

THE INFLUENCE OF EXTERNAL FACTORS ON ENTREPRENEURIAALLY-ORIENTED E-COMMERCE ADOPTION IN MSMEs: A CASE STUDY OF BALE BERDAYA SUMBAWA

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Abstract

This study investigates the influence of external factors on the adoption of entrepreneurially-oriented e-commerce among micro, small, and medium enterprises (MSMEs) of Bale Berdaya Sumbawa. Using a quantitative method with a sample of 100 MSME owners, data were collected through structured questionnaires and analyzed using multiple linear regression. The results show that external factors have a significant positive effect on entrepreneurially-oriented e-commerce adoption ($p < 0.05$), explaining 52.3% of the variance ($R^2 = 0.523$). Among the external factors examined, market demand and technological infrastructure demonstrated the strongest effects, with standardized beta coefficients of 0.421 and 0.367, respectively. These findings contribute theoretically by extending the understanding of e-commerce adoption through the lens of entrepreneurial orientation, highlighting how external stimuli interact with entrepreneurial behavior in digital contexts. Practically, the study offers actionable insights for policymakers, business support organizations, and digital platform providers to design interventions that enhance MSME competitiveness through targeted e-commerce strategies

Keywords: *Entrepreneurial orientation; e-commerce adoption; external factors; MSMEs; Bale Berdaya Sumbawa*

INTRODUCTION

PT Amman Mineral Nusa Tenggara (AMMAN) initiated the Bale Berdaya program in Sumbawa with the aim of empowering Micro, Small, and Medium Enterprises (MSMEs) through various business activities and the application of digital technology. This program was a collaboration between the local government and private institutions to enhance MSME players' skills and knowledge so they can compete in an increasingly competitive market. The training covers a wide range of topics, from brand creation to financial management, as well as business legality management such as NIB, BPOM, Halal certification, and IPR. The Bale Berdaya report highlights the program's success in recruiting more than 100 MSMEs from 500 registrants across seven sub-districts, achieving outcomes such as a 29% increase in participants' income, 95% of MSMEs obtaining NIB, 94% adopting technology, a 43% increase in entrepreneurial knowledge, and the creation of 30% new innovative products, such as lip balm made from honey dregs in Lunyuk District. (Aini, 2022).

Several external factors play a significant role in the adoption of entrepreneurially-oriented e-commerce among MSMEs. Government support through policies and programs promoting the digitalization of MSMEs can act as a crucial catalyst (Chatzoglou & Chatzoudes, 2016). Adequate technological infrastructure, including the availability of high-speed internet and digital devices, is a prerequisite for effective e-commerce implementation (Awiagah et al., 2016). Market conditions, such as the level of competition and consumer demand for online transactions, influence MSMEs' motivation to adopt e-commerce (Andi Arifwangsa Adiningrat et al., 2023). Furthermore, access to training and digital skills development is an essential factor in enhancing MSMEs' capacity to adopt and optimally utilize e-commerce (Abou-Shouk et al., 2016).

Information and Communication Technology (ICT) has had a major impact on MSMEs. The government has a responsibility to maintain the economic cycle of MSMEs. Aini & Anggriani (2023) say that the government has a duty to keep the MSMEs' economic cycle running properly. While the internet has become an integral part of daily life (Gunawan et al., 2021). Data from APJII (2019) shows that internet penetration reached 73.7% of the population, facilitating fast access to information that helps entrepreneurs develop their businesses more effectively

(Pratama et al., 2024). This move to digital technology opens up new ways for MSMEs to grow their businesses and become more competitive. But small and medium-sized businesses (MSMEs) in places like Sumbawa still have trouble using e-commerce because of outside factors. Previous studies have identified various factors influencing MSMEs' decisions to adopt e-commerce (Alrousan & Jones, 2016), and revealed a close relationship between e-commerce adoption and entrepreneurial orientation (Senderovitz et al., 2016) MSMEs with extensive business networks and active community engagement are more likely to adopt new technologies. Support such as technical assistance, training, and knowledge sharing has proven to be instrumental in the successful adoption of e-commerce, along with strategic partnerships and community support. However, most research still focuses on internal factors, with the role of external factors in developing countries remaining underexplored (Fauzan et al., 2021) Moreover, the integration of entrepreneurial perspectives into e-commerce adoption studies is still relatively limited (Wijaya & Widjaja, 2023). and research in remote areas of Eastern Indonesia is scarce (Pratamansyah, 2024)

This study focuses on the importance of digital transformation for MSMEs to enhance their competitiveness in the global market and their role in the national economy. Adopting entrepreneurially-oriented e-commerce is expected not only to improve MSME business performance but also to promote inclusive economic growth (Tarutė & Gatautis, 2014). The case of Bale Berdaya Sumbawa MSMEs is particularly relevant as it illustrates the unique dynamics and challenges of technology adoption in a region with high economic potential but limited infrastructure. This research aims to examine in detail the external factors influencing the adoption of entrepreneurially-oriented e-commerce among Bale Berdaya MSMEs, with the expectation of contributing both theoretically and practically to MSME development in the digital era. This study will help us learn more about how these things affect each other and how they affect MSMEs' choices about whether to use e-commerce technology. In general, this study should help make small and medium-sized businesses (MSMEs) more successful in the digital economy, both in theory and in practice.

LITERATURE REVIEW

Model Development *E-commerce Adoption*

E-commerce adoption among Micro, Small, and Medium Enterprises (MSMEs) has been widely discussed in both developed and developing countries. Various studies highlight its potential to improve market reach, operational efficiency, and (Laudon & Traver, 2021; Turban et al., 2023). In developing contexts, such as Indonesia, adoption is often influenced by infrastructure readiness, perceived ease of use, and external pressures (Putri et al., 2021). While many scholars agree on these enabling factors, others emphasize constraints such as digital literacy gaps, lack of trust in online transactions, and inadequate regulatory frameworks (Ahmad et al., 2022). This divergence indicates that e-commerce adoption is not a uniform process, but is shaped by contextual factors, suggesting the need for a more nuanced examination.

When businesses, especially small and medium-sized ones, use digital technology to make their operations more efficient and competitive, this is called "adoption." Molla & Licker (2005) say that e-commerce growth can be measured in a number of ways, such as websites, the use of digital tools for purchases, and the integration of electronic payment systems. Kholifah (2021) research shows that how people feel about technology, subjective values, and how much control they think they have over their behavior all play a big role in how businesses decide whether to use e-commerce. This acceptance is also affected by outside factors such as backing from the government, the state of technological facilities, and the level of competition in the market. Adopting e-commerce has become one of the most important things for MSMEs to do to stay alive in the digital world. Ausat et al (2022) research shows that small and medium-sized businesses can become up to 30% more efficient by using digital technology, which can also help them get a bigger piece of the market. But problems like not knowing how to use technology and not having enough access to it are still big problems. To help small businesses take advantage of the opportunities that digital technology presents, it is important to know what makes people start using e-commerce. Some studies, such as Awiagah et al (2016), stress that external pressures from customers and competitors accelerate adoption, whereas others Kshetri (2018) argue that internal capabilities, including managerial skills and innovation capacity, are more decisive. This contrast highlights the importance of integrating both perspectives when analyzing adoption patterns.

Government Support, Entrepreneurial Orientation, and E-Commerce Adoption in Sumbawa

Government support plays a pivotal role in driving e-commerce adoption among MSMEs, especially in regions with developing digital infrastructure such as Sumbawa. This support can take various forms, including tax incentives, digital skills training, access to financing, and the development of reliable internet infrastructure.

According to a study by Utomo et al (2024), strong government policies and targeted assistance significantly contribute to increasing e-commerce adoption rates among small and medium-sized enterprises.

In the context of Sumbawa, government-run digital literacy programs not only enhance technical skills but also foster entrepreneurial confidence, enabling business owners to explore new market opportunities online. Infrastructure projects, such as expanding internet coverage to rural areas, reduce logistical and technological barriers, making it feasible for entrepreneurs to integrate digital platforms into their business models. When combined with a strong entrepreneurial orientation—characterized by innovativeness, proactiveness, and strategic risk-taking—government support becomes even more impactful. Entrepreneurs with high EO are more likely to leverage government-provided training to experiment with digital marketing strategies, innovate product offerings, and proactively seek out new customer segments. For example, a Sumbawa-based MSME owner with strong EO might use government-provided e-commerce training to develop a unique branding strategy targeting niche tourism markets, thereby transforming public support into tangible competitive advantages.

H1 Government Support and E-commerce Adoption

Technology Infrastructure and E-commerce Adoption

For MSMEs to adopt and utilize e-commerce effectively, adequate technology infrastructure is essential. This includes stable internet connectivity, high network quality, and supporting digital systems such as data centers and cloud computing services. When these elements are well-developed, they reduce operational barriers and increase the likelihood of successful e-commerce adoption. Asteria et al (2023) found that the availability of a broad and high-quality internet network significantly enhances the effectiveness of e-commerce-based business activities, as it allows seamless transactions and real-time communication with customers (*X: infrastructure quality → Y: e-commerce performance*). Similarly, Suasih & Wijaya (2022) reported that robust technology infrastructure not only ensures faster and safer online transactions but also builds customer trust toward e-commerce platforms (*X: infrastructure reliability → Y: consumer trust and adoption*). Extending these findings, Hossain & Chowdhury (2022) demonstrated that MSMEs with access to advanced digital systems—such as cloud-based inventory management—show higher levels of e-commerce adoption and achieve greater sales growth compared to those with limited infrastructure (*X: digital system availability → Y: adoption rate and sales performance*).

H2 Technology Infrastructure and E-commerce Adoption

Market Conditions and E-commerce Adoption

One outside factor that can help or hurt MSMEs' acceptance of e-commerce is the state of the market. Businesses usually look for new ways to get customers and stay ahead of the competition when the market is tough. According to a study by Ayes et al (2016), businesses are more likely to use new technologies like e-commerce to meet the wants of current customers who are moving more and more toward online purchases. Along with competition in the market, product difference is another important factor that leads people to use e-commerce. Ayes et al (2024) said that businesses with unique goods tend to learn how to use digital platforms faster because e-commerce gives them more opportunities to reach customers around the world. That being said, businesses are much better able to use this technology successfully when they have access to training programs (Andiana & Yuliarmi, 2022). As a result, changing market conditions put pressure on small and medium-sized businesses (SMEs) to use e-commerce tactics in order to stay in business in this era of global digitization.

H3 Market Conditions and E-commerce Adoption

Training Access and E-commerce Adoption

Access to training also contributes to the development of entrepreneurs' confidence in using new technology. When SMEs receive support through training programs, they are more likely to feel comfortable trying and implementing e-commerce technology in their operations. Gunawan et al (2021) state that increasing digital literacy through training can help MSME owners make better decisions regarding investments in technology and online marketing strategies. This is very important considering that confidence in using technology often becomes the main barrier for many SMEs to transition from traditional methods to digital. Additionally, Atmojo et al (2024) highlight the importance of branding and digital marketing in increasing product visibility and consumer engagement. Training that covers these aspects not only provides technical skills but also equips entrepreneurs with knowledge on how to effectively market their products on e-commerce platforms. Because of this, MSMEs can do better in the digital market and fight better in this globalized world if they have access to thorough training. So, putting money into training programs should be seen as a long-term way to help small businesses start using e-commerce.

Tabel 1. Variable operationalization

Variables	Indicator/Measurement	Scale
E-commerce Adoption	1) Adoption of digital technology 2) Online transaction security	Likert Scale (1-5)
<p>Definition: E-commerce adoption refers to the integration of digital technologies in business operations (Molla & Licker, 2005). E-commerce adoption among Micro, Small, and Medium Enterprises (MSMEs) has been widely discussed in both developed and developing countries. Various studies highlight its potential to improve market reach, operational efficiency, and competitiveness (Laudon & Traver, 2021; Turban et al., 2023) In developing contexts, such as Indonesia, adoption is often influenced by infrastructure readiness, perceived ease of use, and external pressures (Putri et al., 2021) Adoption is not a uniform process, but is shaped by contextual factors, suggesting the need for a more nuanced examination (Kurnia et al., 2019) people feel about technology, subjective values, and how much control they think they have over their behavior all play a big role in how businesses decide whether to use e-commerce (Kholifah, 2021) Small and medium-sized businesses can become up to 30% more efficient by using digital technology, which can also help them get a bigger piece of the market (Ausat et al., 2024) Stress that external pressures from customers and competitors accelerate adoption (Awiagah et al., 2016) The internal capabilities, including managerial skills and innovation capacity, are more decisive (Kshetri, 2018)</p>		
Government Support	1) Capital assistance 2) Quality of	Likert Scale (1-5)
<p>Definition: Government support includes policies and initiatives aimed at facilitating e-commerce adoption (Utomo et al., 2024).</p>		
Technology Infrastructure	Quality and accessibility of internet services and digital infrastructure.	Likert Scale (1-5)
<p>Definition: Technology infrastructure encompasses the physical and virtual resources that enable e-commerce (Asteria et al., 2023). Robust technology infrastructure not only ensures faster and safer online transactions but</p>		

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also builds customer trust toward e-commerce platforms (Suasih & Wijaya, 2022) MSMEs with access to advanced digital systems—such as cloud- based inventory management—show higher levels of e-commerce adoption and achieve greater sales growth compared to those with limited infrastructure (Hossain & Chowdhury, 2022)		
Market Conditions	1) Market competition 2) Product differentiation	Likert Scale (1-5)
Definition: Market conditions refer to the competitive landscape and consumer demand for online shopping (Ayes et al., 2024). Businesses with unique goods tend to learn how to use digital platforms faster because e-commerce gives them more opportunities to reach customers around the world (Ayes et al., 2024) Businesses are much better able to use this technology successfully when they have access to training programs (Andiana & Yuliarmi, 2022)		
Training Access	1) Training programs 2) Educational support	Likert Scale (1-5)
Definition: Training access involves the provision of educational resources to improve e-commerce capabilities (Kurniawati et al., 2021). Increasing digital literacy through training can help MSME		

METHOD

Data Collection

This study uses a quantitative method to test how outside factors, such as government support, technological infrastructure, market conditions, and access to training, affect the choice of Bale Berdaya Sumbawa MSMEs to start doing business online and become more entrepreneurial. Questionnaires were sent to MSME players, who were also the study samples, to get first-hand information. The collected data were then put through a multiple regression model to find the cause- and-effect link between the independent variables (outside factors) and the dependent variable (e-commerce usage). This study will use both regression analysis and descriptive statistics to talk about the people who answered the survey and the research factors in general. Stratified Sampling is the method used to pick samples. The population is split into groups based on business types like food, services, and hobbies. A questionnaire that was sent out online was used as a research tool in this study. The purpose of this poll was to get information from MSME players. Researchers can easily and quickly reach more people and collect and analyze more data when they use Google Form. This method lets researchers get a lot of useful information from a lot of different people. This way, the study's results can give a full picture of how outside factors affect the use of e-commerce by MSMEs in Sumbawa. A Likert scale with 5 intervals was used to measure this study. The scale has 5 options: strongly agree (score 5), agree (score 4), neutral (score 3), disagree (score 2).

Analysis Method

The summary statistical value of each respondent was found by adding up the answers to the questionnaire. The process of data analysis was to look at all of the interviewees' detailed data. The steps of the study process are shown below in Figure 1.



Figure 1. Research Procedure

Figure 1. Shows that the process of compiling quantitative data is carried out through several stages, namely: (1) Compiling the Instrument, the instrument used is in the form of a Questionnaire with statements that support the variables, (2) Data Collection is carried out by distributing questionnaires via an online platform to reach respondents more efficiently, The most common data collection tool used in quantitative research. The questionnaire contains closed questions with predetermined answer choices for 100 respondents from Bale Berdaya MSME actors. which were selected randomly. (3) Data analysis and interpretation were processed using statistical tests, including validity tests, reliability tests and multiple regression analysis tests which were then processed using SPSS software. (4) conclusion. The researcher involved 4 independent variables and 1 dependent variable, along with variables consisting of several indicators. Government Support (X1), Capital Assistance (Utomo et al., 2024); Quality of Public Services (Kadyrova, 2023). Technology Infrastructure (X2), Internet Network Availability (Asteria et al., 2023); Digital Infrastructure Quality (Wijaya & Widjaja, 2023). Market Conditions (X3), Market Competition (Ayes et al., 2016); Product Differentiation (Ayes et al., 2024). Training Access (X4), Training Programs (Andiana & Yuliarmi, 2022); Educational Support (Ramdhan, 2023). E-commerce (Y), Adoption of Digital Technology (Almaududi Ausat et al., 2022); Online Transaction Security (Buluati et al., 2023).

Population and Sample

The population of this study consisted of 250 registered MSMEs under Bale Berdaya Sumbawa. A sample of 100 MSMEs was selected to ensure adequate statistical power for analysis while maintaining feasibility in terms of time and resources. This sample size was determined based on the Slovin formula with a margin of error of 5%, which is considered acceptable for social science research. The selected sample is expected to provide a reasonable representation of the population.

Sampling Technique

A stratified sampling method was employed to ensure that the diversity of MSMEs in terms of business sectors (e.g., food and beverage, handicrafts, fashion, services) was adequately represented. Four strata were defined based on these sectors. The number of respondents selected from each stratum was proportional to the total number of MSMEs in that category within Bale Berdaya’s registry: 40 from food and beverage, 25 from handicrafts, 20 from fashion, and 15 from services. Respondents within each stratum were chosen randomly to minimize selection bias.

RESULTS AND DISCUSSION

Respondents

The study uses a questionnaire with 18 questions that are broken down into four groups: government support (X1), technology infrastructure (X2), market conditions (X3), and access to training (X4). The following are the results of the data analysis:

Table 2. Respondents Based on Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	45	45.0	45.0	45.0
	Women	55	55.0	55.0	100.0
	Total	100	100.0	100.0	

Source: Processed primary data, 2024

Based the table, the respondents consisted predominantly of female entrepreneurs (68%) aged between 31–40 years (46%), with most having completed senior high school (54%) and operating their businesses for more than five years (42%). These characteristics suggest a relatively experienced group of MSME owners with a moderate level of formal education, potentially influencing their adoption of e-commerce.

Descriptive Variabel

Table 3. Descriptive Variable Values

	N	Minimum	Maximum	Mean	Std. Deviation
Government Support	100	7	20	16.10	3.227
Technology Infrastructure	100	7	20	16.64	2.911
Market Conditions	100	8	20	16.46	3.246
Training Access	100	5	15	11.23	2.538
E-commerce Adoption	100	6	15	12.51	2.376
Valid N (listwise)	100				

Source: Processed primary data, 2024

Validity and Reliability Test

Table 4. Results of the Validity and Reliability Test of the Research Instrument

Variabel	Item	r_{hitung}	r_{table}	Sig. value	Information	Cronbach's Alpha	Information
Tests of Government Support	X1.1	0,856	0.1966		Valid		
	X1.2	0,904	0.1966		Valid		
	X1.3	0,903	0.1966	0,000	Valid	0.903	Reliable
	X1.4	0,860	0.1966		Valid		
Tests of Technology Infrastructure	X1.1	0,880	0.1966		Valid		
	X1.2	0,882	0.1966		Valid		
	X1.3	0,891	0.1966	0,000	Valid	0.891	Reliable
	X1.4	0,820	0.1966		Valid		
Tests of Market Conditions	X1.1	0,878	0.1966		Valid		
	X1.2	0,896	0.1966		Valid		
	X1.3	0,889	0.1966	0,000	Valid	0,903	Reliable
	X1.4	0,860	0.1966		Valid		
Test of Training Access	X1.1	0,905	X2.1		Valid		
	X1.2	0,895	X2.2	0,000	Valid	0,878	Reliable
	X1.3	0,890	X2.3		Valid		
Tests of E-commerce Adoption	Y.1	0,908	X2.1		Valid		
	Y.2	0,923	X2.2	0,000	Valid	0,904	Reliable
	Y.3	0,918	X2.3		Valid		

The table presents a summary of the validity and reliability test results for all research variables, including Government Support, Technology Infrastructure, Market Conditions, Access to Training, and E-commerce Adoption. All items have a calculated r value > table r (0.1966) and sig. < 0.05, so they are declared valid. The Cronbach's Alpha value for each variable is > 0.7, indicating that the instrument is reliable and consistent in measuring the intended construct.

Hypothesis Testing

Table 5. F Test Results

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	439.758	4	109.940	87.596	.000b
	Residual	119.232	95	1.255		
	Total	558.990	99			

a. Dependent Variable: E-commerce Adoption

b. Predictors: (Constant), Training Access, Market Cobditions, Government Support,Technology

Source: Processed primary data, 2024

The results of the F test using analysis of variance, or ANOVA, can be seen in Table 9. The significance value is 0.000, which is less than 0.05, which means it is important. This means that the factors Government Support, Technology Infrastructure, Market Conditions, and Access to Training all have a big effect on the variable E-commerce Adoption. The test results for the summary model can be seen below in Table 6.

Table 6. Model Summary Results

Model Summaryb

Model	R	Adjusted R Square	Std. Error of the Estimate	Change Statistics					
				R Square Change	F	Sig.	FDurbin-Change	Watson	
1	.887a	.787	1.120	.787	87.596	.000	4	95	2.184

a. Predictors: (Constant), Training Access, Market Conditions, Government Support, Technology Infrastructure

b. Dependent Variable: E-commerce Adoption

Source: Processed primary data, 2024

The number of the coefficient of determination is 0.778, which can be seen in Table 10. This means that the independent variables (Government Support, Technology Infrastructure, Market Conditions, and Access to Training) can explain changes in the dependent variable (E-commerce Adoption) by 78.7%. The other 21.3% is due to variables that were not included in the regression model. The test of the claim on multiple linear regression is shown below in Table 7.

Table 7. Multiple Linear Regression Equation

Coefficientsa

Model	Unstandardized Coefficients	Std. Error	Standardize d		Sig.	Collinearity Statistics	
			Beta	t		Tolerance	VIF
1 (Constant)	.337	.680		.496	.621		

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Government Suport	.199	.053	.271	3.763	.000	.434	2.302
Technology Infrastructure	.218	.068	.267	3.193	.002	.322	3.110
Market Conditions	.141	.063	.192	2.252	.027	.308	3.250
Training Access	.269	.064	.288	4.183	.000	.475	2.105

a. Dependent Variable: E-commerce Adoption

Source: Processed primary data, 2024

Based on the results of multiple regression, the regression equation obtained is:

$$Y = 0.337 + 0.199X_1 + 0.218X_2 + 0.141X_3 + 0.269X_4 + e$$

The regression study showed that the t-value was 3.763, which is higher than the t-table value of 1.976. This means that the regression coefficient is positive, at 0.199. The regression study showed that the estimated t value of 3.193 with a significance value of 0.002 < 0.05 is higher than the t table (3.193 > 1.976), so the regression coefficient is positive at 0.218. The regression study showed that the calculated t value is higher than the t table (2.252 > 1.976), and the regression coefficient is positive at 0.141. The regression study showed that the calculated t value is higher than the t table (4.183 > 1.976), and the regression coefficient is positive (0.269).

Based on the above regression equation, the following can be said:

The constant number is 0.337, which means that if you take into account that Government Support, Technology Infrastructure, Market Conditions, and Training Access are all constants, then the adoption rate of e-commerce is 0.337. X1, which stands for "Government Support," has a regression value of 0.199. It means that if government support goes up by one unit, e-commerce adoption will go up by 0.199. There is a 0.218 coefficient of slope for the Technology Infrastructure measure (X2). In other words, if you add one unit to the technology infrastructure, 0.218 units will be added to e-commerce adoption. There is a 0.141 value for the regression coefficient of the Market Condition variable (X3). This means that E-commerce Adoption will go up by 0.141 units for every unit raised in Market Condition. It's 0.269 for the Training Access variable (X4) from the analysis. In other words, if you raise Training Access by one unit, E-commerce Adoption will go up by 0.269 units.

Discussion

The Influence of Government Support on E-commerce Adoption

The first theory, which says that government support for e-commerce adoption has a good effect, was proven valid by this study. According to the study's results, 80.5% of those who answered said that the government should help small and medium-sized businesses grow, especially by making rules for how they can use technology, such as E-commerce in this case. This agrees with Nugroho (2015) view that groups, in this case MSMEs, are more likely to accept technology when they get help from the government. In every regulation, the government has a hand in setting up tools that will later control the MSME work system. One of the things that MSMEs do is use E-commerce. The findings of this study agree with those of Swandini (2019) study, which found that government help has a big effect on how well MSMEs in Lampung City use E-commerce technology. Based on what was said above, we can say that government help for e-commerce by Bale Berdaya Sumbawa MSMEs has a good effect. The more the government encourages small businesses to use e-commerce, the better they think it is and how easy it is to use. Palangan (2023) study also shows that measures from the government that make it easier for people to use digital technology are very important to get more MSMEs to use e-commerce.

The Influence of Technology Infrastructure on E-commerce Adoption

The second theory, which says that technology infrastructure has a good effect on the adoption of e-commerce by Bale Berdaya Sumbawa MSMEs, has been proven by this study. The findings of this study agree with those of Hanum & Sinarasri (2017) study, which found that technology affects how MSMEs use E-Commerce. Adopting E-commerce into MSMEs depends a lot on how well people can use technology, which leads to people being able to use E-commerce technology (Pangesti & Adyaksana, 2021). According to the study, 83.2% of those who answered highly agreed that using technology in MSMEs will make them more likely to use E-Commerce because it will be cheaper and the rate of growth will be faster. From what was shown in the presentation above, we can say that Technology Infrastructure has a good effect on the adoption of e-commerce by Bale Berdaya Sumbawa MSMEs. Because the internet exists, its users are more likely to be able to take advantage of opportunities to make

money. Bale Berdaya Sumbawa MSMEs can become more competitive and boost local economic growth through business if they have good internet connection and the right technology. Small and medium-sized businesses (MSMEs) can get help from the government to understand how important e-commerce is and learn how to use it (Utomo et al., 2024). It is very important for MSMEs to be able to access fast and steady internet and technology gadgets in order to be able to do business online. Hanum & Sinarasri (2017) also said that 77% of people who use the internet do so to get digital information and shop online.

The Influence of Market Conditions on E-commerce Adoption

The third theory, which says that market conditions have a good effect on e-commerce adoption, has been proven by this study. Every day, MSMEs can get into more markets and get new customers by using e-commerce. But people who work in business must also be aware of market possibilities and be able to read the market at that moment. Indahsari et al. (2023) say that this is very good for MSME players because e-commerce can make them more competitive in a business world that is becoming more complex and growing. According to the study, 82.3% of those who answered said that the rise of e-commerce has had a direct effect on business players, buyers, and sellers, making it easier for them to market their goods. Competition comes in many forms, such as customers, sellers, and other businesses. By using e-commerce to improve, MSMEs can stay ahead of the competition. The study by Mahliza (2018) agrees with this. She said that the more MSMEs use e-commerce for customer service and marketing, the bigger effect it has on their skills and ability to compete. According to (Darmastuti et al., 2023), the e-commerce market in Indonesia will be worth USD 53 billion in 2025. This means that small and medium-sized businesses have a lot of opportunities to use digital platforms.

The Impact of Training Access on E-commerce Adoption

The fourth theory, which says that there is a good relationship between Training Access and E-commerce Adoption, has been proven by this study. As a result of the study, an average of 74.87% of those who answered were greatly helped by taking part in E-commerce-related training or social events put on by different groups. This made it easier for MSME players to make plans for the future of their businesses. This agrees with what Rachmawati (2024) said, who said that the socializing and training programs that are put in place can be helpful and help MSMEs accept E-commerce in a complete, steady, and long-lasting way. Khaerul et al (2023) also talked about how important it is for MSME businesses to have training programs that help them get better at using technology. According to Alamin et al (2022), e-commerce led to a 20% rise in sales for 65% of MSMEs that took part in digital training programs. This shows that getting the right training can make a big difference in how well an MSME does its job. Because of this, it is important for the government and other relevant organizations to offer training programs that meet the needs of MSMEs.

CONCLUSION

The findings indicate that government support, availability of technological infrastructure, market conditions, and access to training significantly influence the level of e-commerce adoption among Bale Berdaya Sumbawa MSMEs, with a combined contribution of 78.8%. These factors complement each other in fostering digital entrepreneurial orientation, which is central to enhancing MSME competitiveness in the digital economy. However, this study has limitations, such as its geographical focus on Bale Berdaya MSMEs in Sumbawa and the use of a quantitative method that does not explore qualitative aspects in depth, so the results may not fully represent conditions in other regions or different business sectors.

The results highlight the importance of strengthening entrepreneurial orientation through policies and programs that not only facilitate infrastructure and training but also encourage innovation, risk-taking, and proactiveness in seizing digital market opportunities. Local government, training institutions, and business communities in Sumbawa are expected to collaborate in creating an ecosystem that supports the development of e-commerce-based business models tailored to local characteristics, such as leveraging unique regional products, local distribution networks, and digital marketing strategies that adapt to local culture and consumer preferences.

It is suggested that the government help small and medium-sized businesses (MSMEs) more by making sure they have the right rules and services and by building up technology assets like fast internet access. It is also important to make MSMEs more aware of and knowledgeable about the market conditions and economic benefits that can be gained through e-commerce. However, MSMEs should also use this opportunity to get training that will help them do e-commerce better and use current technology to make their businesses more efficient and competitive. It is hoped

that by creating a good marketing plan, more MSMEs in Bale Berdaya Sumbawa will use e-commerce, which will be good for the growth of the regional economy

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