THE INFLUENCE OF ACCOUNTING INFORMATION SYSTEMS, ONLINE-BASED MARKETPLACES AND MARKET BEHAVIOR ON BUSINESS DECISION MAKING AT THE FOURTH INDUSTRIAL REVOLUTION ERA

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ABSTRACT
During these years, the world is entering a new age of technological advancement, which made a significant influence on business. Therefore, a change has to be made. Businesses has to broaden their horizon to welcome this new age, the age of Artificial Intelligence, on doing so, they have to start making new decisions based on this new era, collecting new information, expanding their market into the online based marketplaces which in turn opened new opportunities unbound by location.
Keywords: Accounting Information Systems, Online Marketplace, Market Behaviour, Decision Making

1.   INTRODUCTION

The World is moving extremely fast, right now we are entering a new era, the era of Fourth Industrial Revolution, and with it all the business must promptly adapt to the swift movement of the market which demanded everything to be fast and automated, This new era, the era of Industrial Revolution has made a significant amount of new jobs and new opportunities, but it is also a new threat to those who could not keep up and adapt to the rapidly growing new technologies, The Fourth Industrial Revolution is also called the digital revolution era, due to the computer proliferations and automatization on all fields. One of the unique traits of the Fourth Industrial Revolution is the application of Artificial Intelligence also known as AI. (Tjandrawinata, 2016) the usage of Artificial Intelligence could one day replace human work force because they are more cost effective.

The changes that happens on this era would also have significant effects on market demands, which is why business are demanded to use a suitable business method, one of of those methods including using a digital payment method. New technologies and new approaches that combines the physical, digital and biological will fundamentally changes the life pattern and human interaction (Tjandrawinata, 2016).

Technological and digital media advancement allows automatization to occur on every single field and also made both the people and business have better and faster accessibility on the information about what is is happening. This advancement also made the marketplace of this era a highly competitive market, because of that, online based marketplace could be one of the alternatives taken for business expansion.

Based on the criteria that have been determined in non-probability sampling with purposive sampling technique, a sample of 59 is obtained. The panel data procedure shown is based on 59 observed data that has been obtained. In this study, author use path analysis, a form of multiple regression statistical analysis that is used to evaluate causal models by examining the relationships between a dependent variable and two or more independent variables. By using this method, it can be estimated both the magnitude and significance of causal connections between variables.

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2. LITERATURE REVIEW

2.1 The Effect of Accounting Information Systems to Business Decision Making on the Fourth Industrial Revolution

Accounting Information Systems is a source of information, which can provide a wide range of information to meet managers' information needs, is a system that generates information for decision makers through the process of collecting, recording, storing, and processing data (Romney &Steinbart, 2016). Decision making is a combination of three functions: planning, organizing implementation and evaluation, because all of them require decisions (Yahyuni et al.2017). A process in solving problems faced to be able to obtain solutions that will be implemented is referred to as decision making (Yahyuni et al. 2017) one of the purposes of Accounting information system is to provide business managers with information, decision making will run effectively if the information system is properly designed and evaluated.

2.2 The Effect of Online Marketplace to Business Decision Making on the Fourth Industrial Revolution.

An online marketplace is a website or mobile application that connects buyers and sellers. Online marketplaces date back to the early days of the internet, online marketplace affected the traditional paradigm about marketplace, where now the marketplace will no longer be bounded by location, a transaction could be done every time by everyone, even those which was a potential buyer could now easily access an item sold on the other end of the world, during the lockdown on 2020 COVID-19 pandemic, online marketplace fill a significant role and helped shorten the distance between seller and buyers which at that time which make online marketplace a force to reckon with, a good decision making on this area could significantly increase the product that will sold.

2.3 The Effect of Market Behaviour to Business Decision Making on the Fourth Industrial Revolution.

A person's decision-making is influenced by his or her personal and social factors. Personal factors include a person's motivation, perception, understanding, beliefs, attitudes, and personality. Through market research in particular can be built a more relevant and informative market profile. Good information should be able to explain not only the current market profile but also the market profile for the decision making on a foreseeable future.

Figure 1. Conceptual Outline
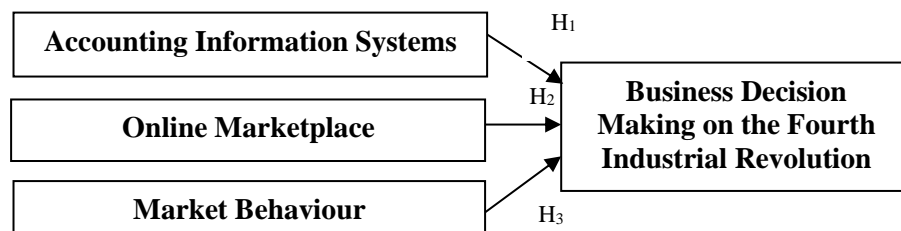
Source: Self Processed

3. DATA AND DATA COLLECTION TECHNIQUES

The data collected in the preparation of this study is primary data that is a data source that directly provides data to data collectors (Sugiyono, 2019). The primary data

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method used is the survey method with questionnaires. According to Jogiyanto (2013), Survey (survey) or self-administered survey is a method of collecting primary data by giving questions to respondents. The respondents in this study are entrepreneurs and the participants in trading companies. In line with the opinion of Srivastava & Rego, (2011) which states that questionnaires are questions that are asked to individuals to obtain useful information in accordance with the given topic.

In this study, the questionnaire was distributed through google form by sending through the internet network (Computer Delivered Survey), then processed based on predetermined criteria.

Data Analysis Techniques

In this study technical data analysis used is Structural Equation Modelling (SEM), SEM is a combination of factor analysis and regression analysis (Santoso, 2019). Partial Least Squares Structural Equation Modelling (PLS-SEM) will help explain the extent of the influence of variables (X1) accounting information systems, Online Marketplace variables (X2) and variables (X3) on variable (Y) decision making.

4. RESULT AND DISCUSSION
4.1 Structural Model
The model used in this paper is the influence of Accounting Information System, Online Marketplace, Market Behaviour on Business People's Decision Making in the Fourth Industrial Revolution Era. So, Business Decision Making in Fourth Industrial Revolution Era as an endogenous latent variable, while Accounting Information System, Online-Based Marketplace, Market Behaviour as exogen latent variable.

Constructs or latent variables in this structural equation include: Accounting Information Systems, Online-Based Marketplaces, Market behaviour and Business Decision Making in the Fourth Industrial Revolution Era. Each latent variable has an indicator or variable manifest in it

4.2 Construct Reliability Analysis

Table 1. Construct Reliability Analysis

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
X1	0.925	0.929	0.935	0.508
X2	0.929	0.933	0.943	0.703
X3	0.864	0.878	0.892	0.510
Y	0.895	0.897	0.916	0.578

Source: Self Proceed

Composite reliability values of 0.6 – 0.7 are considered to have good reliability (Sarstedt et al., 2017), and Cronbach's expected alpha value is above 0.6 (Ghozali and Latan, 2015). Based on the table, it can be seen that all constructs have a value of cronbach's

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Alpha > 0.6 and even all of them, then it can be said that all the constructs have been reliable.

The undimensionality test was conducted using composite reliability indicators and alpha cronbach. For both indicators the cut-value is 0.7. So, based on the table above, all constructs have qualified unidimensionality because the composite reliability value > 0.7.

Convergent validity is determined based on the principle that a measuring gauge of a construct should be highly correlated (Ghozali and Latan, 2015). The convergent validity of a construct with reflective indicators is evaluated with Average Variance Extracted (AVE). The AVE value should be equal to 0.5 or more. An AVE value of 0.5 or more means the construct can account for 50% or more of the item variance (Wong K.K., 2013, Sarstedt et al., 2017).

Based on the average variance extracted (AVE) value to determine the achievement of the convergent validity requirement, all constructs have been reached for convergent validity requirements because the AVE values are all >0.50.

Table 2. Correlation coefficient between variables

	X1	X2	X3	Y
X1	0.712	0.730	0.684	0.725
X2		0.838		
X3		0.547	0.714	0.764
Y		0.539		0.760

Source: Self Proceed

Discriminant validity aims to test how far latent constructs are actually different from other constructs. A high discriminant validity value indicates that a construct is unique and can explain the measured phenomenon. A construct is said to be valid by comparing the root value of the AVE (Fornell-Larcker Criterion) with the correlation value between latent variables. The root value of AVE should be greater than the correlation between latent variables.

4.3 Hypotesis Testing

Table 3. Path Coefficient of Each Independent Variable

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
X1 -> Y	0.400	0.408	0.170	2.346	0.019
X2 -> Y	-0.030	-0.018	0.146	0.203	0.839
X3 -> Y	0.507	0.510	0.137	3.704	0.000

Source: Self Proceed

the Output Path Coefficient as seen in the table above is to see the magnitude of the direct effect (direct effect) of each free variable (exogenous) to the variable bound (endogenous).

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4.4 The Effect of Accounting Information Systems to Business Decision Making on the Fourth Industrial Revolution

The magnitude of the parameter coefficient for accounting information system variables on business decision making in the Fourth Industrial Revolution era amounted to 0.400 which means there is a positive influence of accounting information systems on business decision making in the Fourth Industrial Revolution era, or it can be interpreted that the better the value of Accounting Information System, the decision making of business people in the Industrial Revolution era 4.0 will increase. The increase of one unit of Accounting Information System will increase the Decision Making of Business People in the Fourth Industrial Revolution Era by 40%. Based on calculations using bootstrap or resampling, where the results of the calculation coefficient of Accounting Information System to Business Decision Making In the Fourth Industrial Revolution Era bootstrap results are 0.408 with a calculated value of 2,346 then the value of p value is $0.019 < 0.05$ so that H0 is rejected, which means that the direct influence of Accounting Information Systems on Business Decision Making In the Fourth Industrial Revolution Era is meaningful or statistically significant.

4.5 The Effect of Online Marketplace to Business Decision Making on the Fourth Industrial Revolution.

The magnitude of the parameter coefficient for online marketplace variables on business decision making in the Fourth Industrial Revolution amounted to -0.030 which means there is a negative influence of online-based marketplaces on business people's decision making in the Fourth Industrial Revolution Era. Or it can be interpreted that the better the value of online-based marketplaces, the decision making of business people in the Fourth Industrial Revolution Era will decrease. The increase of one unit of Online Marketplace will decrease the Business Decision Making of in the Fourth Industrial Revolution Era by 3%. Based on calculations using bootstrap or resampling, where the results of the online-based Marketplace estimation coefficient test on Business Decision Making in the Fourth Industrial Revolution Era bootstrap results are -0.018 with a calculated value of 0.203 then the value of p value is $0.839 > 0.05$ so that H0 is accepted, that means the direct influence of Online-Based Marketplace on Business People's Decision Making In the Fourth Industrial Revolution Era is not meaningful or statistically insignificant.

4.6   The Effect of Market Behaviour to Business Decision Making on the Fourth Industrial Revolution.

The magnitude of the parameter coefficient for the variables of Market Behaviour towards Business People's Decision Making in the Fourth Industrial Revolution Era amounted to 0.507 which means there is a positive influence of Market Behaviour on Business People's Decision Making in the Fourth Industrial Revolution Era. Or it can be interpreted that the better the value of Market Behavior, the decision making of business people in the Fourth Industrial Revolution Era will increase. An increase of one unit of Market Behavior will increase the Decision Making of Business People in the Fourth Industrial Revolution Era by 50.7%. Based on calculations using bootstrap or resampling, where the results of the test coefficient of market behavior to business people's decision making in the Fourth Industrial Revolution era. Bootstrap results are 0.510 with a calculated value of 3,704 Then the value p value is $0.000 < 0.05$ so that H0 is rejected or

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which means the direct influence of Market Behavior on Business People's Decision Making in the Fourth Industrial Revolution Era is meaningful or statistically significant.

So, in this model, The Accounting Information Systems and Market Behavior significantly affect business decision making in the Fourth Industrial Revolution Era because p value < 0.05 while online marketplaces have no significant effect on business decision making in the Fourth Industrial Revolution era because p value > 0.05

5. CONCLUSION

This study identifies the relationship between Accounting Information Systems, Online Marketplace, and Market Behaviour on Business Decision Making in the Fourth Industrial Revolution Era using path analysis method with the conclusions of this study are: (1) Accounting Information Systems have a significant effect on Business Decision Making in the Fourth Industrial Revolution Era, which means that Accounting Information system could be used as a solid ground for decision making on the Fourth Industrial Revolution Era, (2) Online Marketplace have an insignificant effect on Business Decision Making in the Fourth Industrial Revolution Era, which means that Online Marketplace could not be used as a solid ground for decision making on the Fourth Industrial Revolution Era: (3) Market Behaviour have a significant effect on Business Decision Making in the Fourth Industrial Revolution Era, which means that Market Behaviour could be used as a solid ground for decision making on the Fourth Industrial Revolution Era.

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