

Complex, Intelligent and Software Intensive Systems

Proceedings of the 17th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2023)



Lecture Notes on Data Engineering and Communications Technologies

176

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Welcome Message of CISIS-2023 International Conference Organizers

Welcome to the 17th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2023), which will be held from July 5 to July 7, 2023, in conjunction with the 17th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (IMIS 2023).

The aim of the conference is to deliver a platform of scientific interaction between the three interwoven challenging areas of research and development of future ICT-enabled applications: software intensive systems, complex systems, and intelligent systems.

Software intensive systems are systems, which heavily interact with other systems, sensors, actuators, devices, other software systems, and users. More and more domains are involved with software intensive systems, e.g., automotive, telecommunication systems, embedded systems in general, industrial automation systems, and business applications. Moreover, the outcome of Web services delivers a new platform for enabling software intensive systems. The conference is thus focused on tools, practically relevant, and theoretical foundations for engineering software intensive systems.

Complex systems research is focused on the overall understanding of systems rather than its components. Complex systems are very much characterized by the changing environments in which they act by their multiple internal and external interactions. They evolve and adapt through internal and external dynamic interactions.

The development of intelligent systems and agents, which is each time more characterized by the use of ontologies and their logical foundations build a fruitful impulse for both software intensive systems and complex systems. Recent research in the field of intelligent systems, robotics, neuroscience, artificial intelligence, and cognitive sciences are very important factors for the future development and innovation of software intensive and complex systems.

This conference is aiming at delivering a forum for in-depth scientific discussions among the three communities. The papers included in the proceedings cover all aspects of theory, design, and application of complex systems, intelligent systems, and software intensive systems.

We are very proud and honored to have two distinguished keynote talks by Dr. Salvatore Venticinque, University of Campania "Luigi Vanvitelli", Italy, and Prof. Sanjay Kumar Dhurandher, Netaji Subhas University of Technology, India, who will present their recent work and will give new insights and ideas to the conference participants.

The organization of an International Conference requires the support and help of many people. A lot of people have helped and worked hard to produce a successful technical program and conference proceedings. First, we would like to thank all authors for submitting their papers, the Program Committee Members, and the reviewers who carried out the most difficult work by carefully evaluating the submitted papers. We are grateful to Honorary Chair Prof. Makoto Takizawa, Hosei University, Japan, for his guidance and support.

Finally, we would like to thank Web Administrator Co-Chairs for their excellent and timely work.

We hope you will enjoy the conference proceedings.

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Evolution of Intelligent Software Agents

Salvatore Venticinque

University of Campania "Luigi Vanvitelli", Caserta, Italy

Abstract. The talk will focus on the evolution of models, techniques, technologies, and applications of software agents in the last years. Rapidly evolving areas of software agents range from programming paradigms to artificial intelligence. Driven by different motivations, an heterogeneous body of research is carried out under this banner. In each research area, the acceptance of agents has always been at once critical or skeptical and enthusiastic for promising future opportunities. Nevertheless, the efforts have been continuously spent to advance the research in this field. One example is the semantic Web vision, whereby machine-readable Web data could be automatically actioned upon by intelligent software Web agents. Maybe it has yet to be realized; however, semantic enrichment of Web metadata of digital archives is constantly growing including links to domain vocabularies and ontologies by supporting more and more advanced reasoning.

Securing Mobile Wireless Networks

Sanjay Kumar Dhurandher

Netaji Subhas University of Technology, New Delhi, India

Abstract. The area of mobile computing aims toward providing connectivity to various mobile users. There is an increasing demand by users that the information be available to them at any place and at any time. This has led to more use of mobile devices and networks. Since the wireless networks such as WLAN and Wi-Fi require the use of the unlicensed ISM band for data communication, there are increased threats to users because the data may be modified/fabricated. Additionally, these types of networks are further prone to various other threats which may even result in cyber-attacks and cyber-crime. Thus, it is a need to protect the users/devices from such threats leading to loss of important financial data and in some cases leakage of important defense documents of certain targeted countries.

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Improving Business Success Through the Use of Business Capital Management and Accounting Information

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Abstract. The micro, small and medium enterprise (MSME) sector is the largest economic support sector in Indonesia, but along with the development of the times, there are still many problems that occur and have not been resolved, one of which is the low business success of MSMEs. This study aims to offer a conceptual framework for the effect of using accounting information and business capital management on business success. This study uses a quantitative approach with research data in the form of primary data through a questionnaire. The population in this study are owners or managers of micro, small and medium enterprises (MSMEs) in Java Island, Indonesia. The sampling technique used is non-random sampling with the purposive sampling method. The data analysis technique in this study will use multiple linear regression analysis. Several factors that influence business success proposed in this conceptual article are the use of accounting information and business capital management.

Keywords: Use of Accounting Information \cdot Business Capital Management \cdot Business Success

1 Introduction

1.1 Background

Indonesia is a country whose economy is based on a populist economy marked by the presence of Micro, Small, and Medium Enterprises (MSMEs). Hasibuan (2020), stated that the management of MSMEs, which is easy and does not require a lot of money, makes the role of MSMEs quite large, both at the regional and national levels. In the national economy, MSMEs have proven their role, especially in the aspect of the income distribution, increasing job opportunities, increasing non-oil and gas exports, and economic development in rural areas. Based on data from the Ministry of Cooperatives and Small and Medium Enterprises (Ministry of Cooperative SMEs). The number of MSMEs in Indonesia until 2020 reaches 65.4 million MSME units, which are divided into Micro Enterprises (UMi) of 64.6 million, Small Businesses (UK) of 700 thousand, and Medium Enterprises (UM) of 65 thousand.

Business success is managed success in realizing goals that are very important in business survival. Business success is marked by an increase in the amount of production, an increase in profits or profits, an increase in the number of sales, and stable business growth (Arlianto 2014). The success of the business cannot be separated from the role of the owner in running his business. The key to business success is making accurate managerial decisions and policies (Merdekawati & Rosyanti 2020).

Business success is influenced by several factors, one of which is the use of accounting information as an important factor in influencing business success. According to Mastura et al. (2019), business success is influenced by the role of management in utilizing accounting information. Every business activity requires accounting records so that all transactions that have occurred can be known with certainty and clarity.

Accounting information is defined as accounting financial records that can be used by business owners in knowing the amount of operating income received, the number of operating costs incurred, and the amount of loss or profit earned. Decision-making and policies on business management such as market development, policy determination prices, and so on are based on accounting information in the form of financial statements (Hasibuan 2020). The success of an MSME is determined by making the right decisions, so accounting information has an important role because it is used in decision-making considerations (Wibowo & Kurniawati 2016).

According to Nurwani & Safitri (2019), the majority of micro, small and medium enterprises in Indonesia have not used and utilized accounting information in managing their business, due to the many problems that arise, namely the application of financial accounting in MSMEs in Indonesia is still weak and low due to low education, low understanding of Financial Accounting Standards (SAK), as well as legal regulations that do not yet exist regarding the obligations of MSMEs to prepare financial reports. Many MSME actors cannot continue their business because of the many problems they face (Diansari & Rahmantio 2020).

MSME actors still ignore the importance of using accounting information such as bookkeeping in business activities that are just developing, so this becomes an obstacle for MSMEs in financial planning, knowing financial conditions, and borrowing money which will slow down business success (Merdekawati & Rosyanti 2020). MSME activities which are still considered traditional have many weaknesses, namely, they still carry out traditional accounting techniques that cannot distinguish between controlling family (personal) finances and finances from business activities, so many MSME actors still combine personal finance with business finance.

Another weakness is that the prospect of business progress which is increasingly complex over time is still ignored by MSME actors (Lazuardi & Greetings 2016). According to Wibowo & Kurniawati (2016), some factors hinder the success of MSMEs in Indonesia, namely: (1) the lack of business capital issued, (2) the lack of knowledge about the market owned by MSME actors, (3) the low technology used in business activities, and (4) bargaining power is still weak.

According to Candra et al. (2020), there are several external challenges faced by MSMEs, namely: (1) market competition is increasing in line with the presence of globalization, (2) regulation and law enforcement are still weak, (3) the level of trust in product quality is still low by consumers in the country and (4) development assistance

that has not been spread evenly to MSME production centers. Therefore, to be able to develop MSMEs to support the Indonesian economy to increase the use of accounting information for MSMEs. In solving these problems, it is necessary to use accounting information in the process of determining the right policies for MSME owners to increase business success.

In addition to the use of accounting information, business success is influenced by other factors, namely business capital management. When building and running a business, business capital becomes a very important part because it is used to support operational activities and ensure business turnover (Diansari & Rahmantio 2020). The important role of business capital management causes business operational activities to be carried out properly, to seize investment opportunities to increase the profitability of MSMEs.

In connection with the realization of business success, it will result in increased effectiveness of business capital management, therefore MSMEs will update the way of taking the total adequacy of the availability of business capital used in achieving the level of business success. Business capital in an MSME requires good management so when MSMEs have good business capital management, it can make it easier for MSMEs to achieve business success. However, if MSMEs have low business capital management, it will slow down business success (Firdarini & Prasetyo 2020).

The problems that exist in MSMEs in Indonesia can be seen from various aspects. First, in terms of the use of accounting information, where MSME actors are still very low in the use of accounting information, they still ignore the importance of the role of accounting information in business, and MSME actors use traditional recording systems in business activities by combining business finance with personal finance. This causes MSME actors to find it difficult to find out the advantages and disadvantages they will get to run their business in the future so that the use of accounting information that is still low will slow down business success for MSMEs.

Furthermore, from another perspective, it is seen from business capital management. Many MSMEs are still not good at managing their business capital, and MSME actors are still having difficulties in managing business capital. This is because MSMEs still have a low understanding of the importance of business capital management in increasing business success. Whereas the role of business capital is very important, where business capital can be used as a reference to get investment opportunities and get money loans from outside parties.

Research on the use of accounting information on business success has been carried out by many previous researchers, namely: Firdarini & Prasetyo (2020); Mastura et al. (2019); Nurwani & Safitri (2019); Yulianthi & Susyarini (2017), which which states that there is a positive influence between the use of accounting information and business success, as well as research Fauzi (2020), which states that the use of accounting information does not affect business success.

The previous research on business capital management affects business success, namely: Firdarini & Prasetyo (2020) concludes that there is a positive influence between business capital management and business success. And according to research Fauzi (2020) stated that business capital has a negative influence on business success, and

also according to research in Netty & Yustien (2019), the authors state that there is no influence between business capital and business success.

This research refers to research Diansari & Rahmantio (2020), which states that the use of accounting information and business capital has a significant influence on business success. This shows that if MSMEs use accounting information and good business capital management in managing their business, they can achieve and increase business success so that MSMEs in lending business capital will not experience difficulties (Diansari & Rahmantio 2020).

This study combines research models that have been carried out by previous researchers such as (Diansari & Rahmantio 2020), (Hasibuan 2020), (Firdarini & Prasetyo 2020), (Fauzi 2020), (Netty & Yustien 2019), (Nurwani & Safitri 2019), (Eve E 2019), (Apriliani & Widiyanto 2018), and (Yulianthi & Susyarini 2017). The combined model is synthesized to produce a new model that is different from the previous research model.

Based on the phenomena and research gap above, this research is interesting to do to examine the effect of the independent variable, namely the use of accounting information and business capital management on the dependent variable, namely business success in micro, small and medium enterprises in Java Island continuation of business success. This research is also very important for the level of business success so it is hoped that MSMEs can bounce back and the economy in Indonesia will also recover. So that the formulation of the problem in this study is as follows:

- 1. How to increase business success through the use of accounting information?
- 2. How does business capital management affect business success?

2 Literature Review

2.1 Stakeholder Theory

In 1984 R. Edward Freeman first proposed stakeholder theory, he defined and described it as a "separation thesis" in the workplace in business discussions. This theory was then popularized by Clarkson in 1994 who saw stakeholders have an interest in an organization based on moral or legal reasons. An organization has an obligation if there is a party that has legal rights to the organization. This can result in good implementation for an organization in maintaining good relations with stakeholders. An organization should be responsive to stakeholders.

Theory stakeholdersdefines a company not only to carry out operational activities for itself but also to be useful for shareholders. In research conducted by Azmi (2019) and Gray, Kouhy, and Adams (1994) it is stated that the survival of a company is influenced by support from shareholders or other parties. A result of activities or actions decided by the organization legally or morally, personally or collectively, is a right and interest of the organization. Stakeholders include shareholders, suppliers, creditors, employees, consumers, communities, and others.

Stakeholders provide an important role in MSMEs. This relates to the source of wealth provided by stakeholders for the company's operational activities such as donations to the company, loans, and government regulations. So the company should improve its performance to gain the trust of shareholders that the company can develop. To achieve this is to use accounting information and good business capital management can be used by management as material for business planning and control in making decisions that are useful for achieving success for the sake of business continuity.

2.2 Motivation Theory

The word "movere" is a Latin word for motivation which means force, encouragement, or driving, which causes action or action. The word "movere" is defined as motivation in English which has the meaning of generating motives, giving motives, and conditions that cause encouragement. Motivation is explained as an impulse that invites people to act and behave by motivational techniques based on the cause and effect of an action, namely aspects that make a person able to do or not do something.

In 1993, Bedard and Chi put forward a theory of motivation which was strengthened by Spilker in 1995. They stated that to increase the understanding of owners or managers in using accounting information in business, it is necessary to have motivation for owners or managers to understand accounting knowledge.

Business success in a company is not only for profit but motivation in developing a business must also be improved. Business actors, especially MSMEs, must have high motivation in each of them to continue to improve performance in the current business competition. Therefore, it can be concluded that the theory of motivation is the ability of the owner or manager to be able to motivate employees to have high knowledge of accounting information in its application and to manage business capital well, in its business activities, to achieve business success (Yolanda et al. 2020).

2.3 Business Success

Business success is a condition that exceeds other parallel conditions (Sustainable 2011). Business success is also defined as the achievement of goals and objectives by the company, which is not interpreted directly (Radzi et al. 2017). Some of the factors supporting business success in Micro, Small, and Medium Enterprises are a description of work motivation, business abilities which are illustrated through attitudes, knowledge, and skills, education levels, and relevant experience. The success of a business is described through profits or additional wealth obtained in business operations. Business success is not only felt physically but business success can be accepted by management in the form of inner satisfaction and individual calling.

2.4 The Use of Accounting Information

Use means a process or method of using something. According to I Cenik and Endro (2016) in Nurwani & Safitri (2019), information is defined as the output of data management that is useful for information users. Isaac and Arief (2015) in Nurwani & Safitri

(2019), define accounting as a service activity that is useful in making quantitative information and data, especially in the financial department of a company so that it is useful in making policies and decisions to determine the choice that is considered the most appropriate compared to other options.

Furthermore, accounting information is defined as information that is needed in regulating the company to avoid being there are problems related to the company's activities (Yousef 2013). According to Nwaigburu & Mark (2014), accounting information is a contribution that has a significant nature to activities that are useful in making decisions in a company. From the definition described above, it can be concluded that the use of accounting information is defined as a process of applying accounting information that can generate benefits in the form of quantitative and qualitative data needed by a company in an accurate decision-making process.

Priliandani et al. (2020) mention that in carrying out its functions, management requires information, such as quantitative information or qualitative information. Quantitative information that is widely used is in the form of accounting information. Financial statements must be prepared properly to be useful for internal parties or external parties of the company. Qualitative information is in the form of information about company policies such as in strategic preparation. In the process of management supervision, operational supervision, and strategic planning, using financial accounting information (Candra et al. 2020).

2.5 Business Capital Management

Business capital is one of the factors that must exist before carrying out production activities. According to Prawirosoentono (2007) in Apriliani & Widiyanto (2018), Business capital is defined as an asset that must be owned by a company to earn future profits and is usually expressed in units of value. Apriliani & Widiyanto (2018) revealed that the development and achievement of income of a business are influenced by the size of its business capital.

According to Rumerung (2018), the presence of business capital is very important in building and running a business. However, the events that often become a problem are how to manage business capital appropriately and optimally so that the business that is run will generate profits and can achieve its goals. For MSMEs, large and small business capital will be a problem in itself, because if the amount of business capital is too much compared to the business needs, it will result in a lot of loading costs, but on the contrary, if the amount of business capital owned is too small, it will make the business run will feel difficult. Business capital used in running a business must be under business needs.

3 Hypothesis Development

3.1 The Effect of Using Accounting Information on Business Success

Accounting information is a very important factor in an organization or business. An organization uses accounting information for the planning, management, or evaluation of an organization. The use of accounting information in the form of notes to record

transactions related to business receipts and expenses. All business activities can run well due to the available accounting information that can influence achieving business success.

An MSME in achieving business success cannot be separated from the influence of the use of accounting information which is used as a basis for decision-making in running a business, such as being used for market development, pricing, and so on. So that MSMEs need the use of good accounting information for the success of their business. Business success for MSMEs will be the key to the success and survival of MSMEs in the future.

Christian & Rita (2016) revealed that accounting information has a very important influence on achieving business success so that it can be used as a basis for making decisions. A lack of knowledge of accounting information can cause financial bookkeeping activities to be hampered. Accounting information is used by owners or managers such as financial records to find out operational costs that must be incurred, find out how much income is earned, and find out the amount of profit/loss earned (Mastura et al. 2019). According to Suryana (2013) in Nurwani & Safitri (2019), business success is marked by increasing capital, increasing income, increasing sales volume, increasing production output, and increasing the number of workers.

Studies by Diansari & Rahmantio (2020), Nurwani & Safitri (2019), Hasibuan (2020), and (Yulianthi & Susyarini 2017), mention the use of accounting information has a significant effect on business success. This shows that when business actors, especially MSMEs use accounting information well in making decisions, achieving business success will be easier to achieve and increase, compared to MSMEs that do not use accounting information in their decision-making process.

Based on this explanation, the following hypothesis can be formulated: H1 = The use of accounting information has a positive effect on business success

3.2 The Effect of Business Capital Management on Business Success

One of the important factors in running a business is business capital because a business cannot operate if there is no business capital. The success of a business is influenced by the size of the amount of business capital which is sufficient to increase the smoothness and facilitate the development process of a business (Feriansyah & Manullang 2015). Business capital is defined as the amount of money used to operate a business so that it can grow and run.

Capital in business can be viewed from several sides, such as capital to set up a business, capital for business development, and capital to operate daily business activities (Agustina 2015). (Diansari & Rahmantio 2020). An organization in determining the business capital needed by an organization needs to be determined precisely because it will be used to ensure the smooth running of business activities.

Previous research by Apriliani & Widiyanto (2018), Diansari & Rahmantio (2020), and Firdarini & Prasetyo (2020) reveals the influence between business capital management and business success. This means that if there is an increase in business capital, it must be balanced with an increase in business success. It can be concluded that if the amount of business capital owned is insufficient, it will cause problems in the production process, and vice versa if the business capital owned is excessive, it will cause investment opportunities to be hampered, because the business capital used is only for operational activities. Therefore, managers must decide how much business capital is appropriate and appropriate so that the company's operational activities can run smoothly and can capture investment opportunities to increase the level of profitability so that business success can be achieved.

A business, especially MSME, really needs a management role, especially in terms of business capital. Business capital is the driving wheel of MSME activities so good management is needed. The goal is that having good business capital management in an MSME will make it easier to achieve business success. On the other hand, if an MSME has poor business capital management, then MSMEs will find it difficult to achieve business success.

Based on this explanation, the following hypothesis can be formulated: H2 = Business capital management has a positive effect on business success

4 Research Methodology

4.1 Types of Research

The type of research used is explanatory research. Explanatory research is a study that describes the relationship between variable X and variable Y. The research method used is a quantitative method using a questionnaire. According to Sugiyono (2019) in Blue & Regards (2016), the quantitative research method is defined as a method based on the philosophy of positivism which is used to examine the population and sample. Later quantitative methods are used to test a variable by using statistical tools in the form of numbers or scores which are generally obtained using data collection tools with answers in the form of questions that are given a range of scores or weights so that they will generate hypotheses and can explain the relationship between the independent variable and the dependent variable has the ability to develop an understanding of various things.

4.2 Population and Research Sample

Population

This study uses a population of SMEs in Java Island Indonesia. According to data from the Office of Cooperatives and Micro, Small, and Medium Enterprises (Diskop UKM) states that the total number of MSMEs in Micro, Small and Medium Enterprises (MSMEs) thrive in a number of areas. This can be seen from the data reported by the Ministry of Cooperatives and Small and Medium Enterprises (Kemenkop UKM), the total number of MSMEs in Indonesia will exceed 8.71 million business units in 2022. Java Island

dominates this sector. It was recorded that West Java became the MSME champion with a total of 1.49 million business units. Thin in second place is Central Java, which reached 1.45 million units. Third, there is East Java with 1.15 million units. The author took the population of Java Island, Indonesia because for the results of the study to be more accurate by using a larger population and wider range. If you only use the population in one or two districts or cities, the number of population in the district that has the criteria according to the provisions that have been made by the author is not sufficient, so the results of the study will be less accurate because it only uses a population with a small scope, but by using a population MSMEs in Java Island, Indonesia the author can take samples of MSMEs in various districts or cities in Java Island.

Sample

The sample is part of the total population that has certain terms and conditions (Sugiyono 2019). Determination of the sample size based on the number population used by the author, namely MSMEs located in districts or cities of Java Island, West Java with a total of 1.49 million business units. Central Java, which reached 1.45 million units. East Java with 1.15 million units. The following is a calculation of the overall sample used in this study according to the 1960 Slovin formula:

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{4.090.000}{1 + 4.090.000 (0.05)^2}$$

$$n = 399,96$$

n = 400 respondents

So, the minimum number of samples used is 400 respondents.

4.3 Sampling Technique

This study used a non-random sampling technique using a purposive sampling method. A Non-random sampling technique is a sampling technique for each member of the population who is not given the same opportunity to be used as a research sample. The purposive sampling method belongs to the category of non-random sampling technique. The purposive sampling method is a technique with a method considering certain characteristics that will be used in determining the research sample (Sugiyono 2019). In the purposive sampling method, the author can choose research subjects and research locations with the aim of studying or understanding the main problems to be studied. The characteristics of the samples used are as follows:

- 1. MSMEs are located in West Java, Central Java and East Java.
- 2. Have a minimum of 3 employees.
- 3. The business has been running for at least 2 years.
- 4. Minimum monthly income of IDR 2,000,000.

4.4 Data Sources and Types

This study uses primary data types. Primary data is a source of data obtained by the author directly (Sugiyono 2019). Primary data were obtained directly from respondents through questionnaires using all original data collection methods. The primary data used in this study were obtained through questionnaires distributed directly (offline) or online using google forms. The respondents in question are owners or managers of MSMEs in Java Island, especially West Java, Central Java and East Java, both those who have not or have been registered with the Office of Cooperatives and Small and Medium Enterprises of each Province.

4.5 Method of Collecting Data

The data collection method in this study used a questionnaire or questionnaire. The questionnaire or questionnaire method is a data collection technique carried out by the author by distributing written statements and questions directly or indirectly to be answered by respondents (Sugiyono 2019). If the number of respondents is very large and widely distributed, then the questionnaire is suitable to be applied. In the questionnaire, some questions or statements are open or closed. From the questionnaire or questionnaire method, the authors prepared two methods of distribution, namely online using google forms or offline which were given directly using paper to several potential respondents, namely owners or managers of SMEs in Java Island as many as 400 respondents.

4.6 Research Period

This research will be carried out from December 2022–May 2023 by going through the research stages. Includes observation, submitting research proposals, making and testing research instruments, data documentation, and research data analysis.

4.7 Operational Definitions and Variable Indicators

Business Success

This study uses the dependent variable, namely business success. Business success is defined as the perception of the owner or founder of the business about the performance of his business compared to the goals to be achieved. The increasing number of sales, increased production, ever-increasing profits, and businesses that are always developing are signs of business success (Arlianto 2014) (Merdekawati & Rosyanti 2020). According to Firdarini & Prasetyo (2020), a sign of business success is the addition of the number of employees and an ever-increasing sales turnover.

Use of Accounting Information

The first independent variable used in this study is the use of accounting information.

Usage in the Big Indonesian Dictionary is a method and a process of using something (Priliandani et al. 2020). The definition of accounting information is information that has a quantitative nature related to the company as a basis for making decisions to choose the right alternative (Firdarini & Prasetyo 2020). It can be concluded that the use of accounting information is the process, methods, and actions of using and using accounting information for economic decision-making in determining many choices among alternative actions so that the decisions taken will be more appropriate (Hasibuan 2020). According to Belkaoui (2010) in Firdarini & Prasetyo journal (2020) There are three classes of accounting information, namely financial information, management information, and operating information.

Business Capital Management

The second independent variable used is business capital management. Management is defined as a systematic process within a company for the control and supervision process in achieving business goals. Furthermore, the understanding of business capital is the amount of money used in operating a business so that it continues to run and develop. The amount of business capital owned by a business must be following the required needs because less business capital will cause difficulties in running a business, while excessive business capital will make it difficult for businesses to find investment opportunities from outside parties. So business capital in running a business must be appropriate and appropriate and requires good business capital management.

4.8 Analysis Techniques

The analysis technique is a data processing technique using a computer program with Statistical Product and Service Solutions (SPSS) version 25.0 which can process statistical data accurately and quickly. The analysis technique in this study is used to examine the effect of using accounting information and business capital management on business success. Data analysis is made to make decisions from the processed data. In this research, descriptive statistical analysis, data quality test (validity test and reliability test), classical assumption test (data normality test, multicollinearity test, and heteroscedasticity test), multiple linear regression analysis, and hypothesis testing (F statistic test, statistical test were carried out). t, and the coefficient of determination test (R2) (Table 1).

 Table 1. Indicator variables.

| No. | Variables | Indicators | Sources |
|-----|-----------------------------------|---|-----------------------------|
| 1. | Business Success | 1. Number of employees who have increased 2. Increased consumer orders 3. Increased turnover or income 4. Product promotion has increased 5. The selling price of the product has increased 6. Business capital that has increased 7. Higher level of sales 8. Production continues to increase 9. Production equipment upgrade | Nurwani & Safitri (2019) |
| 2. | The Use of Accounting Information | 1. Use of accounting information for projecting future funding needs 2. Controlled expenses 3. Well-measured business productivity 4. Using operation information 5. Using management accounting information 6. Using financial accounting information 7. Using statutory accounting information 8. Using budgetary information 9. Using additional accounting information 10. There is an increase in business productivity 11. The production process is always supported | (Diansari & Rahmantio 2020) |
| 3. | Business Capital Management | 1. Initial capital invested 2. Business working capital 3. Business operating capital 4. Challenges in obtaining capital | Diansari & Rahmantio (2020) |

5 Conclusions

Based on the conceptual explanation of the research above, the use of accounting information and business capital management affects business success. The use of accounting information is useful in making the right decisions for business actors in achieving business success. Business capital owned by MSMEs has a very important role in a business because business capital is the driving wheel of MSME operational activities so good management is needed to achieve business success.

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