P-ISSN: 2088-9372 E-ISSN: 2527-8991

Jurnal Manajemen dan Organisasi (JMO),
Vol. 15 No. 1, Maret 2024, Hal. 21-37
DOI: 10.29244/jmo.v15i1.50298

Factors of Increasing Intention to Use Information Systems

Faktor-Faktor yang Meningkatkan Penggunaan Sistem Informasi

Siswanto*
Universitas Esa Unggul Jl. Arjuna Utara No.9, Duri Kepa, Kec. Kb. Jeruk, Kota Jakarta Barat
E-mail: siswanto@student.esaunggul.ac.id
Rokiah Kusumapradja
Universitas Esa Unggul Jl. Arjuna Utara No.9, Duri Kepa, Kec. Kb. Jeruk, Kota Jakarta Barat
E-mail: rokiah.kusumapradja@esaunggul.ac.id

ABSTRAK

Penelitian ini dilandaskan pada informasi dari divisi IT tentang tidak terlaksananya implementasi sejak penggunaan SIRS di RSU Bhakti Asih dimulai tahun 2005 sampai dengan tahun 2022 yang telah berganti sebanyak tiga kali dan pencapaian implementasi untuk ketiga SIRS tersebut tidak ada yang pernah mencapai 100 persen. Tujuan penelitian ini adalah untuk mengungkap secara empiris pengaruh pelatihan dan utilitas terhadap intensi menggunakan SIRS dengan motivasi kerja sebagai variabel mediasi. Jenis penelitian termasuk dalam kuantitatif dengan disain kausalitas. Populasi yang digunakan adalah tenaga kesehatan yang terdiri dari perawat rawat jalan, perawat rawat inap, perawat IGD, bagian farmasi, bagian laboratorium dan bagian radiologi. Teknik sampel menggunakan proporsional sampling, dengan perhitungan menggunakan rumus slovin dengan tingkat kesalahan 5 persen, sehingga ditentukan jumlah sampel sebesar 175 responden. Teknik analisa pengungpulan data menggunakan metode survei, dan teknik analisa data menggunakn SEM denan bantuan program Lisrel serta analisa *three box method*. Hasil analisa membuktikan pelatihan dan utilitas berpengaruh terhadap intensi menggunakan SIRS dengan motivasi kerja sebagai pemediasi, pelatihan berpengaruh terhadap utilitas, pelatihan dan utilitas berpengaruh terhadap motivasi kerja dan intensi menggunakan SIRS, serta motivasi kerja berpengaruh terhadap intensi menggunakan SIRS dan juga mampu memberikan intervensi positif pada pengaruh pelatihan dan utilitas terhadap intensi menggunakan SIRS, sehingga dengan adanya motivasi kerja, maka efektivitas pelatihan dan utilitas akan lebih tinggi dalam meningkatkan intensi menggunakan SIRS.

Kata kunci: Pelatihan, utilitas, motivasi kerja, intensi menggunakan, SIRS.

ABSTRACT

This research is based on information from the IT division regarding non-performance of implementation since the use of HIS at RSU Bhakti Asih began in 2005 until 2022, which has changed three times and none of the implementation achievements for the three HIS have ever reached 100 percent. The aim of this research is to empirically reveal the influence of training and utility on intention to use HIS with work motivation as a mediating variable. This type of research is quantitative with a causality design. The population used is health workers consisting of outpatient nurses, inpatient nurses, emergency room nurses, pharmacy departments, laboratory departments and radiology departments. The sampling technique used proportional sampling, with calculations using the Slovin formula with an error rate of 5 percent, so that the sample size was determined to be 175 respondents. Data collection analysis techniques use survey methods, and data analysis techniques use SEM with the help of the Lisrel program and three box method analysis. The results of the analysis prove that training and utility influence the intention to use HIS with work motivation as a mediator, training influences utility, training and utility influence work motivation and intention to use HIS, and work motivation influences intention to use HIS and is also able to provide positive intervention on the influence training and utility on intentions to use HIS, so that with work motivation, the effectiveness of training and utility will be higher in increasing intentions to use HIS.

***Keywords**: Training, utility, work motivation, intention to use, HIS.*

Corresponding author

INTRODUCTION

The study of individual intentions towards an object is interesting, so Fishbein & Ajzen in 1980 revealed it through the theory of reasoned (TRA) which aims to explain the relationship between attitudes and subjective human norms in determining their interests. TRA is a theory that explains a behavior is carried out because individuals have the will or intention to carry out related activities to be carried out on their own volition. Intention to use is a condition in which individuals determine their interest in an object and carry out further reactions to that object (Ajzen, 2005), and intention to use is a motivation that drives individuals to do what they want (Robbins & Judge, 2017). Individual interest in using management information systems is related to the technology acceptance model (TAM) which is an extension and adaptation of the theory of reasoned action, in which the TAM states that the five basic elements that underlie individual acceptance of information technology are perceived usefulness, perceived convenience, attitude in use, behavior to continue to use and actual conditions of use of the system (Davis *et al*., 2023).

The development of the times and the current era of digitalization forces a situation to accept a technology-based management information system as a source of accurate information for the smooth operation of an organization (Calderon-Monge & Ribeiro-Soriano, 2023), The hospital is no exception as an organization that serves health, a technology-based management information system is implemented to support quality service for patients (Mohammadpour *et al*., 2021), but various obstacles experienced by hospital management in influencing the intention of its health workers to use the hospital management information system (Ljubicic *et al*., 2020), the training factor is one of the determinants of the intention of users of hospital information systems (Febrita *et al*., 2021), utility determines individual interest in using a hospital management information system (Gani *et al*., 2023), as well as the main driving force in increasing interest in using management information systems is work motivation (Kuo *et al*., 2018), and intention to use based on aspects of subjective norms and objective norms (Chaveesuk *et al*., 2022).

Training is a form of organizational support that seeks to equip its employees to add knowledge and skills that are useful to support their broad field of work (Dessler, 2016), In training, efforts are made to introduce ways to understand and solve any problems related to aspects of work (Mondy & Mondy, 2014), then by providing training on effective management information systems will foster a perception of usability (Zaman *et al*., 2021), the important role of training will be to encourage individuals to determine their concern for their field of work (Ozkeser, 2019), as well as with effective training will foster individual interest in using the information system (Ashraf *et al*., 2022), and effective training depends on materials, methods, instructors, participants and evaluation (EL Hajjar & Alkhanaizi, 2018).

Utility is an individual's perception of the usefulness or usefulness of using technology which will show the degree to which individuals believe that the use of certain technologies will increase performance (Davis *et al*., 2023), utility can measure the level of individual satisfaction for the perceived benefits of using technology (Kruger *et al*., 2020), the perception of usability that exists in the minds of individuals will encourage them to maximize the function of management information systems as a support for their field of work (Atinga *et al*., 2020), individual perceptions of the usefulness of management information systems will increase their intention to use them (Boon-itt, 2019), and information system utilities are formed based on individual

Jurnal Manajemen dan Organisasi (JMO),
Vol. 15 No. 1,
Maret 2024,
Hal. 21-37

assumptions about facilitating work, increasing productivity, increasing effectiveness and increasing performance (Welchen *et al*., 2022).

A theory of work motivation was put forward by Federick Irving Herzberg in 1959 who argued that work motivation is an individual's desire to do work that is based on intrinsic and extrinsic factors. (Alrawahi *et al*., 2020), Intrinsic factors are based on the individual's will and need for an achievement (Manzoor *et al*., 2021), while extrinsic factors are based on the individual's work environment and all aspects of work related to it (Koziol & Koziol, 2020), Work motivation is present as an individual basis for determining his attitude towards his work and causing an action (Forson *et al*., 2021), work motivation encourages individual interest in using management information systems to support their work activities (Ljubicic *et al*., 2020), and work motivation underlies every individual's interest in using technology-based information systems (Bastari *et al*., 2020).

The problem experienced by a private hospital in Ciledug Tangerang is regarding the intention to use a hospital management information system which was implemented since 2005, based on a preliminary survey in April 2023 to the IT department, it was informed that until now the information system used had changed as many as 3 times, but its usage has not reached 100 percent as expected by the organization. Some of the problems that occur due to the not optimal use of hospital management information systems are, there is often a vacancy in drug stocks and medicinal raw materials in pharmaceutical installations, incompatibility of inpatient room availability data with realization, and the patient's medical record data is confused, causing errors in medical procedures. Based on these problems, it appears that health workers are not maximizing the use of hospital management information systems as a source of accurate information which will avoid poor quality services for patients, because management information systems are a trusted source of information and inform data in real time (Sanjuluca *et al*., 2022) and management information systems prevent errors in patient medical handlers (Arora & Ikbal, 2023).

Based on this information, discussions were held with several health workers at the same time consisting of outpatient nurses, inpatient nurses, emergency room nurses, pharmacy, laboratory, and radiology departments. Discussions were held to examine whether prior to implementing the information system, management had provided training? The information put forward by the health workers was “training has been given by management for each information system program that is implemented, only the material provided during the training is general in nature, not specifically about the information system program that will be implemented at that time, so that when it is implemented, it is difficult to use it, besides that there is a long enough time lag between the application and the training time”.

Based on this information, it appears that there is an ineffectiveness of training as a form of organizational support that fosters perceptions of usefulness and motivates health workers to determine their interest in using the implemented hospital management information system. Referring to previous research, it is evident that training is an effort to foster perceptions of the usefulness of information systems (Zaman *et al*., 2021), in training it is stated about the main benefits of the information system, so that individuals can find out the usefulness of the system (Arora & Ikbal, 2023), training is a source of work motivation for individuals (Apathy & Yeager, 2019), because with training, health workers will be more motivated to master the broad field of work (Ardita *et al*., 2019), In addition, training determines the intention of health

workers to use management information systems to support their work (Ljubicic *et al*., 2020), the importance of training will be the basis for determining the interest of health workers in using management information systems (Aldosari *et al*., 2018) and the creation of effective management information system training will increase the intention of health workers to use it (Lulin *et al.*, 2020), so that from this description it can be predicted that training has an influence on utility, work motivation and intention to use a hospital management information system.

Follow-up discussions were held to examine the problem of not achieving the target of optimizing the use of management information systems up to 100 percent in each work unit, starting from 2005 until now. All health workers involved in the discussion stated that "the current program is indeed better in terms of sophistication and its features are complete, but for the first and second generation management information systems that were implemented, it hampered our work a lot, because it was difficult to use, the features are incomplete and the problems with the first and second generation information systems that are most felt are difficulties to access and the resulting output is incomplete, thus hindering work operations, for example in the first and second generations the sophistication and completeness of features like this third generation, maybe at the end of the year 2022 has reached its optimization of up to 100 percent".

The information obtained illustrates the problem of the utility of an information system that should provide benefits and uses to facilitate the operational activities of health workers in providing professional services for patients, and it has been proven through relevant research that the utility of information systems perceived by health workers will motivate them to more professional at work (Atinga *et al*., 2020), the perceived usefulness value felt by health workers towards management information systems, becomes an encouragement to be more professional at work (Ngusie *et al*., 2022) and utilities that make the work of health workers easier, a strong incentive for them to be more professional at work (Ljubicic *et al*., 2020). From this description it becomes a prediction that utility or perceived usefulness will have an impact on increasing work motivation.

In addition, it is empirically proven that utility is one of the factors that influence the intention of health workers to use management information systems in supporting services to patients (Boon-Itt, 2019), positive perception of the utility of the management information system, increasing the intention of health workers to use it in services for patients (Ahmed *et al*., 2020) and the perception of the utility of HIS will spur the intensity of health workers to maximize their use (Sun *et al*., 2019). From this description it becomes a prediction that utility or perceived usefulness has an impact on increasing the intention of health workers to use management information systems.

Two problems raised by health workers regarding hospital management information systems imply problems regarding work motivation, where nurses feel that the training, they receive has not achieved effectiveness or suitability of goals with the benefits of the training they have received and health workers feel there are difficulties in using the hospital management information system. in the first and second generations so that in each work unit optimization of the use of information systems has not been achieved in accordance with organizational expectations, these two problems indicate problems of work motivation towards use intentions, referring to previous research, it was revealed empirically that work motivation is an individual's desire to do work based on by intrinsic and extrinsic factors (Alrawahi *et al*., 2020), Work

motivation is present as an individual basis for determining his attitude towards his work and causing an action (Forson *et al*., 2021), work motivation encourages individual interest in using management information systems to support their work activities (Ljubicic *et al*., 2020), work motivation underlies every individual's interest in using technology-based information systems (Bastari *et al*., 2020), and work motivation can increase the intensity of use (Kuo *et al*., 2018), so it is predicted that work motivation can increase the intention to use the hospital management information system, and can also intervene in the relationship between training and utility towards the intention to use the hospital management information system.

Based on the description above, it can be seen that several relevant studies have revealed the relationship between variables that influence the intensity of using information systems separately by the variables training, utility and work motivation, but none have combined them simultaneously to analyze the intensity of using hospital management information systems which is influenced by training. utility and work motivation, so that this research is a novelty that combines the variables of training, utility and work motivation on the intensity of using information systems. The failure to achieve the target of optimizing the use of management information systems from 2005 to the present, which has changed three times, is the basis for conducting a study that aims to empirically reveal the effect of training and work motivation on the intention to use information systems, with work motivation as an intervening variable., and according to the description above, several research hypotheses are formulated as follows:

H1 : Simultaneously training and utilities affect the intention to use a hospital management information system with work motivation as an intervening variable.
H2 : Management information system training has an effect on utility.
H3 : Management information system training influences work motivation.
H4 : Management information system utilities affect work motivation. Management information system utilities affect work motivation.
H5 : Training affects staff intention to use management information systems.
H6 : Utilities affect the intention to use management information systems.
H7 : Work motivation affects the employee's intention to use management information systems.

Frame Work

In accordance with the hypothesis that has been formulated, the following describes the conceptual framework as a research paradigm that connects the relationship between research variables:

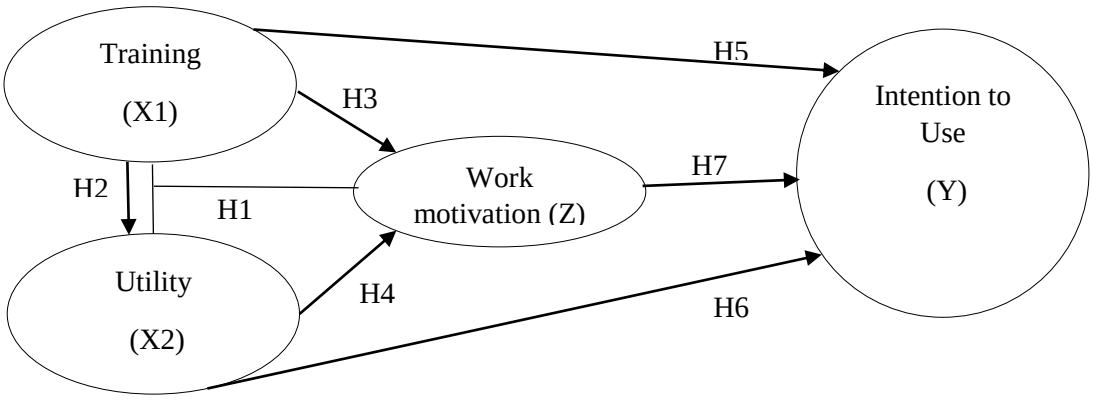

Figure 1. Research Constellation

Jurnal Manajemen dan Organisasi (JMO),
Vol. 15 No. 1,
Maret 2024,
Hal. 21-37

RESEARCH METHODS

Reserch Design

This research is a type of quantitative research using a causality design which attempts to reveal causal relationships between research variables. Because this research uses a quantitative, statistical approach, a survey method was used by distributing research questionnaires that were developed by ourselves based on measurement dimensions adopted from several relevant studies. Scoring is given using a Likert Type scale of 1 – 4 points.

Participants and Data Collection Techniques

This research was conducted at a private hospital located in Ciledug, Tangerang with a population of health workers consisting of outpatient nurses, inpatient nurses, emergency room nurses, pharmacy, laboratory and radiology departments totaling 306 with details of the number per each unit being outpatient nurses 32 (10 percent), inpatient nurses 187 (61 percent), emergency room nurses 33 (12 percent) , pharmacy department 32 (10 percent), laboratory 12 (4 percent), and radiology 10 (3 percent). The sampling technique uses proportional sampling and the sample size calculation uses the Slovin formula with an error rate of 5 percent, so that the sample size is 175 respondents, with the sample criteria having to meet the inclusion criteria and exclusion criteria, namely as follows: (1) Inclusion Criteria: Are health workers who served as outpatient nurse, inpatient nurse, emergency room nurse, pharmacy department, laboratory department and radiology department, using SIRS in work, willing to fill out questionnaires. (2) Exclusion Criteria: Health workers who are on leave or sick and do not return the questionnaire.

Instrument

The study consisted of two independent variables, namely training and utility, one dependent variable, namely intention to use, and one intervening variable, namely work motivation. The measurements were adopted from the aspects put forward by relevant research as follows: The training instrument was adopted from (EL Hajjar & Alkhanaizi, 2018), consists of aspects of material, methods, instructors, participants and evaluation which consists of 12 indicators. Utilities adopted from (Welchen *et al*., 2022) with aspects of facilitating work, increasing productivity, increasing effectiveness and increasing performance which consists of 8 indicators. Work motivation is adopted from the theory of two-factor motivation put forward by Herzberg with aspects of intrinsic and extrinsic factors consisting of 10 indicators. Intention to use adopted from (Chaveesuk *et al*., 2022) with aspects of subjective norms and objective norms consisting of eight indicators.

Data Analysis Technique

The pretest was carried out on 30 respondents outside the research sample using the product moment correlation technique and the reliability test using the Cronbach's alpha technique. The validity test concludes that each instrument has indicators that show $r_{count} > 0{,}361$, so that the training variables use 12 indicators, utility 8 indicators, work motivation 10 indicators, and intentions use 8 indicators. The reliability test uses the Cronbach's alpha technique, and shows that all instruments have a reliability value of > 0,70 so that the questionnaire can be continued for research. Descriptive statistical analysis refers to Ferdinand (2014) using the three box method approach to produce a scale range of 47,75 – 87,5: Low, 87,6 – 131,25: Medium and 131,26 – 1175: High.

Hypothesis testing using Structure Equation Modeling (SEM) with the help of the Lisrel program. The pretest used is the construct validity test with the assumption that if the loading factor is > 0,50 then the indicator is declared valid and the reliability of the construct is assuming that if CR ≥ 0,7 and VE ≥ 0,4 it means that the construct is reliable (Hair *et al*., 2014). Structural model fit test refers to the values of AGFI, CFI, GFI, IFI, RFI, NNFI, NFI with the assumption that if these values are ≥ 0,90 then the model is declared good fit, and refers to the probability value if < 0,000 and RSMEA < 0,08 then the model is declared good fit (Hair *et al*., 2014). The decision to accept the hypothesis with an error rate of 5 percent simultaneously refers to the probability value if <0,05 and partially refers to the tvalue > 1,96, indicating acceptance of the hypothesis (Hair *et al*., 2014).

RESULTS & DISCUSSION

Respondent Profile

Based on the results of a survey of 175 health workers, in the gender category the most were women with a percentage of 82 percent, the most age category was in the range > 25-35 years by 57 percent, the most recent education category with final diploma education was 63 percent and in the service period category highest in the range 1 - 5 years of 46 percent.

Description of Research Instruments

Table 1. Research Instrument Analysis Matrix

Variable	Average Index	Category			Dominant Aspect	Lowest Aspect
		L	M	H		
Training	148,7			*	Evaluation	Instructor
Utility	116,3		*		Increase productivity	Increase effectiveness
Work motivation	145,43			*	extrinsic factor	Intrinsic factor
Intention to Use	137,16			*	Objective norm	Subjective norm

Source: Processed primary data, 2023

The training variable is at a high level, referring to the opinion which states that training is a form of organizational support that seeks to equip its employees to increase knowledge and skills that are useful to support their broad field of work (Dessler, 2016), a high index level shows the behavior of skilled health workers in maximizing the use of hospital management information systems to support their work. The utility variable is at a moderate level, referring to the opinion which states that utility is an individual's perception of the usefulness or usefulness of using technology which will indicate the level at which individuals believe that the use of certain technologies will increase performance (Davis *et al*., 2023), the index level is moderate indicating the behavior of health workers fairly believing that the information system implemented at this time has usefulness value that helps their work. The variable of work motivation is at a high level, referring to the opinion which states that work motivation exists as an individual basis for determining his attitude towards his work and causing an action (Forson *et al*., 2021), a high index level shows the behavior of health workers who care about maximizing the use of information systems to support their work. The intention to use variable is at a high level, referring to the opinion that the intention to use is a motivation that encourages individuals to do what they want (Robbins & Judge, 2017), a high index level indicates the behavior of health workers who are motivated to maximize the use of management information systems to support their work.

Construct Validity and Reliability Test

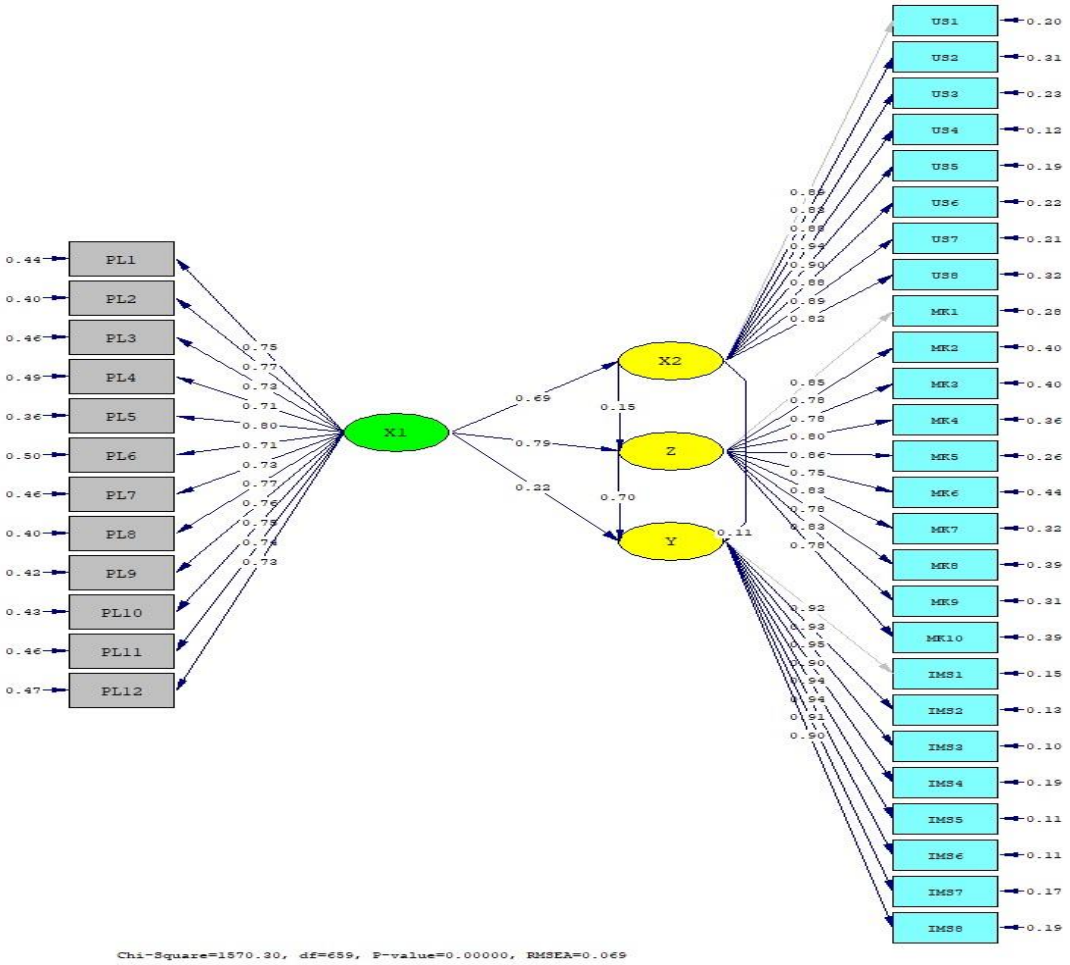

Figure 2. Results of Loading Factor Analysis
Source: Lisrel Output (2023)

Based on the figure, all indicators of the variables studied have a loading factor value greater than 0.5 so it can be concluded that all these indicators are valid. Then based on the results of the analysis of the variables also showed a CR value > 0,7 and a VE value 0,4 so it was concluded that the variables studied were reliable and could be continued at the next analysis stage.

Structural Model Fit Test

Table 2. Structural Model Fit Test Results

GoFI	Standard Value	Results	Conclusion
AGFI	≥ 0,90	0,97	Good fit
CFI	≥ 0,90	0,98	Good fit
GFI	≥ 0,90	0,91	Good fit
IFI	≥ 0,90	0,98	Good fit
RFI	≥ 0,90	0,96	Good fit
NNFI	≥ 0,90	0,98	Good fit
NFI	≥ 0,90	0,96	Good fit
Probability	< 0,05	0,000	Good fit
RMSEA	< 0,08	0,069	Good fit

Based on the Table 2 above, all indicators show good fit results, that is, the research model can be said to be Good Fit to measure the relationship between latent variables and observed variables.

Hypothesis Testing

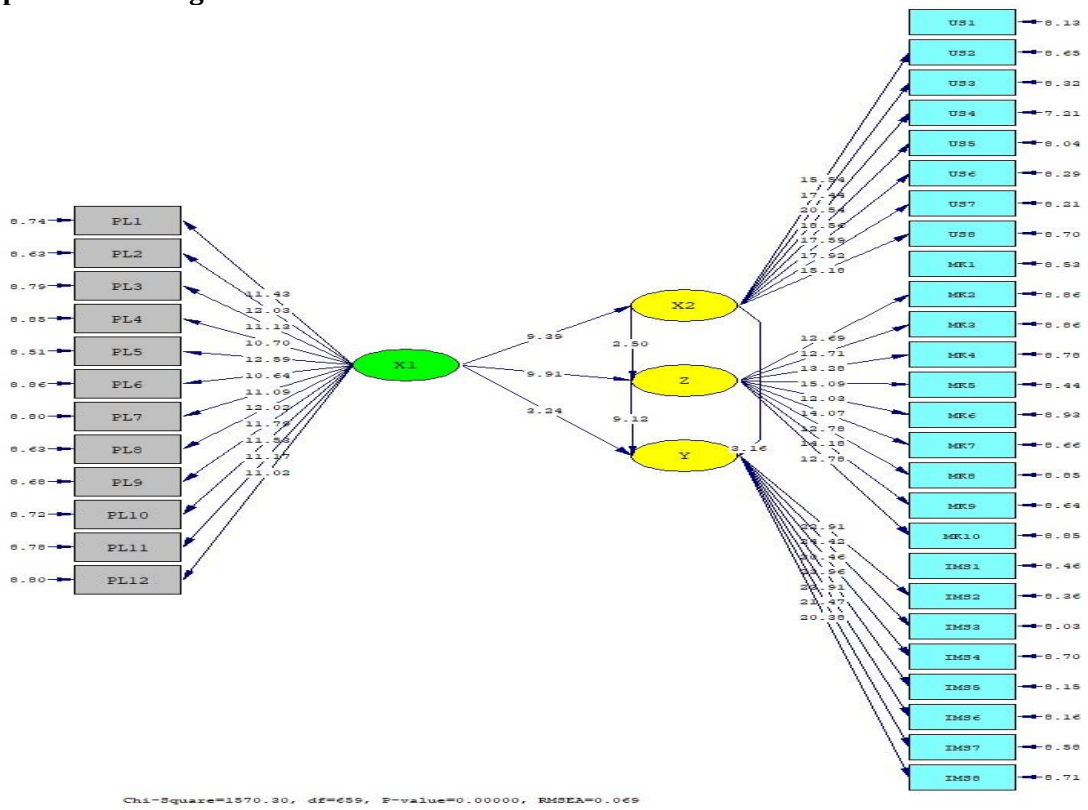

Figure 3. Path diagram of the Significance Test Model
Source: Lisrel Output, 2023

Table 3. Results of Direct Effect Analysis

Structure	Effect	Coefficient	R^2
Sub Structure 1	X1→X2	0,69	0,48
Sub Structure 2	X1→Z	0,79	0,81
	X2→Z	0,15	
Sub Structure 3	X1→Y	0,22	0,96
	X2→Y	0,11	
	Z→Y	0,70	

Source: Processed by researchers, 2023

Table 4. Results of Indirect and Total Effect Analysis

Effect	Indirect Effect	Total Effect
X1→Z→Y	0,55	0,77
X1→Z→Y	0,10	0,21

Source: Processed by researchers, 2023

In the analysis of sub structure 1 produces a direct effect equation function X2 = 0,69 (X1) and the value of the coefficient of determination shows a value of 0,48. These results explain that if training is increased by one unit, utility will increase by 0,69 through training, and training contributes 48 percent to increasing utility. In sub-structure analysis 2, the direct effect equation function is Z=0,79(X1)+0,15(X2) and the

coefficient of determination shows a value of 0,81. These results explain that if simultaneously training and utility are increased by one unit, then work motivation will increase by 0,79 through training and 0,15 through utility, and training and utility contribute 81 percent in increasing work motivation. In sub-structural analysis 3, the direct effect equation function is Y=0,22(X1)+0,11X2)+0,70(Z) and the coefficient of determination shows a value of 0,96. These results explain that if simultaneously training, utility and work motivation are increased by one unit, then the intention to use will increase by 0,22 through training, 0,11 through utility, and 0,70 through work motivation, as well as training, utility and work motivation contributed 96 percent in increasing the intention to use. In the indirect effect analysis, a path equation of 0,55(X1)+0,10(X2) was found. This equation explains that work motivation intervenes positively with the effect of training of 0,55 and utility of 0,10 on intention to use. The results of the total effect analysis found a path equation of 0,77(X1)+0,21(X2) which means that if there is work motivation, training and utility will increase the intention to use higher than without the mediating role of work motivation, where the intention to use will increase by 0,77 through training and 0,21 through utility.

Table 5. Summary of Hypothesis Testing

Hypothesis	P_{Value}	T_{Value}	Conclusion
X1, X2→Z→Y	0,000		**H1** Accepted
X1→X2		9,39	**H2** Accepted
X1→Z		9,91	**H3** Accepted
X2→Z		2,50	**H4** Accepted
X1→Y		3,24	**H5** Accepted
X2→Y		3,16	**H6** Accepted
Z→Y		9,12	**H7** Accepted

Source: Processed by researchers, 2023

The influence of training and utility on intention to use with work motivation as an intervening variable shows a p-value ratio of 0,000 < 0,05 compared to the opinion that if the probability value is < 0,05 then it is stated that there is a significant influence of the independent variable in influencing the dependent variable (Hair *et al*., 2014), then the results can be interpreted, if first through work motivation then training and utility have a significant influence on intention for use and falls into the H1 acceptance category. To prove the acceptance of the hypothesis, where the independent variable is able to influence the dependent variable significantly, refer to the opinion which states that if tcount > 1,96 then it is stated that there is a significant influence of the independent variable on the dependent variable (Hair *et al*., 2014), and the results of the analysis prove that the effect of training on utility shows a t-value ratio of 9,39 > 1,96, which means that training has a significant effect on utility, and is included in the H2 acceptance category. The effect of training on work motivation shows a t-value comparison of 9,91 > 1,96, which means that training has a significant effect on work motivation, and is included in the H3 acceptance category. The effect of utility on work motivation shows a t-value ratio of 2,50 > 1,96, which means that utility has a significant effect on work motivation, and is included in the acceptance category of H4. The effect of training on intention to use shows a t-value comparison of 3,24 > 1,96, which means that training has a significant effect on intention to use, and is included in the acceptance category of H5. The influence of utility on intention to use HIS shows a t-value ratio of 3,16 > 1,96, which means that utility has a significant effect on intention

to use, and is included in the acceptance category of H6. The influence of work motivation on intention to use shows a comparison of the t-value of 9,12 > 1,96, which means that work motivation has a significant effect on intention to use, and is included in the acceptance category H7.

Effect of Training and Utilities on Intention to Use with Work Motivation as Intervening Variable

The results of the analysis conclude that training and utility have an impact on increasing the intention to use, and when work motivation plays its role as an intervening variable, then training and utility have a greater effect on increasing the intention to use, so that with work motivation, training effectiveness and perceived utility value are perceived by health workers will be greater in increasing the intention of health workers to use the hospital management information system as a support for their work in the hospital. The important role of work motivation felt by health workers, makes the effectiveness of training and utility able to increase the intention to use hospital management information systems, this is due to the domination of extrinsic factors which are motivation based on the individual work environment and all aspects of work related to it (Koziol & Koziol, 2020), where health workers are encouraged to use information systems because they want to get appreciation from management, support the implementation of information systems, get fair compensation, get non-financial incentives and because of hospital management policies, thereby spurring health workers to maximize training outcomes and the value of using information systems as a basis His interest is in using a hospital management information system that will support his work.

The situation that occurs shows the view of health workers that their work must be supported by a hospital management information system so that it runs more effectively, as well as encouragement in the form of regulations that require health workers to use information systems compared to manually, this forces them to use information systems because they care. for effective health services and support organizational policies regarding the aims and objectives of implementing them in health services in hospitals, and this is in line with research which concludes that work motivation is an individual's desire to do work that is based on intrinsic and extrinsic factors (Alrawahi *et al*., 2020), Work motivation is present as an individual basis for determining his attitude towards his work and causing an action (Forson *et al*., 2021), work motivation encourages individual interest in using management information systems to support their work activities (Ljubicic *et al*., 2020), work motivation underlies every individual's interest in using technology-based information systems (Bastari *et al*., 2020), and work motivation can increase the intensity of use (Kuo *et al*., 2018).

Effect of Training on Utility

The results of the analysis conclude that training has the effect of increasing utility, so that by increasing the effectiveness of training, the perception of health workers on the usefulness of the hospital management information system can increase. These results reveal the problems raised by health workers in the preliminary discussion, where they felt that the training that had been given was not linear with the information system that was implemented at that time, thus making them less aware of the usefulness of the management information system that was implemented, and this was due to the lack of instructors effective in providing training, where health workers experience problems about how instructors present training material in an interesting

and motivating way to use hospital management information systems and problems about how instructors provide valuable insights to participants, and this causes problems for health workers in perceiving the value of the use of hospital management information systems in increasing work effectiveness. The ability of training to increase utility, is in line with the opinion that training is a form of organizational support that seeks to equip its employees to increase knowledge and skills that are useful to support their broad field of work (Dessler, 2016). This means that with materials, methods, instructors, participants and training evaluations that are linear with the currently implemented management information system, it will foster the perception of health workers on the value of use, especially in aspects related to increasing productivity which make health workers feel that the home management information system hospitals make the hospital administration process faster and reduce the need to use physical documents excessively, and these results are in line with research which concludes that training is an effort to foster perceptions of the usefulness of information systems (Zaman *et al*., 2021), in the training it was explained about the main benefits of the information system, so that individuals can find out the usefulness of the system (Arora & Ikbal, 2023).

Effect of Training and Utilities on Work Motivation

The results of the analysis conclude that training and utility are the impact of increasing work motivation, so that by increasing the effectiveness of training and the perceived usefulness value of health workers for management information systems, the work motivation of health workers to support the successful implementation of management information systems implemented by current hospital management can increase. These results reveal the problems raised by health workers in the preliminary discussion, where they felt that the training that had been given was not linear with the information system implemented at the time, thus making them less concerned about supporting the successful implementation of information systems implemented by hospital management. This means that the action that must be taken by management is to provide training according to the currently implemented information system program, which will make health workers understand the functions and advantages of the information system, which will make them concerned about supporting the organization in maximizing the implementation of information systems. In addition, these results reveal alignment with the preliminary discussion which shows the difficulty of health workers to operationalize the first- and second-generation management information systems, so that the optimization of the use of management information systems that began in 2005 until now has not reached 100 percent in each work unit. This means that health workers need a direction from hospital management about the usability value of the third-generation management information system, so that it becomes an encouragement for health workers to care about the use of the currently implemented hospital management information system.

This situation supports the opinion which concludes that training is a process of teaching new employees or existing employees the basic skills they need that are useful in carrying out their work (Dessler, 2016), and in training efforts are made to introduce ways to understand and solve any problems related to aspects of work (Mondy & Mondy, 2014), This means that staff consider that when training is given in accordance with the objectives of the training results, they will be motivated to care about supporting the implementation of the management information system that is currently being implemented as an employee support for organizational success goals, and in line

with research which concludes that training is a source of work motivation for employees. individual (Apathy & Yeager, 2019), because with training, health workers will be more motivated to master the broad field of work. The results of the analysis conclude that training is the most dominant variable that is able to increase the work motivation of health workers in supporting the successful implementation of information systems, this is because health workers consider that in hospital management information system training, instructors are very helpful in understanding and overcoming problems that arise during implementation management information system, training provided in accordance with the program implemented in the hospital and training adds insight to provide feedback on the strengths and weaknesses of the system that is useful for relevant improvements.

Utility of the management information system perceived by health workers has an impact on increasing work motivation, so that by increasing the perception of health workers on the use value of hospital management information systems, the work motivation of health workers to support the successful implementation of the current hospital management information system can increase. This result is in line with the opinion which states that utility is a level where individuals believe that the use of certain technologies will increase performance (Davis *et al.*, 2023). Knowing the value of the usefulness of the hospital management information system in supporting the work of health workers in each unit will be an impetus in the form of increasing health worker awareness of the implementation of the current hospital management information system. This is in line with the opinion that concludes that the utility of information systems felt by health workers will motivate them to be more professional at work (Atinga *et al.*, 2020), the perceived usefulness value felt by health workers towards management information systems, becomes an encouragement to be more professional at work (Ngusie *et al.*, 2022) and utilities that make the work of health workers easier, a strong incentive for them to be more professional at work (Ljubicic *et al.*, 2020). The results of the analysis show that utility is the lowest variable that can increase work motivation compared to training variables, which is caused by the weak intrinsic motivation of health workers compared to extrinsic motivation. This led them to react to the implementation of hospital management information systems, where health workers feel that information systems are less useful in increasing the effectiveness of managing patient schedules in hospitals and not helping to reduce errors in patient handling.

Effect of Training, Utilities and Work Motivation on Intention to Use

The results of the analysis conclude that training, utility, and work motivation are the impact of increasing intention to use, so that by creating training effectiveness, perceived useful value and perceived work motivation of health workers, the intention of health workers to use the hospital management information system can increase. Training ability, utility and work motivation increase the intention of health workers to use management information systems in line with the theory of reasoned which explains that a behavior is carried out because individuals have the will or intention to carry out related activities to be carried out on their own accord, and intention is individual awareness of an object, a person, a situation, or a certain matter that concerns himself or is seen as something conscious. This means that the intention of health workers to use the hospital management information system is built through training that aims to increase knowledge and how to use it, as well as build a perception of the value of use, and also stimulate the interest of health workers by promoting work efficiency that can

be produced by using management information systems, as well as forming a rule that is coercive that information systems must be operationalized by health workers to support their work.

Training is the impact of increasing the intention of health workers to use management information systems because health workers feel that instructor support during training is very helpful in understanding and overcoming problems that arise during implementation at the hospital. The training provided is in accordance with the program implemented at the hospital and the training adds insight to provide feedback on the strengths and weaknesses of the system which will be useful for relevant improvements. Spurring the intention of health workers to use hospital management information systems in supporting their work in hospitals, especially those related to objective norms, and this situation is in line with previous research concluded that training determines the intention of health workers to use management information systems in supporting their work (Ljubicic *et al*., 2020), the importance of training will be the basis for determining the interest of health workers in using management information systems (Aldosari *et al*., 2018) and the creation of effective management information system training will increase the intention of health workers to use it (Lulin *et al*., 2020).

The perceived utility of health workers is the impact of increasing the intention to use, so that by increasing the perception of health workers on the usefulness of the currently implemented management information system, the intention of health workers to use the hospital management information system can increase. This is shown by the behavior of health workers who are quite sure that a hospital management information system can increase work productivity because it makes the hospital administration process faster and reduces the need to use physical documents excessively, thus becoming the basis for their interest in using a hospital management information system as a support for their work. This resuts in line with research that concludes that utility is one of the factors that influence the intention of health workers to use management information systems in supporting services to patients (Boon-Itt, 2019), positive perception of the utility of the management information system, increasing the intention of health workers to use it in services for patients (Ahmed *et al*., 2020) and perceptions of the utility of management information systems will spur the intensity of health workers to maximize their use (Sun *et al.*, 2019).

The ability of work motivation is the impact of increasing the intention to use, so that by increasing work motivation, the intention of health workers to use the hospital management information system can increase. This happens because extrinsic motivation dominates the encouragement of health workers to use hospital management information systems where they are motivated because they want to get appreciation from management, because they support hospital management policies, because they are motivated by the compensation promised by hospital management, because management promises non- financial if the implementation of the hospital management information system reaches 100 percent. The situation is in line with research which concludes that work motivation is an individual's desire to do work that is based on intrinsic and extrinsic factors (Alrawahi *et al*., 2020), work motivation is present as an individual basis for determining his attitude towards his work and causing an action (Forson *et al.*, 2021), work motivation encourages individual interest in using management information systems to support their work activities (Ljubicic *et al.*, 2020), work motivation underlies every individual's interest in using technology-based

information systems (Bastari *et al*., 2020), and work motivation can increase the intensity of use (Kuo *et al.,* 2018).

CONCLUSION

The results of the analysis conclude that work motivation provides a positive intervention in the influence of training and utility on intention to use, so that with work motivation, training and utility can increase the intention of health workers to use management information systems higher than without work motivation. Training and utilities have an impact on increasing work motivation and health workers' intentions to use hospital management information systems, and work motivation can increase health workers' intentions to use hospital management information systems. Some implications that management can make are choosing a competent training organization that can deliver material that management information systems provide sufficient information to understand the potential, benefits and value for the hospital, using case example methods and relevant case studies to illustrate the use of the system at home sick, and instructors who are able to deliver training material in an interesting way and motivate participants to use management information systems. Carrying out outreach and promotion regarding the objectives of implementing the hospital management information system, as well as instilling technology-based work behavior so that health workers are encouraged to use the hospital management information system. The importance of creating a competition system between units using hospital management information systems, so that it can build the perception that using hospital management information systems can increase job satisfaction, improve the quality of service in hospitals and patient welfare, as well as increase work efficiency in hospitals. This research is only limited to assessing the intention of health workers to use it, without assessing the ability to use the hospital management information system, so it is recommended to further research the ability of health workers to use it, so that it becomes a consideration for determining appropriate training in building the ability of health workers to maximize use of hospital management information systems.

REFERENCES

Ahmed, M. H., Bogale, A. D., Tilahun, B., Kalayou, M. H., Klein, J., Mengiste, S. A., and Endehabtu, B. F. (2020). Intention to use electronic medical record and its predictors among health care providers at referral hospitals, north-West Ethiopia, 2019: Using unified theory of acceptance and use technology 2(UTAUT2) model. *BMC Medical Informatics and Decision Making*, 20(1), 1–11.

Ajzen, I. (2005). *EBOOK: Attitudes, Personality and Behaviour*. McGraw-Hill Education.

Aldosari, B., Al-Mansour, S., Aldosari, H., and Alanazi, A. (2018). Assessment of factors influencing nurses acceptance of electronic medical record in a Saudi Arabia hospital. *Informatics in Medicine Unlocked*, 10, 82–88.

Alrawahi, S., Sellgren, S. F., Altouby, S., Alwahaibi, N., and Brommels, M. (2020). The application of Herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani hospitals. *Heliyon*, 6(9), e04829.

Apathy, N. C., and Yeager, V. A. (2019). Examining Training Motivations Among Public Health Workers. *Journal of Public Health Management and Practice : JPHMP*, 25 Suppl 2(2 Suppl), S157–S165.

Ardita, V., Novieastari, E., and Gayatri, D. (2019). Assertive communication training and associate nurses' knowledge and motivation: A quasi experiment. *Enfermeria Clinica*, 29, 837–844.

Arora, L., & Ikbal, F. (2023). Experiences of implementing hospital management information system (HMIS) at a tertiary care hospital, India. *Vilakshan - XIMB Journal of Management*, 20(1), 59–81.

Ashraf, M. A., Iqbal, J., Arif, M. I., and Asghar, M. Z. (2022). Fostering ICT Competencies in Blended Learning: Role of Curriculum Content, Material, and Teaching Strategies. *Frontiers in Psychology*, 13(July), 1–13.

Atinga, R. A., Abor, P. A., Suleman, S. J., Anaba, E. A., and Kipo, B. (2020). e-health usage and health workers' motivation and job satisfaction in Ghana. *PloS One*, 15(9), e0239454.

Bastari, A., Eliyana, A., Syabarrudin, A., Arief, Z., and Emur, A. P. (2020). Digitalization in banking sector: the role of intrinsic motivation. *Heliyon*, 6(12), e05801.

Boon-itt, S. (2019). Quality of health websites and their influence on perceived usefulness, trust and intention to use: an analysis from Thailand. *Journal of Innovation and Entrepreneurship*, *8*.

Boon-Itt, S. (2019). Quality of health websites and their influence on perceived usefulness, trust and intention to use: An analysis from Thailand. *Journal of Innovation and Entrepreneurship*, 8(1), 1–18.

Calderon-Monge, E., and Ribeiro-Soriano, D. (2023). The role of digitalization in business and management: a systematic literature review. *Review of Managerial Science*.

Chaveesuk, S., Khalid, B., Bsoul-Kopowska, M., Rostańska, E., and Chaiyasoonthorn, W. (2022). Comparative analysis of variables that influence behavioral intention to use MOOCs. *PLOS ONE*, 17(4), 1–26.

Davis, F. D., Granić, A., and Marangunić, N. (2023). *The Technology Acceptance Model: 30 Years of TAM*. Springer International Publishing.

Dessler, G. (2016). *Human Resource Management*. Pearson Education.

EL Hajjar, S. T., and Alkhanaizi, M. S. (2018). Exploring the Factors That Affect Employee Training Effectiveness: A Case Study in Bahrain. *SAGE Open*, *8*(2).

Febrita, H., Martunis, M., Syahrizal, D., Abdat, M., and Bakhtiar, B. (2021). ANALYSIS OF HOSPITAL INFORMATION MANAGEMENT SYSTEM USING HUMAN ORGANIZATION FIT MODEL. *Jurnal Administrasi Kesehatan Indonesia*, 9, 23.

Ferdinand, A. (2014). Metode Penelitian Manajemen Edisi 5. *Semarang: Badan Penerbit Universitas Diponegoro*.

Forson, J. A., Ofosu-Dwamena, E., Opoku, R. A., and Adjavon, S. E. (2021). Employee motivation and job performance: a study of basic school teachers in Ghana. *Future Business Journal*, 7(1), 30.

Gani, M. O., Rahman, M. S., Bag, S., and Mia, M. P. (2023). Examining behavioural intention of using smart health care technology among females: dynamics of social influence and perceived usefulness. *Benchmarking: An International Journal*, *ahead-of-p*(ahead-of-print).

Hair, J. F., Sarstedt, M., Hopkins, L., and Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121.

Koziol, L., & Koziol, M. (2020). The concept of the trichotomy of motivating factors in the workplace. *Central European Journal of Operations Research*, 28(2), 707–715.

Kruger, R., Brosens, J., and Hattingh, M. (2020). A Methodology to Compare the Usability of Information Systems. In *Responsible Design, Implementation and Use of Information and Communication Technology: 19th IFIP WG 6.11 Conference on e-Business, e-Services, and e-Society, I3E 2020, Skukuza, South Africa, April 6–8, 2020, Proceedings, Part II*, 12067, 452–463.

Kuo, K. M., Chen, Y. C., Talley, P. C., and Huang, C. H. (2018). Continuance compliance of privacy policy of electronic medical records: the roles of both motivation and habit. *BMC Medical Informatics and Decision Making*, 18(1), 135.

Ljubicic, V., Ketikidis, P. H., and Lazuras, L. (2020). Drivers of intentions to use healthcare information systems among health and care professionals. *Health Informatics Journal*, 26(1), 56–71.

Lulin, Z., Owusu-Marfo, J., Antwi, H. A., and Xu, X. (2020). The Contributing Factors to Nurses' Behavioral Intention to Use Hospital Information Technologies in Ghana. *SAGE Open Nursing*, 6(301).

Manzoor, F., Wei, L., and Asif, M. (2021). Intrinsic Rewards and Employee's Performance With the Mediating Mechanism of Employee's Motivation. *Frontiers in Psychology*, 12(July), 1–13.

Mohammadpour, A., Ghaemi, M. M., Darrudi, R., and Sadagheyani, H. E. (2021). Use of Hospital Information System to Improve the Quality of Health Care from Clinical Staff Perspective. *Galen Medical Journal*, 10, e1830.

Mondy, R. W., and Mondy, J. B. (2014). *Human Resource Management*. Pearson.

Ngusie, H. S., Ahmed, M. H., Kasaye, M. D., and Kanfe, S. G. (2022). Utilisation of health management information and its determinant factors among health professionals working at public health facilities in North Wollo Zone, Northeast Ethiopia: a cross-sectional study. *BMJ Open*, 12(4), 1–10.

Ozkeser, B. (2019). Impact of training on employee motivation in human resources management. *Procedia Computer Science*, 158, 802–810.

Robbins, S. P., & Judge, T. A. (2017). *Organizational behavior*. Pearson Education Limited.

Sanjuluca, T. H. P., de Almeida, A. A., and Cruz-Correia, R. (2022). Assessing the Use of Hospital Information Systems (HIS) to Support Decision-Making: A Cross-Sectional Study in Public Hospitals in the Huíla Health Region of Southern Angola. *Healthcare (Switzerland)*, 10(7).

Sun, S. L., Hwang, H. G., Dutta, B., and Peng, M. H. (2019). Exploring critical factors influencing nurses' intention to use tablet PC in Patients' care using an integrated theoretical model. *Libyan Journal of Medicine*, 14(1).

Welchen, V., Matte, J., Giacomello, C. P., Dalle Molle, F., and Camargo, M. E. (2022). Usability perception of the health information systems in Brazil: the view of hospital health professionals on the electronic health record. *RAUSP Management Journal*, 57(3), 264–279.

Zaman, N., Goldberg, D. M., Kelly, S., Russell, R. S., and Drye, S. L. (2021). The Relationship between Nurses' Training and Perceptions of Electronic Documentation Systems. *Nursing Reports (Pavia, Italy)*, 11(1), 12–27.