the UTAUT model, followed by an influence on the dependent variable Intention to utilize behavior E-learning. As a result, the acceptance of the second hypothesis can be demonstrated. Furthermore, Table 4 shows a positive relationship and a one-way influence with an explanation (positive/negative), the mediation category is included in complementary mediation when viewed from the explanation, implying that the second hypothesis has a mediation relationship with a complementary mediation category.

5. Discussion

The relationship between the innovation diffusion theory variable and intention to utilize behavior E-learning in the structural model has a t-value of 5.49, which is greater than the t-value coefficient of 1.645, and the coefficient value in this hypothesis is 0.40, which is positive, allowing it to be hypothesized. First, it may be concluded that it is accepted, implying that innovation diffusion theory has a beneficial impact on behavioral intentions to directly use e-learning. So According to the findings, all dimensions from diffusion of innovation have substantial effects on employee behavioral intentions when utilizing e-learning systems, as detailed by Gunasinghe et al. (2019). These results back up previous research that shows a substantial link between the five inventive qualities and behavioral intentions. The existence of a compatibility value in workers can provide the ability to use e-learning facilities because of the harmony with their use, a low complexity value and a system of using e-learning that is more easily adapted to workers will make workers more comfortable in using e-learning, a relative advantage with a value. A high value is able to provide a superior value of learning innovation and employee development better than before, the value of observability to workers will provide the ability to observe the use of e-learning much more easily and trialability allows workers to experiment with limited ideas before using e-learning. To encourage workers to utilize e-learning systems, e-learning system designers should focus on the creative creation of e-learning system features and contents for SMEs employees as e-learning users (Gunasinghe et al., 2019).

In this study, testing the mediating role of the hypothesis is to look at the significance of the relationship between innovation diffusion theory and intrinsic motivation in the UTAUT model and the relationship between intrinsic motivation in the UTAUT model on intention to utilize behavior E-learning. In this case, Dwivedi et al. (2020) and Gunasinghe et al. (2019) stated that this complementary mediation relationship was included in the category of partial mediation, which means that the independent variable can affect the dependent variable directly or indirectly through the mediating variable, confirming the findings of several previous studies. SMEs employees have more chances to try out e-learning systems, and they are more likely to find them simple to use. As a result, e-learning system developers must build the system to be simple to use and relevant to SMEs employees' work in order to promote the right attitude and simplicity of utilizing e-learning. SMEs employees need organizational support in order to try out e-learning systems, according to company leaders. Compatibility and observability play a role in motivating SMEs employees to behave, and we believe it will be much easier now that e-learning facilities are available, which can be more widely accepted with the right steps (Balakrishnan et al., 2022).

After learning the meaning of e-learning, then we also need to know some of the benefits of e-learning. First, the benefits of e-learning are that it makes it easier for us to join classes, meetings, or webinars anywhere. So this is very helpful for those of us who have high mobility. One of the functions of e-learning is to reduce the budgeted funds for education. With an online learning system, one can cut transportation costs, pocket money, and several other costs that may need to be incurred during conventional learning. Have we ever wanted to join a learning forum but were constrained by the remote location? Well, we will not find this kind of obstacle if we choose the e-learning model as an alternative to learning activities. In addition to the several benefits of e-learning above, the e-learning model also allows for standardization of teaching, which means that each learning material has been uniformed and adapted to the needs students at each level.

As a result, the second hypothesis in this study is that by combining the diffusion of innovations that are carried out in accordance with the level of comfort expected by SMEs employees, providing a willingness to improve SMEs employees' abilities in their work, and having a comfortable employee E-learning learning system, SMEs employees can increase their desire to use E-learning.The significance of the relationship between innovation diffusion theory and extrinsic motivation in the UTAUT model, as well as the relationship between extrinsic motivation in the UTAUT model and intention to utilize behavior E-learning, has been examined in this study to test the hypothesis' mediating role. The t-value of the relationship between innovation diffusion theory and extrinsic motivation in the UTAUT Model is 12.41 in this study, indicating that the relationship is significant since the t-value exceeds 1.645 and is positive, indicating that the relationship is positive. The findings of this study model are consistent with prior research on innovation diffusion, which has various dimensions, one of which is that workers have more opportunity to test out e-learning systems and are more likely to think of it as simpler to use. As a result, e-learning system developers are trying to make it more user-friendly and relevant to workers' jobs in order to improve corporate expectations for simplicity of use. Employee leaders must also ensure that the business provides enough assistance for SMEs employees to try out the e-learning system (Blut et al., 2021). However, there is a discrepancy between previous research findings that e-learning systems are complicated and difficult to use by SMEs employees. This means that if SMEs employees believe that e-learning systems can help them improve their performance, they are more likely to believe that e-learning systems are simple to use (Gunasinghe et al., 2019). While in this study, the ease of use of the E-learning system used will increase performance expectancy, allowing potential SMEs employees to better understand what is communicated in E-learning. As a result, e-learning system developers must design the system to be simple to use and relevant to SMEs employees' work in order to increase perceived ease of use (Dwivedi et al., 2020). As a result, the third hypothesis in this study is that by combining the diffusion of innovations with the level of expectations in improving employee performance, procuring appropriate facilities, and in accordance with employee acceptance and the presence of social support from the work environment, it is possible to increase SMEs employees' desire to use E-commerce Learning.

The advantage of e-learning is the moderation ability that bridges students and teachers in learning. In contrast to conventional learning, one of the functions of e-learning is to make it easier for students when they want to repeat material. By using the help of technology, it does not mean that e-learning is unstructured. E-learning remains based on the applicable structure and curriculum. The flexibility of e-learning can accommodate discussions and learning forums anywhere and anytime. The function of e-learning is to make students more active, either by making it easier for the material to be reviewed or with interesting features that make students more comfortable learning.

6. Conclusion

Evaluation of e-learning is an important step in measuring the quality of e-learning implementation. The quality of e-learning implementation will always be related to voluntary user acceptance. The extent to which the user's understanding and acceptance of the implementation of e-learning is what determines the quality of the success of the implementation of e-learning. In accordance with the evaluation objectives that emphasize acceptance, the technology acceptance model is the right evaluation model for use. Unified theory of acceptance and use of technology (UTAUT) is a comprehensive synthesis of models of technology acceptance. Evaluation of e-learning acceptance will emphasize on the four key constructs of UTAUT, namely: performance expectations, business expectations, social influence, and condition of the facility on the intention to accept e-learning. This initial study is expected to be a reference in policy formulation regarding implementation and sustainable e-learning development SMEs employees' willingness to adopt the E-learning system will be influenced by firms' use of diffusion innovation. In Indonesian companies that use learning and development systems, intrinsic motivation in the UTAUT Model has been shown to mediate the Innovation diffusion theory variable on intention to utilize behavior E-learning. SMEs employees. Since both relationships showed significant and positive effects, complementary mediation was added to the mediation category. The diffusion of innovation factors can increase SMEs employees' expectations of hope and comfort, acceptance and calmness in their desire to use the E-learning system, thanks to the intrinsic motivation in the UTAUT model. Extrinsic motivation has been shown to mediate the Innovation diffusion theory variable on intention to utilize behavior E-learning in Indonesian companies that use learning and employee development systems in the UTAUT Model. Both relationships had significant and positive effects, so complementary mediation was added to the mediation category. The diffusion of innovation factors can increase performance expectations, facilitate the use of E-learning, and have a social influence on SMEs employees' desire to use the E-learning system with extrinsic motivation in the UTAUT model. As a result of the findings, it is clear that the innovation diffusion theory has a significant impact on SMEs employees' behavioral intentions to use E-learning. As a result, companies should apply five dimensions to E-learning as an application of acceptance of innovation steps for SMEs employees so that SMEs employees have confidence in using the E-learning system. The application of intrinsic and intrinsic motivation to employee acceptance of E-learning strengthens the impact of the innovation diffusion theory on intention to utilize behavior E-learning. The company hopes to be able to categorize and analyze intrinsic and extrinsic motivational factors that influence employee willingness to use E-learning. So that the innovation diffusion process will be stronger and easier to implement as a result of knowing these factors. For further research, other latent variables should be used to develop research on innovation diffusion theory so that it can contextually provide more diverse contributions in scientific literacy. Furthermore, a more detailed description of the influence of the five factors that influence UTAUT one by one is required in order to explain the impact of each factor from the innovation diffusion theory on SMEs employees' desire to use E-learning in greater detail. Other supporting variables are required, one of which is a moderating variable that can provide a more detailed explanation based on the characteristics of the respondents obtained, allowing the company to identify companies with a more specific scope and avoiding generalizations in the interpretation of research results.

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