



Source details

Tec Empresarial

Open Access ⓘ

Scopus coverage years: from 2020 to Present

Publisher: Business School, Instituto Tecnológico de Costa Rica

ISSN: 1659-2395 E-ISSN: 1659-3359

Subject area: Business, Management and Accounting: Business, Management and Accounting (miscellaneous) Business, Management and Accounting: Business and International Management View all ▾

Source type: Journal

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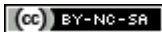
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Campus Central del Tecnológico de Costa Rica, avenida 14, calle 15. Distrito oriental. Cantón central. Cartago, Costa Rica.

revistaae@tec.ac.cr

Current Issue

Vol. 17 No. 2 (2022): Tec Empresarial Journal

Published: 2022-11-08

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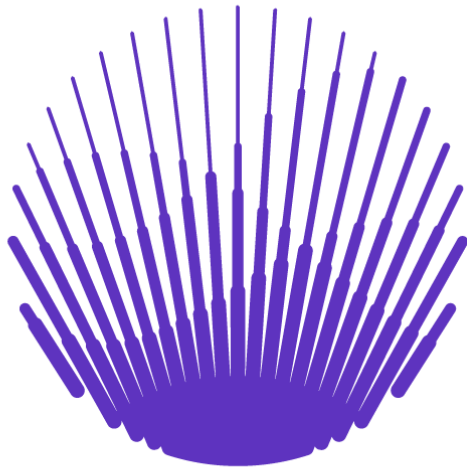
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Tec Empresarial Journal

ISSN: [1659-2395](#) e-ISSN: [1659-3359](#)

Indexed: SCOPUS, ScimagoJR, DOAJ, WoS

[Business School, Instituto Tecnológico de Costa Rica](#)

email: editor.tecempresarial@gmail.com

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Sales Expansion of Agro-Industrial Products Through E-Commerce: A Gender Analysis Approach

Tajidan^A, Anas Zaini^B, Amanda Anggi Purwanti^C, Effendy^D, M. Zaenul Muttaqin^E

Abstract

The development of digital technology provides opportunities for women to work from home using electronic commerce to sell agro-industrial products to increase sales turnover. The way women work and how to increase the sales turnover of agribusiness products through e-commerce has never been done before. The Pathway, the Gap, and the Harvard Analysis method are usually used in the socio-economic conditions, however, in this research, the comparative and competitive analysis method were employed to solve current issues related to sales expansion of agro-industrial products. The data collection was carried out using observation at business area, structured interviews with micro, small and medium-sized enterprises (MSMEs), and in-depth interviews with business managers of NTB Mall. The survey of ata was carried out in June 2022 while data collection was in May 2022. The location and sampling was obtained from the managers of NTB Mall and the number of objects is up to 14 micro, small and medium enterprises of agro-industrial units. Comparative and competitive analysis methods have been shown to be used effectively as a method of gender analysis. Therefore, the results showed that female entrepreneurs have comparative and competitive advantages over male entrepreneurs in the use of electronic commerce. Comparative and competitive analysis methods are good to use for gender analysis.

Keywords: *Gap, Digital, Harvard, Comparative, Competitive.*

INTRODUCTION

Sales through e-commerce are growing all over the world, including in Indonesia. The number of e-commerce and e-commerce players in Indonesia continues to grow and develop significantly. (Sirlo, 2020) reported that in 2020 there was 88% of the Internet users who had purchased products using *online* networks. The amount of e-commerce in Indonesia in 2020 reached 2.36 million spread across Indonesia. (Nielsen IQ, 2022) noted that the number of e-commerce visitors in 2021 reached 32 million people, an increase of 88% compared to 2020 with 17 million people, while (CNN Indonesia 2021)

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reported that 81,1% of Internet users shopping through electronic commerce. The number of e-commerce visitors grew to 15.7 million people in the period from January to March 2022 with indicated as a fantastic growth figure, a fantastic growth figure and social commerce development is rapid, and in the new normal era, e-commerce activity is becoming very busy (Mua'dy et al., 2022)

The results of a study by (Leni Lestari, 2017) using time series analysis showed that sales turnover increased by 5.5 percent per quarter, which means that in one year it increased by 16.5 percent or e-commerce made a significant contribution to increasing sales turnover. The research results of and in Makassar, South Sulawesi, that the use of e-commerce can increase the value of sales from 20% to 30% per year (Ikhsan and Hasan 2020). The benefits of e-commerce are that it provides convenience to producers in marketing their products and makes it easy for consumers to satisfy their needs without sacrificing much time and transportation costs and make it easier for customers to order (Karmawan 2010). In the situation of the Covid-19 pandemic where the government prohibits crowding in public places, it leads the online shopping through e-commerce as one of solutions to do shopping under prohibition to be in public places.

The use of electronic commerce as a means of sale has changed the method of sale from indirect sales to direct sales (Karmawan, 2010), in order to reduce costs and margins that have an impact on sales prices compared to indirect sales (Tajidan et al., 2022). Meanwhile, Diah Chandra Kartika Sari (2017), argue that online sales could facilitate the transaction process and can be reached as well as carried out by many people.

The growth trend of e-commerce players and visitors and the benefits to producers and consumers as described above has been responded by the West Nusa Tenggara (NTB) Provincial Government through the formation of an NTB e-commerce mall. NTB Mall e-commerce was formed as a means for micro, small and medium enterprises (MSMEs) to market their products. Since its launch on August 17, 2020, the most responsive participants to NTB Mall e-commerce are agribusiness MSMEs domiciled in the Mataram city area. At the beginning of 2022, the number of e-commerce participants in NTB Mall was 14 MSME units. The existence of NTB Mall e-commerce deserves recognition, as a form of concern for the NTB Provincial Government by facilitating MSMEs and small and medium-sized industries (IKM) to market the products they produced directly to the consumers. However, conventional sales through distributors and retailers still remain. Therefore, NTB mall e-commerce will contribute to the increase of the sales value and volume.

In addition to the economics of the existence of the NTB Mall e-commerce, it is interesting to conduct research from the gender perspective, that is, how many women contribute to participate in the use of the facilities provided by the Government Provincial of NTB, in fact, in traditional markets is dominated by women. Various studies have been carried out according to women participate more than men

as traders in traditional markets. Do the tendency of women to be dominant as actors in traditional markets also apply in online markets?.

So far, in the analysis of the role of women in the domestic sector and in the public sector using the Gap, Pathway, and Harvard Analysis, which consists of comparing the roles and participation between women and men, that is, to observe the differences in the participation rates in each variable being analyzed. In today's digital age, the intellectual abilities are more than physical abilities, thus, using the Gap Analysis method, Path Analysis and Harvard Analysis is considered less relevant, because in many respects women and men compete for business opportunities and resources. In terms of intellectual abilities, it seems that women can compete with men. This is evident from the ability of women to compete in the commercial business sectors. Therefore, it is not appropriate if the gender analysis is carried out using the Gap, Pathway, and Harvard Analysis method. The solution that the author offers in this research is that to capture the role and participation of women from their potential and performance, that is, through the use of comparative and competitive gender analysis. Comparative and competitive method taking into account the competition between women and men in the use of NTB Mall electronic commerce.

In relation to the research problems and solutions offered above, the aim of this research is to analyze the role and contribution of women and men in the use of e-commerce of NTB Mall measured by their comparative capacity and analyze the competitive capacity of women against men measured by the value of sales turnover as well as the increase in sales value.

LITERATURE REVIEW

Some previous studies stated that sales via e-commerce have a significant effect on sales volume (Leni Lestari, 2017); (Wilia Nabila Saad, 2017) in his research using the regression analysis method argued that e-commerce variables have a significant effect on the income of the banana chips industry centers in Bandar Lampung. Meanwhile, (Leni Lestari, 2017) stated that the sale of e-commerce products had a positive impact on increasing sales turnover. Research conducted by (Wilia Nabila Saad, 2017) and (Leni Lestari, 2017) are in line with research by (Ikhsan and Hasan, 2020) which indicated that in Makassar through e-commerce increased sales turnover by 20% to 30% per year.

In contrast to the results of previous research, research by (Ariline Prameswari Effendi and Bambang Subroto, 2021) described that the factor of e-commerce adoption by MSMEs has an unrealistic effect on increasing business income. One of the reasons is the appearance of a multicollinearity between the sales volume of offline activities and the online activities, because the income is a combination of the difference in the sales volume of offline activities with online activities. What is interesting about the results of (Ariline Prameswari Effendi and Bambang Subroto, 2021) research is that it found that

companies that adopt *e-commerce* experience an increase in profitability compared to companies that do not adopt *e-commerce*. Therefore, in this study, revenue from offline sales must be separated from revenue from online adoption or e-commerce as a dummy variable.

Moreover, the results of (Tita Yulia Ariani, 2018) research that examined the impact of Go-Food services on sales volume in Bandung restaurants showed that the sales volume of Bandung restaurants compared to the previous sales volume. Based on the results of previous studies, it indicated that direct sales using e-commerce apps and Go-Food can increase sales turnover. Offline sales will continue to exist, while online sales will continue to grow with the various comparative and competitive advantages that they have. Research conducted by (Marthalina, 2018) concluded that women play a pivotal role in improving household well-being. Therefore, the role of women in social aspects should be seen as a form of economic appreciation of women's contribution to improving the well-being of the community.

Economic disadvantage urban women in Ghana who are brought together in the Joint Venture Group, specifically for women who get credit, can improve their asset status where assets are dominated by non-earning assets. Loans invested in business activities can increase income, thus can help improve living standards (Abdulai et al., 2021). Research by (Soharwardi and Ahmad, 2020) found that women's characteristics, especially higher education level and women's health, husband's employment status, and income level are positively related to women's employment status, awareness, decision-making, self-esteem and self-confidence, while, the number of children living to the age of five or more and the number of children born have an effect significantly towards the empowerment of women and performance of the emotional determination system by gender and age. Hence, the characteristics of the human being to distinguish differences towards the emotional recognition system and the type of emotion give different effects depending on the gender class and age classification (Houari & Guerti, 2020).

Furthermore, Lina Nur Hidayati and Winanro & Winarno (2104) have conducted research on the role of women in the adoption of information technology and the development of small and medium enterprises. The results of their research revealed that 52 percent of the women surveyed used information technology less frequently, and 48% stated that they did not use information technology because they could not operate it. This is possible because at the time, information technology was a new technology that was not widely known. Diah Chandra Kartika Sari (2017) revealed that online sales is a business opportunity that can be adopted to fill free time and work from home. Women as part of a society that is unemployed can take advantage of e-commerce as an opportunity to earn additional income by making sales online. The problem is that access to the information technology is still limited, so digital e-commerce literacy is needed for to get benefit from business opportunities through online sales. Meanwhile, (Shinta Kartika, 2022) a notice from the Coordinating Minister for Human

Development and Culture said that women must be able to take advantage of e-commerce. From this description, it can be understood that many parties expect women to be able to take advantage of information technology applications and electronic commerce in order to improve their well-being. The article by (Puput Mumbrita, 2021) recommended the building wisdom that female employees channel their aspirations to better career positions and change the dominant and masculine narrative of the tech industry.

Behaving customers in online purchases through e-commerce show that customer satisfaction is influenced by utilitarian values and hedonic values, but utilitarian values have no significant effect on customer retention, and social values have no significant effect on customer satisfaction (Yulistyawati Evelina, 2022). (Martínez-Mesa et al., 2016) argues that e-commerce systems are able to provide key functional features and real-time information that can meet customer satisfaction that is not obtained in offline sales.

From previous studies that have been carried out in e-commerce studies, they are not in a position to carry out gender analysis (Leni Lestari, 2017); (Ikhsan & Hasan, 2020); (Wilia Nabila Saad, 2017); (Arline Prameswari Effendi and Bambang Subroto, 2021); (Tita Yulia Ariani, 2018), while other studies that carry out gender analysis are not related to electronic commerce (Soharwardi & Ahmad, 2020); and (Houari & Guerti, 2020) when analyzing it, they place women as subordinate to men, to measure gap between men and women. The analysis of the nature of gender is a discovery between women and men in various aspects of life, including electronic commerce. In an effort to grow and improve gender results, then, this study considers to apply comparative analysis and competitive methods as a new alternative in gender analysis, so that the advantages of the use of technology can be known, particularly in digital marketing of the agro-industrial products they produce. This study employed a comparative advantage with variables of age, level of education, duration of the experience of incorporation to electronic commerce, a class of MSMEs, and competitive advantage with variables of sales turnover and increase in sales value based on comparison between gender.

METHOD

The object of the study is all the participants (census) on NTB Mall e-commerce (Chaidir et al., 2020). Primary data was collected from the managers of the business units participating in the NTB shopping center e-commerce and the managers of the NTB Mall. Data survey was carried out in June 2022, while the data collected was in May 2022. Data collection using the triangulation method (Haryanti & Irianto, 2011); (Tajidan et al., 2022) through observation in the business unit location, structured interviews with managers of participating business units, and in-depth interviews with NTB Mall e-commerce managers.

Gender analysis methods that are often used are gap analysis, path analysis, and Harvard analysis (Honjo et al., 2006). In this study, we started using comparative analysis methods and competitive

analysis methods as new alternatives in gender analysis. The advantage of using comparative method can be seen in the evaluation result of company-owned resources against other company resources (Okali, 2012), in this case, it is female human resources and male resources. Potential resources are age, level of education, experience using e-commerce, and MSME classes.

The procedure for comparative analysis are as follows:

1. Measure the resource potential of female entrepreneurs and measure the resource potential of male entrepreneurs.
2. Evaluate the resource potential of female entrepreneurs against the resource potential of male entrepreneurs.
3. comparing the potential value of women's resources with the potential resources of male entrepreneurs:
 - a. If the comparison value is equal to 1 (one) = equal, it means that the potential resources of female entrepreneurs are equivalent to the potential resources of male entrepreneurs.
 - b. If the comparative value is greater than 1 (one) = superior, it means that the resource potential of female entrepreneurs, they have a comparative advantage over the resource potential of male entrepreneurs
 - c. If the value is less than 1 (one), compete with the potential resources of female entrepreneurs to compete with the potential resources of male entrepreneurs.

The competitive advantage of the ability to compete in the market. The ability to compete in the market is demonstrated by the ability of women to produce similar products, able to produce goods at a lower cost and sold at a cheaper price than competitors (Shelby D. Hun and Robert M. Morgan, 1995), then this it will be replaced by sales churn and upselling. Competitive advantage over superiority and differential advantage.

In this study, what is meant by competitive advantage is the ability of women to compete against men, as measured by female performance and male performance. The performance is the amount of sales volume during a month and an increase in sales value.

The procedure for comparative analysis are as follows:

1. Measure the performance of entrepreneurs and the performance of male entrepreneurs in offline and online market.
2. Evaluate the performance of entrepreneurs against the performance of male entrepreneurs.
3. compare the value of entrepreneur performance against the value of male entrepreneurs in offline and online market using the following criteria:
 - a. If the comparative value is equal to 1 (one) = equal, it means that the marketing performance of female entrepreneurs is equivalent to the marketing performance of men.
 - b. If the comparative value is greater than 1 (one) = superior than the marketing performance of female entrepreneurs, they have a competitive advantage over the marketing performance of male entrepreneurs;

If the comparative value is greater than 1 (one) = compete with the marketing performance of female entrepreneurs that compete with the marketing of male entrepreneurs.

RESULT AND DISCUSSION

Human Resources Potential of Entrepreneurs

The human resource potential of entrepreneurs who are active in NTB Mall e-commerce is measured by age (years), level of formal education (score), period of time to join e-commerce (months), and class of micro, small and medium enterprises (score).

Age

The age of male entrepreneurs joining NTB Mall e-commerce ranges from 24 to 45 years old with an average of 34.5 years old, while female entrepreneurs range from 34 to 48 years old with an average of 43 years old. The age of a female entrepreneur is older than that of a male entrepreneur.

The average age of entrepreneurs who are members of NTB shopping mall e-commerce is shown in Figures below:

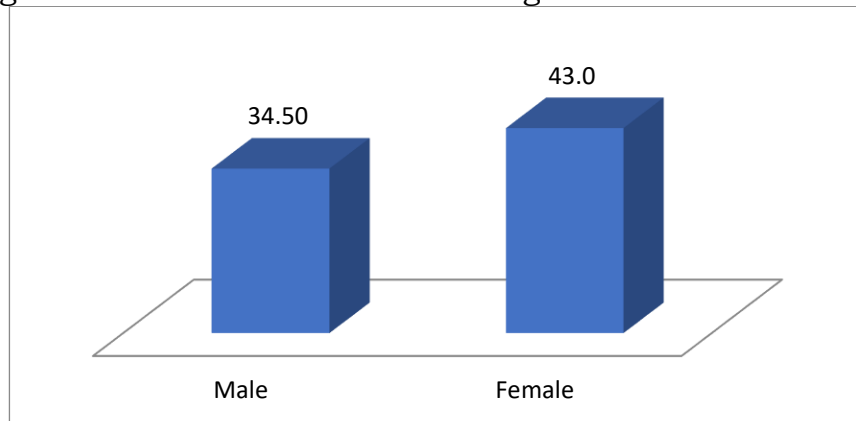


Figure 1. The age by gender entrepreneurs

Source: Primary data

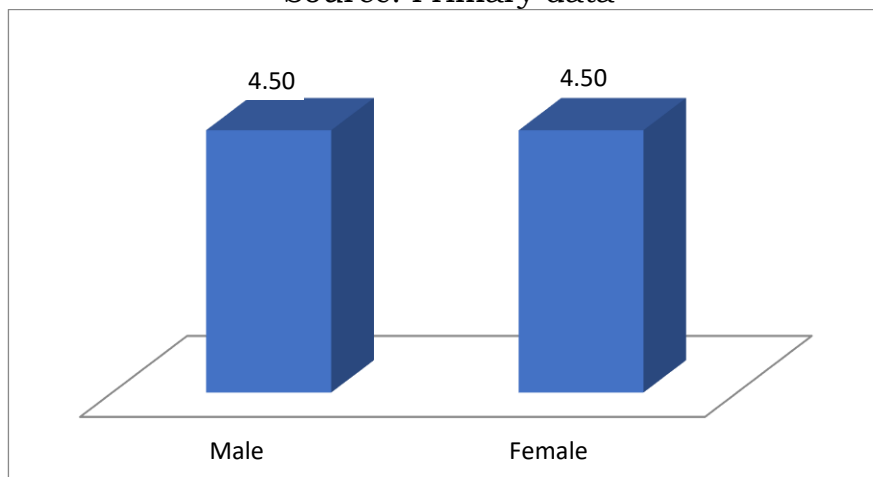


Figure 2. The level of education by gender entrepreneurs

Source: Primary data

Education

Agro-industry MSME entrepreneurs who are members of NTB Mall e-commerce have formal education at least graduated from high school and have the highest undergraduate education. The educational level of female entrepreneurs is equivalent to that of male entrepreneurs. One of the aspects of the education obtained, due to the establishment of education for parents without distinction of the sex of their children (Alexandra Twin, 2022). In accordance with the results by (Nisak & Sugiharti, 2020), there is no significant difference in financial literacy between women and men.

Long Time Joining E-Commerce

The first time to join NTB Mall e-commerce were female entrepreneurs with a range between 12-22 months with an average of 16.3 months, while the experience of male entrepreneurs who joined NTB Mall e-commerce ranged from 12 to 18 months with an average of 15 months.

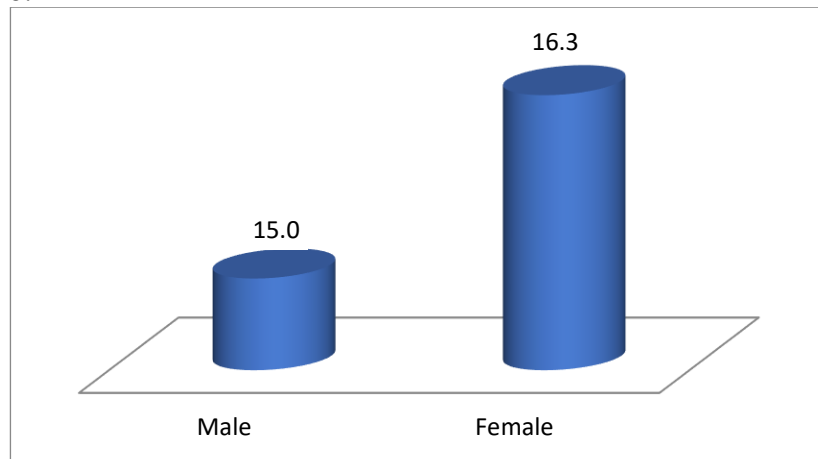


Figure 3. Period of time in joining e-commerce (months) by gender

Source: Primary data

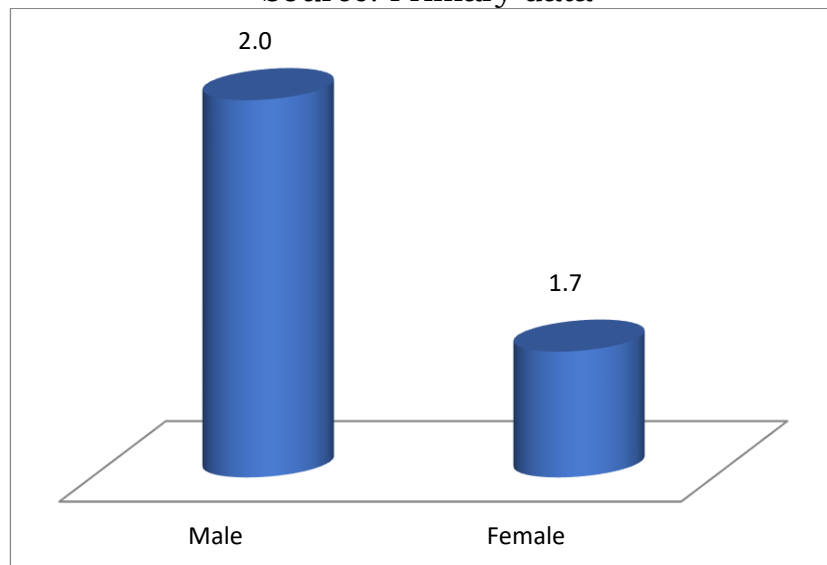


Figure 4. MSME class (score) by gender

Source: Primary data

MSME Class

Based on Law Number 20 of 2008 concerning on Micro, Small, and Medium Enterprises (MSMEs) that there are three classes of MSMEs which are (1) micro, (2) small, and (3) medium. Micro-enterprises are individual companies with a maximum total asset of IDR 50 million with a maximum sales turnover of IDR 300 million per year. Small businesses have assets of between IDR 50 million to IDR 300 million with a turnover of between IDR 300 million to IDR 2.5 billion per year. Medium enterprises are companies with assets between IDR 300 million to IDR 500 million with a turnover of between IDR 2.5 billion to IDR 50 billion per year. From these criteria, male entrepreneurs manage small businesses, while women manage businesses from micro to medium.

Table 1. Agro-industrial and long-time MSME class in NTB Mall e-commerce

Name of the MSME	MSME class	Long time to join about e-commerce NTB Mall (months)
Male Manager		
a. CV. Tri Utama Jaya	Small	18
b. Goyang Lidah	Small	12
Women Manager		
a. UD. Merpati Lombok	Micro	18
b. Charity Food	Micro	20
c. Mamink's Food	Micro	18
d. Yant Sorghum	Micro	18
e. Bale Kreatif	Micro	18
f. UD. Wida Chocolates, Cakes, & Cookies	Micro	12
g. UD. Depot Taliwang	Small	18
h. Dapur Coklat Tiaga	Micro	12
i. DC Shop	Micro	20
j. CV. Selera Asli Lombok	Micro	12
k. CV. Nutsafir Indo Raya	Medium	18
l. Bale Bunda Akbar (Bebuak)	Micro	12

Source: NTB Mall (2022).

Comparative Advantage

Out of the four criteria used in the comparative analysis which are age, education, time period of joining e-commerce, and class of MSMEs, there are two criteria for women entrepreneurs to be superior compared to male entrepreneurs, namely, the criteria of age and duration of incorporation into electronic commerce, in the aspect of education, only in the MSME class do entrepreneurs compete with male entrepreneurs (Table 2). In general, female entrepreneurs have a comparative advantage over male entrepreneurs with a ratio of 1.05 to one.

Table 2. The analysis result of comparative advantage of women entrepreneurs compared to men entrepreneurs

Description	Men	Woman	Comparison	Criterion
Age (years)	34.50	43.0	1.25	Superior
Education (score)	4.50	4.50	1.00	Equal
Time period in joining e-commerce (months)	15.0	17.0	1.13	Superior
MSME class (score)	2.0	1.7	0.83	Compete
Aggregate	1.05			Superior

Source: Results of primary data analysis

Women entrepreneurs are 1.25 times older than men entrepreneurs, thus, women outnumber men entrepreneurs in the productive age range (15-64 years). Women entrepreneurs are more mature and have more experience.

The level of education of men entrepreneurs as same as women entrepreneurs, so from the aspect of education, it seems that men are equal to women. Gender equality between men and women indicated that the success of gender development in Indonesia (Xerxa et al., 2021) which positioning men and women with equal opportunities to access education at all levels, from early childhood education to higher education. The first to join the e-commerce of NTB Mall were women. It turned out that women respond to the use of information technology, so they quickly responded and joined the NTB Mall e-commerce.

The MSME class seems to vary in women entrepreneurs from the micro class to the middle class, while the men entrepreneurs are homogeneous, that is, the increase in small entrepreneurs. From the four aspects of comparative advantage, there was only one area where women entrepreneurs are in a lower position than men entrepreneurs, namely in the MSME class. Women entrepreneurs compete with men entrepreneurs in the fight for resources and market share. Therefore, in the future, women entrepreneurs are expected to continue to improve their skills so that they can be equivalent to how to make working capital.

Performance of Agro-Industrial Entrepreneurs

The performance of agribusiness entrepreneurs, both women and men, is measured using the value of sales turnover and an increase in the value of sales for one month, that is, in May 2022.

Turnover

Before there was e-commerce of NTB Mall which was launched on August 17th, 2022. MSMEs entrepreneurs had conducted their business activities and produced offline sales and used social media as media for promotion such as WhatsApp, Facebook, Twitter, Line, etc. (Ndemo & Maina, 2007).

The emerge of NTB Mall is an opportunity to expand the marketing area as well as make it easier for customers to order the necessary products. Although they have joined NTB Mall e-commerce, they still maintain offline sales and use social media as a media promotion. The turnover value of offline sales appears to be higher

compared to sales through e-commerce. The contribution of electronic commerce to the commercialization of agro-industrial products is 4.23%.

Table 3. Sales turnover value of MSMEs Agro-industrial of women entrepreneurs

Businessman	Sales volume (IDR x1000/month)		
	Online (e-commerce)	Offline	Total
UD. Merpati Lombok	2,000	6,000	8,000
Charity Food	1,560	19,500	21,060
Mamink's Food	1,920	3,840	5,760
Yant Sorghum	2,200	3,700	5,900
Bale Kreatif	360	1,950	2,310
UD. Wida Chocolates, Cakes, & Cookies	720	9,000	9,720
UD. Depot Taliwang	6,420	85,500	91,920
Dapur Coklat Tiaga	1,900	7,600	9,500
DC Shop	300	420	720
CV. Selera Asli Lombok	1,205	17,200	18,405
CV. Nutsafir Indo Raya	997	293,750	294,747
Bale Bunda Akbar (Bebuak)	405	4,000	4,405
Average	1,662	37,705	39,371
Contribution (%)	4.23	95.77	100.00

Source: Results of primary data analysis

The turnover value of sales of MSME agribusiness products with men entrepreneurs is higher than that of women entrepreneurs (Table 3 and Table 4). Entrepreneurs have a higher sales turnover compared to women entrepreneurs, although the number of women entrepreneurs is higher (85.71%) than the number of men entrepreneurs (14.29%) which men entrepreneurs (73.81 million/month) have an advantage over women entrepreneurs in terms of the amount of sales volume, (IDR 39.37 million/month), it turns out that men entrepreneurs are more capable of making business breakthroughs by combining social media and e-commerce. The results of this study are in accordance with the understanding that female directors play a role as mediators who contribute to the company's non-financial performance (Zhu & Chen, 2015).

Table 4. Sales turnover value of MSMEs Agro-industrial of men entrepreneurs

Businessman	Sales Volume (IDR 1,000/month)		
	Online e-commerce)	Offline	Total
CV. Tri Utama Jaya	8,370	71,250	79,620
Goyang Lidah	8,000	60,000	68,000
Average	8,185	65,625	73,810
Contribution (%)	11.09	88.91	100.00

Source: Results of primary data analysis

The contribution of online marketing through e-commerce for men entrepreneurs seems to be higher (11.09%) than for women entrepreneurs (4.23%), this is natural because the volume of sales of agro-industrial products managed by men entrepreneurs is greater than that of women entrepreneurs which affects the volume of sales (Table 3 and Table 4).

Increase in Sales Value

Women entrepreneurs compete with male entrepreneurs in terms of sales turnover value (Table 3 and Table 4), but in terms of increased sales value, women entrepreneurs outperform male entrepreneurs (Table 5 and Table 6). The sale value of women entrepreneurs was almost double (24.89%) compared to the increase of the sale value of men entrepreneurs by 12.54%. Therefore, women entrepreneurs have a greater competitive advantage compared to the competitive advantages of men entrepreneurs.

Table 5. The sales value of MSMEs Agro-industrial Entrepreneurs

Women Entrepreneurs	Sales Volume of MSMEs (Rp/month)		
	Before joining e-commerce	After joining e-commerce	Increase value (%)
UD. Merpati Lombok	6,000	8,000	33.33
Charity Food	19,500	21,060	8.00
Mamink's Food	3,840	5,760	50.00
Yant Sorghum	3,700	5,900	59.46
Bale Kreatif	1,950	2,310	18.46
UD. Wida Chocolates, Cakes & Cookies	9,000	9,720	8.00
UD. Depot Taliwang	85,500	91,920	7.51
Dapur Coklat Tiaga	7,600	9,500	25.00
DC Shop	420	720	71.43
CV. Selera Asli Lombok	17,200	18,405	7.01
CV. Nutsafir Indo Raya	293,750	294,747	0.34
Bale Bunda Akbar (Bebuak)	4,000	4,405	10.13
Average	37,705	39,371	24.89

Source: Results of primary data analysis

The competitive advantage of women entrepreneurs over men entrepreneurs, as the data in Tables 5 and 6, the role of women entrepreneurs seems to be better able to compete with men entrepreneurs in both offline and online market. The results of this study provide the data that if women are given a role equal to that of men, women have skills that are equal to the skills of men. The gender policy that has been initiated by the new government (1966 - 1997) and continued in the reform government (1997 - present) has a positive impact on the formation of attitudes and behaviors towards gender.

The improvement of household and community well-being is closely related to its implementation and the implementation of gender policies in planning and implementation in all spheres. Several studies have found that women's contribution to the home is real.

Table 6. The sales value of entrepreneurs in the MSME agribusiness

Men Entrepreneurs	Sales Volume of MSMEs (Rp1,000/month)		
	Before joining e-commerce	After joining e-commerce	Increase value (%)
CV. Tri Utama Jaya	71,250	79,620	11.75
Goyang Lidah	60,000	68,000	13.33
Average	65,625	73,810	12.54

Source: Results of primary data analysis

The increase in the sales value of Agro-industrial managed by women entrepreneurs ranged between 0.35% and 71.43% (Table 5) with an average monthly increase value of 24.89%, while the increase in sales of Agro-industrial managed by men entrepreneurs ranged between 11.73% and 13.33% with an average of 12.54% and there was not much variation due to the limited number of analysis units. The number of analysis units is limited because the population of men entrepreneurs is limited, that is, there are only two analysis units. Along with that increase in the number of men entrepreneurs who will engage in marketing using e-commerce, the unit of analysis for men entrepreneurs is likely to increase.

Using the data in Table 3, Table 4, Table 5, and Table 6, an analysis of the competitive advantage of women versus men entrepreneurs was carried out. The results of the analysis appear in Table below.

Table 7. The analysis result of the competitive advantages of female entrepreneurs compared to male entrepreneurs

Description	Male	Female	Comparison	Criterion
Sales volume (IDR1,000)	73,810	39,371	0.53	Competitive
Increase value (%)	12.54	24.89	1.98	Superior
Average			1.26	Superior

Source: Results of primary data analysis

In the aspect of sales turnover, it turns out that female entrepreneurs get competitors from men entrepreneurs, however, in the future, it is believed that women entrepreneurs will be able to outperform men entrepreneurs, because, in the aspect of increasing turnover value of sales, it seems that women entrepreneurs have increased almost twice (1.98) compared to the increase in sales value of men agribusiness entrepreneurs. In general, women entrepreneurs from agribusiness MSMEs are superior to men entrepreneurs with a significant proportion (Table 7), that is, with a ratio of 1.26 to 1 (one), which means that if the turnover value of sales of men entrepreneurs of agribusiness MSMEs increased by 1 (one) percent, then the rotation of women entrepreneurs of agribusiness MSMEs increased by 1.26 percent.

CONCLUSION

Women have used e-commerce as a means of online marketing. Of the 14 MSME units incorporated in the electronic commerce of NTB Mall, there is 85.71 percent of women entrepreneurs, while men entrepreneurs are 14.29 percent. The contribution of the NTB Mall

electronic commerce in the commercialization of agro-industrial products for women entrepreneurs is 4.23 percent, while for men entrepreneurs it is 11.09 percent, which means that electronic commerce has increased the sales turnover of agro-industrial MSMEs.

Women entrepreneurs have a comparative advantage over men entrepreneurs at the micro, small, and medium enterprise level based on indicators of age and e-commerce experience, but are equivalent in education level and compete in the micro, small and medium class businesses.

Female entrepreneurs have a competitive advantage in the use of electronic commerce based on sales turnover indicators and an increase in sales value compared to men entrepreneurs with a ratio of 1.26 to 1 (one). The sales turnover of women entrepreneurs increased by 24.89 percent, while men entrepreneurs increased by 12.54 percent from before joining e-commerce.

Women entrepreneurs should upgrade the class from micro-enterprises to small and medium-sized enterprises. Women entrepreneurs who are mentored by MSMEs are advised to enhance their promotion capabilities through social e-commerce and other e-commerce to be equivalent to men entrepreneurs in the amount of sales volume per month.

ACKNOWLEDGEMENTS

Thanks to the Head of the Department of Agricultural Socio - Economics and Head of Magister Agribusiness Study Program at the Agriculture Faculty, the University of Mataram for facilitating the publication process of this article.

REFERENCES

- Abdulai, I. A., Bukari, S., & Fuseini, M. N. (2021). Women's self-help groups and asset accumulation in peri-urban Wa, Ghana. *African Journal of Science, Technology, Innovation and Development*. <https://doi.org/10.1080/20421338.2021.1917041>
- Alexandra Twin. (2022). *Business Essentials: Competitive Advantage*. Retrieved from https://www.investopedia.com/terms/c/competitive_advantage.asp#
- Ariline Prameswari Effendi and Bambang Subroto. (2021). *Analysis of the Factors of E-Commerce Adoption by MSMEs and Their Influence on Operating Income*.
- Chaidir, T., Putri, I. A., Arini, G. A., & Baiq, I. (2020). *Determinan Literasi Keuangan pada Pelaku Usaha Mikro, Kecil, dan Menengah (UMKM) di Kota Mataram* (Vol. 2, Issue 1).
- CNN Indonesia. (2021). *Home Nasional Internasional Ekonomi Olahraga Teknologi Hiburan Gaya Hidup*.
- Diah Chandra Kartika Sari. (2017). The Influence of the Use of E-Commerce and the Sales Process on Entrepreneurial Interests in Ngraho State Vocational High School students. In *Jurnal IT-EDU* (Vol. 2).

- Haryanti, S., & Irianto, T. (2011). Design and Build an E-Commerce Information System for Fashion Business Case Study of Omah Mode Kudus. In *Journal Speed-Sentra Penelitian Engineering dan Edukasi* (Vol. 3). Online.
- Honjo, K., Tsutsumi, A., Kawachi, I., & Kawakami, N. (2006). What accounts for the relationship between social class and smoking cessation? Results of a path analysis. *Social Science and Medicine*, 62(2), 317–328. <https://doi.org/10.1016/j.socscimed.2005.06.011>
- Houari, H., & Guerti, M. (2020). Study the influence of gender and age in recognition of emotions from Algerian dialect speech. *Traitement Du Signal*, 37(3), 413–423. <https://doi.org/10.18280/ts.370308>
- Ikhsan, M., & Hasan, M. (2020). *Analisis Dampak Penggunaan E-Commerce dalam Meningkatkan Omzet Penjualan Usaha Mikro Kecil Menengah di Kota Makassar*.
- Karmawan, I. G. M. A. M. S. D. L. (2010). Analisis dan Perancangan E_Commerce PD Garuda. *Aprilasi Teknologi Informasi*, 1–1.
- Leni Lestari. (2017). *Pengaruh E-Commerce Terhadap Volume Penjualan Pada Online Shop Aneka Kemeja Pria Bekasi SKRIPSI*.
- Lina Nur Hidayati and Winanro, & Winarno, D. (2104). *Peran Perempuan dalam Mengadopsi Teknologi Informasi dan Mengembangkan Usaha Kecil Menengah Batik*. <http://peluangusaha.kontan>.
- Marthalina. (2018). *Pemberdayaan Perempuan Dalam Mendukung Usaha Mikro, Kecil, dan Menengah (UMKM) di Indonesia*. www.mdn.biz.id
- Martínez-Mesa, J., González-Chica, D. A., Duquia, R. P., Bonamigo, R. R., & Bastos, J. L. (2016). Sampling: How to select participants in my research study? *Anais Brasileiros de Dermatologia*, 91(3), 326–330. <https://doi.org/10.1590/abd1806-4841.20165254>
- Mua'dy, M., Amalia, S., & Wardhani, K. (2022). Analysis of Trust Mechanism in Social Commerce: A Systematic Literature Review. *International Journal of Electronic Commerce Studies*, 13(2), 197–222. <https://doi.org/10.7903/ijecs.2015>
- Ndemo, B., & Maina, F. W. (2007). Women entrepreneurs and strategic decision making. *Management Decision*, 45(1), 118–130. <https://doi.org/10.1108/00251740710719006>
- Nielsen IQ. (2022). The 2022 state of consumers. *Disruptions Drive Re-Evaluation*, 1–5.
- Nisak, S. S., & Sugiharti, L. (2020). *Gender Inequality and Women Poverty in Indonesia*. www.ijicc.net
- Okali, C. (2012). *Gender Analysis: Engaging with Rural Development and Agricultural Policy Processes*. www.future-agricultures.org
- Puput Mumbrita. (2021). Menko PMK Perempuan Harus Mampu Manfaatkan e-Commerce. *MenkoPKM*, 39(1), 1–3.
- Shelby D. Hun and Robert M. Morgan. (1995). The Comparative Advantage Theory of Competition on JSTOR. *The Comparative Advantage Theory of Competition. Marketing*, 59(2), 1–15.

- Shinta Kartika. (2022). *Berita Utama Info Papua Barat News Nasional Ekonomi Wacana Gaya Hidup Olahraga Lensa Log In*.
- Sirlo. (2020). *Jumlah Pengguna E-Commerce Indonesia di Tahun 2020 Meningkat Pesat. Desember 2020*, 1–9.
- Soharwardi, M. A., & Ahmad, T. I. (2020). Dimensions and determinants of women empowerment in developing countries. *International Journal of Sustainable Development and Planning*, 15(6), 957–964. <https://doi.org/10.18280/ijstdp.150620>
- Tajidan, T., Halil, H., Fernandez, E., Efendy, E., Nabilah, S., & Effendy. (2022). A Cost-Driven Method for Determining the Optimum Selling Price in Tofu Production on the Household-Scale Tofu Agroindustry: A Case Study in Mataram, Indonesia. *International Journal of Sustainable Development and Planning*, 17(3), 1033–1039. <https://doi.org/10.18280/ijstdp.170335>
- Tita Yulia Ariani. (2018). *Analisis Dampak Layanan Go-Food Terhadap Omzet Penjualan Rumah Makan di Kota Bandung*. <http://fe.unpas.ac.id/>
- Wilia Nabila Saad. (2017). *Pengaruh E-Commerce Terhadap Peningkatan Pendapatan Sentra Industri Keripik Pisang Bandarlampung Ditinjau Dari Etika Bisnis Islam (Studi pada Sentra Industri Keripik Pisang di Kota Bandar Lampung)*. <http://repository.radenintan.ac.id/id/eprint/2609>
- Xerxa, Y., Rescorla, L. A., van der Ende, J., Hillegers, M. H. J., Verhulst, F. C., & Tiemeier, H. (2021). From Parent to Child to Parent: Associations Between Parent and Offspring Psychopathology. *Child Development*, 92(1), 291–307. <https://doi.org/10.1111/cdev.13402>
- Yulistyawati Evelina, T. (2022). The Effect of Perceived Benefits on Customer Satisfaction and Customer Retention on Indonesian E-Commerce Sites. In *Open Journal Systems Journal Help Journal Help USER*. www.academic-pub.org/ojs/index.php/ijecs/article/view/1908
- Zhu, Y. Q., & Chen, H. G. (2015). Social media and human need satisfaction: Implications for social media marketing. *Business Horizons*, 58(3), 335–345. <https://doi.org/10.1016/j.bushor.2015.01.006>