INTENSIF, Vol.7 No.2 August 2023
ISSN: 2580-409X (Print) / 2549-6824 (Online)
DOI: https://doi.org/10.29407/intensif.v7i2.19330

Factor Analysis of Intention to Use Open-Source ERP: A Case Study from East Java Area

Received:
29 December 2022
Accepted:
17 July 2023
Published:
1 August 2023

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Abstract—Open-source ERP is an information system that supports the digitization of an organization's business so that it can support business continuity in an uncertain environment during the new normal while still implementing health protocol. In fact, only a few small to medium-sized organizations have adopted it. This research aims to examine the significant factors that influence the intention to use or adopt an open-source ERP system in the MSME-based new normal era. In the manner of exploring technological readiness's positive and negative effects on cognitive factors (H1 and H2), environmental uncertainty, and cognitive and organizational readiness on intention to use (H3, H4, H5). There are 420 respondents collected by non-probability sampling and have been analyzed using PLS-SEM based on five subsectors of the small and medium-scale organizations (i.e.: agricultural, fishery, fashion, handicrafts, and culinary). This research confirms that the conceptual model and the five hypotheses proposed previously have been fully proven. The findings of this study prove that the intention to adopt an open-source ERP system is influenced by readiness factors (positive and negative technological, cognitive, and organizational) and environmental uncertainty due to the past COVID-19 pandemic.

Keywords—Open-Source ERP; IT Business Value; IT Adoption; SEM-PLS

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INTENSIF, Vol.7 No.2 August 2023
ISSN: 2580-409X (Print) / 2549-6824 (Online)
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I. INTRODUCTION

Small and medium-scale organizations are currently experiencing a phenomenon faced in the new normal and digital era. Small and medium-scale organizations in some towns have not been able to adapt to an uncertain business environment required to survive, compete with competitors, earn high profits, and maintain long-term business continuity with limited resources. On the other hand, external organizational factors such as environmental uncertainty, changes in consumption patterns, demand, product distribution, and consumer behavior create direct and significant changes to the business [1]. Most individuals, small and medium-scale organizations, are more careful in making decisions and conducting business activities. Some business actors even reduce the demand for goods and services produced or supplied due to the lack of working capital.

During the past COVID-19 pandemic, the use of information technology was very important. Information technology innovation aims to reduce the threat of COVID-19 and the new normal era. Large to small-scale organizations are transformed using information technology to support the continuity of business processes and operations [2],[3]. There is an interesting fact that small and medium-scale organizations have experienced increased profits due to digital innovation. Some information technologies, such as Enterprise Resource Planning (ERP), also allow companies to reduce logistics costs and customer service levels. However, the number of small and medium-scale organizations that experience increased profits after adopting information technology is relatively small. If examined from internal factors, the use of information technology by small and medium-scale organizations is still low. Organizations feel that they do not need to use computers to run their business, financial support is not enough to use information technology, and human resources are less competent in operating computers. This is because they do not have a broad understanding of the potential of information technology. On the other hand, information, and communication technologies (ICT) infrastructure is inadequate in small towns.

ERP is an information system widely used by organizations to manage logistics operational activities [4]. Companies have increasingly used ERP since the COVID-19 pandemic. Export-import service companies in big cities are considered successful in adopting ERP as one of the Logistics Information Systems (LIS) is a computer-based system that provides relevant management information related to an organization's logistics processes [5]. Management control systems in companies are very influential in the success of ERP implementation in Indonesia. Even so, it was also stated that staffing problems were one of the causes of the inefficient ERP system implementation [6]. The factors that influence the adoption of LIS are the perceptions of the organization regarding the obstacles and the benefits obtained [4]. Nevertheless, organizational business needs for ERP system adoption are getting bigger today. Because, ERP

ISSN: 2580-409X (Print) / 2549-6824 (Online)
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systems effectively integrate organizational assets such as workforce, machinery, product and service planning, accounting and finance, payroll, inventory, etc. [7].

The ERP software system market is based on two categories. The first is the paid category, an ERP software system for large-scale organizations that requires complex business systems (for example, Infor, Oracle, Sage, Microsoft Dynamics, SAP, etc.). Second, is the category of open-source ERP software systems for medium to small-sized organizations that need simple business systems (examples: ADempiere, Apache OFBiz, Dolibarr, ERPNext, Metasfresh, Odoo, Tryton, Axelor ERP, xTuple PostBooks, etc.) [8],[9]. The background of medium to small organizations adopting open-source ERP software is very heterogeneous in terms of company size, variety of products and services, or level of readiness of the implemented information technology. Based on previous research, open-source ERP software is adopted by medium to small-scale organizations with backgrounds in the trade, production, service, handicraft, agriculture, manufacturing, and construction sectors in several developing countries [9],[10],[11],[12]. The current background phenomenon that causes medium to small organizations to adopt open-source ERP software is the Indonesian government regulation (number 21 of 2020), regarding large-scale social restrictions in the framework of accelerating the handling of CORONA VIRUS DISEASE 2019 (COVID-19). This government policy causes medium to small-sized organizations to have to rely on information technology, namely open-source ERP software to carry out their operations so that organizations can survive in an uncertain business environment. Based on the development of the ERP system, organizations can choose the ERP system that best suits the organization's business needs.

This research examines significant factors influencing the intention to use or adopt open-source ERP systems in the new normal era based on small and medium-scale organizations. Open-source ERP is an information system that supports the digitization of an organization's business so that it can support business continuity in an uncertain environment during the new normal while still implementing health protocols. On the other hand, open-source ERP is an alternative for MSMEs to implement an integrated system in the new normal era [9].

Previous research applies the Technology Acceptance Model (TAM) as a basic theory to explore user acceptance of ERP as an information technology used by organizations based on previous research [7],[13],[14]. But several previous research has also concluded that TAM does not sufficiently explain user behaviors in technology adoption, and there is a need for theory expansion [15]. So, in this research, the proposed conceptual model is the Technology Readiness and Acceptance Model (TRAM) model, which expands TAM by integrating the readiness construct (TR). The expansion of TR within TRAM shifts more emphasis from technology systems to consumers. Technology readiness, perceived usefulness, perceived ease of use, and

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intention to use are variables in the TRAM conceptual model (see Figure 1) [15]. Interestingly, this study has examined the TR variable in acceptance of and intention to use technology. On the other hand, this study explores other variables influencing the intention to use environmental uncertainty and organizational readiness based on the negative impact COVID-19 pandemic.

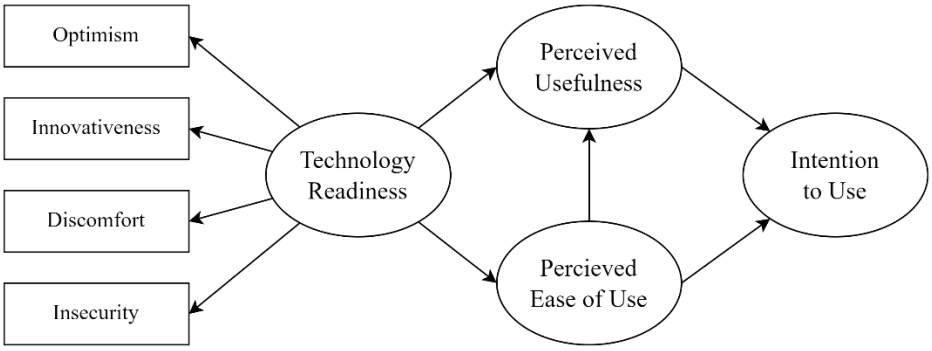

Fig 1. Technology Readiness And Acceptance Model

II. RESEARCH METHOD

Quantitative methods have been used to complete the hypotheses proposed in this research. Review studies based on previous research have been carried out to develop conceptual models and hypotheses. This research finally examines several problems related to the intention to use small and medium-scale organizations to adopt new information technology in the new normal era. SEM (Structural Equation Model) as a multivariate analysis technique that combines factor analysis and regression analysis (correlation), has been used to examine the relationship between the variables proposed in this conceptual research model (see Figure 2) [16].

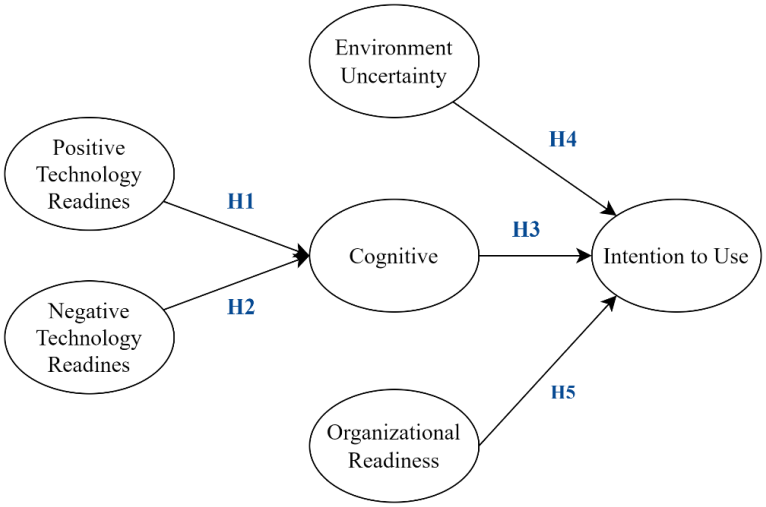

Fig 2. Conceptual Model

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TRAM examines the influence of inhibiting and contributing factors [17]. This research uses inhibiting and contributing to measure user readiness in adopting new technology. Contributors as positive technology readiness are dimensions of optimism and innovation that increase readiness to adopt new information technologies. Inhibitor as negative technology readiness is a dimension of discomfort and insecurity that increases readiness to adopt new information technology. Previous research has concluded that positive and negative technology influence cognitive factors i.e. Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) [17],[18]. Previous studies have concluded that technological readiness, i.e. negative or positive technology, influences perceived usefulness [18]. Based on this explanation, this research produces Hypothesis 1 "Positive Technology Readiness (PTR) makes an impact on Cognitive (CG) factors". Hypothesis 2 "Negative Technology Readiness (NTR) makes an impact on Cognitive (CG) factors".

The variables Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are cognitive factors in TRAM to understand better the psychological processes of users involved in technology acceptance as complex variables that influence the success of information technology adoption. PU and PEOU are individual factors that believe when technology is considered useful and easy to use, there will be an interest and will affect the intention to use [18],[19]. Based on this explanation, this research produces hypothesis 3 "Cognitive (CG) factors make an impact on Intention to Use (IU)".

Environmental uncertainty due to the COVID-19 pandemic is a problematic situation for managers to understand making decisions or taking actions effectively [20]. The environmental uncertainty in this study is the negative impact of COVID-19. This case is unique in that it spread worldwide and created an uncertain global environmental problem. The government immediately responded by developing a policy strategy to support health facilities, the economic sector, and social safety nets during a pandemic. These important government policies and programs must be carried out even after a post-pandemic or in a 'new normal' situation with the support of information technology innovation adopted by small and medium-scale organizations. Currently, environmental uncertainty influences the intention to use. Previous research examined the intention to use information technology in an uncertain business environment due to the COVID-19 pandemic. It can be concluded that the intention to use is influenced by the environmental context [3]. Based on this explanation, this research produces hypothesis 4 "Environment Uncertainty (EU) makes an impact on Intention to Use (IU)".

Measurement of organizational readiness conducted by previous research concluded that almost 90% of organizations are considered less ready to adopt digital innovation [18]. If the organization is ready to adopt information technology, it will affect Intention to Use. Based on

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this explanation, this research produces hypothesis 5 “Organizational Readiness (OR) makes an impact on Behavioral Intention to Use. (BIU)”.

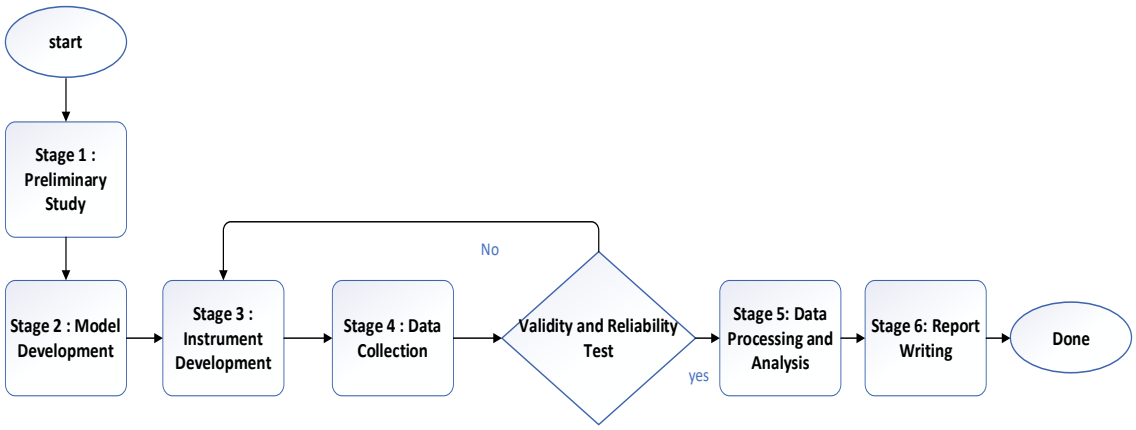

Fig 3. Research Design

The flow of research that has been done consists of six stages. The first is a preliminary study as an initial stage to analyze the main problems underlying research development's importance. This stage also aims to prepare a conceptual framework that is used as a reference for conducting further studies. The second stage is model development in the form of compiling a conceptual model based on previous research to generate a hypothesis for analysis. The third stage is instrument development which is distributed to respondents. The fourth stage is online data collection. At the data collection stage, validity and reliability tests were carried out. The research can proceed to the next stage if the data is valid and reliable. But if the data is invalid and unreliable, then the research stage returns to stage 3, namely instrument development. The fifth stage is data processing and analysis using SEM. And in the sixth or final stage is report writing (see Figure 3).

Referring to the conceptual model (see Figure 2) that has been proposed, several measurement variables have also been determined as indicators. This research used six variables and sixteen indicators to determine the relationship between variables.

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Table 1. List of Variables and Indicators

List of Variables and Indicators			
	Variables	***Indicator Variables***	***References***
1.	Positive Technology Readiness.	Optimism, innovativeness.	[15]
2.	Negative Technology Readiness.	Discomfort, insecurity.	[15]
3.	Cognitive.	Perceived usefulness, perceived ease of use.	[18] ,[19], [21],[22]
4.	Environment Uncertainty.	Ambiguity aspects, risk perception.	[3],[23],[20], [24]
5.	Organizational Readiness.	Strategic, cultural, business partnerships, IT infrastructure, and resources.	[3],[19]
6.	Intention to Use.	Plan to use, intensity, loyalty.	[17],[21]

To obtain research data, a questionnaire has been developed based on variable constituent indicators based on the TRAM conceptual model which has been modified to answer the research objectives.

Table 2. Positive Technology Readiness Statements

Positive Technology Readiness Statements	
Code of Variable Constituent Indicators	***Statements***
PTR1	I believe that an open-source ERP system as information technology is a key success factor for small and medium-scale companies in facing business competition.
PTR2	I was the first individual to use an open-source ERP system as a new technology in the organization.

Positive Technology Readiness (PTR) is a measuring tool to determine positive perceptions or acceptance of new open-source ERP systems in small and medium-scale organizations. The perception is assessed based on two indicators, optimism and innovation. Optimism is the attitude of users who always see opportunities or the good side of open-source ERP systems. Users tend to see Open-source ERP systems as one of the key success factors of an organization because it will have a good impact on efficiency, productivity, integration of internal processes, etc. Innovativeness is a category of technology adopters. In this research, innovativeness is the level

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where an individual as a user in an organization is relatively earlier in adopting open-source ERP systems as a new information technology than other members.

Table 3. Negative Technology Readiness Statements

Negative Technology Readiness Statements	
Code of Variable Constituent Indicators	***Statements***
NTR1	I feel uncomfortable and pessimistic about using an open-source ERP system because the new technology tends to be complex, and my perception may conclude that the technology is difficult to use.
NTR2	I have a feeling of insecurity about open-source ERP systems, so I tend to avoid adopting these technologies and will not try to find out or try new open-source ERP systems unless it is a must to use.

Negative Technology Readiness (NTR) is a measuring tool to determine the perception or resistance to the adoption of a new open-source ERP system in small and medium-scale organizations. This perception is assessed based on two indicators, such as discomfort and insecurity. Discomfort indicates a user's lack of technical mastery of the open-source ERP system as a new technology, resulting in a feeling of insecurity in using and choosing to use technology. Users sometimes need help in operating new technology and tend to choose simple technology. Insecurity refers more to distrust of technology-based transactions, namely open-source ERP systems, and doubts about the working ability of these technologies.

Table 4. Cognitive Statements

Cognitive Statements	
Code of Variable Constituent Indicators	***Statements***
CG1	I feel the benefits of using an open-source ERP system, it can help improve my performance as a user.
CG2	I think that an open-source ERP system is flexible, easy to learn, easy to use, and can control work.

Cognitive factors are mental activities that make users able to connect, assess, and consider adopting a new open-source ERP system in the organization. Cognitive factors are assessed based on two indicators, i.e.: perceived usefulness and perceived ease of use. Perceived usefulness is a level where the user believes that using an open-source ERP system will be able to help improve the performance of the individual. The perceived ease of use of an open-source ERP system

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results in less effort and fewer resources to operate the technology because it is easy to deploy in a small and medium-scale organization (i.e.: flexible, easy to learn, easy to use, and can control work) [18], [19],[21],[22].

Table 5. Environment Uncertainty Statements

Environment Uncertainty Statements	
Code of Variable Constituent Indicators	***Statements***
EU1	I think that if the COVID-19 pandemic causes increasing aspect of ambiguity in the business situation, it is difficult for my organizations to predict not to use or adopt open-source ERP system that is suitable for small and medium-scale organization situations.
EU2	I consider risk perception, such as business loss and loss of organizational data before adopting an open-source ERP system in an uncertain environment.

The COVID-19 pandemic has created high uncertainty in the business environment, including for small and medium-scale organizations. This phenomenon has caused individuals within the organization to have limitations in assessing perceived risks based on ambiguity in adopting an open-source ERP system. When in a situation full of uncertainty, small and medium-scale organizations must pay attention to ambiguity and perceived risk [3],[23],[20],[24].

Table 6. Organizational Readiness Statements

Organizational Readiness Statements	
Code of Variable Constituent Indicators	***Statements***
OR1	My organization has an IT portfolio so that IT innovation is aligned with the organization's strategic objectives.
OR2	All business areas in the organization where I work are open to various ideas for innovation which are reflected in the IT portfolio including the adoption of an open-source ERP system.
OR3	My organization collaborates with IT consultants, hardware and software vendors, and suppliers to support IT innovation (such as open-source ERP systems).
OR4	I think the organization has a stable, reliable, and up-to-date infrastructure to facilitate the adoption of open-source ERP systems.
OR5	My organization allocates financial, human, and IT infrastructure resources to innovate and adopt IT, such as open-source ERP systems to achieve business goals.

Organizational readiness is crucial for the successful adoption of open-source ERP systems. The adoption of information technology must be by the company's strategic allocation. To reduce

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the failure factor of information technology adoption, companies should pay attention to organizational readiness and have readiness in several factors, such as strategic, cultural, business partnerships, IT infrastructure, and resource factors [3],[19].

Table 7. Intention to Use Statements

Cognitive Statements	
Code of Variable Constituent Indicators	***Statements***
IU1	I plan to use open-source ERP systems to achieve the organization's business goals.
IU2	I will use open-source ERP systems more often to achieve my organization's business goals.
IU3	I will continue to use and recommend other small and medium-scale organizations to use open-source ERP systems in the future because they are very useful and increase business efficiency.

Intention to use is the behavioral tendency of users to adopt open-source ERP systems in this research. The level of use of open-source ERP systems in a person can be predicted by the user's attitude and attention to the technology. This action can be a plan of use, intensity, and loyalty [17],[21].

Based on the research design (see Figure 3), the next step after the development of the instrument is to collect the data. The population is MSMEs-scale organizations that have contributed to the regional economy in Indonesia and have used open-source ERP. However, there was no definite data or figures regarding open-source ERP users in the MSMEs sector when this research was carried out. The population of open-source ERP users in the MSMEs sector is not known with certainty. To achieve the research objectives, the sampling used is non-probability sampling with an accidental sampling technique. Non-probability sampling has been used because the sampling technique does not provide equal opportunities for each element or member of the population to be selected as a sample [25]. On the other hand, the accidental sampling technique has been used because the sampling technique is based on coincidence, anyone who incidentally meets the researcher can be used as a sample, if deemed suitable as a data source [26].

The sample size in this study uses the Lemeshow formula because the population of the MSMEs sector is no definite data [27][28]. The Lemeshow formula determines the minimum number of samples required (n). To calculate how many samples required a standard value of distribution i.e., $\alpha = 5\% = 1.96$ ($Z\alpha$), the prevalence of outcome in this research used 50% because

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data has not been obtained (P), and an accuracy level of 10% (L). Based on the calculation, the minimum number (n) of samples required is 96 respondents.

Table 8. Five Point Likert Scale

Point	Explanation of Points
5	Totally Agree
4	Agree
3	Neutral
2	Don't agree
1	Strongly disagree

The questionnaire survey in this research was disseminated indirectly or online using Google Forms to obtain primary data based five-point Likert Scale, see Table 8 [29]. This study aims to identify the factors that influence user intention of open-source ERP in the MSMEs (see conceptual research model in Figure 2). Respondents as a sample in this research were limited to the MSMEs in East Java Province. To measure the level of agreement about Positive Technology Readiness, Negative Technology Readiness, Cognitive, Environment Uncertainty, Organizational Readiness, and Intention to Use, questionnaires have been distributed for five months, from April to August 2022. Of all the questionnaires distributed, they were classified as valid, so this research used 420 respondents who had been processed and analyzed using the PLS-SEM method.

III. RESULT AND DISCUSSION

In this research, organizations classified as large, medium, or small have different standards. In the research that has been done, the size of the organization refers to the regulations of the Badan Pusat Statistik (BPS), which defines an organization based on the quantity of its workforce. Small organizations are businesses with a workforce of five to nineteen people. In comparison, medium-sized organizations are business entities with 20 to 99 people. If more than this number, they are classified as large organizations [30]. The classification of respondents in this research is known in Table 9.

Table 9. Organization Classification Respondents

Organization Classification Respondents		
Classification of Respondents	***Respondents***	***Percent of Respondents***
Small (5–19)	84	20%
Medium (20-99)	336	80%
Large (>99)	0	0
Total	**420**	**100%**

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Small-scale organizations have become respondents as much as 20% and medium-scale organizations have become respondents as much as 80%. It was concluded that the largest number of respondents based on organizational scale were medium-scale organizations.

Table 10. Subsectors of Business Respondent Organizations

Subsectors of Business Respondents Organizations		
Organizations of Business Respondents	***Respondents***	***Percent of Respondents***
Agricultural	76	18%
Fishery	101	24%
Fashion	42	10%
Handicraft's	92	22%
Culinary	109	26%
Total	**420**	**100%**

Respondent demographics were also categorized based on the organization's business sub-sector (see Table 10). This research uses the agricultural, fishery, fashion, handicraft, and culinary business sectors, which businesspeople in some towns mostly carry out. Table 3 explains the percentage of respondents based on the previous questionnaire. Obtained if the culinary sector is the largest respondent by 26% and the fashion sector is the least respondent by 10%. The demographics of other respondents, respondents in the agricultural sector were 18%, respondents in the fishery sector were 24%, and the handicrafts sector were 22%.

Other demographic data of respondents that have been carried out is the distribution of small and medium-scale organizations based on cities or districts spread across East Java. There are eleven cities and districts that have become respondents and collected 420 research data (see Table 11).

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Table 11. Subsectors of cities

Subsectors of Cities		
Cities of Respondents	***Respondents***	***Percent of Respondents***
1. Malang	91	22%
2. Pasuruan	7	8%
3. Sidoarjo	28	2%
4. Surabaya	73	7%
5. Lamongan	78	17%
6. Banyuwangi	12	19%
7. Mojokerto	35	3%
8. Tuban	26	8%
9. Kediri	5	6%
10. Bojonegoro	9	1%
11. Jember	21	2%
Total	**420**	**100%**

In Table 11, it has been described that Malang is the largest number of respondents, 91. In second place is Lamongan district with 78 respondents. In third place is the city of Surabaya with 73 respondents. In fourth place are Gresik and Mojokerto districts with 35 respondents. In fifth place is Sidoarjo with 28 respondents. In sixth place is Tuban with 26 respondents. In seventh place is Jember with 21 respondents. In the eighth rank is Banyuwangi with 12 respondents. In ninth place is Bojonegoro with 9 respondents. The tenth rank is Pasuruan with 7 respondents. And in the last or eleventh rank is Kediri with 5 respondents.

Table 12. SUBSECTORS OF EXPERIENCE

Subsectors of Experience		
Organizations with of years' Experience	***Respondents***	***Percent of Respondents***
Below 5 years	63	15%
5-10 years	147	35%
10 – 20 years	126	30%
Above 20 years	84	20%
Total	**420**	**100%**

Finally, the demographic data of the respondents used in this research is organizations of years' experience (see Table 12). Organizational experience of 5-10 years was the largest number of respondents, followed by an organizational experience of 10-20 years, organizational experience of over 20 years, and organizational experience of under 5 years.

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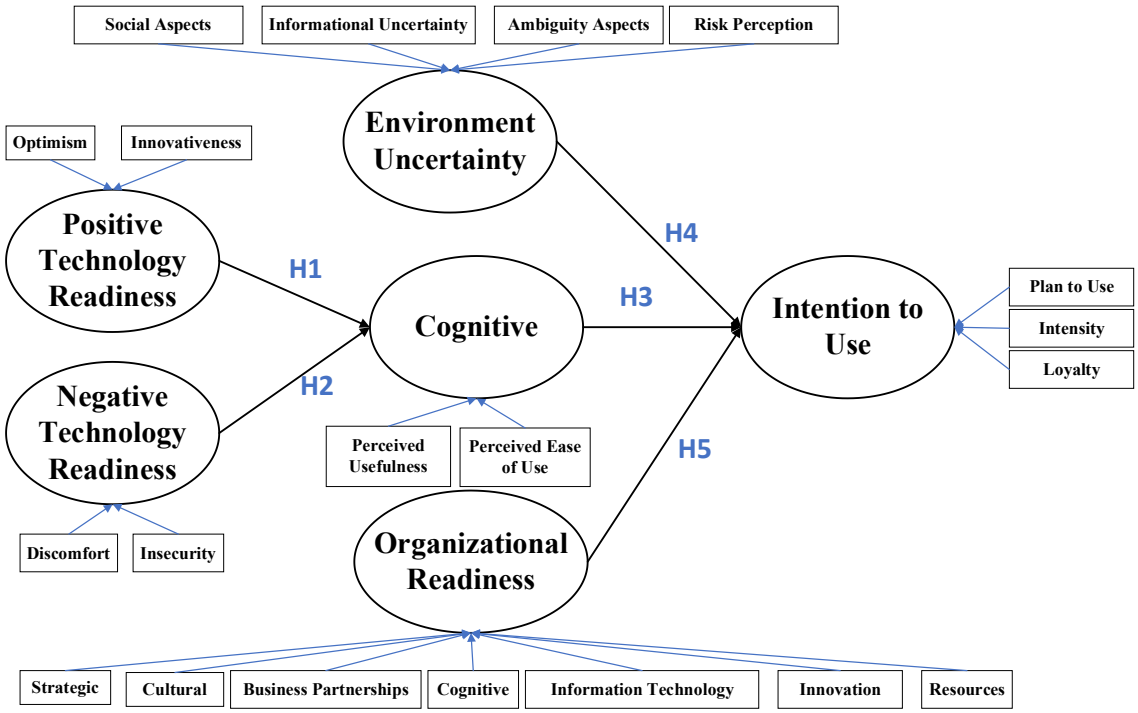

Fig 4. Constructing Conceptual Model Research Design

In explaining the conceptual models, variables, and indicators that have been presented (see Figure 2 and Table 1), this study proposes a constructive research design that has been developed based on a formative measurement model (see Figure 4). The formative measurement model is a condition where indicators form latent variables. Under these conditions, indicators seem to influence latent variables. If one indicator changes, it is not always followed by a change in other indicators in one construct, but it still results in a change in the meaning of the latent variable [16].

PLS-SEM has been chosen in this research because it is adjusted to the problem formulation, hypothesis, and conceptual model. PLS-SEM is not only limited to research indicators but is also used for formative relationships that contrast the relationship between variables in causal (cause and effect) research. In addition, PLS-SEM can solve very complex models with many variables without experiencing problems regarding model estimation. The PLS-SEM method has a structural model (Outer Model and Inner Model) with Path Analysis to prove the truth of the hypothesis [16].

After distributing the online questionnaires, the next step was to test convergent validity, discriminant validity, and composite reliability. Six variables and five hypotheses are proposed to be analyzed in this research. Convergent validity test to determine the correlation between indicators and their constructs (loading factor). The requirement for all indicators to be valid is

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that the Loading Factor score is > 0,7. Composite Reliability ensures that each instrument is consistent or reliable based on Composite Reliability (≥ 0,7), Cronbach's Alpha (≥ 0,6), and Average Variance Extracted (≥ 0,5) [16]. The results of testing the 420 data that had been carried out of convergent validity and composite reliability in this research found that all variables passed the test (see Table 13).

Table 13. Convergent Validity and Reliability Test Results

Convergent Validity and Reliability Test Results			
Variables	***AVE***	***Composite Reliability Cronbach's***	***Cronbach's Alpha***
Positive Technology Readiness.	0,909	0,932	0,734
Negative Technology Readiness.	0,888	0,918	0,692
Cognitive.	1,000	1,000	1,000
Environment Uncertainty.	1,000	1,000	1,000
Organizational Readiness.	0,881	0,926	0,808
Intention to Use.	0,891	0,925	0,756

Discriminant validity compares each Square Root of Average Variance Extracted (AVE) on Cross Loading where the constructed value formed for each variable must be greater than the constructed value of the other variables. Testing the 420 data out of discriminant validity in this research found that all variables passed the test (see Table 14).

Table 14. Discriminant validity test results

Discriminant Validity Test Results						
Variables	***PTR***	***NTR***	***CG***	***EU***	***OR***	***IU***
Positive Technology Readiness.	0,881					
Negative Technology Readiness.	0,588	0,723				
Cognitive.	0.057	0.146	1,000			
Environment Uncertainty.	0,227	0,019	0,037	1,000		
Organizational Readiness.	0,761	0,997	0,191	0,049	0,805	
Intention to Use.	0,596	0,879	0,177	0,078	0,035	0,835

Hypothesis testing has been carried out to discover the model's conceptual truth and prove the relationship between variables. The conceptual model in this research (see Figure 2) includes dependent, independent, and intervening variables. Intention to use is a dependent variable that has been influenced by independent variables, i.e., positive technology readiness, negative technology readiness, environment uncertainty, and organizational readiness. The cognitive factor

ISSN: 2580-409X (Print) / 2549-6824 (Online)
DOI: https://doi.org/10.29407/intensif.v7i2.19330

is an intervening variable that makes an indirect relationship between positive technology readiness and negative technology readiness variables on intention to use variables.

Based on the SEM analysis that has been carried out, it is known that the research hypothesis is accepted or rejected based on the Path Coefficient results in Table 15. The hypothesis is accepted if the p-value <0,05 indicates a significant effect. The hypothesis is rejected if the p-value > 0,05 indicates no significant effect. The results of this research prove that positive and negative technology readiness significantly affect perceived usability with a p-value of 0,00 (<0,05). Perceived usefulness significantly affects behavioral intention to use with a p-value of 0,00 (<0,05). Organizational readiness significantly affects behavioral intention to use with a p-value of 0,00 (<0,05). Environmental uncertainty significantly affects behavioral intention to use, with a p-value of 0,00 (<0,05). From all these results it can be concluded that H1, H2, H3, H4, and H5 are accepted.

Table 15. Path Coefficient Results

Convergent Validity and Reliability Test Results		
Hypothesis	***P Values***	***Conclusion***
H1: Positive Technology Readiness → Cognitive.	0,000	Accepted
H2: Negative Technology Readiness → Cognitive.	0,000	Accepted
H3: Cognitive → Intention to Use.	0,000	Accepted
H4: Environment Uncertainty → Intention to Use.	0,000	Accepted
H5: Organizational Readiness → Intention to Use.	0,000	Accepted

The result is that factors that influence the intention to use an open-source ERP system in the new normal era i.e., positive technology readiness, negative technology readiness, cognitive, environmental, and organizational readiness. Testing the hypothesis on the Path Coefficient that has been carried out results in an analysis that there is a positive relationship between positive and negative technology readiness variables on cognitive variables. These findings are like several previous studies (e.g.: [17],[18]). The significant influence that has occurred is also found in the relationship between cognition and intention to use. These findings are from several previous studies (e.g.: [18],[21],[19]). A similar significant effect has also occurred in the relationship between organizational readiness variables on intention to use. These findings are from several previous studies (e.g.: [18],[19]). On the other hand, the environment uncertainty variable has a significant impact on the intention to use. These findings are from several previous studies (e.g.: [3],[20]).

ISSN: 2580-409X (Print) / 2549-6824 (Online)
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IV. CONCLUSION

This study confirms that the conceptual model as well as the five hypotheses previously proposed are fully accepted or proven. So that the relevance in the development and implementation of open-source ERP systems in the new normal era can focus more on the factors that influence the intention to use small to medium-scale organizations to adopt open-source ERP systems in the new normal era. Some of these factors are positive technology readiness, negative technology readiness, cognitive, environmental uncertainty, and organizational readiness.

There are some limitations of this research. The first is related to the demographic data of the respondents used. Further research is proposed to focus on cities or regencies that contribute to East Java's economy (i.e.: Malang, Gresik, Pasuruan, Sidoarjo, Surabaya, etc.). Second, this research used scale organization based on the number of human resources. Further research is proposed to classify organizational scale based on the number of assets or assets owned. Third, research related to factors that influence behavioral intentions that have been carried out in this study can be developed in subsequent research or supplemented with other phenomena to produce new conceptual models. Fourth, this research has been completed using quantitative methods, so the next research is proposed to use qualitative methods to generate in-depth understanding, develop theory, and describe the reality and complexity that represents IT Readiness in the digital era and the new normal in today's small to medium scale organizations.

ACKNOWLEDGMENTS

The author would like the acknowledgment for the financial support that has been provided by the Institute for Research and Community Service (LPPM) Telkom Surabaya Institute of Technology (IT) Telkom Surabaya). Acknowledgments also for the willingness of respondents in several MSME sectors so that the data that has been provided can be processed according to the method and contribute to the development of science and technology.

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