Critical Drivers of Digital Marketing Implementation in the Coffee Industry of Central Aceh Regency

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Abstract. This study analyzes the factors influencing digital marketing adoption in coffee enterprises in Central Aceh Regency. Digital marketing has the potential to enhance the competitiveness of the coffee industry; however, its implementation faces internal and external barriers. Using the AHP and IPA methods, this study evaluates digital marketing adoption from the perspective of 15 coffee business owners and 30 consumers in Central Aceh. The results reveal "expanding market reach" and "increasing sales" as primary motivations while "brand awareness enhancement" and "ease of product information provision" also rate highly among decided factors. However, performance for "risk mitigation" lags in importance, presenting adoption impediments for businesses. By integrating the findings with innovation diffusion theories, this study proposes strategic priorities and recommendations to accelerate digital marketing adoption for regional coffee industry growth. It contributes empirically validated insights to augment digitalization frameworks for agricultural commodity businesses in developing contexts.

Keywords: Evaluation, Digital Marketing, Coffee Business

1. Introduction

In the era of digitization and the development of information technology, the implementation of digital marketing has become crucial for enhancing competitiveness and sustainability in various sectors, including the coffee commodities sector (Aulia, 2023). According to the Association of Internet Service Providers in Indonesia (2016), Indonesia began using internet technology in 1995. When Indo Internet launched its services in the late 1990s, it started to grow rapidly. Through digital marketing, communication, and transactions can occur in real time and on a global scale (Pradiani, 2017). Digital marketing utilizes the Internet and various information technologies to expand markets and increase sales volumes (Juliana et al., 2020).

Digital marketing has transformed companies' management and communication with customers and the public. It has become a key instrument for addressing the challenges that still exist in the field of marketing (Jones et al., 2018). It facilitates communication with customers and enhances innovation, production, sales, and company services (Kirzner, 2013). Some researchers believe that, with e-commerce, SMEs can contribute to improving the competitiveness of local products. However, many business owners are still unsure whether their e-commerce ventures have been successful and many have experienced failures (Hartman, 2002).

According to Quaddus and Achjari (2015), e-commerce adoption has two inhibiting factors: internal and external. Internal factors, also known as internal obstacles, are obstacles to the success of e-commerce that arise within an organization. SME operators face these obstacles, including financial limitations, risks associated with using information technology or e-commerce, and the expertise of SMEs in using e-commerce. External obstacles are external factors to the organization, and they pose new challenges for SME operators that can lead to a decrease in buyers due to the additional costs imposed on customers. Consumer responses to e-commerce products can hinder the use of information technology if the delivery time is lengthy, there are transaction risks, and there is poor Internet access.

Central Aceh Regency, one of the leading coffee-producing regions, faces challenges in adopting digital marketing as an effective strategy. Therefore, this study aims to analyze the factors influencing the decision to implement digital marketing in coffee commodity businesses in Central Aceh Regency. Previous studies have shown that digital marketing can expand markets and increase sales volume (Juliana et al., 2020). Additionally, innovations related to information technology, such as e-commerce, can provide significant advantages for micro-, small-, and medium-sized businesses (Longenecker & Moore, 2010). However, internal and external inhibiting factors still exist in e-commerce adoption of e-commerce (Quaddus & Achjari, 2015).

In the context of Central Aceh Regency, an important coffee-producing region, the adoption of digital marketing presents a challenge. By analyzing and evaluating the factors influencing the implementation of digital marketing, it is hoped that effective strategies can be found to enhance the marketing and competitiveness of coffee businesses in Central Aceh Regency.

This research is of high urgency and priority given the importance of digital marketing in enhancing the competitiveness of the coffee commodity business in the era of globalization. By analyzing the factors influencing the decision to implement digital marketing, this study is expected to provide a better understanding of effective strategies for leveraging information technology to improve the marketing and growth of the coffee commodity business in the Central Aceh Regency.

2. Literature Review

2.1. Digital Marketing

Since the early days of trade, marketing has undergone rapid development, especially with the advancement of technology, driving the shift towards digitization. Search Engine Optimization (SEO) and Search Engine Marketing (SEM) have become top priorities in the realm of digital marketing. Various marketing strategies also involve technologies such as Artificial Intelligence (AI), Big Data, Internet of Things (IoT), and Machine Learning (ML), providing beneficial responses for organizational

growth. The objective of this study is to provide an overview of research on the evolution of digital marketing, SEO, and SEM strategies and to differentiate various tools and techniques used (Panchal et al, 2021).

Currently, there is still a gap between public behavior and beliefs and the market's perception of a company's sustainability and capabilities, making digital marketing a key to bridging this gap (Martin et al, 2019). Digital marketing can reduce risks, uncertainties, and mistrust in online shopping (Alvarez et al, 2018). The digitization of marketing communication channels in business highlights the importance of finding the right methods to develop business practices centered on driving technological change within the organization and creating tailored communication strategies. The dynamic nature of current marketing trends increases the need to implement innovative technology and communication tools that enhance customer satisfaction and retention (loyalty) through customer relationship management (CRM) and digital marketing activities in the digital economy (Limna et al, 2022).

Understanding and navigating modern interactive marketing requires profound insight into customer behavior, their preferred modes of interaction, and the ability to deliver tailored and engaging personalized experiences. The number of days when corporations cannot collect vital data about customer satisfaction is diminishing thanks to advancements in technology (Stone & Woodcock, 2014).

In today's digital age, marketers face challenges and opportunities. Digital marketing, which utilizes electronic media for promotional purposes, has gained significance for both marketers and consumers. Its competitiveness over traditional marketing lies in its diverse forms, effectiveness, and impact on company sales (Yasmin et al., 2015). Social media, given its distinct characteristics, has emerged as a potent marketing tool for businesses, especially for those in the travel tourism industry.

In the realm of travel tourism, reliance on traditional walk-in services for reservations and package selections has shifted dramatically due to digital technology. Programs such as Go-Digital represent strategic initiatives within the tourism industry to thrive in the 4.0 industrial era (Dewi, 2020). Making informed marketing strategy decisions in this context involves understanding the application of Customer Relationship Management (CRM) with Artificial Intelligence (AI) in digital marketing, an area that remains relatively unexplored (Saura et al., 2021).

Digital marketing encompasses various strategies such as content marketing and electronic promotion (E-Promotion). E-promotion, often superior in describing electronic word of mouth (E-WOM), significantly impacts customers' purchase intent. In Thailand, e-WOM serves as a significant mediator between digital marketing activities and customers' purchase intentions on platforms such as Shopee (Napawut et al., 2022).

2.2. Customer Centricity

The concept of a customer-centric organization, or customer-centricity, traces its roots back to 1954, when Drucker asserted that the customer determines what a business is, what it produces, and whether it will prosper (Drucker, 1954). This early recognition of the pivotal role of customers in shaping business success was further emphasized in Lawrence Abott's book "Quality and Competition," where he asserted that people desire satisfying experiences rather than mere products (Abbott, 1955).

The evolution of the customer-centric paradigm continued with influential marketing academics such as Theodore Levitt, who posited that "the purpose of a business is the creation and maintenance of customers" (Levitt, 1986). However, it was not until the 1990s that this concept gained momentum in the marketing literature, primarily through the term "market orientation." Narver and Slater (1990) demonstrated that market-oriented companies were more profitable, even in markets with undifferentiated products.

The economic impact of a customer-centric strategy on a firm has long been a subject of interest in marketing literature. Krasnikov and Jayachandran's (2008) meta-analytic study found a stronger correlation between a firm's economic performance and commercial capabilities than between R&D or operations capabilities. Customer satisfaction has emerged as a robust predictor of a firm's cash flow, sales growth, gross margins, and shareholder returns (Gruca & Rego, 2006; Gruca & Rego, 2005).

Additionally, Fang et al.'s meta-analysis suggest that transitioning from product-centric to service-centric business contributes to shareholder value (Fang et. al. 2008).

The importance of customer-centricity has become increasingly pronounced in the dynamic landscape of contemporary business. Companies recognize the need to continually reassess and redefine their value propositions, with a keen focus on understanding and meeting the evolving needs and expectations of their customers. This customer-centric approach is not merely a trend but also a strategic imperative for sustained success (Pardo-Jaramillo et. al, 2020).

Listening to customers has emerged as a pivotal element of informed and agile business decisions. The insights gained from customer feedback play a crucial role in enhancing operational efficiency and optimizing the utilization of limited resources. This customer-centric philosophy aligns with the broader shift in business paradigms, emphasizing the importance of agility, responsiveness, and adaptability in today's fast-paced markets (Carvalho et. al, 2023).

A novel innovation paradigm is gaining prominence and offers a fresh perspective for entrepreneurs. This paradigm revolves around the principles of convergence, collaboration, and new creation in innovation platforms. As proposed by Trimi and Mirabent (2012), this approach opens new horizons for businesses, encouraging them to break traditional boundaries and explore collaborative opportunities for innovation. This underscores the idea that innovation is not a linear process, but a dynamic interplay between diverse elements and stakeholders.

Customer empowerment has become a pervasive trend in the business landscape. Many companies have embraced this shift, acknowledging the potential for co-creation and collaboration with their customer bases. As highlighted by Fuchs and Schreier (2011), not only have companies empowered their customers, but they also plan to do so in the future. Empowerment serves as a catalyst for the development of competitive and customer-centric products.

Several emerging theories and frameworks have contributed to the understanding and implementation of customer-centric strategies in the current business ecosystem. The Customer Development Model, popularized by Steve Blank, emphasizes the importance of engaging with customers early in the product development process to ensure market fit. Design Thinking, championed by IDEO and Stanford's d.school, provides a human-centered approach to problem solving, placing empathy for the end user at the core of innovation.

Moreover, the rise of Artificial Intelligence (AI) and Machine Learning (ML) technologies has revolutionized customer centricity. These technologies enable businesses to analyze vast amounts of customer data, extract meaningful insights, and personalize experiences at scale. The adoption of Customer Relationship Management (CRM) systems integrated with AI has become a game changer for companies seeking to build lasting and meaningful connections with their customer bases.

2.3. Innovation Diffusion

Innovation Diffusion Theory (IDT), developed by sociologist Everett Rogers in 1962, serves as a comprehensive framework for understanding the intricate process of how new ideas, innovations, or technologies spread within a social system (Rogers, 1983). This theory, which is widely applicable across diverse fields such as communication, marketing, technology, and public health, has its roots in various disciplines, including economics, marketing, sociology, and anthropology (Aizstrauta et. al, 2015).

Rogers' Theory on the Diffusion of Innovations is a seminal contribution in this interdisciplinary field, continuously evolving and influencing subsequent research projects. Many models that aim to elucidate the factors influencing the sharing and adoption of innovation draw inspiration from Rogers' work. The theory encompasses various perspectives, including the innovation-development process, innovation-decision process, innovation attributes and their rate of adoption, adopter categories, leadership, change agents, and innovation in organizations (Aggarwal, et al., 2014; Ferreira et al., 2022).

Rogers defined innovation as an idea, practice, or object perceived as new by an individual or

another unit of adoption. According to Rogers, the innovation decision process entails the stages an individual undergoes, from initial knowledge of an innovation to forming an attitude, deciding to adopt or reject, implementing the idea, and confirming the decision.

Innovation attributes play a crucial role in adoption. This challenges the oversimplified view that all innovations are equivalent units, as evidenced by the varying success rates of the new products. The five innovation attributes are relative advantage, compatibility, complexity, trialability, and observability (Drenta & Labontiu, 2016).

In our study, the set of innovation attributes outlined in Rogers' theory of innovation diffusion is a significant contribution. Applied to the context of digital marketing adoption, IDT provides valuable insights into how businesses or individuals embrace new strategies, platforms, and technologies. By examining the diffusion process, researchers and practitioners can anticipate challenges, design effective communication strategies, and identify potential barriers to adoption in specific markets and industries. The interdisciplinary nature of IDT enriches our understanding of the dynamics involved in innovation adoption, making it a foundational framework for our study.

3. Research Method

3.1 Time and Place

This study was conducted over a period of two months, from August 2023 to October 2023, in the Central Aceh Regency. The research location was chosen because it is a central hub for the coffee business in the Gayo Highlands.

3.2 Population and Sample

The study population was selected using Purposive Sampling. Purposive Sampling is used to select samples based on specific considerations. The advantage of purposive sampling is that it helps fulfill the objectives of the researcher. The population in this study consisted of coffee business operators in Central Aceh Regency. The grouping of the population aims to map the business models run by entrepreneurs and measure the level of consumer satisfaction with the services depicted in the business models implemented in coffee businesses in the Central Aceh Regency.

The determination of samples for the group of business operators and the group of consumers is performed proportionally based on the sub-districts. The sample consisted of technical departments and entrepreneurs of Arabica coffee products. Entrepreneurs of derived Arabica coffee products are expected to provide information on the mapping of derived Arabica coffee products, ranking of derived products, marketing channels for superior derived products, and the business model of superior derived products. Quota sampling was used to determine the sample size in the business operator group. For this group of consumers, the minimum boundary is considered representative of a coffee business. For studies that used statistical data analysis, the minimum sample size was 30 (Baley in Mahmud, 2011). This study included 15 coffee business owners and 30 consumers from Central Aceh.

3.3 Data Analysis

The data analysis methods used in this study were the Analytical Hierarchy Process (AHP) and Importance-Performance Analysis (IPA). A more detailed discussion of the statistical techniques used is as follows.

1. Analytical Hierarchy Process (AHP)

The Analytical Hierarchy Process (AHP), developed by Thomas L. Saaty, serves as a decision support method for tackling multi-factor and multi-criteria problems through a hierarchical representation of complex issues (Saaty, 2008). Its application in problem-solving is substantiated for various reasons, as highlighted by Bernasconi et al. (2010).

AHP establishes a hierarchical structure based on the selected criteria, extending from overarching goals to the deepest sub-criteria. This structured approach aids in organizing and addressing complex

decision-making scenarios.

This method accounts for the validity of decisions, considering the tolerance for inconsistency in the criteria and alternatives chosen by decision makers. This finding emphasizes the importance of reliable and coherent decision-making processes.

AHP also incorporates resilience into decision-making by leveraging the sensitivity analysis output. This feature allows decision-makers to assess the robustness of their choices in the face of varying conditions or inputs.

The procedural steps involved in the AHP method were comprehensive and methodological. They begin with clearly defining the problem and determining the desired solution. The subsequent creation of a hierarchical structure, starting with the main goal, establishes a clear framework for the decision analysis.

Paired comparisons play a crucial role in AHP, helping determine the total number of assessments needed. The construction of a pairwise comparison matrix further illustrates the relative contribution or influence of each element on higher-level goals or criteria.

Calculating the eigenvalues and testing consistency ensures the reliability of the decision-making process. If inconsistencies arise, repeated data collection is required to enhance the accuracy of the assessments.

Repeating the steps for all hierarchy levels ensures a thorough and systematic analysis, and calculating the eigenvectors determines the weight of each element in establishing priorities at the lowest hierarchical level for goal achievement.

Checking the consistency of the hierarchy serves as the final validation step, ensuring that the decision-making structure remains coherent and dependable. Adhering to these steps guarantees systematic and reliable application of the AHP method in complex decision-making processes.

2. Importance-Performance Analysis (IPA)

Importance-Performance Analysis (IPA) is a set of services that identifies the necessary actions. Zeithaml (1990) stated that this method can be used to measure the level of satisfaction with services provided by a company or institution in order to assess the level of alignment between expectations and perceived reality by service recipients. In this study, consumers evaluate customer segments, value propositions, channels, customer relationships, and revenue streams because these five parts of the Business Model Canvas are directly perceived by consumers as service recipients. The importance-performance analysis method maps each satisfaction indicator into four quadrants.
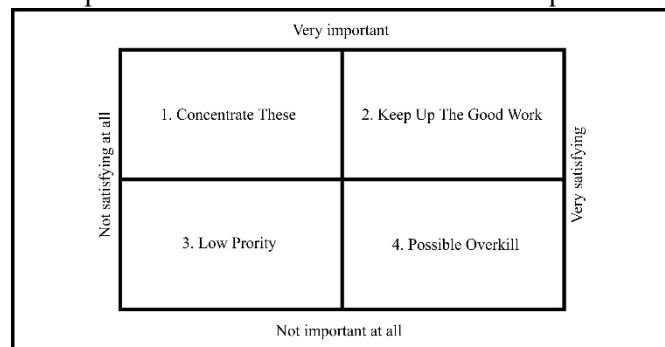

Fig.1: Quadrants of Importance-Performance Analysis

1) The first quadrant (concentrate on these) contains satisfaction measurement indicators where service recipients have very high expectations because they consider the indicators to be highly important in the services they receive.

2) The second quadrant (keeping up with good work) contained important satisfaction indicators. The satisfaction indicators in this quadrant were highly satisfactory, and the quality of service was good.

3) The third quadrant (low priority) contains satisfaction indicators considered less important by consumers.

4) The fourth quadrant (possible overkill) contains satisfaction indicators considered less important by consumers and perceived as excessive because the quality of service provided is higher than consumer expectations.

3. Data Validation

The collected data must be validated to ensure reliability. Qualitative and quantitative data validations can be achieved through triangulation. Triangulation involves the synthesis of data for accuracy by employing different data collection methods or triangulation paradigms. When data is validated through triangulation, researchers gain confidence in its validity, allowing them to draw conclusive findings with certainty in their research (Bachri, 2010)

Triangulation is a multimethod approach employed by researchers throughout the research process, including data collection and analysis. The fundamental concept is that a thorough understanding of the phenomenon under study and a high level of accuracy can be attained from various perspectives. Triangulation techniques encompass four main aspects: (1) sources, (2) researchers, (3) methods, and (4) theories (Kasiyan, 2015).

In this study, data obtained through observation and interviews were reduced, displayed, and verified, as outlined by Sugiyono (2014). This approach ensures a comprehensive and rigorous analysis of the collected data: a) Data that involves summarizing the essential and important aspects and identifying themes and patterns so that the reduced field data can provide a clearer picture and facilitate the collection of further data. b) Data display or presentation is the stage after reduction that presents data in narrative text in the form of graphs, matrices, and charts. c) Drawing conclusions and verification is the third step, which is a new finding or collection of information required in research.

4. Result and Discussion

4.1 Desctiptive Analysis

The respondents' ages in this study were predominantly in the 20-30 years range, accounting for 73%, while 41-50 years make for 20%, and 31-40 years represent 7%. The respondents' educational levels were 67% at the high school/vocational school level and 33% at bachelor's level. Regarding their experience in running a coffee commodity business, 60% had 1–3 years, and 40% had 4–6 years.

Table 1. Usage Percentages of Digital Media

No	Digital Media	Percentage of Usage
1	Instagram	93.8%
2	Facebook	60%
3	Shopees and Webstores	13.3%
4	Tokopedia	6.7%
5	TikTok	6.7%

Tables 1 and 2 summarize the usage percentages of different digital media and the reasons for using digital marketing by coffee commodity business operators in Central Aceh Regency, based on the interview results.

Table 2. Percentage of Reasons for Using Digital Marketing

No	Reasons of Using Digital Marketing	Percentage of Respondents
1	Expanding the Market	100%
2	Increasing Brand Awareness	80%
3	Increasing the Number of Purchase	66.7%
4	Ease of providing Product Information	40%
5	Cost Saving	26.7%
6	Ease of Interaction with Consumers	13.3%
7	Conducting Transactions Online	13.3%
8	Increasing the Number of Partners	20%

From the above data, the primary goal of implementing digital marketing in coffee businesses in

Central Aceh Regency is to expand the market and enhance brand awareness. Instagram is the dominant platform used, and a significant number of respondents viewing digital marketing as a means to save costs indicates the potential efficiency that can be gained by implementing this strategy.

4.2 Analytic Hierarchy Proses (AHP)

One of the approaches used to analyze these data is the Analytic Hierarchy Process (AHP). Through the AHP approach, various factors influencing business operators' decisions to implement digital marketing are weighted (Table 3).

Table 3. Weight of Factors

No	Factors	Weight
1	Expanding the Market	29.71%
2	Increasing the Number of Purchases	16.45%
3	Enhancing Brand Awareness	12.46%
4	Increasing the Number of Partners	10.51%
5	Easily Providing Product Information	10.46%
6	Ease of Interaction with Customers	6.56%
7	Easy Online Transactions	5.37%
8	Time Efficiency	4.28%
9	Cost Savings	2.54%
10	Low Risk of Loss	1.65%

Table 3 summarizes the factors related to the importance of digital marketing in various business aspects, along with their corresponding weights, as indicated. The weights represent the perceived significance of each factor, with a higher percentage indicating a greater importance. Thus, the results of this research indicate that factors such as market expansion, increased sales volume, and brand awareness are the primary motivations for coffee business operators in Central Aceh Regency to implement digital marketing.

The importance of increasing sales volume reflects the need for entrepreneurs to boost their revenue and business growth. Digital marketing serves as an effective means of achieving this goal by expanding consumers' reach and enhancing the sales of their coffee products.

Furthermore, the emphasis on increasing brand awareness indicates that coffee entrepreneurs in Central Aceh Regency recognize the value of building a strong brand image. Digital marketing enables them to reach potential audiences easily, introduce their coffee products, and create a brand identity that is recognizable to customers.

Based on these findings, a digital marketing strategy focused on market expansion, increased sales volume, and brand development can be considered as a relevant and positively impactful investment for coffee entrepreneurs in this region. Therefore, entrepreneurs may consider concrete steps such as enhancing their online presence, improving interactions with customers through social media, and designing marketing campaigns that strengthen their brand image.

While these findings align with general trends in the business sector, it is crucial to remain attentive to the local context and unique characteristics of the market in the Central Aceh Regency. The adoption of digital marketing strategies tailored to the characteristics and preferences of local consumers is key to the success of optimizing the outcomes of these primary motivations (Purnomo, 2023).

4.3 Importance Performance Analysis *(IPA)*

This analysis helps to identify areas that require attention or improvement by comparing what is considered important by users or customers against their satisfaction with the current performance of those attributes. IPA provides a visual representation of the relationship between importance and performance, guiding businesses or organizations in making informed decisions about where to focus their efforts on improvement and optimization.

Based on the obtained data, the analysis results for each quadrant can be seen in Table 4, which are categorized into four quadrants based on their importance and performance scores. Quadrant Two represents the areas where the business is performing well and should continue its efforts. Quadrant Three indicates low-priority areas that may not require immediate attention. Quadrant Four suggests that the effort to increase the number of partners might be excessive compared with its importance.

Table 4. Importance and Performance Score of IPA

No	Factors	Importance Score	Performance Score	Quadrant
1	Expanding the Market	4.73	4.53	Two
2	Easily Providing Product Information	4.40	4.27	Two
3	Increasing the Number of Purchases	4.33	4.13	Two
4	Cost Savings	4.40	3.93	Two
5	Time Efficiency	4.40	3.87	Two
6	Ease of Interaction with Customers	3.73	3.67	Three
7	Enhancing Brand Awareness	3.67	3.60	Three
8	Low Risk of Loss	3.60	3.27	Three
9	Easy Online Transactions	3.40	3.40	Three
10	Increasing the Number of Partners	3.73	3.87	Four

As illustrated in Figure 2, these quadrant analyses offer valuable insights into the significance and performance levels of different aspects of digital marketing for coffee business operators in Central Aceh Regency. Visualization of the Importance Performance Analysis (IPA) results allows for a comprehensive understanding of how these operators perceive and execute their digital marketing strategies.
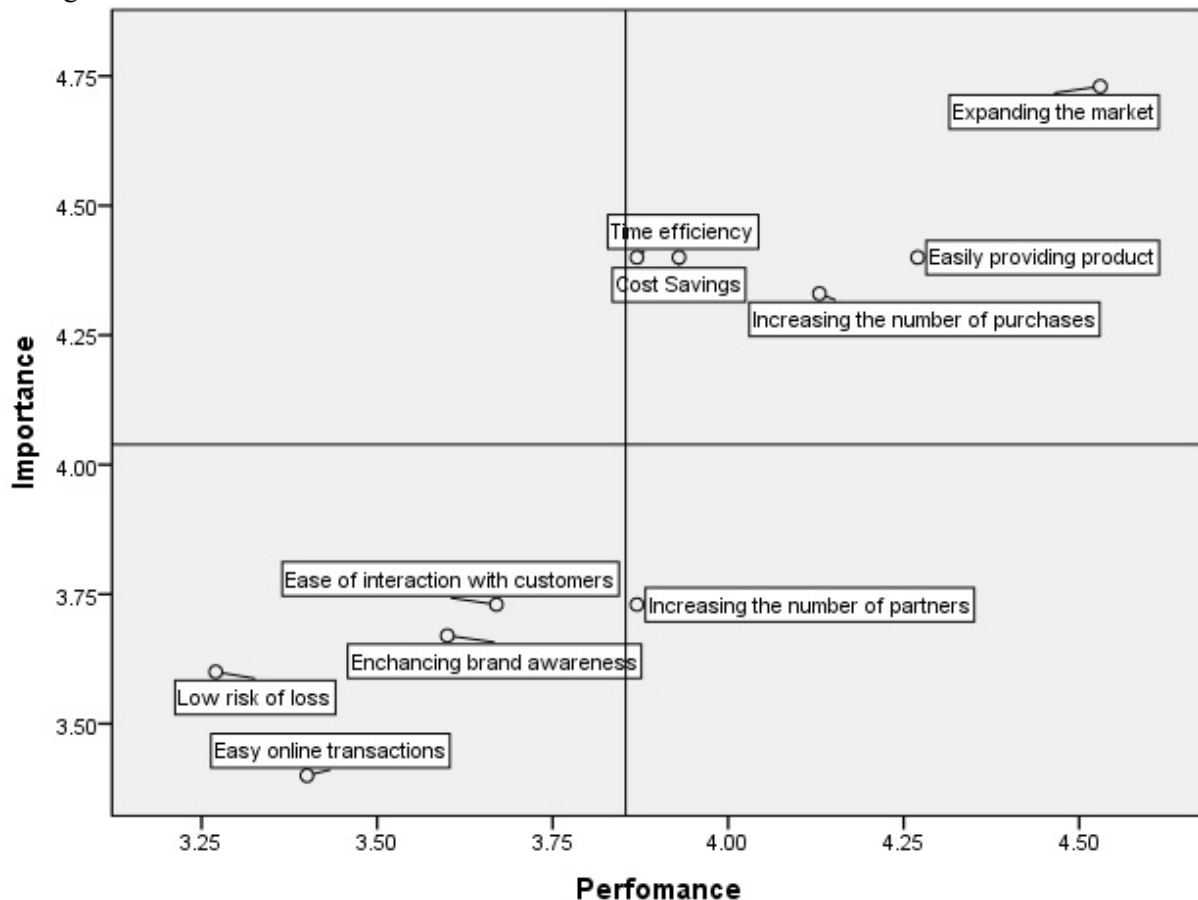

Fig.2: Cartesian Diagram of IPA Method

Quadrant Two, identified as "Keep Up the Good Work," highlights aspects such as expanding the

market, easily providing product information, increasing the number of purchases, cost savings, and time efficiency. These factors received high importance scores, indicating that business operators consider them crucial, and their performance scores suggest that operators believe they are performing well in these areas. This quadrant signifies strengths that should be maintained and potentially leveraged for sustained success.

Quadrant Three, labeled as "Low Priority," includes factors such as ease of interaction with customers, enhancing brand awareness, low risk of loss, and easy online transactions. Although these aspects have been deemed less important by business operators, the performance scores suggest that improvements may be required in these areas to align with their significance in the overall digital marketing strategy.

Quadrant Four, identified as "Possible Overkill," raises interesting considerations regarding the increase in the number of partners. Although deemed less important by business operators, the performance score suggests that efforts in this area may exceed expectations, indicating a potential opportunity to refine strategies or reallocate resources.

These quadrant analyses, when considered alongside previous research findings, provide a nuanced understanding of the specific strengths and areas for improvement within the digital marketing landscape of coffee businesses in Central Aceh Regency. Utilizing this information, business operators can fine-tune their strategies, capitalize on strengths, and address potential weaknesses to ensure a more effective and targeted approach to digital marketing in the local context (Umami & Darma, 2021).

5. Conclusion and Future Research

This study sought to analyze the influential factors in adopting digital marketing for specialized coffee enterprises in Central Aceh, using AHP and IPA techniques. The eigenvalue analysis revealed that "expanding market reach" and "increasing sales volume" were the dominant incentives, whereas performance metrics showed effective digital strategies for customer information and brand awareness. However, technology risk alleviation remains a lower priority, signaling an impediment to internal adoption. By integrating these findings with established innovation diffusion theories, strategic priorities are proposed, including technical training for businesses and online customer experience enhancements, to enable smoother digitization. This study makes important empirical contributions by extending the technology adoption framework for agricultural commodity businesses in developing regions. It provides coffee enterprises with preliminary confirmation and recommendations to base targeted digitalization approaches that can accelerate their marketing modernization. Scholarly implications involve validating the contextual complexities of innovation acceptance in traditional industries. Further studies can build on this platform to test stage-based adoption models or compare acceptance predictors across the agricultural sectors.

The findings of this study offer valuable insights into the priorities and perspectives of coffee business operators in Central Aceh Regency regarding the implementation of digital marketing. However, it is essential to acknowledge several limitations that may affect the generalizability and robustness of this study's conclusions. First, the results are context specific and apply specifically to the sampled coffee businesses in the Central Aceh Regency. Attempting to generalize these findings to other regions or industries may not be appropriate because of potential variations in digital marketing priorities and challenges. Additionally, the sample size and representativeness of the study raise concerns regarding the broader applicability of the results. A more extensive and diverse sample size could have enhanced the external validity of this study. Moreover, the subjectivity inherent in the Analytic Hierarchy Process (AHP) method used for weighting factors introduces a level of bias, as individual respondents may have different perspectives and opinions. Furthermore, this study's time sensitivity is a consideration because the rapidly evolving nature of the digital marketing landscape may render certain findings less relevant over time.

Considering these limitations, future research directions are suggested to enrich our understanding

of the digital marketing strategies in the coffee industry. A cross-industry comparative study could reveal variations in digital marketing priorities across sectors. A longitudinal study that tracks the digital marketing strategies of coffee businesses over time could capture the evolving trends. Complementing quantitative data with in-depth qualitative analyses, such as interviews or focus group discussions, would provide a deeper understanding of coffee business operators' motivations and challenges. Integrating customer perspectives into future research could offer insights into how consumer preferences align with or diverge from the identified priorities. Additionally, exploring the impact of external factors and comparing digital marketing with traditional methods within the coffee industry context could contribute to a more comprehensive understanding of strategic decision making. Addressing these limitations and pursuing these avenues for future research will contribute to a more nuanced and applicable understanding of the dynamics of digital marketing in the coffee business.

Some recommendations that can be made based on the results of this study are as follows:

1. Emphasis on Market Expansion and Brand Awareness. Given the high importance attributed to expanding the market and enhancing brand awareness, coffee business operators should continue to prioritize efforts in these areas. Strategies that leverage digital platforms, particularly Instagram, can be further explored and optimized to maximize reach and visibility (Asamoah, 2014).

2. Optimizing the Use of Digital Platforms. Since Instagram is widely used by respondents, businesses should capitalize on its features and explore innovative content strategies to maintain engagement and attract a broader audience. Exploring emerging platforms such as TikTok may offer new opportunities for creative marketing approaches (Purwanto, 2022).

3. Strategic Partnerships. While the AHP analysis indicates a lower importance assigned to increasing the number of partners, positive performance suggests an opportunity for strategic partnerships. Coffee businesses should explore collaborations that align with their brand values and that contribute to mutual growth (Aulia et al., 2024).

4. Customer Interaction and Online Transactions. Although categorized as a lower priority, businesses should not overlook the importance of ease of interaction with customers and online transactions. Improving the user experience in these areas can contribute to customer satisfaction and loyalty (Tiwasing, 2021).

5. Continuous Monitoring and Adaptation. Recognizing the dynamic nature of the digital marketing landscape, businesses should engage in continuous monitoring and adaptation. Regularly reassessing priorities and staying informed about industry trends will enable businesses to remain ahead of the curve (Aulia *et al.*, 2023).

6. Digital channel diversification While Instagram is a dominant platform, exploring and diversifying digital channels, such as Facebook, Shopee, WebStore, and TikTok, can provide a more comprehensive and effective digital marketing strategy (Dash, Kiefer and Paul, 2021).

7. Qualitative Insights. Complementing quantitative data with qualitative insights through in-depth interviews or focus group discussions can provide a deeper understanding of the motivations and challenges faced by coffee business operators, and guide more nuanced and tailored strategies.

By implementing these recommendations, coffee businesses in Central Aceh Regency can enhance their digital marketing strategies, adapt to changing market dynamics, and achieve sustainable growth in an increasingly competitive digital landscape.

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