

The Influence of Digital Business Strategy, Mental Accounting, and Growth Mindset on MSMEs Business Performance

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Abstract

The COVID-19 pandemic has affected the global economy, including Indonesia. As the backbone of Indonesia's national economy, MSMEs has been affected by the pandemic which adds to the various problems it already has. Some of MSMEs problems are weakness of business legality; unclear business model; no separation between personal and corporate wealth; limited business capital and human resources; lack of professional management, innovation, creativity, and technology literate; and lack of accounting knowledge in making accounting decisions. This paper aims to investigate the effect of digital business strategy, mental accounting, and growth mindset on MSMEs Business Performance that could help MSMEs overcome their problems. This research uses a quantitative method using questionnaires with 66 items. The sampling technique uses convenient sampling. This study uses a sample of 95 respondents from MSMEs operating in South Tangerang with minimum business age of 3 years. This study uses a statistical method with the IBM SPSS Statistics 28 program as a test tool. The result indicates that digital business strategy and growth mindset have a positive effect on business performance. Meanwhile, mental accounting does not affect business performance. This proves that entrepreneurs need knowledge and vision concerning digital transformation to drive competitive advantage. Entrepreneurs need to have creativity and innovation to enhance MSMEs' business performance to develop the business.

Keywords

Business Performance, Digital Business Strategy, Growth Mindset, Mental Accounting and MSMEs.

1. Introduction

The COVID-19 pandemic has significantly affected the global economy. The International Monetary Fund (IMF) 2020 estimated the median global gross domestic product (GDP) dropped by 3.9% from 2019 to 2020, making it the worst economic downturn since the Great Depression (Oum et al. 2022). The economic effect of COVID-19 also hit Indonesia. According to the data from IMF, Indonesia's GDP dropped by 7.1% in 2020. Although it increased in 2021 by 5.3%, it is still below pre-pandemic GDP. According to the Ministry of Cooperatives and SMEs, Indonesia has 64.2 million MSMEs contributing to a GDP of 61.07%. However, COVID-19-related health protocols such as restrictions to community activities, limitations on public places visitors, and business operational hour restrictions reduce the number of customers needed by MSMEs to survive (Afriza 2021). In response to the MSMEs problem described, this paper aims to research business performance determinants of MSMEs, especially in South Tangerang, Indonesia.

MSMEs in South Tangerang continue to look for information about market opportunities and product development (Indrajaya and Bastian 2021). However, in their operation, they have a few other problems such as weakness of business legality; unclear business model; no separation between personal and corporate wealth; limited business capital and human resources; lack of professional management, innovation, creativity, and technology literate; and lack of accounting knowledge in making accounting decisions (Irawan and Chandranegara 2017; Khairunnisa and Rustiana 2019). Therefore, a few factors can affect MSMEs' business performance. This paper wants to highlight the effect of digital business strategy, mental accounting, and growth mindset as an internal factor of MSMEs that could help businesses overcome the stated problems.

First, digital business strategy (DBS) fuses business and IT strategies to guide the inevitable transformations that digital technologies trigger (Brown and Brown 2019). MSMEs' digitalization is beneficial to MSMEs as it can assist in avoiding a complete economic halt to business during the COVID-19 crisis (Khai et al. 2020). Prior research has studied different aspects of digitalization on business performance. Social media drives business model innovation, big data, and a high level of digital tools training which positively impacts business performance (Bouwman et al. 2018; Ribeiro-Navarrete et al. 2021). Research conducted by Eller et al. (2020) found that IT adoption, employee skills, and a digital strategy significantly drive digitalization, and, in turn, digitalization drives the financial performance of SMEs. Meanwhile Joensuu-Salo et al. (2018) found that digitalization influences domestic market firms but doesn't influence internationalized firms. Research by Rahman and Ferdaous (2019) shows that IT assets don't influence the stock market performance in Bangladesh. Another research also found that information technology capability doesn't impact performance, and even IT leader firms showed poorer performance than control firms studied (Chae et al. 2018; Ping et al. 2018).

Second, mental accounting (MA) is how a person groups and treats their finance by observing several aspects such as the ability to secure income, current wealth, and future income (Radianto et al. 2022). MSMEs owners/managers make decisions ranging from acquiring funds to investing in the business. However, they often make mistakes in management, as they are vulnerable to various biases, which lead them to uncertainty in making optimal decision-making (Hoque 2017). Research conducted by Hoque (2017) has found a positive influence of mental budgeting on the financial management of SMEs, in which financial management has a positive impact on business performance (Awaluddin et al. 2020; Muktiadji et al. 2020). However, research by Raveendra et al. (2018) has studied the behavioral problems involved in the decision-making process leading to poor SMEs performance. Some reasonings of poor SMEs performance mentioned are lack of emotional control in making financial decisions; lack of skills and knowledge of financial decision making and management; overconfidence in financial, operational, and managerial; as well as inconsistent decision-making strategies. Research conducted by Baucells et al. (2018) found that behavioral project management's decisions (viewed from mental accounting) result in lower profitability. Another study has also discussed the negative effect of mental accounting on decision making. Consumers as well as decision makers are subject to the negative effect of mental accountability that leads to irrational decisions that have negative consequences (Albaddawi 2022). Prior research on mental accounting mainly focuses on household, consumer perspectives, and different scope of studies not related to business performance (Hahnel 2020; Mahapatra and Misra 2020; Qiu et al. 2022; Radianto et al. 2022; Rosmalen 2020; Yun and Suk 2022). Research on the direct relationship between mental accounting and business performance is still lacking.

Third, a growth mindset (GM) is defined as "the belief that one's intellectual ability can increase with practice and time" (Xu et al. 2021). There is compelling research on how a growth mindset could outperform those with a fixed mindset (Johnston 2017). Individuals with a growth mindset pursue more learning goals, aiming to develop their skills and abilities; they show greater resilience in the face of challenges and predict better performance (Murphy and Reeves 2019). However, a study by (Puente-Díaz & Cavazos-Arroyo 2017) found that both growth and fixed mindset positively influence achievement goals. Another study found that mindset is not directly affecting work engagement (Caniëls et al. 2018) that is positively related to performance (Koekemoer et al. 2021). A fixed and growth mindset could positively affect work engagement depending on leadership style. A growth mindset prevents engagement when efforts do not lead to expected performance, and it needs interaction with other factors, such as leadership, to become meaningful (Caniëls et al. 2018).

Several studies have been identified, and the findings in these studies remain inconclusive. First, studies on DBS have shown a positive influence (Bouwman et al. 2018; Eller et al. 2020; Khai et al. 2020; Ribeiro-Navarrete et al. 2021) and no influence (Chae et al. 2018; Joensuu-Salo et al. 2018; Ping et al. 2018; Rahman and Ferdaous 2019) of DBS on business performance. Second, studies on mental accounting mainly focus on household, consumer perspectives, and different scope of studies not related to business performance (Mahapatra and Misra 2020; Yun and Suk 2022; Hahnel et al. 2020; Qiu et al. 2022; Radianto et al. 2022; Rosmalen 2020). Studies on a direct relationship between mental accounting and business performance are still lacking. Therefore, this research is hoping to fill in the research gaps. Lastly, there are inconclusive findings on whether growth mindset positively (Johnston 2017; Murphy and Reeves 2019; Puente-Díaz and Cavazos-Arroyo 2017) or do not (Caniëls et al. 2018) affects performance. Given that empirical findings remain inconclusive, further research is needed to understand how digital business strategy (DBS), mental accounting, and growth mindset can affect business performance. Therefore, this paper aims to fill this gap and contribute to the study relating to DBS, MA, GM, and BP.

This paper is motivated to do research based on the phenomena and research gaps described above by using digital business strategy, mental accounting, and growth mindset as independent variables to business performance as dependent variables in the MSMEs sector in South Tangerang. The research expects MSMEs, especially in South Tangerang, to improve their business performance. This research hopes MSMEs can develop and advance their business while considering digital business strategy, mental accounting, and growth mindset. By reading this research, MSMEs are hoped to understand the benefits of digital business strategy in this modern era which requires businesses to advance together with technological advances to survive. MSMEs are also hoped to have growth mindset and courage to be creative and take calculated risk to expand business, as well as good financial management to keep businesses going.

2. Literature Review

Digitalization is the process of adopting digital technologies to promote organizational changes (Guo et al. 2020). Many new opportunities driven by digitalization put pressure on MSMEs to critically reflect on their current business model strategy and identify new business opportunities (Bouwman et al. 2019). Digital business strategy (DBS) is defined as the fusion of business and IT strategies to guide the inevitable transformations that digital technologies trigger (Brown and Brown 2019).

The theoretical framework of digital business strategy is based on dynamic capability theory. Dynamic capability theory is rooted in the resource-based view (RBV) theoretical framework that focuses on resources, assets, and firm performance (Mu 2017). Based on RBV, business can gain sustainable competitive advantage through digital transformation if they possess valuable, rare, inimitable, and non-substitutable resources (Papadopoulos et al. 2020). However, it may be hard to establish, especially in a significant disruption situation like COVID-19. Therefore, businesses need to initiate a dynamic capability to secure business continuity in uncertain environments instead (Papadopoulos et al. 2020). While RBV focuses on resources, assets, and firm performance, dynamic capability emphasizes a view on dynamics, changes, and firm performance (Mu 2017). Based on the description and prior research by Ukko et al. (2019), this paper defines managerial and operational capabilities as the main dimensions of DBS.

The first dimension of DBS is managerial capabilities. There are three core underpinnings of managerial capability. First, managerial cognition that affects managers' sense of market changes and how they adapt to these changes; second, managerial social capital that allows a manager to better sense market opportunities and challenges; lastly, managerial human capital includes knowledge, experience, skills, and education that helps manager recognize and seize opportunities – which in the context of this paper is digital transformation (Li et al. 2018). The second dimension of DBS is operational capabilities. Operational capability is defined as how companies manage and operate to achieve their financial goals (Liu et al. 2019). In the sense of digitalization, an operational capability is a strategic choice for obtaining and embedding digital-related capabilities. It is crucial in managing problems and uncertainty in the digital era (Ukko et al. 2019).

Digitalization has proven to be beneficial for business performance (Bouwman et al. 2018; Eller et al. 2020; Ribeiro-Navarrete et al. 2021). To make the right decisions in digital business environments, managers must have clear vision for utilization of digitality, so digital transformation in business can be turned into competitive advantages and enhanced business performance (Ukko et al. 2019). This is supported by other research that has found a positive influence of managerial capabilities on business performance (Li et al. 2018; Mostafiz et al. 2019; Permana and Ellitan 2020; Senaratne and Kulathunga 2021; Ukko et al. 2019). Operational capabilities are also crucial in supporting a successful digital business strategy because superior operations capability can increase delivery process efficiency, reduce the cost of operations, and help achieve a competitive advantage, especially in the digital era (Mu 2017; Ukko et al. 2019). Several studies support the positive influence of operational capability on business performance (Benitez et al. 2018; Braojos et al. 2019; Li et al. 2018; Mu 2017; Senaratne and Kulathunga, 2021). So, based on the consideration above, the following hypothesis is proposed:

H₁: Digital business performance has a positive influence on business performance.

The theoretical framework of mental accounting is behavioral finance. Insights from behavioral finance help make decisions more effective as it examines financial phenomena through economic and cognitive psychology (Hoque 2017). One behavioral finance concept is mental accounting, defined as how a person groups and treats their finance by observing several aspects such as the ability to secure income, current wealth, and future income (Radianto et al.

2022). It includes the effect of human behavior on how accounting models are constructed, and the effect of the way accounting models are built on human behavior (Hoque 2017). Mental accounting can be shown by an individual's implementation of accounting principles on their financial activity so that mental accounting will influence financial behavior (Radianto et al. 2022).

In entrepreneurship, mental accounting controls an entrepreneur's mindset in managing finance for an effective financial behavior that plays an essential role in economic decision-making (Radianto et al. 2022). The more mental accounting influences a person's way of thinking, the better the person manages their finances and makes the right financial decisions (Radianto et al. 2022). Good financial decisions are needed to drive business sustainability. A study conducted by Adriani (2021) stated that someone who makes financial records would be more encouraged to evaluate their financial conditions, which will affect their decision-making and attitude towards their financial problems. Another research conducted by Hoque (2017) has also found a positive influence of mental budgeting on the financial management of SMEs, in which financial management has a positive impact on business performance (Awaluddin et al. 2020; Muktiadji et al. 2020). Good financial management is vital to the economic health of SMEs and, when considered from behavioral finance (mental accounting), perspective can become more effective (Hoque 2017). So, based on the consideration above, the following hypothesis is proposed:

H₂: Mental accounting has a positive influence on business performance.

A growth mindset is defined as "the belief that one's intellectual ability can increase with practice and time" (Xu et al., 2021). The theoretical framework of a growth mindset is entrepreneurial mindset theory. Individuals with entrepreneurial mindset are adaptable and resilient in uncertain and complex conditions; able to recognize and act upon opportunities; and able to make decisions with limited information (Daspit et al. 2021). This research defines entrepreneurial leadership, entrepreneurial culture, and entrepreneurial orientation as a part of a growth mindset that would influence business performance. Entrepreneurial leadership (EL) significantly differs from the classical business leadership concept in behavioral norms. An entrepreneurial leader observes themselves as an entrepreneur managing their own business and they behave in the interest of realizing business's vision and plans (Sandybayev 2019). Growth mindset leaders believe in abilities development, by improving their leadership. Prior studies have shown GM leaders are generally more effective in leadership (Kouzes and Posner 2019). For business to continue to grow dynamically, entrepreneur leaders need to have a growth mindset. It has been found to be beneficial and has significant positive correlation between leadership on /business performance (Paudel 2019; Sandybayev 2019; Sawaeen et al. 2021).

Entrepreneurial culture (EC) is a part of a growth mindset consisting of a set of internal factors representing the company's orientation towards exploring new resources, innovation, and creating new products (Leal-Rodríguez et al. 2017). Critical dimensions of innovation culture are vital to a company's success and are strongly inter-correlated (Dabić et al. 2019). Research by Hoque (2018) found that organizational culture is significantly related to SME performance. Entrepreneurial orientation (EO) is a strategic capability and a process that allow business to response to the market by the creation of competitive advantage based on innovativeness, proactiveness, and risk-taking in terms of financial, physical, and social risk (Cuevas-Vargas et al. 2019). EO determines how businesses dare to get into new markets and develop goods or services that could help business growth (Cuevas-Vargas et al. 2019). The positive relationship between EO and performance is also supported by several other research (Cuevas-Vargas et al. 2019; Ibarra-Cisneros & Hernandez-Perlins 2019; Octavia et al. 2020; Tajeddini et al. 2020; Wahyuni and Sara 2020). So, based on the consideration above, the following hypothesis is proposed:

H₃: A growth mindset has a positive influence on business performance

3. Methods

This paper uses quantitative research using a survey questionnaire method with convenience sampling technique which targeted individuals who own or work at MSMEs operating in South Tangerang, Indonesia as respondents. A cross-sectional time horizon is used as data are collected just once over some time. The variables studied in this paper are business performance as dependent variables and digital business strategy, mental accounting, and growth mindset as independent variables. Therefore, the research model can be seen in Figure 1. As this paper has one dependent variable and three independent variables, multiple regression analysis is used to analyze the relationship between a dependent variable and several independent variables (Hair et al. 2019). Data collected is processed and analyzed

using SPSS 28. The test includes validity and reliability test, regression analysis, coefficient of determination, and f- and t-test.

The survey instruments of this paper consist of 66 questionnaire items, including financial performance (3 items) and non-financial performance (8 items) adopted from Rehman (2019); managerial capability (3 items), and operational capability (3 items) adopted from Ukko (2019); mental accounting (16 items) adopted from Rosmalen (2020); entrepreneurial leadership (8 items) adopted from Renko et al. (2015); entrepreneurial culture (7 items) adopted from Leal-Rodríguez et al. (2017); and entrepreneurial orientation (18 items) adopted from Shan et al. (2016). Each item in the questionnaire was measured on a Likert scale – 6 points ranging from 1 strongly disagree – to 6 strongly agree (Chyung et al. 2017). The table of survey instruments can be seen in Table 1.

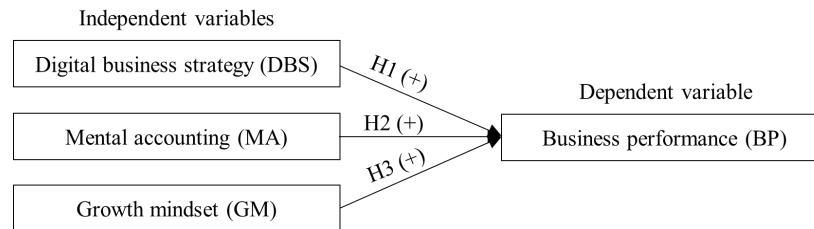


Figure 1. Research model

Table 1. Survey instruments

Variables	Variable Definitions	Number of Items	Scales
Business Performance (Rehman 2019)	A metric for assessing the effectiveness of management to illustrate companies' wellbeing (Saad and Zhengge 2015)	11 items	Likert, 1-6
Digital Business Strategy (Ukko et al. 2019)	The fusion of business and IT strategies guides the inevitable transformations that digital technologies trigger (Brown and Brown 2019)	6 items	Likert, 1-6
Mental Accounting (Rosmalen 2020)	How a person groups and treats their finance by observing several aspects such as the ability to secure income, current wealth, and future income (Radianto et al. 2022)	16 items	Likert, 1-6
Growth Mindset (Leal-Rodríguez et al. 2017; Renko et al. 2015; Shan et al. 2016)	Defined as the belief that one's intellectual ability can increase with practice and time (Xu et al. 2021).	33 items	Likert, 1-6

4. Data Collection

Research data collection is divided into two parts. First, respondents were asked to fill in the demographics data such as respondents' email, name, gender, education (middle school, senior/vocational high school, and bachelor's degree), position (owner, supervisor, admin), and business name, and business's age. In the second part, respondents were asked to answer questions related to business performance, digital business strategy, mental accounting, and growth mindset. A filtering statement was entered at the beginning of this research to ensure respondents can represent the actual conditions in their business related to business performance. The questionnaire was sent out to MSMEs and entrepreneurs with the business operating criteria in South Tangerang, and the business has been working for at least three years. The lifespan of an older company will illustrate the experience of a company and shows that the company can still compete in the competition in the business today, besides the company that is experienced is considered to have a more stable profit from the new companies (Putri and Rachmawati 2018). Questionnaires were sent out via direct message through Instagram, WhatsApp, Line, and Shopee. Most of the respondents came from Shopee, family, friends, and acquaintances who have a business. The total of collected data is 101 respondents. However, from 101 respondents, 6 data are tested for outliers. Therefore, this paper uses 95 data respondents.

5. Results and Discussion

5.1 Profile of Respondents

Respondents in this study were MSMEs in South Tangerang, characterized and summarized in Table 2:

Table 2. Respondent's identity

	Frequency		Frequency
Gender		Job Position	
Male	41	Owner	79
Female	54	Supervisor	3
Age		Admin	7
<26 years	46	Other	6
26-41 years	26	Business Age	
42-57 years	21	3-5 years	60
>57 years	2	6-10 years	17
Education		>10 years	18
Senior	24		
Bachelor	70		
Other	1		

5.2 Numerical Results

The validity test correlates each item's score with the total score. The total score is the sum of each item. Question items that are significantly associated with the total score indicate that these items can provide support in revealing what researchers want to admit. Based on Table 3, each item showed a result of a calculated R-value > R-table of 0.195 (Hair et al. 2019). Thus, each questionnaire item is valid.

Table 3. Validity test

Indicator	R-statistics	Indicator	R-statistics	Indicator	R-statistics	Indicator	R-statistics
BP1	.777	MA1	.703	GM2	.787	GM18	.773
BP2	.851	MA2	.504	GM3	.818	GM19	.668
BP3	.853	MA3	.566	GM4	.705	GM20	.687
BP4	.711	MA4	.767	GM5	.737	GM21	.537
BP5	.903	MA5	.682	GM6	.712	GM22	.537
BP6	.879	MA6	.727	GM7	.724	GM23	.510
BP7	.746	MA7	.824	GM8	.806	GM24	.497
BP8	.720	MA8	.799	GM9	.724	GM25	.769
BP9	.838	MA9	.681	GM10	.805	GM26	.814
BP10	.809	MA10	.723	GM11	.823	GM27	.802
BP11	.807	MA11	.825	GM12	.810	GM28	.784
DBS1	.882	MA12	.823	GM13	.829	GM29	.830
DBS2	.829	MA13	.801	GM14	.814	GM30	.781
DBS3	.872	MA14	.794	GM15	.787	GM31	.708
DBS4	.891	MA15	.627	GM16	.839	GM32	.818
DBS5	.878	MA16	.341	GM17	.798	GM33	.649
DBS6	.819	GM1	.838				

A reliability test is a tool to measure a questionnaire that indicates a variable or constructs. A questionnaire can be reliable if a person's answer to the statement is consistent or stable from time to time. The reliability test refers to the degree of stability, consistency, and accuracy. Based on Table 4, digital business, mental accounting, growth mindset, and business performance are reliable from all the statement points in questionnaires seen from each Cronbach's alpha

value are greater than 0,70 (Hair et al. 2019). Data are reliable if the measurements have high reliability, show consistency, and can be trusted.

Table 4. Cronbach's alpha

Variable	Cronbach's Alpha
Business Performance	0.946
Digital Business	0.930
Mental Accounting	0.924
Growth Mindset	0.973

Based on the classical assumption test, the normality test uses the Kolmogorov Smirnov test, and the result showed an asymp. Sig value of 0.06 is greater than the alpha value of 0.05. Thus, it can be concluded that the data is normally distributed. The heteroscedasticity test uses the Glejser test, and the result shows that all variables have a significant value greater than 0.05. Thus, it can be concluded that there is no heteroscedasticity. The autocorrelation test was conducted using the Durbin Watson test, and the result shows a value of 2.178. This value is in the range of du (1.7316) and $4-du$ (2.2684); therefore, there is no autocorrelation. The multicollinearity test is conducted to determine whether a relationship exists between independent variables in a regression model. Each variable shows a tolerance value greater than 0.1 and a VIF value less than 10. Therefore, it can be concluded that there is no multicollinearity in this study (Hair et al. 2019).

Based on Table 5, the probability statistic of the F-value is 0.000, which is under the significance value of 0.05. Thus, it can be concluded that DBS, MA, and GM simultaneously affect BP. The coefficient determination value is 0.587. DBS, MA, and GM can explain the BP of 58.7%, while the remaining 41.3% is explained by other variables not included in this study. The Standard Error Estimation is 5.774. This means that the smaller the SEE value, the more precise the regression model in this study predicts dependent variable business performance. A T-test was conducted to see the partial influence of each independent variable on the dependent variable. From the result, DBS and GM show a probability value less than the significance value of 0.05, and MA shows a probability value greater than 0.05. Therefore, it can be concluded that DBS and MA affect BP, while MA does not affect BP (Hair et al. 2019).

Table 5. Regression result

Variable	Pred. Sign	Coeff.	t-stat	Probability		Result
				Two-tailed	One-tailed	
Constant		3.742	0.886	0.378	0.189	
DBS	+	0.400	2.428	0.017*	0.008*	Accepted
MA	+	0.083	1.016	0.313	0.156	Rejected
GM	+	0.198	4.495	0.001*	0.000*	Accepted
F-statistic				0.000		
Adj. R Square				0.587		
Std. Error				5.774		
N				95		

Notes: * $p < 0.05$

5.3 Discussion

Based on the result of the t-statistic, it can be concluded that DBS affects MSMEs' BP. From the data collected, DBS can improve BP and help MSMEs in their operational business. This research is in line previous research conducted by Ukko et al. (2019), Mu (2017), and Braojos et al. (2019), which states that with managerial and operational capabilities, businesses are very likely to adjust to changes caused by digital transformation by creation and modification of operational process to provide operational efficiency and effectiveness as a response to the changes. Having knowledge and a clear vision of digitality help entrepreneurs gain a competitive advantage to enhance business performance (Ukko et al. 2019).

Based on the result of the t-statistic, it can be concluded that MA does not affect MSMEs' BP as the t-statistic is below the t-table shown 1.016. From the data collected, it's known that a business's performance is not affected by whether individuals do categorization of income/expenditure or not. It's also not affected by whether financial choices are grouped together or not. The finding supported by the study conducted by Raveendra et al. (2018) that has discussed how financial behavioral bias could lead to poor performance of SMEs. Another research conducted by Baucells et al. (2018) found that behavioral project management's decisions (viewed from mental accounting) result in lower profitability. An insignificant result of MA on BP might occur because MA is commonly related to individuals and consumers rather than a direct relationship to business performance. A study by Albaddawi (2022) discussed the negative effect of mental accounting on decision making. Decision makers may be exposed and subjected to the negative effects of mental accountability that leads to irrational decisions that have negative consequences.

Based on the result of the t-statistic, it can be concluded that GM affects MSMEs' BP. From the data collected, creativity, innovation, and risk taking which is a characteristic of GM that is influential in improving ideas for MSMEs business product that affect BP positively. This finding is in line with previous research conducted by Sawaeen et al. (2021), Sandybayev (2019), Leal-Rodríguez et al. (2017), and Paudel (2019), that has found that a growth mindset is beneficial on performance and stated that business could survive and compete with innovation, improvement by accepting criticism, and courage to take new opportunities and challenges. Aspiring entrepreneurs need to learn about themselves and how they are going to manage themselves through the entrepreneurial journey (Blass, 2018).

6. Conclusion

Using quantitative research with a survey questionnaire method and sampling technique uses convenience sampling, this study aims to examine whether digital business strategy, mental accounting, and growth mindset influence business performance. The analysis results show the digital business strategy and growth mindset significantly affect business performance. This proves that entrepreneurs need to have knowledge and vision for digital transformation to drive competitive advantage. Entrepreneurs need to have creativity and innovation to enhance MSMEs' business performance to develop the business. The analysis result of mental accounting shows that it doesn't significantly affect MSMEs' business performance. Perhaps, a study on mental accounting is more commonly done and affects individuals, but it doesn't directly impact business performance.

In terms of practical implications, the results of this study will be helpful for entrepreneurs in MSMEs to develop business performance MSMEs during pandemic COVID-19 that has affected businesses and/or the economy. This paper has proven that digitalization affects business performance, therefore it's recommended entrepreneurs to keep up with digitalization (e.g., digital tools and digital media) as it is proven to be beneficial for business. As for regulators, it is recommended to expand digital literacy because one of the problems of MSMEs is lack of technology literacy (Irawan and Chandranegara 2017). Having a growth mindset characteristic is also proven to have effect on business performance. Therefore, it's recommended to entrepreneurs to always strive for dynamic improvement, dare to take opportunities and include creativity in the work process and product innovation so that business can grow. Studies on the effect of mental accounting on business performance are still lacking, so further study is needed. The limitations of this study are that the total of respondents does not match the expected estimated number of respondents. Due to the COVID-19 situation, this paper only distributed questionnaires online; however, many respondents ignored or refused to fill out the questionnaire. The distribution of 101 data collected is not normal because 6 data are tested for outliers; therefore, only 95 data from respondents are available for analysis. Future research could expand respondents' criteria, using a larger and broader sample sector between provinces/cities, especially those that use data collections only from questionnaires to obtain more samples. Future research could compare data between provinces as the development of digitality is different across the country. The mindset and mentality of people in other regions might be influenced by culture. Future research could consider adding other variables that can influence MSMEs' business performance such as big data analytic capability, social media marketing, credit access, financial literacy, or entrepreneurial ability.

References

- Adriani, J., Factors affecting financial behaviors: Studies in students who do venture creation, *International Journal of Review Management Business and Entrepreneurship (RMBE)*, vol. 1, no. 2, pp. 191–204, 2021.
- Afriza, E. S. D., Indonesian Small Medium Enterprise (SME) can survive during COVID-19: Facts or illusions? *International Journal of Business, Economics, and Law*, vol. 24, no. 3, pp. 11–20, 2021.

- Albaddawi, E. A. I., The negative effects of mental accounting on the decision-making process, *World Bulletin of Management and Law*, vol. 10, pp. 87–94, 2022.
- Awaluddin, M., Awaluddin, S. P. and Sumarni, Business performance fluctuation of small business as the impact of leadership style, financial inclusion, and financial management in Makassar City, *PalArch's Journal of Archaeology of Egypt / Egyptology*, vol. 17, no. 7, pp. 10950–10960, 2020.
- Baucells, M., Grushka-Cockayne, Y. and Hwang W., The effects of mental accounting on project performance, *SSRN Electronic Journal*, 2018.
- Benitez, J., Chen, Y., Teo, T. S. H. and Ajamieh, A., Evolution of the impact of e-business technology on operational competence and firm profitability: A panel data investigation, *Information & Management*, vol. 55, no. 1, pp. 120–130, 2018.
- Blass, E., Developing a curriculum for aspiring entrepreneurs: What do they really need to learn? *Journal of Entrepreneurship Education*, vol. 21, no. 4, pp. 1–14, 2018.
- Bouwman, H., Nikou, S., Molina-Castillo, F. J. and Reuver, M. D., The impact of digitalization on business models, digital policy, *Regulation and Governance*, vol. 20, no. 2, pp. 105–124, 2018.
- Bouwman, H., Nikou, S. and De Reuver, M., Digitalization, business models, and SMEs: How do business model innovation practices improve performance of digitalizing SMEs? *Telecommunications Policy*, vol. 43, no. 9, p. 101828, 2019.
- Braojos, J., Benitez, J. and Llorens, J., How do social commerce-IT capabilities influence firm performance? Theory and empirical evidence, *Information & Management*, vol. 56, no. 2, pp. 155–171, 2019.
- Brown, N. and Brown, I. From digital business strategy to digital transformation - How: A systematic literature review, *Proceedings of the South African Institute of Computer Scientists and Information Technologists 2019 on ZZZ - SAICSIT '19*, pp. 1–8, 2019.
- Caniëls, M. C. J., Semeijn, J. H. and Renders I. H. M., Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work, *Career Development International*, vol. 23, no. 1, pp. 48–66, 2018.
- Chae, H. C., Koh, C. E. and Park, K. O., Information technology capability and firm performance: Role of industry, *Information & Management*, vol. 55, no. 5, pp. 525–546, 2018.
- Chyung, S. Y. Y., Roberts, K., Swanson, I. and Hankinson, A., Evidence-based survey design: The use of a midpoint on the Likert scale. *Performance Improvement*, vol. 56, no. 10, pp. 15–23, 2017.
- Cuevas-Vargas, H., Parga-Montoya, N., and Fernández-Escobedo, R., Effects of entrepreneurial orientation on business performance: The mediating role of customer satisfaction—A formative-Reflective model analysis. *SAGE Open*, vol. 9, no. 2, 2019.
- Dabić, M., Lažnjak, J., Smallbone, D. and Švarc J., Intellectual capital, organisational climate, innovation culture, and SME performance, *Journal of Small Business and Enterprise Development*, vol. 26, no. 4, pp. 522–544, 2019.
- Daspit, J. J., Fox, C. J. and Findley, S. K., Entrepreneurial mindset: An integrated definition, a review of current insights, and directions for future research, *Journal of Small Business Management*, pp. 1–33, 2021.
- Eller, R., Alford, P., Kallmünzer, A. and Peters, M., Antecedents, consequences, and challenges of small and medium-sized enterprise digitalization, *Journal of Business Research*, vol. 112, pp. 119–127, 2020.
- Guo, H., Yang, Z., Huang, R. and Guo, A., The digitalization and public crisis responses of small and medium enterprises: Implications from a COVID-19 survey, *Frontiers of Business Research in China*, vol. 14, no. 1, pp. 19, 2020.
- Hahnel, U. J., Chatelain, G., Conte, B., Piana, V. and Brosch, T., Mental accounting mechanisms in energy decision-making and behaviour, *Nature Energy*, vol. 5, no. 12, pp. 952–958, 2020.
- Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E., *Multivariate data analysis*, 8th Edition, Cengage Learning EMEA, Hampshire, 2019.
- Hoque, A. S. M. M., The effect of entrepreneurial orientation on Bangladeshi SME performance: Role of organizational culture, *International Journal of Data and Network Science*, pp. 1–14, 2018.
- Hoque, M. Z., Mental budgeting and the financial management of small and medium entrepreneurs, *Cogent Economics & Finance*, vol. 5, no. 1, pp. 1291474, 2017.
- Ibarra-Cisneros, M. A. and Hernandez-Perlines, F., Entrepreneurial orientation, absorptive capacity and business performance in SMEs, *Measuring Business Excellence*, 2019.
- Indrajaya S. and Bastian, A. F., Innovation Accelerates Competitiveness and Business Development (SME entrepreneurs South Tangerang City), *INCEEES 2020: Proceedings of the 1st International Conference on Economics Engineering and Social Science*, pp. 102, July, 2021.
- Irawan, B. and Chandranegara, I. S., Government policy analysis on medium small business in developing entrepreneurship, *Proceedings of The International Conference on Social Sciences (ICCS)*, January, 2017.

- Joensuu-Salo, S., Sorama, K., Viljamaa, A. and Varamäki, E., Firm performance among internationalized SMEs: The interplay of market orientation, marketing capability and digitalization, *Administrative Sciences*, vol. 8, no. 3, p. 31, 2018.
- Johnston, I., Creating A Growth Mindset, *Strategic HR Review*, vol. 16, no. 4, pp. 155–160, 2017.
- Khai, K. G., Onn, Y. W., Zulkifli, R. B., Kandasamy, S. and Ahmad, A. B., The necessity to digitalize SMEs business model during the COVID-19 pandemic period to remain sustainable in Malaysia, *Journal of Education and Social Sciences*, vol. 16, no. 1, 2020.
- Khairunnisa and Rustiana, S., The effect of education level, business age and accounting knowledge on the implementation of SME Accounting Information Systems in Industrial Era 4.0 (Empirical study of MSME in South Tangerang), *KnE Social Sciences*, October, 2019.
- Koekemoer, L., Beer, L. T. D., Govender, K. and Brouwers, M., Leadership behaviour, team effectiveness, technological flexibility, work engagement and performance during COVID-19 lockdown: An exploratory study, *SA Journal of Industrial Psychology*, vol. 47, no. 1, pp. 1–8, 2021.
- Kouzes, T. K. and Posner, B. Z., Influence of managers' mindset on leadership behavior, *Leadership & Organization Development Journal*, 2019.
- Leal-Rodríguez, A. L., Albort-Morant, G. and Martelo-Landroque, S., links between entrepreneurial culture, innovation, and performance: The moderating role of family firms, *International Entrepreneurship and Management Journal*, vol. 13, no. 3, pp. 819–835, 2017.
- Li, L., Su, F., Zhang, W. and Mao, J. Y., Digital transformation by SME entrepreneurs: A capability perspective, *Information Systems Journal*, vol. 28, no. 6, pp. 1129–1157, 2018.
- Liu, H., Wu, S. and Liu, Y., The quality management, operational capability and financial performance in Chinese manufacturing companies, 2019 *IEEE 6th International Conference on Industrial Engineering and Applications (ICIEA)*, pp. 618–621, April, 2019.
- Mahapatra, M. S. and Mishra, R., Behavioral influence and financial decision of individuals: A study on mental accounting process among Indian households. *Cogent Economics & Finance*, vol. 8, no. 1, p. 1827762, 2020.
- Mostafiz, M. I., Sambasivan, M. and Goh S. K., Impacts of dynamic managerial capability and international opportunity identification on firm performance, *Multinational Business Review*, vol. 27, no. 4, pp. 339–363, 2019.
- Mu, J., Dynamic capability and firm performance: The role of marketing capability and operations capability, *IEEE Transactions on Engineering Management*, vol. 64, no. 4, pp. 554–565, 2017.
- Muktiadji, N., Mulyani, S., Djanegara, M. S. and Pamungkas, B., the role of financial management accountability in enhancing organizational performance in Indonesia, *The Journal of Asian Finance, Economics and Business*, vol. 7, no. 12, pp. 845–852, 2020.
- Murphy, M. C. and Reeves, S. L., Personal and organizational mindsets at work, *Research in Organizational Behavior*, vol. 39, p. 100121, 2019.
- Octavia, A., Indrawijaya, S., Sriyudha, Y. and Hasbullah, H., Impact on e-commerce adoption on entrepreneurial orientation and market orientation in business performance of SMEs, *Asian Economic and Financial Review*, vol. 10, no. 5, pp. 516–525, 2020.
- Oum, S., Kates, J. and Wexler, A., Economic impact of COVID-19 on PEPFAR countries, Available: <https://www.kff.org/report-section/economic-impact-of-covid-19-on-pepfar-countries-appendix/>, Accessed on March 07, 2022.
- Papadopoulos, T., Baltas, K. N. and Balta, M. E., The use of digital technologies by small and medium enterprises during COVID-19: Implications for theory and practice, *International Journal of Information Management*, vol. 55, p. 102192, 2020.
- Paudel, S., Entrepreneurial leadership and business performance: Effect of organizational innovation and environmental dynamism, *South Asian Journal of Business Studies*, 2019.
- Permana, A. and Ellitan, L., The role of dynamic capability in mediating the effects of environmental dynamism and managerial capabilities on firm performance: A preliminary study, *Journal of Entrepreneurship & Business*, vol. 1, no. 2, pp. 70–83, 2020.
- Ping, T. A., Chinn, C. V., Yin, L. Y. and Muthuveloo, R., the impact of information technology capability, business intelligence use and collaboration capability on organizational performance among public listed companies in Malaysia, *Global Business & Management Research*, vol. 10, no. 1, 2018.
- Puente-Díaz, R. and Cavazos-Arroyo, J., The influence of creative mindsets on achievement goals, enjoyment, creative self-efficacy and performance among business students, *Thinking Skills and Creativity*, vol. 24, pp. 1–11, 2017.
- Putri, V. R. and Rachmawati, A., The effect of profitability, dividend policy, debt policy, and firm age on firm value in the non-bank financial industry, *Jurnal Ilmu Manajemen & Ekonomika*, vol. 10, no. 1, pp. 14, 2018.

- Qiu, S., Wu, L., Yang, Y., and Zeng, G., Offering the right incentive at the right time: Leveraging customer mental accounting to promote prepaid service. *Annals of Tourism Research*, vol. 93, p. 103367, 2022.
- Radianto, W. E. D., Salim, I., Christian, S., Efrata, T. C. and Efrata, L., Does mental accounting play an important role in young entrepreneurs? Studies on entrepreneurship education, *Journal of Educational and Social Research*, vol. 12, no. 2, p. 140, 2022.
- Rahman, M. M. and Ferdaous, J., the impact of IT investment on firm performance in Bangladesh: A resource based perspective, *Global Management Review*, vol. 13, no. 1, pp. 39-51, 2019.
- Ravendra, P. V., Singh, J. E., Singh, P. and Kumar, S. S., Behavioral finance and its impact on poor financial performance of SMEs: A review, *International Journal of Mechanical Engineering and Technology*, vol. 9, no. 5, pp. 341-348, 2018.
- Rehman, S. U., Mediating effect of innovative culture and organizational learning between leadership styles at third-order and organizational performance in Malaysian SMEs, 2019.
- Renko, M., Tarabishy, A. E., Carsrud, A. L. and Brännback, M., Understanding and measuring entrepreneurial leadership style, *Journal of Small Business Management*, vol. 53, no. 1, pp. 54–74, 2015.
- Ribeiro-Navarrete, S., Botella-Carrubi, D., Palacios-Marqués, D. and Orero-Blat, M., The effect of digitalization on business performance: An applied study of KIBS, *Journal of Business Research*, vol. 126, pp. 319–326, 2021.
- Rosmalen, B., *The influence of personality and preferences on mental budgeting*, Radboud University, Nijmegen, 2020.
- Saad M, A. S. and Zhengge, T., The impact of organizational factors on financial performance: Building a theoretical model, *International Journal of Management Science and Business Administration*, vol. 2, no. 7, pp. 51-56, 2015.
- Sandybayev, A., Impact of effective entrepreneurial leadership style on organizational performance: Critical review, *International Journal of Economics and Management*, vol. 1, no. 1, pp. 47-55, 2019.
- Sawaeen, F. A., Ali, K. A. M. and Alenzi, A. A., Entrepreneurial leadership and organisational performance of SMEs in Kuwait: The intermediate mechanisms of innovation management and learning orientation, *Interdisciplinary Journal of Information, Knowledge, and Management*, vol. 16, pp. 459–489, 2021.
- Senaratne, S. I. and Kulathunga, D., Effect of managerial capability and organizational capability on digital innovation among organizations in Sri Lanka, *ICEB 2021 Proceedings* vol. 36, Nanjing, China, 2021.
- Shan, P., Song, M. and Ju, X., Entrepreneurial orientation and performance: Is innovation speed a missing link? *Journal of Business Research*, vol. 69, no. 2, pp. 683–690, 2016.
- Tajeddini, K., Martin, E. and Ali, A., Enhancing hospitality business performance: The role of entrepreneurial orientation and networking ties in a dynamic environment. *International Journal of Hospitality Management*, vol. 90, p. 102605, 2020.
- Ukko, J., Nasiri, M., Saunila, M. and Rantala, T., Sustainability strategy as a moderator in the relationship between digital business strategy and financial performance, *Journal of Cleaner Production*, vol. 236, p. 117626, 2019.
- Wahyuni, N. M. and Sara, I. M., The effect of entrepreneurial orientation variables on business performance in the SME industry context, *Journal of Workplace Learning*, 2020.
- Xu, K. M., Koorn, P., De Koning, B., Skuballa, I. T., Lin, L., Henderikx, M. and Paas, F., A growth mindset lowers perceived cognitive load and improves learning: Integrating motivation to cognitive load, *Journal of Educational Psychology*, vol. 113, no 6, p. 1177, 2021.
- Yun, S. and Suk, K., Consumer preference for pay-per-use service tariffs: The roles of mental accounting, *Journal of the Academy of Marketing Science*, pp. 1–14, 2022.

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