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IMPACT OF INTELLECTUAL CAPITAL AND RISK ATTITUDE THROUGH FINANCIAL LITERACY ON BUSINESS SUSTAINABILITY IN INDONESIA BATIK SMES

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ABSTRACT

This study aims to create a theoretical model of business sustainability with financial literacy antecedents. The antecedents of financial literacy are intellectual capital and risk attitudes. The research location is in the province of East Java, Indonesia. Batik SMEs are only found in Indonesia because it is a cultural heritage belonging to Indonesia that does not exist in other countries. The sampling technique used was purposive sampling, with 222 respondents from the batik SMEs spread across six cities. The data was taken using a questionnaire on a Likert scale. Data analysis uses SEM (structural equation modeling) with the SmartPLS application. The study results show that risk attitudes toward financial literacy have a positive effect. The effect of financial literacy on the business sustainability of the batik industry has a positive influence. The impact of intellectual capital on the business sustainability of the batik industry has a positive effect. Risk attitudes have no significant positive impact on business sustainability. Financial literacy has yet to be able to mediate intellectual capital's influence on the batik SME's business sustainability. This needs to be explored further with further research. Furthermore, financial literacy can mediate risk attitudes towards the business sustainability of batik SMEs.

Keywords: *Financial literacy, business sustainability, intellectual capital, risk attitudes, batik SMEs*

1. INTRODUCTION

Indonesia is one of the developing countries whose economy is supported by creative SMEs (Raharja & Kostini, 2021). Many creative SMEs have sprung up because they are the newest economic concept that promotes creativity and information (Srikalimah et al., 2020; Boğa & Topcu, 2020). Likewise, Indonesia has creative SMEs, especially batik SMEs (Rahayu et al., 2023); see Table 1. Indonesia is the only place for batik SMEs globally because batik was selected as a cultural heritage of Indonesia on October 2, 2009, by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the World Education, Science, and Culture Organization (Citradika et al., 2019a; Nugroho et al., 2022). Indonesia has a batik textile art with a distinctive character that does not exist in other countries. Batik SMEs are heavily influenced by their history and culture (Tanziha et al., 2022).

Business sustainability is an essential factor that SMEs must have (Qianwei Ying et al., 2019). Previous studies tried to examine creativity as a driver of business sustainability in SMEs (Srikalimah et al., 2020). This study provides recommendations for further studying intellectual

capital. Apart from that, financial performance still leaves gaps for SMEs in Indonesia; uncertainty impacts funding sources, which causes SMEs to grow and even go bankrupt (Purba et al., 2021). In 2020 the world experienced the Covid-19 pandemic, which affected the condition of creative SMEs, one of which was batik SMEs (Patma et al., 2021). The development of batik SMEs still needs help with business sustainability, financial literacy, human resources, and the risk of failure (Garba, 2021). For batik SMEs in Indonesia to rise quickly, it is necessary to study the theoretical model of business sustainability in batik SMEs.

Table 1. Number of Batik SMEs in Indonesia

Province	Small & Medium Scale	Large Scale	Total
Central Java	821	108	929
East Java	89	40	129
West Java	65	23	88
Bali	62	3	65
Yogyakarta	49	12	61
Banten	27	16	43
Jambi	16	3	19
Bangka Belitung	3	1	4
West Sumatera	2	2	4
Jakarta	4	-	4
North Sumatera	4	-	4
East Kalimantan	3	-	3
Riau	3	-	3
Bengkulu	2	-	2
South Kalimantan	1	-	1
Lampung	1	-	1
Maluku	1	-	1
North Maluku	1	-	1
West Nusa Tenggara	1	-	1
South Sulawesi	1	-	1

Source: Indonesian Ministry of Trade, 2023

Intangible resources are needed to develop batik SMEs in Indonesia (Isa et al., 2023). Intangible resources like the ability to think, be sensitive to opportunity, communicate, and have other skills to pursue a business are essential to the perpetrators of batik SMEs (Sarjiyanto et al., 2023). The importance of business transaction recording, profitability planning, working capital management, and financial report analysis preparation should be the responsibility of batik SMEs (Ambarriani & Purwanugraha, 2012). Understanding of financial analysis is believed to be very minimal among SME batik managers (Siregar et al., 2020). Financial decision-making tends to be done spontaneously (Rita & Huruta, 2020). From the above explanation, research on financial literacy and business sustainability of creative industry efforts focusing on batik SMEs still needs to be more specific and done better.

The main objective of this study is to investigate how intellectual capital and risk tolerance affect financial literacy and how that affects the sustainability of Batik SMEs in Indonesia. This theoretical framework on managing money with a strong knowledge that making the correct choices would help a company expand is anticipated to become an empirical truth. Intellectual capital is one of the characteristics examined since it influences business performance more than natural resources do. Another issue that has to be studied is risk attitudes, which is seen to

be crucial in enabling Batik SMEs to adjust to the environment's quick and unexpected changes.

This article is organized as follows. First, the research problem is provided (section 1). Second, a brief overview of the literature review (section 2). Third, the methodological strategy applied is described (section 3). Fourth, the results obtained from the data analysis are described (section 4). Fifth, the results of the discussion are explained (section 5). Furthermore, finally, conclusions are presented (section 6).

2. LITERATURE REVIEW

According to Gross-Gołacka et al. (2020), business sustainability integrates social, economic, and environmental principles into a business model. Fulfilling economic, social, and ecological goals will increase the competitiveness of a business. Meanwhile, according to Muslimat et al. (2020)business sustainability is a form of consistency from business conditions, including growth, development, and strategies to maintain business sustainability, which all lead to business sustainability and existence. According to Jayashree et al. (2021)it will be very difficult for SMEs' performance to improve and impossible for them to reach their sustainability goals. Small businesses should therefore be encouraged to embrace the next technological frontier, Industry 4.0 (I4.0, business sustainability in SMEs can be seen from the company's success in innovating, managing employees and customers, and returning their initial capital. Even though business sustainability is closely related to companies, business continuity can also be applied to creative industries. A business will do well when it can create value from a financial perspective, such as profit, and a non-financial perspective, such as the environment and social responsibility.

Business sustainability is the ability of a business to continue running its business (Cagnin et al., 2013;Ciceri et al., 2010). The sustainability businesses of Batik SMEs are influenced by the financial capital they have in order to survive and avoid business closures (Raharjo, 2019). One of the steps to obtaining financial capital is financial inclusion in the form of easy access to funding to help creative industries survive. Financial literacy is defined by Noctor et al. (1992) as the ability to make appropriate judgments and effective decisions regarding the use and management of money. According to Marcolin & Abraham (2006), financial literacy is urgently needed along with financial market regulations and easier access to loans to financial institutions, the rapid growth of financial products, and encouragement from the government. According to Huston (2010), financial literacy is grouped into four, namely: 1) the basics of money (time value of money, purchasing power, personal financial accounting concepts), 2) loans (use of credit cards, consumer loans, or mortgages), 3) investments (savings, stocks, bonds or mutual funds), and 4) protection (insurance).

Then some researchers like Thabet et al. (2019) and Rahim & Balan (2020) simplifies the construct of financial literacy into three, namely: financial knowledge (financial knowledge), financial attitude (attitude financial), and financial behavior (behavior financial). Then according to Eniola & Entebang (2017) financial literacy is divided into knowledge, attitude, and awareness. Financial knowledge is an ability that is obtained from the process of learning to manage income, expenses, and savings. Financial attitudes combine concepts, information, and emotions, resulting in a readiness to respond positively about finances. Meanwhile, financial behavior is the essence of financial literacy.

Financial literacy is an important thing that must be possessed by creative industry players (Alharbi, 2021). Financial literacy helps Batik SMEs to make better financial decisions regarding sources of financing and capital structure for their businesses (Citradika et al., 2019b). Financial literacy is believed to maintain business sustainability. Even more so with financial literacy

for the SMEs. One that supports business sustainability in Batik SMEs is financial literacy. The fact is that Batik SMEs initially developed but, over time, have yet to be able to survive due to not managing their finances properly. This can happen because Batik SMEs tend to use spontaneity when making financial decisions since they don't understand how to record transactions, track income and costs, plan for profitability, and manage working capital.

Besides financial literacy, there is also the intellectual capital needed for SMEs (Ying et al., 2019; Khan et al., 2021). The Resource-Based View (RBV) theory states that unique, rare, and unchanging resources enable businesses to achieve business continuity (Barney, 1991). Intellectual capital is knowledge, information, intellectual property, and experience that can be used to create value for a business (Stewart, 1997). Intellectual capital is one of the keys to business sustainability. Intellectual capital is an intangible resource that can realize business sustainability in Batik SMEs. Intellectual capital that is well-managed can increase business sustainability. It has become a general discussion that creative industries face limited resources, including intellectual ones.

According to Stewart (1997), intellectual capital includes knowledge, information, intellectual property, and experience that can be used to create value for the company. According to Sullivan (2000), intellectual capital is knowledge owned by a company that can provide real benefits for the company. From the definitions above, intellectual capital is a change in the traditional concept of company capital and is an intangible asset that can create value for the company. According to Kaplan & Norton (1996), intellectual capital contributes more than 75% to firm value, while physical capital and money contribute less than 25%.

Researchers from various disciplines, such as accounting, economics, finance, strategy, human resources, and psychology, have different models for measuring intellectual capital. Stewart (1997) introduced intellectual capital consisting of three components: human capital, structured capital, and relational capital. In comparison, Pulic (2000) explained the Value Added Intellectual Coefficient (VAIC) model using data from financial reports, dividing intellectual capital into human, customer, and structure capital. In comparison, Khalique et al. (2015); Stanivuk (2015) and Ying et al. (2019)\"Should one either invest in tangible resources or intangible resources/capabilities?\" is still fragmented. In prior studies, more emphasis is given to tangible resources, while intangible resources have comparatively received minor attention, despite their significant role in the success of small and medium enterprises (SMEs used human capital, customer capital, structural capital, social capital, and technological capital for SMEs in Pakistan. Then Supeno et al. (2015) used human capital, structural capital, and relational capital in the creative industries in Indonesia. Likewise, Dabić (2019) uses human capital, structural capital, and relational capital in SMEs in Croatia. Asyik et al. (2022)such as Indonesia. The number of samples are use 500 respondents. The analysis method uses the Partial Least Square (PLS use curiosity and motivation, experience, innovation and creativity, and competency ability.

Intellectual capital is capital owned by business organizations in the form of skills, intelligence, and mastery of tools for business excellence (Stanivuk, 2015). Research conducted by Ying et al. (2019)\"Should one either invest in tangible resources or intangible resources/capabilities?\" is still fragmented. In prior studies, more emphasis is given to tangible resources, while intangible resources have comparatively received minor attention, despite their significant role in the success of small and medium enterprises (SMEs and Khan et al. (2021) emphasized the influence of intellectual capital on the sustainability of SME businesses. Based on empirical studies conducted on the case of creative industries in Indonesia, the three capitals can be adopted, namely a) Human Capital, b) Organizational Capital, and c) Information Capital. Human capital is company capital in the form of employee ownership with the required level of

mastery of competencies, loyalty, and attitude in developing the company. This human capital is temporary. Its situation is very dependent on the atmosphere and organizational environment of the company, as well as the internal factors of the workers themselves (Supeno et al., 2015).

Organizational capital, not only in the structural realm, is capital for creative industry organizations but also for organizational culture. Both encourage the creation of conditions, inspiration, and opportunities to develop the company's potential in achieving its goals. Internal organizational capital is needed to develop the organization. However, organizational capital can also provide value for external parties to generate trust, involvement, and loyalty to the activities carried out by the organization (C. Jardon, 2014; C M Jardon, 2015; Carlos M. Jardon & Martos, 2012)formed by small to medium-sized enterprises (SMEs.

Information capital is ownership of a collection of data, information, and network systems integrated into the organizational structure to support personnel, optimize work processes, and contribute to the creation of accelerated decision systems. Information capital reaches beyond customers but also customers, work partners, and other members of stakeholders (C. Jardon, 2014; C M Jardon, 2015; Carlos M. Jardon & Martos, 2012)formed by small to medium-sized enterprises (SMEs. Apart from intellectual capital, which is believed to be able to maintain business sustainability, what is no less important is the risk attitude possessed by Batik SMEs (Redha et al., 2021). A weak risk attitude makes it difficult for creative industries to adapt to changes in the environment that are so fast and uncertain.

Risk attitude is a preferred response to the perception of uncertainty (Hillson & Murray-Webster, 2007). However, the attitude of risk requires a long time to be implemented in the creative industry. Often interpreting risk attitudes is only a perception to comply with existing legal or statutory regulations. Even though the attitude of risk is broader than that meaning. Awareness regarding risk attitudes still needs to be increased in Batik SMEs.

According to Mittone et al. (2022) the risk is the result or deviation from the realization of plans that may occur unexpectedly. Even though an activity has been planned as well as possible, it still contains uncertainties. According to Li et al. (2022), risks can happen anywhere, anytime, and to anyone. Riyanto et al. (2021) explains that one of the abilities that batik industry players must possess is being able to face risks. Batik SMEs players need to measure risk so that decisions are taken result from careful thought. Then batik industry players need to know any risks that can cause failure for their business. This knowledge can be obtained from participating in training and being open about the business conditions in which they are involved. Risks can cause losses caused by human error or natural factors. So that the risk does not turn into a loss, the risk needs to be appropriately managed. According to Moeuf et al. (2020), there are four risks faced by the SMEs in the 4.0 industrial revolution, namely 1) the first risk, lack of expertise in the batik industry; 2) the second risk, short-term strategy in the batik industry; 3) the third risk, the speed of technology improvement; and 4) fourth risk, fear of employees who perceive industry 4.0 as a means to increase supervision of their work.

Based on a review of the above literature, business sustainability is a concept in SMEs that can combine economic, social, and environmental objectives. Such a combination is complex and requires the help of intangible resources owned by managers or SME owners, such as financial literacy, intellectual capital, and risk attitudes. Financial literacy means assessing and making effective and efficient financial decisions regarding where SME capital is obtained and how to manage it properly. Intellectual capital is information and intellectual property owned by managers or owners of SMEs that can create added value for SMEs. Risk attitude is how SME managers and owners respond with the best choices regarding the uncertainty and opportunities they face. This research seeks to provide empirical evidence that intellectual capital, risk

attitudes, and financial literacy are necessary for the business sustainability of Batik SMEs in Indonesia. In addition, there is financial literacy, which becomes a variable that mediates intellectual capital and risk attitudes towards the business sustainability of Batik SMEs in Indonesia.

3. METHODS

3. 1. DATA SOURCES

This study uses a quantitative approach based on positivism, namely a research method based on the assumption that a symptom can be classified and the relationship between symptoms is causal. The research strategy used was a survey with a questionnaire to obtain data about opinions, characteristics, behavior, and relationship variables and to test several hypotheses (Saunders et al., 2009). The research was conducted from March 2023 to July 2023 at the Batik SMEs in Indonesia. Population is a generalized area consisting of objects/subjects with specific qualities and characteristics determined by the researcher. The sample is part of the number and characteristics of the population. This study used a population of 522 batik SMEs in East Java province, Indonesia. The sampling technique uses non-probability sampling, meaning it does not provide equal opportunities or opportunities for sample population members. It uses a sampling technique, namely purposive sampling, namely a sampling technique by determining the target of the population that is estimated to be the most suitable for collecting data. Criteria that Batik SMEs must meet have a turnover/gross income of more than 300 million a year and a minimum business length of 5 years (Aryani et al., 2020). Then, the study was conducted on 222 samples of the batik SMEs in East Java province, Indonesia.

The type of data used in this research is primary data. Primary data is data collected by researchers directly from the first source. Data collection in this study used a questionnaire (questionnaire), a data collection technique that is carried out by giving respondents a set of questions or written statements to answer. This study uses a questionnaire because it is suitable for many respondents and is spread over a large area. Data was taken using a questionnaire using a Likert scale. Data analysis uses the SEM (structural equation modelling) with the SmartPLS application. Data analysis in PLS is divided into 2, namely, Structural Model Analysis (Outer Model) which explains the validity and reliability of the relationship between indicators and variables. Analysis of the Equation Model (Inner Model), which explains the correlation between variables (hypothesis) (J. Hair et al., 2014). The PLS technique influences abnormal data in accordance with the central limit theorem; consequently, PLS-SEM is not overly stringent when working with abnormal data (J. F. Hair et al., 2019).

3. 2. DEFINING VARIABLES

Financial literacy uses indicators from Adomako & Danso (2014) and Sohilauw & Nohong (2020), then business sustainability uses needles from Cagnin et al. (2013) and Patma et al. (2021) for intellectual capital using hands from Ying et al. (2019) and Khan et al. (2021). Meanwhile, risk attitude uses indicators from Redha et al. (2021) and Pratono (2018).

Table 2. Variable Operational Definitions

	Indicators	References
Financial Literacy (FL)		
FL1	Separation of assets, liabilities, income and expenses between personal and business.	(Adomako & Danso, 2014; Sohilauw & Nohong, 2020)
FL2	The use of a financial report program, even though it is as simple as Excel.	
FL3	Recording of every Batik SMEs transaction.	
FL4	I am making financial reports periodically.	
FL5	Preparation of true and accurate financial reports.	
FL6	Financial reports are made helpful in decision-making.	
Business Sustainability (BS)		
BS1	I can create new jobs.	(Cagnin et al., 2013; Patma et al., 2021)
BS2	I maintain environmental sustainability.	
BS3	I can develop local culture and wisdom.	
BS4	I can harmonize economic, environmental and social activities.	
BS5	I generate profits and business growth.	
BS6	The business that I make has an institution.	
Intellectual Capital (IC)		
IC1	I have competence according to the field.	(Khan et al., .2021; Ying et al., 2019)
IC2	I have loyalty and attitude.	
IC3	I can communicate and have extensive knowledge.	
IC4	I have good relationships with customers, partners and governments.	
Risk Attitude (RA)		
RA1	I set aside some business income just in case.	(Redha et al., 2021; Pratono, 2018)
RA2	I develop standard safe work procedures.	
RA3	I comply with government regulations and applicable laws.	
RA4	I cooperate with other parties in terms of the availability of raw materials.	
RA5	I have knowledge about insurance.	
RA6	I do not delay paying debts to the bank.	

Source: constructed by authors

3. 3. RESEARCH HYPOTHESIS

Intellectual capital is the knowledge that provides information about a company's intangible value that can affect the company's resilience and competitive advantage to achieve added value to financial performance. Meanwhile, Choo & Bontis (2002) explained that intellectual capital represents existing knowledge in an organization at a particular time. The company's intellectual capital consists of human resources, structure, organizational routines, intellectual property, and the relationship between the company and its customers, suppliers, distributors, and partners.

Meanwhile, financial literacy is an essential issue in the world. Several countries worldwide are even very focused on financial literacy and include it in their strategic programs, such as the United States, United Kingdom, Australia, Canada, Japan, Singapore, and Malaysia. According to Kirsten (2013), financial management skills or abilities are needed for SME owners to manage a business to survive and continue to grow. One form of capacity building is training

in financial management for business. Resource Based View (RBV) Theory is very relevant to explain the effect of intellectual capital on financial literacy. The batik industry hopes to have financial literacy skills because this ability is a resource that is scarce, difficult to imitate, and irreplaceable. This hypothesis is supported by the results of research conducted by Asyik et al. (2022)such as Indonesia. The number of samples are use 500 respondents. The analysis method uses the Partial Least Square (PLS, which showed an influence between intellectual capital and financial literacy.

H1. Intellectual Capital has a positive effect on Financial Literacy.

Currently, SMEs are faced with various uncertain conditions, such as the Covid-19 pandemic which has passed which has resulted in an increased risk of failure or bankruptcy for SMEs (Resmi et al., 2021). The inability to manage risk and the lack of financial skills training make SMEs focus only on short-term goals rather than long-term ones (Buchdadi et al., 2020)the purpose of this study was to examine the determinant variable of the SMEs performance namely financial literacy of the manager. This study utilize acces to financial product and financial risk risk attitude as the mediation variables. This type of research uses a quantitative approach and the structural equation modeling (SEM. For this reason, a risk attitude is needed in every business by identifying and managing risks as early as possible (K. Kulathunga et al., 2019)in the growing literature of SMEs management, inadequate consideration has been devoted on the financial literacy of the SMEs, and the mechanisms through which it impacts on SMEs performances. Drawing upon knowledge-based view and dual process theory, we tested the impact of financial literacy and risk attitude on SMEs performances in an integrated model. The sample included 244 chief financial officers of SMEs in three provinces of Sri Lanka (Central, Western and Southern provinces. Risk attitude will increase the understanding of financial literacy for managers such as bookkeeping, financial statement analysis, investment management, and matters relevant to business finance.

The influence of risk attitudes on financial literacy is based on TRA (Theory of reasoned action) and TPB (Theory of planned behavior) initiated by Ajzen in 1985. TRA emphasizes the critical role of intention as a determinant of behavior. Meanwhile, TPB is an extension of TRA which explains that in addition to the intention that determines the behavior, it is also influenced by the perception (perceived) owned by a person. TPB explains that individuals are pretty rational, use available information, and consider the consequences of their actions before deciding whether to follow a behavior. This theory explains that the theory of planned behavior relates to the relationship between beliefs and behavior. This theory states that attitudes toward behavior, subjective norms, and perceptions of behavior control together form individual behavioral intentions. Based on this theory, the authors assume that the stronger the risk attitude, the greater the financial literacy. This hypothesis is supported by the results of research conducted by Mabula & Ping (2018)Small and Medium Enterprises (SMEs that the risk attitude of SME managers will improve their level of financial literacy. Likewise, the study by Kulathunga et al. (2020)the influence of techno-finance literacy in the development of SMEs is still not adequately researched. Drawing upon KBV, we developed a single-mediator structural model with an aim to explore the effect of techno-finance literacy and enterprise risk management (ERM, Nohong et al. (2019), and Sohilauw et al. (2020) state that a higher-risk attitude will increase financial literacy.

H2. Risk attitude has a positive effect on Financial Literacy.

As the largest mover of the informal sector in Indonesia with the most significant number of workers absorbed, SMEs have an essential role in the economic system. According to Cole et al. (2011), the fastest way to drive the economy in emerging markets is to focus on the devel-

opment of the informal sector (SMEs), which will impact increasing the income level of the middle class. In this case, SMEs with sound financial literacy can achieve their company goals, have a business development orientation, and survive in challenging economic conditions. Business sustainability in SMEs can be seen from the company's success in innovating, managing employees and customers, and returning their initial capital. This shows that the company is oriented to development and continuously sees opportunities for innovation (Hudson et al., 2001). Financial literacy is needed to manage and make effective decisions regarding financial handling, such as budgeting, bookkeeping, paying bills and utilities, acquiring and repaying loans, and other financial decisions (Adomako & Danso, 2014).

With sound financial literacy, entrepreneurs can use their financial skills to make the right decisions for their companies (Muraga & John, 2015). SME owners/managers are closely related to making complex and strategic financial decisions related to the success of achieving goals and business sustainability (Drexler et al., 2014). The RBV (Resource-based-view) explains that financial literacy is a unique, rare, and unchanging resource that enables businesses to achieve business continuity. Several research results show that financial literacy affects the performance of SMEs (Dahmen & Rodríguez, 2014; Chepngetich, 2016; Ngek, 2016). This relationship is logically applied to companies that, with good financial literacy, can strategically identify and respond to changes in the business, economic and financial climate so that the decisions are well directed towards business sustainability.

H3. Financial Literacy has a positive effect on Business Sustainability.

SMEs need more resources. However, these conditions were not an obstacle to the development of his business. The sustainability of SMEs must be oriented toward management skills and human resource strategies to compete in the global market (Styaningrum et al., 2020). One resource that can be maximized is intellectual capital (Ying et al., 2019). Several studies in developed countries such as England, America, and Sweden and developing countries such as Malaysia prove that intellectual capital positively affects business performance (Khalique et al., 2015).

An emphasis on intellectual capital owned by managers will affect the performance of SMEs (Khan et al., 2021). The combination of human capital, structural capital, and relational capital influences the performance of SMEs (Sardo, 2018). Research by Ullah et al. (2021) offers a new concept called Green Intellectual Capital which affects the sustainability of SME businesses in Pakistan. Green Intellectual Capital is the overall intangible assets, relationships, knowledge, and capacities of an organization that are applied to maintain the organizational environment. Based on the Knowledge-Based View (KBV) theory, the batik creative industry is expected to be able to manage and utilize intellectual capital to improve business sustainability properly. This business's sustainability will spur the batik industry's added value in competing and meeting customer needs.

H4. Intellectual Capital has a positive effect on Business Sustainability.

The risk attitude allows SMEs to identify opportunities and risks related to business continuity. Gärling et al. (2009) found risk attitude as a significant factor affecting the business continuity process. Thus the attitude towards risk-taking plays an essential role in the sustainability of SME businesses. Many studies have attempted to provide empirical evidence about the impact of risk attitudes on the sustainability of SME businesses. Empirically, K. Kulathunga et al. (2019)in the growing literature of SMEs management, inadequate consideration has been devoted on the financial literacy of the SMEs, and the mechanisms through which it impacts on SMEs performances. Drawing upon knowledge-based view and dual process theory, we tested the impact of financial literacy and risk attitude on SMEs performances in an integrated model. The sample

included 244 chief financial officers of SMEs in three provinces of Sri Lanka (Central, Western and Southern provinces show that risk attitudes positively affect SME performance. Kortana (2019) examines strategic risk, financial risk, operational risk, and compliance risk that have a positive effect on SME business performance. Agyapong (2020) did the same about market, operational, financial, and technology risks, which positively affect SME performance.

In Knowledge Based-View Theory (KBV), companies can rely on knowledge as a strategic resource to rise in competition among competitors. The basic tenet of KBV is that knowledge is a uniquely valuable asset in that it is not easily lost and difficult for competitors to copy, giving organizations that acquire knowledge assets an advantage over those that do not. Risk Attitude is seen as an intellectual asset that can drive business sustainability. The study's results Jalali et al. (2020) found that risk-taking positively affects SME performance. SME actors must become risk-takers to perform better by allocating resources for risky strategies and actions with precise results.

H5. Risk attitude has a positive effect on Business Sustainability.

Gross-Gołacka et al. (2020) explains that the sustainability of SME businesses in Poland is determined by the intellectual capital of human resources with skills and a high level of knowledge. Then concerning SMEs in Indonesia, it shows that there is a clear relationship between intellectual capital, financial literacy, and SME business sustainability, as was done by Arum (2021) and Nuryakin et al. (2021)Central Java. The analysis unit is conducted with the owners or manager of export based brass industry in Central Java. The collection of data for this research was done by the use of purposive sampling. This study takes 200 respondents as its sample. The structural equation modelling (SEM that when SME business actors have good level of financial literacy, they tend to be able to manage their business finances better and can recognize and access financial resources so that they are expected to be able to maintain the continuity of their business.

Asyik et al. (2022) explained that intellectual capital can affect financial literacy. SME actors with sound financial literacy are determined from the intellectual development of business actors obtained from the learning process or training provided by the government and educational institutions. The same thing was also obtained by Nur Hamidah et al. (2020) and Sudewi & Dewi (2022) that intellectual capital and financial literacy can improve the sustainability of SME businesses in Indonesia with existing resources through optimally empowering intellectual capital and managing finances by increasing understanding of financial literacy.

H6. Financial Literacy mediates the effect of Intellectual Capital on Business Sustainability.

Research conducted by Kortana (2019) suggests that the government should participate in activities to increase understanding of risk management for SME performance. Risk management, such as strategic risk, financial risk, operational risk, and legal compliance risk, accounts for 60% of the performance of SMEs in Thailand. Glowka et al. (2021) explained that SME activities that involve family involvement in them would reduce the performance of these SMEs, so one solution is to implement risk management.

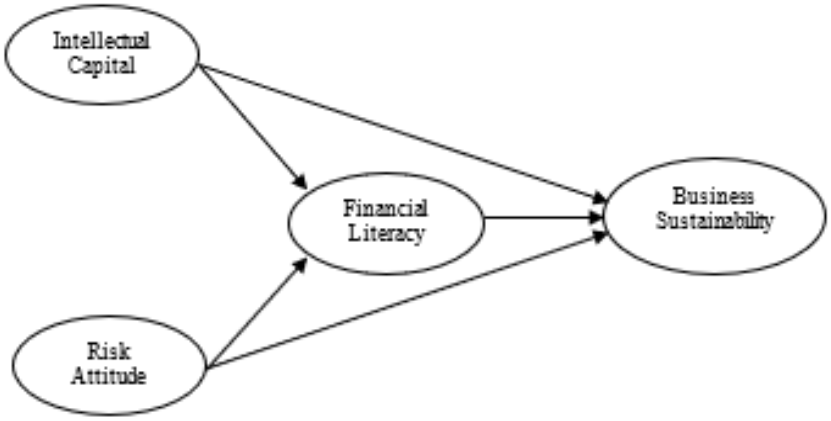
Several studies combining risk attitudes, financial literacy, and SME business continuity were conducted by Buchdadi et al. (2020)the purpose of this study was to examine the determinant variable of the SMEs performance namely financial literacy of the manager. This study utilize acces to financial product and financial risk risk attitude as the mediation variables. This type of research uses a quantitative approach and the structural equation modeling (SEM and Mabula & Ping (2018)Small and Medium Enterprises (SMEs. Research by Buchdadi et al. (2020)the purpose of this study was to examine the determinant variable of the SMEs performance name-

ly financial literacy of the manager. This study utilize acces to financial product and financial risk risk attitude as the mediation variables. This type of research uses a quantitative approach and the structural equation modeling (SEM explain that SMEs with a higher level of financial literacy can manage risk attitudes efficiently so that SMEs can face problems and make the right decisions in running their business. The same thing was also revealed by Mabula & Ping (2018) Small and Medium Enterprises (SMEs that business sustainability is vulnerable to internal and external changes. This research also offers insurance as part of risk management. SME actors who know about financial literacy, especially in risk management, can objectively evaluate their actions. Risk management is considered an integral part of individual and corporate financial literacy.

H7. Financial Literacy mediates the influence of Risk Attitudes on Business Sustainability.

Based on this explanation, a research model was created to be analyzed in Figure 1 and the hypothesis.

Figure 1. Research Model



Source: created by the authors

4. RESULTS

222 samples were acquired based on the dissemination of questionnaires to business actors in the creative batik sector. Table 3 below shows the demographic information for the respondents, which reveals that most of them are female, between the ages of 31 and 40, with a high school diploma, less than five years in business, one to four employees, and annual sales of less than IDR 100,000,000.

Table 3. Description of Respondents

Description		Amount	%
Age	20-30 years	62	27,8
	31-40 years	136	61,1
	> 40 years	24	0,11
Gender	Male	86	38,9
	Female	136	61,1
Education	Senior High School	191	86,1
	College	31	13,9
City	Kediri	18	8,11
	Tulungagung	58	26,13
	Blitar	30	13,51
	Madiun	20	9,00
	Mojokerto	19	8,56
	Malang	77	34,69
Business Age	< 5 years	136	61,1
	5-10 years	24	11,1
	>10 years	62	27,8
Number of employees	1-4 employees	154	69,4
	5-19 employees	61	27,7
	> 20 employees	7	2,9
Sales	< IDR. 100.000.000	154	69,4
	IDR. 100.000.000-IDR. 300.000.000	68	30,6

Source: constructed by authors based on result of model development

The validity and reliability of the indicators are used in structural model analysis to gauge how strongly an indicator reflects its relationship with variables. Two tests—convergent validity and discriminant validity—are used to assess a construct's validity. For the convergent validity test, the loading factor value of each variable used to generate the variable must be more than 0.6 (Fornell & Larcker, 1981; Hair et al., 2014). The benchmark used to analyze the discriminant validity test is the AVE root (AVE). If AVE > 0.6, the instrument is deemed to be genuine. As a result, the model satisfies the requirements and has enough discriminant validity (Fornell & Larcker, 1981; Hair et al., 2014). Table 3 below will summarize the convergent and discriminatory validity.

Table 4. Loading Factor and Average Variance Extracted

Indicators	Loading Factor	√AVE
Financial Literacy (FL)		
FL1	0,814	0,824
FL2	0,748	
FL3	0,886	
FL4	0,795	
FL5	0,843	
FL6	0,851	
Business Sustainability (BS)		
BS1	0,822	0,870
BS3	0,893	
BS4	0,945	
BS5	0,716	
BS6	0,954	
Intellectual Capital (IC)		
IC1	0,975	0,877
IC4	0,767	
Risk Attitude (RA)		
RA1	0,918	0,854
RA2	0,719	
RA3	0,843	
RA4	0,868	
RA6	0,908	

Source: constructed by authors based on result of model development

While two tests—the Composite Reliability test and Cronbach's alpha—can be used to assess a construct's reliability. According to the general rule, if the value of the two tests—whether it is the Composite Reliability value or the Cronbach's alpha value—is greater than 0.7, it satisfies the requirements (Fornell & Larcker, 1981; Hair et al., 2014). Therefore, it can be concluded from table 4 below that the four variables are reliable.

Table 5. Construct Reliability and Validity

Variables	Cronbach's Alpha	Composite Reliability
Financial Literacy (FL)	0,906	0,927
Business Sustainability (BS)	0,917	0,939
Intellectual Capital (IC)	0,755	0,868
Risk Attitude (RA)	0,906	0,931

Source: constructed by authors based on result of model development

The value of R square is a measure of the proportion of variable values that are influenced by the dependent (endogenous) variable and that can be explained by variables that affect the independent (exogenous) variables. The R Square value determines whether the model is good or bad. R Square value has several criteria, namely that a model with a value of 0.75 is said to be substantial (strong), a model with a value of 0.5 is said to be moderate (moderate), and a model with a value of 0.25 is said to be weak. Based on table 6, the R Square value is used to see the

influence of Intellectual Capital, Risk attitude, and Financial Literacy variables on Business sustainability, which is 0.866 or 86.6%, so this relationship is strong. While the influence of Intellectual Capital and Risk Attitudes on Financial Literacy is 0.680, or 68.0%, this relationship is moderate.

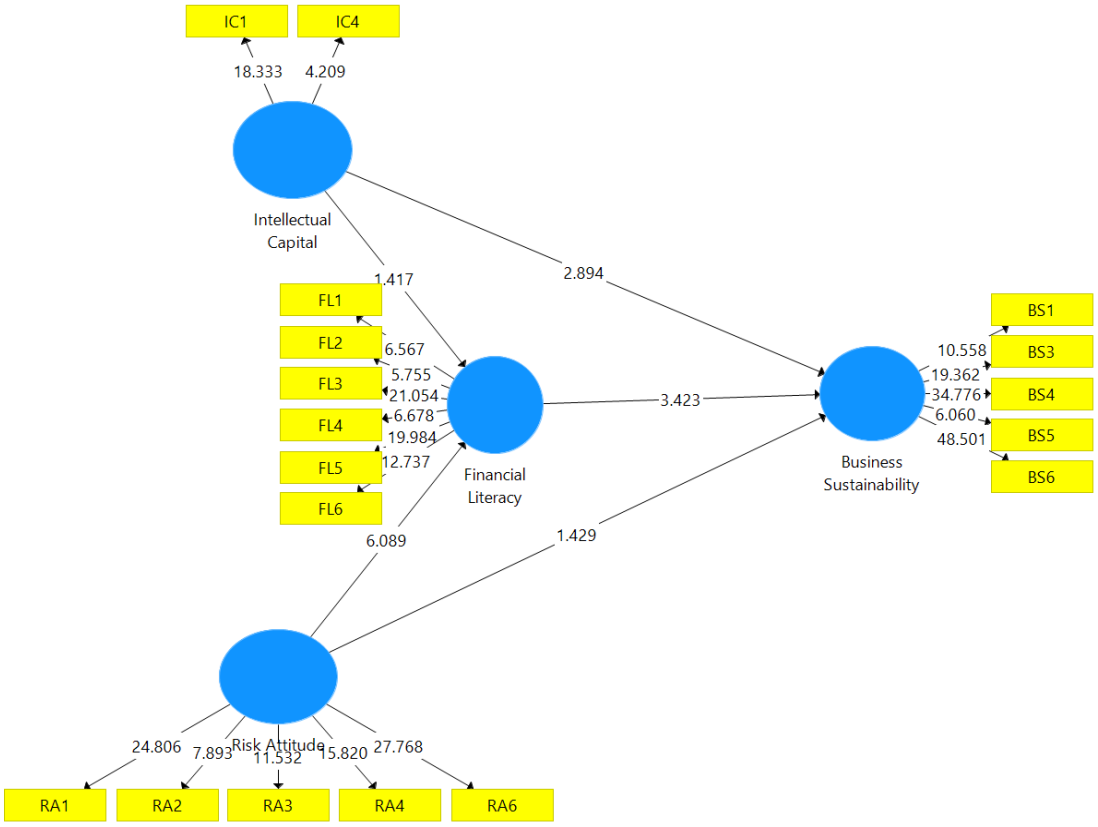
Table 6. R-Square

	R-Square
Business Sustainability	0,866
Financial Literacy	0,680

Source: constructed by authors based on result of model development

Hypothesis testing with SmartPLS 3.2 is used to see the magnitude of the structural path coefficient and the stability of the estimates, which are evaluated using the t test with the bootstrapping method shown in Figure 2 below. Testing with the bootstrapping method aims to minimize the occurrence of abnormal data. The results of the hypothesis testing using bootstrapping from the PLS analysis are presented in Table 7 below.

Figure 2. Bootstrapping



Source: constructed by authors based on result of model development

Table 7. Hypothesis Test Results

Variables corelations	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Result of Hypothesis path
Intellectual Capital (IC) -> Financial Literacy (FL)	0.224	0.256	0.158	1.417	0.173	H1 Rejected
Risk Attitude (RA) -> Financial Literacy (FL)	0.719	0.706	0.118	6.089	0.000	H2 Accepted
Financial Literacy (FL) -> Business Sustainability (BS)	0.535	0.549	0.156	3.423	0.001	H3 Accepted
Intellectual Capital (IC) -> Business Sustainability (BS)	0.396	0.373	0.137	2.894	0.004	H4 Accepted
Risk Attitude (RA) -> Business Sustainability (BS)	0.171	0.165	0.120	1.429	0.153	H5 Rejected

Source: constructed by authors based on result of model development

The results of the H1 test show that the correlation between the Intellectual Capital variable and Financial Literacy for the batik creative industry players gets a path coefficient value of 0.224 with a t value of 1.417 < 1.98, which shows that the direction of the correlation between Intellectual Capital and Financial Literacy is positive and not significant because t value <t table. Indicators IC1 and IC4 are essential to intellectual capital and demonstrate how Batik SMEs are proficient in their particular sectors and have positive working connections with clients, partners, and the government. Regarding financial literacy, namely FL1, FL2, FL3, FL4, FL5, and FL6, which demonstrate how Batik SMEs often utilize FL by research indicators, this condition shows that the higher the intellectual capital of creative industry players, the higher their financial literacy, but it is not significant. This means that efforts are still needed to increase intellectual capital in the form of training and education for batik industry players in managing business finances properly, for example, by teaching them how to separate business finances from personal finances. This does not follow the first hypothesis, so H1 is rejected.

The results of the H2 test show that the correlation between the Risk Attitudes variable and Financial Literacy in the batik creative industry gets a path coefficient value of 0.719 with a t value of 6.089 > 1.98, which shows that the direction of the correlation between Risk Attitudes and Financial Literacy is positive and significant because the statistical t value is greater than the t table. Risk Attitude indicators consist of RA1, RA2, RA3, RA4, and RA6, which explain that Batik SMEs can set aside a portion of their business income just in case; Batik SMEs develop standard safe work procedures; Batik SMEs comply with regulations and laws, Batik SMEs can cooperate with suppliers of raw materials, and Batik SMEs do not delay debt payments. All indicators above become RA constructs that can improve FL for Batik SMEs. The higher the Risk Attitude of the batik creative industry players, the higher their financial literacy. This is in accordance with the second hypothesis, so it can be said that H2 is accepted.

The results of the H3 test show that the correlation between the Financial Literacy variable and the Batik Creative Industry Business Sustainability has a path coefficient value of 0.535 with a t value of 3,423 > 1.98, which shows that the direction of the correlation between Financial Literacy and Business Sustainability is positive and significant because the value t count > t table. FL indicators that explain how Batik SMEs can separate assets, liabilities, personal and business income and expenses (FL1), make simple financial reports (FL2), record every business transaction (FL3), make financial reports periodically (FL4), and prepare financial statements correctly (FL5). Batik SMEs make the right decisions (FL6). While the BS indicators explain that Batik SMEs can create new jobs (BS1), Batik SMEs can develop local culture and wis-

dom (BS3), Batik SMEs can align economic, environmental, and social activities (BS4), Batik SMEs can generate profits and grow businesses (BS5), and finally, Batik SMEs have transparent institutions (BS6). The higher the financial literacy of the batik creative industry players, the higher the chances of business continuity. This is in accordance with the third hypothesis, so it can be said that H3 is accepted.

The results of the H4 test show that the correlation between the Intellectual Capital variable and the Business Sustainability of the batik creative industry has a path coefficient value of 0.396 with a t value of 2.894 > 1.98, which shows that the direction of the correlation between intellectual capital and Business Sustainability is positive and significant because the value t count > t table. Indicators IC1 and IC4 are essential to intellectual capital and demonstrate how Batik SMEs are proficient in their particular sectors and have positive working connections with clients, partners, and the government. While the BS indicators explain that Batik SMEs can create new jobs (BS1), Batik SMEs can develop local culture and wisdom (BS3), Batik SMEs can align economic, environmental, and social activities (BS4), Batik SMEs can generate profits and grow businesses (BS5), and finally, Batik SMEs have transparent institutions (BS6). This is in accordance with the hypothesis, so H4 is declared accepted.

The results of the H5 test show that the correlation between the risk attitude variable and the business sustainability of the batik creative industry has a path coefficient value of 0.171 with a t value of 1.429 < 1.98, which shows that the direction of the correlation between risk attitudes and business continuity is positive and not significant. because the value of t count < t table. Risk Attitude indicators consist of RA1, RA2, RA3, RA4, and RA6, which explain that Batik SMEs can set aside a portion of their business income just in case; Batik SMEs develop standard safe work procedures; Batik SMEs comply with regulations and laws, Batik SMEs can cooperate with suppliers of raw materials, and Batik SMEs do not delay debt payments. All indicators above become RA constructs that can improve FL for Batik SMEs. While the BS indicators explain that Batik SMEs can create new jobs (BS1), Batik SMEs can develop local culture and wisdom (BS3), Batik SMEs can align economic, environmental, and social activities (BS4), Batik SMEs can generate profits and grow businesses (BS5), and finally, Batik SMEs have transparent institutions (BS6). This is not in accordance with the fifth hypothesis, so H5 is rejected.

Table 8. Mediation Test Results

Variables corelations	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Result of Hypothesis path
Intellectual Capital (IC) -> Financial Literacy (FL) -> Business Sustainability (BS)	0.120	0.149	0.105	1.142	0.254	H6 Rejected
Risk Attitude (RA) -> Financial Literacy (FL) -> Business Sustainability (BS)	0.384	0.385	0.121	3.170	0.002	H7 Accepted

Source: constructed by authors based on result of model development

The results of the H6 test show that the correlation between the Intellectual Capital variable and the Business Sustainability of the batik creative industry is mediated by the Financial Literacy variable, obtaining a path coefficient value of 0.120 with a t value of 1.142 <1.98 which shows that the direction of the correlation between Intellectual Capital and Business Sustainability is mediated by Financial Literacy is positive but not significant because the value of t count <t table. This proves that the Financial Literacy variable cannot mediate the influence of Intellectual

Capital on Business Sustainability. This is not in accordance with the sixth hypothesis, so H6 is declared rejected.

The results of the H7 test show that the correlation between the Risk Attitude variable and Business Continuity is mediated by the financial literacy of the batik creative industry business actors, obtaining a path coefficient value of 0.384 with a t value of 3.170 > 1.98, which shows that the direction of the correlation between Risk Attitudes and Business Sustainability is mediated by financial literacy and is positive and significant because the t count > t table. This indicates that the financial literacy variable is successful in mediating the effect of risk attitudes on business sustainability. This is in accordance with the seventh hypothesis, so H7 is declared accepted.

5. DISCUSSION

Intellectual capital in Batik SMEs is a collection of knowledge that describes intangible assets that can affect Business Sustainability. Batik SME owners need financial management skills or competencies to run the business and ensure its survival and expansion. Training in financial management is one approach to increasing the intellectual capital of Batik SME owners. It was found that intellectual capital has little impact on the financial literacy of creative batik businesses in Indonesia, and this still needs to be improved. Stakeholders should pay attention to this matter so that the intellectual capital development of batik SMEs can be taken more seriously.

The COVID-19 epidemic that has now passed and increased the danger of failure or bankruptcy for Batik SMEs is just one of the conditions of uncertainty facing Batik SMEs in Indonesia today. Batik SMEs only concentrate on short-term rather than long-term goals due to their inability to manage risk and lack financial skills training. As a result, every organization needs to adopt a risk-taking attitude by identifying and managing risks as early as possible. Risk attitudes will increase the financial literacy of Batik SMEs in various fields such as bookkeeping, financial statement analysis, investment management, and other business finance-related topics. The risk attitude has a significant impact on financial literacy in batik SMEs.

Batik SMEs with solid financial literacy will be better equipped to meet company goals, focus on business development, and survive difficult economic times. Financial literacy is required to manage and make financial decisions effectively, including bookkeeping, payments, loans, and other financial choices. To achieve the goals of company success and sustainability, owners or managers of Batik SMEs must make difficult financial decisions. The justification above makes perfect sense regarding batik SMEs in Indonesia. Batik SMEs can survive if their financial knowledge is good.

Batik SMEs do, however, usually have few resources. However, this did not hinder the growth of his business. Batik SMEs must focus on human resources and management strategies to compete in the global market. The sustainability of Batik SMEs will be influenced by a focus on the intellectual capital owned by the owners or managers of Batik SMEs. With sufficient intellectual capital, the batik industry can guarantee the long-term sustainability of its sector.

Batik SMEs can recognize opportunities and dangers related to business continuity by taking a risk-taking attitude. The threats Batik SMEs face, including financial, market, operational, and technological risks. If these risks are adequately managed, the sustainability of Batik SMEs will improve. Furthermore, investigated how risk attitudes can enhance the sustainability of Batik SMEs. Before developing a risk attitude and learning more about the different hazards, the batik creative sector must first learn a risk attitude because this attitude will guide future risk management actions. Batik SMEs must still understand the proper risk mindset to maintain

economic viability.

6. CONCLUSION

In general, the results of the research above prove that variable intellectual capital does not affect financial literacy because the batik industry is a family industry, which assumes that industry players simply learn from the skills taught by the family. However, because the batik industry has high prospects, batik industry players should start adding insight into financial literacy by attending training or financial education.

The effect of risk attitudes on financial literacy has a positive influence, meaning that with increasing attention from industry players regarding risks that always occur anytime and anywhere, the level of financial literacy obtained is also higher. The effect of financial literacy on the sustainability of the batik industry business has a positive influence, meaning that the level of financial literacy is one of the factors or abilities needed by batik industry players so that their business continues to run and develop. The effect of intellectual capital on the sustainability of the batik industry business has a positive influence, meaning that the higher the intellectual capital owned by the batik creative industry players, the stronger the business sustainability. Meanwhile, the risk attitude has not had a positive effect on business sustainability.

Financial literacy has yet to mediate intellectual capital's influence on the sustainability of the batik industry. This needs to be explored further with further research. Furthermore, financial literacy can mediate risk attitudes toward the sustainability of the batik industry's business. The implications of these findings are to prove that financial literacy is beneficial for the business sustainability of Batik SMEs. Whether intellectual capital becomes an antecedent of financial literacy. When intellectual capital becomes a value for Batik SMEs, then it provides tangible benefits for Batik SMEs. Whether risk attitude an antecedent of financial literacy. When batik, SMEs have the mindset that risks can occur anytime and anywhere, batik SMEs can face risks. The risk attitude allows Batik SMEs to maintain business sustainability.

As a limitation of this study, there is a possibility of respondent bias which could lead to different results when compared to other regions in Indonesia. Another limiting factor can be observed in the sample size and the fact that it refers to batik SMEs, which may differ from the results obtained in a more significant number of respondents and in large companies. Even considering the methodological rigor used, another limitation concerns the non-generalizability of the results because the variables used may show some trends in the results, as predicted by the authors who investigated the relationship between FL and BS. Therefore, it is advisable to use another sample and replicate this study considering this use and the inclusion of other variables to verify the results.

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