ERP Post-Implementation Phase: Deployment of the Unified Theory of Acceptance and Use of Technology (UTAUT) Model on User Acceptance

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ABSTRACT

The fourth industrial revolution (IR4.0) has unfurled its wings over all industries, and its positive impact on the modern global economy has already emerged significantly. The need for a real-time, integrated information environment to enhance business operations has motivated companies to employ enterprise resource planning (ERP) systems. Once implemented, the organization's attention has shifted to the most efficient deployment of the ERP post-system usage. User acceptance of the ERP system during the post-implementation phase could determine the overall system's success or failure since the system benefits reside in the exploitation of the integration capabilities. This study aimed to investigate the determinants of user acceptance of post-ERP system usage in Malaysian organizations by adopting the UTAUT model. The five identified factors comprised of performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioural intention. The result suggests that these five factors have a significant positive influence on ERP acceptance among Malaysian ERP users. From a theoretical point of view, the findings open new doors of opportunities by providing new insights into the user's acceptance of ERP in the Malaysian environment. The practical contribution includes recommendations provided to organizations to emphasize the specific factors that increase the effectiveness of the ERP post-implementation phase.

Keywords: enterprise resource planning, ERP acceptance, UTAUT, Post-Implementation, Malaysia

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INTRODUCTION

The need for a real-time, integrated computing and information environment to support and enhance business operations has motivated companies to employ enterprise resource planning (ERP) systems. Ever since its emergence in the 1990s, ERP has become a major part of a company's operations, especially those that operate on a larger scale. ERP is crucial for organizational business transformation to face the challenges of a global and competitive environment. Enterprise Resource Planning (ERP) enables organizations to manage their information or data (Sumner, 2014), simplify operations, integrate information between departments, and overall improve the efficiency and effectiveness of the business (Law, 2019). Due to its complexity, the ERP system requires proper planning and preparation for a successful implementation (Morawiec & Sotysik-Piorunkiewicz, 2022). According to Putra et al. (2021), 90% of ERP projects exceeded their intended budgets and had a 67% failure rate in achieving ERP implementation goals. Among the impacts of the failures of the ERP implementation are the failure to deliver the targeted return on investment (ROI) to the shareholders, wastage of the company's resources and time, unsatisfied employees, and large-scale operational disruption (Carlton, 2017; Janssens et al., 2020).

The post-ERP implementation stage, especially the usage and evaluation phases, has become an important phase of the ERP life cycle (Amado & Belfo, 2021; Sheu et al., 2014). Once a company has successfully implemented an ERP system, attention turns to the most efficient use of the system (Behera & Dhal, 2020; Cao et al., 2013; Grabski et al., 2011; Moon, 2007). The process of understanding the user's acceptance of the ERP system was done in the post-implementation stage, where the end users are already been exposed to the system (Wang et al., 2020). The user acceptance of the ERP system during the post-implementation phase could determine the overall success or failure of the system, as the benefits of the ERP system reside in how the organization uses and exploits the integration capabilities (both data and process) after the implementation phase. If the management does not address the problems that arise in the post-implementation stage, they might face new challenges before fully adopting the ERP system successfully (Hassanien & Elragal, 2021; Govindaraju et al., 2016).

In Malaysia, as the nation progresses towards becoming a fully developed country, the use of technology has become a major factor that can enhance its overall growth. Besides that, the government is encouraging companies to integrate the use of technological devices and applications into their day-to-day operations. In the new Malaysian Budget 2022, the Malaysian government has announced that they are providing grants and incentives to the businesses to encourage the use of an automated and digitalized system (Bernama, 2022). These incentives would include RM100 million for smart automation matching grants and RM45 million to encourage technological transformation toward Industry 4WD among small and medium enterprises as well as mid-level companies. These efforts, which are in line with the fourth industrial revolution (IR4.0), aim to enhance the capability of businesses, especially the small ones, to adopt new technologies, which include ERP systems.

Despite the exhaustive research on ERP systems, a substantial portion of the studies have focused on the implementation phase. For example, reviews of previous studies by Hietala and Päivärinta (2021), Harun and Mansor (2019), Ghosh et al. (2013), and Cao et al. (2013) suggested that the existing ERP literature is skewed towards the selection and implementation phases and not the post-implementation phases of the ERP research. This indicates less emphasis on the later phase. Nevertheless, once a company successfully implements an ERP system, the direction must also move towards the effective usage of such a system (Cao et al., 2013; Grabski et al., 2011; Malik & Khan, 2020). Besides, some studies have been made on ERP acceptance in Malaysia compared to other countries (Alsoub et al., 2018; Sternad & Bobek, 2013; Zhang et al., 2013). ERP research that focuses on acceptance must be conducted from the post-implementation phase onward. This is the stage where the ERP system has already been implemented, and the company focuses on system maintenance, upgrades, and database backups (Jagoda & Samaranayake, 2017). Research on ERP acceptance in the Malaysian context, such as that by Ghani et al. (2018), has emphasized the factors that, from the TAM theoretical perspective rather than the UTAUT perspective, could affect the accountants' acceptance of the ERP system. Acknowledging this fact, this study aimed to investigate the determinants of user acceptance of post-ERP system usage by Malaysian organizations. Based upon the Unified Theory of Acceptance and Use of Technology (UTAUT), the specific objectives of this study were to determine

the influence of five determinant factors: performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioural intention, on the user's actual usage of the ERP system in Malaysian organizations.

This study adds value to the existing body of knowledge from the ERP point of view. The findings from this study could help open new doors of opportunities by providing new insights into the user's acceptance of ERP in the Malaysian environment. This is to emphasize the specific identified factors through the lens of UTAUT. By determining the factors affecting the user's acceptance of ERP system usage in Malaysian organizations, this study can help companies understand the user's perception and behaviour when using the ERP system and help system developers understand the user's preferences, which allows them to develop new features within the ERP system that are in line with the user's needs. From a practical point of view, by referring to the significant factors, companies can shift their focus to specific factors to increase the effectiveness of ERP implementation. The study finds a significant result: actual ERP usage is influenced by facilitating conditions within the company and the behavioural intentions of the users.

The remainder of the paper is organized as follows: The next section presents the theoretical foundation and literature review. Hypothesis's development and research model follow this. Subsequently, the description of the methodology is outlined. The results are presented in the following section. Finally, the discussion and conclusion are presented.

LITERATURE REVIEW

ERP Definition

An ERP system is defined as the integrated software used by organizations to manage all their information efficiently across different departments. The ERP system can also act as a channel through which information will flow throughout all functional units within the company in a single, complete database that can be accessed through a user-friendly interface (Cheng, 2018). The ERP system is also implied as "*well-organized collections of software that work together to timely integrate business*

processes and support the management of effective cross-functional operations within an organization" (Prakash et al., 2022, p. 538).

Molina-Castillo et al. (2022) added that the main benefits that most companies acquired from adopting the ERP system were the standardization of business processes and the improvement of relationships with suppliers and customers. In the past several years, developers and vendors have been competing against each other to deliver the best ERP systems that can be used effectively and efficiently by several types of organizations. Some of the globally well-known ERP systems include SAP, PeopleSoft, and Oracle (Elbahri et al., 2019; Jain & Unhelkar, 2020; Sumner, 2014). Large corporations depend on the ERP system to ensure that their business functions can operate sufficiently. In recent years, this practice has resumed with the introduction of an ERP cloud environment (Kenge & Khan, 2020). The use of cloud ERP has also significantly increased through the pandemic as more businesses are relying on technology to run their business remotely. Panorama Consulting Group (2022) indicates in their 2022 ERP report that only 35% of ERP systems used are on-premises, while the other 65% are cloud ERP. Additionally, the usage of ERP systems is also extended to small and medium enterprises, where the developers have introduced more affordable ERP software (Aremu et al., 2019).

ERP in Malaysia

Malaysia is known as one of the most recognized countries for Foreign Direct Investment (FDI) in Southeast Asia; hence, many large corporations have been established throughout Malaysia to capture the opportunities available (Fadhil & Almsafir, 2015; PwC, 2020). As a result, the demand for a unified information system such as ERP has risen. Thus, ERP systems designed and used in Malaysia must be in line with the appropriate accounting principles practiced in the region. In promoting the adoption of the ERP system, many efforts have been undertaken by the Malaysian government to facilitate companies' deployment of the system. For instance, Multimedia Development Corporation (MDeC) had introduced the SME Cloud Computing Adoption Program to promote the adoption of cloud ERP software by SMEs, and the Malaysian government has provided many incentives for ERP implementation, such as a fee refund up to six months (Jayeola et al., 2020; Qian et al., 2016). Financial aid

was crucial, as the cost of ERP implementation can be a huge burden for SMEs in developing countries. Regulation of laws and policies has also been made and updated constantly to ensure that the systems used are in line with any relevant changes (Jayeola et al., 2022). This will eventually result in increased competitiveness among SMEs, which can help the overall economic growth of Malaysia.

ERP Post-Implementation Phase

There are several stages involved in implementing an ERP system within a company. The most known stages were pre-implementation, implementation, and post-implementation (Alaskari et al., 2021; Morawiec & Sotysik-Piorunkiewicz, 2022). In pre-implementation, companies will assess their readiness for adopting the new system. This is when feasibility studies, the development team, and the contract agreement with the vendor are formed. The second stage is known as the implementation cycle. After everything is ready, the ERP system will be implemented. Installation, configuration, and programming are being made towards the established ERP systems before the final "go live" step, where customization, data migration, and integration are done. Finally, the final stage is called the post-implementation stage, where the main job done mainly concerns system maintenance, user support, upgrades, and database backups. Malik and Khan (2020) dubbed the last stage the "maintenance and continuous improvement" stage. They explained that continuous technical support, upgrades, and enhancements are crucial during this stage as they add functionality to the existing modules within the ERP system. One of the misconceptions commonly found in ERP projects is a misplaced emphasis on implementation and making light of the importance of post-implementation processes in the ERP lifecycle (Law, 2019). The post-implementation stage of the ERP implementation process is relevant to the ERP acceptance study since this is the stage where the users actively engage with the system and the possibility of ERP failure is higher due to the user's resistance to accepting the ERP system (Costa et al., 2020; Ilie & Turel, 2020).

Factors Affecting User's Acceptance of ERP System Usage

There are many different types of external and internal factors that could affect a user's acceptance of a specific kind of technology. The variety

of models that were developed to measure user technology acceptance may be comprehensive and cover different areas, but they can be too complex and impractical to apply to a single type of technology (Shibly et al., 2022). Nevertheless, there are several factors that are constantly being applied in various acceptance models using different terms. The most mentioned factor is performance expectancy. This factor has been continuously used by different theories and models under different names or designations. For example, Davis et al. (1989) called it "perceived usefulness" while Moore & Benbasat (1991) used the term "relative advantage". Davis (1989) explained performance expectancy as the degree to which the users believe that using the information system can be useful to their job performance. Another popular factor that is commonly paired with performance expectancy is effort expectancy. It can be understood as the degree to which using the ERP system is easy or free from effort (Davis, 1989). It is understandable, as a user tends to accept the system if it is easy to use. This, of course, will depend on the complexity of the ERP system and how well the system is designed to be user-friendly. ERP system users tend to find it easier to interact with the system when the level of complexity is lower, which helps improve their perceived outcomes such as productivity, efficiency, and effectiveness (Bamufleh et al., 2021; Cheng, 2018).

Social influence is the next possible factor that could influence the user's acceptance of ERP usage. Ajzen (1991) used the term subjective norms to explain the social influence, and he explained it as the social pressure received by the ERP users from other people to perform or not perform the intended behaviour. Shibly et al. (2022) stated that social factors have a more significant influence than economic factors in driving the acceptance of technology among its users. In a working environment, employees' actions or behaviours will be influenced by other people around them. This includes the behaviour of using and accepting the ERP system inside their organization. If a certain social pressure is asserted on the users, they can be "persuaded" to accept the use of technology (Venkatesh et al., 2003).

Venkatesh et al. (2003) used the term '**facilitating conditions**' as the degree to which an ERP user observes that the organization has the appropriate infrastructure to support the use of the system. This can be a major factor as it measures the ability of the organization to sustain the use

of the ERP system effectively. Caserio and Trucco (2018) stated that IT adoption will have high implementation costs, which include monetary and human resources that cover everything from the IT infrastructure to trainings and continuous improvements. Good infrastructure and training help reduce anxiety and increase favourable perceptions about the technology among the intended users, which will result in better user acceptance (Shibly et al., 2022). Besides that, **behavioural intention** is one of the factors that must be considered. Venkatesh et al. (2003) explained behavioural intention as the feeling received by the users because of their individual reaction towards using the information technology. The reactions to the use of the ERP system will encourage the users to accept or reject the system. This factor is trickier to understand since it involves measuring the intention of the users. Nevertheless, it is one of the most used variables in basic user acceptance models (Venkatesh et al., 2003).

Theoretical Foundation: Unified Theory of Acceptance and Use of Technology (UTAUT)

The Unified Theory of Acceptance and Use of Technology, or UTAUT, was developed by Venkatesh et al. (2003) by reviewing the literature on user's acceptance and examining eight different types of popular technology acceptance models. They proposed that the UTAUT comprises four main constructs that become the direct determinants of the user's acceptance of using the system: performance expectancy, effort expectancy, social influence, and facilitating conditions. Specifically, performance expectancy, effort expectancy, and social influence will affect the intention of ERP users to use the system, which will eventually lead to ERP acceptance (Venkatesh et al., 2003). The UTAUT was employed in this study since it offers a more comprehensive and reliable theory that is relevant to this research context. This is also because it is one of the latest theories developed, which can provide a more accurate result that reflects the current situation. The original paper by Venkatesh et al. (2003) (see Figure 1 below) has been cited more than four thousand times, and UTAUT has been used as a reference to a wide range of technologies acceptance research, including the internet, web sites, hospital information systems, tax payment systems, and mobile technology (Dwivedi et al., 2020; Shachak et al., 2019; Williams et al., 2015).
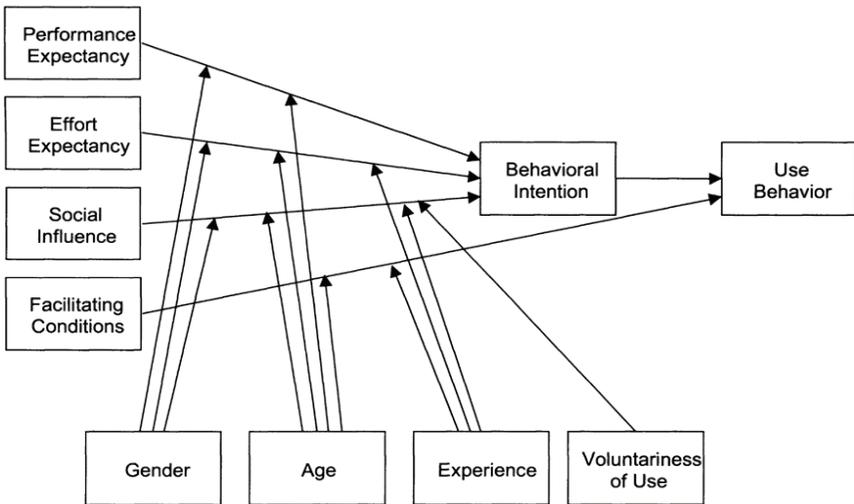
Figure 1: Unified Theory of Acceptance and Use of Technology
Source: Venkatesh et al. (2003)

Hypotheses Development

Based on the UTAUT framework, this study proposed five factors that can influence user's acceptance of ERP. The five main factors are performance expectancy, effort expectancy, social influence, facilitating conditions (which will act as independent variables), and behavioural intention (which will act as a mediating variable). The actual ERP usage will act as the dependent variable since it signifies the user's acceptance of the system and the successful willingness of the users to use the ERP system.

Performance Expectancy

Venkatesh et al. (2003, p. 447) defined performance expectancy as "the extent to which the user is convinced that by using the system, he or she will improve job performance." This factor is one of the most used in studies aimed at understanding users' acceptance of the information system, aside from effort expectations. Davis (1989) explained the construct as being useful towards the user and capable of being used in favour of the user, while Thompson et al. (1991) emphasized the ability of the system to boost a user's job performance. Job performance is one of the key aspects of a company's productivity since better job performance leads to the overall growth of the company. Job performance can be a subjective matter; Pandey (2018) stated that there are two ways of examining job performance:

(1) the behavioural aspect, where we observe what the employees do at work; and (2) the outcome aspect, where we observe the results generated from the work done. Muldoon et al. (2017) urged that employees aim to increase their job performance to gain incentives such as a higher salary and a better impression from the top management. From the ERP context, the previous literature suggested significant evidence of improving an employee's job performance via this integrated system (Alisoun et al., 2018; Ayaz & Yanartaş, 2020; Mahzan & Lymer, 2014). Thus, when the performance expectation gained from using the ERP system is higher, the user's intention to use the system will also be higher. This brings us to the first research hypothesis:

Hypothesis 1 (H1): Performance expectancy will have a significant positive influence on a user's behavioural intention to accept the ERP system.

Effort Expectancy

Based on the UTAUT model, Venkatesh et al. (2003, p. 450) defined effort expectancy as "the extent of ease when the user used the information system." Prior studies on UTAUT believed that effort expectancy, also known as perceived ease of use, was included in the Technology Acceptance Model (TAM) developed by Davis in 1989, which is one of the most prominently used models in technology acceptance studies. Since ERP is a complex and comprehensive system to use, it requires the users to have a certain level of competency to operate within the system. (Gupta et al., 2017) explained that expanding business operations and the scale of economic growth increase the complexity of the ERP system as users need to adjust to the changes through constant customization of the system. The increase in complexity reduces the ease of use of the ERP system since the ERP users will need to continuously adapt to new features (Cheng, 2018; Donmez-Turan, 2020). The complexity of the ERP system also involves the level of skills required to use and maintain the system for further customization (Saputra et al., 2021). Thus, ERP developers are designing a system that can be easily used by users and requires less time to understand. Furthermore, the top decision makers within the company need to ensure that the ERP system used is compatible with the company's operations to avoid any unnecessary issues. Venkatesh et al. (2003) stated that effort expectancy has a significant influence on the user's intention to use the system in both voluntary and compulsory situations. Easier use of the system with little

effort could encourage ERP users to accept the ERP system better. Previous studies found evidence that the higher the degree of ease when using the information system, the higher the users' satisfaction, which could motivate them to continue using the system (Almajali et al., 2016; Sivathanu, 2019; Soong et al., 2020). Thus, the following hypothesis was formulated:

Hypothesis 2 (H2): Effort expectancy will have a significant positive influence on a user's behavioural intention to accept the ERP system.

Social Influence

Venkatesh et al. (2003, p. 451) defined **social influence** as: *"The extent to which the user recognized that other people believe he or she should be using the new system."* In this case, the term "other people" refers to persons with a high status such as the top managers or any influential person to the user. Besides that, other terms used for this construct are social norms, social factors, and image. Thompson et al. (1991) stated that users are influenced and motivated by their superiors and colleagues in using computer software. This can happen because colleagues have mutual respects between one another. Thus, they can influence one another. Social influence can impact the ERP user's behaviour using three mechanisms (Venkatesh et al., 2003). These mechanisms include compliance, identification, and internalization (Abbas Naqvi et al., 2020; Liu et al., 2020). Compliance can be understood as the need to provide a favourable response towards the need of others to gain something or avoid negative consequences. Identification can be understood as the need to establish or maintain a social relationship with other persons in the community. Internalization can be understood as the state where individual's beliefs and behaviours are aligned with another person. The top management and the organization need to create a conducive social environment that supports the use of the system. Besides, the incentives for the employees to use the system through the IT staff support is crucial to the ensure the success of the ERP implementation (Thompson et al., 1991). Furthermore, when the use of a system is mandatory, studies find that social influence element has a significant impact on the actual use of the information technology (Amron et al., 2019; Mensah, 2019); (Zhang et al., 2013). As a result, when the degree of social influence is higher within the organization, users are more willing to use the ERP system. Thus, the third hypothesis was constructed:

Hypothesis 3 (H3): Social influence will have a significant positive influence on a user's behavioural intention to accept the ERP system.

Facilitating Conditions

Facilitating conditions implies "the extent to which an individual believes that an organizational and technical infrastructure exists to support the use of the system." Venkatesh et al. (2003, p. 453) The system that it supported refers to the ERP system used within the company. It is known that adopting an ERP system in a company requires a lot of resources in terms of effort, time, and money (Shibly et al., 2022). This is the reason why large corporations and governmental bodies have the capability of adopting ERP technology. Smaller companies, like SMEs, will need to think carefully about their readiness to support the use of the ERP system. (Gupta et al., 2017) highlighted that companies also need to be able to sustain the long-term costs of using the ERP system which may include on-site maintenance, annual subscription fees for those who use cloud ERP services, and other running costs. Companies that fail to meet the technical and infrastructure demands of the ERP system could be in danger of ineffective implementation or, in the worst cases, a complete ERP failure. (Chauhan & Jaiswal, 2016) explained that good facilities and technical supports are important to ensure that problems can be resolved faster, and this opens opportunities for continual use of the ERP system. This is because the end-users can seek technical help faster and are thus more satisfied with the use of the ERP system. In summary, when system users believe that the level of facilitating conditions within the company is high, they can accept the use of the information system in their day-to-day work (Maita et al., 2018; Thottoli & Thomas, 2022; Yohanes et al., 2020). Thus, the following fourth hypothesis was formulated:

Hypothesis 4 (H4): Facilitating conditions will have a significant positive influence on a user's actual usage of the ERP system.

Behavioural Intention

Venkatesh et al. (2003, p. 456) stated several definitions of behavioural intention from different sources; a few examples include: "An individual's positive or negative feelings about performing the required behaviour." (Davis et al., 1989). In this case, the feelings received by the ERP users must be positive feelings caused by the improvement in job quality, ease of

use, and social influence of using the ERP system in their working space. As a result, this will increase the user's willingness to accept the use of the system. As explained by Sternad and Bobek (2013), at the later stage of the ERP system's life cycle, the users will begin to realize the advantages gained from using the system. Thus, they will try to explore the system's functions more and gradually accept the system. Mayeh et al. (2016) added that the intention to use the ERP system is a good predictor for the user's acceptance of the system. Thus, theory makers such as Davis et al. (1989) and Venkatesh et al. (2003) take into consideration the role of behavioural intention as a factor in the technology acceptance model. In summary, when the users have the intention to use the ERP system due to its benefits and advantages, they will accept the system and continue to use it in the future (Asastani et al., 2019). This will increase the time users interact with the system. Thus, the following hypothesis was developed:

Hypothesis 5 (H5): Behavioural intention will have a significant positive influence on a user's actual usage of the ERP system.

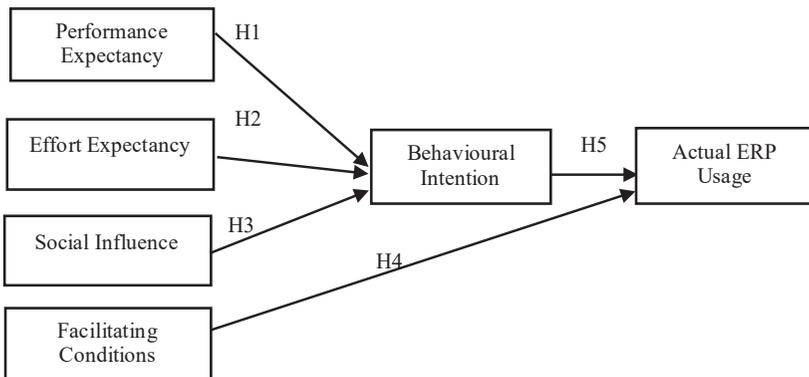The following Figure 2 illustrates this study Research Framework.

Figure 2: Research Framework. Adapted from the UTAUT model by Venkatesh et al. (2003)

METHODOLOGY

Population and Sample of the Study

To achieve the goals and objectives of the study, a survey was conducted through the distribution of questionnaires answered by the users of the ERP system. The ERP system users employed the software to receive or provide inputs and outputs for their business processes. The group of ERP users ranged from the top management to the average employee level. Hence, the selected respondents in this study included ERP users from various private organizations all around Malaysia (mainly from Kuala Lumpur and Selangor). This was because many companies are located and established in these areas. This study then used purposive sampling to obtain the relevant information from a particular target group (Sekaran & Bougie, 2016). This is because only employees who directly operate and use the ERP system can provide the relevant information pertaining to an ERP user's acceptance. Besides, not all employees within the organization use the system. A total of 180 questionnaires were distributed; 30 were distributed as physical copies, while the other 150 were distributed via email using online questionnaires. A total of 101 responses were received, which included 25 responses from the physical copies and 76 from the online questionnaires. Based on these figures, the total response rate was calculated at 56.11%. The results showed that physical copies had a higher response rate of 83.33%, while online questionnaires received a lower response rate of 50.67%.

Survey Instruments

For this study, six variables were used to develop the five hypotheses. For the first three hypotheses, the study aimed to identify which factors influenced the behavioural intention of ERP users on using the ERP system, while the last two hypotheses examined the factors that influenced the actual ERP usage by users. Based on the hypotheses tested, we can indicate which factor had a significant influence on ERP acceptance among its users. A five-point Likert scale ranging from 1 as strongly disagree to 5 as strongly agree was used in the questionnaire as a measurement scale for this study. The questionnaire used in the study consisted of three sections, which were Sections A, B, and C. All the questions in Sections A, B, and C were required to be answered by the respondents.

Section A consisted of the demographic part of the questionnaire. This demographic section aimed to understand the background of the respondents, who were ERP users within Malaysian organizations. In understanding the demographic profile of the respondents, several questions needed to be answered in Section A of the questionnaire. These included gender, age, work experience, types of industries involved, business functions inside the organization, type of ERP software used, and ERP usage experience. These can be observed in Table 1.

Table 1: Measurement for Demographic Profile

Question		Measurement
Q1	Gender	Male Female
Q2	Age	<25 years old 26 to 30 years old 31 to 40 years old >41 years old
Q3	Work Experience	<2 years 2 to 5 years 6 to 9 years >10 years
Q4	Types of Industries	Agriculture Electrical and electronics Automotive Construction Accounting, finance, and banking Oil and gas Consumer products and services Others
Q5	Business Functions	Finance and accounting Human resources Marketing and sales Administration and IT support Operations Others
Q6	ERP System Application Used	SAP ERP/Business One Sage 100 Oracle NetSuite Microsoft Dynamics MYOB/ABSS Others
Q7	ERP Usage Experience	<2 years 2 to 5 years 6 to 9 years >10 years

In Section B, the questionnaire focussed on measuring the factors affecting the user's acceptance of ERP. Based on the UTAUT model introduced by Venkatesh et al. (2003), performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioral intention can influence actual ERP usage. Table 2 presents the measurements used in determining the independent and mediating variables in this study. Hence, to develop the items, this study referred to the previous literature.

Table 2: Summary of Independent and Mediating Variables Studied

Variable	Measure	Reference
Performance expectancy (Independent)	Changes in job performance and quality Changes in job productivity	Cheng (2018) Alsoub et al. (2018) (Ghani et al., 2018) Chauhan & Jaiswal (2016) Venkatesh et al. (2003) Thompson et al. (1991) Davis (1989)
Effort Expectancy (Independent)	Level of effort needed in understanding the ERP system. Level of ease of use when using the system The complexity of the ERP system	Cheng (2018) Alsoub et al. (2018) Ghani et al. (2018) Chauhan & Jaiswal (2016) Venkatesh et al. (2003) Thompson et al. (1991) Davis (1989)
Social Influence (Independent)	Level of influence or pressure from other people to use the ERP system	Cheng (2018) Alsoub et al. (2018) Chauhan & Jaiswal (2016) Venkatesh et al. (2003) Thompson et al. (1991)
Facilitating Conditions (Independent)	The level of infrastructure within the organization to support the use of the ERP system. Training and technical supports received by the employees to use the ERP system	Alsoub et al. (2018) Chauhan & Jaiswal (2016) Venkatesh et al. (2003) Thompson et al. (1991)
Behavioral Intention (Mediating)	The extent to which ERP users intend or plan to use the system in the future	Cheng (2018) Alsoub et al. (2018) Chauhan & Jaiswal (2016) Venkatesh et al. (2003) Davis (1989)

The dependent variable can be understood as what the researchers intend to measure in the study and what is affected during the study (Sekaran & Bougie, 2016). Section C of the questionnaire focussed on the dependent variable of the study, which is the actual ERP usage by the users in Malaysian

organizations. Table 3 below explains the meaning behind the measurement of the dependent variable, and which work of literature were used to adopt the items for the questionnaire.

Table 3: Summary of the Dependent Variables Studied

Variable	Measure	Reference
Actual ERP Usage (Dependent)	Duration of use of ERP system by the user	Ghani et al. (2018) Chauhan & Jaiswal (2016)
	User dependency on the ERP system	Venkatesh et al. (2003) Davis (1989)

Measurement of Variables

The study employed five predictors of ERP acceptance: performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioural intention. Specifically, the independent variables consisted of performance expectancy, effort expectancy, social influence, and facilitating conditions, while behavioural intention acted as the mediating variable. Actual ERP usage acted as a dependent variable for the study. Each variable consisted of five items or questions. These questions were adopted from references in Table 2 and Table 3. Each statement in the questions was then measured using a five-point Likert scale ranging from 1 as strongly disagree, 2 as disagree, 3 as neutral, 4 as agree, and 5 as strongly agree." Every respondent was expected to answer all the questions by choosing an accurate response on the scale based on their own experience using the ERP system. Table 4 presents all the items used to measure the variables in this study.

Table 4: Items and Measurement for each variable studied.

Item	Measurement
PE1	I find the use of ERP system useful for my job.
PE2	Using the ERP system in my job enables me to accomplish the tasks more quickly than working manually.
PE3	Using the ERP system in my job increases my productivity compared to working without the ERP system.
PE4	Using the ERP system improves the quality of the task that I perform.
PE5	If I use the ERP system effectively, I will increase my chances of getting pay raise or promotion.
EE1	My interaction with the ERP system is clear and understandable.
EE2	It would be easy for me to become skilful at using the ERP system.
EE3	Learning to operate the ERP system is easy for me.

EE4	I find it easy to get the ERP system to do what I want it to do.
EE5	Overall, I find that the ERP system is easy to use and user friendly.
SI1	People who influence my behaviour think that I should use the ERP system.
SI2	People who are important to me think that I should use the ERP system.
SI3	I use the ERP system because of the proportion of co-workers who use the system.
SI4	The senior management of this business is helpful in facilitating the use of the ERP system.
SI5	In general, the company has supported the use of the ERP system.
FC1	The resources necessary (e.g., computer hardware and software) are available for me to use the ERP system effectively.
FC2	I have the knowledge necessary to use the ERP system.
FC3	A specific person (or group) is available to assist me in cases of difficulties in using the ERP system.
FC4	Specialized instructions and guidelines concerning the ERP system are available for me.
FC5	I am comfortable and satisfied with using the ERP system in my company.
BI1	I intend to continue using the ERP system rather than working manually in the future.
BI2	I plan to continue using the ERP system on a regular basis in the future.
BI3	I predict that I would use the ERP system in the future.
BI4	I plan to use more modules and functions in the ERP system in the future.
BI5	I intend to use the ERP system as often as possible in the future.
AU1	I am currently using the ERP system frequently in my daily work.
AU2	I have been using the ERP system extensively for the past few months.
AU3	I spend many hours per week during work on using the ERP system.
AU4	I depend on the ERP system to finish my work and other jobs.
AU5	Overall, I use the ERP system a lot.

Note: PE=Performance Expectancy; EE=Effort Expectancy; SI=Social Influence; FC=Facilitating Conditions; BI=Behavioral Intention; AU=Actual ERP Usage

The data analysis done in this study used the 25th version of the Statistical Package for Social Sciences (SPSS) software. Several tests were done, which included descriptive analysis, validity testing, reliability testing, correlation analysis, and regression analysis. Path analysis was done to examine the effect of each variable on ERP acceptance. Since behavioural intention acted as a mediating variable, the study employed path analysis with the four-step method as stated by Portland State University (2018) to identify the mediation effect.

RESULTS AND DISCUSSION

Demographic Analysis

In the demographic analysis, the background of a total of 101 respondents, who were ERP users within Malaysian organizations, was analysed based on the questions asked in Section A of the questionnaire. The questions included gender, age, work experience, the types of industries they work in, the business functions they were involved in within the organization, the types of ERP systems used at their workplace, and ERP usage experience. Table 5 shows the demographic distribution among the 101 respondents.

Table 5: Respondents' Gender

Variable	Detail	Frequency	Percentage (%)
Gender	Male	33	32.70
	Female	68	**67.30**
Age	≤25 years old	26	25.70
	26 to 30 years old	32	31.70
	31 to 40 years old	37	**36.60**
	>41 years old	6	5.90
Work Experience	<2 years	25	24.80
	2 to 5 years	23	22.80
	6 to 9 years	21	20.80
	≥10 years	32	**31.70**
Types of Industries	Agriculture	1	1
	Electrical and electronics	2	2
	Automotive	2	2
	Construction	1	1
	Accounting, finance, and banking	30	29.70
	Oil and gas	32	**31.70**
	Consumer products and services	12	11.90
	Others	21	20.80
Business Functions	Finance and accounting	54	**53.50**
	Human resources	13	12.90
	Marketing and sales	13	12.90
	Administration and IT support	2	2
	Operations	12	11.90
	Others	7	6.90

ERP System Used	SAP ERP/Business One	56	**55.40**
	Oracle NetSuite	6	5.90
	MYOB/ABSS	14	13.90
	Others	25	24.80
ERP Usage Experience	<2 years	51	**50.50**
	2 to 5 years	25	24.80
	6 to 9 years	15	14.90
	>10 years	10	9.90

Descriptive Analysis

The average mean for all the items in performance expectancy was recorded at 4.12. This indicated that the users believed that using the information system can be useful to their job performance. This may be accurate given that an ERP system's purpose is to efficiently help users enhance the calibre of their work. For effort expectancy, the users' mean score was recorded at 3.82. This indicated that the respondents somewhat agreed that the ERP system was easy to use and user friendly. Next, the average mean for all the items in social influence was recorded at 3.86, which implied that the users mildly agreed that they were influenced by people around them to use the ERP system. For facilitating conditions, the average mean was recorded at 4.05. This showed that the users agreed that their organization had the appropriate infrastructure to support the use of the ERP system. The average mean for all the items in behavioural intention was recorded at 4.19, which indicated that the users agreed that they have the intention to continuously use the ERP system in the future, as well as the intention to explore other functions and modules available within the software features. Lastly, the average mean for all the items in the actual ERP usage was recorded at 3.99. This indicated that the users agreed that they have used the ERP system a lot in their line of work (see Table 6).

Table 6: Descriptive Results of the Study

Variable	Mean	Standard Deviation	Cronbach Alpha	Skewness/ SE	Kurtosis/ SE
Performance Expectancy	4.12	0.541	0.829	-1.54	-0.72
Effort Expectancy	3.82	0.613	0.857	0.58	-0.97
Social Influence	3.86	0.579	0.745	-1.25	0.61
Facilitating Conditions	4.05	0.643	0.818	-1.48	-0.71
Behavioral Intention	4.19	0.646	0.908	-1.78	-1.18
Actual ERP Usage	3.99	0.67	0.897	-1.26	-1.67

Normality Test

Rose et al. (2014) suggested that the rule of thumb can be applied where the values of skewness and kurtosis will be divided by their standard error. If the result showed a value greater than ±1.96, it will suggest that the collected data are not normal. Table 6 also shows the results of the computation done. Based on the table above, the results showed that the values were less than ±1.96. In conclusion, it is safe to say that the data collected from this study were normally distributed.

Reliability Test

A reliability test was done to ensure that the measures used in the questionnaire reflected the constructs that it is supposed to measure (Field, 2017). Pallant (2016) explained that the Cronbach's Alpha value should be at least 0.7, where it can be interpreted as acceptable. On the other hand, he indicated that it is preferable for the values to be above 0.8. Based on Table 6, all the constructs had values of above 0.7, which were acceptable. The lowest Cronbach's Alpha value was recorded by Social Influence at 0.745, while the highest value was held by Behavioral Intention with 0.908. This showed that the internal consistency of the constructs' reliability ranged from acceptable to excellent.

Validity Test

According to Kabir (2016), validity refers to whether the measurement measures what it is supposed to measure. The validity test is done to test the goodness of measures and is done to validate the instruments and the information used within the study. The instrument validity must be conducted using Pearson Correlation in SPSS. The items within the questionnaire must be significantly correlated with the total score of the variables that they are supposed to measure to ensure that the items are valid. In this study, the significance level of all the items was recorded at <0.05; thus, it can be finalized that all the instrumented items were valid.

Correlation Analysis

A correlation analysis was done to understand the strength and direction of the linear association between two variables that are being

studied (Pallant, 2016). This study used the Pearson's correlation coefficient (r) analysis via SPSS to examine the status of the association between the variables studied. Table 7 below, shows the results of the correlation analysis. For the first association between performance expectancy and behavioural intention, the result showed that there was a strong positive correlation (r = 0.538, p ≤ .001). Secondly, the association between effort expectancy and behavioural intention showed a moderate positive correlation (r = 0.485, p ≤ .001). As for the third association between social influence and behavioural intention, the result showed that there was a strong positive correlation (r = 0.681, p ≤ .001). Furthermore, the fourth association was between facilitating conditions and the actual ERP usage. The result from the Pearson correlation test showed that there was a moderate positive correlation between the two variables (r = 0.334, p ≤ .001). Lastly, the final association studied in this research is between behavioural intention and the actual ERP usage. The result showed that a moderate positive correlation existed (r = 0.417, p ≤ .001). (Jensen, 2005) suggested that should two variables showed a correlation of 0.90 or higher, one of the variables will have to be eliminated. The result of Pearson's correlation coefficient test for this study can be seen in Table 7. Overall, no correlations were found to be greater than 0.9 as recommended by Jensen and thus the issue of multicollinearity did not exist in this study.

Table 7: Pearson Correlation Results

Variables	Performance Expectancy	Effort Expectancy	Social Influence	Facilitating Conditions	Behavioural Intention
Performance Expectancy	1				
Effort Expectancy	.513**	1			
Social Influence	.611**	.706**	1		
Facilitating Conditions	.444**	.481**	.520**	1	
behavioural Intention	**.538****	**.485****	**.681****	.443**	1
Actual ERP Usage	.415**	.468**	.507**	**.334****	**.417****

Notes: ***P < 0.001; **P < 0.01

Regression Analysis

To further examine the hypothesised relationships among the variables, a simple linear and multiple regression was employed on the

four independent variables while at the same time testing the effect of mediation. Multiple regressions enable the researcher to determine the overall fit (variance explained) and the relative contribution of each of the predictors to the total variance explained (Field, 2017). The proposed path model of the study was verified using the linear regressions as it produced the coefficients and quantifies the goodness of fit of the model. To pursue the empirical confirmations on factors (Performance Expectancy, Effort Expectancy, Social Influence, behavioural Intention, and Facilitating Conditions) influencing the Actual ERP Usage of ERP users, the path model of the study led to the development of 5 hypotheses. All the hypotheses tested was accepted which indicated a significant relationship exist between the variables and the effect of mediation was tested.

Behavioural Intention as a Mediator

Mediation effect is a causal sequence or also known as a domino effect where one variable affects a second variable that, in turn, affects a third variable. Since behavioural intention will act as a mediating variable, the study employed the use of path analysis with 4 steps method as stated by Baron & Kenny in 1986 (Portland State University, 2018). Following the steps suggested by Baron & Kenny (1986) to test for the effect of mediation, below are the results of the regression analyses.

Step 1: Conduct a simple regression analysis with Performance Expectancy, Effort Expectancy, and Social Influence predicting Actual ERP Usage.

a) $\hat{Y}1 = \alpha + \beta1$ (Performance Expectancy) $+ \varepsilon$
b) $\hat{Y}1 = \alpha + \beta2$ (Effort Expectancy) $+ \varepsilon$
c) $\hat{Y}1 = \alpha + \beta3$ (Social Influence) $+ \varepsilon$

Where, "$\hat{Y}1$" is the projected value for ERP users' Actual ERP Usage, "α" is the estimate of the Y – intercept, "β" is the slope of the regression line, and "ε" represents the errors of prediction.

Table 8: Coefficients of Step 1 - Simple Regression

Step 1 Path Model	B[1]	P value[2]
Performance Expectancy -> Actual ERP Usage	.471	.000
Effort Expectancy -> Actual ERP Usage	.468	.000
Social Influence -> Actual ERP Usage	.507	.000

Notes: [1]Regression coefficient
[2]Statistical significant of the test

Based on results seen in Table 8 for Step 1, **all relationships are significant** ($p < .05$) and shows that zero-order relationships among the variables exists.

Step 2: Conduct a simple regression analysis with Performance Expectancy, Effort Expectancy, and Social Influence predicting Behavioural Intention.

d) $\hat{Y}2 = \alpha + \beta1 \text{ (Performance Expectancy)} + \varepsilon$
e) $\hat{Y}2 = \alpha + \beta2 \text{ (Effort Expectancy)} + \varepsilon$
f) $\hat{Y}2 = \alpha + \beta3 \text{ (Social Influence)} + \varepsilon$

Where, "$\hat{Y}2$" is the projected value for ERP users' Behavioural Intention, "α" is the estimate of the Y – intercept, "β" is the slope of the regression line, and "ε" represents the errors of prediction.

Table 9: Coefficients of Step 2 - Simple Regression

Path	Step 2 Path Model	B[1]	P value[2]
H1	Performance Expectancy -> Behavioural Intention	**.538**	**.000**
H2	Effort Expectancy -> Behavioural Intention	**.485**	**.000**
H3	Social Influence -> Behavioural Intention	**.681**	**.000**

Notes: [1]Regression coefficient
[2]Statistical significant of the test

Based on results seen in Table 9 for Step 2, **all relationships were significant** ($p < .05$) and showed that zero-order relationships among the variables exists.

Step 3: Conduct a simple regression analysis with Behavioural Intention predicting Actual ERP Usage alone.

g) $\hat{Y}3 = \alpha + \beta5 \text{ (Behavioural Intention)} + \varepsilon$

Where, "Ŷ3" is the projected value for ERP users' Actual ERP Usage, "α" is the estimate of the Y – intercept, "β" is the slope of the regression line, and "ε" represents the errors of prediction.

Table 10: Coefficients of Step 3 - Simple Regression

Path	Step 3 Path Model	B[1]	P value[2]
H5	behavioural Intention -> Actual ERP Usage	.417	.000

Notes: [1]Regression coefficient
[2]Statistical significant of the test

Based on results seen in Table 10 for Step 3, the relationship between Behavioural Intention and Actual ERP Usage was **significant** ($p < .05$) and showed that zero-order relationships among the variables exists.

Step 4: Conduct a multiple regression analysis with Performance Expectancy, Effort Expectancy, Social Influence, and Behavioural Intention predicting Actual ERP Usage.

h) $\hat{Y}1 = \alpha + \beta1$ (Performance Expectancy) $\beta2$ (Effort Expectancy) $+ \beta3$ (Social Influence) $+ \beta5$ (Behavioural Intention) $+ \varepsilon$

Where, "Ŷ1" is the projected value for ERP users' Actual ERP Usage, "α" is the estimate of the Y – intercept, "β" is the slope of the regression line, and "ε" represents the errors of prediction.

Table 11 below shows the result from Step 4. The results indicated that **no significant relationships existed for all the paths analysed** ($p > .05$). According to the rule established by (Portland State University, 2018), This showed that the Performance Expectancy, Effort Expectancy, and Social Influence are **fully mediated** by Behavioural Intention to predict Actual ERP Usage.

Table 11: Coefficients for Multiple Regression (Step 4)

Step 4 Path Model	B[1]	P value[2]
Performance Expectancy -> Actual ERP Usage	.121	.283
Effort Expectancy -> Actual ERP Usage	.199	.106
Social Influence -> Actual ERP Usage	.222	.140
Behavioural Intention -> Actual ERP Usage	.105	.381

Notes: [1]Regression coefficient
[2]Statistical significant of the test

Simple Linear Regression for Facilitating Conditions

To test the 4th Hypothesis which studies the path between Facilitating Conditions and Actual ERP Usage, a simple regression will be made. Note that there are no steps involve since Facilitating Conditions does not have any mediating variable in between.

i) $\hat{Y}1 = \alpha + \beta 4$ (Facilitating Conditions) $+ \varepsilon$

Where, "$\hat{Y}1$" is the projected value for ERP users' Actual ERP Usage, "α" is the estimate of the Y – intercept, "β" is the slope of the regression line, and "ε" represents the errors of prediction.

Table 12: Coefficients for Facilitating Conditions

Path	Step 3 Path Model	B[1]	P value[2]
H4	Facilitating Conditions -> Actual ERP Usage	**.334**	**.001**

Notes: [1]Regression coefficient
[2]Statistical significant of the test

Based on results seen in Table 12, the relationship between Facilitating Conditions and Actual ERP Usage was **significant** ($p < .05$) and showed that zero-order relationships among the variables exists. In summary, Table 13 shows the hypotheses test results based on the regression analysis made. The study suggested that performance expectancy, effort expectancy, and social influence had a significant positive relationship with the user's behavioural intention while behavioural intention and facilitating conditions has a significant positive relationship with the user's actual ERP usage. The result from the mediation test indicated that performance expectancy, effort expectancy, and social influence were **fully mediated** by behavioural intention towards actual ERP usage.

Table 13: Summary of Hypotheses Results

Variables	Hypothesis Statement	Findings
Performance Expectancy	Performance expectancy will have a significant positive influence on the user's behavioural intention to accept the ERP system.	There is a *significant positive* relationship between performance expectancy and behavioural intention.
Effort Expectancy	Effort expectancy will have a significant positive influence on the user's behavioural intention to accept the ERP system.	There is a *significant positive* relationship between effort expectancy and behavioural intention.

Social Influence	Social influence will have a significant positive influence on the user's behavioural intention to accept the ERP system.	There is a ***significant positive*** relationship between social influence and behavioural intention.
Facilitating Conditions	Facilitating conditions will have a significant positive influence on the user's actual usage of the ERP system.	There is a ***significant positive*** relationship between facilitating conditions and the actual usage of the ERP system.
behavioural Intention	behavioural intention will have a significant positive influence on the user's actual usage of the ERP system.	There is a ***significant positive*** relationship between behavioural intention and the actual usage of the ERP system.
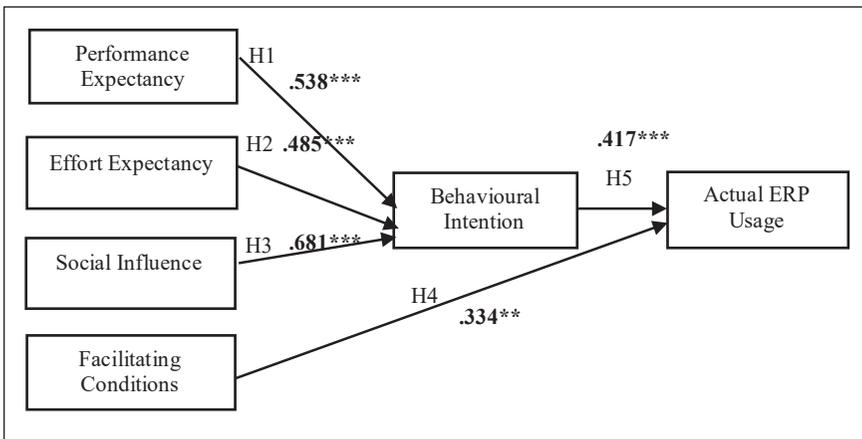
**Figure 3: Standardized Path Coefficients
for All Respondents. ***P < 0.001; **P < 0.01**

DISCUSSION ON FINDINGS

The purpose of this study was to investigate the factors affecting the user's acceptance of the ERP system's usage in Malaysian organizations. Based on the collected data, the regression analysis was conducted to understand the cause and effect of the five factors, which were performance expectancy, effort expectancy, and social influence, and examine their effects on behavioural intention, as well as the effects of facilitating conditions and behavioural intention on actual ERP usage. The function of behavioural intention as a mediating variable proved to be crucial as it fully mediated the relationship from performance expectancy, effort expectancy, and social

influence toward actual ERP usage. Thus, this is why behavioural intention was used as the basis of IT adoption models (Venkatesh et al., 2003).

The results showed that most of the respondents agreed that using ERP systems helped them improve the quality and productivity of their work. The study indicated that performance expectancy had a significant influence on behavioural intention (p < .05). The standardised regression weight (β = .538) revealed that when performance expectancy increased by 1 standard deviation, the ERP user's behavioural intention will increase by .538 standard deviation. Thus, Hypothesis 1 was accepted. This showed that the better the ERP system was at improving the user's work, the higher the user's intention to use the system. ERP users gain more intention to use the ERP system when it can attain significant job performance, which could potentially lead to many other benefits for the users. Similar results supported the findings of this study, such as the studies by Handoko and Prianto (2020), Althunibat et al. (2019), Uddin et al. (2019), Cheng (2018), Chauhan and Jaiswal (2016), Alsoub et al. (2018), and Samander et al. (2017).

For effort expectancy, overall, the study found that most respondents mildly agreed with the fact that the ERP system was easy to use and required less effort. Regarding the variables tested in Hypothesis 2, the study found that effort expectancy had a significant relationship with an ERP user's behavioural intention (p < .05), as stated in the regression analysis. The standardised regression weight (β = .485) revealed that when effort expectancy increased by 1 standard deviation, the ERP user's behavioural intention will increase by .485 standard deviation. Thus, Hypothesis 2 was accepted. This showed that effort expectancy did not make any unique contribution to the prediction of behavioural intention. This is consistent with the studies by Venkatesh et al. (2003), Chauhan and Jaiswal (2016), Alsoub et al. (2018), Uddin et al. (2019), Althunibat et al. (2019), and Handoko and Prianto (2020). As stated by McIntosh (2019), ERP systems have many useful features and allow flexibility with custom adjustments and customizations. This will eventually ease the use of the system by its users.

For the social influence dimension, the descriptive statistics indicated that most of the users mildly agreed that they were affected by social influences such as the encouragement from peers and important people to use the ERP system. The regression test showed that the relationship

between the two variables was significant (p < .05). The standardised regression weight (β = .681) revealed that when effort expectancy increased by 1 standard deviation, the ERP user's behavioural intention will increase by .681 standard deviation. Thus, Hypothesis 3 was accepted. This result suggested that an ERP user's intention to use the ERP system was influenced by their social environment. When social pressure was inserted into the user's day-to-day environment, they can be encouraged to perform certain behaviours. This included the intention of using the ERP system. This is in line with the results from previous studies by Uddin et al. (2019), Althunibat et al. (2019), Alam et al. (2018), Cheng (2018), Alsoub et al. (2018), and Gumussoy et al. (2007), which have indicated that social influence, also known as subjective norms, has a great impact on the intention to use the ERP system.

The fourth hypothesis highlighted the influence of facilitating conditions on actual ERP usage. Based on the results, facilitating conditions had a significant positive relationship with actual ERP usage (p < .05). The standardised regression weight (β = .334) revealed that when effort expectancy increased by 1 standard deviation, the ERP user's behavioural intention will increase by .334 standard deviation. Thus, Hypothesis 4 was accepted. This showed that having good facilities and training within the organization contributes to increased time usage by the ERP users. Studies by Venkatesh et al. (2003), Chauhan and Jaiswal (2016), Wagaw (2017), Handoko and Prianto (2020), and Andwika and Witjaksono (2020) have shown a significant positive relationship between these two variables. On the other hand, studies by Fillion et al. (2012) and Uddin et al. (2019) found no significant relationship. A few reasons that have been highlighted are the effect of age and experience factors on the use of the ERP system. Based on the demographic profiles, the study showed that most of the respondents were younger and have little working experience. Thus, they tend to benefit more from the factor of facilitating conditions, which eventually increases their actual usage of the ERP system.

For the fifth variable, the study focussed on the relationship and influence of behavioural intention on the actual ERP usage. The result from this study indicated that behavioural intention had a significant influence on the actual ERP (p < .05. The standardised regression weight (β = .417) revealed that when effort expectancy increased by 1 standard deviation, the

ERP user's behavioural intention will increase by.417 standard deviation. Thus, Hypothesis 5 was accepted. This shows that a higher intention to use the ERP system can lead to an increase in the actual usage of the system by the users. This shows that the ERP users are more willing to accept the system. Based on the past studies from Andwika and Witjaksono (2020), Handoko and Prianto (2020), Uddin et al. (2019), Alsoub et al. (2018), and Chauhan and Jaiswal (2016), similar results that support the results of this study have been shown.

CONCLUSION

Contributions of the Study

This study contributes to various perspectives. From a theoretical point of view, the findings from this study could help open new doors of opportunity by providing new insights into the user's acceptance of ERP in the Malaysian environment through the lens of the UTAUT. Understanding the factors that affect users' acceptance of the ERP system could prove useful because practitioners, vendors, academicians, and researchers could benefit from this study by improving the current functions of the ERP system so that they can cater to the needs of its users.

From a practical perspective, by referring to the significant factors, companies can shift their focus to specific factors to increase the effectiveness of ERP implementation. The study found a significant result: actual ERP usage is influenced by facilitating conditions within the company and the behavioural intentions of the users. This intention is a reaction to the positive feelings received by the users through using the ERP system (Venkatesh et al., 2003). The intention of ERP users to use the system is then influenced by performance expectations, effort expectations, and social influence. High performance expectancy indicates that the users appreciate the usefulness of using the ERP system since it can increase their productivity and the quality of the work they do. Thus, when choosing the right ERP system to use, the decision makers need to focus on the available functions that are useful for the ERP users, which include providing the users with good quality and relevant information and enabling them to exploit the special features within the ERP system to the fullest, such as remote access from mobile

devices, integration of various departments, third-party interoperability, and many more.

Decision makers in the company also need to choose the best ERP that promotes ease of use for the ERP users. This can be done through preliminary tests and ERP pilot projects that will prove the viability of the ERP system used in the company environment. ERP users' feedback can also be collected throughout the post-implementation stage to constantly improve and customize the system to increase flexibility and convenience of using the ERP system. Next, companies that implement the ERP system must create a conducive and comfortable social environment for the ERP users that encourages the use of the system. The three mechanisms highlighted by Venkatesh et al. (2003), which are compliance, internalization, and identification, can be used in the hope of altering the ERP user's beliefs and intentions for using the ERP system, hence making them respond to the potential social benefits and pressure that make them accept the ERP system. This is because the social environment could play a vital role in influencing the ERP user's acceptance of the ERP system. Thus, the impact of social influence on the user's behavioural intention should also not be neglected since ERP users are influenced by the opinions and suggestions of the important persons in their lives, such as families, friends, colleagues, and the top management, about whether they should or should not use the ERP system. Not to mention, due to the importance of the facilitating conditions factor, a proper facility, which includes software, hardware, and support services, must be available within the company to encourage ERP users to use the system better. As a result, companies may need to invest a lot of their resources in this area to ensure the ERP system can be supported effectively and efficiently.

These practical suggestions do not only apply to the early stages of ERP implementation but also to the post-implementation stage. Organizations that are struggling with the post-implementation period could use the suggestions to improve their current condition. As a result, they know how to achieve the benefits, such as more efficient work hours, better execution of the ERP service, and reduced costs (Rajasekar & Suresh, 2017). In addition, new perspectives can be gained by developing more effective training programs for employees to adapt to and accept the system better. Thus, this avoids the risk of ERP implementation failure within Malaysian organizations. This

can also encourage ERP acceptance among new users who are getting to know the system.

Limitations of the Study

This study has several limitations that can be discussed. Firstly, there was a limitation in terms of the time constraint while conducting the study, whereby the overall duration allocated was around three to four months. This has put additional pressure on the researcher due to the short period of time. If this study was allocated a more extensive time, more reliable and higher-quality research could be produced. Another limitation that can be discussed is the accessibility issue. Most of the organizations that had been contacted refused to participate in the survey due to confidential issues. Thus, most of the organizations in the study were contacted through personal connections. Furthermore, due to undisclosed information by the companies and ERP vendors, the study could not determine the exact population of the study, which forced the study to shift into employing a non-probability sampling that contains a slight bias. Furthermore, based on the responses collected, the study only received a majority (more than 60%) of responses from the accounting, finance, and banking industries, as well as the oil and gas industry. As is commonly known, the ERP system has been used across various types of industries and departments. Thus, the findings of this study might not provide a clearer picture of what is happening in other industries in terms of ERP acceptance.

Future Research

There are many opportunities for future research, especially in the Malaysian environment. Future research done in the Malaysian environment should expand the geographical coverage to other states in the east and the west of Malaysia. This can be done by distributing the surveys evenly throughout every state or by focusing the research only on a specific geographical area (for example, on the east side of Malaysia, which includes Sabah and Sarawak). This study was done in the Klang Valley area, which has state-of-the-art technology and is occupied by various companies from many different industries. Thus, the companies here will have easier access to the ERP technology, technical support, and high-speed internet that help support the ERP implementation process. Meanwhile, in other states,

especially in the areas with lower technology coverage, ERP users may have faced several challenges in using the system, which has caused them to not accept the system. Conducting research in these areas could provide a different perspective on ERP acceptance.

In addition, future research can explore the factors affecting ERP acceptance in different industries across Malaysia. This is because every industry may differ from one another in terms of the technologies used, the working environment, the facilities available, the training provided, and other factors. By doing this, the results can have a more in-depth analysis of how each predictor of ERP acceptance reacts to a different industry environment. Furthermore, some improvements can be made in future studies in terms of the targeted responses. Future research should aim for a larger sample size since it can increase the accuracy of the findings and allow for better interpretation and generalization of the population studied. Moreover, future research can explore the study using different research methods. Since this study was fully done using the quantitative method, new research should try to adopt qualitative or mixed methods approaches. Qualitative research enables a deeper analysis of the collected data by recording the users' attitudes, feelings, and behaviours towards ERP acceptance. By using this method, the result of the study can be created in detail. This is because a comprehensive picture can be built up on why certain users react negatively towards the use of the ERP system through a simulation of the user's personal experience.

CONCLUSION

As all business functions and processes become more complex and are directly affected by Industry 4.0, the ERP system has become one of the most popular pieces of software used by companies across Malaysia to integrate and link various functions such as accounting, inventory control, and human resources within the company. The results of this study have shed some light on ERP acceptance in the Malaysian environment. Using the framework adopted from the UTAUT, this study has identified the most significant factors that affect ERP acceptance in the Malaysian environment. This factor includes performance expectancy, effort expectancy, social influence, facilitating conditions, and the behavioural intention of ERP users.

In summary, all the hypotheses tested in this study show a significant result. With this output, corrections and advancements can be made in certain areas to increase the user's acceptance of the ERP system. As a result, this can contribute to better ERP implementation and effective use of the system, which then enhances the performance of the organizations and contributes to overall economic growth.

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