

Original Article

IT-Enabled Innovations in Marketing: From Social Media to Customer Insights in Iringa Municipal, Tanzania

Lusekelo Kibona

Department of Computer Science, Ruaha Catholic University (RCU), Iringa, Tanzania.

Corresponding Author : lusekelo2012@gmail.com

Received: 10 October 2024

Revised: 12 November 2024

Accepted: 29 November 2024

Published: 16 December 2024

Abstract - Over the past decade, Information Technology (IT) innovations have significantly altered the marketing landscape, transitioning from conventional methods to more sophisticated, data-driven techniques. This transformation has been fueled by the widespread adoption of social media platforms, which have become central to marketing efforts. This study explored the impact of IT-enabled innovations on marketing practices in Iringa Municipal, Tanzania, focusing on how these technologies shape customer experiences and drive business strategies. With a sample size of 210 respondents, the research employed quantitative and qualitative methods to investigate IT tools' utilization, effectiveness, and challenges in marketing. Key findings revealed that social media platforms and customer relationship management (CRM) software were widely adopted, significantly improving customer engagement and marketing effectiveness. However, challenges such as high costs, a lack of skilled personnel, and data privacy concerns hindered more extensive implementation. The study concluded that while IT-enabled marketing strategies have substantial potential to enhance business performance, addressing these challenges through targeted investments, training, and robust data protection practices is essential for maximizing their benefits. The recommendations aim to guide businesses in overcoming these barriers and fully leveraging IT innovations to optimize their marketing efforts and customer interactions.

Keywords - Information Technology (IT), Marketing innovations, Social media marketing, Customer Relationship Management (CRM), Customer insights, Data analytics, IT-enabled marketing strategies, Customer engagement.

1. Introduction

Over the past decade, Information Technology (IT) innovations have significantly altered the marketing landscape, transitioning from conventional methods to more sophisticated, data-driven techniques. This transformation has been fueled by the widespread adoption of social media platforms, which have become central to marketing efforts. Social media tools have expanded the reach of marketing campaigns and provided valuable insights into consumer behavior and preferences. The evolution of marketing has witnessed a substantial alteration from traditional to technology-driven approaches. Traditional marketing relied on tangible mediums like print ads and television commercials, operating on a broadcast model with limited customization [1, 2]. However, digital technologies and the internet have transformed marketing strategies, enabling personalized engagement, real-time interaction, and measurable campaign effectiveness [1, 3]. This transition has been driven by increased internet accessibility, data analytics, and mobile technology [1]. The rise of artificial intelligence and machine learning has further enhanced marketing capabilities, allowing for the digitalization of consumer behavior and more targeted marketing programs

[4, 5]. As a result, companies have increasingly adopted digital marketing strategies to build better customer relationships, achieve global reach, and maintain competitiveness in the evolving marketplace [3, 6]. The evolution of marketing in Tanzania has seen a significant shift from traditional to technology-driven approaches. While e-marketing adoption has grown among Tanzanian Small and Medium Enterprises (SMEs), it still accounts for only 27% of marketing strategies, with security concerns being a major challenge [7]. The rise of social media has prompted SMEs to explore new marketing avenues, leveraging internet and mobile-based applications [8]. The banking sector's market-driven transformation in Tanzania, part of broader economic reforms, has been relatively successful [9]. Mobile marketing adoption has been positively influenced by perceived usefulness, ease of use, and customer knowledge [10]. Decreased mobile phone usage costs have made mobile payments a popular marketing approach, accounting for 53% of feasible strategies [7]. These developments reflect Tanzania's gradual transition towards technology-driven marketing approaches. Social media platforms have become powerful tools for customer engagement, brand building, and market research. Studies showed that social media marketing



positively influenced customer engagement and brand loyalty [11, 12]. These platforms facilitated direct communication between brands and consumers, enabling real-time interactions and personalized experiences [13]. Building customer engagement through social media involves connection, interaction, satisfaction, retention, commitment, advocacy, and customer engagement [14]. Social media also provides valuable data and analytics, guiding strategic decision-making and refining branding strategies [13]. However, while one-to-one and firm-to-firm communication positively impacted brand trust, the effects of customer-to-customer communication were less clear [14].

Overall, leveraging social media effectively allowed businesses to reach wider audiences, boost brand visibility, and foster stronger customer relationships [11, 13]. Recent studies examined the impact of social media on businesses in Tanzania. Social media platforms were found to play a significant role in promoting organizational brands, particularly in the telecommunications sector, by creating brand awareness and fostering stakeholder engagement [15]. For SMEs, social media usage positively affected performance, innovation, and branding [16]. WhatsApp emerged as the most preferred platform among micro-enterprises, followed by Facebook and Instagram, with social media use enhancing business performance in terms of customer base, sales growth, and brand enhancement [17]. In the telecommunications industry, Instagram was identified as the most effective platform for increasing sales revenue [18]. Despite these benefits, challenges such as information security risks and costs were observed as hindrances to social media adoption by businesses [17].

Data analytics tools have revolutionized how businesses understand customer behavior and preferences. These tools enable the analysis of large volumes of customer data from various sources, including online reviews and website interactions [19, 20]. Big data analytics can uncover hidden patterns and insights, allowing marketers to make informed decisions and tailor strategies to meet customer needs [21]. Machine learning techniques are increasingly used to process and interpret this data, offering transformative insights for businesses [21]. While big data analytics presents significant opportunities for improving customer experiences and business performance, it raises ethical considerations [22]. Adopting these technologies can be challenging for SMEs, but cloud-based solutions may provide accessible options for leveraging customer analytics [20]. Data analytics tools are powerful assets for businesses seeking to enhance customer understanding and drive innovation. Research on data analytics and customer insights in Tanzania revealed limited adoption of big data tools and techniques. Many companies were found to be in the early stages of big data implementation, facing challenges such as a lack of IT skills and infrastructure costs [23]. Similarly, academic libraries in Tanzania primarily used social networking sites for

marketing, with only a few employing advanced analytics tools due to insufficient skills [24]. However, some progress was observed in m-government services, where web analytics tools were used to monitor traffic data and identify critical success factors for adoption [25]. Customer behavior analysis through web analytics was recognized as a valuable tool for understanding customer responses to websites and supporting data-driven decision-making [19]. These studies highlight the potential for IT-enabled data analytics in Tanzania while emphasizing the need for skill development and infrastructure improvement.

Digital marketing has become increasingly important for businesses in the modern era, with various channels showing different levels of effectiveness. Studies have found that social media marketing was particularly effective for MSMEs in the NCR region during the "new normal" [26]. Search engine marketing and social media marketing demonstrated positive relationships with consumer buying decisions in Malaysia, while email marketing showed a negative relationship [27]. Digital marketing strategies, including search engine optimization, content marketing, and influencer marketing, were analyzed to determine their effectiveness in achieving business goals [28]. The rise of digital marketing has led to the evolution of traditional marketing methods, incorporating customer feedback and two-way interactions between companies and customers [29, 30]. These findings highlight the importance of businesses adapting their digital marketing strategies to leverage the most effective channels for reaching and engaging their target audiences.

Digital marketing has been in Tanzania and globally. Studies have shown that various digital channels, including search engine marketing, email marketing, and social media marketing, can positively impact company performance [31]. These strategies were cost-effective and had a significant commercial impact on businesses [32]. However, security concerns remained a significant challenge for e-marketing adoption in the country [7]. Digital marketing allows firms to attract customers and facilitate brand interaction through electronic media [33]. Overall, digital marketing strategies improved sales and expanded customer bases for businesses in Tanzania and other developing countries. The impact of IT on marketing measurement has been important, enabling more precise tracking and evaluation of marketing performance. Studies showed that IT transformed marketing capabilities beyond simple automation, allowing for enhanced operational efficiency and innovative product development [34, 35]. IT use in marketing was found to positively influence individual and firm performance, mediated by factors such as perceived usefulness, attitudes toward system use, and actual system usage [36]. The ability to measure marketing performance, facilitated by IT, demonstrated a significant impact on firm performance, profitability, and stock returns. Additionally, it improved

marketing's stature within organizations, as evidenced by increased CEO satisfaction with marketing [37]. However, adopting IT in marketing also led to the diffusion of customer-oriented activities throughout organizations, potentially affecting marketing's traditional role [34]. The impact of Information and Communication Technology (ICT) on marketing measurement and performance in Tanzania has been significant. Studies have shown that ICT enhances organizational performance, improves communication, and speeds decision-making [38]. In the manufacturing sector, SMEs utilizing ICT in marketing activities demonstrated better growth performance compared to those that did not [39, 40]. ICT has increased market access, market share, and promotional strategies for small businesses [41]. However, challenges such as lack of ICT knowledge, internet crimes, and difficulties accessing ICT accessories have been identified [39]. While the importance of ICT in marketing is widely recognized, some studies suggest that the relationship between ICT application ratings and SME performance may not be statistically significant [39]. Nevertheless, the overall impact of ICT on marketing capabilities and business operations has been transformative [41, 42]. Despite the increasing adoption of digital tools and platforms, many businesses struggle to integrate these technologies into their marketing strategies effectively. The proliferation of social media and data analytics tools promised enhanced customer engagement and deeper insights into consumer behavior. However, businesses often face difficulties leveraging these innovations to their full potential. Issues such as the complexity of new technologies, high costs, and the need for specialized skills created barriers to effective implementation.

Additionally, while IT-enabled tools offered the potential for highly personalized marketing and improved customer interactions, businesses encountered challenges in data management, privacy concerns, and integrating disparate systems. This study sought to explore these problems by examining how businesses navigated the adoption and utilization of IT tools in their marketing efforts, assessing the impact on their strategies, and identifying the key obstacles that hindered the successful application of these innovations. The study's objective was to investigate how advancements in information technology have transformed marketing practices and customer engagement strategies. The study aimed to evaluate how IT tools, such as social media platforms and data analytics, have been integrated into marketing strategies and assess their effectiveness in enhancing customer insights and interactions. Additionally, the research sought to identify the challenges businesses faced in adopting these technologies and explore the impact of IT-enabled innovations on marketing performance and consumer behavior. The study's main contribution was its comprehensive examination of how IT innovations have reshaped marketing practices and customer engagement. The study offered a detailed

understanding of how these technologies have enhanced marketing strategies and customer insights by analyzing the integration and effectiveness of various IT tools such as social media platforms, data analytics, and customer relationship management systems. It highlighted the transformative effects of IT on marketing performance, including improvements in targeting, personalization, and customer interaction. Additionally, the study identified key challenges businesses face in leveraging these technologies and provided actionable recommendations for overcoming these barriers. This research not only advanced the knowledge of IT's role in marketing but also offered practical insights for marketers seeking to optimize their use of technology to understand better and engage with their customers. The remaining sections of the paper are arranged as follows: Section 2 contains the study's methodology, and Section 3 covers the results and discussion of the study. At the same time, the conclusion and recommendations are presented in Section 4.

2. Methodology

The study's methodology involved a comprehensive approach to understanding how IT innovations impact marketing practices in Iringa Municipal. With a sample size of 210 participants, the study employed a mixed-methods approach, combining quantitative and qualitative research methods to gather robust data.

2.1. Quantitative Data Collection

A structured questionnaire was designed to capture quantitative data on various IT-enabled marketing innovations. The survey included questions on using social media platforms, data analytics tools, and Customer Relationship Management (CRM) systems. It also assessed the effectiveness of these tools in enhancing marketing strategies and customer insights. The questionnaire was distributed to 210 respondents online and face-to-face, ensuring a diverse representation of marketing professionals and business owners in Iringa Municipal.

2.2. Qualitative Data Collection

In-depth interviews were conducted with a subset of 30 participants drawn from the initial sample to gain deeper insights into their experiences and perceptions regarding IT innovations in marketing. These interviews aimed to explore the practical challenges and successes associated with implementing IT tools and understand the nuances of how these technologies influence customer engagement and business performance. The qualitative data provided contextual understanding that complemented the quantitative findings.

2.3. Data Analysis

Quantitative data were analyzed using statistical techniques to identify trends, correlations, and patterns related to the use and effectiveness of IT tools in marketing.

Descriptive statistics, such as percentages, were used to summarize the data. The qualitative data from interviews were analyzed thematically to extract key themes and insights, providing a richer understanding of the respondents' experiences.

2.4. Sampling and Data Collection Process

The study used a stratified random sampling technique to ensure representation across business sectors and professional roles. This approach helped capture a comprehensive view of IT-enabled marketing innovations across various contexts. Data collection was conducted over a period of three months, during which respondents were given ample time to complete the questionnaires and participate in interviews. In general, this methodology provided a well-rounded perspective on how IT innovations are transforming marketing practices in Iringa Municipal, combining empirical evidence with in-depth personal insights to deliver a thorough analysis of the subject.

3. Results and Discussion

This section digs into the findings, examining the extent of IT tool integration, their perceived effectiveness, and the challenges encountered, thereby offering a comprehensive understanding of the current state and implications of IT-enabled marketing innovations in the region.

3.1. Demographic Information

The demographic information of the study provided a detailed profile of the participants, which was essential for understanding the context and scope of the findings. With a sample size of 210 respondents from Iringa Municipal, the demographic data encompassed a range of characteristics, including age, gender, education level, and occupation. This demographic breakdown offered valuable insights into the diverse backgrounds of the participants. It helped contextualize their perspectives on IT-enabled marketing innovations, thereby enriching the analysis of how these technologies impact different population segments.

3.1.1. Age of the Respondents

In the study, the age distribution of participants, according to Table 1, revealed a varied demographic profile. Most respondents fell within the 25-34 age bracket, with 85 individuals representing 40.5% of the sample. This group was notably engaged with information technology and digital marketing innovations, reflecting a high level of comfort with new technologies and a strong propensity to adopt them in their professional and personal lives. The next largest segment, aged 15-24 years, included 40 respondents, accounting for 19% of the sample. While smaller in number, this younger group was pivotal in understanding emerging trends and the initial reception of new technological tools. The 35-44 age group comprised 50 participants or 23.8% of the sample. This demographic was characterized by a balance of experience and adaptability, often demonstrating a

pragmatic approach to integrating IT into marketing strategies. Lastly, individuals aged 44 and above made up 35% of the respondents, highlighting a significant proportion of seasoned professionals. This group faced unique challenges and opportunities in adapting to IT-enabled marketing innovations, often reflecting a more cautious or selective approach based on their extensive experience. Overall, the diverse age distribution provided a comprehensive view of how different age groups interacted with and were impacted by IT-enabled marketing practices.

3.1.2. Gender of the Respondents

In the study, the gender distribution of respondents, as per table 1, offered valuable insights into the varied observations on IT-enabled innovations in marketing. The sample included 120 male participants, constituting approximately 57.1% of the total, and 90 female participants, making up 42.9%.

This distribution reflected a balanced representation, although males were slightly more predominant. The more male respondents indicated a potentially greater engagement or representation in roles directly related to IT and marketing technologies within the study's context. The male participants, who comprised the majority, often reported extensive experience with various IT tools and platforms.

Their responses revealed a strong familiarity with advanced technologies and an inclination towards leveraging these innovations for marketing purposes. They frequently highlighted the benefits of IT-enabled tools, such as enhanced analytics capabilities and greater efficiency in campaign management. Conversely, the female respondents, while fewer in number, provided equally significant insights into the integration of IT in marketing. Their response underlined varied experiences and often focused on the practical applications and user-friendly aspects of IT tools. Female participants highlighted the importance of intuitive design and accessibility in marketing technologies, reflecting a wider perception of how these tools are utilized and perceived across different gender demographics.

3.1.3. Education Level of the Respondents

The Educational background of respondents, as shown in table 1, in the study, revealed a diverse range of qualifications, reflecting various levels of expertise and experience related to IT-enabled innovations in marketing. Among the 210 participants, 30 had completed Secondary School or below education. This group represented approximately 14.3% of the sample, and their responses often reflected a more basic understanding of IT tools and their applications in marketing. Their response highlighted the need for more foundational training and simpler interfaces to engage with advanced marketing technologies effectively. A significant portion of the respondents, 60 individuals or 28.6%, held diplomas or certificates.

Table 1. Demographic information

Demographic Variable	Category	Frequency	Percentage
Age	15-24 years	40	19.05%
	25-34 years	85	40.48%
	35-44 years	50	23.81%
	44+ years	35	16.67%
Gender	Male	120	57.14%
	Female	90	42.86%
Education Level	Secondary School or Below	30	14.29%
	Diploma/Certificate	60	28.57%
	Bachelor's Degree	80	38.10%
	Postgraduate Degree	40	19.05%
Occupation	Business Owner	70	33.33%
	Marketing Officer	50	23.81%
	IT Professional	45	21.43%
	Sales Officer	30	14.29%
	Other	15	7.14%
Type of Industry/Business	Retail	60	28.57%
	Manufacturing	50	23.81%
	Healthcare	40	19.05%
	IT and Technology	30	14.29%
	Finance	20	9.52%
	Other	10	4.76%

These participants generally demonstrated a practical knowledge of IT tools, often discussing how these certifications had equipped them with specific skills relevant to marketing innovations. Their insights frequently centered on the practical applications of IT tools and how these could be optimized to enhance marketing strategies. The largest segment of respondents, numbering 80 or 38.1%, had attained a Bachelor's Degree.

This group provided in-depth analysis and feedback on integrating IT into marketing practices, often drawing from their academic and professional experiences. Their responses highlighted a sophisticated understanding of how IT innovations could be leveraged to drive marketing effectiveness, reflecting a deeper engagement with both strategic and technical aspects of marketing technologies.

Finally, 40 respondents, constituting 19%, had completed postgraduate degrees. This highly educated group contributed valuable insights into IT-enabled marketing innovations' advanced applications and theoretical underpinnings. Their responses frequently involved complex discussions on data analytics, customer insights, and strategic implementation, showcasing a high level of expertise in utilizing IT tools to shape marketing strategies and customer experiences. The varying educational levels among respondents enriched the study by providing a broad spectrum of perspectives, from foundational knowledge to advanced understanding, thus offering a comprehensive view of how different educational backgrounds influence the perception and utilization of IT in marketing.

3.1.4. The Occupation of the Respondents

The occupation distribution among respondents, as per Table 1, provided a detailed perspective on the impact and utilization of IT-enabled innovations in marketing. Among the 210 participants, 70 were business owners, representing about 33.3% of the sample. These respondents often shared insights into how IT innovations affected their overall business operations and strategic decision-making. They discussed the benefits and challenges of integrating IT tools into their marketing strategies, emphasizing how technologies such as CRM systems and data analytics have reshaped their approach to managing customer relationships and driving business growth. Business owners highlighted how these tools provided valuable data-driven insights, which enabled them to make more informed decisions and tailor their marketing efforts more precisely. Marketing officers, numbering 50 or 23.8% of the sample, contributed detailed observations on the practical applications of IT tools in crafting and executing marketing campaigns. Their opinion frequently addressed the effectiveness of various marketing platforms and software tools, such as email marketing systems and social media analytics, in achieving marketing objectives. They reflected on how IT innovations had streamlined their processes, enhanced their ability to measure campaign performance, and facilitated more targeted and personalized marketing approaches. Their experiences underlined the transformative role of technology in modern marketing practices and provided practical examples of how these tools had been employed to optimize marketing strategies. The responses from 45 IT professionals, making up 21.4% of the sample, provided a

technical perspective on the implementation and impact of IT tools in marketing. These individuals shared their expertise on the technical aspects of integrating IT solutions into marketing systems, including the challenges of ensuring seamless integration with existing infrastructure and maintaining data security. They offered insights into the latest technological advancements and their implications for marketing practices. They reflected on how emerging technologies such as artificial intelligence and machine learning were beginning to influence marketing strategies and customer interactions.

Numbering 30 or 14.3%, sales officers shared their experiences using IT tools in supporting sales activities and customer relationship management. Their feedback focused on how IT innovations had enhanced their ability to track sales performance, manage customer interactions, and streamline sales processes. They discussed how technology facilitated better communication with clients and provided tools for analyzing sales data to identify trends and opportunities for improvement. Lastly, 15 respondents, categorized as "Other," represented a variety of additional roles within the organizations, contributing diverse viewpoints on the impact of IT on marketing. This group included roles such as customer service representatives and data analysts, who offered unique perspectives on how IT tools influenced their specific functions and interactions with marketing strategies. Their input provided a broader understanding of how IT innovations impacted various facets of organizational operations beyond the primary marketing and IT functions. The diverse occupational backgrounds of the respondents enriched the study by offering a multifaceted view of how IT-enabled innovations in marketing were perceived and utilized across different roles within organizations. This varied input highlighted the broad impact of IT tools on business practices and marketing strategies, reflecting how technology had been integrated into and influenced various professional functions.

3.1.5. Type of Industry/Business

The distribution of respondents across various industries, as shown in Table 1, provided a comprehensive view of how IT-enabled innovations in marketing impacted different sectors. In the retail industry, which had the largest representation with 60 respondents, insights were focused on how technology had transformed customer interactions and sales processes. Retailers reported that IT tools, such as Customer Relationship Management (CRM) systems and Point-of-Sale (POS) technologies, had significantly enhanced their ability to track consumer behavior, manage inventory, and execute targeted marketing campaigns. Integrating data analytics and social media platforms enabled them to understand customer preferences better, optimize promotional strategies, and drive sales through personalized offers and recommendations. Retailers highlighted that these technological advancements had been crucial in maintaining

competitiveness in an increasingly digital marketplace. With 50 respondents, manufacturing showcased how IT innovations were leveraged to streamline operations and improve marketing strategies. The focus was on using IT to manage supply chains, optimize production processes, and integrate marketing efforts with production data. Participants from this sector noted that technologies such as Enterprise Resource Planning (ERP) systems and data visualization tools had been instrumental in aligning marketing campaigns with manufacturing capabilities and customer demand. These tools allowed manufacturers to forecast demand better, manage product inventories, and tailor marketing messages based on real-time data, ultimately improving operational efficiency and market responsiveness. The healthcare sector, represented by 40 respondents, offered perspectives on the role of IT in enhancing patient engagement and managing healthcare marketing. Healthcare professionals discussed the implementation of IT tools such as Electronic Health Records (EHR) and telemedicine platforms, which facilitated improved patient communication and engagement.

They noted that data-driven marketing strategies had effectively targeted health promotions and educational content to specific patient demographics. Integrating IT into marketing efforts enabled healthcare providers to address patient needs better, promote health services, and build stronger patient relationships through personalized outreach and targeted health campaigns. In the IT and technology sector, comprising 30 respondents, the discussion centered on how technology was utilized to drive marketing innovations. Respondents shared how advancements in Artificial Intelligence (AI), machine learning, and big data analytics were harnessed to create sophisticated marketing solutions. They emphasized the role of IT tools in developing predictive analytics models, automating marketing tasks, and personalizing customer experiences. The sector's expertise in IT tools and their applications provided valuable insights into cutting-edge marketing strategies and the impact of technology on shaping customer interactions and engagement. With 20 respondents, the finance sector highlighted the use of IT tools in managing financial services, marketing and customer relations. Financial institutions reported that IT innovations, such as online banking platforms and automated customer service systems, had enhanced their ability to offer personalized financial products and services. They observed that data analytics and customer insights were crucial in targeting marketing efforts and improving client acquisition and retention strategies.

Lastly, the "Other" category, which included 10 respondents from various industries not specified above, contributed diverse perspectives on applying IT tools in marketing. This group provided insights into niche applications of technology and how different sectors were adapting IT innovations to meet their specific marketing needs and challenges.

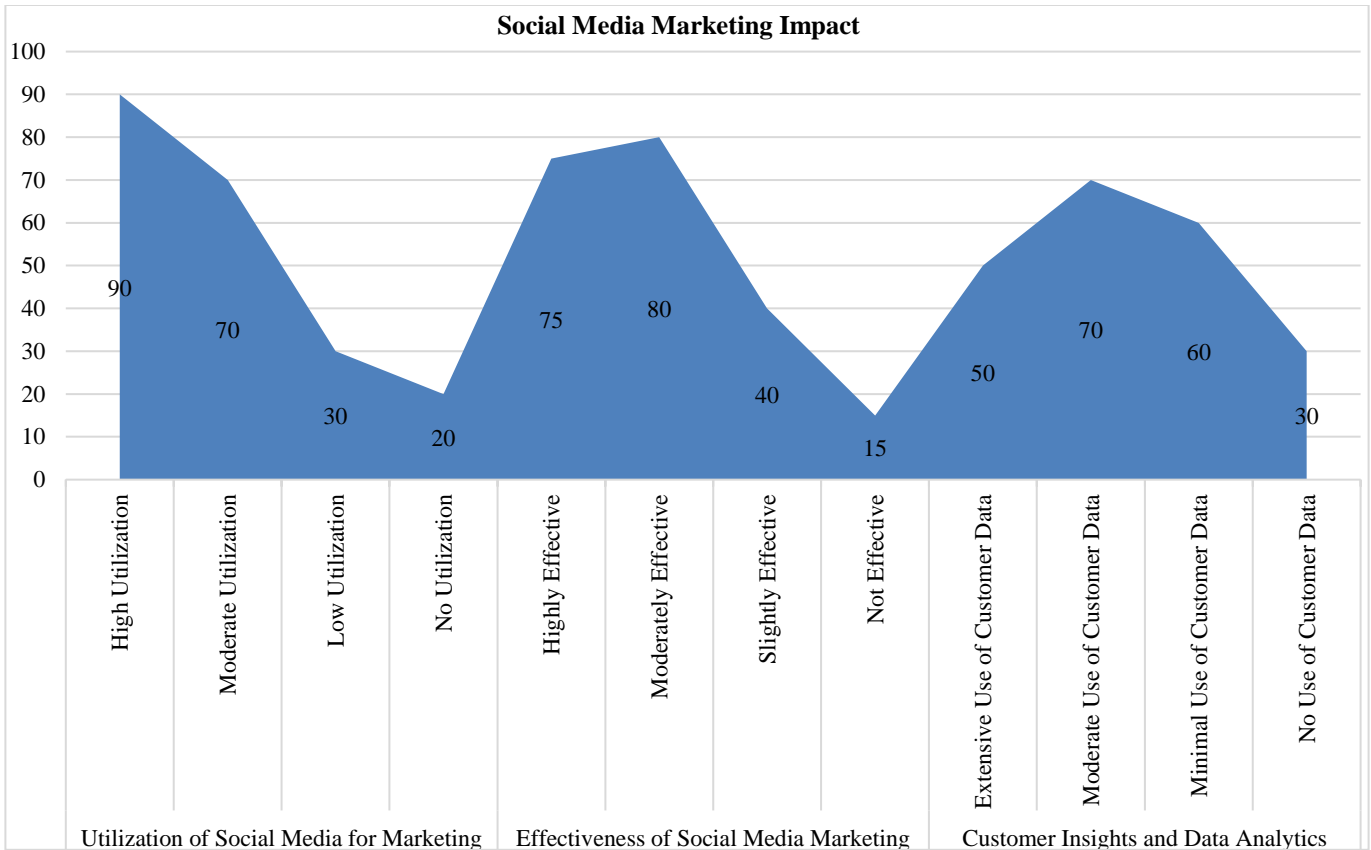


Fig. 1 Social media marketing impact

The range of industries represented in the study underscored the widespread impact of IT-enabled marketing innovations across various sectors. Each industry leveraged technology in distinct ways to enhance marketing effectiveness, streamline operations, and improve customer engagement, reflecting the versatile role of IT in modern business practices.

3.2. Social Media Marketing Impact

In the study on the impact of IT-enabled innovations in marketing within Iringa Municipal, the Social Media Marketing Impact indicator was examined through several key sub-indicators. The research focused on the extent to which businesses utilized social media for marketing purposes, assessing both the frequency and depth of use. Additionally, the study explored the perceived effectiveness of social media marketing efforts, gathering insights from respondents on how these platforms influenced their overall marketing success. Finally, the integration of customer insights and data analytics within social media strategies was analyzed, highlighting how businesses leveraged data to enhance their understanding of customer behaviors and preferences.

3.2.1. Utilization of Social Media for Marketing

In the study, respondents were interviewed to understand how social media was utilized for marketing purposes within

their businesses. As indicated in Figure 1, a significant portion of the respondents, 90 in total, reported high utilization of social media platforms, highlighting their importance in reaching a broad audience and fostering customer engagement. These respondents emphasized the versatility and cost-effectiveness of social media marketing. One respondent noted that:

"...social media became an indispensable tool for our business, allowing us to connect with customers in real-time, promote our products, and build brand awareness with minimal investment..."

This emotion was echoed by many who found that platforms like Facebook, Instagram, and Twitter offered unparalleled opportunities for direct communication with their target market. Meanwhile, 70 respondents indicated moderate utilization of social media for marketing. These businesses used social media selectively, often integrating it with other traditional marketing methods. While they recognized the value of social media, they cited constraints such as limited resources or expertise in social media management. One business owner mentioned:

"...while we understand the potential of social media, we have not fully capitalized on it due to our small team and lack of social media skills..."

This group often used social media for specific campaigns or announcements rather than as a central component of their marketing strategy. On the other hand, 30 respondents reported low utilization of social media, reflecting a cautious approach towards these platforms. These businesses were either skeptical about the return on investment from social media marketing or faced challenges in creating content that resonated with their audience. One respondent shared:

"...we tried using social media, but the results were not as impactful as we hoped. We struggled to create content that would engage our customers, so we focused more on other marketing channels..."

This group often viewed social media as supplementary rather than essential to their overall marketing efforts. Finally, 20 respondents admitted not utilising social media for marketing, primarily due to a lack of familiarity with the platforms or a belief that their target customers were not active on social media. These businesses often relied on more traditional marketing methods, such as word-of-mouth or local advertising, which they felt were more effective for their specific market. One respondent remarked:

"...our customers are mostly older and inactive on social media, so we have not seen the need to invest in it. We prefer to stick with the methods that have always worked for us..."

The study revealed a diverse range of approaches to social media marketing, with businesses at different stages of adoption and varying levels of success. The insights gathered from respondents highlighted the challenges and opportunities associated with integrating social media into marketing strategies, reflecting the evolving nature of digital marketing in Iringa Municipal.

3.2.2. Effectiveness of Social Media Marketing

In the study, according to Figure 1, respondents provided varied perspectives on the effectiveness of social media marketing within their businesses, reflecting different levels of success and satisfaction. Out of the 210 participants, 75 indicated that social media marketing had been highly effective for their businesses. These respondents shared experiences of substantial growth in brand visibility, customer engagement, and sales directly attributable to their social media efforts. One business owner remarked:

"...social media transformed the way we reach our customers. Our posts regularly generate high engagement, and we have seen a noticeable increase in both online and in-store sales as a result. It has become an indispensable part of our marketing strategy..."

Another 80 respondents found social media marketing to

be moderately effective. These businesses experienced benefits from their social media presence but did not achieve the same impact as those who reported it as highly effective. They often cited challenges such as inconsistent engagement, difficulties targeting the right audience, or limited expertise in leveraging the platforms to their full potential. One marketing officer noted:

"...social media has helped us maintain a presence and keep our customers informed, but we are still figuring out how to turn that engagement into real, measurable growth. It works, but not as powerfully as we hoped..."

For 40 respondents, social media marketing was only slightly effective. These businesses struggled to see significant returns on their investment in social media, often due to limited resources or a lack of clear strategy. They typically used social media sporadically without fully understanding how to optimize their efforts. A sales officer explained:

"...we post occasionally, but it has not really driven sales or brought in new customers. It feels like we are just going through the motions without seeing much in return. We are unsure what we are doing wrong, but it has not been as beneficial as we would like..."

Lastly, 15 respondents considered social media marketing to be not effective at all for their businesses. These participants often expressed frustration, noting that their attempts to use social media had not translated into meaningful business outcomes. Some cited the nature of their products or services, which they believed did not lend themselves well to social media promotion. One respondent stated:

"...we tried using social media, but it did not resonate with our customers. It felt like a waste of time and resources, so we have decided to focus on other marketing channels that align better with our business needs..."

In short, the study revealed that while many businesses in Iringa Municipal have found social media marketing to be effective, its success varied significantly depending on the approach, resources, and alignment with business objectives. The effectiveness of social media marketing was closely tied to the level of investment in understanding and utilizing these platforms strategically, highlighting the need for tailored strategies that fit the unique needs of each business.

3.2.3. Customer Insights and Data Analytics

The study utilised customer insights and data analytics to understand how businesses in Iringa Municipal leveraged these tools to enhance their marketing strategies. As per Figure 1, the findings highlighted a range of approaches to using customer data, reflecting differing levels of integration

and impact on business operations. Among the 210 respondents, 50 reported extensive use of customer data, indicating that these businesses had fully embraced data-driven decision-making. They utilized advanced analytics to gain deep insights into customer behavior, preferences, and trends, significantly informing their marketing strategies. One respondent, a business owner, elaborated on their experience:

"...we have integrated sophisticated data analytics tools into our operations. By analyzing customer purchase patterns and engagement metrics, we can precisely tailor our marketing campaigns to target segments of our customer base. This approach has greatly enhanced our ability to forecast trends and personalize our promotions, increasing customer satisfaction and loyalty..."

In contrast, 70 respondents engaged in moderate use of customer data. These businesses collected and analyzed data but did not fully leverage it for strategic decision-making. Their use of data was often limited to basic demographic information or periodic reviews, which provided useful but less actionable insights. A marketing officer shared their experience:

"...we use customer data to inform our marketing decisions, but our approach is relatively basic. We track sales and customer interactions but have not yet implemented more advanced analytics techniques. It has been helpful, but we know we could do more to capitalize on the data we have fully..."

Another 60 respondents reported minimal use of customer data, indicating that it was often fragmented or not systematically analyzed while data collection occurred.

These businesses faced challenges such as inadequate tools, lack of expertise, or insufficient data integration into their marketing practices. One IT professional noted:

"...we collect customer data, but it is not always analyzed in depth. We struggle with integrating the data from different sources and lack the tools to make comprehensive sense of it. As a result, our marketing strategies are not as informed as they could be..."

Finally, 30 respondents indicated they did not use customer data in their marketing efforts. These businesses often relied on traditional marketing methods and did not incorporate data-driven insights into their decision-making processes. A sales officer commented:

"... we have never really used customer data in our marketing. Our strategies are based more on intuition and past experiences rather than data. While we see some success, we know that we might be missing out on more

targeted and effective approaches by not leveraging the data available to us..."

Generally, the study demonstrated a range of engagement with customer insights and data analytics among businesses in Iringa Municipal. The extensive use of data was associated with more strategic and personalized marketing efforts, while minimal or no use of data indicated a reliance on less informed decision-making. This variance accentuated the potential benefits of deeply integrating data analytics into marketing practices to drive more effective and responsive business strategies.

3.3. Impact of IT-Enabled Marketing on Customer Engagement

In the study on the impact of IT-enabled marketing on customer engagement, a range of effects was observed, reflecting how different approaches to leveraging information technology influenced customer interactions. As illustrated in Figure 2, the results highlighted significant variations in engagement levels among businesses in Iringa Municipal, Tanzania, providing a nuanced view of IT's role in enhancing customer relationships. A substantial number of respondents, specifically 80, reported a significant increase in customer engagement due to IT-enabled marketing strategies. These businesses employed advanced digital tools and platforms, leading to more interactive and responsive customer experiences. One respondent, a marketing manager for a retail chain, shared their success story:

"...our investment in IT-enabled marketing tools, such as targeted social media ads and personalized email campaigns, has transformed our customer interactions. We have seen a remarkable increase in engagement levels. Customers now respond more actively to our promotions, and we have been able to build more meaningful relationships through tailored content and timely responses..."

Another 60 respondents experienced a moderate increase in customer engagement. These businesses integrated IT solutions into their marketing efforts but perhaps not as extensively or innovatively as those with significant gains. A business owner described their experience:

"...we implemented several IT tools, like Customer Relationship Management (CRM) systems and social media platforms, which did improve our engagement. However, the increase was not as dramatic as we had hoped. Our campaigns are better targeted, and we see more interactions, but there is still room for growth in fully harnessing the potential of these technologies..."

Fifty respondents noted only a slight increase in customer engagement, indicating that while IT-enabled marketing efforts had some impact, the results were modest.

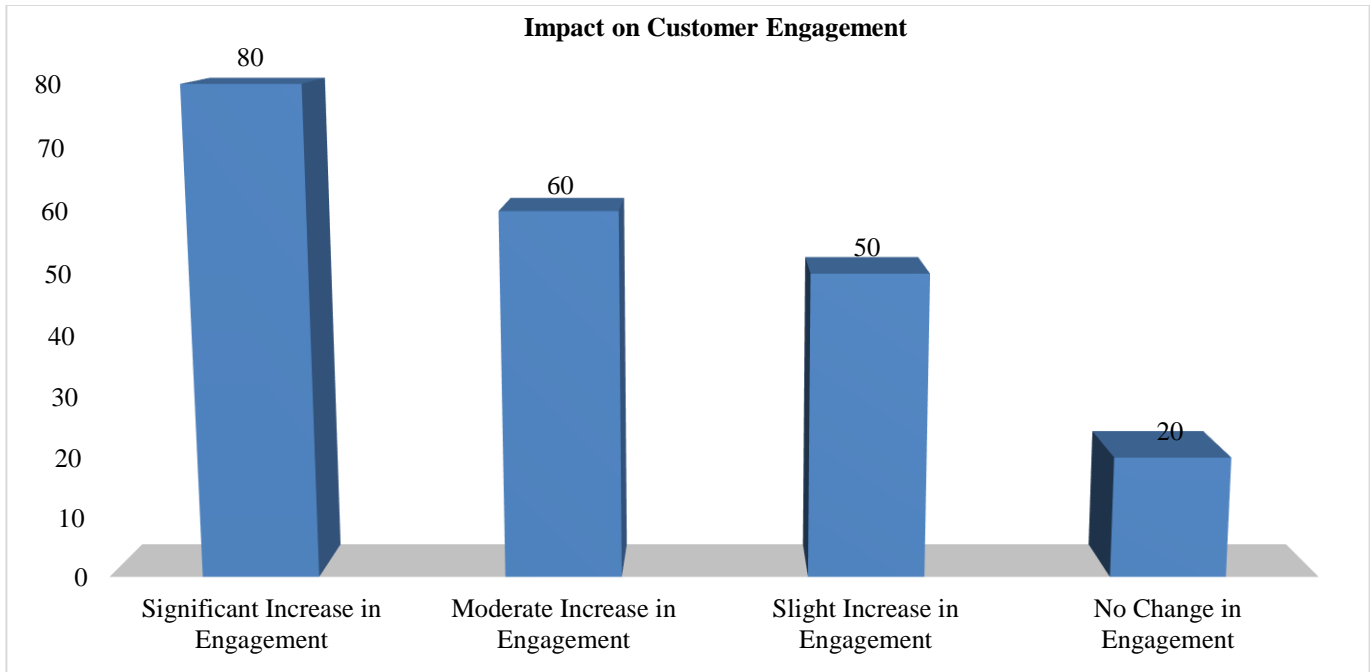


Fig. 2 The impact of IT enabled marketing on the customer engagement

These businesses might have faced challenges such as insufficient technology integration or limited use of advanced analytics. One respondent, an IT professional, explained:

"... we have adopted some IT tools for marketing, like basic email automation and social media management software. While we do see some improvement in customer interactions, it has not been substantial. We must delve deeper into data analytics and explore more sophisticated tools to drive higher engagement..."

Lastly, 20 respondents reported no change in customer engagement despite using IT-enabled marketing strategies. These businesses often struggle with issues such as ineffective technology implementation or lack of alignment between their marketing efforts and customer needs. A sales officer commented:

"... we have tried using various IT tools, but we have not seen any noticeable change in customer engagement. It feels like we are missing something in our approach, perhaps in how we use the data or integrate these tools into our overall strategy..."

Overall, the study revealed a spectrum of impacts from IT-enabled marketing on customer engagement. While many businesses saw significant or moderate improvements, others experienced only slight changes or no noticeable impact. These findings highlighted the importance of adopting IT tools and effectively integrating and utilizing them to realize their potential in enhancing customer engagement.

3.4. IT-Enabled Marketing Strategies and Challenges

This study focused on examining the adoption of IT-enabled marketing strategies and the associated challenges businesses encounter. Analyzing the adoption rates of IT-enabled marketing strategies and the challenges reported, a comprehensive understanding of how businesses in Iringa Municipal navigated the complexities of integrating technology into their marketing efforts was achieved.

The data collected provided insights into which strategies were embraced and the obstacles that hindered their optimal utilization shedding light on the broader impact of IT innovations on marketing practices.

3.4.1. Adoption of IT-Enabled Marketing Strategies

In the study on IT-enabled marketing strategies, respondents provided detailed insights into how businesses in Iringa Municipal adopted these modern approaches.

The data presented in Figure 3 revealed that a significant portion of businesses had fully adopted IT-enabled marketing strategies, with 60 respondents indicating comprehensive integration of these tools into their operations. These businesses reported a range of positive outcomes from their full adoption. One respondent noted:

"...our company has embraced a full spectrum of IT-enabled marketing strategies, from advanced CRM systems to extensive social media campaigns. This comprehensive approach has allowed us to streamline our marketing efforts and significantly improve our outreach and customer interactions..."

Conversely, 80 respondents indicated that their adoption of IT-enabled marketing strategies was partial. These businesses implemented some, but not all, aspects of IT-enabled marketing, often due to resource constraints or a lack of expertise. A business owner explained:

"...while we have integrated several IT tools into our marketing mix, such as email marketing platforms and basic analytics, we have not yet fully exploited the potential of social media analytics or advanced customer segmentation tools. Our partial adoption is mainly due to budget limitations and the learning curve associated with these technologies..."

The study also highlighted that 50 respondents had minimally adopted IT-enabled marketing strategies. These businesses used only a few of the available tools, which often resulted in limited improvements in their marketing effectiveness. One respondent shared:

"...we started using a basic CRM system and dabbling in social media, but our efforts have been minimal compared to other companies. The lack of a cohesive strategy and technical support has hindered us from leveraging IT tools more effectively..."

Finally, 20 respondents reported not adopting IT-enabled marketing strategies at all. These businesses continued to rely on traditional marketing methods, either due to a lack of awareness or resistance to change. A respondent from one of these businesses commented:

"...our marketing practices remain largely traditional. We have not yet ventured into IT-enabled strategies because we are unsure of their benefits and prefer to stick with what we know. The transition to modern tools seems daunting, and we do not have the resources to explore these options..."

These varying levels of adoption illustrate the varied ways businesses approached IT-enabled marketing and underline the challenges and successes encountered across different levels of integration.

3.4.2. Challenges in IT-Enabled Marketing

The study on IT-enabled marketing, as per Figure 3, revealed several significant challenges businesses in Iringa Municipal faced. One of the primary obstacles highlighted was the high costs associated with IT tools.

With 80 respondents identifying this issue, it became clear that financial constraints were a major barrier to adopting advanced marketing technologies. A respondent from a medium-sized enterprise expressed the difficulty faced:

"...the cost of implementing sophisticated IT tools is substantial. While we recognize the potential benefits, the initial investment required for advanced CRM systems and data analytics platforms has been prohibitive. We have had to prioritize our expenditures, which, unfortunately, some of the more expensive IT solutions remain out of reach for us..."

Another prominent challenge was the lack of skilled personnel, which 70 respondents noted. The need for specialized knowledge and expertise to effectively utilize IT tools was a significant obstacle for many businesses. One interviewee detailed their experience:

"... we have invested in various IT tools, but without the right expertise, it has been challenging to leverage these technologies fully. Our team lacks the necessary skills to operate advanced marketing software and interpret the data effectively. We have tried to train our staff, but the learning curve has been steep, and progress has been slower than expected..."

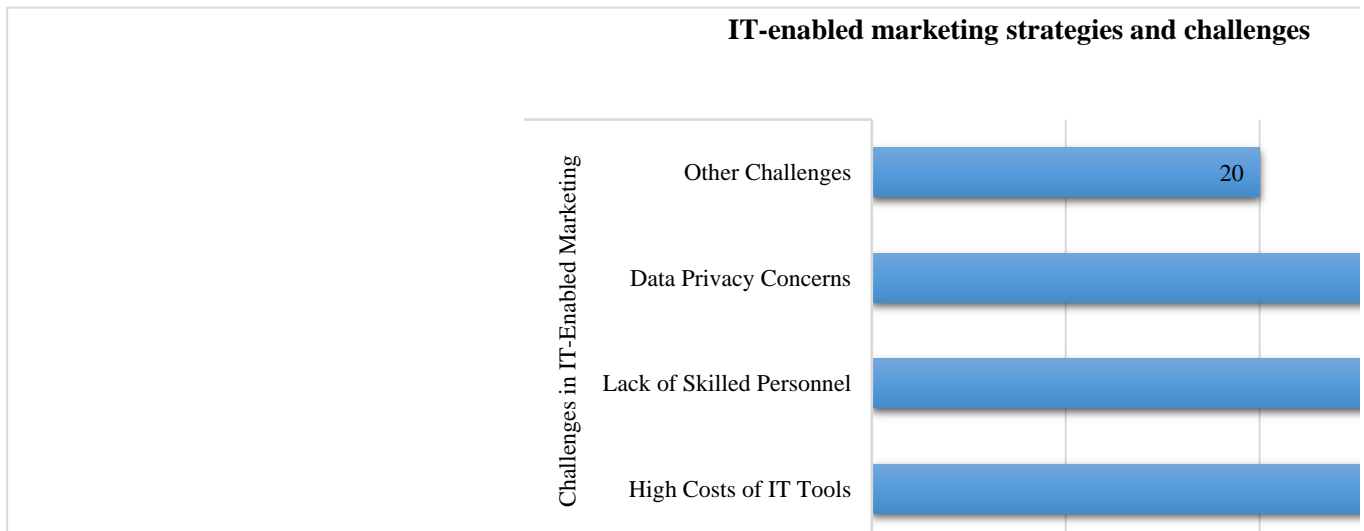


Fig. 3 The IT-enabled marketing strategies and challenges

Data privacy concerns also emerged as a challenge, affecting 40 respondents. Protecting customer data while complying with regulations was a significant concern. A business owner commented on this issue:

"...as we integrated more IT tools into our marketing strategies, we became increasingly aware of data privacy issues. Ensuring compliance with privacy laws and safeguarding customer information has been a major concern. We had to invest additional resources into securing our data and understanding legal requirements, which diverted attention from other important aspects of our marketing efforts..."

Finally, 20 respondents mentioned other challenges, including system integration difficulties and resistance to change within the organization. One respondent summarized these additional issues:

"...apart from the high costs and data privacy concerns, we have faced challenges with integrating new IT systems with our existing processes. There has also been some resistance from employees accustomed to traditional methods. Overcoming these obstacles has required significant effort and adaptation..."

These challenges underline the complexity of implementing IT-enabled marketing strategies and highlight the need for businesses to fully address financial, technical, and regulatory issues to capitalize on modern marketing technologies' benefits.

4. Conclusion and Recommendations

The study on IT-enabled innovations in marketing has highlighted both the transformative potential and the significant challenges associated with integrating advanced technologies into marketing strategies. It was found that

while businesses in Iringa Municipal have made considerable strides in adopting IT tools such as CRM software and social media analytics, the extent of adoption varies widely. The data indicated that high utilization of these technologies was linked to improved customer engagement and more effective marketing campaigns. However, the study also revealed substantial barriers, including high costs of IT tools, a shortage of skilled personnel, and concerns over data privacy, which have impeded more widespread and effective use of these technologies.

In conclusion, the findings underline the critical need for businesses to address these challenges to leverage IT-enabled marketing more effectively and strategically. Recommendations include investing in affordable and scalable IT solutions, enhancing training programs to build internal expertise, and implementing robust data privacy measures to protect customer information. By overcoming these obstacles, businesses can better harness the power of IT to drive customer engagement, optimize marketing strategies, and ultimately gain a competitive edge in the market. The study's insights provide valuable guidance for businesses seeking to navigate the complexities of IT-enabled marketing and capitalize on the opportunities presented by technological advancements.

Acknowledgments

I want to extend my appreciation to Juma Mdimu Rugina and Dani Mfungo from Ruaha Catholic University (RUCU) for their support during the preparation of this manuscript, Ruaha Catholic University management and staff for the encouragement they gave us during data collection, analysis and interpretation. Also, I would like to thank my family, especially my kids (Neema, Nelson, Nelvin, Nelvis and Angel Lusekelo Kibona) for always being there when I needed them.

References

- [1] Bharati Rathore, "Exploring the Impact of Digital Transformation on Marketing Management Strategies," *Eduzone: International Peer Reviewed/Refereed Multidisciplinary Journal*, vol. 8, no. 2, pp. 39-48, 2019. [[Google Scholar](#)] [[Publisher Link](#)]
- [2] Bhupinder Singh, and Christian Kaunert, *Future of Digital Marketing: Hyper-Personalized Customer Dynamic Experience with AI-Based Predictive Models*, Revolutionizing the AI-Digital Landscape: Productivity Press, 1st ed., pp. 189-203, 2024. [[Google Scholar](#)] [[Publisher Link](#)]
- [3] Yakup Durmaz, and Ibrahim Halil Efendioglu, "Travel from Traditional Marketing to Digital Marketing," *Global Journal of Management and Business Research*, vol. 16, no. 2, pp. 34-40, 2016. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [4] Srikrishna Chintalapati, and Shivendra Kumar Pandey, "Artificial Intelligence in Marketing: A Systematic Literature Review," *International Journal of Market Research*, vol. 64, no. 1, pp. 38-68, 2022. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [5] Abid Haleem et al., "Artificial intelligence (AI) Applications for Marketing: A Literature-Based Study," *International Journal of Intelligent Networks*, vol. 3, pp. 119-132, 2022. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [6] Mircea Fuciu, and Luigi Dumitrescu, "From Marketing 1.0 to Marketing 4.0 - The Evolution of the Marketing Concept in the Context of the 21 Century," *International Conference Knowledge-based Organization*, vol. 24, no. 2, pp. 43-48, 2018. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]

- [7] Renatus Michael, "Acceptance of E-Marketing Strategies in Developing Countries - A Case Study of Tanzania SMEs," *Proceedings of the International Conference on Computer Science, Computer Engineering and Education Technologies*, pp. 122-128, 2014. [[Google Scholar](#)] [[Publisher Link](#)]
- [8] Amos Kasilima, "*The Role of Digital Marketing on Business Performance: A Case of Fast Moving–Consumable Goods in Dar es Salaam-Tanzania*," Doctoral Dissertation, The Open University of Tanzania, 2023. [[Google Scholar](#)] [[Publisher Link](#)]
- [9] Daudi R.B. Lwiza, and Sonny Nwankwo, "Market-Driven Transformation of the Banking Sector in Tanzania," *International Journal of Bank Marketing*, vol. 20, no. 1, pp. 38-49, 2002. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [10] Felix Joseph Chille, France Aloyce Shayo, and Nasra Shokat Kara, "Adoption of Mobile Marketing in the Telecommunication Industry of Tanzania: The Effects of Perceived Usefulness, Ease of Use, and Customer's Knowledge," *European Scientific Journal*, vol. 17, no. 12, 2021. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [11] Sombala Ningthoujam et al., "Building Customer Engagement and Brand Loyalty Through Online Social Media: An Exploratory Study," *International Journal of Electronic Marketing and Retailing*, vol. 11, no. 2, pp. 143-160, 2020. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [12] Brian Garda Muchardie, Nabila Hanindya Yudiana, and Annetta Gunawan, "Effect of Social Media Marketing on Customer Engagement and its Impact on Brand Loyalty in Caring Colours Cosmetics, Martha Tilaar," *Binus Business Review*, vol. 7, no. 1, pp. 83-87, 2016. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [13] Astrid Puspiningrum, "Social Media Marketing and Brand Loyalty: The Role of Brand Trust," *The Journal of Asian Finance, Economics and Business*, vol. 7, no. 12, pp. 951-958, 2020. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [14] Magdalena Hofman-Kohlmeyer, "Customer Engagement with a Brand in the Context of Social Media," *CBU International Conference Proceedings*, vol. 5, 2017. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [15] Faridi Abdallah Mnakatu, and Çağlar Genç, "The Role of Social Media in Promoting Organizational Brand: A Case of Telecommunication Organizations in Tanzania," *Anadolu University Journal of Social Sciences*, vol. 23, no. 3, pp. 847-872, 2023. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [16] Nzoja E. Shauri, Berine R. Magaria, and Zacharia S. Masanyiwa, "Utilization of Social Media and its Implications on the Performance of SMEs in Dodoma City, Tanzania," *Open Journal of Business and Management*, vol. 11, no. 2, pp. 660-672, 2023. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [17] Isaac Kazungu, George Matto, and Hellen Massawe, "Social Media and Performance of Micro Enterprises in Moshi Tanzania," *International Journal of Academic Research in Business and Social Sciences*, vol. 7, no. 5, 2017. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [18] Leyla Juma Pongwe, and Josephine Churk, "Social Media Marketing Platforms and Sales Revenue in Tanzania Telecommunication Company Limited," *International Review of Management and Marketing*, vol. 14, no. 1, pp. 31-38, 2024. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [19] Jigyasa Bharti, Snehlata Dongre, and Mayuri Thorat, "Customer Behaviour Analysis: Tools Overview," *2024 IEEE International Conference for Women in Innovation, Technology & Entrepreneurship (ICWITE)*, Bangalore, India, pp. 197-201, 2024. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [20] Ying Liu et al., "Cloud-Based Big Data Analytics for Customer Insight-Driven Design Innovation in SMEs," *International Journal of Information Management*, vol. 51, 2020. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [21] Chandradeep Bhatt et al., "Transformative Insights: Harnessing Machine Learning for Big Data Analytics," *2023 3rd International Conference on Technological Advancements in Computational Sciences (ICTACS)*, Tashkent, Uzbekistan, pp. 49-54, 2023. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [22] Ch. Vasilopoulos, L. Theodorakopoulos, and K. Giotopoulos, "Big Data and Consumer Behavior: The Power and Pitfalls of Analytics in the Digital Age," *Technium Social Sciences Journal*, vol. 45, pp. 469-480, 2023. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [23] Augustine Malero, and Hassan Seif, "Hadoop and Big Data Readiness in Africa: A case of Tanzania," *International Journal for Scientific Research & Development*, vol. 1, no. 8, pp. 1609-1612, 2013. [[Google Scholar](#)] [[Publisher Link](#)]
- [24] Jaffar Msafiri Ponera, and Valeria Kyumana, "Big Data Analytic Tools Usage among Academic Libraries in Tanzania," *Asian Journal of Information Science and Technology*, vol. 14, no. 1, pp. 18-23, 2024. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [25] Fredrick Ishengoma, *Exploring Critical Success Factors Towards Adoption of M-Government Services in Tanzania: A Web Analytics Study*, App and Website Accessibility Developments and Compliance Strategies, IGI Global, pp. 225-253, 2022. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [26] Ohle Nychail Santos et al., "Effective Digital Marketing Strategies Used by MSMEs in NCR under New Normal," *Journal of Business and Management Studies*, vol. 4, no. 1, pp. 124-130, 2022. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [27] Noor Aslinda Abu Seman, and Vigneswaran Segar, "The Impact of Digital Marketing Channels on Consumer Buying Decision," *Journal of International Business, Economics and Entrepreneurship (JIBE)*, vol. 8, no. 1, pp. 42-53, 2023. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]

- [28] Fawad Khan, and Kamran Siddiqui, "The Importance of Digital Marketing. An Exploratory Study to Find the Perception and Effectiveness of Digital Marketing amongst the Marketing Professionals in Pakistan," *Journal of Information Systems & Operations Management*, vol. 7, no. 2, 2013. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [29] Dave Chaffey, and Fiona Ellis-Chadwick, *Digital marketing*, Pearson UK, 2019. [[Google Scholar](#)] [[Publisher Link](#)]
- [30] Jerry Wind, and Vijay Mahajan, *Digital Marketing*, Etas, 2002. [[Google Scholar](#)] [[Publisher Link](#)]
- [31] Aron Msonga, and Omary Swallehe, "Impact of Digital Marketing Strategies on Performance of Telecommunication Companies in Tanzania," *Journal of Business School*, vol. 5, no. 1, pp. 26-34, 2022. [[CrossRef](#)]
- [32] Madhu Bala, and Deepak Verma, "A Critical Review of Digital Marketing," *A Critical Review of Digital Marketing. International Journal of Management, IT & Engineering*, vol. 8, no. 10, pp. 321-339, 2018. [[Google Scholar](#)] [[Publisher Link](#)]
- [33] Afrina Yasmin, Sadia Tasneem, and Kaniz Fatema, "Effectiveness of Digital Marketing in the Challenging Age: An Empirical Study," *International Journal of Management Science and Business Administration*, vol. 1, no. 5, pp. 69-80, 2015. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [34] Fiona Leverick et al., "The Role of IT in the Reshaping of Marketing," *Journal of Marketing Practice: Applied Marketing Science*, vol. 3, no. 2, pp. 87-106, 1997. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [35] Otakar Ungerma, Jaroslava Dedkova, and Katerina Gurinova, "The Impact of Marketing Innovation on the Competitiveness of Enterprises in the Context of Industry 4.0," *Journal of Competitiveness*, vol. 10, no. 2, 2018. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [36] Robert W. Stone, David J. Good, and Lori Baker-Eveleth, "The Impact of Information Technology on Individual and Firm Marketing Performance," *Behaviour & Information Technology*, vol. 26, no. 6, pp. 465-482, 2007. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [37] Don O'Sullivan, and Andrew V. Abela, "Marketing Performance Measurement Ability and Firm Performance," *Journal of Marketing*, vol. 71, no. 2, pp. 79-93, 2007. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [38] Zidadu Rashid Mbawala, and Julius Raphael Athuman Mhina, "The Influence of Information Communication Technology System on Performance of Weights and Measures Agency in Tanzania," *International Journal of Innovative Research in Engineering & Multidisciplinary Physical Sciences*, vol. 9, no. 4, 2021. [[Google Scholar](#)] [[Publisher Link](#)]
- [39] Francis Matambalya, and Susanna Wolf, "The role of ICT for the performance of SMEs in East Africa: empirical evidence from Kenya and Tanzania," ZEF Discussion Papers on Development Policy, pp. 1-30, 2001. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [40] Kabanda Salah, "E-commerce and Small and Medium Enterprises (SME) in Least Developed Countries: The Case of Tanzania," Doctoral Thesis, University of Cape Town, 2013. [[Google Scholar](#)] [[Publisher Link](#)]
- [41] Liliane Pasape, "The Influence of Information and Communication Technology on the Business Performance of the Incubated Small Business Enterprises in Tanzania," *Journal of Economics, Management and Trade*, vol. 28, no. 4, pp. 30-46, 2022. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]
- [42] Vahid Jafari-Sadeghi et al., "Exploring the Impact of Digital Transformation on Technology Entrepreneurship and Technological Market Expansion: The Role of Technology Readiness, Exploration and Exploitation," *Journal of Business Research*, vol. 124, pp. 100-111, 2021. [[CrossRef](#)] [[Google Scholar](#)] [[Publisher Link](#)]