Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

# IMPROVING MSMES SUSTAINABILITY IN BUNGO REGENCY: DIRECT AND INDIRECT PERFORMANCE, INNOVATION AND MANAGER BEHAVIOUR AS ANTECEDENT

**ISTIANINGSIH, NANIK**

Student of Doctoral, Universitas Putra Indonesia YPTK, Padang, Indonesia.
E-mail: nanikistianingsih1324@gmail.com ORCID ID 0000-0003-2259-819X

**DEFIT, SARJON**

Associate Professor, Universitas Putra Indonesia YPTK, Padang, Indonesia.
E-mail: sarjond@yahoo.co.uk ORCID ID 0000-0001-7538-9274

**ZEFRIYENNI, Z**

Lecture, Universitas Putra Indonesia YPTK, Padang, Indonesia. E-mail: zefriyenni@upiyptk.ac.id
ORCID ID 0000-0001-7236-8785

**Abstract:**

This study aims to determine, analyze, and measure the direct and indirect effects of the relationship between MSMEs Sustainability, business performance, Innovation and manager behavior as antecedent. Furthermore, the sample was 428 MSMEs at Bungo Regency. Data were analyzed using SEM PLS. empirically, the data were processed through the outer model stage. The results showed several invalid indicators were removed for further analysis. Because the processing of discriminant validity, Cronbach alpha, and AVE met the requirements, the model was declared feasible. In the Inner model, the results of five proposed hypotheses showed that all were accepted. SMSEs Sustainability in this case MSMEs can be achieved by improving SMS's Performance by increasing the use of Innovation for businesses or MSMEs by improving Manager Behaviour to understand business conditions during the Covid-19 pandemic to be more courageous to face risks, implement business activities directly and are willing to make changes as needed, then increase commitment to the business undertaken and make past experience to improve the business in the future.

**Keywords:** MSMEs Sustainability, Performance, Innovation, Manager Behavior

**JEL:** E24, L26, O15

## Introduction

Today's business leaders are really focused on business sustainability issues related to the impact of COVID-19, and first they must continue to ensure maximum employee safety, ensure financial stability, assess supply chain sustainability, and strengthen critical systems to support technology levels while countering a surge in cyber-attacks (Leal Filho et al., 2021). Several studies conducted before Covid 19 and during the Covid 19 period stated that business performance has a positive and significant influence on business sustainability according to (Suraya et al., 2020). But on the other hand, Huan Huu Nguyen's research (2021) actually stated that there is no influence between business performance and business sustainability. This indicates that there is a research gap that

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

needs to be reviewed again about the influence of business performance on business sustainability.

Every time a crisis comes there will be the potential to solve related problems through innovative solutions. The global crisis that emerged with the spread of COVID-19 is twice as big as the previous crisis (Oppong Peprah, 2020). Health crises not only lead to the need to develop new therapies and vaccines. Similarly, infection control practices carried out by many governments around the world to manage health crises have led to economic crises (Danciu, 2020) (Kristinae et al., 2020) (Kelley et al., 2020) as indicated, for example, by financial market reactions (Widarti et al., 2020). Both aspects of the COVID-19 crisis are likely to trigger innovative behaviors that deal with the consequences of these actions.

Research on the influence of innovation on business sustainability resulted in significant conclusions of influence during the Covid-19 pandemic as stated by (Ben Amara & Chen, 2020), (Gregurec et al., 2021). But different conditions were conveyed by (Mercedes & Burrell, 2021) who stated the results of his research before the Covid-19 pandemic that innovation had no effect on business sustainability. One of the causes is that innovation requires a large cost in African MSMEs so that the focus of innovation will consume capital and businesses will be financially difficult.

Given that a crisis as big as the COVID-19 pandemic is accompanied by many pressing challenges, investigating how quickly organizations can react to challenges seems to be of the utmost importance. Because new challenges require new solutions, how quickly organizations can introduce innovation is just as important as any other managerial action that needs to be taken during a crisis. In general, time is an important characteristic of all human activities. The potential for high innovation speed accompanies fast innovation response times to produce good performance. Research (Widagda et al., 2020), (Bouwman et al., 2019) (Kuncoro et al., 2021), says that innovation affects business performance. In contrast to (Bertoni et al., 2021) said that innovation has no effect on business performance. Research (Saliba de Oliveira et al., 2018) actually obtained the result that innovation has a negative and significant influence on business performance. Thus more testing is needed on the consistency of the innovation relationship and business performance.

As shown by the above study related to different types of business enterprises, trying to explain the relationship between innovation and company performance, as well as the influence of innovation mechanisms on company performance. However, it has been shown that the impact of the level of innovation on the performance of the company varies with different types of companies, different risk attitudes, different economic levels, different types of innovations, and different types of performance measurements (Sajjad & Rasel, 2020)(Young et al., 2020). Therefore, the conclusions of existing research are diverse and the relationship between innovation and company performance is still inconclusive. This not only hinders the development of relevant theories but also makes

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

it difficult for managers to make decisions about whether to implement innovations in certain situations.

Research on crises has emphasized on survival mechanisms and innovation capabilities have been found to be key mechanisms for organizational growth and renewal (Abu Hatab et al., 2021). Especially in times of environmental turmoil such as natural crises, companies need to realize the need for innovation to fight destruction (Cucculelli & Peruzzi, 2020). In the context of sudden disasters such as the COVID-19 crisis, technological innovation always requires a long cycle of research and development (Ibidunni et al., 2020), whereas marketing innovation (compared to technological innovation) can be implemented relatively quickly to adapt to new and ever-changing customer demands. Therefore, marketing innovation is an effective strategy for companies to survive during the COVID-19 crisis (Kristinae et al., 2020).

By looking at business phenomena in the midst of Covid 19 as it is today and the business orientation in the future after Covid 19 ends although it is not yet known when it will end, business sustainability is the most important thing. Businesses that have performed well with covid conditions are now many who are unable to survive and are sustainable (Rafiq et al., 2020) (H. H. Nguyen et al., 2021).

The business world is faced with continuous and different changes. And ready to change, it is important for managers, professional leaders of the company to understand the factors that affect the readiness of individuals to change. A suitable organizational culture can efficiently facilitate change, and a manager can increase an employee's readiness to change to have a positive impact on the organization (Antonio & Anamaria, 2019). Cultural change is more likely to be achieved when there are examples of senior management, good planning and employee engagement at a higher level, to learn from resistance to past changes (Nayeemunnisa & Gomathi, 2020)(Costanza et al., 2016a). In addition to business performance another keyword associated with business sustainability is innovation. But the relationship between the two variables is also still inconsistent, thus researchers try to give antisedent variables as a precursor to variable innovation. The Manager Behavior Variable is selected to be an antisedent variable according to suggestions (Harel et al., 2020) (Izadi Z.D et al., 2020)(W. Li et al., 2018).

## 1. Literature review

The Business Sustainability Model according to (Teece, 2018) suggests that the design of the business model makes it possible to identify the ability of businesses to adapt to the changing business environment. The business model is seen as a vehicle for innovation and a necessary means to commercialize technological innovation, as well as the subject of innovation, e.g. open innovation, collaborative entrepreneurship, the business model itself is as part of intellectual property (Carracedo et al., 2020)

Business sustainability requires more integrated thinking in the assessment of several aspects of business such as capability, stakeholder relations, knowledge management,

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

leadership and culture (Srisathan et al., 2020). Business sustainability is expected to be able to make real and substantial improvements by developing superior production processes, products and services, and by running a strong market of influence and social or political. (Lu et al., 2020) (Gamage et al., 2020) highlights that business sustainability models tend to be ad hoc and neither systematic nor systemic.

Sustainable value represents not only environmental sustainability but also social and economic value (Angelakoglou & Gaidajis, 2020). Drivers of business sustainability include poverty alleviation, fair distribution, waste reduction and transparency, and business strategies related to green technology, sustainability vision, pollution prevention, and product utilization that can encourage the creation of sustainable value for business (Luqmani et al., 2017).

Over the years, the literature has presented a series of alternatives to addressing Business Performance Measurement, and proposed various structures for understanding a series of indicators. In terms of complexity, the framework has expanded beyond the list of financial indicators to include indicators of various Indicators, such as internal and external, financial and non-financial, customer and employee satisfaction, and others. The literature also reinforces the need for alignment between the company's Business Performance Measurement and the company's vision, strategy and resources (Diabate et al., 2019)(Muda et al., 2020) to establish a synergistic relationship between the company's Business Performance Measurement and business processes. To intensify and justify the resources needed to determine performance indicators, collect data, and disseminate information throughout the company. Business Performance Measurement must be dynamic and able to track the needs involved in company decisions (Buul & Omundi, 2017) (Prasetyo et al., 2020) (Devi et al., 2020).

Not all innovations are equally beneficial, some innovations (characterized by top management practices) are more beneficial to the profitability of the company due to its search activities and innovative strategies. Many SMEs fail in the short term due to existing problems such as little or no investment in market improvement and knowledge, lack of formal planning and demand forecasts, lack of managerial and technical skills, and limited economic resources (García-Vidal et al., 2020a).

In the context of the crisis, innovation has been identified as a strong trigger for small business organization resilience and economic development in the manufacturing and service sectors (Fasth et al., 2021). Coincidentally, this is the sector most affected during the COVID-19 pandemic (Caballero-Morales, 2021) (Hamilton, 2020). Innovation in SMEs can be measured through three indicators: product innovation, process innovation, and management system innovation. In particular, product innovation has been identified as the most important for improving effort and performance. However, in practice, concerns regarding when, where and how to innovate are important when choosing and implementing the necessary managerial and technical strategies and tools. This is because key indicators of innovation can involve high costs and risks, and current COVID-

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

19 events have improved both, and greatly affected the performance of SMEs (Kraus et al., 2020).

An organization in order to have the ability to innovate can be formed from two different perspectives, and this view includes behavioral variables in adoption and innovation management. Therefore, for an organization to participate in innovation, investigating the attributes of a manager's behavior is important and necessary to know its influence on the management of innovation capabilities, and is an intellectual and emotional asset. The personality of a manager is a key factor for successful innovation, (Qi et al., 2019), because innovative nature is a component of human personality.

Based on (C. Li et al., 2020) personality is an elusive variable that is considered a determinant of entrepreneurial success or failure in many societies. It is also suggested that personality makes a person unique through the characteristics of thoughts, behaviors, and feelings. As said before, the personality and characteristics of entrepreneurs are considered the business center of success or failure in various societies (Kocherbaeva et al., 2019). (Alrowwad et al., 2020) propose that management personality and behavior can encourage team members to work innovatively. However, there are gaps in the literature in exploring the fact that personality and behavior can also hinder innovation (Raucci & Tarquinio, 2020). Based on (Cucculelli & Peruzzi, 2020), there is a close relationship between managerial perspective and understanding of innovation; however, organisations in the UK get problematic innovations due to personality traits and team characteristics. Therefore, it is important for leaders and managers to have the right behavioral characteristics to steer their employees and teams towards innovation success. From this it can be understood that the personality and behavior of managers influence innovation.

## 2. Research Method

This type of research is associative, namely research that aims to see the relationship between variables (Hermawan and Amirullah, 2016). While the data used is primary data sourced from respondents. While the population in this study are all MSMEs in Bungo Regency that use Digital Marketing with an unknown number of people so that it is categorized as an unlimited population. The number of samples in this study was 428 SMEs.

Operational variables in this study contain indicators of a variable that allows researchers to collect relevant data so that each of these variables is more focused and in accordance with the planned measurement method. Operational variables in this study are illustrated in Table 1 below:

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

**Table 1. The operational variable**

| No. | Variable | Indicator | Variable Type |
|---|---|---|---|
| 1. | Business Sustainability (Z) | 1. Environmental Value<br>2. Social Value<br>3. Economic Value | Endogenous |
| 2. | MSME Performance (Y) | 1. Sales Volume<br>2. Customer Growth<br>3. Profit Achievement | Endogenous and mediation |
| 2. | Innovation (X2) | 1. Product Innovation,<br>2. Process Innovation,<br>3. Management System Innovation | Exogenous |
| 4. | Manager Behaviour (X1) | 1. Experience,<br>2. Activity,<br>3. Personal<br>4. Knowledge,<br>5. Courage Ability<br>6. Training To Bear<br>7. The Risk of Commitment | Antecedent |

(Source: Author's selection)

The data analysis method used is SEM analysis with Smart PLS 3.2.9. It is Structural equation analysis (SEM) based on variance that can simultaneously test the measurement model as well as test the structural model. The measurement model is used to test the validity and reliability, while the structural model is used to test causality (testing hypotheses with predictive models). Partial Least Squares (PLS) analysis is a multivariate statistical technique that performs comparisons between multiple dependent variables and multiple independent variables. PLS is a variant-based SEM statistical method designed to solve multiple regression when specific problems occur in the data (Harahap, 2020). The conceptual framework scheme in this study is structured as follows:

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

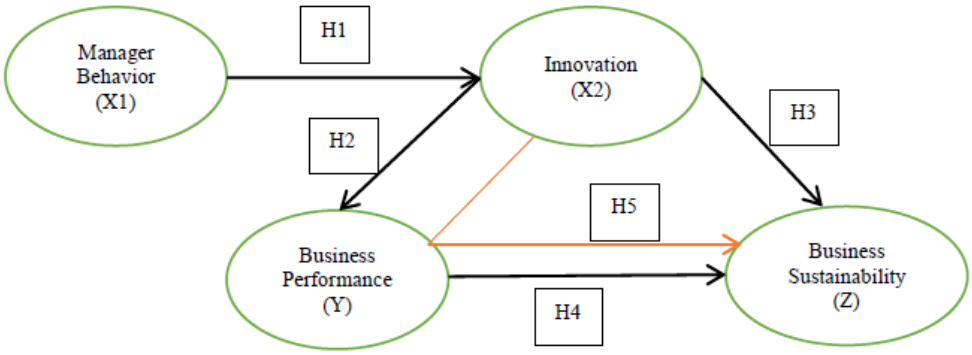



**Figure 1. The conceptual framework**

## 3. Result and Discussion

Data analysis using PLS-SEM needs to go through at least five processes, where each stage affects the following. These stages include model conceptualization, determination of algorithm analysis method, determination of resampling method, drawing the path diagram, and model evaluation. All stages need to be completed before further analysis to ensure the validity and reliability of elements in each evaluation before establishing a relationship between the constructs.

**Table 2: Discriminant Validity Test**

| | BP | BS | INO | MB |
|---|---|---|---|---|
| BP | 0,843 | | | |
| BS | 0,738 | 0,829 | | |
| INO | 0,490 | 0,496 | 0,792 | |
| MB | 0,081 | 0,122 | 0,151 | 0,792 |

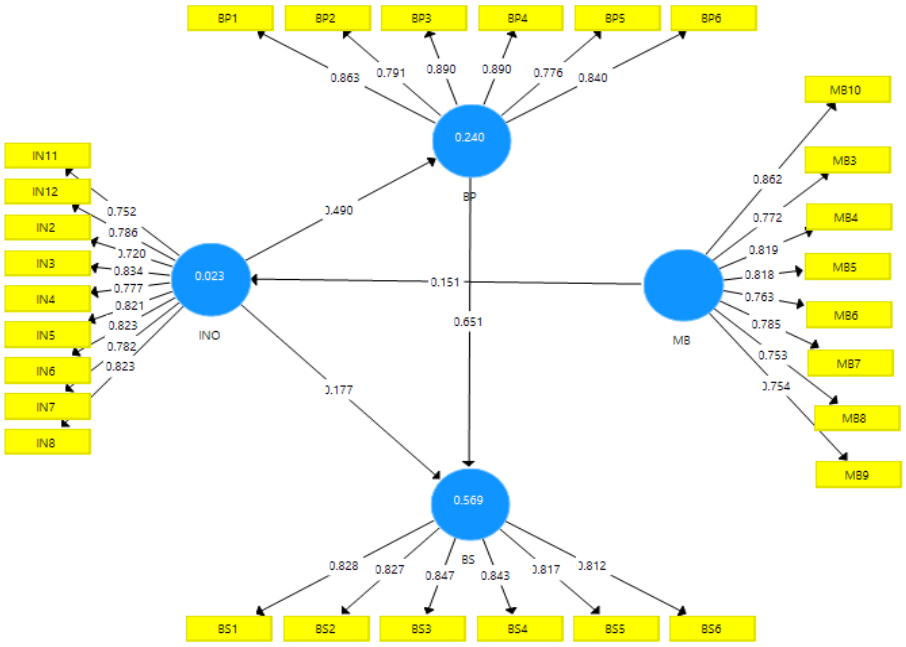
Source: Researchers, processed data (2022)

### Measurement Model - Outer Model

Measurements with reflective indicators show a change in construct when other indicators in the same construct change (or are removed from the model). The linearity assumption test was used to determine whether the model is appropriate in describing the relationship between the variables studied, hence; it is categorized as a good model. Furthermore, the measurement model was used to test the construct validity and instrument reliability. The results of the outer model test are described in Figure 2 as follows:

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

**Figure 2: Loading factor at reflective indicators**




The measurement model evaluation (outer model) was carried out for each PLS scheme used, including the path, centroid, and factor schemes. Meanwhile, the measurement model evaluation for reflexive indicators includes evaluating their validity and reliability on the latent variables. Validity is a measure that describes the correlation between reflexive indicator scores and latent variables. The evaluation begins by looking at the validity indicators shown by the loading factor value (λ), when the factor value (λ) is 0.7, then the indicator is said to be valid. However, when it is < 0.7, it will be excluded from the model (Sarstedt et al., 2020). The valid indicators that will be the next data processing are shown in Figure 2.

After performing summarization and reduction of the indicators, the next step is to test construct reliability. The results are shown in Table 3 as follows:

**Table 3: Construct Reliability**

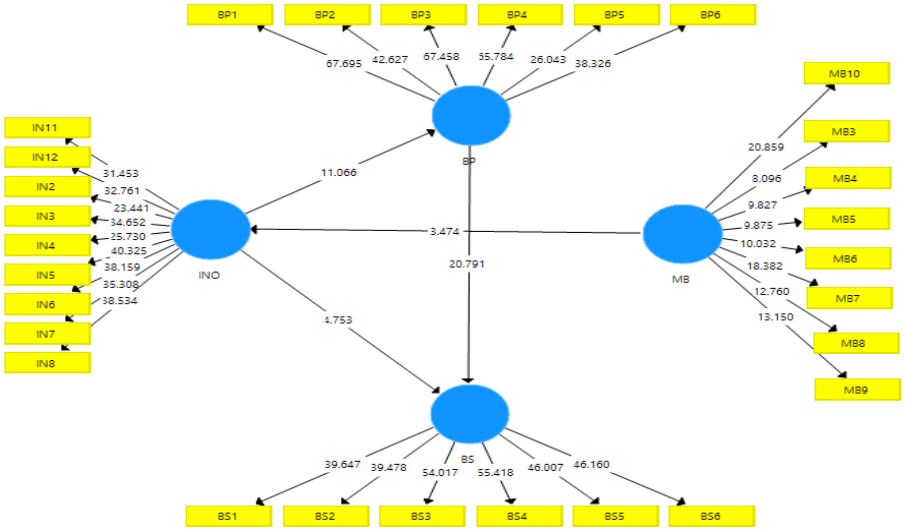
| | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| **BP** | **0,919** | **0,928** | **0,936** | **0,710** |
| **BS** | **0,909** | **0,911** | **0,930** | **0,688** |
| **INO** | **0,926** | **0,933** | **0,938** | **0,627** |
| **MB** | **0,917** | **0,931** | **0,931** | **0,627** |

Source: Researchers, processed data (2022)

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

The rule of thumb which is usually used to assess construct reliability, namely the value of composite reliability needs to be greater than 0.7 for confirmatory studies and 0.6 - 0.7 for exploratory (Wiyono, 2013) (Sarstedt et al., 2020). The table above shows the value of Cronbach's alpha and composite reliability of all variables which are greater than 0.7. Furthermore, the overall average variance extracted value is above 0.5, hence, it meets the reliability requirements. The evaluation of the Inner model can be seen in Figure 3 below:

**Figure 3: Inner Model Test**




The structural model evaluation was carried out to determine the relationship between latent constructs that have been previously hypothesized. Also, the measures used to evaluate the structural model (inner model) are Q-square.

**Table 4: Test Results of Goodness of Fit Model (Q-square)**

| **Variable** | **$R^2$** |
|---|---|
| Business Sustainability (Z) | 0,240 |
| Business Performance (Y) | 0,569 |
| Innovation (X2) | 0,023 |
| $Q^2 = 1 - [( 1 - R1^2 ) ( 1 - R2^2 ) ( 1 – R3^2 )]$<br>$Q^2 = 1 - [( 1 - 0.240) ( 1 - 0.569) ( 1 - 0.023)] = 0.748$ | |

Source: Researchers, processed data (2022)

Testing the model quality was carried out to determine the effects between the variables. The provisions in the effect size ($f^2$) are: when the $f^2$ value is < 0.02, there is no effect, the $F^2$ value between 0.02 - 0.15 has a small effect, the $F^2$ value of 0.15 - 0.35 has moderate, and $F^2$ value > 0.35 has large. The results of the $F^2$ assessment are presented in the table below:

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

**Table 5: F square**

| | BP | BS | INO | MB |
|---|---|---|---|---|
| BP | | **0,748** | | |
| BS | | | | |
| INO | **0,316** | 0,055 | | |
| MB | | | 0,023 | |

Source: Researchers, processed data (2022)

The value of Business Performance effect (Y) on Business Sustainability (Z) is 0.748, which is categorized as having a large effect, while the influence of other values is categorized as small and moderate.

The Standardized Root Mean Square Residual (SRMR) value that meets the criteria for the measurement fit model is less than 0.10 or SRMR < 0.10. The SRMR result in this study was 0.084 < 0.10, hence, the model is believed to still have good criteria.

The next step is testing the parameters for the structural model, and the hypotheses used are:

H0: ij = 0 H1: ij 0

Bootstrapping results for the structural model are as follows:

**Table 6: Structural Model Hypothesis Testing**

| Hypothesis | Direct Influence | Original Sample | t- stats | p-value | Results |
|---|---|---|---|---|---|
| H1 | **MB -> INO** | 0,151 | 3,474 | **0,001** | Accepted |
| H2 | **INO -> BP** | 0,490 | 11,066 | **0,000** | Accepted |
| H3 | **INO -> BS** | 0,496 | 11,844 | **0,000** | Accepted |
| H4 | **BP -> BS** | 0,651 | 20,791 | **0,000** | Accepted |
| H5 | **INO -> BP-> BS** | 0.319 | 10,206 | **0,000** | Accepted |

Source: Researchers, processed data (2022)

The results of the five proposed hypotheses showed all were accepted because the results of t value are greater than t table.

## Discussion

Of the five Indicators of Manager Behavior that get the most answers are activity indicators with item items willing to make changes. The change in question is a change related to the willingness and desire to innovate. One form of innovation carried out descriptively can be expressed as a change in service from the way traditional sales changes using delivery technology, but also changes in product innovation by adding variants or changes in packaging. However, there was a gap in answers between respondents that resulted in testing on the model being invalid and excluded from the

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

model. This research supports the theory (García Manjón, 2020) (Raucci & Tarquinio, 2020) (Izadi Z.D et al., 2020).

This study answered the performance from (Kottika et al., 2020) which is a recommendation to test the influence of business leaders' behavior on innovation. Based on the findings of research conducted under intense economic conditions, the right answer to survival lies in: (a) the personality traits and skills of entrepreneurs affecting the market and entrepreneurial orientation of SMEs, (b) the adoption of such orientations that continue to affect the performance of the enterprise. The answer to this study can provide guidelines for SMEs to rely on certain entrepreneurial behaviors to deal with economic downturns, including the current Covid-19 situation.

One indicator in innovation is that product innovation is not able to reflect measurements in innovation. Although descriptively this indicator has the highest measurement value but there are some gaps in the field, most product innovations are only carried out by MSMEs who are only more than one year old because these MSMEs are still looking for opportunities in the market to find out product variants that can be accepted by the market during Covid-19. Meanwhile, MSMEs that are more than three years old are reluctant to innovate products, they try to maintain products that have been accepted by the market. Innovation is carried out mostly on policy innovations, such as policies imposed on employees in order to comply with government policies during the Covid 19 pandemic.

This research is in line with research conducted by (Zekra, 2020). In the context of the crisis, innovation has been identified as a strong trigger for the resilience of small business organizations and economic development in the manufacturing and service sectors. Coincidentally, this was the sector most affected during the COVID-19 pandemic. This research also supports research conducted by (García Manjón, 2020).

Innovation is a means of transforming an organization, either in response to changes in the internal or external environment or as a precautionary measure taken on an affecting environment. Therefore, innovation can take many forms and can be attributed to new products, processes, services, management methods, or organizational structures (Danarahmanto et al., 2020)(Supono et al., 2019).

While it is also in addition to demanding companies to continue to innovate (Mead et al., 2020), it is also important for them to adapt to the rapidly changing competition and market demands and to be able to create a sustainable competitive advantage (Danarahmanto et al., 2020). For this reason, innovation remains a key economic concept that needs to be adopted by the business sector to contribute to societal change related to sustainability challenges. Innovation is one way for companies to survive (Tur-Porcar et al., 2018). This research is in line with the opinion (Bouwman et al., 2019) that marketing innovation can help companies survive risk. The results of this study also support the opinion (Eti & Bari, 2020).

In the context of the crisis, innovation has been identified as a strong trigger for the resilience of small business organizations and economic development in the

Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/
Journal of Tianjin University Science and Technology
ISSN (Online): 0493-2137
E-Publication: Online Open Access
Vol:55 Issue:09:2022
DOI 10.17605/OSF.IO/WUXE3

manufacturing and service sector (Handayani & Handoyo, 2020) (Gunasegaran et al., 2020) (Tantayanubutr & Panjakajornsak, 2017) (Nah and Siau, 2020).

This research is in line with research conducted by (Garcia-Morales et al., 2018). Corporate Sustainability is a variable function of creativity, innovation, entrepreneurship, and financial performance Sustainable business models, as defined as simplified representations of elements, interrelationships between these elements, and interactions with stakeholders that organizational units use to create, convey, capture, and exchange sustainable value, have become the focus of research, due to knowledge gaps relating to how Determine elements that focus on transforming the business model. Thus, the business model must be the result of organizational innovation for sustainable processes.

The research is also in line with opinion (Study et al., 2018), another initiative for continuous performance improvement, suggesting the possibility of using integrated reporting and integrated thinking (to combine financial and non-financial indicators). It is considered a significant contribution to sustainable development initiatives thus demonstrating how the company can use its own resources and capital to generate value for itself and all stakeholders related to its operations. The results of this study also support the study (Kristinae et al., 2020)

## 4. Conclusions

The results of this study have refuted research conducted by (Kuncoro et al., 2021) (García Manjón, 2020) (Hermundsdottir & Aspelund, 2021) who said specifically product innovation has been identified as the most important thing to improve business performance. In this case innovation cannot be reflected by product innovation. During the pandemic, process innovation on change becomes the most important innovation to improve business performance.

The behaviour of managers became observations in this study and was designated as an antecedent variable or variable that preceded the free variable in this case is an innovation. This can be proven by the relationship between the two variables in a moderate position. Thus this study can find answers to recommendations (Kottika et al., 2020) to empirically test the relationship of manager behaviour to innovation.

The results of this study have managerial implications, especially the managerial activities of MSMEs in Bungo Regency. In the condition of the Covid 19 pandemic that has not been determined when it ends. SMSEs Sustainability in this case MSMEs can be achieved by improving SMS's Performance by increasing the use of Innovation for businesses or MSMEs by improving Manager Behaviour to understand business conditions during the Covid-19 pandemic to be more courageous to face risks, implement business activities directly and are willing to make changes as needed, then increase commitment to the business undertaken and make past experience to improve the business in the future.

**Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/**
**Journal of Tianjin University Science and Technology**
**ISSN (Online): 0493-2137**
**E-Publication: Online Open Access**
**Vol:55 Issue:09:2022**
**DOI 10.17605/OSF.IO/WUXE3**

### Authors Contributions

The authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

### Conflict of Interest Statement

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

### References

ALVES, J., LOK, T. C., LUO, Y., & HAO, W. (2020). Crisis Management for Small Business during the COVID-19 Outbreak:Survival, Resilience and Renewal Strategies of Firms in Macau. 1–29. https://doi.org/10.21203/rs.3.rs-34541/v1

Amri, A. (2020). Dampak Covid-19 Terhadap UMKM di Indonesia. Jurnal Brand, 2(1), 123–130. https://www.academia.edu/42672824/Dampak_Covid-19_Terhadap_UMKM_di_Indonesia

Bothe, J., Dorin, M., Cluj-napoca, U. T., & Bumbac, R. (2020). New Trends in Sustainable Business and Consumption TOP-MANAGEMENT TOP-MANAGEMENT IMPACT FACTORS PREVENTING TURNAROUND. May.

Carracedo, P., Puertas Medina, R., & Luisa Martí Selva, M. (2020). Research lines on the impact of the COVID-19 pandemic on business. A text mining analysis. Journal of Business Research, November. https://doi.org/10.1016/j.jbusres.2020.11.043

Cucculelli, M., & Peruzzi, V. (2020). Innovation over the industry life-cycle. Does ownership matter? Research Policy, 49(1), 103878. https://doi.org/10.1016/j.respol.2019.103878

Ding, A. W., & Li, S. (2021). National response strategies and marketing innovations during the COVID-19 pandemic. Business Horizons, 64(2), 295–306. https://doi.org/10.1016/j.bushor.2020.12.005

Firman, A., Putra, A. H. P. K., Mustapa, Z., Ilyas, G. B., & Karim, K. (2020). Re-conceptualization of business model for marketing nowadays: Theory and implications. Journal of Asian Finance, Economics and Business, 7(7), 279–291. https://doi.org/10.13106/jafeb.2020.vol7.no7.279

García-Vidal, G., Guzmán-Vilar, L., Sánchez-Rodríguez, A., Martínez-Vivar, R., Pérez-Campdesuñer, R., & Uset-Ruiz, F. (2020). Facing post COVID-19 era, what is really important for Ecuadorian SMEs? International Journal of Engineering Business Management, 12. https://doi.org/10.1177/1847979020971944

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202

Hair Jr et al. (2009). Multivariate Data Analysis. 1–761.

Hermundsdottir, F., & Aspelund, A. (2021). Sustainability innovations and firm competitiveness: A review. Journal of Cleaner Production, 280, 124715. https://doi.org/10.1016/j.jclepro.2020.124715

Kneipp, J. M., Gomes, C. M., Bichueti, R. S., Frizzo, K., & Perlin, A. P. (2019). Sustainable innovation practices and their relationship with the performance of industrial companies. Revista de Gestão, 26(2), 94–111. https://doi.org/10.1108/rege-01-2018-0005

Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., Bamberger, P., Bapuji, H., Bhave, D. P., Choi, V. K., Creary, S. J., Demerouti, E., Flynn, F. J., Gelfand, M. J., Greer, L. L., Johns, G., Kesebir, S., Klein, P. G., Lee, S. Y., … Vugt, M. van. (2021). COVID-19 and the workplace: Implications,

**Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/**
**Journal of Tianjin University Science and Technology**
**ISSN (Online): 0493-2137**
**E-Publication: Online Open Access**
**Vol:55 Issue:09:2022**
**DOI 10.17605/OSF.IO/WUXE3**

issues, and insights for future research and action. American Psychologist, 76(1), 63–77. https://doi.org/10.1037/amp0000716

Kopren, A., & Westlund, H. (2022). Entrepreneurship bridging ethnic divides. 45(4), 423–449.

Memon, M. A., Ting, H., Ramayah, T., Chuah, F., & Cheah, J. H. (2017). A review of the methodological misconceptions and guidelines related to the application of structural equation modeling: A malaysian scenario. Journal of Applied Structural Equation Modeling, 1(1), i–xiii. https://doi.org/10.47263/jasem.1(1)01

Mofijur, M., Fattah, I. M. R., Alam, M. A., Islam, A. B. M. S., Ong, H. C., Rahman, S. M. A., Najafi, G., Ahmed, S. F., Uddin, M. A., & Mahlia, T. M. I. (2021). Impact of COVID-19 on the social, economic, environmental and energy domains: Lessons learnt from a global pandemic. Sustainable Production and Consumption, 26, 343–359. https://doi.org/10.1016/j.spc.2020.10.016

Montani, F., & Staglianò, R. (2021). Innovation in times of pandemic: The moderating effect of knowledge sharing on the relationship between COVID-19-induced job stress and employee innovation. R and D Management, 1–13. https://doi.org/10.1111/radm.12457

Morgan, A. K., Awafo, B. A., & Quartey, T. (2021). The effects of COVID-19 on global economic output and sustainability: evidence from around the world and lessons for redress. Sustainability: Science, Practice, and Policy, 17(1), 77–81. https://doi.org/10.1080/15487733.2020.1860345

Nanjundeswaraswamy, T. S., & Divakar, S. (2021). Determination of Sample Size and Sampling Methods in Applied Research. Proceedings on Engineering Sciences, 3(1), 25–32. https://doi.org/10.24874/pes03.01.003

Nguyen, H. H., Ngo, V. M., & Tran, A. N. T. (2021). Financial performances, entrepreneurial factors and coping strategy to survive in the COVID-19 pandemic: case of Vietnam. Research in International Business and Finance, 56(December 2020), 101380. https://doi.org/10.1016/j.ribaf.2021.101380

Obrenovic, B., Du, J., Godinic, D., Tsoy, D., Khan, M. A. S., & Jakhongirov, I. (2020). Sustaining enterprise operations and productivity during the COVID-19 pandemic: "Enterprise effectiveness and sustainability model." Sustainability (Switzerland), 12(15), 1–27. https://doi.org/10.3390/su12155981

OECD Secretary General. (2020). Covid-19: SME Policy Responses. March, 1–55.

Rafiq, M., Zhang, X. P., Yuan, J., Naz, S., & Maqbool, S. (2020). Impact of a balanced scorecard as a strategic management system tool to improve sustainable development: Measuring the mediation of organizational performance through PLS-Smart. Sustainability (Switzerland), 12(4), 1–19. https://doi.org/10.3390/su12041365

Seetharaman, P. (2020). Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect , the company ' s public news and information. International Journal of Information Management, January. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7323683/pdf/main.pdf

Șerbănel, C. I. (2020). Best Practices for The Economic Environment During COVID-19. Ovidius University Annals, Economic Sciences Series, XX(1), 500–509.

Suraya, E., Azis, N., & Majid, M. S. A. (2020). Does Performance Matter for Business Survival Based on the Enhancement of Locus of Control and Business Competence? The Case of Micro Small and Medium Enterprises. Sumerianz Journal of Business Management and Marketing, 3(July), 98–106.

Tao, M., Khaja Safiuddin, S., Ali, Q. M., Nawaz, S., & Alam, F. (2020). RMC Journal of Social Science and Humanities Social Currencies of Social Media Influencers (SMIS) Matter Purchase Intention on Social E-Commerce Platform During COVID-19. RMC Journal of Social Sciences and Humanities, 1(3), 41–50. https://journal.rnmconsultants.org/index.php/jssh/article/view/114%0Ahttps://journal.rnmconsultants.org/in

**Tianjin Daxue Xuebao (Ziran Kexue yu Gongcheng Jishu Ban)/**
**Journal of Tianjin University Science and Technology**
**ISSN (Online): 0493-2137**
**E-Publication: Online Open Access**
**Vol:55 Issue:09:2022**
**DOI 10.17605/OSF.IO/WUXE3**

dex.php/jssh/article/view/114

Teece, D. J. (2018). Business models and dynamic capabilities. Long Range Planning, 51(1), 40–49. https://doi.org/10.1016/j.lrp.2017.06.007

Ye, Q., Zhou, R., Anwar, M. A., Siddiquei, A. N., & Asmi, F. (2020). Entrepreneurs and environmental sustainability in the digital era: Regional and institutional perspectives. International Journal of Environmental Research and Public Health, 17(4). https://doi.org/10.3390/ijerph17041355

Zekra, L., Constanta, U. O., Sakit, R., Menular, P., & Constanta, K. (2020). Pandemi COVID-19 dan Dampak Ekonomi Global. XX, 237–244.