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Identification Of Readiness Factors For The Agile Erp ASSESSMENT

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Abstract

The impact of adopting technological innovation for industries will require management's commitment make changes to business processes in order to accomplish the work to be more efficient and effective. Enterprise Resource Planning (ERP) system is one solution to improve work efficiency and effectiveness. The purpose of ERP implementation is to enhance business value and organizational agility. The fact that implementation failure is still an issue that needs to be considered seriously. For this reason, it is necessary to evaluate of the readiness level to accept the ERP system as a necessity for supporting organizational operations. This is a challenge for the authors to analyze the gaps in ERP implementation by focusing on the ERP readiness assessment. The purpose of this research is to identify of ERP readiness factors as a measurement tool before management decides to implement ERP. This research methodology uses the Smart PLS Square Equation Modeling approach as a tool for processing data from questionnaire statements. The result of this research is the development of a methodology for evaluating the ERP readiness assessment for industry.

Keywords: *Readiness factors, Assessment tool, Agile ERP, implementation.*

1. Introduction

The ERP implementation has become one of technological innovations to accomplish the work becomes more effective and efficient. Thus, the ERP implementation success becomes a benchmark in order to achieve the goals of the ERP. However, in fact that ERP implementation is still high, and a tendency go live delay that causing investment costs in ERP implementation to be expensive. Therefore, the considering of readiness level of project management and change management are the critical factor [24]. The readiness of project management factors are system integration, collaborative work environment, and evaluating [23]. While, the readiness of change management is fundamental before top management decides for using an ERP system. Thus, needed for identification of ERP readiness factor as assessment tool for analyzing of ERP implementation. The authors discuss ERP readiness assessment with the agile ERP approach perspective. It is hoped this research will become a guideline for researchers, practitioners, and IT consultants in assessing organizational readiness in implementing ERP. This is the advantage of this research compared with previous

studies. This research will develop the agile ERP readiness assessment model to be able to help managerial levels in making decisions. This research study aims to provide insight into how to reduce the complexity in ERP implementation of the organizations. In this research, the authors will answer for the following research questions:

1. Why do ERP of readiness factors become the critical factor in ERP implementation?
2. What kind of ERP readiness factors affect the ERP implementation?

2. Literature Review

2.1 Why the agile approach is needed?

Agile approach can identify factors that focus on organizational strategy, team ability, project management, collaborative work environment, and increase share business value [4]. Agile approach related to management support do not merely influence and approve the investment value of the project, but support management that is involved active in project management activities [6]. Thus, agile approach can be considered and needed as a methodology for achieving ERP implementation success. The differences approach between agile and traditional can be shown in the table:

Table 1. Differential between agile and traditional [6]

DIMENSIONS		AGILE	TRADITIONAL
ORGANIZATION	1	Collaborative work environment	Goal oriented organizational culture
	2	Top management support - involvement	Top management support - influence
	3	Adaptive view toward change	Commitment to project management
	4	Cooperative horizontal business culture	Project team authority
	5	People oriented culture	Change management approach
PROCESS	6	Adaptive/iterative requirements management	Formal change management process
	7	Early delivery of important features	Strong project management practices
	8	Regular and frequent communication	Formal documentation & reporting
	9	Test driven environment	Project manager interpersonal skills
	10	Co-location of staff & stakeholders	Project management skills
PEOPLE	11	Adaptive leadership style	Project team commitment
	12	Self-organizing teams	Team technical expertise
	13	Close team customer relationship	User attitude
PROJECT	14	Rapid/early delivery of value	Clearly started goals
	15	Emergent requirements	Clear & unambiguous requirements
	16	Fluid project schedule	Detailed schedule
	17	Customer involvement	User involvement
	18	Continuous & incremental business value	Availability of required technical expertise

2.2 Agile approach for ERP

The benefit of the agile approach will provide a response to changes according to a predetermined plan [16]. Activities of the agile approach are focusing on customer satisfaction, quick response, skill of people for sharing information, collaborative work environment, teamwork, and adaptation to change. Agile approach can more focus on evaluating with iterative and collaborative of each stage of implementation, thereby making project work more effective and efficient [7]. The iterative and collaborative provide many opportunities for the organization to understand need of management. The agile approach focuses on simplifying processes, moving quickly & providing optimal software operation functionality, improving communication with collaborative work environment, advancing visibility of the project team, and increasing the ability to adapt to change [(7), (2)]. Therefore, the agile ERP approach can be considered for analysis and carried out further research as a way for reducing the complexity of ERP implementation.

2.3 ERP readiness assessment

The advantage of ERP readiness assessment for industry is to understand the business processes of ERP systems, making it easier to use ERP systems, because

ERP implementation is a large project of an organization [(21), (15)]. The ERP readiness assessment categorized into four dimensions such as project management, training and education, business process reengineering, and system integration [19]. The critical factors of ERP readiness assessment are project management, clearly of vision and goals of implementation, business process change, human resource allocate [9]. The factors for achieving implementation success into three components such as collaborative and work environment, human resource allocate, organizational culture change [11]. The one of the readiness activities of the organization is the readiness to standardize business processes to follow the business processes of the selected an ERP system. The reality of the readiness to standardize the process has not yet been carried out with socialization until the users understand, is ready to do, standardized and well documented, so that in carrying out an assessment of the readiness to carry out ERP, the existence of the users does not understand the standardization of the process of the ERP system, so that it can lead to resistance. This can cause delay in the ERP implementation. For this reason, in the initial stages of ERP assessment readiness, it is necessary for the role of the project manager to coordinate and ensure the dissemination of ERP assessment readiness activities until the users understand well. The role and responsibility of the project manager are an effective first step in the overall project preparation [20]. The priority of dimension in ERP readiness assessment are organization, people, process, and project technical [3].

2.4 Factors of ERP readiness assessment

Based on the results of comparison of ERP readiness factors from the survey literature shows that the dominant factors in ERP readiness are strategic organization, top management support, human resource allocation, and organization structure. The results of survey literature for the comparison of ERP readiness factors is shown in the table:

Table 2. The comparison of ERP readiness factors (survey literature)

DIMENSIONS	NO	FACTORS	# References	Kennon & Kocsegh,2019	Oshevski et al. 2017	Ahmadi et al. 2015	Sun et al., 2015	Shen et al., 2015	Jian et al., 2015	Hidayanto et al. 2013	HaniEmadzi et al. 8, 2011	HaniEmadzi et al., 2009	Bozzni et al., 2009	Bozzni et al., 2008	Kwak & Lee, 2008	Chen & Chen, 2008	Seyra & Nasa, 2006	Bayazeid et al., 2006
PROCESSES	1	Business Process Reengineering	6	x					x		x		x	x			x	
	2	Process integration	3					x									x	x
	3	Adaptive requirement management	2					x			x							
	4	Continue & incremental process value	2	x		x												
PEOPLE	5	Project champion	4					x			x			x			x	
	6	Skill & competency of project team	6	x			x	x			x				x		x	
	7	Top management support	8	x			x			x	x		x	x	x		x	
	8	Adaptive leadership style	5	x			x		x		x				x			
	9	Cross functional support	2	x			x											
	10	Human Resource allocation	7				x	x			x	x		x			x	x
	11	Self organizing team	4					x			x			x			x	
	12	Clear roles and responsibilites	3	x			x							x				
ORGANIZATIONAL	13	Shared values	4					x			x						x	x
	14	Organization structure	7			x	x	x			x		x	x			x	
	15	Organization culture	6		x	x		x		x	x			x				
	16	Collaborative work environment	6	x			x	x			x			x			x	
	17	Project Management	2						x								x	
	18	Organization size	3					x			x						x	
	19	Clear goals, vision, & objectives	6	x			x	x			x		x	x				
	20	Organization strategic	9			x	x	x			x		x	x	x		x	x
	21	Organization agility	5				x	x							x	x	x	
TECHNOLOGY	22	System integration	1						x									
	23	Information standarization	3				x			x							x	
	24	Data security	5	x				x			x						x	x
	25	IT infrastructure	4	x				x			x	x						
	26	Legacy systems	3					x									x	x
	27	Technology trend	1			x												

3. Methodology Research

The authors use quantitative methods with a questionnaire as a research instrument used as data collection from respondents.

3.1 Research method

This research methodology used the partial least squares (PLS) approach. PLS approach has a sensitivity violation of normality assumptions by comparing sample data with covariant based. The advantage of this method is that it does not require assumptions and can be estimated with a relatively small number of samples [17]. This research distributed the questionnaire statements by respondents that needed to collect the further data analysis. The rule of thumb in determine the validity of result analysis that is shown in the table:

Table 3. Rule of thumb for data analysis [12]

Validity & Reliability	Parameter	Rule of Thumb
ValidityConvergent	Loading factor	> 0,70 for Confirmatory Research > 0,60 for Exploratory Research
	Average Variance Extract (AVE)	> 0,50 for Confirmatory & ExploratoryResearch
	Communality	> 0,50 for Confirmatory & ExploratoryResearch
Validity Discriminant	Cross Loading	> 0,70 for each variable
Reliability	Cronbach's Alpha	> 0,70 for Confirmatory Research > 0,60 for Exploratory Research
	Composite Reliability	> 0,70 for Confirmatory Research
		0,60 - 0,70 for Exploratory Research

Based on the result data processing of the questionnaire statements, the authors did to find out the weight of each factors using Technique for Order Preference by Similarity to Ideal Solution (TOPSIS) method. TOPSIS is a method in statistics for multi-criteria decision-making that uses the principle that the alternative chosen must have the shortest distance from the positive ideal solution and the longest distance from the negative ideal solution [10].

3.2 Method of collecting data

The authors used a questionnaire method for processing data from respondents. The authors make a questionnaire statement based on the results of previous literature studies, the list questionnaire statements is categorized into construct groups and construct components, and the questionnaire statements using a Likert scale of choice of answers categorized as follows: 1. not too important, 2. not important, 3. less important, 4. quite important, 5. important, and 6. very important. The questionnaire statements are the questions to respondents how important the ERP readiness factors can influence in ERP implementation. The list of groups, components, and questionnaire are displayed in the table:

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Table 4. List of groups, components, and questionnaire statements

Group	Components	No	Questionnaire statements
Processes	Business Process Reengineering	1	Business processes reengineering need commitment to be standardized, understood, and documented
	Process integration	2	The goals of integrate business processes and operations to improve the organization's business
	Adaptive requirement management	3	Standardization of work processes must follow the ERP system selected
	Continue & incremental process value	4	ERP implementation becomes more effective by managing proceess changes according to ERP standards
People	Project Management	5	The role of project champion will determine the ERP implementation success
	Skill & competence of team	6	Competence of IT team must have technical expertise and understanding business processes of ERP
	Top management support	7	Management support will determine the ERP implementation success with involve actively in implement phase
	Adaptive leadership style	8	Leadership style becomes an important aspect for users to adapt to new systems
	Cross functional support	9	Collaboration information becomes effective with users collaboration with related others
	Human resource allocation	10	Human resource allocation must be determined at the beginning of the project
	Self organizing team	11	Self organizing team must be cooperative with users in overcoming ERP problems
	Clear roles and responsibilities	12	The role and responsibilities of project team must be clearly defined and understood
Organizational	Shared values	13	The benefit of using the system will have an impact with enhancing work more effective
	Organization structure	14	The organizational structure will determine the competence of the project team
	Organization culture	15	organizational culture change must follow the way ERP system selected
	Collaborative work environment	16	the collaborative work environment will create a synergy of teamwork
	Project management	17	ERP project management must be clearly defined
	Organization size	18	The organization size will determine the functional structure of ERP project team
	Clear goals, vision, objectives	19	Clear goals, visions & objectives must be effectively communicated to management and operational levels
	Organization strategic	20	The ERP implementation decision is critical of an organizational strategy for adopting technological innovation
	Organization agility	21	Agility of the organization will support a more competitive business change process
Technology	System integration	22	System integration will be accelerates the decision making process for supporting management strategy
	Information standarization	23	Standardization of information is important in the preparation of implementation ERP
	Data security	24	The availability of accurate data will determine the quality of information generated by ERP system
	IT infrastructure	25	IT infrastructure includes software, hardware, and network infrastructure
	Legacy systems	26	The level authorization of system usage can be analyzed from actual data inputting
	Technology trend	27	Technology trends must be synchronized with the organization's readiness to carry out project management

3.3 Research models

Based on previous survey literature that the measurement of the agile ERP readiness assessment is the best practice to implement ERP. The practice of agile methods can solve the complexity of ERP into iterative in scope and time. The agile ERP concept, the use of iterative is needed to support business processes and enhance the work more efficient. The agile ERP process becomes a gap to overcome the complexity of ERP implementation for organizations [13]. The authors consolidated dimensions as an agile ERP readiness assessment model such as processes, people, organizational, and technology mapped with ERP implementation, ERP readiness factors, and agile approaches. The results of consolidation of an agile ERP readiness assessment model can be shown in the following figure:

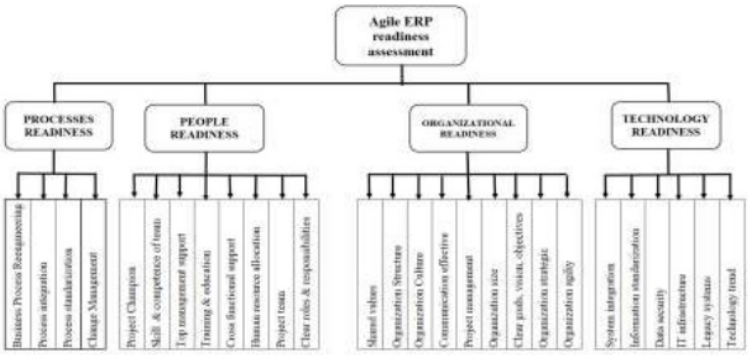

Figure 1. Hierarchy of agile ERP readiness assessment model

4. Result and Analysis

4.1 Validity of data respondents

Based on the collection data respondent characteristics, the authors make groupings in categories such as education level, tenure, background of education, the role of respondents, and industry type. The data respondent characteristics that is shown in the table:

Table 5. Data respondent characteristics

Respondent profiles	Frequency	%
Gender		
Male	36	60%
Female	24	40%
Age		
20-30 years	25	42%
31-40 years	11	18%
41-50 years	17	28%
51 > years	7	12%
Educational Level		
Diploma	5	8%
Undergraduate	40	67%
Postgraduate	15	25%
Doctorate	0	0%
Tenure		
1-2 years	6	10%
3-4 years	10	17%
5-6 years	9	15%
7 > years	35	58%
Background of education		
IT / IS	33	55%
Finance/Accounting	22	37%
Management	2	3%
Marketing	3	5%
Role of respondents		
Staff	20	33%
Manager	33	55%
Director	7	12%
Industry type		
Manufacturing-Textile	47	78%
IT Consultant	13	22%

4.2 Confirmatory Factor Analysis

As result of questionnaire distribution, the authors have test data validation of each factors using SPPS software with Confirmatory Factor Analysis (CFA). The results of CFA analysis showing that Measure of Sampling Adequate (MSA) is 0,781 and all construct have the score of each factor is > 0,5. It means that all construct of each factors are valid. The results of Confirmatory Factor Analysis are shown in the table:

Table 6. Result of Confirmatory Factor Analysis

KMO and Bartlett's Test	
Kaiser Meyer Olkin Measure of Sampling Adequacy (MSA)	0,781
Bartlett's test of approximately Chi-square	1107.11
Sphericity	0,351
Significant	0,000

No	Construct		MSA
1	PR01	Business process reengineering	0,687
2	PR02	Process integration	0,846
3	PR03	Process standarization	0,697
4	PR04	Change management	0,906
5	PE05	Project champion	0,645
6	PE06	Skill competency IT	0,836
7	PE07	Top management support	0,734
8	PE08	Training	0,872
9	PE09	Cross functional support	0,770
10	PE10	Human resource allocate	0,574
11	PE11	Skill project team	0,755
12	PE12	Clearly roles/responsibilities team	0,802
13	OG13	Benefit of system use	0,817
14	OG14	Organization structure	0,888
15	OG15	Organization culture	0,788
16	OG16	Communication effective	0,885
17	OG17	Project management	0,849
18	OG18	Organization size	0,705
19	OG19	Clearly goal and vision	0,796
20	OG20	Organization strategy	0,769
21	OG21	Organization agility	0,881
22	TH22	System integration	0,810
23	TH23	Information standarization	0,688
24	TH24	Data security	0,839
25	TH25	IT infrastructure	0,804
26	TH26	Legacy systems	0,722
27	TH27	Technology trend	0,728

4.3 Assessment structural model

In this section, the authors describe the results of structural model assessment such as measurement model, construct reliability and validity, smart PLS model, determinant coefficient.

4.3.1 Measurement model

As result confirmatory factors analysis, from 27 construct show that all constructs are valid which the MSA of all construct is > 0,5. Thus, the authors decide for process 27 construct for measurement model. The result measurement model that is shown in the table:

Table 7. The result measurement model

No	Construct	FL	CA	CR	AVE	Mean	St.Dev	Standardised factor loadings (p-values)				
								OG	PE	PR	TH	p-values (2-tailed)
1	OG13 Shared values	0,691	0,866	0,895	0,490	0,689	0,070	0,691				< 0.001
2	OG14 Organization structure	0,728				0,730	0,066	0,728				< 0.001
3	OG15 Organization culture	0,614				0,608	0,117	0,614				< 0.001
4	OG16 Communication effective	0,778				0,771	0,077	0,778				< 0.001
5	OG17 Project management	0,755				0,735	0,098	0,755				< 0.001
6	OG18 Organization size	0,521				0,529	0,097	0,521				< 0.001
7	OG19 Clearly goal and vision	0,613				0,608	0,120	0,613				< 0.001
8	OG20 Organization strategy	0,761				0,757	0,060	0,761				< 0.001
9	OG21 Organization agility	0,787				0,795	0,058	0,787				< 0.001
10	PE05 Project champion	0,721	0,815	0,862	0,444	0,712	0,091		0,721			< 0.001
11	PE06 Skill competency IT	0,627				0,629	0,082		0,627			< 0.001
12	PE07 Top management support	0,734				0,725	0,075		0,734			< 0.001
13	PE08 Training	0,695				0,692	0,067		0,695			< 0.001
14	PE09 Cross functional support	0,626				0,626	0,093		0,626			< 0.001
15	PE10 Human resource allocate	0,443				0,447	0,117		0,443			< 0.001
16	PE11 Skill project team	0,725				0,723	0,068		0,725			< 0.001
17	PE12 Clearly roles and responsibilities team	0,707				0,704	0,073		0,707			< 0.001
18	PR01 Business process reengineering	0,757	0,751	0,842	0,572	0,766	0,055			0,757		< 0.001
19	PR02 Process integration	0,696				0,691	0,109			0,696		< 0.001
20	PR03 Process standarization	0,796				0,665	0,107			0,796		< 0.001
21	PR04 Change management	0,757				0,777	0,082			0,757		< 0.001
22	TH22 System integration	0,763	0,773	0,840	0,470	0,747	0,084				0,763	< 0.001
23	TH23 Information standarization	0,524				0,514	0,128				0,524	< 0.001
24	TH24 Data security	0,754				0,737	0,109				0,754	< 0.001
25	TH25 IT infrastructure	0,702				0,713	0,059				0,702	< 0.001
26	TH26 Legacy systems	0,655				0,645	0,076				0,655	< 0.001
27	TH27 Technology trend	0,689				0,684	0,098				0,689	< 0.001
								0,694	**0,660**	**0,752**	**0,681**	

FL = Factor Loading, CA = Cronbach Alpha, CR= Composite Reliabilities, AVE= Average Variance Extract

The result of measurement model, the perform constructs adequate reliability. Initially, the average variance extracted (AVE) value of all constructs was above value of 0,5, The value cronbach alpha and composite reliabilities of all construct was above value of 0,7, and the factor loading of all construct was above value of 0,7. Thus, the result of measurement model of all construct was valid.

4.3.2 Construct reliability and validity

As result smart PLS for construct reliability and validity analysis show that the score of all construct for cronbach Alpha is > 0,70, composite reliabilities is > 0,70, and the score of Average Variance Extract is> 0,50, Thus, the result for construct reliability and validity analysis are valid & reliable. The result construct reliability and validity analysis that is shown in the table:

Table 8. The result construct reliability and validity

Construct		No of item	CA	CR	AVE	Latent Variable			
						OG	PE	PR	TH
OG	Organizational	9	0,866	0,895	0,616	1,000			
PE	People	8	0,815	0,862	0,554	0,800	1,000		
PR	Processes	4	0,751	0,842	0,637	0,855	0,706	1,000	
TH	Technology	6	0,773	0,840	0,586	0,858	0,746	0,753	1,000

CA = Cronbach Alpha, CR= Composite Reliabilities, AVE= Average Variance Extract

4.3.3 Smart PLS model

Based on figure of smart PLS model show that variability construct readiness has influence hard significantly that influence of organizational factors was 93,6%, influence of people factors was 79,8%, influence of processes factors was 78,9%, and influence of technology was 83,1%. While another variables effect is not significant. The result smart PLS model that shown in figure:

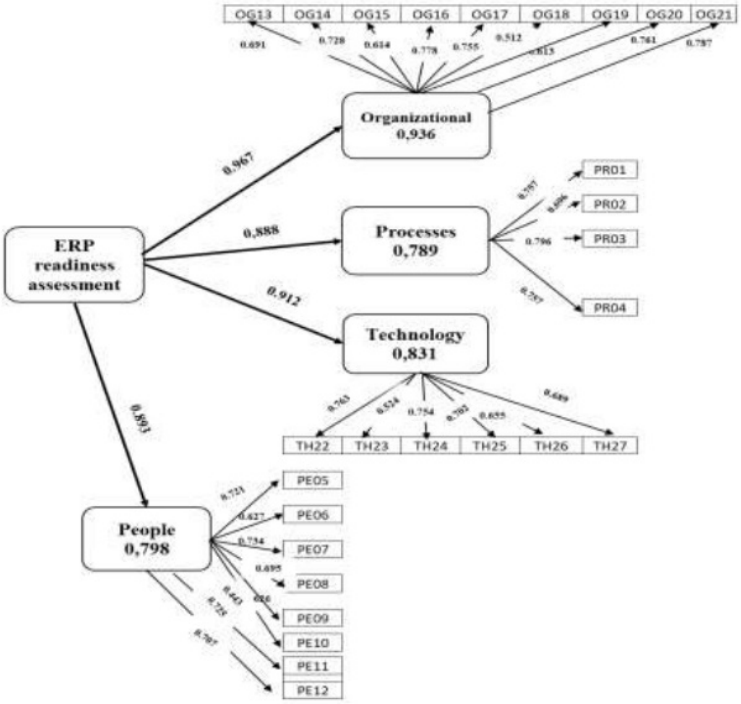

Figure 2. Smart PLS model

4.3.4 Determinant Coefficient

The score of R square will affect certain independent latent variables on the dependent variable that has substantive influence. The coefficient of determination to measure the ability of the model in the variation of the dependent variable [12]. The results of the coefficient of determination can be said that all indicators of the contract include the strong category, because it has an effect of > 70% on the level of readiness, where the organizational construct value is 93.6%; construct value of people 79.8%; process construct value 78.9%; and technology construct value 83.1%. The results of the coefficient of determination can be seen in the following table:

Table 9. Determinant Coefficient

Construct		R Square	R Square Adjusted
OG	Organizational	0,936	0,934
PE	People	0,798	0,795
PR	Processes	0,789	0,786
TH	Technology	0,831	0,828

5. Discussion

In this section, the authors discuss to answer the research questions of this study

5.1 Why do ERP of readiness factors become the critical factor in ERP implementation?

Based on the result and discussion in this research, It shows that ERP readiness factors are very important and suitable for ERP implementation as a measurement tool for ensuring the organization readiness to understand and accept the ERP system to business processes change, human resource allocation, collaborative work environment, commitment top management, and the suitability of technology trends that synchronize with business needs. Socializing and ensuring understanding of organizational readiness from management to operational levels. This can reduce the complexity in ERP implementation. Thus, The ERP readiness factors become the critical factor in ERP implementation for the industries.

5.2 What kind of ERP readiness factors affect the ERP implementation?

Based on the result data processing in this research, to find out the rank of each factors of agile ERP readiness assessment, thus the authors make a weighting of each factors using TOPSIS method. The result TOPSIS of weight of dimension and factors of agile ERP readiness assessment that is shown in the table:

Table 10. The weight of dimensions and factors of Agile ERP readiness assessment

Dimension		Factors	Main weights	Final weights	Weights of subfactors	Preference score
People	PE07	**Top management support**	29,39%	**13,27**	3,90	0,719
	PE10	Human resource allocate		12,93	3,80	0,699
	PE05	Project champion		12,76	3,75	0,691
	PE09	cross functional support		12,69	3,73	0,688
	PE08	Training		12,42	3,65	0,672
	PE12	Clearly roles and responsibilities team		12,08	3,55	0,653
	PE06	Skill competency IT		12,04	3,54	0,651
	PE11	Skill project team		23,61	3,47	0,640
Processes	PR01	**Business process reengineering**	15,17%	**28,16**	4,14	0,763
	PR03	Process integration		26,05	3,83	0,706
	PR04	Change management		25,17	3,70	0,682
	PR02	Process integration		23,81	3,50	0,645
Organizational	OG16	**Communication effective**	33,59%	**12,32**	4,23	0,780
	OG17	Project management		11,74	4,03	0,743
	OG20	Organization strategy		11,36	3,90	0,719
	OG15	Organization culture		11,27	3,87	0,713
	OG19	Clearly goal and vision		11,09	3,81	0,702
	OG21	Organization agility		10,37	3,56	0,657
	OG13	Benefit of system use		10,10	3,47	0,639
	OG14	Organization structure		10,05	3,45	0,636
	OG18	Organization size		9,52	3,27	0,603
Technology	TH24	**Data security**	21,85%	**18,66**	4,08	0,752
	TH25	IT infrastructure		18,47	4,04	0,741
	TH23	Information standarization		16,69	3,65	0,672
	TH27	Technology trend		16,23	3,55	0,654
	TH22	System integration		16,05	3,51	0,647
	TH26	Legacy systems		13,81	3,02	0,556
			100,00%		100,00	18,424

The result data processing of the weight of dimensions and factors of agile ERP readiness assessment, the show that the dimension influence of people is 29,39%, the dimension influence of processes is 15,17%, the dimension influence of organizational is 33,59%, and the dimension influence of technology is 21,85%. It shows that the dimension of organizational is critical dimension that considering in agile ERP readiness assessment. While based on the top rank of final weight for each factors of the agile ERP readiness assessment, the show that the score of top rank for people readiness is top management support(13,27%), the score of top rank for processes readiness is Business Process Reengineering(28,16%), the score of top rank for organizational readiness is communication effective (12,32%), and the score of top rank for technology readiness is data security(18,66%). It shows that the score of top rank of each dimension is critical factor that considering in agile ERP readiness assessment. Therefore, based on this research, in total 27 factors were identified as readiness factors for the agile ERP assessment.

6. Conclusion

Based on the results of this research concluded that an iterative and collaborative work environment in the agile ERP approach is fundamental for responding to change. However, changes are not made automatically, but require top management support to realize the impact of change with a commitment to disseminate to the operational level to ensure the change process is carried out. This is to ensure that the ERP implementation runs well. Thus, it can be said the agile ERP approach is highly helpful for ERP implementation of organizations even it can enhance the organization performance. For reducing the complexity of ERP implementation for the organizations, thus the consider of 27 factors were identified as readiness factors for the agile ERP assessment with the dimensions of measuring agile ERP in readiness assessment are processes, people, organizational, and technology. It was concluded that the critical dimension for agile ERP readiness assessment is the organizational dimension, and the critical factors of the agile ERP readiness assessment are top management support, business process reengineering, communication effective, and data security. However, the authors realize that this research is still far from perfect. Therefore, suggestions and criticisms from the reviewer team are highly expected. The authors will conduct further research by designing prototypes and applications to ERP readiness, and development of the agile ERP readiness assessments by testing on a real case study in related to the industry.

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