Digital Business Development Strategy as a Determinant of Business Competitiveness Through E-Commerce of MSMEs Products in Indonesia

Wahyudi Putera
Program of Economic Accounting, STIE Pelita Buana, South Sulawesi, Indonesia

Nisma Iriani
Program Graduate of Economic Management, University of East Indonesia, South Sulawesi, Indonesia

Sanny Feria Julian
Program of Economic Management, Tentena Christian University, Central Sulawesi, Indonesia

Nurjanna
Program of Economic Accounting, STIE Tri Dharma Nusantara, South Sulawesi, Indonesia

Abdul Rahman
Program of Economic Management, STIE Pelita Buana, South Sulawesi, Indonesia

Riska Sucianti
Program of Economic Management, STIE Pelita Buana, South Sulawesi, Indonesia

Abstract:
This study aims to explain and analyze the impact of product innovation and social media on business competitiveness through e-commerce of MSME products to bridge the gap. The population under this study includes e-commerce MSMEs customer community located in 27 districts / cities in South Sulawesi and East Java Provinces including Palopo City, Pare-Pare, Makassar, Batu, Malang, Surabaya, Kediri and Madiun, Bulukumba Regency, Sinjai, Bantaeng, Takalar, Gowa, Tana Toraja, Luwu, Maros, Pangkep, Soppeng, Wajo, Banyuwangi, Blitar, Bojonegoro, Gresik, Kediri, Lamongan, Magetan, and Malang which amounted to 22,296,873 e-commerce MSME customers in South Sulawesi and East Java Provinces. The sample used in this study, namely 500 respondents / customers, using probability sampling techniques or multistage random sampling or determination of cluster sampling based on the division of an area / region in stages. The analytical technique used for hypothesis testing is Amos structural equation modeling (SEM). The results show that product innovation has one indirect significant effect on e-commerce of MSME products, social media has an indirect significant effect on e-commerce of MSME products. Product innovation has a significant effect directly on business competitiveness. Social media has a significant effect directly on business competitiveness and e-commerce of MSME products has a significant effect directly on business competitiveness.

Keywords: Product Innovation, Social Media, E-Commerce of MSME Products and Business Competitiveness.
Introduction

The business world is currently experiencing a recovery after the Covid-19 pandemic that hit the world, this makes the current business world need the right strategy to restore MSME entrepreneurs so that they are again in demand by customers/society. The way that today's entrepreneurs can use is increasing business competitiveness, through business competitiveness MSME entrepreneurs can further improve the quality of a product that will be marketed to customers / society (Shenkar, O, Luo, Y and Chi,T, 2014). With increasing business competitiveness, it automatically makes alternative choices that entrepreneurs can make by developing e-commerce for MSME products. Electronic trading media by involving third parties exchanging information between MSME entrepreneurs and external stakeholders can increase marketing so that it can also indirectly increase creativity so as to create innovations in MSME products that attract customers/public (Chaffey, D, 2009). A study also raised a relationship between product innovation and e-commerce products which is an important issue for various industrial companies that will increase their efforts in the field of product marketing (Jayashree, S, Malarvizhi, C, Abdollahbeigi, B, et.al, 2016). With the thought and imagination of an entrepreneur, it can create product innovations that have an impact on creating new customers (Widodo, et al, 2022, M, 2010). Furthermore, the development of technology is currently growing rapidly, almost most of the current human civilization uses communication tools equipped with various features in it. The presence of various applications that are in these Communication tools can be used in different ways, one of which is social media applications, a means used by people to interact with each other by creating, sharing, and exchanging information and ideas in a network and virtual community (Parker, S. P. Ed, 1994). In line with research conducted by Javid, E, Nazari, M and Ghaeli, M (2019) Studies on global trends in research through scientometrics help managers and researchers identify countries and institutions with the greatest potential for scientific production, which allows them to develop their profession that social media plays an important role in increasing e-commerce products. The following is a chart of the best-selling MSME products online e-commerce in South Sulawesi and East Java Provinces.

![Chart of Best Selling MSME Products Online E-Commerce Prov. Sul-Sel and East Java](image)

Figure 1. Best Selling MSME Products Online E-Commerce Prov. Sul-Sel and East Java
Source: MSMES Product Online Prov Sul-Sel & East Java, 2021
From Figure 1 above, the highest e-commerce online MSME product sales value in South Sulawesi and East Java Province is in furniture amounting to IDR 1,020,331, - or 25.42%, followed by culinary products of IDR 750,280,020, - or 18.69%, then lodging products of IDR 560,880,00, - or 13.97%, book sales products of IDR 400,001,260, - or 9.96%, fashion products amounting to Rp 340,724,000, or 8.48%, skin care and cosmetic products amounting to Rp 321,020,567, or 7.99%, baby equipment products amounting to Rp 235,041,721, or 5.85%, digital marketing agent products amounting to Rp 170,260,112, or 4.24%, make-up artist (MUA) products amounting to Rp 120,020,331, or 2.99% and the smallest photo and video service products amounting to Rp 95,021,320, or 2.36%.

The sales platforms for MSME products in South Sulawesi and East Java provinces experienced fluctuations in increase and decrease from 2017 to 2021. The following is information on the number of increases and decreases in sales of e-commerce MSME product platforms as follows:

### Table 1. E-Commerce Sales of MSME Product Platforms

<table>
<thead>
<tr>
<th>No.</th>
<th>Platform</th>
<th>Per-Des 2017-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>1.</td>
<td>Bukalapak</td>
<td>Rp 2,145,785,000</td>
</tr>
<tr>
<td>2.</td>
<td>Tokopedia</td>
<td>Rp 1,445,685,000</td>
</tr>
<tr>
<td>3.</td>
<td>Shopee</td>
<td>Rp 1,345,885,000</td>
</tr>
<tr>
<td>4.</td>
<td>Lazada</td>
<td>Rp 1,207,581,000</td>
</tr>
<tr>
<td>5.</td>
<td>JD.id</td>
<td>Rp 1,141,025,000</td>
</tr>
<tr>
<td>6.</td>
<td>Blibli</td>
<td>Rp 545,785,000</td>
</tr>
</tbody>
</table>

Source: E-Commerce MSMES Product Online, 2022

From table 1 above, the sales of e-commerce platforms for MSME products in the provinces of South Sulawesi and East Java from 2017 to 2021, the bukalapak platform experienced an increase and a decrease in 2020, which was marked by the Covid-19 pandemic storm that hit the world which automatically made all kinds of businesses experience a significant decline. Tokopedia, Shopee, Lazada, and Blibli.com platforms experienced a decline in 2020, while the JD.id platform experienced a decline in sales in 2018 and 2020.

From the data above, a number of studies that have been conducted by experts such as the results of this study are (1) Entrepreneurial orientation, product innovation, e-commerce utilization, and market orientation have a significant effect on competitive advantage. (2) Entrepreneurial orientation, product innovation, e-commerce utilization, market orientation, and competitive advantage have a significant effect on business performance. (3) Entrepreneurial orientation, product innovation, e-commerce utilization, market orientation, and competitive advantage have a significant effect on business performance and competitive advantage as an intervening variable (Susana, E, S Darsono, J and Andarwati, M, 2019). Furthermore, the findings of this study highlighted the geo-graphical distribution of @Samsung Mobile followers, the brand's market outreach, and the relationship between the increase in followers and quarterly sales of @Samsung Mobile (Singh. M and Singh G, 2018). Then the results showed that innovation strategies consisting of administrative innovation, technical innovation, process innovation, and product innovation can improve organizational competitiveness in the context of the manufacturing industry. Administrative innovation has a positive effect on business competitiveness. Technical innovation has a positive effect on business competitiveness. Process innovation has a positive effect on business competitiveness. Then, product...
innovation has a positive effect on business competitiveness. Process innovation has a greater influence in improving business competitiveness compared to other innovation strategies (Riyadi S and Sumardi. S, 2017). Furthermore, the results of the correlation analysis revealed that social media marketing is positively and significantly related to the competitiveness of tourism MSMEs. Recommendations for utilizing social media marketing integration into small business competitive strategies are provided (Rambe. P, 2017). As well as research that aims to develop a theoretical framework for e-business competitiveness. After the analysis of e-business diversity, a conceptual model describing e-commerce competitiveness as one of the most important activities of e-business is presented. The model includes four different but interrelated levels of analysis: firm level, industry level, country level, and global level (Clarniene. R and Stankeviciute G, 2015).

Literature Review

Product Innovation

According to Widodo, et al, 2022, M (2010) product innovation is one thing that has the potential to create people’s thoughts and imagination which ultimately creates customers. Furthermore, according to Sutomo (2012), product innovation is the process or result of development or utilization, skills and experience to create or innovate new products (goods or services), processes or new systems that provide significant value. And according to Elitan and Anatan (2009), product innovation is the process of adapting products, services, ideas, or processes that exist within the organization or develop outside the organization. In general, innovation refers to the process of adopting something new, as well as the process of creating new products. Jayashree, S, Malavizhi, C, Abdollahbeigi, B, et.al (2016); Susana, E, SDarsono, J and Andarwati, M (2019); Kurniawati, E, Al Siddiq, I and Idris (2020); Riyadi S and Sumardi. S (2017); Bakator. M, Dordevic. D and Cockalo. D (2019); Alonso Ubieta S and Carlos Leiva. J (2019) and Putera, W., Sahabuddin, R., Rakib, M., & Lestari, I. (2021) state that the effect of product innovation both directly and indirectly has a significant effect on e-commerce products and business competitiveness.

Social Media

Parker, S. P. (Ed.). (1994) Social media is the way people interact with each other by creating, sharing, and exchanging information and ideas in virtual networks and communities. Furthermore, Varinder Taprial and Priya Kanwar (2012) Social media is a medium used by individuals to be social, or to be social online by sharing content, news, photos and others with others. Then B.K. Lewis (2010) Social media is a digital technology label that allows people to connect, interact, produce and share message content. Furthermore, Mark Hopkins (2008) Social media is a term that not only includes various New Media platforms but it also involves the inclusion of systems such as FriendFeed, Facebook, and other commonly considered social networks. The idea is that various media platforms have a social component and as a public communication medium. As well as P.N. Howard and M.R Parks (2012) Social networks are media consisting of three parts, namely: Information infrastructure and tools used to produce and distribute media content. Media content can be personal messages, news, ideas, and cultural products in digital form. At that time, those who produced and consumed media content in digital form were individuals, organizations, and industrial individuals. A number of experts who have conducted research on the influence of social media both directly and indirectly have a significant effect on e-commerce products and business competitiveness (Javid, E, Nazari, M and Ghaeli, M, 2019; Singh. M and Singh G, 2020; Johan. M, Syed. M and Adnan H, 2019; Rambe. P, 2017; Rambe, P., Mosweunyane, L., & Dzansi, D, 2019; and Gerber. P, 2016).

E-Commerce

Chaffey, D (2009) According to him, e-commerce is any exchange of information between a company and external stakeholders (third parties who have certain agreements with
the company) through electronic means. Furthermore, Laudon and Traver (2013) define e-commerce as an electronic trading medium that has certain characteristics or properties. Then Triton (2006) e-commerce is a form of electronic commerce that provides transactions between sellers and buyers with a network or connected to the internet. Furthermore, according to Onno W. Purbo (2001), e-commerce is a dynamic technology-based tool, both applications and processes carried out between consumers and producers through electronic means, especially the internet and e-commerce is part of the process of sales interactions with internet-based buyers carried out with good service (Julian Ding, 1999). A number of studies by experts state that the effect of e-commerce both directly and indirectly has a significant effect on business competitiveness (Clarniene. R and Stankeviciute G, 2015; Ping.N, Hussin. A and Ali, N, 2019; Khan. M and Sagar. P, 2015; and Gomeseria. R, 2020).

Business Competitiveness
Shenkar, O, Luo. Y and Chi.T (2014) and Liébana-Cabanillas, F, Muñoz-Leiva, F, Sanchez-Fernández, J, et al (2014) state the importance of e-commerce in business development, including the advantages and disadvantages of e-payment, this book is an important resource for business professionals who want to improve their understanding of the strategic role of e-commerce in all dimensions, as well as for researchers and students. Furthermore, according to Cravens (1996), competitiveness is the company's ability to compete with its competitors. Therefore, every company must have a competitive strategy and competitive advantage that must be focused on dynamic processes. Competitiveness is the concept of comparing the ability and performance of companies, subsectors or countries in selling and supplying goods and/or services offered in the market. The competitiveness of a country can be achieved through the accumulation of strategic competitiveness of each company. In Indonesia, the small industry sector is one form of alternative strategy to support economic development in Indonesia's long-term development. Its role in equalization and employment opportunities for the community as well as contributions to foreign exchange earnings have proven that small businesses are not only active but productive (Sahabuddin, R, 2016). Research on local-based creative economy to support tourism attraction and to propose strategies and programs for local creative economy in Balla Peu traditional residential zone in Mamasa district. The subjects of this study were government, community, creative industry owners and tourists (Rakib M, 2017). Research that aims to analyze the effect of market orientation and entrepreneurial orientation on marketing performance so that competitive advantage variables are added to bridge the gap (Putera, W., Rakib, M., & Sahabuddin, R, 2021).

Hypothesis
Product Innovation Affects E-Commerce (H.1)
The effect of product innovation is influential and significant on e-commerce. This indicates the fact that product innovation determines e-commerce products where research evaluates the concept of social media and e-commerce with the aim of developing a theoretical model for its relationship with product innovation and business success. This research identifies dimensions for the proposed model for social media and e-commerce, product innovation and business success. This research is important mainly due to the fact that e-commerce and social media are two aspects that have received considerable attention in the field of research and in the business world with considerable significance (Jayashree, S, Malarvizhi, C, Abdollahbeigi, B, et.al, 2016). Furthermore, the results of the study found the facts (1) Entrepreneurial orientation, product innovation, e-commerce utilization, and market orientation have a significant effect on competitive advantage. (2) Entrepreneurial orientation, product innovation, e-commerce utilization, market orientation, and competitive advantage have a significant effect on business performance. (3) Entrepreneurial orientation,
product innovation, e-commerce utilization, market orientation have a significant effect on business performance and competitive advantage as an intervening variable (Susana, E, S.Darsono, J and Andarwati, M, 2019). Then the results showed the following e-commerce opportunities to influence satisfaction and trust in making transactions, providing the best service, satisfying customer expectations, and not being a threat to MSMEs (Kurniawati, E, Al Siddiq, I and Idris, 2020).

H.1: Product Innovation Has an Influence and Significance on E-Commerce

Social Media Affects E-Commerce (H.2)

The influence of social media has an effect and is significant on e-commerce. This shows that social media determines e-commerce products where the findings show that research has grown exponentially since 2009 and the trend continues at a relatively stable rate. Thematic analysis shows that the subject has a significant but unfavorable research field. There is a high level of cooperation with rich research networks among institutions in the United States, European and Asian countries (Javid, E, Nazari, M and Ghaeli, M, 2019). Furthermore, the main objective of this project is to identify the role of social media marketing strategies and evaluate its importance over traditional marketing strategies in building brand names and consumer behavior (Singh, M and Singh, G, 2018). And the results showed that customer preferences, non-delivery risk and financial transaction risk and security significantly influenced social media and the use of e-commerce online shopping platforms among micro SMEs in Malaysia (Johan, M, Syed. M and Adnan, H, 2019).

H.2: Social Media Has a Significant Effect on E-Commerce

Product Innovation Affects Business Competitiveness (H.3)

The effect of product innovation has an effect and is significant on business competitiveness. This shows that product innovation determines business competitiveness where the results show that innovation strategies consisting of administrative innovation, technical innovation, process innovation, and product innovation can improve organizational competitiveness in the context of the manufacturing industry. Administrative innovation has a positive effect on business competitiveness. Technical innovation has a positive effect on business competitiveness. Process innovation has a positive effect on business competitiveness. Product innovation has a greater influence in improving business competitiveness compared to other innovation strategies (Riyadi S and Sumardi, S, 2017). Furthermore, the results show that the observed relationships between the measured constructs are different, and they depend on how many employees the company has. This paper contributes to the existing body of literature, provides a solid foundation for future research in this domain, and other researchers and managers can use this paper as an insight into the relationships between important business metrics (Bakator, M, Dordevic, D and Cockalo, D, 2019). As well as the findings show that businesses in the manufacturing and services sectors present the highest levels of competitive efficiency, which is explained by the pillars related to product innovation and business networking. The proposed competitiveness index is a valuable tool that can support businesses. The decision-making process as well as the design of specific strategies that contribute to improving the resource allocation process and the configuration of competitive pillars at the business level (Alonso Ubieta S and Carlos Leiva, J, 2019).

H.3: Product Innovation Has a Significant Effect on Business Competitiveness

Social Media Affects Business Competitiveness (H.4)

The influence of social media has an effect and is significant on business competitiveness. This shows that the role of social media greatly determines business competitiveness where the results of the correlation analysis reveal that social media marketing is positively and significantly related to the competitiveness of tourism MSMEs. Recommendations for
utilizing social media marketing integration into small business competitive strategies are provided (Rambe. P, 2017). Furthermore, the findings show that most tourism SMEs use social media technology to maintain their customer base, solicit feedback from customers, assert their dominance in the market, maintain contact between their coworkers and share information. In addition, findings show that there is a significant positive relationship between social media business networks and the competitiveness of these firms (Rambe, P., Mosweunyane, L., & Dzansi, D, 2019). And research was conducted to identify additional risks resulting from the adoption of social media by businesses and to develop an integrated Information Technology (IT) governance control framework to address these risks. To address IT gaps, these risks are addressed at both strategic and operational levels (Gerber. P, 2016).

H.4: Social Media Affects and Significantly to Business Competitiveness

E-Commerce Affects Business Competitiveness (H.5)

The effect of e-commerce has an effect and is significant on business competitiveness. This shows that e-commerce products are largely determined by business competitiveness where the research aims to develop a theoretical framework of e-business competitiveness. After the analysis of e-business diversity, a conceptual model describing e-commerce competitiveness as one of the most important activities of e-business is presented. This model includes four different but interrelated levels of analysis: firm level, industry level, country level, and global level (Clarniene. R and Stankeviciute G, 2015). Then in this study discussing about Advanced SWOT Analysis of E-commerce in India oriented which will consist of strengths, weaknesses, opportunities and threats faced by e-commerce in the current scenario in India. India is an emerging economy and how e-commerce has played an important role in business growth and overall economic development (Khan. M and Sagar. P, 2015) and Construction for artificial intelligence customer service in E-commerce (Ping.N, Hussin. A and Ali, N, 2019). Small industry sector research is one form of alternative strategy to support economic development in Indonesia's long-term development. Its role in equity and employment opportunities for the community as well as its contribution to foreign exchange earnings has proven that small businesses are not only active but productive (Sahabuddin, R, 2016) as well as a local-based creative economy to support tourism attraction and to propose strategies and programs for the local creative economy in the Balla Peu traditional residential zone in Mamasa Regency (Rakib. M, 2017).

H.5: E-Commerce Affects and Significantly to Business Competitiveness

![Figure 2. Conceptual Framework of Relationship Between Variables](Data processed by SEM Program Amos Ver, -2023)
Research Method

This research was conducted on e-commerce MSME products in South Sulawesi and East Java Provinces. This location was chosen because e-commerce MSME products in South Sulawesi and East Java Provinces are growing rapidly in the midst of current technological developments. The research object in this study is the customer community for e-commerce MSME products in South Sulawesi and East Java Provinces located in 27 districts / cities in South Sulawesi and East Java Provinces including Palopo City, Pare-Pare, Makassar, Batu, Malang, Surabaya, Kediri and Madiun, Bulukumba, Sinjai, Bantaeng, Takalar, Gowa, Tana Toraja, Luwu, Maros, Pangkep, Soppeng, Wajo, Banyuwangi, Blitar, Bojonegoro, Gresik, Kediri, Lamongan, Magetan, and Malang which amounted to 500 respondents / customers. The sampling technique was carried out by sampling with probability sampling, namely multistage random sampling or determining cluster sampling based on the division of a region / region in stages, then randomly taken for each region, the goal is that each sample in an area has the same opportunity to be used as a respondent. Customers of e-commerce MSME products in South Sulawesi and East Java Provinces who are directly encountered by researchers can be used as respondents. As for determining the number of samples used by researchers using the Slovin Formula (Sugiyono, 2013).

Based on Figure 4 below, multistage random sampling of the population in 27 districts / cities in South Sulawesi and East Java Provinces, including Palopo City, Pare-Pare, Makassar, Batu, Malang, Surabaya, Kediri and Madiun, Bulukumba, Sinjai, Bantaeng, Takalar, Gowa, Tana Toraja, Luwu, Maros, Pangkep, Soppeng, Wajo, Banyuwangi, Blitar, Bojonegoro, Gresik, Kediri, Lamongan, Magetan, and Malang as
many as 500 respondents / customers of e-commerce MSME products in South Sulawesi and East Java Provinces. Data collection The method used in this research is through distributing questionnaires to respondents/customers of e-commerce MSME products in South Sulawesi and East Java Provinces in 27 districts/cities in South Sulawesi and East Java Provinces including Palopo City, Pare-Pare, Makassar, Batu, Malang, Surabaya, Kediri and Madiun, Bulukumba, Sinjai, Bantaeng, Takalar, Gowa, Tana Toraja, Luwu, Maros, Pangkep, Soppeng, Wajo, Banyuwangi, Blitar, Bojonegoro, Gresik, Kediri, Lamongan, Magetan, and Malang districts. Data collection in this study used a questionnaire method. Respondents' answers were measured using a 5-point Likert scale. The data analysis technique used is Structure Equation Modeling (SEM) Amos Ver.-2022 For Windows Program.

**Figure 4. Population and Sample Data (Multistage Random Sampling)**

*Source:* Data processed by customers/respondents of E-Commerce MSMEs of South Sulawesi & East Java Province, 2022

**Results**

The following respondents / customers used in this study have different characteristics or identities according to the figure 5.

Based on Figure 5, most of the respondents are male as many as 275 respondents/customers of MSME e-commerce products or 55% while 225 respondents/customers of MSME products or 45% are female.

Based on Figure 6, according to the age of respondents 25 years to 30 years, 103 respondents / MSME e-commerce customers or 20%, the age of respondents 31 years to 35 years was 145 respondents / MSME e-commerce customers or 29%, the age of respondents 36 years to 40 years was 102 respondents / MSME e-commerce customers or 20% and 45 years and over were 70 respondents / MSME e-commerce customers or 14%.
Figure 5. Classification by Gender
Source: Data processed by customers / respondents of E-Commerce MSMES Sul-Sel & East Java Province, 2022

Figure 6. Classification by Age of Respondents
Source: Data processed by customers / respondents of E-Commerce MSMES Sul-Sel & East Java Province, 2022

Figure 7. Classification by Respondents’ Education
Source: Data processed by customers / respondents of E-Commerce MSMES Sul-Sel & East Java Province, 2022

In Figure 7 above, based on the classification of the education level of respondents / MSME e-commerce customers, most of them have a bachelor's degree of 180 respondents / MSME e-commerce customers or 36%, then have a master's degree of 150 respondents / MSME e-commerce customers or 30%, then have a baccalaureate education of 90 respondents / MSME e-commerce customers or 18% and have a general high school education of 80 respondents / MSME e-commerce customers or 16%.

Table 2. Validity Test

<table>
<thead>
<tr>
<th></th>
<th>Product Innovation</th>
<th>Social Media</th>
<th>E-Commerce Business Competitiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Innovation</td>
<td>.443**</td>
<td>.399**</td>
<td>.495**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Social Media</td>
<td>.443**</td>
<td>.777**</td>
<td>.960**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>.399**</td>
<td>.777**</td>
<td>.850**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Business Competitiveness</td>
<td>.495**</td>
<td>.960**</td>
<td>.805**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
</tbody>
</table>

Note: ** - Correlation is significant at the 0.01 level (2-tailed).
Source: Data Processed SPSS Ver.- 2023 Program, (N = 500)

Table 2 of the validity test above shows that all question/statement items to measure product innovation variables (X.1), social media (X.2), e-commerce (Y.1) and the effectiveness of
business competitiveness (Y.2) in this study have a correlation coefficient greater than \( t_{table} = 0.165 \) and marked with a ** sign (\( t_{table} \) value for \( n = 500 \)). So, it can be concluded that all items in the question / statement indicators of product innovation variables (X.1), social media (X.2), e-commerce (Y.1) and business competitiveness (Y.2) are valid.

**Table 3. Reliability Test**

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>N of Items</td>
</tr>
<tr>
<td>.868</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item-Totals Statistics</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item- Total Correlation</th>
<th>Cronbach's Alpha Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Innovation</td>
<td>124.4320</td>
<td>100.735</td>
<td>.470</td>
<td>.928</td>
</tr>
<tr>
<td>Social Media</td>
<td>124.6540</td>
<td>95.016</td>
<td>.862</td>
<td>.797</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>112.7240</td>
<td>79.046</td>
<td>.751</td>
<td>.821</td>
</tr>
<tr>
<td>Business Competitiveness</td>
<td>113.4800</td>
<td>77.661</td>
<td>.888</td>
<td>.757</td>
</tr>
</tbody>
</table>

**Source:** Data Processed SPSS Ver.- 2023 Program, (\( N = 500 \))

Table 3 of the reliability test above shows that the question / statement items for the product innovation variable (X.1), social media (X.2), e-commerce (Y.1) and the effectiveness of business competitiveness (Y.2) have a Cronbach's Alpha value of 0.868 and Cronbach's Alpha If Item Deleted is above 0.6. There is a table value of 0.07 (\( N = 500 \)) so it can be argued that the question / statement items for product innovation variables (X.1), social media (X.2), e-commerce (Y.1) and business competitiveness (Y.2) are declared reliable.

**Table 4. Normality Test**

<table>
<thead>
<tr>
<th>Normality Test</th>
<th>Product Innovation</th>
<th>Social Media</th>
<th>E-Commerce</th>
<th>Business Competitiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>500</td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Normal Parameters *</td>
<td>Mean</td>
<td>33.9980</td>
<td>33.7760</td>
<td>45.7060</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>2.74139</td>
<td>2.80456</td>
<td>4.07293</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
<td>.128</td>
<td>.196</td>
<td>.219</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>.128</td>
<td>.184</td>
<td>.141</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>-.124</td>
<td>-.196</td>
<td>-.219</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>2.869</td>
<td>4.379</td>
<td>4.892</td>
<td>3.747</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.680</td>
<td>.120</td>
<td>.051</td>
<td>.032</td>
</tr>
</tbody>
</table>

**Note:** a. Test distribution is Normal.

**Source:** Data Processed SPSS Ver.- 2023 Program, (\( N = 250 \))

From table 4 above, it can be concluded that the results of the data normality test with Kolmogorov-Smirnov by comparing the probability number value or Asymp. Sig (2-
tailed) with a significance level of 0.05 or 5% with decision making if the significance value is less than 0.05 or 5% then the data distribution is abnormal. Based on the calculation of the SPSS Ver.-2022 output above, the value of the probability number or Asymp. Sig (2-tailed) with a significance level above 0.05 or 5%, the data is declared normally distributed.

Table 5. Autocorrelation Test

<table>
<thead>
<tr>
<th>Model Summary b</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.967 a</td>
<td>.936</td>
<td>.935</td>
<td>.94947</td>
<td>1.495</td>
</tr>
</tbody>
</table>

Note: a. Predictors: (Constant), E-Commerce, Product Innovation; b. Dependent Variable: Business Competitiveness

Source: Data Processed SPSS Ver.- 2023 Program, (N=500)

The results in the table show that the autocorrelation test above produces a Durbin-Watson value of 1.495. This value is not less than -2 and not more than 2 so it can be concluded that the variables of product innovation (X.1), social media (X.2), e-commerce (Y.1) and business competitiveness (Y.2) do not occur autocorrelation in this study.

Table 6. Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.392</td>
<td>.380</td>
<td>1.033</td>
<td>.302</td>
<td></td>
</tr>
<tr>
<td>Product Innovation</td>
<td>.019</td>
<td>.009</td>
<td>.110</td>
<td>2.205</td>
<td>.028</td>
</tr>
<tr>
<td>Social Media</td>
<td>.017</td>
<td>.017</td>
<td>.073</td>
<td>1.010</td>
<td>.313</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>-.021</td>
<td>.011</td>
<td>-.128</td>
<td>-1.801</td>
<td>.072</td>
</tr>
</tbody>
</table>

Note: a. Dependent Variable RES2

Source: Data Processed SPSS Ver.- 2023 Program, (N = 500)

From table 5 above, it can be concluded that the results of the heteroscedasticity test data by looking at the column table, the significance value (Sig.) > 0.05 is above 0.05, so it can be concluded that the variables of product innovation (X.1), social media (X.2), e-commerce (Y.1) and business competitiveness (Y.2) do not occur Heteroscedasticity symptoms.

Table 7. F-Simultaneous Test

<table>
<thead>
<tr>
<th>ANOVA b</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>Regression</td>
<td>027.101</td>
<td>2</td>
<td>2513.551</td>
<td>384.299</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>250.681</td>
<td>497</td>
<td>6.541</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>277.782</td>
<td>499</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: a. Predictors: (Constant), Social Media, Product Innovation; b. Dependent Variable: E-Commerce

Source: Data Processed SPSS Ver.- 2023 Program, (N=500)
Based on table 7 above, the indirect effect of simultaneous testing together shows a regression value of 5027.101, residual 3250.681, df 2, mean square 2513.551. f value 348.299 with sig .000 which means that indirectly together the variables of product innovation and social media have an indirect and significant effect on e-commerce.

Table 8. Partial t-test

<table>
<thead>
<tr>
<th>Coefficients *</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>6.550</td>
<td>1.464</td>
<td>4.474</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Product Innovation</td>
<td>.075</td>
<td>.034</td>
<td>.487</td>
<td>21.190</td>
<td>.005</td>
</tr>
<tr>
<td>Social Media</td>
<td>1.084</td>
<td>.046</td>
<td>.746</td>
<td>23.809</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: a. Dependent Variable: E-Commerce
Source: Data Processed SPSS Ver.- 2023 Program, (N = 500)

Based on the results of the path analysis in Table 8, the structural equation can be formulated as follows.

\[ Y_1 = 0.487X_1 + 0.746X_2 + e_1 \]  (1)

This structural equation can be interpreted, namely:

(1) The product innovation variable is 0.487, which means that product innovation has a significant effect on e-commerce, meaning that if product innovation increases, e-commerce will also increase.

(2) The social media interest variable has a coefficient value of 0.746, which means that consumer buying interest has a positive effect on business competitiveness, meaning that the more consumer buying interest increases, the business competitiveness will increase.

Table 9. F-Simultaneous Test

<table>
<thead>
<tr>
<th>ANOVA b</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>Regression</td>
<td>508.614</td>
<td>3</td>
<td>2169.538</td>
<td>406.629</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Residual</td>
<td>447.136</td>
<td>496</td>
<td>.901</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>955.750</td>
<td>499</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: a. Predictors: (Constant), E-Commerce, Product Innovation, Social Media; b. Dependent Variable: Business Competitiveness
Source: Data Processed SPSS Ver.- 2023 Program, (N=500)

Based on table 9 above, the direct effect of simultaneous testing together shows an R value of 0.967 R-Square 0.936 adjusted R-Square 0.935 and Std the Estimate 0.949. The regression value is 6508.614, residual 447.136, df 3, mean square 2169.629, the value of f = 2406.629 with sig .000 which means that indirectly together the variables of product innovation, social media and e-commerce have a direct and significant effect on business competitiveness.
Table 10. Partial t-test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-.279</td>
<td>.554</td>
<td>-.503</td>
<td>.615</td>
<td>.796</td>
</tr>
<tr>
<td>Product Innovation</td>
<td>.078</td>
<td>.013</td>
<td>.078</td>
<td>6.094</td>
<td>.000</td>
</tr>
<tr>
<td>Social Media</td>
<td>1.090</td>
<td>.025</td>
<td>.819</td>
<td>44.062</td>
<td>.000</td>
</tr>
<tr>
<td>E-Commerce</td>
<td>.127</td>
<td>.017</td>
<td>.138</td>
<td>7.602</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: a. Dependent Variable: Business Competitiveness

Source: Data Processed SPSS Ver.- 2023 Program, (N = 500)

Based on the results of the path analysis in Table 10, the structural equation can be formulated as follows.

\[ Y_2 = 0.078 X_1 + 0.819 X_2 + 0.138 Y_1 + e_1 \]  

(2)

This structural equation can be interpreted, namely:

1. Product innovation variable 0.078, which means that product innovation has a significant effect on business competitiveness, meaning that if product innovation increases, business competitiveness will also increase.

2. Social media variable is 0.819, which means that social media has a significant effect on business competitiveness, meaning that if social media increases, business competitiveness will also increase.

3. The e-commerce variable has a coefficient value of 0.138, which means that e-commerce has an effect and is significant on business competitiveness, meaning that the more e-commerce increases, business competitiveness will increase. In this study, the effect of product innovation, social media, e-commerce and business competitiveness was calculated through SPSS Ver.- 2022 for windows.

The Initial Confirmatory Factor Analysis (CFA) model that has been carried out with the (AMOS) Program obtained the values, that describe on Figure 8.

In Figure 8, the magnitude of the influence of product innovation variables, social media and e-commerce, each value of the magnitude of influence is obtained from the standard Beta coefficient and the value of each error variable from each structural equation. Based on the path diagram in Figure 3, the calculation of the results of the Goodness of Fit test for the initial stage Structural Model can be summarized which will be presented in Table 11 below.

Table 11 shows the summary results of the Goodness of Fit test value of the Structural Model of government policy variables, market orientation and early stage business performance that have not found the best model. To achieve the maximum level of Goodness of Fit from Confirmatory Factory Analysis (CFA) from the GFI, AGFI, TLI, CFI, NFI, PGFI and RMSEA values, it is necessary to modify the structural model including: correlation between variables and indicators and elimination of indicators to improve the suitability of the Good of Fit (GoF) model, Confirmatory Factor Analysis (CFA) Structure Equation Modeling (SEM) (Latan H. and Temalagi S., 2013).
Figure 8. Preliminary CFA Exogenous and Endogenous Good of Fit Analysis
Source: Data processed by SEM Program AMOS Ver, -, 2023

Figure 9. CFA Modified Exogenous and Endogenous Good of Fit Model
Source: Data processed by SEM Program AMOS Ver, -, 2023
Table 11. Goodness of Fit Test Results of the Initial Stage Structural Model

<table>
<thead>
<tr>
<th>Goodness Of Fit Index</th>
<th>Cut-Off Value</th>
<th>Result Of Model</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>91.670</td>
<td>199.691</td>
<td>Marginal</td>
</tr>
<tr>
<td>Probability</td>
<td>≥ 0,05</td>
<td>0,000</td>
<td>Marginal</td>
</tr>
<tr>
<td>GFI</td>
<td>≥ 0.90</td>
<td>0.642</td>
<td>Marginal</td>
</tr>
<tr>
<td>AGFI</td>
<td>≥ 0.90</td>
<td>0.479</td>
<td>Marginal</td>
</tr>
<tr>
<td>TLI</td>
<td>≥ 0.95</td>
<td>0.572</td>
<td>Marginal</td>
</tr>
<tr>
<td>CFI</td>
<td>≥ 0.95</td>
<td>0.662</td>
<td>Marginal</td>
</tr>
<tr>
<td>RMSEA</td>
<td>≤ 0.08</td>
<td>0.231</td>
<td>Marginal</td>
</tr>
</tbody>
</table>

Source: Results of SEM Calculation Amos Ver, 2022 (N=250), 2023

Table 12. Final Stage Structural Model Goodness of Fit Test Results

<table>
<thead>
<tr>
<th>Goodness Of Fit Index</th>
<th>Cut-Off Value</th>
<th>Result Of Model</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>Expected smaller</td>
<td>82,303</td>
<td>Good</td>
</tr>
<tr>
<td>Probability</td>
<td>≥ 0.05</td>
<td>0,000</td>
<td>Good</td>
</tr>
<tr>
<td>GFI</td>
<td>≥ 0.90</td>
<td>0.977</td>
<td>Good Fit</td>
</tr>
<tr>
<td>AGFI</td>
<td>≥ 0.90</td>
<td>0.943</td>
<td>Good Fit</td>
</tr>
<tr>
<td>TLI</td>
<td>≥ 0.95</td>
<td>0.985</td>
<td>Good Fit</td>
</tr>
</tbody>
</table>

Source: SEM Calculation Results AMOS Ver, 2023 (N = 500)

Based on Table 12, the variables of government policy, market orientation and business performance obtained a chi square value of 82.303 with a probability of 0.000 < 0.05, RMSEA value of 0.043 ≤ 0.08, TLI value of 0.983 > 0.950 CFI value of 0.993 > 0.95 GFI value of 0.977 > 0.90 and AGFI of 0.943 > 0.90 and loading factors are all above 0.5. Thus indicating that this model fit test results in a good acceptance where all suggested model fit parameters have been met (Hair J, Anderson R, Tatham R and Black W, 2018). Thus, the model is firmly stated that the covariance or correlation matrix of the analyzed data sample is in accordance with the population covariance or correlation matrix estimated in the proposed model for the variables of product innovation, social media, e-commerce and business competitiveness.

Table 13. Regression Analysis

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y.1 ↔ X.1</td>
<td>0.329</td>
<td>0.073</td>
<td>4.503</td>
<td>***</td>
<td>Par-11</td>
</tr>
<tr>
<td>Y.1 ↔ X.2</td>
<td>-0.280</td>
<td>0.041</td>
<td>6.780</td>
<td>***</td>
<td>Par-12</td>
</tr>
<tr>
<td>Y.1 ↔ X.1</td>
<td>0.189</td>
<td>0.051</td>
<td>3.704</td>
<td>***</td>
<td>Par-13</td>
</tr>
<tr>
<td>Y.2 ↔ X.2</td>
<td>0.184</td>
<td>0.040</td>
<td>4.573</td>
<td>***</td>
<td>Par-14</td>
</tr>
<tr>
<td>Y.2 ↔ Y.1</td>
<td>0.462</td>
<td>0.043</td>
<td>10.825</td>
<td>***</td>
<td>Par-12</td>
</tr>
</tbody>
</table>

Source: SEM Calculation Results AMOS Ver, 2023 (N=500)

Hypothesis Testing

Hypothesis 1

Based on hypothesis testing, it is evidenced by the t-value of 4.503 > 1.96 with a significance P-Value of 0.000 < 0.05 (5%), this shows that product innovation has a significant effect on e-commerce, which means that the first hypothesis is accepted.

Hypothesis 2

Based on hypothesis testing, it is evidenced by a t-value of 6.780 > 1.96 with a significance P-Value of 0.000 < 0.05 (5%), this shows that social media has a significant effect on e-commerce, which means that the second hypothesis is accepted.

Hypothesis 3

Based on hypothesis testing, it is evidenced by a t-value of 3.704 > 1.96 with a significance P-Value of 0.000 < 0.05 (5%), this shows that product innovation has a significant effect on business competitiveness, which means that the third hypothesis is accepted.

Hypothesis 4

Based on hypothesis testing, it is evidenced by a t-value of 4.573 > 1.96 with a significance P-Value of 0.000 < 0.05 (5%), this shows that social media has a significant effect on business competitiveness.
competitiveness, which means that the fourth hypothesis is accepted.

**Hypothesis 5**

Based on hypothesis testing, it is proven that the t-value is 10.825 > 1.96 with a significance P-Value of 0.000 < 0.05 (5%), this shows that e-commerce has a significant effect on business competitiveness, which means that the fifth hypothesis is accepted.

**Discussion**

**Product Innovation on E-Commerce**

The results showed that product innovation indirectly (indirect effect) affects e-commerce of MSME products with a loading factor value of 0.329 with a path coefficient of 0.284 with a t-value of 4.503 > 1.96 with a p-value < 0.005. This means that if product innovation will be enabled, it will affect the e-commerce of MSME products. The achievement of e-commerce of MSME products cannot be separated from how product innovation is provided to customers/consumers of e-commerce of MSME products. Where product innovation includes product introduction, product design and changes in product components as a form of e-commerce of MSME products to consumer customers. If you look at the research results which show that product innovation affects the e-commerce of MSME products, then MSME product owners must be able to provide e-commerce of MSME products to customers/consumers with business to business, business to consumer, consumer to consumer and consumers to consumers.

The initial Confirmatory Factor Analysis (CFA) results of product innovation variables consist of indicators of product introduction, product design and changes in product component changes. E-commerce variables consist of business to business, business to consumer, consumer to consumer and consumer to business indicators. In line with research conducted by Jayashree, S, Malarvizhi, C (2016) shows that product innovation has a significant effect on e-commerce.

The results of the final Confirmatory Factor Analysis (CFA) and the results of the product innovation variable hypothesis consist of indicators of product introduction where e-commerce online products offered to customers/consumers need to get a good understanding introduction. The next indicator is the product design given to customers/consumers of e-commerce MSME products must be designed as well as possible to provide attractiveness, make curiosity and customers/consumers like. As well as indicators of changes in product components, there needs to be a good understanding to customers/consumers, especially if there are changes in each component of the product offered. E-commerce variables with business to business indicators where every e-commerce MSME product business produced needs to think about business for the long term to ensure business sustainability in e-commerce MSME products. Business indicators for consumers where starting from MSME product business efforts, of course, must provide good benefits to customers / consumers in order to provide excellence in MSME product e-commerce. The next indicator is consumers for consumers where e-commerce MSME products obtained by customers/consumers must be able to attract new customers/consumers in order to provide sustainability for MSME products. As well as consumer indicators for businesses where customers/consumers of MSME products must be able to have a long-term business impact with every customer/consumer who succeeds in getting new customers/consumers will be given an award. In line with research that states one of the main pillars of the national economy with an independent perspective and has great potential to improve people's welfare. SMEs have limitations in various ways, including limitations in accessing technology, capital, information and markets. Empowerment of SMEs based on regional potential and market orientation needs to be done. The influence of entrepreneurial orientation, product innovation, e-commerce utilization and market orientation has a significant effect on business performance through competitive advantage (Susana, E, SDarsono, J and Andarwati, M, 2019). Further
research shows the following e-commerce opportunities to influence satisfaction and trust in making transactions, providing the best service, satisfying customer expectations, and not being a threat to MSMEs (Kurniawati, E, Al Siddiq, I and Idris, 2020).

**Social Media on E-Commerce**

The results showed that product innovation indirectly (indirect effect) had an effect on e-commerce of MSME products with a loading factor value of 0.280 with a path coefficient of 0.301 with a t-value of 6.780> 1.96 with a p-value <0.005. This means that if social media will be functioned, it will affect the e-commerce of MSME products. The achievement of e-commerce of MSME products cannot be separated from how social media is provided to customers/consumers of e-commerce of MSME products. Where social media includes social media that is easily accessible and connected to the business community. If you look at the research results which show that social media has an effect on e-commerce of MSME products, then MSME product owners must be able to provide e-commerce of MSME products to customers/consumers with business to business, business to consumer, consumer to consumer, and consumers to business. The initial Confirmatory Factor Analysis (CFA) results of social media variables consist of social media indicators, easily accessible and connected to the business community. E-commerce variables consist of business to business, business to consumer, consumer to consumer and consumer to business indicators. In line with research conducted by Javid, E, Nazari, M and Ghaeli, M (2019) shows that social media has a significant effect on e-commerce.

The results of the final Confirmatory Factor Analysis (CFA) and the results of the social media variable hypothesis consist of social media indicators where through this application social networks create a community of MSME product lovers in Indonesia, every MSME product offered to MSME customers/consumers needs to be packaged as well as possible to provide attractiveness and benefits in each product offered. Furthermore, the indicator is easy to access where every e-commerce product for MSME products offered to customers/consumers must provide easy access to every product in online services. As well as indicators connected to business communities where the creation of a new community in social media applications for MSME product lovers in Indonesia will create a large business area between provinces and abroad. E-commerce variables with indicators of business to business, business to consumer, consumer to consumer and consumer to business. In line with research social networking has gained tremendous attention in the last decade and as the evolution takes place, accessing social networking sites such as Twitter, Facebook, LinkedIn, Instagram and YouTube has become very affordable. The main objective of this project is to identify the role of social media marketing strategies and evaluate its importance over traditional marketing strategies in building brand name and consumer behavior. The dataset on which the research has been conducted consists of a sample of tweets on @Samsung-Mobile, quarterly sales of @Samsung Mobile and information of its followers on Twitter. The analysis and findings of this study highlighted the geographical distribution of @Samsung Mobile's followers, the brand's market outreach, and the relationship between increased followers and @Samsung Mobile's quarterly sales (Singh, M and Singh G, 2018). Also, the results showed that customer preference, non-delivery risk and financial and security transaction risk significantly influenced social media and e-commerce online shopping platform usage among micro SMEs in Malaysia. This study has important implications that provide new start-up business owners with the importance of consumer risk perception to adopt with adequate risk reduction strategies in the online social media and e-commerce shopping environment (Johan, M, Syed, M and Adnan H, 2019).

**Product Innovation Leads to Company Competitiveness**

The results showed that product innovation directly (direct effect) had an effect on business competitiveness with a loading factor value of
0.189 with a path coefficient of 0.165 with a t-value of 3.704> 1.96 with a p-value <0.005. This means that if product innovation will be functioned, it will affect business competitiveness. The achievement of business competitiveness is inseparable from how product innovation is given to MSME product managers in providing their business competitiveness to customers/consumers. Where product innovation includes product introduction, product design and changes in product components as a form of business competitiveness to consumer customers. If you look at the research results which show that product innovation affects business competitiveness, then MSME product owners must be able to provide MSME product business competitiveness to customers/consumers with competitive prices, product quality, product uniqueness and financial performance.

The initial Confirmatory Factor Analysis (CFA) results of product innovation variables consist of indicators of product introduction, product design and product component changes. Business competitiveness variables consist of competitive prices, product quality, product uniqueness and financial performance. In line with the research results show that innovation strategies consisting of administrative innovation, technical innovation, process innovation, and product innovation can improve organizational competitiveness in the context of the manufacturing industry. Administrative innovation has a positive effect on business competitiveness. Technical innovation has a positive effect on business competitiveness. Process innovation has a positive effect on business competitiveness. Then, product innovation has a positive effect on business competitiveness. Process innovation has a greater influence in improving business competitiveness compared to other innovation strategies by (Riyadi, S., & Sumardi, S, 2017).

The final Confirmatory Factor Analysis (CFA) results and hypothesis results of product innovation variables consist of indicators of product introduction where the competitiveness of online product businesses offered to customers/consumers needs to get a good introduction and understanding. The next indicator is the product design given to customers/consumers through the competitiveness of MSME product businesses must be designed as well as possible to provide attractiveness, make curiosity and customers/consumers like. As well as indicators of changes in product components, there needs to be a good understanding to customers/consumers, especially if there are changes in each component of the product offered. Business competitiveness variables with competitive price indicators where every MSME product offered needs to provide good benefits and usability to customers/consumers. Product quality indicators where every MSME product offered needs to have good quality assurance so that customers/consumers feel the MSME products used. Then the indicator of product uniqueness where every MSME product marketed to MSME customers contains unique characteristics compared to other competitors. As well as indicators of financial performance where the management of cash flow for MSME products, both in sales and employee payroll, is carried out professionally so that the financial performance of MSME products runs healthily. Some research results show that the observed relationships between the measured constructs are different, and they depend on how many employees the company has. This paper contributes to the existing body of literature, provides a solid foundation for future research in this domain, and other researchers and managers can use this paper as an insight into the relationships between important business metrics (Đorđević, D., & Ćoćkalo, D, 2019). As well as the findings show that businesses in the manufacturing and services sectors present the highest levels of competitive efficiency, which is explained by the pillars related to product innovation and business networking. The proposed competitiveness index is a valuable tool that can support businesses. The decision-making process as well as the design of specific strategies that contribute to improving the resource allocation process and the configuration of competitive pillars at the business level (Alonso, Š., & Leiva, J. C. 2019).
Social Media on Business Competitiveness

The results showed that product innovation directly (indirect effect) had an effect on e-commerce of MSME products with a loading factor value of 0.184 with a path coefficient of 0.200 with a t-value of 4.573> 1.96 with a p-value <0.005. This means that if social media will be functioned, it will affect the competitiveness of MSME product businesses. The achievement of business competitiveness of MSME products cannot be separated from how social media is provided to customers/consumers of MSME products. Where social media includes social media, is easily accessible and connected to the business community. If you look at the research results which show that social media has an effect on the competitiveness of MSME product businesses, then MSME product owners must be able to provide MSME product business competitiveness to customers/consumers with competitive prices, product quality, product uniqueness and financial performance.

The initial Confirmatory Factor Analysis (CFA) results of social media variables consist of social media indicators, easily accessible and connected to the community. Business competitiveness variables consist of competitive prices, product quality, product uniqueness and financial performance. In line with the correlation analysis results revealed that social media marketing is positively and significantly related to the competitiveness of tourism MSMEs. Recommendations for utilizing social media marketing integration into small business competitive strategies are provided (Rambe, P. (2017).

The results of the final Confirmatory Factor Analysis (CFA) and the results of the social media variable hypothesis consist of social media indicators where through this social networking application a community of MSME product lovers is created in Indonesia, every MSME product offered to MSME customers/consumers needs to be packaged as well as possible to provide attractiveness and benefits in every product offered. Furthermore, the indicator is easy to access where every e-commerce product for MSME products offered to customers/consumers must provide easy access to every product in online services. As well as indicators connected to the business community where the creation of a new community in social media applications for MSME product lovers in Indonesia will create a large business area between provinces and abroad. Business competitiveness variables with competitive price indicators where every MSME product offered needs to provide good benefits and usability to customers/consumers. Product quality indicators where every MSME product offered needs to have good quality assurance so that customers/consumers feel the MSME products used. Then the indicator of product uniqueness where every MSME product marketed to MSME customers contains unique characteristics compared to other competitors. As well as indicators of financial performance where the management of cash flow for MSME products both in sales and employee payroll is carried out professionally so that the financial performance of MSME products runs healthily.

As for some of the research results, among others, the findings show that most tourism SMEs use social media technology to maintain their customer base, solicit feedback from customers, assert their dominance in the market, maintain contact between their coworkers and share information. In addition, the findings show that there is a significant positive relationship between social media business networks and the competitiveness of these firms. The study recommends that tourism SMEs should create a policy framework for comprehensive stakeholder engagement that serves the interests of all individuals.

Conclusion: To improve the competitiveness of such firms, SMEs should incorporate social media into their formal internal and external information strategies (Rambe, P., Mosweunyane, L., & Dzansi, D, 2019). Then this research was conducted to identify additional risks resulting from the adoption of social media by businesses and to develop an integrated Information Technology (IT) governance control framework to address these risks. To address IT gaps, these risks are addressed at both strategic and operational levels. With the help of the processes in Control Objectives for
Information Technology and Related Technologies (COBIT) 5, this research provides safeguards or controls that can be implemented to address the IT risks that social media introduces to businesses. A business can ensure that it successfully manages IT-related risks at a strategic level through the implementation of protections and controls identified from COBIT 5. The study also briefly discusses the steps a business can follow to ensure IT-related risks at an operational level are addressed through the implementation of configuration controls (Gerber, P, 2016). Then research by Sahabuddin, R. (2016) in Indonesia, the small industry sector is one of the alternative types of strategies to support economic development in long-term development in Indonesia. Its role in equalization and provision of employment for the community and contribution to foreign exchange earnings prove that small businesses are not only dynamic but also productive. The purpose of this study is to analyze the local-based creative economy to support tourism attraction and to propose strategies and programs for the local creative economy in the Balla Peu traditional residential zone in Mamasa Regency (Rakib, M., 2017).

E-Commerce and Business Competitiveness

The results showed that e-commerce directly and indirectly (direct and indirect effect) had an effect on the competitiveness of MSME product businesses with a loading factor value of 0.462 with a path coefficient of 0.466 with a t-value of 10.825> 1.96 with a p-value <0.005. This means that if e-commerce will be enabled, it will affect the competitiveness of MSME product businesses. The achievement of business competitiveness of MSME products is inseparable from how e-commerce of MSME products is provided to customers/consumers of MSME products. Where e-commerce includes business to business, business to consumers, consumers to consumers and consumers to businesses. If you look at the results of the study which show that e-commerce affects the competitiveness of MSME product businesses, then the owner of the MSME product manager must be able to provide the competitiveness of MSME product businesses to customers/consumers with competitive prices, product quality, product uniqueness and financial performance.

The initial Confirmatory Factor Analysis (CFA) results of the e-commerce variable consisted of business to business, business to consumer, consumer to consumer and business to business indicators. In line with the research aims to develop a theoretical framework of e-business competitiveness. After the analysis of e-business diversity, a conceptual model describing e-commerce competitiveness as one of the most important activities of e-business is presented. The model includes four different but interrelated levels of analysis: firm level, industry level, country level, and global level (Čiarnienė, R., & Stankevičiūtė, G, 2015).

The final Confirmatory Factor Analysis (CFA) results and hypothesis results of e-commerce variables consist of indicators with indicators of business to business, business to consumer, consumer to consumer and consumer to business. Furthermore, business indicators for businesses where e-commerce businesses of MSME products from business sales to procurement of MSME product materials. Furthermore, consumer indicators for consumers where customers/consumers of e-commerce MSME products obtain products in accordance with the results and benefits received. As well as consumer indicators for businesses where customers/consumers of e-commerce MSME products get what they are looking for then e-commerce MSME products get back the community of customers/consumers which in turn can increase sales of MSME products. Business competitiveness variables with competitive price indicators where every MSME product offered needs to provide good benefits and usability to customers/consumers. Product quality indicators where every MSME product offered needs to have good quality assurance so that customers/consumers feel the MSME products used. Then the indicator of product uniqueness where every MSME product marketed to MSME customers contains unique characteristics compared to other competitors. As well as
financial performance indicators where the management of cash flow for MSME products both in sales and employee payroll is carried out professionally so that the financial performance of MSME products runs healthily. Some studies that support that e-commerce has a significant impact on business competitiveness includes building artificial intelligence customer service in E-commerce (Ping, N. L, 2019). Then a new approach to Internet marketing in E-commerce; Shows how advertisers need this innovation to succeed. E-Commerce is emerging as a new way to help business enterprises to compete in the market and thus contribute to economic success. In this research paper we will discuss about the Advanced SWOT Analysis of E-commerce in India oriented which will comprise of the strengths, weaknesses, opportunities and threats faced by e-commerce in the current scenario in India. India is an emerging economy and how e-commerce has played an important role in business growth and overall economic development (Khan, M. A., & Sagar, P, 2015). Then this article is about the practice and belief in technological innovation in the power of Social Media Based e-commerce Applications. This topic will discuss the important characteristics of Social Media-based e-stores for e-commerce businesses to successfully sell their products or services offered for the purpose of individual income. Moreover, Social Media-based e-commerce is a sustainable strategy that will help and guide you wisely, productively as well as improve the environment we live in (Gomeseria, R. V, 2020). The research provides information on the inception, emergence and current status of new and established industries and business segments that pioneered new technologies, introduced break-through marketing strategies or implemented innovative ways to serve new markets. It consists of detailed profiles of new industries, such as biometrics, risk management services, satellite, specialty tourism, and others (Smith, R. A, 2008).

Conclusion
Based on the test results and discussion above, the conclusion of this study are the direct and indirect effects of product innovation through indicators of product introduction, product design and product component changes. Social media variables through social media indicators, easily accessible and connected to the business community have a significant and significant effect on the competitiveness of MSMEs product businesses with indicators of competitive prices, product quality, product uniqueness and financial performance through e-commerce of MSME products with business to business indicators, business to consumers, consumers to consumers and consumers to businesses located in 27 districts / cities in South Sulawesi and East Java Provinces including Palopo City, Pare-Pare, Makassar, Batu Malang, Surabaya, Kediri and Madiun, Bulukumba, Sinjai, Bantaeng, Takalar, Gowa, Tana Toraja, Luwu, Maros, Pangkep, Soppeng, Wajo, Banyuwangi, Blitar, Bojonegoro, Gresik, Kediri, Lamongan, Magetan, and Malang.

Suggestion
Based on the research results and conclusions that have been described, there are several suggestions in terms of product innovation, what MSME product managers must do is that there is a need for a clear understanding of the indicators that form it, including product introduction, product design and changes in product components so that customers/consumers of MSME products can clearly recognize them. Then the social media variable needs to be further improved in terms of marketing so that customers/consumers of MSME products have an impact on the indicators that form it, namely social media, easy to access and connected to the business community. Which ultimately increases e-commerce of MSME products through business to business, business to consumer, consumer to consumer and consumer to business indicators and has a direct impact on creating business competitiveness with competitive prices, product quality, product uniqueness and financial performance.
Acknowledgments

Thanks to all parties, especially the managers of MSME e-commerce MSME products located in 27 districts / cities in South Sulawesi and East Java Provinces, including Palopo City, Pare-Pare, Makassar, Batu Malang, Surabayaya, Kediri and Madjuin, Bulukumba, Sinjai, Bantaeng, Takalar, Gowa, Tana Toraja, Luwu, Maros, Pangkep, Soppeng, Wajo, Banyuwangi, Blitar, Bojonegoro, Gresik, Kediri, Lamongan, Magetan, and Malang who have helped a lot in this research, so that this research on e-commerce of MSME products can be written and informed to MSME actors throughout Indonesia, especially in South Sulawesi and East Java Provinces.

References


Resources for Pre-Service Teacher Education Programs Among A Consortium of Five Texas Colleges. In Society for Information Technology & Teacher Education International Conference (pp. 2036-2039). Association for the Advancement of Computing in Education (AACE).


http://dx.doi.org/10.17512/pjms.2020.21.1.15


