Resilience Of Sme Business: Lesson Learn From Creative Climate, Digital Literacy, And Innovation Capability

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Abstract.

Micro, Small and Medium Enterprises (MSMEs) are one of the businesses that play a significant role in the Indonesian economy. For this reason, the capacity to survive needs to be a concern and priority. This research aims to analyze the direct determinants of organizational resilience, namely creative climate and digital literacy, as well as indirect determinants, namely innovation. This research took 151 Small Medium Enterprises (SME) through a quantitative approach. The analysis technique used is Regression with Path Analysis Stages. Through the Path Analysis stage, the research results prove that a creative climate is able to directly and indirectly encourage organizational resilience. Digital Literacy is able to encourage organizational resilience through full mediation, namely Innovation. This research does not prove the role of innovation as a mediating influence of digital literacy on organizational resilience. MSMEs In the current recovery period, it is necessary to increase organizational resilience by creating a creative climate that will increase innovation capabilities. Apart from that, mastering the use of systems and strategies using digital technology will also encourage innovation capabilities and business resilience.

Keywords: Organizational Resilience; Creative Climate; Digital Literacy; Innovation and SME.

I. INTRODUCTION

The community is still feeling the Covid-19 pandemic until the end of 2021. Micro, Small and Medium Enterprises are among those that feel the real impact. Based on data from the Ministry of Industry, as covered by Liputan6.com (2020), around 60 percent of industries experienced a heavy impact, while the other 40 percent experienced a moderate impact. This condition will continue to be felt by business actors until the end of 2021. MSMEs that are able to survive will continue to be able to run and develop their businesses, while MSMEs that are unable to survive will temporarily stop their businesses until conditions return to normal. Surviving ability or what is often called organizational resilience is important to study. MSMEs that are able to survive illustrate their ability to maintain their business performance. The concept of organizational resilience for MSMEs needs to be built continuously through various aspects, one of which is human resources. In this context, the owner or manager of MSMEs has a key role. Referring to the resourcebased approach (Barney, 2001), HR plays a key role in the success of every business, which determines the resilience and competitiveness of the business. MSME business leaders have the capacity to develop creative ideas and business innovations as an effort to increase their ability to survive in pandemic crisis conditions. There are several aspects that can encourage organizational resilience for MSMEs. One important aspect is the Creative Climate, which describes how MSMEs are able to create conditions that encourage creativity to innovate, encourage the development of new ideas, are open, build active communication with the entire academic community and stakeholders, respect and recognize creativity in the workplace; and conducting fair work evaluations (Mafabi, 2015).

The creative climate that is built will encourage the emergence of fresh ideas from lecturers so that it will encourage the creation of innovation in business. This is because innovation basically describes success in carrying out or finding new ways, methods, products as the embodiment, combination, or synthesis of basic knowledge, products, processes, or new services (Luecke and Katz, 2003, quoted by William, 2017). The ability to innovate will encourage the ability to survive for MSMEs. In the era of adaptation as a result of Covid 19, every ability to use technology is important. For MSMEs, this is important, because the ability to utilize technology can be used to leverage the ability of MSMEs in implementing marketing programs,

obtaining benchmark about products, obtain product development information, and establish good relationships with suppliers. The ability to use technology today is often called technological literacy or digital literacy. Setyaningsih et al (2019) revealed seven important digital literacy elements including (1) Media literacy, (2) Communication and Collaboration, (3) information literacy, (4) Learning Skills, (5) Career and identity management, (6) Digital Scholarship and (7) ICT Literacy, also known as technological literacy. The increasing digital literacy of MSME players will encourage higher innovation capabilities.

II. THEORY AND HYPOTHESIS DEVELOPMENT

The Influence of a Creative Climate on Organizational Innovation

Ekvall (1996) revealed the existence of climate as an organizational attribute, a collection of attitudes, feelings and behavior that characterize life in each organization, which are independently perceived and understood by each member. Based on this understanding, it can be said that organizational climate describes the level of trust and openness between organizational members, depicts commitment and motivation, a risk-taking mentality, and other positive behavior. Ekvall (1987) also revealed that climate describes organizational reality in an "objectivistic" sense (Ekvall, 1987), which is different from organizational culture, including 10 dimensions, namely challenge, freedom, support of ideas, trust/openness, dynamic, humorous, debate, conflict, risk taking, idea time. SME's creative climate describes its ability to create conditions that encourage creativity to innovate, encourage the development of new ideas, be open, build active communication with the entire academic community and stakeholders, respect and recognize creativity in the workplace; and conducting fair job evaluations.

SMEs as drivers of the national economy are required to have the ability to adapt quickly. The creative climate created will provide employees with opportunities to develop innovative abilities in carrying out their work, thus having an impact on better results. Ismail's (2005) research measured the influence of a creative climate and learning culture in increasing organizational innovation, with the result that a creative climate and learning culture were able to encourage innovation. Similar research conducted by Ekvall (2008) built a conceptual model that links organizational resources, climate and results. Organizational resources which include human resources, equipment, finance and other aspects can encourage individual, team and organizational performance through organizational climate. Performance consists of innovation, satisfaction, quality, productivity, work welfare and profits. Another research conducted by Mafabi et al., 2015 concluded that the creative climate created by an organization will encourage innovation capabilities. Also, Liu et al., 2020 in their study in China concluded the importance of climate to encourage openness to change and innovation. Research conducted Afrashteh and Dehdashti (2019) also show that a creative climate is able to encourage organizational innovation capabilities. Karatepe (2020) in his study in Palestine also proved that a creative climate is able to encourage innovation. Based on this description, the first hypothesis is formulated as follows.

H1: The creative climate has a positive effect on innovation

The Effect of Digital Literacy on Organizational Innovation and Resilience

Digital Literacy describes the knowledge and ability of SMEs to utilize technology for business success. Digital literacy is measured using three dimensions, namely (Tahir et al, 2021): use skills (the basic abilities possessed by individuals in utilizing digital technology for their business), critical understanding (the ability to understand the functions and regulations for the use of existing digital media), and communicative abilities (the ability to communicate actively on social media for business. On the other hand, in the current unpredictable environmental situation, every organization has the big task of maintaining its business through various strategies, including organizational innovation. The concept of organizational resilience began to be studied in the 1970s as a psychological concept that tests a person's resilience (Curtis & Cicchetti, 2003, quoted by Shani, 2020). This concept is interpreted as a set of attitudes and competencies that facilitate a person's feelings and functioning after experiencing destructive conditions or perceived critical conflicts. Commitment, control and challenge are important dimensions of individual resilience (Maddi, 2002, quoted by Shani, 2020). The study of resilience at the organizational level began to gain interest and was studied in the 1990s, as was done by Horne & Orr, 1998 (quoted by Shani, 2020). Some of

the dimensions included in this concept are commitment, control, and challenges at the organizational level (Maddi, Khoshaba, & Pammenter, 1999, in Shani, 2020).

Organizational resilience or toughness basically describes how the organization is well prepared to overcome or react to disruptions (Rahi Khalil, 2019). To survive, the right strategy is needed through strategies at the organizational and individual levels. Several theories emphasize the importance of resilience as a reflection of the ability to get out of the crisis situation faced. By using an organizational behavior perspective, there is a contingency approach (Robbin, 2016) which directs the organization's efforts to adapt to both internal and external situations to defend itself and maintain sustainable competitiveness. Innovation describes success in the introduction of new things or new methods, which can also be understood as the realization, combination, or synthesis of new basic knowledge, products, processes, or services (Luecke and Katz, 2003, William, 2017). Amaratunga et al. (2001), Mafabi et al. (2015) explains the factors that determine the success of innovation implementation, including: 1). Frequent formal and informal communication at all levels; 2). Capacity building; 3). Reward and recognition system; and 4) Use of process teams and use of clear process performance measures. Business actors are required to have the ability to receive information and this is also balanced with the ability to search for and identify the information received, especially in digital form or what is known as digital literacy skills. Tahir's research (2021) concluded that digital literacy skills are really needed by every individual as a business actor so that they can easily search, find, utilize and use information technology so as to encourage business success.

Hypothesis 2: Digital Literacy drives Innovation

Hypothesis 3: Digital Literacy drives Organizational resilience

The Influence of Creative Climate on Organizational Resilience

The creative climate basically describes the general conditions in aspects of the organization that are felt by employees, especially in relation to efforts to encourage creativity. Research conducted by Mafabi et al., 2015 shows that a creative climate can encourage organizational resilience. Research conducted Afrashteh and Dehdashti (2019) also show results that a creative climate can encourage organizational resilience. Likewise, Jilani et al (2019) show that a creative climate can increase organizational resilience.

H4: Creative climate has a positive effect on organizational resilience.

The Influence of Innovation on Organizational Resilience

Innovation has an important role for the development of SMEs in Indonesia. For example, technological innovation will encourage easy access for SMEs so that they can create creativity, diversification, and present products/services to respond to market changes and business demands. Ahiauzu (2015), Sartika (2015), Mafabi (2015), William, (2017) in their studies prove the influence of innovation in increasing all dimensions of organizational resilience.

Hypothesis 5: Organizational Innovation has a positive effect on organizational resilience

The Role of Innovation in Mediating Digital Literacy and Creative Climate on Organizational Resilience

The influence of a creative climate on organizational resilience can be direct and indirect. The direct effect is proven by Mafabi et al., 2015; Afrashteh and Dehdashti (2019); Jilani et al (2019). While the indirect influence can be understood, remote employee engagement will influence organizational resilience when the organization is able to demonstrate good innovation. Research conducted by Mafabi et al. (2015) also show that innovation plays a mediating role between creative climate and organizational resilience.

This research also places organizational innovation as a mediating variable, with the following hypothesis.

H6: Innovation mediates the influence of Digital Literacy on organizational resilience

H7: Innovation mediates the influence of creative climate on organizational resilience

III. METHODS

This research uses a quantitative approach or also called *hypothesis testing research* using quantitative data (positivist), which examines the influence between one variable and several other variables. Researchers focus on the determinants of organizational resilience, namely creative climate, digital literacy and innovation. The research objects used were MSMEs in the Special Region of Yogyakarta (DIY) and its

surroundings. By considering the organizational unit of analysis in this research, this research takes one person as a representative for each MSME, namely the owner or manager. Owners or managers are considered representative enough to represent the scope of the organization in relation to strategic and managerial roles such as decision making in determining business direction and innovation. Primary data was collected directly by researchers, through distributing questionnaires with *google form* related to the owner's or manager's perception of organizational resilience, innovation, creative climate, and digital literacy. The exogenous variables in this research are creative climate, digital literacy and innovation. Meanwhile, the endogenous variable is organizational resilience. The creative climate, innovation and organizational resilience variables were adopted from Mafabi et al., 2015.

The creative climate variable has three dimensions, namely organizational support, superior support and co-worker support. The Innovation variable is measured based on the owner's or manager's perception of innovation capabilities with three dimensions, namely structure, process and competency. This Digital Literacy variable is measured using three dimensions that describe MSMEs' ability to digital literacy, with the dimensions of use skills, critical understanding, communicative abilities, which were adopted from Tahir et al (2021). Organizational resilience is measured through three dimensions, namely adaptability, competitiveness, and applied organizational values. The instrument was tested using validity and reliability. The data analysis technique used in this research is Path Analysis, which is a regression approach to answer research problems that test mediation effects in the model. The research examines the direct and indirect determinants of organizational resilience of small and medium enterprises by taking innovation as a mediating variable, and creative climate and digital literacy as independent variables. Questionnaires were prepared and distributed via the Whatsapps group link for business actors, including the Muhammadiyah Merchants Network, the Shopping Group and the National 'Aisyiyah Business Actors Group, and the Business Actors Group, Private Higher Education Alumni Network. Based on the data entered in the two month period, 151 complete answers were obtained, so that in this study the total number of respondents was 151.

IV. RESULT AND DISCUSSION

The results of research instrument tests including validity and reliability tests concluded that the instruments were valid and reliable. The results of instrument testing (appendix 1) show that all question items for the variables Organizational Resilience, Innovation, Creative Climate and Digital Literacy are valid, with a probability value of $\leq 5\%$. Likewise, from the results of the reliability test, it was concluded that all variables had a high level of reliability (appendix 2).

Descriptive statistics

Descriptive statistics for organizational resilience are at 4,318, which indicates a very high category. This illustrates that the resilience of SME organizations is very high. Meanwhile, the innovation variable has a mean of 3,987, with the High category, which describes a good level of business innovation from business actors. The Digital Literacy variable has a mean value of 3,690, in the high category, which illustrates the ability that SMEs have good digital literacy. The mean score for Creative Climate is 4,184, so it is included in the high category. This means that SME already has a good creative climate.

Respondent Profile

Based on the survey, it was concluded that respondents based on gender described the number of male business actors or MSMEs as 10% above female (55% and 45%), although the difference was relatively low. Meanwhile, based on marital status, the majority of respondents (73%) were married or had a family. Judging from age, it shows that the largest percentage of respondents were in the age range of 25 to 50 years, followed by those aged less than 25 years, and those aged more than 50 years. This data illustrates that the majority of business actors are in the productive age range, so this provides capital to be able to develop their business well in order to survive. Based on the length of time they have been running the business, it was detected that respondents were still classified as early business actors, as seen from the majority figure or as many as 47% of business actors had a business experience of less than 5 years, the remainder (30%) had a business age of between 5.1 to 10 years and 23% had been running a business more than 10 years.

Data Analysis Results

This research wants to examine the determinants of MSME organizational resilience, more specifically examining direct and indirect determinants. The independent variables used are creative climate and Digital Literacy. Meanwhile, innovation in research is used as a mediating variable. The analysis technique used is path analysis by carrying out the analysis stages as follows. The results of stage-1 of multiple regression analysis are presented in Table-1.Based on the calculation results, the beta coefficient value obtained which describes the direction of the relationship between the creative climate and innovation is positive (+0.395), which indicates that the creative climate built by business actors will encourage innovation to be carried out. The t value of 5.506 ($0.00 \le 5\%$) indicates that there is a positive and significant influence of creative climate on organizational innovation. Thus the first research hypothesis is supported. Likewise, the direction of the relationship between digital literacy and innovation is positive (+0.409), indicating that digital literacy will encourage innovation to be carried out. The t value of 5.703 ($0.00 \le 5\%$) indicates that there is a positive and significant influence of creative climate on organizational innovation. Thus the second research hypothesis is supported.

Model Unstandardized Standardized t Say. Coefficients Coefficients В Std. Error Beta 6.644 2.928 .004 (Constant) 2.269 CREAT_CLIMATE .533 .097 395 5.506 .000 5.703 YOU LITERATE .261 .046 .409 .000 Nilai F mark 80.738 $.000^{b}$ Adjusted Std. Error of R R Square R Square the Estimate .722a .522 .515 4.019

Table 1. First Stage Regression Calculations

The results of the second stage 2 regression analysis, testing the influence of creative climate and digital literacy on organizational resilience, with a positive value for the direction of the relationship between creative climate and organizational resilience (+0.412), show that the creative climate built by business actors will encourage organizational resilience. The t value of $4.707 \ (0.00 \le 5\%)$ indicates that there is a positive and significant influence of creative climate on organizational resilience. Thus the third research hypothesis is supported. Likewise, the direction of the relationship between digital literacy and organizational resilience is positive (+1.470). However, the probability figure is above 5% (14.4%), so the fourth hypothesis states that digital literacy has a positive effect on organizational resilience**not proven** in this research. So the fourth hypothesis is not supported.

Model Unstandardized Standardized t Say. Coefficients Coefficients Beta В Std. Error 2 000. (Constant) 34.113 4.042 8.440 CREAT_CLIMATE .866 .184 .412 4.707 000. YOU_LITERATE .144 .129 .088 .129 1.470 INNOVATION .288 .142 .185 2.022 .045 .000b 34.710 R R Square Adjusted R Std. Error of R Square the Estimate .644a .415 .403 6.960

Table 2. Stage-2 regression.

However, as expected, the direction of the relationship between innovation and organizational resilience shows a positive number (+0.185), which illustrates that innovation carried out successfully by small and medium enterprises will encourage organizational resilience. The t value of 2.022 (0.045) indicates that innovation significantly encourages organizational resilience. Thus, the fifth research hypothesis is supported. A recap of the results of the second stage of regression is presented in Table 2.In the third stage, indirect determinants of organizational resilience were tested through innovation mediation. The first Sobel test was carried out to test the influence of a creative climate on organizational resilience through innovation.

Through the Sobel Test, a Sobel value of 1.24 < 1.96 and a sign of 0.21 was obtained. **Thus the sixth hypothesis is not supported.** Likewise, the seventh hypothesis which predicts the indirect determinant of digital literacy on organizational resilience through innovation climate obtained a Sobel value of 1.29 with a probability of 19.7%. **Thus, the seventh hypothesis is not supported.**

Discussion, Implications

This research proves the influence of a creative climate in encouraging organizational resilience, both directly and indirectly. Direct influence explains that the creative climate created by business actors will encourage the ability to survive in the conditions faced by the organization. Interestingly, the results of this research also explain that the creative climate possessed by business actors can increase their ability to survive through the innovation aspect. This research is in line with the results of research conducted by Ismail (2005) which revealed the positive effect of a creative climate on innovation. Munir (2019) stated that a creative climate will encourage innovative behavior in organizations. For business actors in Indonesia, their ability to survive has actually been tested since they were able to face or emerge from the crisis due to the Covid-19 pandemic. In the early stages of facing the pandemic, business actors generally experienced a period of shock, marked by a decrease in turnover, some reducing employees, and some closing their businesses. However, after three years of escaping from the pandemic era, they have created working conditions that encourage new ideas, new methods so they can develop their business again and have better competitive abilities. The results of this research support the findings of Jilani et al (2019) regarding the influence of a creative climate on the survival ability of MSME business actors.

This research also proves that innovation can encourage the resilience of the business organization being run. The innovation ability of business actors can create new ways and strategies thereby boosting their survival capabilities. Moghimiet al (2013) explained the importance of a creative climate in encouraging employee creativity. In business practice, creativity will stimulate innovation capabilities. However, this research is not in line with Gunasekaran (2011) who links organizational resilience to the technology applied. The results of this research do not explain that digital literacy possessed by business actors is able to encourage their innovation capabilities. However, the indirect influence of creative climate and digital literacy on the ability to survive through innovation mediation cannot be proven in this research. The creative climate has a direct effect on the ability to survive, as does digital literacy. This research is not in line with Masbiraanyou at the., (2021) which explains the ability of business actors to utilize digital technology as part of their efforts to survive. This research provides important implications. The problems of business actors in maintaining their business are influenced by aspects such as the creative climate and innovation. Business actors need to build working conditions that encourage the development of creativity and encourage employees creating new ideas, providing an understanding of business goals so as to encourage employee creativity. Business actors also need to have an open attitude towards technological development and apply it to be able to maintain their business. Apart from that, attention to employees and customers is part of efforts to maintain reputation and survival.

V. CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

This research proves that the creative climate is able to encourage SMEs' innovation capabilities, Digital literacy is able to encourage SMEs' innovation capabilities, Innovation is able to encourage SMEs' ability to survive, the creative climate is able to encourage SMEs' ability to survive. However, this research is unable to prove the influence of Digital Literacy on the survival ability of SMEs. Likewise, innovation is not able to mediate the effect of a creative climate on the resilience of SME organizations, and innovation does not mediate the effect of technological literacy on the resilience of SMEs in Indonesia. However, this study has several limitations. The use of cross-sectional data limits the results which do not reflect changes in attitudes and conditions of SMEs in situations of change and recovery of SME performance amidst the current era of change. Apart from that, this research does not separate the types of businesses owned by the SMEs used as samples. For this reason, future research should use broader data, and be able to group SME business types so that they can get more useful results.

REFERENCES

- [1] AfrashtehAslani Amir, DehdashtiMoreImpact of creative climate and customer knowledge management on organizational resilience; evidence from the exporters of the Iranian food industry, *Journal of International Business Administration*, Vol. 2. P. 65-93.
- [2] Ahiauzu, Uche Levi, Eketu, Continue Anderson. (2015). Product Innovation and Organizational Resilience in Public Universities in South-South Nigeria, *European Journal of Business and Management*, Vol.7, No.33, P.82-91.
- [3] Barney. (2001). Is Resource-based View a "Useful" Perspective for Strategic Management Research? Yes, *Academy of Management Review*, Flight. 26, no.1. p. 41-56.
- [4] Carvalho de Azevedo, Schlosser Francine and McPhee Deborah. (2020), Building Organizational Innovation through HRM, Employee Voice and Engagement, *Personnel Review*, DOI 10.1108/PR-12-2019-0687
- [5] Ekvall, G. (1996). Organizational climate for creativity and innovation. *European Journal of Work and Organizational Psychology*, 5(1), 105–123. doi:10.1080/13594329608414845.
- [6] Ferdinand Augusty. (2014). Management Research Methods, Research Guidelines for Writing Theses, Theses and Dissertations in Management Science, Fifth Edition, Diponegoro University Publishing Agency, Semarang, Indonesia
- [7] Jilani MMAK, Fan L,Nusrat M. (2019). Empirical Study on the Antecedents Predicting Organizational Resilience of Small And Medium Enterprises In Bangladesh, *Journal on Innovation and Sustainability* volume 10, No 2.
- [8] Karatepe M. Osman, Aboramadan Mohammed, Khalid Dahleez Abed k. (2020). Does climate for creativity mediate the impact of servant leadership on management innovation and innovative behavior in the hotel industry?, *International Journal of Contemporary Hospitality Management*, *Flight*. 32 No. 8, pp. 2497-2517.https://doi.org/10.1108/IJCHM-03-2020-0219
- [9] Mafabi Samuel, Makerere Munene C. John, And Ahiauzu. (2015). Creative Climate And Organisational Resilience: The Mediating Role of Innovation, *International Journal of Organizational Analysis*, Vol. 23, No. 4, pp. 564-587 DOI 10.1108/IJOA-07-2012-0596
- [10] Mallak Larry. (1998). Putting Organizational Resilience to Work, Industrial Management, p. 1-9.
- [11] Mcmanus, Seville E, Vargo J, And Brunsdon D. (2008), Facilitated Process For Improving Organizational Resilience Sonia, Natural Hazards Review, Vol 9, P.81-90
- [12] Creative Industry Players Also Affected by the Corona Pandemic Bisnis Liputan6.com
- [13] Rahi Khalil. (2019). Indicators to assess organizational resilience a review of empirical literature, *International Journal of Disaster Resilience in the Built Environment*, Vol. 10 No. 2/3, pp. 85-98.DOI 10.1108/IJDRBE-11-2018-0046
- [14] Robbins P.Stephen, Judge A.Timothy. (2016). Organization Behavior, Global Edition. 16 edition, ISBN 13: 978-0-27-375587-6, Pearson Education Limited, England.
- [15] Sartika D. (2015). Organizational Innovation and Organizational Performance: Case Study at the Center for Apparatus Studies and Education and Training III 1 State Administration Institute, *Borneo Administrator Journal*, Volume 11, No. 2.
- [16] Sekaran Uma. (2011). Research Methods for Business, Research Methodology for Business, Indonesian Edition, Edition 4, Salema Empat Publisher, Jakarta.
- [17] Shani Orit. (2020). Organizational Resilience: Antecedents, Consequences, And Practical Implications For Managers And Change Leaders, Research In Organizational Change And Development, Vol. 28, p. 127–158
- [18] Setyaningsih, R., Abdullah, A., Prihantoro, E., & Hustinawaty, H. (2019). Model for Strengthening Digital Literacy Through the Use of E-Learning. *ASPIKOM Journal*, 3(6), 1200.https://doi.org/10.24329/aspikom.v3i6.3 33
- [19] Tahir Thamrin, Ahmad Said Ihsan Muhammad, Nurjannah, Rijal Syamsu, Hasan Muhammad. (2021) Entrepreneurial Behavior of MSMEs in the Culinary Sector from a Digital Literacy Perspective Proceedings of Educational Technology National Online Seminar 2021: Digital Generation For Digital Nation Volume 1 Number 8 August 2021 Page. 144-154 e-ISSN: 2798-9895.
- [20] Williams Alamene, C. Eke Best, Anyanwu A. Success(2017). Innovation And Organizational Resilience: A Study Of Selected Food And Beverage Firms In Port Harcourt *International Journal Of Advanced Academic Research, Social & Management Sciences*, Vol. 3, Issue 6, p. 1-15.