ANALYSIS OF INFORMATION QUALITY, TECHNOLOGY CAPABILITY TOWARDS STRATEGIC DECISION MAKING, AND THEIR EFFECT ON IMPROVING ORGANIZATIONAL PERFORMANCE

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ABSTRACT

This study aims to analyze the effect of information quality and technology capability on strategic decision making and their impact on organizational performance. The population in this study was all employees at the Department of Communication, Informatics and Statistics, Brebes Regency, totaling 115 employees and the entire population was sampled. The analytical tool used is SPSS Ver 22 software. The results of the study found that the quality of information did not have a significant effect on organizational performance. Technology capability has a positive and significant effect on organizational performance. The quality of information has a positive and significant effect on strategic decision making. Technology capability has a positive and significant effect on strategic decision making. Strategic decision making has a positive and significant effect on organizational performance.

Keywords: Information Quality, Technology Capability, Strategic Decision Making, Organizational Performance.

INTRODUCTION

HR holds a central position in development, because competent human resources are able to improve performance. Performance is the main aspect in government development, through high-performing human resources can accelerate development. Performance is an evaluation of the constituents to assess the ability of individuals and companies. Performance criteria that are often used are efficiency, effectiveness, productivity and social references. Organizational performance contains the actual output or results of the organization which is measured against what is the purpose of the output objectives (Doval, 2020). Tomal & Jones (2015) define organizational performance as the actual results or outputs of the organization measured against the intended output of the organization. Organizational performance covers three specific areas of corporate results: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder returns (total shareholder return, economic value added, etc.), (Richard et al., 2009). The potential for business success depends on organizational performance, meaning the organization's ability to implement business strategies effectively will be able to achieve institutional goals (Randeree & Youha, 2009). Several variables that shape organizational performance, such as business model effectiveness, efficiency, and results (Boyatzis & Ratti, 2009; Ryan et al., 2009). Organizational

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performance is largely dependent on the level of skill that leaders possess in terms of implementing strategy. Organizational performance, according to Cho & Dansereau (2010), refers to the company's performance compared to its goals and objectives.

Organizational performance is based on the ability of the organization's human resources to make strategic decisions. Strategic decision making is reflected in the sequence of actions that bridge the gap between the current and future state of the organization; it is one of the most influential predictors of organizational success (Bolland & Lopes, 2018; McShane & Glinow, 2015. Griffin (2021) states that the decision-making process is not simply making a choice from a list of alternative options, but rather recognizing and defining the nature of the decision situation, identifying alternatives, selecting the best alternative, and implementing and evaluating the results. Strategic decisions occur continuously: include the formulation and implementation of which are central to managerial activity in all types of organizations; both large and small organizations, private and public, both for-profit and non-profit. Decision making is the process of defining the problem and selecting the best alternative from a series of alternative options (Eromafuru, 2016). Griffin (2021), Decision Making as a means to provide solutions to identified problems. Wilson (2015) states that strategic decision making is like the heart in the body, so managers must be able to analyze the environment, assess organizational capabilities and investigate technological changes, take preferred actions, and examine alternative possibilities. Strategic decisions, which are made, are not easy to change because they have a big impact on organizational performance. According to Griffin (2021), decision making is the act of choosing one alternative from a set of alternatives. Opportunities in the external competitive environment are greatest for management to determine what to do with the available resources, as well as how to take advantage of opportunities to the organization's advantage.

Strategic decision making is strongly influenced by the quality of information and the ability to use technology (technology capability). Information quality is a desirable characteristic of the output system. Information quality is defined as an assessment or measure of how accurately an information object is used (Nurse et al., 2011). Information quality relates to relevance, understanding, accuracy, conciseness, completeness, currency, timeliness, usefulness. According to Al-Mamary et al. (2014) the quality of information has an important role for the success of MIS in organizations. According to Gustavsson & Jonsson (2008) the attributes of quality information are complete, concise, reliable, timely, valid, accessible, the right amount, credible, relevant, and understandable. The information output system must be relevant to the required purpose, easy to understand, accurate or reducing errors, concise, complete or contains all the necessary information, current, fast and timely availability to support the usefulness of information needs. Stvilia et al. (2007) asserted that the company's processes depend on information, because the quality of information as one of the main determinants of the quality of their decisions and actions. Operationally, the quality of information is good, useful, current and accurate information, the quality of information lies in how the information is perceived and used by its customers. Information consumers refer to users, so users affect the quality of information.

While Information Technology (IT) Capability is the use of technology to meet the information needs of the company (Turulja & Bajgoric, 2016). Information technology capabilities are defined as the organization's ability to acquire, deploy, combine, and reconfigure IT resources to support and improve business strategies and work processes; (Mao et al., 2015). IT capability is conceptualized as effective technology management in setting and achieving

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organizational goals, so that it has an organizational role at strategic and operational levels. Lu & Ramamurthy (2011) state that IT capabilities enable companies to identify changes in the environment, control internal information, make fast and innovative decisions, align internal processes, and increase agility. IT capabilities refer to the distinctive assets, competencies, knowledge, processes, and relationships that enable companies to effectively acquire, deploy, and manage IT products and services in shaping innovation and business strategy. Mao et al. (2015) state that IT capability includes the quality of IT resources and the ability to manage them.

The results of the theoretical study show that Technology Capability has an influence on Organizational Performance (Sidiq & Astutik 2017), while Ping et al. (2018) Technology Capability has no effect on Organizational Performance; this condition indicates that the capability of technology to improve organizational performance is still being debated or there is still a research gap.

Efforts to improve public information services in accordance with Law Number 14 of 2008 concerning Information Disclosure, the government as a public body is obliged to provide information. To improve the quality of information, an integrated Single Data System (SDS) technology capability is needed. Dissemination of information is carried out through various media to the public by the Office of Communication, Information and Statistics of Brebes Regency. The public still gets the highest information from TV media 36.54%, next is Word of Mouth 22.44%, Internet 16.67% from government structures (village heads, village leaders) at 12.18%, and the lowest without references is 0, 64%.; (Source: Communications Information Service, Brebes). This condition explains the lack of quality information from the structure of the Brebes district government because it has only reached 12.18%.

Based on theoretical studies and there is still research and gap phenomena, this research aim to:

1) To find out and analyze the influence of information quality on organizational performance
2) To find out and analyze the effect of technology capability on organizational performance
3) To find out and analyze the influence of information quality on strategic decision making
4) To find out and analyze the influence of technology capability on strategic decision making
5) To find out and analyze the influence of strategic decision making on organizational performance

The Relationship between Information Quality and Organizational Performance

Information quality is a desirable characteristic of the system output. For example relevance, understanding, accuracy, conciseness, completeness, currency, timeliness, usability. Information system output must be relevant to the required purpose, easy to understand, accurate or reducing errors, concise, complete or contains all the necessary information, current, fast and timely availability to support the needs and usefulness of information. According to Al-Mamary et al. (2014) the quality of information as an important factor for the success of MIS in organizations. The quality of the information used has a positive impact on measuring organizational performance (Slone 2006). Information Quality mostly has a significant influence on performance (Makau et al., 2017). The results of the research of Al-Mamary et al. (2014) found that there was a positive and significant influence between the quality of information on individual performance and organizational performance. Information quality is hypothesized to have a positive relationship to organizational performance; Al-Mamary et al. (2014). However,

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according to the Basel & Oudat Research, 2020, if the data quality is negative and significant, it shows that the quality of information is a strategic determinant of organizational survival.

H_1: *Information Quality has a positive and significant effect on Organizational Performance*

The Relationship between Technology Capabilities towards Organizational Performance

Information technology capabilities are defined as the organization's ability to acquire, deploy, combine, and reconfigure IT resources to support and improve business strategies and work processes (Mao et al., 2015). IT capability is conceptualized as effective technology management in setting and achieving organizational goals, so that it has an organizational role at strategic and operational levels. Lu & Ramamurthy (2011) state that IT capabilities enable companies to identify changes in the environment, control internal information, take fast and innovative decisions, immediately align internal processes, to increase agility. IT capability refers to the distinctive assets, competencies, knowledge, processes, and relationships that enable an enterprise to effectively acquire, deploy, and manage IT products and services in shaping innovation and business strategy; (Mao et al., 2015). Information technology capabilities have a positive influence on organizational performance, (Zahra1 et al., 2019). IT capability is significantly related to organizational performance based on the resource-based view (RBV). The research results provide important information about the influence of IT capabilities on organizational performance, for managers and academics (Kabiru et al., 2012). Alignment between critical organizational activities and information technology capabilities, both of which have a significant influence on organizational performance; (Hung et al. 2018). In other studies, the ability of information technology does not affect organizational performance (Ping et al., 2018).

H_2: *Technology Capability has a positive and significant effect on Organizational Performance*

The Relationship between Information Quality and Strategic Decision Making

Kinney, 2000 defines information quality as (a) Measurement methods used to prepare information and represent what decision makers want to know (relevance of information) and (b) Methods that are applied competently and the results are presented honestly (reliability or credibility of information). Quality data is an important prerequisite for managerial decision making. Information quality is defined in several ways and has various effects on consumers of information. Operationally, the quality of information is good, useful, current and accurate information. Paul Lillrank (2003) explores information quality as the success of receiving what the sender intended to convey information to the recipient. The hope is that the recipient understands the content of the communication. Means that if consumers do not understand the information, it indicates that the information is not of good quality. The decisions made have far-reaching consequences for the organization. Therefore, the information research used requires appropriate indicators to achieve sustainable organizational performance. Alshikhi & Abdullah (2018); the high quality of the information produced can improve the decision-making process and can be a competitive advantage for the organization. Company performance depends on the quality of information, good quality information will support decision making and increase the value of organizational performance; (Davis & Golicic, 2010).

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H_3: *Information Quality has a positive and significant effect on Strategic Decision Making*

The Relationship between Technology Capability and Strategic Decision Making

Lu & Ramamurthy (2011) stated that IT capabilities enable companies to identify changes in the environment, control internal information, take fast and innovative decisions, immediately align internal processes, therefore, increase agility. IT capability is defined as a combination of IT-based resources and with other resources implemented in a way that adds value (Chen et al., 2015; Fink, 2011). IT capability is defined as the ability to control IT costs and costs, and allow time to achieve company targets. Organizational IT capability is defined as the company's ability to mobilize and deploy IT-based resources to achieve operating objectives; Zeng and Huang (2003). Guo et al., 2008; Lim et al., (2012); Fink (2011) define IT capability as an aggregate concept/feature of the company. Based on research conducted by Sidiq & Astutik (2017), technology capabilities have a positive and significant effect on strategic decision making. Decision-making style has a high positive impact on organizational performance (Rehman et al., 2012).

H_4: *Technology Capability has a positive and significant effect on Strategic Decision Making*

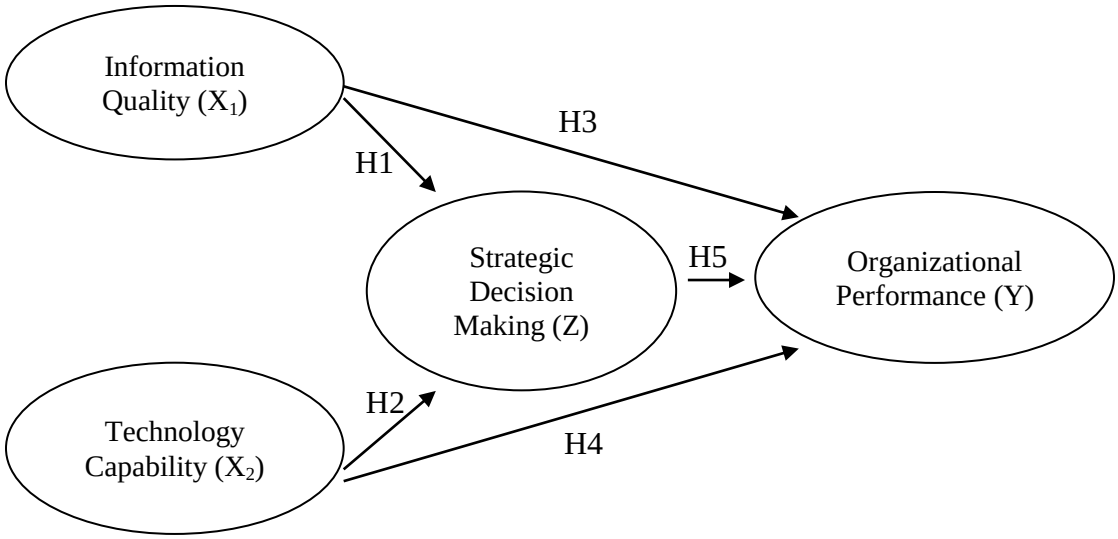

FIGURE 1
THEORETICAL THINKING FRAMEWORK

The Relationship between Strategic Decisions Making To Organizational Performance

Strategic decision making is conceptualized as influencing organizational performance, decision quality, commitment, understanding, and affective acceptance through the channel transacted (Rehman et al., 2012); in his research found that rational and dependent decision-making styles have a high positive impact on organizational performance while risk-averse decision-making styles have a negative impact on organizational performance. Decision-making style is a learned habitual response pattern shown by an individual when faced with a decision

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situation. Based on this definition, individual decision-making styles are grouped into five major categories which in turn relate to rational, intuitive, and dependent, avoidant, and spontaneous decision-making styles. Nwoko & Emerole (2017) in his research conclude that employee participation in decision making has a positive effect on organizational performance. Strategic decision making has an effect on organizational performance; performance is measured in the long term, not short term so that the results of strategic decisions will be felt within a certain period of time. The literature and previous studies show that the strategic decision-making process plays an important role in the effective performance of the organization (Alhawamdeh et al., 2019). With decision making has an influence on company performance.

H_5: *Strategic Decision Making has a positive and significant impact on Organizational Performance*

METHODOLOGY

Population and Sample

In this study, the population consisted of all employees at the Department of Communication, Information and Statistics, Brebes Regency and 10 Regional Apparatus Organizations; A total of 115 employees, and all of them were sampled in the study. All employees are spread across 11 Regional Apparatuses in Brebes Regency consisting of 65 employees from Dinkominfotik, and 5 employees each representing from 10 Regional Apparatuses totaling 50 employees (BKPSDMD, BPPKAD, Baperlitbangda, Dinpermades, Dindukcapil, Social Service, Transportation Agency, DPMTSP, RSU, Satpol PP). The method used in sampling is the whole sample (total sampling) or census.

Research Variables

In this study there are two independent variables Information Quality (X1) and Technology Capability (X2). The dependent variables are: Strategic Decision Making (Z) and Organizational Performance (Y) (Table 1).

Table 1
DEFINITION OF OPERATIONAL VARIABLES AND INDICATORS

No	Variables and Operational Definitions	Indicator
1	**Organizational Performance** Organizational performance includes the actual results of the organization (Doval , 2020)	Y1. Improve management performance (Richard et al., 2009). Y2. Assess the potential for business success (Randeree & Youha, 2009) Y3. The basis for establishing organizational goals and objectives (Cho & Dansereau (2010). Y4. Creating effective business results (Ryan et al., 2009). Y5. The basis of compensation (Doval 2020).
2	**Strategic Decision Making** Strategic decision making is the ability to analyze the environment, assess organizational capabilities and investigate technological shifts, take preferred actions, and examine alternative possibilities (Wilson, 2015).	Z1. identify problems, Z2. Making decision choices Z3. Make alternative decisions. Z4. carry out decisions, Z5. Evaluating decision outcomes (McShane & Glinow, 2015; Griffin, 2021)

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Table 1 DEFINITION OF OPERATIONAL VARIABLES AND INDICATORS		
No	**Variables and Operational Definitions**	**Indicator**
3	**Information Quality** Information quality is the quality of output that is able to produce an accurate information system.	X1.1. Completeness X1.2. Format X1.3. Relevance X1.4. Accurate X1.5. Timeliness
4	**Technology Capability** An organization's ability to acquire deploys, combine, and reconfigure IT resources to support and improve business strategies and work processes. (Mao et al., 2015)	X2.1. IT Resources, X2.2. Use of information technology, X2.3. Reconfigure IT Resources, X2.4. IT Work Process and X2.5. Improve business strategy (Mao et al., 2015)

Method of Collecting Data

Data collection methods in general are using questionnaires, observations and interviews. Data was measured using a Likert scale with a scale of 1 to 5. Answers Strongly Disagree (score: 1); Answers Disagree (score: 2), Moderately Agree (score: 3); Answers Agree (score: 4), Answers Strongly Agree (score: 5).

RESULTS

Table 2 VALIDITY TEST				
Variable	**Items**	**r count**	**r table**	**Description**
Information Quality (X1)	X1.1	0.638	0. 197	Valid
	X1.2	0.652		Valid
	X1.3	0.627		Valid
	X1.4	0.722		Valid
	X1.5	0.639		Valid
Technology Capability (X2)	X2.1	0.521	0. 197	Valid
	X2.2	0.691		Valid
	X2.3	0.593		Valid
	X2.4	0.642		Valid
	X2.5	0.619		Valid
Strategic Decision Making (Z)	Z.1	0.681	0. 197	Valid
	Z.2	0.741		Valid
	Z.3	0.753		Valid
	Z.4	0.679		Valid
	Z.5	0.720		Valid
Organizational Performance (Y)	Y1	0.694	0.197	Valid
	Y2	0.777		Valid
	Y3	0.668		Valid
	Y4	0.736		Valid
	Y5	0.558		Valid

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Table 3 RELIABILITY TEST				
No	**Variable**	**Alpha r value**	**Standardized value**	**Description**
1	Information Quality (X1)	0.666	0.600	Reliable
2	Technology Capability (X2)	0.711	0.600	Reliable
3	Strategic Decision Making (Z)	0.761	0.600	Reliable
4	Organizational Performance (Y)	0.712	0.600	Reliable

From the Tables 2 & 3 above, it is known that the r alpha value of all variables exceeds the standardized value, meaning that the reliability test results of all variables get reliable results. The data were also tested in the One-Sample Kolmogorov-Smirnov Test and were normally distributed. Likewise, in the Variance Inflation Factor (VIF) test, there was no multicollinearity, and there was no heteroscedasticity.

Demographic Profile of the Respondents

Table 4 RESPONDENT DATA		
Age	**Quantity**	**(%)**
< 20 years	15	13
21– 30 years	48	41.8
31– 40 years	32	27.8
41– 50 years	16	13.9
> 51 years	4	3.5
Gender		
Man	78	67.8
Woman	37	32.2
Education		
High school	35	30.4
D3	25	21.7
Bachelor Degree	48	41.7
Postgraduate	7	6.2
length of work		
$< 5^{th}$	27	23.5
$6^{th} – 10^{th}$	46	40
$11^{th} – 15^{th}$	34	29.6
$15^{th}>$	8	6.9
Total	**115**	**100**

Age, the highest age is 21 to 30 years at 41.8%, while the lowest is over 51 years at 3.5%. Shows employees are still of productive age and can still be improved further. While the elderly live 3.5% because they are considered as role models or drafters. Sex, male as much as 67.8% while female as much as 32.2%. Shows male employees are more agile and have high flexibility so that more than female employees who demand accuracy, thoroughness and perseverance. Education, bachelor degree is 41.7% while the lowest is postgraduate is 6.2%. This condition shows that undergraduate education is considered to have an important role in changing performance, so masters are still considered very relevant. While the Length of Work, 6 to 10 years as much as 40%, shows that experience plays an important role for the progress of the

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organization while the lowest is over 15 years as much as 6.9%, usually they have worked too long so they need further refreshment (Table 4).

Respondent Description

Table 5
RESPONDENTS' ANSWER INDEX

No	Items	Total Score	Average	Interpretation Scale
1	**Information Quality (X1)**			
	X1.1 Completeness	504	4.4	6
	X1.2 Formate	497	4.3	5
	X1.3 Relevance	473	4.1	3
	X1.4 Accurate	482	4.2	4
	X1.5 Timelines	486	4.2	4
2	**Technology Capability (X2)**			
	X2.1 IT Resources	479	4.2	4
	X2.2 Use Of Information Tecnology	516	4.5	7
	X2.3 Reconfiguring IT Resources	503	4.4	6
	X2.4 IT Work Process	499	4.3	5
	X2.5 Improve Business Strategy	484	4.2	4
3.	**Strategic Decision Making (Z)**			
	Z.1 identify problems	496	4.3	5
	Z.2 Make alternative decisions	455	3.9	1
	Z.3 Making decision choices	551	4.8	8
	Z.4 carry out decisions	492	4.3	5
	Z.5 Evaluating decision results	478	4.2	4
4	**Organizational Performance (Y)**			
	Y.1 Improve management performance.	521	4.5	7
	Y.2 Assess the potential for business success	460	4.0	2
	Y.3The basis for setting organizational goals and objectives	487	4.3	5
	Y.4 Creating effective business results refers to	489	4.3	5
	Y.5Compensation basis	406	4.2	4

The results of the respondent's answer index when viewed from a scale of 1 to 8 (scale 1 is the lowest and scale 8 is the highest). The highest indicator lies in the strategic decision-making variable with the indicator making decision choices a determinant of organizational performance and the lowest indicator in the decision to choose alternative decisions being the most difficult thing for human resources. This can be justified because making alternative decisions is not easy, because if the decision has been taken then it becomes a certainty and must be carried out for every member of the organization.

Based on the Table 5 above, it can be seen that the average number of information quality variables with the indicator x1.1 completeness is average 4.4 or a scale of 6, the highest, and the lowest is the relevant indicator x1.3, relevance is average 4.1 or scale 3. Technology Capability Variable with indicator x2 .2 the use of Information technology is average 4.5 or a scale of 7, while the indicator is x2.1 IT Resources is average 4.2. or a scale of 4. Decision-making variables with the indicator z3 Making Decision Choices is average 4.8, or a scale 8; indicator z2 making alternative decisions is average 3.9 or a scale of 1. Organizational Performance Variable

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with Y1 indicator Improving management performance is average 4.5, with a scale of 7 and Y2 Assessing the potential for business success is average 4.0. with a scale of 2.

Multiple Regression Analysis

Multiple regression analysis to analyze the effect of Information Quality (X1), Technology Capability (X2), Strategic Decision Making (Z) and Organizational Performance (Y), using the following formula (Tables 6-9):

Stage Test I

$$Y = a + b1X1 + b2X2 + b3Z + e$$

Stage Test II

$$Z = a + b1X1 + b2X2 + e$$

Table 6
F TEST VALUE OF EQUATION I
ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.929	3	1.643	17.327	0.000[b]
	Residual	10.525	111	0.095		
	Total	15.454	114			

a. Dependent Variable: Average Y
b. Predictors: (Constant), Average Z, Average X1, Average X2

Table 7
T-TEST
Information Quality, Technology Capability and Strategic Decision Making Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.155	0.367		5.868	0.000
	Average X1	-0.074	0.117	-0.070	-0.628	0.532
	Average X2	0.236	0.109	0.259	2.171	0.032
	Average Z	0.344	0.092	0.407	3.736	0.000

a. Dependent Variable: Average Y

Table 8
F TEST VALUE OF EQUATION II
ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.514	2	5.257	52.592	0.000[b]
	Residual	11.195	112	.100		
	Total	21.709	114			

a. Dependent Variable: Average Z
b. Predictors: (Constant), Average X2, Average X1

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Table 9
T-TEST

Information Quality and Technology Capability Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.608	0.373		1.631	0.106
	Average X1	0.349	0.116	0.281	3.013	0.003
	Average X2	0.511	0.101	0.473	5.073	0.000

a. Dependent Variable: Average Z

Equation I

$$Y = -0.070X1 + 0.259X2 + 0.407Y$$

Equation II

$$Z = 0.281X1 + 0.473X2$$

DISCUSSION

The Effect of Information Quality on Organizational Performance

Based on the results of the analysis of the quality of information (b1X1) with a value of -0.070 is negative, and not significant. The results of the calculation of the information quality variable obtained a smaller t value < t table with a significance (0.532<0.05) meaning the quality of information is negative and not significant to organizational performance. This condition indicates that the quality of information has not provided benefits to improve organizational performance. This condition can be understood considering the quality of the information from the respondents' answers, the relevance is still on a scale of 3 out of a scale of 8 so that it is still below the average, thus the information is of poor quality, and is still very weak. These results are in accordance with the Basel & Oudat Research, 2020, if the data on the quality of information is negative and significant; it indicates that the quality of information is a strategic determinant of organizational survival. In contrast to the results of research by Slone (2006), the quality of the information used has a positive impact on measuring organizational work results (Makau et al., 2017); Information quality mostly has a significant influence on performance. The results of the research of Al-Mamary et al. (2014) also found a positive and significant influence between the quality of information on individual performance and organizational performance.

The Effect of Technology Capability on Organizational Performance

Based on the results of the technology capability analysis (b2X2), it has a value of 0.259 which is positive. The results of the calculation of the technology capability variable obtained that the t value is greater than t table with a significance (0.032<0.05) meaning that technological capability has a positive and significant effect on organizational performance. These results are in accordance with the research of Zahra et al. (2019); Information technology capabilities have a positive influence on organizational performance. IT capability is significantly related to

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organizational performance based on the resource-based view (RBV). The same result was stated by Kabiru et al (2012) that information is very important in influencing IT capabilities on organizational performance, for managers and academics. Alignment between critical organizational activities and information technology capabilities, both of which have a significant influence on organizational performance (Hung et al., 2018). However, in other studies, the ability of information technology does not affect the organization (Ping et al., 2018). The results of the respondent's description found that the ease of using technology has a scale of 7 so that it is considered good for improving organizational performance.

The Influence of Information Quality on Strategic Decision Making

Based on the analysis of the quality of information (b1X1) has a value of 0.281 which is positive. The results of the calculation of the information quality variable obtained that the t value is greater than t table with a significance (0.003<0.05) meaning that the quality of information has a positive and significant effect on decision making. This research is in line with what was revealed by Alshikhi & Abdullah (2018); the high quality of the information produced can improve the decision-making process and can be a competitive advantage for the organization. Company performance depends on the quality of information, good quality information will support decision making and increase the value of organizational performance (Davis & Golicic, 2010). Based on the descriptive results of the respondents, it shows that the completeness of information still reaches a scale of 6 from a scale of 8 which is an absolute prerequisite for making decisions.

The Influence of Technology Capability on Strategic Decision Making

Based on technology capability analysis (b2X2), it has a value of 0.473 which is positive. The results of the calculation of the technological capability variable obtained that the t value is greater than t table with a significance (0.000<0.05) meaning that technological capability has a positive and significant effect on decision making. Research with the same results was found based on Sidiq & Astutik (2017) technological capabilities that have a positive and significant effect on strategic decision making. Decision-making style has a high positive impact on organizational performance (Rehman et al., 2012). Based on the descriptive results of the respondents, it shows that the reconfiguration of information technology resources has a value of 6 is one way to make strategic decisions.

The Effect of Strategic Decision Making on Organizational Performance

Based on the analysis of decision making (b3Y) has a value of 0.407 which is positive. The results of the calculation of the decision-making variables obtained that the t-count value is greater than t-table with a significance (0.000<0.05) meaning that decision-making has a positive and significant effect on organizational performance. The results of this study are in accordance with the research of Nwoko & Emerole (2017) that decision making has a positive effect on organizational performance. Strategic decision making has an effect on organizational performance; performance is measured in the long term, not short term so that the results of strategic decisions are felt within a certain period of time. Previous studies have shown that the

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strategic decision-making process plays an important role in the effective performance of organizations (Alhawamdeh et al., 2019). Thus the decision making has an influence on the company's performance. The results of the respondent's description indicate that the selection of decision making has a scale of 8 and is considered very well for improving organizational performance.

CONCLUSION

The quality of the information is negative, and not significant; this shows that the quality of information is still weak and insignificant; indicating that the quality of information has not become the main determinant for improving organizational performance, even the quality of information cannot be used as the main reference for making decisions. Technology capability is positive, and significant; this shows that technological capability has a strong influence on improving organizational performance. Decision making is positive, and significant; this condition shows that decision making is very crucial to improve organizational performance. The quality of information is positive, and significant; this means that the quality of information can be used to improve strategic decisions and the impact will be able to improve organizational performance. Technology capability is positive, and significant; this means that good technology capabilities will be able to improve strategic decision making and its impact on improving organizational performance.

Suggestion

The quality of information still needs to be improved, especially in terms of delivering information to the community so that it is conveyed from the government structure, through village heads, village leaders so that it is more valid and accurate. The quality of information should not be allowed to come from news stories that cannot be accounted for and moreover from sources that cannot be accounted for. Here the quality of information requires a re-checking system before it is spread to the wider community as users, so that no one is harmed. And the goal is to increase public trust and improve the performance of government organizations.

REFERENCES

Alhawamdeh, H.M., & Alsmairat, M.A. (2019). Strategic decision making and organization performance: A literature review. *International Review of Management and Marketing*, *9*(4), 95.

Al-Mamary, Y.H., Shamsuddin, A., & Aziati, N. (2014). The relationship between system quality, information quality, and organizational performance. *International Journal of Knowledge and Research in Management & E-Commerce*, *4*(3), 7-10.

Al-Mamary, Y.H., Shamsuddin, A., & Nor Aziati, A.H. (2014). Key factors enhancing acceptance of management information systems in Yemeni companies. *Journal of Business and Management Research*, *5*(1), 108-111.

Alshikhi, O.A., & Abdullah, B.M. (2018). Information quality: definitions, measurement, dimensions, and relationship with decision making. *European Journal of Business and Innovation Research*, *6*(5), 36-42.

Basel J.A.A., & Oudat, M.A. (2020). Information quality and data quality in accounting information system: Implications on the organization performance. *International Journal of Psychosocial Rehabilitation*, *24*(5), 3258-3269.

Bolland, E.J., & Lopes, C.J. (2018). *Decision making and business performance*. Edward Elgar Publishing.

Citation Information: Hutomo, P.T.P., & Rofi, A. (2022). Analysis of information quality, technology capability towards strategic decision making, and their effect on improving organizational performance. *Academy of Strategic Management Journal, 21*(6), 1-15.

Boyatzis, R.E., & Ratti, F. (2009). Emotional, social and cognitive intelligence competencies distinguishing effective Italian managers and leaders in a private company and cooperatives. *Journal of Management Development, 28*(9), 821-838.

Chen, Y., Wang, Y., Nevo, S., Benitez-Amado, J., & Kou, G. (2015). IT capabilities and product innovation performance: The roles of corporate entrepreneurship and competitive intensity. *Information & Management*, *52*(6), 643-657.

Cho, J., & Dansereau, F. (2010). Are transformational leaders fair? A multi-level study of transformational leadership, justice perceptions, and organizational citizenship behaviors. *The Leadership Quarterly*, *21*(3), 409-421.

Davis, D.F., & Golicic, S.L. (2010). Gaining comparative advantage in supply chain relationships: the mediating role of market-oriented IT competence. *Journal of the Academy of Marketing Science*, *38*(1), 56-70.

Doval, E. (2020). Organizational performance by the process of knowledge creation. *Review of General Management*, *32*(2), 15-28.

Eromafuru, E.G. (2016). *The foundation of management (Theory and Practice).* Enugu: Precision Publishers

Fink, L. (2011). How do IT capabilities create strategic value? Toward greater integration of insights from reductionistic and holistic approaches. *European Journal of Information Systems*, *20*(1), 16-33.

Griffin, R. (2021). *Fundamentals of management*. Cengage Learning.

Guo, J., Sun, L., & Zhong, L. (2008). Research on firm IT capability and competitive advantages. *International Journal of Business and Management*, *3*(6), 89-92.

Gustavsson, M., & Jonsson, P. (2008). Perceived quality deficiencies of demand information and their consequences. *International Journal of Logistics Research and Applications*, *11*(4), 295-312.

Hung, W.H., Wang, T.H., Chen, Y.H., & Wu, M.F. (2018). Aligning organizational critical Activities and information technology capabilities with organizational performance. In *Proceedings of the 2nd International Conference on Business and Information Management* (pp. 110-115).

Kabiru, J.R., Mohd, R.R., & Norlena, H. (2012). Moderating effect of Information technology (IT) capability on the relationship between business process reengineering factors and organizational performance of Bank. *African Journal of Business Management*, *6*(16), 5551-5567.

Lim, J.H., Stratopoulos, T.C., & Wirjanto, T.S. (2012). Role of IT executives in the firm's ability to achieve competitive advantage through IT capability. *International Journal of Accounting Information Systems*, *13*(1), 21-40.

Lu, Y., & K. (Ram) Ramamurthy. (2011). Understanding the link between information technology capability and organizational agility: An empirical examination. *MIS quarterly*, 931-954.

Makau, S., Lagat, C., & Bonuke, R. (2017). The role of information quality on the performance of hotel industry in Kenya. *European Scientific Journal*, *13*(20), 169-184.

Mao, H., Liu, S., & Zhang, J. (2015). How the effects of IT and knowledge capability on organizational agility are contingent on environmental uncertainty and information intensity. *Information Development*, *31*(4), 358-382.

McShane, S.L., & Von Glinow, M.A. (2015). *Organizational Behavior 7/e*. New York: McGraw-Hill Education.

Nurse, J.R., Rahman, S.S., Creese, S., Goldsmith, M., & Lamberts, K. (2011). Information quality and trustworthiness: A topical state-of-the-art review.

Nwoko, V.O., & Emerole, G.A. (2017). Effects of employee participation in decision making on organizational performance: A study of national root crops research Institutes, Umidike (2012–2016). *International Journal of Economics, Business and Management Research*, *1*(05).

Ping, T.A., Chinn, C.V., Yin, L.Y., & Muthuveloo, R. (2018). The impact of information technology capability, business intelligence use and collaboration capability on organizational performance among public listed companies in Malaysia. *Global Business and Management Research*, *10*(1), 293-312.

Randeree, K., & Youha, H.A. (2009). Strategic management of performance: An examination of public sector organizations in the United Arab Emirates. *International Journal of Knowledge, Culture and Change Management*, *9*(4), 123-134.

Rehman, R.R., Khalid, A., & Khan, M. (2012). Impact of employee decision making styles on organizational performance: in the moderating role of emotional intelligence. *World Applied Sciences Journal*, *17*(10), 1308-1315.

Richard, P.J., Devinney, T.M., Yip, G.S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, *35*(3), 718-804.

Citation Information: Hutomo, P.T.P., & Rofi, A. (2022). Analysis of information quality, technology capability towards strategic decision making, and their effect on improving organizational performance. *Academy of Strategic Management Journal, 21*(6), 1-15.

Ryan, G., Emmerling, R.J., & Spencer, L.M. (2009). Distinguishing high-performing European executives: The role of emotional, social and cognitive competencies. *Journal of Management Development*.

Sidiq, A., & Astutik, E.P. (2017). Analysis of information technology capabilities on business performance of SMEs with customer orientation as an intervening variable (Study on manufacturing sector SMEs in the greater solo region). *Media Economics and Management*, *32* (1).

Slone, J.P. (2006). *Information quality strategy: An empirical investigation of the relationship between information quality improvements and organizational outcomes*. Unpublished doctoral dissertation, Capella University.

Stvilia, B., Gasser, L., Twidale, M.B., & Smith, L.C. (2007). A framework for information quality assessment. *Journal of the American Society for Information Science and Technology*, *58*(12), 1720-1733.

Tomal, D.R., & Jones Jr, K.J. (2022). A comparison of core competencies of women and men leaders in the manufacturing industry. *The Coastal Business Journal*, *14*(1), 2.

Turulja, L., & Bajgorić, N. (2016). Innovation and information technology capability as antecedents of firms' success. *Interdisciplinary Description of Complex Systems: INDECS*, *14*(2), 148-156.

Wilson, D. (2015). Strategic decision making. *Wiley Encyclopedia of Management*, 1-4.

Zahra, M., Hameed, W.U., Fiaz, M., & Basheer, M.F. (2019). Information technology capability a tool to expedite higher organizational performance. *UCP Management Review (UCPMR)*, *3*(1), 94-112.

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