

Agro Digitalization Capability Of The Umkm Sector In Bitung City In The Era Of Digital Agro Economy

Kapabilitas Agrodigitalisasi Sektor Umkm Di Kota Bitung Dalam Era Agro Ekonomi Digital

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Abstract

The digitalization capability of the UMKM sector in Bitung City in the era economy of digital is carried out to conduct an assessment of the UMKM sector in terms of digitalization capability elements for its business as well as review and analyze the digitalization capability of the UMKM sector in the era economy of digital.

This research uses a survey method by distributing a list of questions to micro, small, and medium enterprises (MSMEs) actors in Bitung City to obtain primary data while secondary data is taken from related agencies. Sampling was carried out using stratified random sampling with comparable allocation. The elements of digitalization capability that determine digitalization capability are (1) the ability to understand digital, (2) the importance of digital strategy, (3) handphone ownership, (4) computer ownership, (5) website ownership, (6) social media ownership, (7) an e-commerce system ownership, (8) aspects of internet use, (9) frequency of internet use, and (10) importance of internet use. Measuring elements of digitalization capability using a Likert scale. The data analysis used was an inductive analysis of the one-sample t-test using the SPSS program.

The research results show that: (a) Eight elements of digitalization capability in micro business including elements (1), (2), (3), (4), (5), (6), (8), and (10) that can be applied significantly. Meanwhile, the 2 (two) elements of digitalization capability implemented by micro businesses are not significant, including elements (7) and (9). (b) Seven elements of digitalization capability in small business, including elements (3), (4), (5), (6), (8), (9), and (10) that can be applied significantly. Meanwhile, the 3 (three) elements of digitalization capability implemented by small businesses are not significant, including elements (1), (2), and (7). (c) Ten elements of digitalization capability in medium business, include elements (1), (2), (3), (4), (5), (6), (7), (8), (9), and (10) that can be applied significantly.

The conclusions of this research are (a) The significant application of the ten elements of digital capability by UMKM actors in Bitung City can increase capabilities to the maximum, can provide profits maximum in existing businesses, and can increase competitiveness in business. (b) The insignificant application of the ten elements of digital capability by UMKM actors in Bitung City cannot increase digitalization capabilities to the maximum, cannot provide profits maximum in existing business, and cannot increase competitiveness in business. The inability of Micro and Small Businesses is due to low ability to understand digital, limited human resources competent in the digital field and limited capital. Suggestions to UMKM in Bitung City are to implement the ten elements of digital capability, while the government needs to carry out socialization and training about digital and provide capital assistance to business actors specifically for Micro and Small Businesses.

Keyword: Digitalization Capabilities, Agroecology, the UMKM sector, Bitung City.

INTRODUCTION

The development of digital technology and information has influenced all aspects of every organization, resulting

in a number of changes. According to Jones Gareth (1995) that these changes originate from internal and external organizations. Technological changes and globalization have encouraged organizational

fragmentation in many industries (Parida, 2008) which has resulted in an increase in the process of buying and selling transactions for goods and services carried out online by organizations.

The increasing popularity of e-commerce, e-business and even e-Government is one example of the impact of the increasingly strong role and influence of digital technology and information in the process of increasing organizational competitiveness in both business and public organizations. The strategy model for gaining competitiveness is moving rapidly from conventional market systems to technology-based markets, which no longer recognize regional boundaries for both producers and consumers.

Increasingly fast digital technology and information platforms in the form of economies of scale and marketing of a business through on-line communication via the internet are becoming part of an organization's strategy to speed up access to distribution and marketing channels that are increasingly fast, efficient and effective. The increasingly strong development and change in technology and information demands a digitalization process in various aspects in all lines of the organization. With the increasingly rapid development of the internet starting in the mid-1990s, the digital landscape has evolved and changed the way businesses operate and how consumers influence business transactions (Barefoot *et al* 2018).

The digital era offers new business and economic opportunities that were not seen before, through various creative methods based on digital services, thus having an impact on changes in the digital-based economic structure, namely the digital economy, which ultimately creates an increasing level of uncertainty and dynamics in the business and industrial environment. The digital economy opens up unprecedented opportunities. For Indonesia, the influence of information

technology which has ultimately resulted in a digital era has influenced various areas of life. As a result of the impact of the digital era, the Indonesian nation must follow digital era trends which have a very significant influence on the global economic level. The contribution of the digital economy to the Indonesian economy shows a significant increase from year to year.

Digital is electronic technology that is capable of deducing, generating and processing various data contained in two states, namely positive and negative (Afrilia, 2018; Purnama, *et al.* 2021). Digitalization is a form of change from analog mechanical and electronic technology to digital technology (Adelia and Rio, 2021). The digitalization capability of the UMKM sector is the digitalization capability of a micro, small and medium enterprise (UMKM) to manage its resources in order to achieve business/enterprise goals to obtain maximum profits. Digitalization capability is determined by the digital capability elements (technological elements and digital information) in business. Digital economy is an economic concept that uses digital technology as a key element in the process of production, distribution, marketing, consumption of goods and services (Adiningsi and Sri, 2019). Digital marketing is the marketing of products or services using technology digitally via the internet, social media, cell phones, or other digital media (Afrilia, 2018). Trading is the activity of reselling (without technical changes) new or used goods (Koeswoyo, 2008).

Bitung City, regionally part of North Sulawesi Province, has the potential to develop and improve aspects of the digital economy. Considering that the economic development of Bitung City is increasing from year to year, it is hoped that this will be followed by the role of the digital economy in the economic development process in Bitung City. The potential of the

digital economy in Bitung City can be seen from the development of digital sector infrastructure that is able to reach hard-to-reach areas, the increase in the number of residents carrying out economic activities in

the digital sector, and its contribution to improving the economy of Bitung City.

Bitung City has micro, small and medium enterprises (UMKM). The development of the number of UMKM in Bitung City can be seen in Table 1.

Table 1. Development of the number of UMKM in Bitung City in 2023

No.	Year	Number of UMKM Businesses			Total UMKM
		Micro Business	Small Business	Medium Business	
1	2018	4.531	268	52	4.851
2	2019	6.156	221	45	6.422
3	2020	32.300	279	45	32.624
4	2021	32.250	330	44	32.624
5	2022	32.088	73	42	32.203
6	2023	32,126	73	42	32.231

Data Source: Bitung City Cooperatives and Trade Department (2023)

Based on Table 1, it shows that UMKM in Bitung City in 2023 will be dominated by Micro Businesses with a total of 32,126 businesses or 99.64%, while Small Businesses are 73 businesses (0.23%) and Medium Businesses are 42 businesses (0.13%) of total UMKM in Bitung City. The development of MSMEs in Bitung City shows an increasing trend until 2020 and will decline slightly in 2022 so these businesses have the potential to build and improve aspects of the digital economy. Economic development in this region is increasing from year to year, so it is hoped that this will be followed by the role of the digital economy in the economic development process. The potential of the digital economy can be seen from the development of digital sector infrastructure that is able to reach hard-to-reach areas, the increase in the number of people carrying out digital economic activities, and its contribution to improving the regional economy.

UMKM business profile sectors include the Trade Sector, Service Sector, Agricultural Sector, Plantation Sector, Livestock Sector, Fisheries Sector, Product Processing Industry Sector. The number of UMKM according to business profile

sectors in Bitung City can be seen in Table 2. The number of Micro Enterprises in the Trade Sector is 9,516 businesses (30%), the Services Sector is 1,971 businesses (6%), the Agriculture Sector is 959 businesses (3%), the Plantation Sector amounting to 406 businesses (1%), the Livestock Sector amounting to 7,876 businesses (25%), the Fisheries Sector amounting to 3,367 businesses (10%), and the Processing Industry Sector amounting to 8,050 businesses (25%). The number of small businesses in the trade sector is 19 businesses (26%), the services sector is 6 businesses (8%), the agricultural sector is 5 businesses (7%), the plantation sector is 3 businesses (4%), the livestock sector is 14 businesses (19%), the Fisheries Sector amounted to 10 businesses (14%), and the Processing Industry Sector amounted to 16 businesses (12%).

The number of Medium Enterprises in the Trade Sector is 9 businesses (21%), the Services Sector is 17 businesses (40%), the Agricultural Sector is 2 businesses (5%), the Plantation Sector is 3 businesses (7%), the Livestock Sector is 2 businesses (5%), Fisheries Sector of 5 businesses (12%), Processing Industry Sector of 4 businesses (10%).

Bitung City has become an Autonomous City since 10 October 1990 (Bitung City Government, 2022). The use of digital in Bitung City has been carried out since this city became an autonomous region, resulting in the formation of regional apparatus/government agencies using computers. Then followed by people using computers, cellphones, internet, websites, social media (Facebook, Twitter, Instagram and YouTube) and e-commerce. Further developments in the application of digital

technology and information are utilized by transportation services in the form of Gojek, Grab and InDrive; marketing and ordering products in the form of Gofood, Shopee and Bukalapak; as well as GoPay and OVO payment transactions. This element of Digitalization Capability (digital technology and information) has been widely implemented by UMKM in their business activities. The number of UMKM that have utilized digital can be seen in Table 3.

Table 2. Number of MSMEs by Business Profile Sector in Bitung City

No	Business Profile Sector	Micro Business	Small Business	Medium Business
1.	Trading	9.497	19	9
2.	Service	1.971	6	17
3.	Agriculture	959	5	2
4.	Plantation	406	3	3
5.	Farm	7.876	14	2
6.	Fishery	3.367	10	5
7.	Processing Industry	8.050	16	4
Total		32.126	73	42

Data Source: Bitung City Cooperatives and Trade Department (2023)

Table 3. Number of UMKM Using Digital in Bitung City

No.	UMKM <u>Businesse</u>	Total Business
1.	Micro Business	32.126
2.	Small Business	73
3.	Medium Business	42

Overall, UMKM business actors in Bitung City have not utilized digital optimally, but at least all UMKM business actors have utilized digital, even though they only own cellphones for their business.

The opportunities and potential for creating a digital economy have not been followed up with how to utilize these opportunities, which will create obstacles in the process of utilizing the digital economy in Bitung City. It is hoped that the large potential with the development of the digital economy will help improve the economy in all lines of

business, both large businesses and micro, small and medium enterprises (UMKM). With increasingly dynamic business development locally, regionally and globally, the digitalization process has become an important factor for every business in seeking, gaining and maintaining competitiveness. Digitalization capabilities are a very important part of an organization's strategy to gain and develop its market share, so it can be said that this process is a potential and opportunity that can be exploited by every line of business and industry (Barney, *et al* 2007).

In its development, it is believed that the potential of the digital economy can bring new opportunities and opportunities as well as obstacles for people who are not reached by old business patterns in UMKM businesses in Bitung City. This is supported by the increasing number of UMKM businesses in Bitung City which utilize elements of digitalization capabilities as technology and digital information in running their business in financial, management, distribution and marketing processes. Apart from that, digitalization capability is a very urgent factor that must be considered, because with strong digitalization it is hoped that UMKM businesses will become an existing and competitive sector, especially facing the free market of the ASEAN Economic Community (AEC).

Based on the description above, the question arises as to whether the UMKM sector has implemented digital technology and information which is an element of full/complete digital capability in its business/enterprise. To what extent are the digital capability elements possessed by UMKM capable of maximizing digitalization capabilities, able to provide profits and able to be competitive in their business ventures in the era of an increasingly competitive digital economy. Therefore, it is necessary to study the digitalization capabilities of the UMKM sector in Bitung City in the era of the digital economy.

RESEARCH METHODOLOGY

Time and Place of Research

The research was carried out for 6 weeks and the research location was Bitung City.

Research Methods

The data used includes primary data and secondary data. Primary data collection was carried out using a survey by distributing a list of questions to micro,

small and medium enterprises (UMKM) in Bitung City. Meanwhile, secondary data was taken from related agencies. The population in this research is all micro, small and medium enterprises (UMKM) in Bitung City. Sampling was taken using stratified random sampling with comparable allocation. The number of samples that will be taken is 30 micro businesses, 30 small businesses and 30 medium businesses (UMKM), and 2 people will be taken from each business as representatives, namely the owner (1 person) and the workforce (1 person).

Concept of Indicators and Variable Measurement

The variables measured and used in the research are:

Characteristics of Business Actors include:

Age (years), level of education (elementary school, middle school, high school, university), length of business (years). Common types of trade in UMKM.

Digitalization Capabilities of the UMKM Sector.

Digitalization capability is the ability of a business to manage or utilize its existing resources using digital in order to achieve the goals of a business to obtain maximum profits. Elements of digitalization capability (application of digital technology and information elements) are used to determine maximum digitalization capability. In this research, only 10 (ten) elements of digital capability were carried out to see the digitalization capability of the UMKM sector in Bitung City through inductive analysis with a one sample t test, namely: (1) Digital Capability, (2) The Importance of Digital Strategy, (3) Mobile Phone Ownership, (4) Computer Ownership, (5) Website Ownership, (6) Social Media Ownership, (7) E-commerce System Ownership, (8) Aspects of Internet Use, (9) Frequency of Internet Use, and (10) Importance of Internet Use. Measurement of 10 (ten)

elements of digital capability using a Likert scale for one sample t test as follows: unfavorable (unfavorable) value 1; less favorable (less favorable) value 2; neutral favorable (no gain/no loss) value 3; favorable (favorable) value 4; very favorable (very profitable) score 5 (Geoff, 2010).

The data analysis used was inductive analysis with a one-sample t test with the SPSS program version.

RESULTS AND DISCUSSION

Research Results

Characteristics of Business Actors

a. Age Distribution of Business Actors.

Table 4 explains the age distribution of Micro, Small and Medium Enterprises (UMKM) business actors in Bitung City, which seen as a whole shows that the majority of UMKM business actors in

Bitung City are aged 29-39 years (31%), 18-28 years (26 %), 40-50 years (22 %), > 50 years (12 %) and < 17 years (9 %).

b. Business Actor Education.

Table 5 explains the educational level of UMKM business actors in Bitung City which, seen as a whole, shows that UMKM business actors in Bitung City have a high school education level (43%), Bachelor/S1 level of 37%, SMP level of 13%, and Masters/S3 level. by 7%.

c. Length of Business by UMKM Entrepreneurs.

Table 6 explains the length of business for Micro, Small and Medium Enterprises (UMKM) business actors in Bitung City, which seen as a whole shows that the majority of UMKM business actors in Bitung City have been in business for 11-15 years (26%), 16-20 years and 6-10 years (23%), > 20 years 16%, and < 5 years 12%.

Table 4. Age Distribution of UMKM Business Actors in Bitung City

Age	Micro Business		Small Business		Medium Business		UMKM	
	Total	%	Total	%	Jumlah	%	Jumlah	%
< 17 years	3	10	4	13	1	3	8	9
18-28 years	9	30	9	30	5	17	23	26
29-39 years	9	30	11	37	8	27	28	31
40-50 years	6	20	4	13	10	33	20	22
>50 years	3	10	2	7	6	20	11	12
Total	30	100	30	100	30	100	90	100

Data Source: Processed Primary Data Results November 2023

Table 5. Education of UMKM Business Actors in Bitung City

Level of Education-	Usaha Mikro		Small Business		Medium Business		UMKM	
	Total	%	Total	%	Total	%	Total	%
SMP	4	13	2	7	6	20	12	13
SMA	15	50	12	40	12	40	39	43
S1)	9	30	14	47	10	33	33	37
S2/S3	2	7	2	7	2	7	6	7
Tota	30	100	30	100	30	100	90	100

Data Source: Processed Primary Data Results November 2023

Table 6. Length of Business by UMKM Business Actors in Bitung City

Age	Micro Business		Small Business		Medium Business		UMKM	
	Total	%	Total	%	Total	%	Total	%
< 5 years	5	17	4	13	3	10	11	12
6-10 years	7	23	7	23	7	23	21	23
11-15 years	8	27	8	27	7	23	23	26
16-20 years	7	23	6	20	8	27	21	23
>20 years	3	10	6	20	5	17	14	16
Total	30	100	30	100	30	100	90	100

Data Source: Processed Primary Data Results November 2023

d. General Types of Trade in UMKM Businesses.

Table 7 explains the general types of trade in Micro Enterprises, Small Enterprises and Medium Enterprises (UMKM) in Bitung City, looking at the overall type of trade in agricultural products, 26 businesses (29%), types of trade in nine basic commodities, 20 businesses (22%), type of trading

Grocery goods 16 businesses (18%), 15 types of trade in building materials (17%), and types of trade in agricultural products 13 businesses (14%).

Digitalization Capability of the UMKM Sector

The development of the application of digital technology and information, which are elements of digitalization capabilities, can open up opportunities and opportunities as well as threats and obstacles for all sectors, including the micro, small and medium enterprise (UMKM) sector. However, the concept of digitalization for the UMKM sector is not yet well known, even though it is actually a necessity that must be adopted or implemented by UMKM business actors, especially in the information process and product design. This is the reason, because the contribution of the MSME sector in Indonesia is quite large in the Indonesian economy. Bank Indonesia reported that in 2017 there were

63 million UMKM in Indonesia with a contribution of more than 60% to GDP. Support for the digitalization capabilities of the UMKM sector in facing increasingly competitive forces in the digital environment is the main reference for all UMKM sectors in Indonesia. The basic and main indicator in encouraging digitalization capabilities is the level of understanding of a sector's capabilities and literacy regarding the concept of digitalization among business actors.

a. Elements of Micro Business Digital Capability.

The results of the one-sample statistical analysis and the one-sample t test on the elements of digitalization capability for Micro Enterprises can be seen in Table 8 and Table 9. Based on the results of the one-sample t-test analysis on the elements of digital capability, it shows that elements (1) are the ability to understand digital, (2) the importance of digital strategy, (3) mobile phone ownership, (4) computer ownership, (5) website ownership, (6) social media ownership, (8) aspects of internet use, and (10) the importance of internet use in micro businesses shows sig. (2-way) < 0.05, H_0 is rejected and H_1 is accepted, meaning the calculated average value (\bar{X}) is significant (significantly different) from the expected average value (μ) = 3. Eight elements of digital capability in Micro Enterprises in The city of Bitung

has implemented it significantly so that it is able to maximize digitalization capabilities,

is able to provide benefits and is able to be competitive in business.

Table 7. Number of UMKM Businesses According to General Trade Type in Bitung City

General types of trading	Micro Business		Small Business		Medium Business		UMKM	
	Total	%	Total	%	Total	%	Total	%
Nine basic	7	23	6	20	7	23	20	22
Grocery Goods	5	17	5	17	6	20	16	18
Building materia	5	17	4	13	6	20	15	17
Electronic Goods	4	13	5	17	4	13	13	14
Agricultural Products	9	30	10	33	7	23	26	29
Total	30	100	30	100	30	100	90	100

Table 8. One Sample Statistical Analysis of Capability Elements in Micro Enterprises In Bitung City

Elements of digital capabilities	Number of samples	Average	Std.Deviation	Std. Average error
(1)Ability to understand digital	30	2,4000	,62146	,11346
(2)The importance of digital strategy	30	2,3000	,59596	,10881
(3)Handpone Ownership	30	3,3000	,70221	,12821
(4)Computer Ownership	30	3,4000	,72397	,13218
(5)Website Ownership	30	2,6000	,81368	,14856
(6)Media Social Ownership	30	2,5000	,62972	,11497
(7)Ownership e-commerce systems	30	2,9000	,75886	,13855
(8)Aspects of internet use	30	3,4000	,67466	,12318
(9)Frequency of internet use	30	3,2000	,55086	,10057
(10)The importance of internet use	30	3,4000	,67466	,12318

Analysis Results with the SPSS Program version

Table 9. One Sample t Test on Digitalization Capability Elements in Micro Enterprises In Bitung City

Elements of digital capability	Average expected value (U) = 3					
	t	df	sig.(2-tail)	Average difference	Confidence difference interval 95 %	
					Lower limit	upper limit
(1)Ability to understand digital	-5,288	29	,000	-,60000	-,8321	-,3679
(2)The importance of digital strategy	-6,433	29	,000	-,70000	-,9225	-,4775
(3)Handpone ownership	2,340	29	,026	,30000	,0378	,5622
(4)Computer ownership	3,026	29	,005	,40000	,1297	,6703
(5)Website ownership	-2,693	29	,012	-,40000	-,7038	-,0962
(6)Media Social ownership	-4,349	29	,000	-,50000	-,7351	-,2649
(7)Ownership e-commerce system	-,722	29	,476	-,10000	-,3834	,1834
(8) Aspects of internet use	3,247	29	,003	,40000	,1481	,6519
(9) Frequency of internet use	1,989	29	,056	,20000	-,0057	,4057
(10) The importance of internet use	3,247	29	,003	,40000	,1481	,6519

Analysis Results with the SPSS Program

Likewise, elements (7) ownership of an e-commerce system and (9) frequency of internet use in Micro Enterprises show sig. (2-way) > 0.05, Ho is accepted and Hi is rejected, meaning the calculated average value (\bar{X}) not significant (not significantly different) with the average expected value (μ) =3. These two elements of digital capability are applied insignificantly so that they are unable to maximize digitalization capabilities, unable to provide benefits and unable to be competitive in business.

b. Elements of Small Business Digitalization Capabilities.

The results of one sample statistical analysis of the results of the one sample t test on the elements of digital capability in Small Businesses can be seen in Table 10 and Table 11. Based on the results of the one sample t test analysis of the elements of digital capability in Small Businesses, it shows that elements (3) ownership of mobile phones, (4)) Computer ownership, (5) website ownership, (8) aspects of internet use, (9) frequency of internet use and (10) importance of internet use show sig. (2-sided) < 0.05, Ho is rejected and Ha is accepted, meaning the calculated average value (\bar{X}) is significant (significantly

different) from the expected average value (μ) = 3.

The six elements of digital capability in Small Businesses in Bitung City are implemented significantly so that they are able to maximize digitalization capabilities, are able to provide profits and are able to be competitive in business. Likewise, the elements (1) ability to understand digital, (2) the importance of digital strategy, (6) ownership of social media, and (7) ownership of an e-commerce system in small businesses show sig. (2-sided) > 0.05, Ho accepted and Ha rejected means that the calculated average value (\bar{X}) is not significant (not significantly different) from the expected average value (μ) =3. The four elements of digital capability in small businesses are applied insignificantly so that they are unable to maximize digitalization capabilities, unable to provide profits and unable to be competitive in business.

c. Elements of Medium Enterprise Digitalization Capabilities.

The results of one-sample statistical analysis and one-sample t test on the elements of medium-sized enterprise digitalization capabilities can be seen in Table 12 and Table 13.

Table 10. One Sample Statistical Analysis of Capability Elements in Small Businesses in Bitung City

Element of digital capabilities	Number of samples	Average	Std.Deviation	Std.Average error
(1)Ability to understand digital	30	3,2000	,66436	,12130
(2)The inportance of digital strategy	30	3,1000	,75886	,13855
(3)Handpone ownership	30	3,6000	,72397	,13218
(4)Computer ownership	30	3,7000	,91539	,16713
(5)Website ownership	30	3,3000	,83666	,15275
(6)Media Social ownership	30	2,6000	,81368	,14856
(7)Ownership e-commerce systems	30	2,8000	,80516	,14700
(8)Aspects of internet use	30	3,6000	,81368	,14856
(9)Frequency of internet use	30	3,7000	,79438	,14503
(10)The importance of internet use	30	3,7000	,65126	,11890

Analysis results with the SPSS program version

Table 11. One Sample t Test on Digitalization Capability Elements in Small Businesses in Bitung City

Elements of digital Capability	Average expected value (μ) = 3					
	t _a	df	sig.(2-sisi)	Average difference	Confidence difference interval 95 %	
					Lower limit	Upper limit
(1)Ability to understand digital	1,649	29	,110	-,60000	-,8321	-,3679
(2)The importance of digital strategy	,722	29	,476	-,70000	-,9225	-,4775
(3)Handpone ownership	4,539	29	,000	,30000	,0378	,5622
(4)Computer ownership	4,188	29	,000	,40000	,1297	,6703
(5)Website ownership	-2,693	29	,012	,40000	-,7038	-,0962
(6)Media Social ownership	-1,361	29	,184	-,20000	-,5007	,1007
(7)Ownership e-commerce systems	1,964	29	,059	-,30000	-,0124	,6124
(8)Aspects of internet use	4,039	29	,000	,60000	,2962	,9038
(9)Frequency of internet use	4,826	29	,000	,70000	,4034	,9966
(10)The importance of internet use	5,887	29	,000	,70000	,4568	,9432

SPSS Program analysis results

Table 12. One Sample Statistical Analysis of Internal Digital Capability Elements Medium Enterprises in Bitung City

Elements of digital capabilities	Number of samples	Average	Std.Deviation	Std.Average error
(1)Ability to understand digital	30	3,8000	,76112	,13896
(2)The importance of digital strateg	30	3,9000	,71197	,12999
(3)Handpone ownership	30	4,1000	,88474	,16153
(4)Computer ownership	30	4,2000	,61026	,11142
(5)Website ownership	30	4,1000	,75886	,13855
(6)Media Sosial ownership	30	4,2000	,76112	,13896
(7)Ownership e-commerce systems	30	4,2000	,66436	,12130
(8)Aspects of internet use	30	4,4000	,49827	,09097
(9)Frequency of internet use	30	4,5000	,50855	,09285
(10)The importance of internet use	30	4,6000	,49827	,09097

Analysis Results with the SPSS Program version

Table 13. One Sample t Test on Digitalization Capability Elements in Medium Enterprises In Bitung City

Elements of digital capability	average expected value (μ) = 3					
	t _a	df	sig.(2-sisi)	Average difference	Confidence difference interval 95 %	
					Lower limit	upper limit
(1)Ability to understand digital	5,757	29	,000	,80000	,5158	1,0842
(2)The importance of digital strategy	6,924	29	,000	,90000	,6341	1,1659
(3)Handpone ownership	6,810	29	,000	1,10000	,7696	1,4304
(4)Computer ownership	10,770	29	,000	1,20000	,9721	1,4279
(5)Website ownership	7,940	29	,000	1,10000	,8166	1,3834
(6)Media Sosial ownership	8,635	29	,000	1,20000	,9158	1,4842
(7)Ownership e-commerce systems	9,893	29	,000	1,20000	,9519	1,4481
(8)Aspects of internet use	15,389	29	,000	1,40000	1,2139	1,5861
(9)Frequency of internet use	16,155	29	,000	1,50000	1,3101	1,6899
(10)The importance of internet use	17,588	29	,000	1,60000	1,4139	1,7861

Analysis Results with the SPSS Program version

Based on the results of the one sample t test analysis of the elements of digitalization capability in small businesses, it shows that the elements of ability to understand digital, the importance of digital strategy, mobile phone ownership, computer ownership, website ownership, social media ownership, e-commerce system ownership, aspects of internet use, the frequency of internet use and the importance of internet use in medium-sized businesses shows sig. (2-sided) < 0.05 , H_0 is rejected and H_a is accepted, meaning the calculated average value (\bar{X}) is significant (significantly different) from the expected average value (μ) = 3. Ten elements of digital capability in Medium Enterprises in The city of Bitung has implemented it significantly so that it is able to maximize digitalization capabilities, is able to provide benefits and is able to be competitive in business.

3.2 Discussion

The digital era offers new business and economic opportunities that were not seen before and has an impact on changes in the digital-based economic structure, namely the digital economy (Sari and Kartika, 2015). The very rapid development of UMKM in Bitung City has resulted in an increasingly strong level of competition as a result of the increasing demands for digitalization in facing the digital economy. The digitalization process is a factor that greatly influences an organization's ability to face its existence in the digital economy era. The better an organization's digitalization capabilities, the stronger the organization will maintain its competitiveness in the digital economy era. With the development of an increasingly fast internet that began in the mid-1990s, the digital landscape has evolved and changed the way businesses operate and how consumers influence business transactions. However, this increase must be accompanied by digital understanding capabilities, because with good digitalization capabilities, micro, small and

medium enterprises (UMKM) will have competitiveness in conditions of increasingly rapid development of digital technology and information.

According to Barney, (1991) said that Digitalization Capability is the ability of a business to manage or utilize existing resources using digital in order to achieve the goals of a business to obtain maximum profits. Micro, Small and Medium Enterprises (UMKM) are a collection of resources to build digitalization capabilities as a source for achieving superior performance. To achieve resource performance which includes products, production factors and marketing, UMKM must be able to manage their resource digitalization capabilities well. Marketing capability is a set of resources and skills in the field of marketing which are the result of a process of knowledge accumulation and integration with values and norms developed through the UMKM process (Sudrajat, 2022).

The elements of digital capability (elements of digital technology and information) in the UMKM sector in Bitung City studied in this research consist of 10 (ten) elements, namely: (1) Ability to Understand Digital, (2) The Importance of Digital Strategy, (3) Mobile Phone Ownership, (4) Computer Ownership, (5) Website Ownership, (6) Social Media Ownership, (7) E-commerce System Ownership, (8) Aspects of Internet Use, (9) Frequency of Internet Use, and (10) Importance of Internet Use in business /business. These elements determine the digitalization capabilities of the UMKM sector.

1. Micro Business

Based on the results of the one sample t test analysis of 10 (ten) elements of digital capability studied in Micro Enterprises in Bitung City, it turns out that 8 (eight) elements of digital capability include the ability to understand digital, the importance of digital strategy, mobile phone ownership,

computer ownership, website ownership, ownership social media, aspects of internet use, and the importance of internet use in business show that the calculated average value (\bar{X}) is significantly different from the expected average value (μ). Overall application of the ten elements of digital capability mentioned above in Micro Businesses can significantly increase digitalization capabilities to the maximum, be able to provide maximum profits in existing businesses, and be able to increase competitiveness in businesses/enterprises. Meanwhile, 2 (two) elements of digital capability, including e-commerce systems and frequency of internet use in business, show that the calculated average value (\bar{X}) is not significantly different from the expected average value (μ). The overall application of these digital capability elements in Micro Enterprises is not significant, unable to increase digitalization capabilities to the maximum, unable to provide maximum profits in business/business, and unable to increase competitiveness in business/enterprise. Therefore, every Micro Business actor must be able to apply elements of digitalization capabilities as a whole so that in managing the business they are able to maximize digitalization capabilities, are able to provide maximum profits in their existing business/enterprise, and are able to be competitive in their business/enterprise. The inability of Micro Businesses in Bitung City to maximize digitalization capabilities, are unable to provide profits, and are unable to compete in existing businesses/businesses due to the lack of competent human resources in the digital field and limited capital. This is in line with the opinion of Hilmiana (2020) who states that the limitations of UMKM business actors in general are a lack of ability to understand digital, limited human resources who are competent in the digital field, and limited capital.

2. Small Business

Based on the results of the one sample t test analysis of 10 (ten) elements of digital capability studied in Small Businesses in Bitung City, it turns out that there are 6 (six) elements of digital capability including cell phone ownership, computer ownership, website ownership, social media ownership, aspects of internet use, frequency Internet use and the importance of internet use in business shows that the calculated average value (\bar{X}) is significantly different from the expected average value (μ). The overall application of the ten elements of digital capability mentioned above in Small Businesses can significantly increase digitalization capabilities to the maximum, be able to provide maximum profits in existing businesses, and be able to increase competitiveness for businesses/enterprises. Meanwhile, 4 (four) elements of digital capability include the ability to understand digital, the importance of digital strategy, ownership of social media and e-commerce systems in business, showing that the calculated average value (\bar{X}) is not significantly different (not significant) from the average value expectation (μ). The overall application of the ten elements of digital capability in Small Businesses is not significant, unable to increase digitalization capabilities to the maximum, unable to provide maximum profits in existing businesses, and unable to increase competitiveness in businesses/enterprises. Therefore, every small business actor must be able to apply the ten elements of digital capability as a whole so that in managing the business they are able to maximize digitalization capabilities, be able to provide profits, and be able to be competitive in existing businesses. The inability of small businesses in Bitung City to maximize digitalization capabilities, are unable to provide profits, and are unable to compete in existing businesses/enterprises is due to small business actors having a low ability to understand digital, lacking competent human resources in the digital

field and limited capital. This is in line with the opinion of Hilmiana (2020) who states that the limitations of UMKM business actors in general are a lack of ability to understand digital, limited human resources who are competent in the digital field, and limited capital.

3. Medium Enterprises

Based on the one sample t test analysis of the elements of digitalization capability of Medium Enterprises in Bitung City including the ability to understand digital, the importance of digital strategy, mobile phone ownership, computer ownership, website ownership, social media ownership, e-commerce system ownership, aspects of internet use, frequency of internet use, and the importance of internet use in business ventures shows that the calculated average value (\bar{X}) is significantly different from the expected average value (μ). The overall application of the ten elements of digital capability mentioned above in Medium Enterprises significantly, is able to increase digitalization capabilities to the maximum, is able to provide maximum profits in business/business, and is able to increase competitiveness in business/enterprise. Therefore, every Medium Business actor must be able to implement all the elements of digital capability so that in managing Medium Enterprises they are able to maximize digitalization capabilities, be able to provide profits, and be able to be competitive in existing businesses/enterprises. If Medium Enterprises do not have the ability to implement all the elements of digital capability then they will not be able to maximize digitalization capabilities, will not be able to provide maximum profits in the existing business/enterprise, and will not be able to be competitive in the business/enterprise.

CONCLUSIONS AND SUGGESTIONS

Conclusion

Based on the results and discussion of the research, the following conclusions can be drawn:

Micro Businesses apply 8 (eight) elements of digital capability significantly, Small Businesses apply 6 (six) elements of digital capability significantly, and Medium Enterprises apply 10 (ten) elements of capability significantly. Significant application of all ten elements of digital capability by UMKM in Bitung City can increase digitalization capabilities to the maximum, provide maximum profits in existing businesses/enterprises, and can increase competitiveness in existing businesses/enterprises.

Micro businesses that do not apply significantly the 2 (two) elements of digital capability, and small businesses that do not significantly apply the 4 (four) elements of digital capability. The insignificant application of the ten elements of digital capability by UMKM in Bitung City cannot increase digitalization capabilities to the maximum, is not able to provide maximum profits in existing businesses, and cannot increase competitiveness in businesses/enterprises. The inability of Micro and Small Businesses in Bitung City to fully implement digital capability elements is due to the low ability to understand digital, limited human resources who are competent in the digital field and limited capital.

Suggestions

Based on the conclusions found above, it is recommended that:

Micro, Small and Medium Enterprises in Bitung City to implement all 10 (ten) elements of digital capabilities so that they can produce maximum digitalization capabilities, provide maximum profits and be able to be competitive in business.

The government, through the Cooperatives and Trade Service, Bitung City Infocom Service, needs to carry out outreach and training on digitalization,

providing capital assistance for Micro and Small Business actors in Bitung City.

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