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DIGITAL KNOWLEDGE AND MARKET POSITIONING OF MICRO, SMALL AND MEDIUM SCALE ENTERPRISE (MSMES) IN ASABA, DELTA STATE, NIGERIA

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ABSTRACT

The study examined the effect of digital knowledge on market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria. The specific objectives of the study were to explore the effect of digital literacy, e-commerce adoption, cybersecurity awareness and digital skills training on market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria. The study was anchored on Resource-Based View (RBV) Theory. The study adopted Descriptive Survey Research Design. The sample size of 227 was determined using Taro Yamane Formula from a population of 552. Data were collected using structured questionnaire. Bio data of the respondents were presented using simple frequency and percentage tables while other data were analyzed using Arithmetic Mean. Hypotheses were tested using Correlation Analysis and OLS Regression with the aid of Statistical Packages for Social Sciences (version 25). Findings revealed that there is a revealed significant effect of digital knowledge on the market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria. The findings concluded that e-commerce adoption and digital literacy have a strong positive effect on market positioning. Digital skill training, though important, shows a positively insignificant effect in the short term, while cybersecurity awareness, if overly prioritized, may negatively impact market positioning by diverting focus from growth and innovation. The study recommended that MSMEs should prioritize the integration of e-commerce platforms and digital literacy initiatives, also, cybersecurity should be managed without overshadowing growth efforts, lastly, implement targeted digital skill training programs that align with long-term goals.

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1. INTRODUCTION

The rapid digital transformation over recent years has significantly impacted the market positioning strategies of Micro, Small, and Medium Scale Enterprises (MSMEs) globally. In Asaba, Delta State, Nigeria, MSMEs play a vital role in the economy, providing employment opportunities and contributing to economic growth. However, to maintain and improve their market positions, these businesses must adapt to the digital age by acquiring relevant digital knowledge. Digital knowledge encompasses the understanding and use of digital tools, platforms, and technologies that facilitate effective business operations and marketing (Bala Subrahmanya, 2008). Market positioning for MSMEs involves establishing a distinct and favorable perception of their products or services in the minds of consumers relative to their competitors (Kotler & Armstrong, 2020). In Asaba, Delta State, Nigeria, many MSMEs struggle to achieve and maintain a competitive market position due to inadequate digital knowledge and skills. Despite the proliferation of digital tools and platforms that could enhance their market positioning, a substantial number of these enterprises lack the necessary expertise to effectively utilize these technologies. This deficiency hinders their ability to reach wider audiences, optimize their marketing strategies, and differentiate themselves in a highly competitive market.

Digital knowledge, which includes an understanding of digital marketing, e-commerce, social media, and data analytics, is crucial for MSMEs to improve their market positioning. However, many MSMEs in Asaba face barriers such as limited access to digital resources, insufficient training, and a lack of awareness about the potential benefits of digital transformation. As a result, they are unable to effectively engage with their target customers or compete with digitally savvy competitors who have a more substantial online presence and better market reach. Furthermore, the lack of digital knowledge among MSMEs in Asaba exacerbates their vulnerability to market disruptions caused by shifts in consumer behavior and the entry of new competitors who leverage digital technologies to offer more innovative and accessible products and services. Without a clear digital strategy, these enterprises risk losing market share, which could lead to diminished growth prospects and even business failure. This situation is particularly concerning in the context of a developing economy where MSMEs play a vital role in economic development and job creation. The problem, therefore, is the apparent gap between the need for digital knowledge and the current digital capabilities of MSMEs in Asaba, Delta State. This gap hampers their market positioning efforts, reduces

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their competitive advantage, and ultimately limits their potential for growth and sustainability in an increasingly digitalized marketplace. There is an urgent need to address this digital knowledge gap by providing MSMEs with access to digital tools, training, and resources that will enable them to effectively compete and thrive in the modern economy. This study aims to explore the impact of digital knowledge on the market positioning of MSMEs in Asaba and identify strategies to enhance their digital capabilities for improved competitiveness.

The integration of digital knowledge into market positioning strategies allows MSMEs to leverage digital channels for greater reach and engagement with their target audience. For instance, through social media marketing, search engine optimization (SEO), and data analytics, businesses can better understand consumer preferences and behavior, thus tailoring their offerings to meet market demands more effectively (Tiago & Veríssimo, 2019). This strategic alignment not only enhances customer satisfaction but also reinforces brand loyalty and competitiveness. In the context of Asaba, where the market landscape is highly dynamic and competitive, MSMEs that effectively harness digital knowledge can achieve superior market positioning compared to those that rely solely on traditional marketing methods. MSMEs in Asaba that have adopted digital marketing strategies have experienced increased visibility and customer engagement, leading to improved sales and market share. The use of digital tools enables these businesses to operate more efficiently and respond swiftly to market changes, thus maintaining a competitive edge. However, despite the evident benefits, many MSMEs in Asaba face challenges in acquiring and utilizing digital knowledge due to factors such as limited access to technology, inadequate digital skills, and financial constraints (Adeola & Evans, 2019). These barriers hinder their ability to fully exploit digital opportunities for market positioning. Consequently, there is a need for targeted support from government and private sectors to provide digital training and resources to MSMEs, enabling them to enhance their digital capabilities and market positioning.

1.1 Objectives

The broad objective of the study is to examine the effect of digital knowledge on the market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria. Specifically, the study aims to;

1. explore the effect of digital literacy on market positioning.
2. determine the effect of digital skills on market positioning.
3. analyze the effect of cybersecurity awareness on market positioning.

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4. ascertain the effect of e-commerce adoption on market positioning.

1.2 Hypotheses

H_{o1}: There is no significant effect of digital literacy on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria.

H_{o2}: There is no significant effect of digital skills on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria.

H_{o3}: There is no significant effect of cybersecurity awareness on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria.

H_{o4}: There is no significant effect of e-commerce adoption on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria.

2. LITERATURE REVIEW

2.1 Conceptual Review

2.1.1 Digital Knowledge

Digital knowledge refers to the skills and competencies required to effectively use digital technologies, tools, and platforms to access, manage, create, and communicate information. It encompasses a broad spectrum of capabilities, including understanding and utilizing software applications, navigating the internet, and engaging with digital media. Digital knowledge is not limited to technical proficiency; it also involves critical thinking and problem-solving abilities related to digital environments. For instance, individuals must possess the ability to critically evaluate online information, ensuring they can discern credible sources from misinformation (Martin & Grudziecki, 2006). The concept of digital knowledge has evolved in response to the rapid technological advancements and the increasing integration of digital tools into various aspects of life and work. As noted by Gallardo-Echenique et al. (2015), digital knowledge goes beyond basic computer literacy, extending into a more comprehensive understanding of how digital technologies can be leveraged for both personal and professional growth. This shift highlights the importance of not only knowing how to operate digital tools but also understanding their broader implications and potential impacts. Moreover, recent studies emphasize that digital knowledge is crucial for participating in the digital economy and society (OECD, 2019). The COVID-19 pandemic further underscored the necessity of digital knowledge, as remote work, online learning, and digital communication became essential for continuity in education, business, and social interaction (Van Deursen & Van Dijk, 2019). As a result, there is a growing recognition of

the need to develop digital knowledge across different populations to bridge digital divides and foster inclusive digital participation (Helsper & Reisdorf, 2017).

2.1.2 Market Positioning

Market positioning is the strategy by which a company crafts a unique image and identity for its products or services within a specific market segment, distinguishing them in the minds of consumers. This process involves setting a brand apart from competitors by emphasizing distinct features and benefits that resonate with the target audience (Kotler & Keller, 2016). The objective is to establish a favorable perception of the brand or product compared to others, thereby influencing consumers' buying decisions. As noted by Hooley et al. (2017), effective market positioning requires a comprehensive understanding of the target market, including customer needs, preferences, and behaviors, as well as a thorough analysis of competitor actions. By using this information, companies can develop a positioning strategy that aligns with their brand values and appeals to their target market. This strategy helps ensure that the brand is viewed positively and its value proposition is clear to consumers. Market positioning is not a one-time effort but an ongoing process that requires constant monitoring and adaptation to changing market conditions, consumer preferences, and competitive dynamics (Ries & Trout, 1981). For example, a company might need to re-evaluate its positioning strategy if consumer demand shifts or if new competitors with disruptive products enter the market. As emphasized by West, Ford, and Ibrahim (2015), successful market positioning often involves a blend of marketing tactics, such as advertising, product innovation, and pricing strategies, to maintain and strengthen the desired market position. Moreover, the rise of digital transformation and globalization has added complexity to market positioning, necessitating more sophisticated strategies that integrate digital channels and consider global market dynamics (Solomon et al., 2009). In today's digital landscape, companies must compete not only against traditional rivals but also against digital-native firms that offer innovative and agile solutions (Chaffey & Ellis-Chadwick, 2019).

2.2 Theoretical Framework

2.2.1 Resource-Based Theory

The study was anchored on Resource-Based Theory. It suggests that a firm's ability to achieve and sustain competitive advantage largely depends on its internal resources and capabilities, which must be valuable, rare, inimitable, and non-substitutable (Barney, 1991). In the context of MSMEs, digital knowledge is considered a critical resource that can significantly influence

market positioning. Digital knowledge encompasses a wide range of competencies, including understanding and effectively using digital tools, platforms, and technologies such as social media, e-commerce, data analytics, and digital marketing. These competencies enable MSMEs to enhance their operational efficiency, reach a broader customer base, tailor their offerings to meet consumer needs, and differentiate themselves from competitors. Applying the RBV theory, digital knowledge can be viewed as a strategic asset that MSMEs in Asaba can leverage to build unique capabilities that are not easily replicated by competitors. For example, an MSME with strong digital marketing skills can better understand customer behavior through data analytics, engage customers through targeted digital campaigns, and optimize its online presence to attract and retain customers. This enhances the firm's market positioning by creating a distinct and favorable image in the minds of consumers, thereby driving competitive advantage. Moreover, the RBV theory posits that to maintain this competitive advantage, firms must continuously develop and refine their resources. For MSMEs, this means not only acquiring digital knowledge but also continuously updating it in response to rapid technological advancements and changing market conditions. The dynamic nature of digital technologies necessitates a proactive approach to learning and adaptation, ensuring that MSMEs remain relevant and competitive in the digital landscape. By integrating the RBV theory into this study, we can better understand how digital knowledge serves as a foundational element for MSMEs' market positioning strategies in Asaba, Delta State. This theoretical framework provides a basis for analyzing how MSMEs can cultivate and utilize digital knowledge as a resource to enhance their competitive positioning and achieve long-term success in an increasingly digitalized marketplace.

2.3 Empirical Review

Le, Nguyen, Pham, and Nguyen (2023) examined the impact of digital leadership on organizational performance: A study in Vietnam's coal mining companies. The purpose of digital transformation for businesses is to enhance operational efficiency through factors such as accelerating market speed, gaining competitive advantage, driving revenue growth, increasing labor productivity, and expanding customer attraction and retention. The research surveyed 111 employees and workers currently working in coal mining companies in Vietnam. Through analysis and hypothesis testing using structural equation model (SEM). The results showed that digital leadership does not have a direct impact on coal companies' operational efficiency. However, it indirectly affects business performance through the mediating role of digital transformation strategies.

Ugwu, Ogbonna, and Okeke (2022) investigated the challenges faced by Small and Medium Enterprises (SMEs) in South-Eastern, Nigeria as they adopt digital technologies. A descriptive survey research design with a mixed-methods approach. The research targets owners and managers of 14 SMEs in South-Eastern, Nigeria. An online survey is distributed to collect quantitative data on the challenges faced by SMEs in adopting digital technologies, followed by semi-structured interviews with a subset of respondents to gain deeper insights into their experiences, a descriptive statistic was used. Findings revealed that several challenges hinder SME adoption of digital technologies in Nigeria. These challenges include lack of access to funding, limited technical expertise, and concerns about data security.

Holmström, Koppinen, and Hippeläinen (2022) explored the influence of digital transformation on business model innovation within manufacturing firms in Finland. The study employed a case study approach with an embedded multiple-case design, allowing for a detailed examination of multiple cases within the Finnish manufacturing context. Three manufacturing firms in Finland are chosen as the research subjects with 411 employees. A qualitative data collection approach is employed, involving semi-structured interviews with key personnel from each firm and the adopted thematic analysis to identify recurring themes and patterns within the collected data. Findings highlighted that digital transformation acts as a catalyst for business model innovation in manufacturing firms.

Preussen, Bourdreau, and Gabriel (2022) explored the intricate relationship between digital transformation, dynamic capabilities, and firm performance in the Canadian retail landscape. The study adopted multiple-case study approach, allowing for an in-depth examination of a select number of cases Four large retail chains operating in Canada are chosen as the research subjects with the total population of 157. Data collection involves semi-structured interviews with key personnel from each retail chain, complemented by document analysis and process mapping techniques, thematic analysis was used to analyze the data. The study found that digital transformation alone is not a guaranteed recipe for success.

Amu, Ugwueze, and Nwezeaku (2022) explored digitization (a facet of digital transformation) and the profitability of selected commercial banks in Nigeria. A quantitative approach is employed, utilizing a survey research design and regression analysis. The study targets a sample of 4 commercial banks in Nigeria. Data collection involves a survey distributed to

bank representatives, followed by statistical analysis to assess the correlation between digitization initiatives and bank profitability. The study found a positive correlation between digitization and profitability in Nigerian banks.

3. MATERIAL AND METHOD

This study employed descriptive survey research designs. The study was domiciled in Asaba, the capital city of Delta State, Nigeria. The population of the study consists of the owners of MSMEs in Asaba. Hence, the total population of the study was 552. The researcher focused on organizations that fall under the category of micro, small and medium-scale enterprises in Asaba, Delta State, Nigeria. The study made use of Krejcie and Morgan's (1970) formula to determine the sample size of the study. The sample size of the study is 227. Purposive sampling technique was adopted in this study. The source of data for this study is majorly primary. The study adopted content validity. The reliability of the instrument was done using Cronbach alpha which tested for internal consistency of the questionnaire. The Cronbach's alpha reliability statistics is 0.901. Bio data collected were presented using simple mathematical tabular presentation based on frequency percentage. The data generated through questionnaire were analyzed using descriptive statistics and hypotheses were tested using OLS multiple regression with the aid of Statistical Packages for Social Science (version 25) at 5% level of significance. OLS regression will provide a more detailed understanding of the causal relationships and predictive power of digital knowledge and market positioning.

4. RESULT AND DISCUSSIONS

4.1 Data Analysis

4.1.1 Presentation of Data

Table 1 Questionnaire Distribution Schedule

Distributed	Collected	Valid
227	211	203
(100%)	(93%)	(89%)

Table 1 shows the total number of distributed copies of the questionnaire, retrieved copies and the number valid to be analyze for the study. From the table, a total of 227 copies of the questionnaire were distributed in accordance with the sample size of the study, 211 copies were collected representing 93% of the distributed copies of the questionnaire, while 203 copies were valid as 8 copies were not answered completely.

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4.2 Research Questions Analyses

Table 2: Distribution of responses for Digital Literacy

S/N	Questionnaire Items	VGE (5)	GE (4)	ME (3)	LE (2)	VLE (1)	Mean	Verdict
	Digital Literacy							
1.	To what extent do you feel confident using digital tools (like computers, smartphones, and the internet) for your business?	78 (38%)	103 (51%)	20 (10%)	2 (1%)	-	4.27	Accept
2.	To what extent do you understand how to protect your business information online, such as using strong passwords and avoiding scams?	82 (40%)	101 (50%)	15 (7%)	3 (2%)	2 (1%)	4.27	Accept
3.	To what extent do you think you can effectively use social media (like Facebook or Instagram) to promote your business?	20 (10%)	23 (11%)	27 (13%)	79 (39%)	54 (27%)	2.39	Reject
4.	To what extent are you comfortable using online	60 (30%)	91 (45%)	34 (17%)	11 (5%)	7 (3%)	3.92	Accept

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	banking or digital payment methods (like mobile money or online transfers) for your business?							
5.	To what extent do you feel capable of learning new digital skills that could help improve your business operations?	56 (28%)	85 (42%)	42 (21%)	12 (6%)	8 (4%)	3.83	Accept

Source: Field Survey, 2024.

Table 3: Distribution of responses for Digital Skills

S/N	**Questionnaire Items**	**VGE (5)**	**GE (4)**	**ME (3)**	**LE (2)**	**VLE (1)**	**Mean**	**Verdict**
	Digital Skills							
6.	To what extent are you able to use basic computer programs, like email or word processing, to help run your business?	64 (32%)	87 (43%)	31 (15%)	14 (7%)	7 (3%)	3.92	Accept
7.	To what extent do you feel skilled at using the internet to search for information that could benefit your business?	20 (10%)	23 (12%)	22 (11%)	70 (34%)	68 (33%)	2.30	Reject

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8.	To what extent can you use digital tools to create simple marketing materials, like flyers or social media posts, for your business?	40 (20%)	57 (28%)	39 (19%)	45 (22%)	22 (11%)	3.24	Accept
9.	To what extent are you comfortable using digital tools, like spreadsheets or accounting software, to manage your business finances?	64 (32%)	93 (46%)	31 (15%)	11 (5%)	4 (2%)	4.00	Accept
10.	To what extent do you feel confident in learning and applying new digital tools or software that could improve your business operations?	71 (35%)	107 (53%)	11 (5%)	8 (4%)	6 (3%)	4.13	Accept

Source: Field Survey, 2024.

Table 4: Distribution of responses for Cybersecurity Awareness

S/N	**Questionnaire Items**	**VGE (5)**	**GE (4)**	**ME (3)**	**LE (2)**	**VLE (1)**	**Mean**	**Verdict**
	Cybersecurity Awareness							

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11.	To what extent do you know how to create strong passwords to protect your business information?	41 (20%)	85 (49%)	20 (10%)	31 (15%)	26 (13%)	3.41	Accept
12.	To what extent are you aware of how to recognize and avoid online scams or phishing emails that could harm your business?	20 (10%)	39 (19%)	25 (12%)	77 (38%)	42 (21%)	2.60	Reject
13.	To what extent do you understand the importance of regularly updating your computer and software to keep your business safe from cyber threats?	51 (25%)	67 (33%)	38 (19%)	27 (13%)	20 (10%)	3.50	Accept
14.	To what extent are you familiar with how to use antivirus software to protect your business devices from viruses and malware?	76 (37%)	100 (49%)	15 (7%)	9 (5%)	3 (2%)	4.17	Accept
15.	To what extent do you feel prepared to respond if your business's online accounts or data are compromised?	50 (25%)	80 (40%)	41 (20%)	22 (11%)	10 (5%)	3.68	Accept

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Source: Field Survey, 2024.

Table 5: Distribution of responses for E-commerce Adoption

S/N	Questionnaire Items	VGE (5)	GE (4)	ME (3)	LE (2)	VLE (1)	Mean	Verdict
	E-commerce Adoption							
16.	To what extent has using e-commerce (buying and selling online) helped your business run more smoothly?	78 (38%)	103 (51%)	20 (10%)	2 (1%)	-	4.27	Accept
17.	To what extent has adopting e-commerce made it easier for your business to find and attract new customers?	64 (32%)	87 (43%)	31 (15%)	14 (7%)	7 (3%)	3.92	Accept
18.	To what extent has using e-commerce improved your customers' experience and satisfaction with your business?	41 (20%)	85 (49%)	20 (10%)	31 (15%)	26 (13%)	3.41	Accept
19.	To what extent do you think that adopting e-commerce has	25 (12%)	81 (40%)	57 (28%)	23 (11%)	17 (9%)	3.36	Accept

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	helped increase your business's sales?							
20.	To what extent has adopting e-commerce helped you reduce the costs of running your business?	70 (35%)	78 (38%)	33 (16%)	14 (7%)	8 (4%)	3.93	Accept

Source: Field Survey, 2024.

Table 6: Distribution of responses for Market Positioning

S/N	**Questionnaire Items**	**VGE (5)**	**GE (4)**	**ME (3)**	**LE (2)**	**VLE (1)**	**Mean**	**Verdict**
	Market Positioning							
21.	To what extent do you feel your business clearly communicates what makes it different from competitors?	107 (53%)	74 (36%)	18 (9%)	4 (2%)	-	4.44	Accept
22.	To what extent do you understand who your target customers are and what they need from your business?	81 (40%)	86 (42%)	34 (17%)	2 (1%)	-	4.21	Accept
23.	To what extent are you confident that your pricing is set correctly to attract your target	78 (38%)	96 (47%)	19 (9%)	6 (3%)	4 (2%)	4.17	Accept

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	customers while remaining competitive?							
24.	To what extent do you believe that your business's branding and messaging are consistent across all marketing channels?	25 (12%)	81 (40%)	57 (28%)	23 (11%)	17 (9%)	3.36	Accept
25.	To what extent do you think your business is effectively positioned to meet the needs and preferences of your target market?	70 (35%)	78 (38%)	33 (16%)	14 (7%)	8 (4%)	3.93	Accept

Source: Field Survey, 2024.

4.3 Test of Hypotheses

Table 7 Summary of Regression Result

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988[a]	.976	.976	.65403

a. Predictors: (Constant), E-commerce Adoption, Cybersecurity Awareness, Digital Skills, Digital Literacy

Table 7 provides a detailed summary of the regression model used to analyze the relationship between the dependent variable (market positioning) and several independent variables, namely Customer Retention and Customer Satisfaction. In this case, R is .988, indicating a very strong positive correlation between the dependent and independent variables. An R squared of .976 means that approximately 97.6% of the variance in the dependent variable is

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explained by the independent variables in the model. An adjusted R squared of .976 suggests that the independent variables in the model collectively account for about 97.6% of the variance in the dependent variable, even after adjusting for the number of predictors. This high adjusted R squared value confirms that the model is robust and not overfitted. The standard error of the estimate is .65403, which is an estimate of the standard deviation of the errors that are not explained by the regression model. A lower standard error reflects a more precise fit of the model to the data. The predictors mentioned in the table (e-commerce adoption, cybersecurity awareness, digital skills, and digital literacy) are the independent variables used in the regression analysis. These predictors are presumed to affect the dependent variable being studied. Given the high R squared and adjusted R squared values, these predictors collectively contribute significantly to explaining the variation in the dependent variable.

Table 8: General ANOVA output

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3487.697	4	871.924	2038.341	.000[b]
	Residual	84.697	198	.428		
	Total	3572.394	202			

a. Dependent Variable: Market Positioning

b. Predictors: (Constant), E-commerce Adoption, Cybersecurity Awareness, Digital Skills, Digital Literacy

Table 8 represent the results of an analysis of variance (ANOVA) for the regression analysis and helps determine whether the model is statistically significant. The regression sum of squares (SS Regression) is 3487.697, which represents the variation in the dependent variable (market positioning) that is explained by the independent variables (e-commerce adoption, cybersecurity awareness, digital skills, and digital literacy). The residual sum of squares (SS Residual) is 84.697, which represents the variation in the dependent variable that is not explained by the model. This is the error or unexplained variation. The total sum of squares (SS Total) is 3572.394, which represents the total variation in the dependent variable. It is the sum of the regression sum of squares and the residual sum of squares. The degrees of freedom (df) for the regression is 4, corresponding to the number of predictors in the model. The degrees of freedom for the residual is 198, calculated as the total number of observations (202)

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minus the number of predictors (4) and the intercept (1). The total degrees of freedom are 202, which is the sum of the regression and residual degrees of freedom. The mean square for the regression (MS Regression) is calculated by dividing the regression sum of squares by its degrees of freedom, resulting in 871.924. The mean square for the residual (MS Residual) is calculated by dividing the residual sum of squares by its degrees of freedom, resulting in 0.428. The F-statistic is calculated by dividing the mean square for the regression by the mean square for the residual, resulting in 2038.341. The F-statistic tests the overall significance of the model. The p-value (Sig.) for the F-statistic is .000, which is less than the standard significance level of 0.05. This indicates that the model is statistically significant and that there is a very low probability that the observed relationship between the independent variables and the dependent variable is due to chance. In summary, the ANOVA table shows that the regression model is statistically significant ($p < 0.001$), indicating that the independent variables (e-commerce adoption, cybersecurity awareness, digital skills, and digital literacy) collectively have a significant effect on the dependent variable (market positioning). The high F-statistic and the low p-value suggest that the model provides a good fit to the data and that the independent variables are important predictors of market positioning.

Table 9 General Coefficient Result

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.753	.342		10.969	.000
	Digital Literacy	.160	.073	.168	2.199	.029
	Digital Skills	-.216	.073	-.263	-2.937	.004
	Cybersecurity Awareness	.035	.056	.047	.639	.524
	E-commerce Adoption	.876	.059	1.035	14.784	.000

a. Dependent Variable: Market Positioning

Source: Field Survey, 2024.

Table 9 shows the multiple regression analysis results of coefficients for the components of the effect of digital knowledge on market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria. The results indicate that digital literacy ($\beta = 0.160$, $t = 2.199$, p-value < 0.05), and e-commerce adoption ($\beta = 0.876$, $t = 14.784$, p-

value < 0.05) have a positive and significant effect on the market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria. On the other hand, digital skills (β = -0.216, t = -2.937, p-value < 0.05) has a negative and significant effect on the market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria, cybersecurity awareness (β = 0.035, t = 0.639, p-value > 0.05) has a positive but insignificant effect on the market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria. The R value of 0.988 supports this result and indicates that digital knowledge has an effect on market positioning of micro, small, and medium scale enterprises (MSME) in Asaba, Delta State, Nigeria. The coefficient of multiple determination Adj R^2 = 0.976 indicates that approximately 97.6% of the variation in market positioning can be accounted for by the components of digital knowledge, while the remaining 2.4% of the variation is accounted for by other variables not captured in the model.

To establish the effects of the components on revenue growth, the following multiple linear regression model was used: $Y = \alpha + \beta1X1 + \beta2X2 + \beta3X3 + \beta4X4$. The predictive model is thus expressed as:

MP = 3.753 + 0.160X1 - 0.216X2 + 0.035X3 + 0.876X4

Where:

Y = Market Positioning

α = Constant (Intercept)

X1 = Digital Literacy

X2 = Digital Skills

X3 = Cybersecurity Awareness

X4 = E-commerce Adoption

β1, β2, β3, β4 = Coefficients of the independent variables

4.3.1 Hypothesis One

H_{o1}: There is no significant effect of digital literacy on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria.

Table 9 shows the coefficient for the components of digital knowledge (digital literacy) on the market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria. The results showed that digital literacy (β = 0.160, t = 2.199, p-value < 0.05). For each unit increase in digital literacy, market positioning is estimated to increase by 0.160 units.

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Decision: Reject the null hypothesis and accept the alternate hypothesis, which concludes that "there is significant effect of digital literacy on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria".

4.3.2 Hypothesis Two

H_{o2}: There is no significant effect of digital skills on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria.

Table 9 shows the coefficient for the components of digital knowledge (digital literacy) on the market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria. The results showed that digital literacy (β = -0.216, t = -2.937, p-value < 0.05), which implies that, digital literacy has a negative but significant effect on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria. For each unit decrease in digital literacy, market positioning is estimated to decrease by 0.216 units.

Decision: Reject the null hypothesis and accept the alternate hypothesis, which state that "there is a significant effect of digital literacy on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria".

4.3.3 Hypothesis Three

H_{o3}: There is no significant effect of cybersecurity awareness on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria.

Table 9 shows the coefficient for the components of digital knowledge (cybersecurity awareness) on the market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria. The results showed that cybersecurity awareness (β = 0.035, t = 0.639, p-value > 0.05), which implies that, cybersecurity awareness has a positive but insignificant effect on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria. For each unit increase in cybersecurity awareness, market positioning is estimated to increase by 0.035 units, though this effect is statistically insignificant.

Decision: Fail to reject the null hypothesis, which states that "there is no significant effect of cybersecurity awareness on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria."

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4.3.4 Hypothesis Four

H_{o4}: There is no significant effect of e-commerce adoption on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria.

Table 9 shows the coefficient for the components of digital knowledge (e-commerce adoption) on the market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria. The results showed that e-commerce adoption ($\beta = 0.876$, $t = 14.784$, p-value < 0.05). For each unit increase in e-commerce adoption, market positioning is estimated to increase by 0.876 units.

Decision: Reject the null hypothesis and accept the alternate hypothesis, which state that "there is significant effect of e-commerce adoption on market positioning of micro, small, and medium-scale enterprises (MSME) in Asaba, Delta State, Nigeria".

CONCLUSION AND RECOMMENDATIONS

This study concluded that digital knowledge plays a crucial role in the market positioning of MSMEs in Asaba, Delta State, Nigeria. The analysis revealed that digital literacy and e-commerce adoption positively and significantly impact market positioning, highlighting the benefits of these competencies in enhancing competitiveness. Conversely, the negative effect of digital skills on market positioning suggests that while digital skills are important, a lack of proficiency in this area can adversely affect how MSMEs position themselves in the market. Additionally, the positive but insignificant effect of cybersecurity awareness indicates that while awareness exists, it does not currently translate into a strategic advantage for market positioning among MSMEs. These findings suggest that for MSMEs in Asaba to optimize their market positioning, there should be a balanced emphasis on improving digital literacy, developing effective e-commerce strategies, enhancing digital skills, and integrating robust cybersecurity practices.

The following are recommended by the study;

a) MSMEs should invest in training programs that improve digital literacy among their employees.

b) MSMEs should prioritize the development and expansion of their e-commerce capabilities.

c) MSMEs should provide regular digital skills training to their workforce.

d) MSMEs should develop comprehensive cybersecurity policies and conduct regular training sessions to protect sensitive data and build trust with customers, which can indirectly enhance market positioning.

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