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Masters in Marketing Management

**The impact of digitalization on E2E
customer experience : case study Coca-Cola**

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Abstract

This study examines the impact of digitalization on end-to-end customer experience at Coca-Cola Algeria, focusing on how digital technologies enhance personalization and customer satisfaction. Guided by the primary research question, "How does digitalization impact end-to-end customer experience in Coca-Cola Algeria?" and its sub-questions, the research aims to provide both practical and academic insights.

The practical objective is to identify key digital tools and strategies that improve customer interactions and satisfaction, thereby offering actionable recommendations for Coca-Cola Algeria to optimize its digital initiatives. From an academic perspective, the study contributes to the existing body of knowledge on digitalization and customer experience by exploring these dynamics in an emerging market context.

The research employs theoretical frameworks such as the Technology Acceptance Model (TAM) and Dynamic Capabilities Theory to analyze how digitalization influences customer experience. It emphasizes the role of digital touchpoints and customer journey mapping in creating seamless and personalized customer experiences.

Methodologically, the study adopts a quantitative approach, utilizing structured surveys to collect data from Coca-Cola Algeria's digital platform users. The data is analyzed using various statistical methods to test hypotheses related to digital interaction frequency, engagement level, personalization perception, and overall customer satisfaction.

The findings reveal that digitalization significantly enhances customer experience by improving personalization and engagement throughout the customer journey. These insights offer valuable recommendations for Coca-Cola Algeria and contribute to a broader understanding of digital transformation's impact on customer experience in emerging markets.

Keywords: Digitalization, Customer Experience, Personalization, Customer Journey, Digital Touchpoints

الملخص

تبحث هذه الدراسة في تأثير التحول الرقمي على تجربة العملاء في شركة كوكاكولا الجزائر، مع التركيز على كيفية تحسين التكنولوجيا الرقمية للتخصيص ورضا العملاء. ويتوجه من السؤال البحثي الرئيسي، "كيف يؤثر التحول الرقمي على تجربة العملاء في شركة كوكاكولا الجزائر؟" وأسئلته الفرعية، تهدف هذه الدراسة إلى تقديم رؤى عملية وأكاديمية.

الهدف العملي هو تحديد الأدوات والاستراتيجيات الرقمية الرئيسية التي تحسن تفاعلات العملاء ورضاهم، وبالتالي تقديم توصيات قابلة للتنفيذ لشركة كوكاكولا الجزائر لتحسين مبادراتها الرقمية. ومن المنظور الأكاديمي، تساهم الدراسة في المعرفة القائمة حول التحول الرقمي وتجربة العملاء من خلال استكشاف هذه الديناميكيات في سياق سوق ناشئ.

تستخدم الدراسة أطراً نظرية مثل نموذج قبول التكنولوجيا (TAM) ونظرية القدرات الديناميكية لتحليل كيفية تأثير التحول الرقمي على تجربة العملاء. تؤكد الدراسة على دور نقاط الاتصال الرقمية ورسم خرائط رحلة العميل في إنشاء تجارب عملاء سلسلة ومخصصة.

من الناحية المنهجية، تتبنى الدراسة نهجاً كمياً، باستخدام استبيانات منظمة لجمع البيانات من مستخدمي منصة كوكاكولا الجزائر الرقمية. يتم تحليل البيانات باستخدام طرق إحصائية مختلفة لاختبار الفرضيات المتعلقة بالتفاعل الرقمي ومستوى المشاركة وإدراك التخصيص والرضا العام للعملاء.

تكشف النتائج أن التحول الرقمي يعزز بشكل كبير تجربة العملاء من خلال تحسين التخصيص والمشاركة طوال رحلة العميل. تقدم هذه الرؤى توصيات قيمة لشركة كوكاكولا الجزائر وتساهم في فهم أوسع لتأثير التحول الرقمي على تجربة العملاء في الأسواق الناشئة.

الكلمات المفتاحية: تحول رقمي، تجربة عملاء، تخصيص، رحلة عميل، نقاط اتصال رقمية

Résumé

Cette étude examine l'impact de la digitalisation sur l'expérience client de bout en bout chez Coca-Cola Algérie, en se concentrant sur la manière dont les technologies numériques améliorent la personnalisation et la satisfaction des clients. Guidée par la question de recherche principale, "Comment la digitalisation impacte-t-elle l'expérience client de bout en bout chez Coca-Cola Algérie

L'objectif pratique est d'identifier les outils et stratégies numériques clés qui améliorent les interactions et la satisfaction des clients, offrant ainsi des recommandations concrètes à Coca-Cola Algérie pour optimiser ses initiatives numériques. D'un point de vue académique, l'étude contribue au corpus de connaissances existant sur la digitalisation et l'expérience client en explorant ces dynamiques dans le contexte d'un marché émergent.

La recherche utilise des cadres théoriques tels que le modèle d'acceptation de la technologie (TAM) et la théorie des capacités dynamiques pour analyser comment la digitalisation influence l'expérience client. Elle met l'accent sur le rôle des points de contact numériques et la cartographie du parcours client dans la création d'expériences clients fluides et personnalisées.

Méthodologiquement, l'étude adopte une approche quantitative, en utilisant des enquêtes structurées pour collecter des données auprès des utilisateurs de la plateforme numérique de Coca-Cola Algérie. Les données sont analysées à l'aide de diverses méthodes statistiques pour tester les hypothèses relatives à la fréquence des interactions numériques, au niveau d'engagement, à la perception de la personnalisation et à la satisfaction globale des clients.

Les résultats révèlent que la digitalisation améliore significativement l'expérience client en améliorant la personnalisation et l'engagement tout au long du parcours client. Ces insights offrent des recommandations précieuses pour Coca-Cola Algérie et contribuent à une meilleure compréhension de l'impact de la transformation digitale sur l'expérience client dans les marchés émergents.

Mots-clés : Digitalisation, Expérience Client, Personnalisation, Parcours Client, Points de contacts numériques

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Abbreviation List

AI: Artificial Intelligence

AR: Augmented Reality

CEM: Customer Experience Management

CRM: Customer Relationship Management

CX: Customer Experience

IoT: Internet of Things

TAM: Technology Acceptance Model

VR: Virtual Reality

E2E: End-to-End

KPI: Key Performance Indicator

ROI: Return on Investment

UX: User Experience

BDA: Big Data Analytics

KAM: Key Account Management

SEO: Search Engine Optimization

PPC: Pay-Per-Click

GDPR: General Data Protection Regulation

NLP: Natural Language Processing

BI: Business Intelligence

ML: Machine Learning

R&D: Research and Development

GENERAL INTRODUCTION

Digital transformation has become a pivotal factor in modern business practices, significantly impacting customer interactions and overall experience. This research explores the role of digitalization in enhancing end-to-end customer experience specifically within the context of Coca-Cola Algeria. The primary research question addressed is: "How does digitalization impact end-to-end customer experience in Coca-Cola Algeria?"

The objectives of the study are twofold: practical and academic. Practically, the study aims to provide actionable insights into how Coca-Cola Algeria can leverage digital technologies to improve personalization and customer satisfaction. By identifying effective digital tools and strategies, the research seeks to help Coca-Cola Algeria optimize its digital initiatives to better meet customer needs and expectations.

From an academic perspective, this study contributes to the existing body of knowledge on digitalization and customer experience. It fills a gap in the literature by providing a nuanced understanding of how digital technologies impact customer interactions in an emerging market context, specifically Algeria. The research applies theoretical frameworks such as the Technology Acceptance Model (TAM) and Customer Experience Management (CEM) to examine these impacts.

The study also highlights the importance of understanding customer experience within the broader scope of the customer journey, emphasizing the significance of digital touchpoints and customer journey mapping. These concepts are crucial for businesses aiming to create seamless and personalized experiences for their customers.

To achieve a comprehensive understanding, the study employs a robust methodological framework. It utilizes a quantitative research approach, which involves collecting and analyzing numerical data to identify patterns and relationships. This approach ensures objectivity and reliability, providing a broad overview of trends across a large sample. By employing structured surveys, the research gathers detailed insights into customer behaviors, perceptions, and satisfaction levels.

The practical significance of this study is underscored by its potential to offer Coca-Cola Algeria actionable recommendations. By identifying key digital tools and strategies, the research aims to enhance customer interactions and satisfaction. This includes

recommendations on the use of technologies such as big data analytics, artificial intelligence, and customer relationship management systems to create more engaging and efficient customer interactions. The study also emphasizes the importance of integrating digital touchpoints across various stages of the customer journey, ensuring a seamless and cohesive experience.

From an academic perspective, the research makes a valuable contribution by exploring the dynamics of digitalization and customer experience in an emerging market context. The application of theoretical frameworks such as TAM and CEM provides a structured lens through which to analyze the impacts of digital technologies. This not only adds to the existing body of knowledge but also offers new insights and perspectives that can inform future research in this area.

Furthermore, the study delves into the broader implications of digital transformation for businesses operating in emerging markets. It highlights the challenges and opportunities associated with digitalization, offering a nuanced understanding of how cultural and economic factors influence the adoption and impact of digital initiatives. This contextual relevance enriches the research, providing more contextually grounded recommendations for Coca-Cola Algeria and other businesses in similar markets.

Overall, this research provides both practical recommendations for Coca-Cola Algeria and theoretical insights for the academic community. It offers a comprehensive analysis of the transformative power of digitalization on customer experience, highlighting the critical role of digital technologies in shaping modern business practices. By bridging the gap between theory and practice, the study aims to contribute to the ongoing discourse on digital transformation and customer experience, offering valuable insights that can inform both business strategy and academic research.

I. CHAPTER 1: RESEARCH CONTEXT

1. Research Question

The primary research question guiding this study is: "How does digitalization impact end-to-end customer experience in Coca-Cola Algeria?" This question aims to explore the influence of digital technologies on the overall customer experience, with a particular focus on personalization and customer satisfaction. To further elaborate on this primary question, the following sub-questions have been formulated:

Sub-question 1: How does digitalization enhance the overall customer experience?

Sub-question 2: How does digitalization satisfaction with customer experience throughout the customer journey?

These sub-questions are grounded in the recognition that digitalization has the potential to transform how businesses interact with their (Verhoef et al., 2021; Hossain & Dwivedi, 2022). By focusing on a specific regional context, this study aims to provide nuanced insights into the broader implications of digital transformation in emerging markets.

2. Study Objectives

2.1 Practical Objective

The practical objective of this study is to provide actionable insights for how well Coca-Cola Algeria digital initiatives are performing to enhance customer experience. By identifying key digital tools and strategies that improve personalization and customer satisfaction, this research aims to help Coca-Cola Algeria optimize its digital initiatives to better meet customer needs and expectations. This includes recommendations on the use of technologies to create more engaging and efficient customer interactions (Kumar & Reinartz, 2018; Wamba et al., 2020).

Digital technologies offer significant potential for enhancing customer experiences by enabling businesses to analyze vast amounts of data and tailor their interactions accordingly. For example, personalization can help businesses understand individual customer preferences and deliver customized recommendations, thereby enhancing the overall customer experience (Huang & Rust, 2018).

2.2 Academic Objective

From an academic perspective, this study seeks to contribute to the existing body of knowledge on digitalization and customer experience. By examining the impact of digital technologies on customer experience in a specific regional context (Algeria), this research

aims to fill a gap in the literature and provide a nuanced understanding of how digitalization can enhance customer interactions in emerging markets (Lee & Lee, 2021; Kshetri, 2021). The findings will also add to the theoretical frameworks that explain the relationship between digitalization and customer experience, offering new insights and perspectives for future research.

This study will explore frameworks such as the Technology Acceptance Model (TAM), which examines how perceived usefulness and ease of use influence technology adoption (Venkatesh & Bala, 2020), and the Dynamic Capabilities Theory, which emphasizes the importance of an organization's ability to integrate and reconfigure competencies to adapt to changing environments (Teece, 2022). By applying these theories in the context of Coca-Cola Algeria, this research will provide empirical evidence to support or challenge these frameworks.

3. Reasons for Choosing the Topic

3.1 Personal Reasons

One of the personal motivations for choosing this topic is a longstanding interest in the intersection of technology and customer experience. Witnessing the rapid advancements in digital technologies and their transformative impact on various industries has inspired a desire to explore how these innovations can be harnessed to improve customer interactions..This focus allows for an exploration of how global digital trends are being adapted and implemented in a local context (Kannan & Li, 2017).

The personal connection to Algeria provides a unique perspective on the challenges and opportunities associated with digital transformation in emerging markets. It allows for a deeper understanding of the cultural and economic factors that influence the adoption and impact of digital initiatives. This personal insight can enrich the research and provide more contextually relevant recommendations for Coca-Cola Algeria.

3.2 Objective Reasons

Objectively, the topic of digitalization in customer experience is highly relevant given the current trends in global business. As companies increasingly adopt digital tools to stay competitive, understanding how these technologies affect customer experience becomes crucial. Coca-Cola Algeria presents an interesting case study due to its established presence in the region and its efforts to integrate digital technologies into its operations. This research can provide valuable insights not only for Coca-Cola Algeria but also for other companies

in similar markets looking to enhance their customer experience through digitalization (Verhoef et al., 2021; Hossain & Dwivedi, 2022).

The objective reasons for choosing this topic also include the potential for this research to contribute to broader discussions about the role of digital technologies in business strategy and customer engagement. As businesses navigate the complexities of digital transformation, insights from this study can help inform best practices and strategic approaches. By examining the specific case of Coca-Cola Algeria, this research can provide a detailed example of how digitalization can be successfully implemented in an emerging market context.

4. Relevance of the Study

4.1 Theoretical Relevance

The study's theoretical relevance lies in its potential to expand the understanding of digitalization's impact on customer experience within the context of an emerging market. By applying and testing established theories of digital transformation and customer experience, this research will contribute to the academic discourse on how digital technologies can enhance customer interactions. The study will explore frameworks such as the Technology Acceptance Model (TAM), and Customer Experience Management (CEM), providing empirical evidence to support or challenge these theories in the context of Coca-Cola Algeria (Teece, 2022; Vargo & Lusch, 2004).

The theoretical relevance of this study is also underscored by its potential to bridge gaps in the existing literature. While much of the current research on digitalization and customer experience focuses on developed markets, there is a growing need to understand these dynamics in emerging economies. By examining the case of Coca-Cola Algeria, this study will provide valuable insights into how digital technologies are being leveraged in different economic and cultural contexts, contributing to a more comprehensive understanding of global digital transformation trends (Kshetri, 2021).

4.2 Managerial Relevance

From a managerial perspective, the findings of this study will offer practical recommendations for Coca-Cola Algeria on how to effectively implement digital initiatives to improve customer experience. The insights gained from this research can help managers understand which digital tools are most effective in enhancing personalization and customer satisfaction. This will enable Coca-Cola Algeria to better align its digital strategies with

customer expectations, ultimately leading to improved customer loyalty and business performance (Kumar & Reinartz, 2018; Wamba et al., 2020). Additionally, the study's recommendations can serve as a benchmark for other companies in the region looking to leverage digitalization to enhance their customer experience.

The managerial relevance of this study is further highlighted by its potential to inform strategic decision-making. As businesses increasingly rely on digital tools to engage with customers, understanding the specific benefits and challenges associated with these technologies becomes crucial. The findings of this study can provide actionable insights that help managers make informed decisions about digital investments and initiatives, ensuring that their efforts are aligned with broader business objectives and customer needs (Davenport & Ronanki, 2018).

5. Epistemology

The epistemology of this research is rooted in positivism, an approach that emphasizes empirical evidence and objective measurement to understand and explain phenomena. Positivism asserts that knowledge is derived from observable and measurable facts, and this study adopts this perspective to explore the impact of digitalization on customer experience. Positivism is characterized by its reliance on empirical data, which is gathered through observation, experimentation, and quantification. This research uses quantitative methods such as surveys and data analytics to collect data on customer behaviors and perceptions. The use of these methods aligns with the positivist emphasis on observable and measurable evidence, ensuring that the findings are grounded in real-world data.

A key principle of positivism is objectivity. Positivist researchers strive to eliminate bias and subjectivity from their studies, relying on standardized measurement tools and statistical analysis to ensure that the results are a true reflection of the data. In this study, objective data collection methods, such as online surveys and digital analytics, are employed to gather unbiased data on customer experiences and satisfaction.

Another fundamental aspect of positivism is the formulation and testing of hypotheses. This research derives its hypotheses from existing theoretical frameworks and tests them through empirical observation and measurement. For example, hypotheses regarding the impact of personalization, digital touchpoints, and customer engagement on customer satisfaction are tested using quantitative data. The ability to test and potentially falsify these hypotheses is a hallmark of the positivist approach, as it allows for the validation or refutation of theoretical propositions based on empirical evidence.

Quantitative methods are central to positivist research. These methods enable the collection of large datasets and the application of statistical techniques to uncover patterns and relationships. In this study, quantitative methods are used to analyze customer data, providing insights into how digital initiatives and touchpoints influence customer satisfaction and engagement. The use of statistical analysis ensures that the findings are robust and reliable, allowing for generalization to a broader population.

Generalization is an important goal of positivist research. By using representative sampling techniques and statistical analysis, researchers can draw conclusions that are applicable to larger groups based on the results obtained from the sample. This research aims to generalize its findings on the impact of digitalization on customer experience to the broader population of digital consumers, providing valuable insights that can inform business practices across various industries.

The adoption of a positivist epistemology for this research is justified for several reasons. First, the objective measurement of customer experiences and satisfaction aligns with the positivist emphasis on empirical evidence and objectivity. By collecting and analyzing measurable data, the research can identify causal relationships and generalize its findings to a larger population.

Second, the hypotheses derived from the theoretical frameworks are tested empirically, which is a core component of positivist research. By testing specific hypotheses regarding personalization, digital touchpoints, and customer engagement, the research provides empirical evidence to support or refute these theoretical propositions.

Third, the positivist approach allows for the replication of the study in different contexts, enhancing the reliability and validity of the findings. Replicability is a key feature of positivist research, as it allows other researchers to verify the results by conducting similar studies. This research can be replicated in different industries or geographical regions to validate the findings and strengthen the generalizability of the results.

The use of quantitative methods also enables the research to handle large datasets, which is essential for studying the impact of digitalization on customer experience. By analyzing large volumes of data, the research can gain a comprehensive understanding of customer behaviors and trends, identifying the broader implications of digital initiatives on customer experience.

While positivism offers several advantages, it is not without its criticisms and limitations. One criticism is that positivism may overlook the subjective and interpretive aspects of social

phenomena. In the context of this research, the focus on quantitative data may overlook the qualitative aspects of customer experiences, such as emotions and personal narratives. To address this limitation, the research could incorporate qualitative methods to complement the quantitative findings and provide a more holistic understanding of customer experiences. Another limitation of positivist research is its reliance on existing theoretical frameworks and hypotheses. This reliance may limit the exploration of new or emerging phenomena that do not fit within established theories. However, by grounding the hypotheses in well-established theoretical constructs and continuously reviewing the literature, the research seeks to address this limitation and remain open to new insights and developments.

In conclusion, the adoption of a positivist epistemology for this research is appropriate given its focus on empirically measuring the impact of digitalization on customer experience. By employing quantitative methods, testing hypotheses, and maintaining objectivity, the research aims to provide reliable and generalizable findings. While acknowledging the limitations of positivism, the research leverages its strengths to contribute valuable insights into the role of digital initiatives in shaping customer satisfaction and engagement.

**II. CHAPTER 2 : LITTERATURE
REVIEW**

1. Digital Transformation Theories

Digital transformation, a multifaceted phenomenon, is revolutionizing how businesses operate and interact with customers. At its core, digital transformation involves integrating digital technology into all aspects of a business, fundamentally changing how value is delivered to customers. Several theories underpin digital transformation, offering insights into its mechanisms and impacts.

One prominent theory is the Technology Acceptance Model (TAM), which posits that perceived usefulness and ease of use influence individuals' technology acceptance and usage behaviors. Developed by Davis (1989), TAM has been widely applied to understand how digital technologies are adopted within organizations. This model is particularly relevant in studying digitalization in customer experience, as it helps explain how customers and employees perceive and adopt new digital tools and platforms. Recent studies, such as one by Venkatesh and Bala (2020), have expanded TAM by incorporating factors like social influence and facilitating conditions, providing a more comprehensive understanding of technology adoption in digital transformation.

Another significant theory is the Dynamic Capabilities Theory (Teece, Pisano, & Shuen, 1997). This theory emphasizes an organization's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. In the context of digital transformation, dynamic capabilities refer to a firm's ability to effectively leverage digital technologies to enhance customer experience and gain a competitive advantage. For instance, a company's dynamic capabilities might involve using real-time data analytics to tailor marketing strategies and improve customer interactions. A recent study by Warner and Wäger (2019) highlights how organizations develop dynamic capabilities to manage digital transformation successfully, emphasizing the role of leadership and culture in this process. Additionally, Teece (2022) has further elaborated on the evolving nature of dynamic capabilities in the digital age, underscoring the need for continuous adaptation and innovation.

The Resource-Based View (RBV) of the firm also provides a useful lens for understanding digital transformation. RBV suggests that a firm's resources and capabilities are critical drivers of competitive advantage (Barney, 1991). Digital technologies can be seen as valuable resources that enable firms to create unique customer experiences. For example, by utilizing advanced CRM systems, companies can manage customer relationships more effectively, leading to increased customer satisfaction and loyalty. A study by Wamba et al.

(2020) illustrates how big data analytics, as a critical resource, can enhance customer experience by providing actionable insights into customer preferences and behaviors.

Additionally, the Digital Business Strategy framework (Bharadwaj et al., 2013) highlights the importance of integrating digital technologies into business strategies. This framework suggests that digital business strategy is characterized by its scope, scale, speed, and sources of value creation. It underscores the need for firms to align their digital initiatives with broader business objectives to achieve sustainable growth. This might involve leveraging digital platforms to enhance brand engagement and streamline operations across a global supply chain. Recent research by Sebastian et al. (2020) discusses the strategic alignment of digital transformation initiatives with organizational goals, providing a roadmap for successful digital integration. Furthermore, a 2023 study by Brynjolfsson and McAfee emphasizes the strategic importance of digital business strategies in fostering innovation and competitive advantage in the digital economy.

In sum, these theoretical perspectives provide a robust foundation for understanding the complexities of digital transformation. By examining how organizations adopt and integrate digital technologies, these theories help elucidate the mechanisms through which digitalization enhances customer experience. As we delve into the impact of digitalization on end-to-end customer experience, these theoretical frameworks will guide our analysis and interpretation of findings.

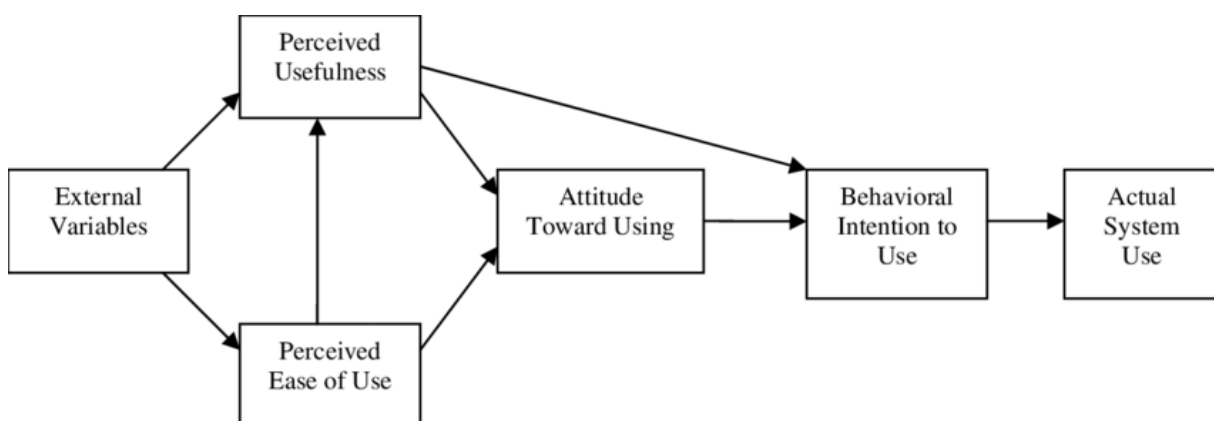


Figure 1 : TAM Model.

Source : https://www.researchgate.net/figure/Illustration-of-the-Technology-Acceptance-Model-TAM_fig1_228631114

2. Customer Experience Theories

Customer experience (CX) has emerged as a critical factor in achieving competitive advantage in today's digital economy. Theoretical frameworks surrounding CX offer valuable insights into how businesses can effectively manage and enhance customer interactions. One foundational theory in this domain is the Service-Dominant Logic (SDL), proposed by Vargo and Lusch (2004). SDL posits that value is co-created by the firm and the customer through interactions and that services, rather than goods, are the fundamental basis of economic exchange. This perspective emphasizes the importance of understanding customer needs and expectations to deliver superior experiences.

The Customer Experience Management (CEM) framework is another vital theoretical model that provides a comprehensive approach to managing CX. CEM focuses on the entire customer journey, identifying key touchpoints where businesses can engage with customers and create memorable experiences. According to Meyer and Schwager (2007), effective CEM involves capturing customer feedback, analyzing it to gain insights, and implementing improvements to enhance customer satisfaction and loyalty. Implementing CEM principles could involve leveraging digital feedback mechanisms to continuously refine and personalize customer interactions. A study by Lemon and Verhoef (2016) further elaborates on the importance of managing customer journeys holistically to enhance customer experience. More recent research by Verhoef et al. (2021) expands on these principles, highlighting the role of digital channels and technologies in shaping customer journeys and experiences.

Another influential theory is the Expectancy-Disconfirmation Theory (EDT), developed by Oliver (1980). EDT suggests that customer satisfaction is determined by the gap between expected and actual performance. When experiences exceed expectations, positive disconfirmation occurs, leading to higher satisfaction. Conversely, when experiences fall short, negative disconfirmation results in dissatisfaction. This theory underscores the importance of managing customer expectations and consistently delivering high-quality experiences. In the context of digitalization, companies can utilize predictive analytics and customer data to anticipate needs and exceed expectations at various touchpoints. Recent research by Hossain and Dwivedi (2021) supports the relevance of EDT in digital contexts, highlighting how digital tools can help manage and exceed customer expectations. Additionally, a 2022 study by Kim and Kim examines the role of augmented reality in

enhancing customer expectations and satisfaction, providing empirical evidence of EDT in a digital setting.

The Theory of Planned Behavior (TPB), formulated by Ajzen (1991), provides insights into how customer attitudes, subjective norms, and perceived behavioral control influence their intentions and behaviors. TPB is particularly relevant for understanding how digital tools and platforms shape customer behaviors. For instance, if customers perceive digital channels as easy to use and beneficial, they are more likely to engage with the brand online, enhancing their overall experience. Recent studies by Pavlou and Fygenson (2017) have adapted TPB to explore customer interactions with digital platforms, offering practical insights into how perceived ease of use and usefulness drive customer engagement. Furthermore, a study by Mathieson (2022) extends TPB to include digital trust as a critical factor influencing online customer behavior.

The Emotional Contagion Theory (Hatfield, Cacioppo, & Rapson, 1993) also plays a significant role in understanding CX. This theory posits that emotions can be transferred from one person to another, influencing behaviors and attitudes. In the context of digital CX, positive emotional contagion can occur through engaging and interactive digital content, social media interactions, and personalized communications, fostering a deeper emotional connection between the brand and customers. A recent study by Li et al. (2021) highlights the impact of emotional contagion in social media marketing, demonstrating how positive emotional exchanges can enhance customer experience and brand loyalty. Additionally, research by Zhang et al. (2023) explores the role of emotional contagion in virtual reality environments, showing how immersive digital experiences can significantly influence customer emotions and behaviors.

By integrating these theoretical perspectives, businesses can develop a holistic understanding of CX and implement strategies that enhance customer satisfaction and loyalty. As we explore the impact of digitalization on E2E customer experience, these theories will provide a valuable framework for analyzing how digital initiatives influence customer perceptions and behaviors.

3. Digitalization in Customer Experience

3.1 Definition and Scope

Digitalization in customer experience (CX) refers to the integration of digital technologies into the various touchpoints and processes that shape the interactions between a business and its customers. This transformation encompasses a wide range of technologies and practices

designed to enhance customer engagement, streamline operations, and provide more personalized and efficient services (Kannan & Li, 2017).

Digitalization involves the use of technologies such as Artificial Intelligence (AI), Big Data Analytics, the Internet of Things (IoT), and advanced Customer Relationship Management (CRM) systems. These technologies enable businesses to gather, analyze, and leverage vast amounts of data to better understand customer behaviors, preferences, and needs. By doing so, companies can create more tailored and responsive customer experiences (Davenport & Ronanki, 2018).

The scope of digitalization in CX is broad, encompassing all stages of the customer journey from initial awareness and consideration to purchase, post-purchase support, and ongoing engagement. Key components of digitalization include:

3.1.1. Data Collection and Analysis

Utilizing big data and analytics to collect and interpret customer data from various sources, including social media, purchase history, and online interactions. This data provides insights into customer preferences and behaviors, enabling more targeted marketing and personalized experiences (Wedel & Kannan, 2016).

3.1.2. Automation and AI

Implementing AI-driven tools and automation to enhance efficiency and responsiveness. Examples include chatbots for customer service, personalized product recommendations, and automated marketing campaigns that adapt to customer behaviors in real-time (Huang & Rust, 2018).

3.1.3. Omnichannel Integration

Ensuring a seamless and consistent experience across all digital and physical channels. This involves integrating online and offline touchpoints, such as websites, mobile apps, social media, and in-store interactions, to provide a unified customer journey (Verhoef et al., 2015).

3.1.4. Enhanced Personalization

Using data and AI to deliver personalized content, offers, and experiences tailored to individual customers. This personalization can significantly improve customer satisfaction and loyalty by making customers feel valued and understood (Pansari & Kumar, 2017).

3.1.5. Improved Customer Support

Leveraging digital tools to provide faster and more effective customer support. This includes AI-powered chatbots, self-service portals, and real-time support through social media and messaging apps (Wirtz et al., 2018).

3.1.6. Interactive and Immersive Experiences

Employing technologies such as augmented reality (AR) and virtual reality (VR) to create engaging and immersive customer experiences. These technologies can enhance product visualization, provide virtual try-ons, and offer interactive tutorials (Hilken et al., 2017).

Recent studies have highlighted the importance and impact of digitalization in CX. For example, a study by Verhoef et al. (2021) emphasizes how digitalization reshapes the customer journey, making interactions more seamless and integrated across different channels. The study found that businesses that effectively implement digitalization strategies experience higher customer satisfaction and loyalty.

Another study by Hossain and Dwivedi (2022) explores the role of AI in enhancing CX, showing that AI-driven personalization and automation significantly improve customer engagement and satisfaction. The research indicates that businesses leveraging AI technologies can better meet customer expectations and deliver more personalized and efficient services.

In summary, digitalization in CX involves leveraging advanced technologies to enhance customer interactions, streamline operations, and provide personalized experiences. By integrating digital tools and data-driven insights, businesses can create more engaging and satisfying customer journeys, ultimately driving customer loyalty and business success.

3.2 Technologies Involved

Digitalization in customer experience relies on a suite of advanced technologies that enable businesses to collect, analyze, and act on customer data in real-time. These technologies transform how businesses interact with their customers, making interactions more efficient, personalized, and impactful.

3.2.1. Artificial Intelligence (AI)

AI plays a pivotal role in digitalizing customer experience. Machine learning algorithms analyze customer data to identify patterns and predict behaviors, enabling businesses to offer personalized recommendations and targeted marketing. AI-powered chatbots provide instant customer support, handling routine inquiries and freeing up human agents to address more complex issues (Duan, Edwards, & Dwivedi, 2019).

3.2.2. Big Data Analytics

Big data technologies enable businesses to process and analyze vast amounts of customer data from multiple sources, including social media, website interactions, and purchase

history. This analysis provides deep insights into customer preferences, allowing for more informed decision-making (Wamba et al., 2020).

3.2.3. Internet of Things (IoT)

IoT devices collect real-time data from various customer touchpoints, such as smart devices and wearable technology. This data helps businesses understand how customers interact with their products and services, enabling proactive support and personalized experiences. For example, IoT can track product usage and send alerts or recommendations based on real-time data, enhancing the overall customer experience (Lee & Lee, 2021).

3.2.4. Customer Relationship Management (CRM) Systems

Advanced CRM systems integrate customer data across various touchpoints, providing a holistic view of customer interactions. This integration allows businesses to manage and analyze customer relationships more effectively, leading to improved customer satisfaction and loyalty. Modern CRM platforms often include AI and analytics capabilities to offer deeper insights and more personalized engagement strategies (Kumar & Reinartz, 2018).

3.2.5. Augmented Reality (AR) and Virtual Reality (VR)

AR and VR technologies create immersive and interactive customer experiences. AR can enhance online shopping by allowing customers to visualize products in their environment, while VR can offer virtual tours and interactive demonstrations. These technologies not only engage customers but also provide a richer and more informative experience (Kim & Hyun, 2022).

By integrating these technologies, businesses can create a more dynamic, responsive, and personalized customer experience. Each technology plays a specific role in collecting data, analyzing it, and delivering actionable insights, all of which contribute to a more satisfying and engaging customer journey. As digitalization continues to evolve, these technologies will become increasingly integral to how businesses interact with and serve their customers.

3.3 Impact on E2E Customer Experience

Recent studies highlight various aspects of how digitalization influences customer experience. Sarah Basahel (2023) emphasizes that digital transformation, customer experience, and IT innovation significantly enhance firm performance, with customer experience having the most substantial impact. This research collected data from service sector firms in Saudi Arabia, revealing the critical role of digital tools in improving customer interactions and organizational outcomes.

Similarly, Anna A. Chirkina and L.P. Sazhneva (2022) explore how digital technologies in customer experience management can increase customer loyalty. They focus on the creation of digital client profiles through omnichannel strategies, which improve the efficiency of customer experience management.

Guled Abdijalil (2022) in a comprehensive review discusses the contribution of digitalization to customer experience, especially in sustainable business practices. This study suggests that digital transformation facilitates better customer journeys and relationships, enhancing overall customer satisfaction.

Another systematic review from the *International Journal of Business Strategies* (2023) indicates that digitalization in business practices enhances customer experience through improved connectivity and personalized services. The review highlights the importance of integrating customer data to provide seamless and tailored customer experiences.

Lastly, the study from Nauchni Trudove (2023) discusses the impact of digitalization on the customer journey in retail. The report emphasizes the necessity of defining and integrating touchpoints to offer a seamless shopping experience, thereby underlining the evolving nature of consumer behavior and retail practices. These studies collectively underscore the pivotal role of digitalization in transforming customer experience across various industries.

3.4 Touchpoints and Customer Journey Mapping

Digitalization introduces numerous digital touchpoints throughout the customer journey, creating opportunities for more personalized and engaging interactions. Touchpoints include websites, mobile apps, social media, email, and in-store digital interfaces. Each touchpoint provides valuable data that businesses can analyze to understand customer preferences and behaviors better (Edelman & Singer, 2015).

Customer journey mapping is a crucial tool for visualizing and optimizing these touchpoints. It involves identifying all the points of interaction between the customer and the business and mapping out the customer's experiences and emotions at each stage. Digital tools enable more precise and detailed mapping, incorporating data from various sources to create a comprehensive view of the customer journey (Lemon & Verhoef, 2016).

Digital touchpoints provide a rich source of data that can be used to enhance the customer journey. For example, a business might use data from website interactions to identify common customer issues and improve site navigation. Similarly, social media interactions can provide insights into customer sentiments and preferences, allowing for more targeted marketing and customer support (Verhoef et al., 2021).

Recent research underscores the benefits of digital touchpoints and customer journey mapping. A study by Verhoef et al. (2021) found that businesses that effectively integrate digital touchpoints into their customer journeys achieve higher levels of customer satisfaction and loyalty. The study highlights the importance of seamless integration across channels, ensuring that customers have a consistent and cohesive experience regardless of how they interact with the business.

Moreover, the use of advanced analytics and AI in journey mapping can provide deeper insights into customer behavior. Predictive analytics can identify potential issues before they arise, allowing businesses to proactively address them. AI-driven tools can personalize the customer journey in real-time, adapting to individual customer preferences and behaviors (Huang & Rust, 2018).

In summary, digitalization significantly impacts E2E customer experience by enhancing touchpoints, enabling detailed customer journey mapping, and providing opportunities for personalized and proactive engagement. Through the use of advanced technologies such as AI, big data analytics, IoT, and CRM systems, businesses can better understand and meet customer needs, leading to improved satisfaction and loyalty. As digitalization continues to evolve, its impact on customer experience will only become more pronounced, making it an essential strategy for businesses aiming to stay competitive in the digital age (Davenport & Ronanki, 2018).

Table 1 : denominations for customer experience.

Author(s) (year)	Denomination and Definition
Maslow (1968, p.73)	Peak Experience It is a "moment of great joy and fulfillment" during which the individual can feel their true identity. During such an experience, Maslow (1968) explains that the individual feels more powerful than usual and experiences concentration, joy, intensity, and creativity that are also unusual.
Holbrook and Hirschman (1982, p.132)	Consumption Experience "Phenomenon directed towards the pursuit of fantasies, feelings, and pleasure" (fantasies – feelings – fun).
Arnould and Price (1993, p.25)	Extraordinary Experience It is "triggered by unusual events and characterized by high levels of

	emotional intensity and experience [...] a significant trigger for this experiential state is interpersonal interaction."
Carbone and Haeckel (1994, p.8)	Customer Experience "A takeaway impression formed when a person encounters products, services, companies; a perception produced when the individual consolidates sensory information."
Schmitt (1999, p.60)	Customer Experience "It involves the entire living being. It often results from direct observation and/or participation in an event – whether real, dreamlike, or virtual."
Filser (2002, p.14)	Consumption Experience "The set of positive and negative consequences that the consumer derives from the use of a good or service."
Shaw and Ivens (2002, p.6)	Customer Experience "Interaction between an organization and a customer. It is a blend of the organization's physical performance, the senses stimulated, and the emotions evoked."
Carù and Cova (2002)	Consumption Experience "Personal experience – often emotionally charged – based on interaction with stimuli such as products or services made available by the consumption system [...] this experience can lead to a transformation of the individual in the case of so-called extraordinary experiences."
Meyer and Schweiger (2007, p.118)	Customer Experience "Internal and subjective response of consumers to any contact with a company, whether direct or indirect."
Gentile, Spiller, and Noci (2007, p.397)	Customer Experience "It results from a set of interactions between the consumer and a product, and a company that provokes a reaction. This experience is strictly personal and involves the consumer at different levels (rational, emotional, sensory, physical, and spiritual)."
Jain and Bagdare (2009, p.34)	Customer Experience "The total sum of feelings, perceptions, and attitudes formed throughout the decision-making and consumption process, involving integrated series of interactions with people, objects, processes, and the environment."

Ismail et al. (2011, p.208)	Consumption Experience "Emotions provoked, sensations felt, knowledge obtained, and skills acquired through active involvement (of the consumer) with the company before, during, and after consumption."
Laurent Deslandres (2015, p.14)	Customer Experience "It is the personal experience of each customer, their rational and emotional perception, built progressively throughout their relationship with the brand."

Source: Flacandji, M. (2015). From the memory of the experience to the relationship with the brand: A theoretical and methodological exploration in the field of retail (Doctoral dissertation, LISIT Graduate School, ED 491). pp. 23-25.

Table 2 : The impact of digital transformation on customer experience: recent studies.

Paper Title	Insight
The Effects of Digital Transformation on Firm Performance (Basahel, 2023)	Highlights the positive impact of digital transformation on firm performance, emphasizing the significant role of customer experience and IT innovation.
Digital technologies in customer experience management as a tool for increasing customer loyalty (Chirkina & Sazhneva, 2022)	Explores the use of digital client profiles and omnichannel strategies to improve customer experience management and increase customer loyalty.
Digital Transformation for Improving Customer Experience (Abdijalil, 2022)	Discusses how digitalization enhances customer experiences through sustainable business practices and improved customer journeys.

Digitalization of Sustainable Business Practices and their Influence on Customer Experiences (2023)	Systematic review of digitalization in business practices, emphasizing improved connectivity and personalized services for better customer experiences.
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Conceptual Framework

1. Understanding Customer Experience Throughout the Customer Journey

The article "Understanding Customer Experience Throughout the Customer Journey" discusses the role of self-congruence in personalized advertising, particularly on social media platforms like Facebook. The research posits that when customers see a brand advertised after searching for it online, a self-congruence effect is established, which enhances brand-related outcomes. This creates a direct relationship between personalized advertising, a result of digitalization, and improved customer experience through enhanced brand congruence. The foundation of this framework is based on how well a customer's self-concept matches the brand image. By leveraging data to provide targeted advertisements, companies can improve brand perception and customer engagement, illustrating how digitalization facilitates the collection and analysis of data, ultimately enhancing customer experience through personalized and relevant advertisements.

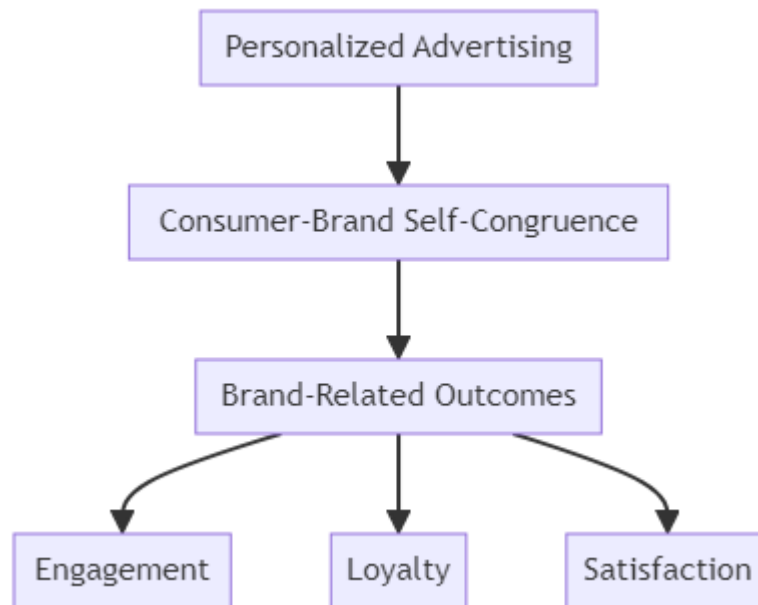


Figure 2 : Understanding Customer Experience Throughout the Customer Journey.

2. the role of digitalization in enhancing customer satisfaction and engagement

The article "The Impact of Digitalization of Retail Banks in Malaysia on Customer Experience" explores the impact of digitalization in retail banking and its effect on customer experience. The study emphasizes the importance of digital touchpoints and the role of digital banking services in enhancing customer satisfaction and engagement. Digitalization in retail banking involves the implementation of digital tools and platforms for customer interactions, leading to improved customer experience through seamless, efficient, and accessible banking services. This improvement is directly linked to the availability and quality of digital services, highlighting how the integration of digital banking services enhances service delivery and accessibility, resulting in higher customer satisfaction from improved digital interactions and services.



Figure 3 : the role of digitalization in enhancing customer satisfaction and engagement.

4. Synthesizing the Findings

Bringing together insights from "Understanding Customer Experience Throughout the Customer Journey" and "The Impact of Digitalization of Retail Banks in Malaysia on Customer Experience" offers a comprehensive understanding of how digitalization impacts customer experience. Both frameworks underscore the transformative role of digitalization in enhancing customer interactions and satisfaction.

The first framework illustrates the impact of self-congruence in personalized advertising, particularly on platforms like Facebook. When customers see a brand advertised after searching for it online, a self-congruence effect is established, enhancing brand-related outcomes. This demonstrates how digitalization facilitates the collection and analysis of data, ultimately improving customer experience through personalized and relevant advertisements.

In contrast, the second framework highlights the impact of digitalization in retail banking on customer experience. It emphasizes the importance of digital touchpoints and the role of digital banking services in enhancing customer satisfaction and engagement. Implementing digital tools and platforms for customer interactions leads to improved customer experience through seamless, efficient, and accessible banking services.

Combining these insights reveals that digitalization significantly enhances customer experience by improving personalized interactions and increasing the availability of digital touchpoints. Personalization of customer interactions, as highlighted in the first framework, directly enhances customer experience by providing relevant and targeted advertisements. Meanwhile, the availability of multiple digital touchpoints, emphasized in the second framework, leads to increased customer satisfaction through better service delivery and accessibility.

Together, these enhancements in customer experience and satisfaction illustrate the powerful impact of digitalization across different sectors, demonstrating how personalized interactions and digital touchpoints contribute to overall improvements in customer experience.

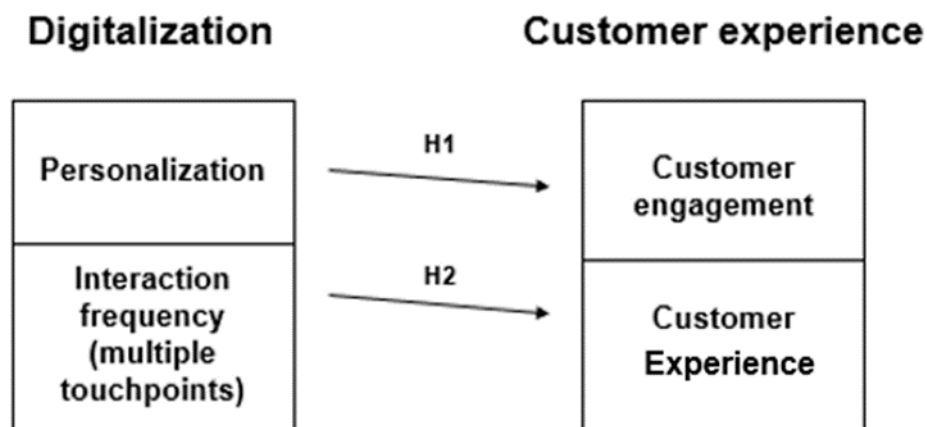


Figure 4 : Theoretical framework.

Hypotheses Development

The theoretical framework provided a comprehensive understanding of how digitalization impacts customer experience through various mechanisms such as personalization, digital touchpoints, and customer journey mapping. Based on these insights, we formulate the following hypotheses to empirically test the proposed relationships in the context of Coca-Cola Algeria.

Hypothesis 1: Impact of Digitalization on Personalization

- **H1:** Digitalization significantly enhances the overall customer experience by improving the personalization of customer interactions.

- **Rationale:** Digital technologies enable businesses to gather and analyze customer data, allowing for personalized interactions that cater to individual preferences and needs. This tailored approach makes customers feel valued and understood, thereby enhancing their overall experience with the brand.

Hypothesis 2: Impact of Digital Touchpoints on Satisfaction

- **H2:** Digitalization increases customer satisfaction through the availability of multiple digital touchpoints throughout the customer journey.
- **Rationale:** The integration of various digital touchpoints such as websites, mobile apps, and social media provides customers with multiple channels to interact with the brand. This seamless connectivity ensures that customers can engage with the brand at their convenience, leading to higher satisfaction levels due to improved accessibility and responsiveness.

5.Theoretical framework

5.1 Personalization

Personalization is a strategy that involves tailoring products, services, and communications to meet the unique needs and preferences of individual customers. This approach is facilitated by the collection and analysis of customer data, which allows businesses to understand and anticipate customer preferences, behaviors, and needs. Brakus et al. (2009) explain that personalization creates experiences that are specific to an individual's preferences and past behaviors, leading to more engaging and relevant interactions. For instance, personalized recommendations on e-commerce websites, tailored email marketing campaigns, and customized user interfaces are all examples of how personalization can enhance customer experience.

The rise of digital technologies has significantly expanded the capabilities of personalization. Advanced data analytics, machine learning, and artificial intelligence enable businesses to process large volumes of data and generate insights that drive personalized interactions. According to Varadarajan and Yadav (2009), the ability to deliver personalized experiences is a key competitive advantage in the digital age, as it helps businesses differentiate themselves in crowded markets and build stronger relationships with customers

Personalization is not limited to marketing and sales; it also extends to customer service and support. For example, customer service representatives can access customer history and preferences to provide more efficient and effective assistance. This level of personalization

can lead to higher customer satisfaction and loyalty, as customers feel valued and understood by the brand.

Moreover, personalization can improve the overall efficiency of marketing efforts by targeting the right audience with the right message at the right time. This targeted approach reduces wasted marketing resources and increases the likelihood of conversion. A more recent study by Smith and Chaffey (2019) supports the view that digital targeting techniques are vastly superior to traditional methods due to their real-time data processing and analysis capabilities.

5.2. Digital Initiatives

Digital initiatives encompass a broad range of strategies and projects aimed at leveraging digital technologies to improve business processes, enhance customer experience, and drive innovation. These initiatives often include the implementation of new digital tools, platforms, and practices that transform how a company operates and interacts with its customers. Brennen and Kreiss (2016) highlight that digital initiatives are essential for businesses to stay competitive in an increasingly digital marketplace. Such initiatives often involve significant changes to organizational structures and processes, requiring a strategic approach to digital transformation.

Digital initiatives can take many forms, including the adoption of customer relationship management (CRM) systems, e-commerce platforms, mobile applications, and social media engagement strategies. Each of these initiatives aims to enhance the efficiency and effectiveness of business operations, improve customer interactions, and foster innovation. For example, the implementation of CRM systems allows businesses to manage customer data more effectively, enabling personalized marketing and improved customer service.

A key aspect of digital initiatives is their ability to create new business models and revenue streams. By leveraging digital technologies, companies can develop innovative products and services that meet the evolving needs of their customers. Hess et al. (2016) discuss how digital initiatives can lead to the creation of new value propositions and business models that drive growth and competitiveness. For instance, subscription-based services, which have gained popularity across various industries, are a direct result of digital innovation.

Moreover, digital initiatives often involve the use of advanced analytics and big data to gain insights into customer behavior and market trends. This data-driven approach enables businesses to make informed decisions, optimize their operations, and deliver better customer experiences. As highlighted by Legner et al. (2017), the integration of digital technologies into business processes allows for real-time monitoring and analysis, leading to more agile and responsive organizations.

The success of digital initiatives largely depends on the ability of organizations to adapt to technological changes and integrate digital tools into their existing workflows. This requires a cultural shift within the organization, fostering an environment of experimentation, agility, and a willingness to embrace risk. According to Kane et al. (2015), leadership plays a crucial role in driving digital transformation, as it involves not only technological adoption but also changes in organizational culture and mindset.

5.3 Digital Touchpoints

Digital touchpoints are points of interaction between a customer and a brand that occur through digital channels. These touchpoints can include websites, mobile apps, social media platforms, email, and other digital media. Effective management of these touchpoints is crucial for creating a seamless and integrated customer journey. Lemon and Verhoef (2016) emphasize that digital touchpoints play a significant role in shaping the overall customer experience by providing consistent and cohesive interactions across multiple channels.

Digital touchpoints allow companies to engage with customers in real-time and provide personalized experiences. For example, a well-designed website can offer personalized recommendations based on a customer's browsing history, while a mobile app can send push notifications about relevant offers and updates. This level of personalization enhances the customer's interaction with the brand and increases the likelihood of conversion and loyalty (Bolton et al., 2018).

The proliferation of digital touchpoints has transformed the way customers interact with brands. Customers now expect to engage with companies through various digital channels, and they anticipate a consistent experience across all these touchpoints. This expectation has led to the rise of omnichannel strategies, where businesses integrate their digital and physical channels to provide a unified customer experience. According to Verhoef, Kannan, and

Inman (2015), omnichannel management has become a standard practice for many companies as they strive to meet the evolving needs of their customers.

Managing digital touchpoints effectively also involves leveraging data analytics to understand customer behavior and preferences. By analyzing data from various digital interactions, companies can gain insights into what customers want and how they interact with different touchpoints. This information can be used to optimize the customer journey, improve the relevance of communications, and enhance the overall customer experience. Leeflang et al. (2013) highlight the importance of using data-driven strategies to manage digital touchpoints and create more engaging and personalized customer interactions.

Additionally, the rise of social media as a digital touchpoint has introduced new opportunities and challenges for businesses. Social media platforms allow customers to share their experiences, provide feedback, and engage with brands in real-time. This level of interaction can significantly influence brand perception and customer loyalty. Libai et al. (2010) note that social media has become a critical touchpoint in the customer journey, as peer-to-peer interactions and recommendations can greatly impact customer decisions.

5.4 Customer Engagement

Customer engagement refers to the emotional connection and level of involvement a customer has with a brand. It encompasses the interactions and experiences that build a customer's trust, loyalty, and advocacy. Hollebeek, Glynn, and Brodie (2014) describe customer engagement as a multidimensional construct that includes cognitive, emotional, and behavioral dimensions. Engaged customers are more likely to exhibit loyalty, make repeat purchases, and advocate for the brand, contributing to the organization's sustained competitive advantage.

Cognitive engagement involves the customer's willingness to invest time and mental effort in understanding and evaluating the brand's offerings. This dimension reflects the depth of a customer's knowledge about the brand and their active interest in its products or services. Emotional engagement captures the affective connection a customer feels towards the brand, including feelings of trust, loyalty, and attachment. According to Vivek, Beatty, and Morgan (2012), emotional engagement is crucial as it predisposes customers to continue choosing the brand over competitors, even in the face of varying circumstances.

Behavioral engagement involves the actions taken by customers that go beyond purchase transactions, such as advocacy, feedback, and social sharing. Engaged customers are likely to participate in brand-related activities, contribute to community forums, and share their positive experiences with others. This behavior not only enhances the customer's relationship with the brand but also serves as valuable word-of-mouth marketing. Kumar et al. (2010) emphasize that engaged customers create significant value for the organization through their ongoing interactions and contributions.

The rise of digital technologies has transformed customer engagement by providing new platforms and tools for interaction. Social media, online communities, and mobile apps offer customers various ways to connect with brands and other customers, fostering a sense of community and belonging. These digital platforms enable real-time engagement, where customers can instantly share their feedback, ask questions, and participate in brand activities. Van Doorn et al. (2010) highlight the importance of these digital touchpoints in facilitating continuous and meaningful customer engagement.

customer engagement is increasingly seen as a dynamic process that evolves over time. As customers interact with a brand through different stages of the customer journey, their level of engagement can fluctuate. Brands need to consistently nurture and enhance this engagement by providing relevant and valuable experiences at each touchpoint. This requires a strategic approach to customer relationship management that focuses on long-term engagement rather than short-term transactions. Brodie et al. (2011) discuss the need for businesses to adopt a holistic view of customer engagement, integrating it into their overall customer experience strategy.

5.5 Customer Satisfaction

Customer satisfaction is a measure of how well a company's products or services meet or exceed customer expectations. It is a key indicator of customer loyalty and long-term business success. According to Oliver (1999), customer satisfaction involves both attitudinal and behavioral dimensions, reflecting a customer's overall contentment with their experience. This satisfaction can be influenced by various factors, including product quality, service delivery, and the overall customer experience.

High levels of customer satisfaction are essential for fostering customer loyalty. Satisfied customers are more likely to make repeat purchases, recommend the brand to others, and exhibit a higher lifetime value. Homburg, Jozic, and Kuehnl (2015) highlight that customer satisfaction can lead to positive word-of-mouth and increased customer retention, which are crucial for sustaining competitive advantage in the marketplace.

The digital age has significantly impacted how customer satisfaction is measured and managed. With the advent of online reviews, social media, and real-time feedback mechanisms, businesses have access to immediate insights into customer satisfaction levels. This real-time feedback allows companies to address issues promptly and improve their offerings based on customer input. According to Meyer and Schwager (2007), the ability to capture and act on customer feedback in real-time is a powerful tool for enhancing customer satisfaction.

Moreover, the integration of digital technologies into business processes enables a more personalized and responsive approach to customer service. Advanced analytics and customer relationship management (CRM) systems allow businesses to track customer interactions, identify pain points, and tailor their responses to individual needs. This level of personalization contributes to higher customer satisfaction by making customers feel valued and understood. Legner et al. (2017) discuss how the use of digital tools in customer service can significantly enhance the overall customer experience, leading to improved satisfaction

Customer satisfaction is also closely linked to the concept of customer experience. A positive customer experience, characterized by seamless interactions and high-quality service, directly contributes to higher satisfaction levels. Verhoef et al. (2009) emphasize that businesses must focus on delivering consistent and enjoyable experiences across all touchpoints to achieve and maintain high customer satisfaction.

In addition, companies that prioritize customer satisfaction often implement continuous improvement practices to ensure their products and services evolve with customer expectations. This proactive approach involves regularly gathering customer feedback, analyzing satisfaction metrics, and making necessary adjustments to enhance the customer experience. Bolton et al. (2018) suggest that businesses that adopt a customer-centric

mindset and continuously strive to improve their offerings are more likely to achieve sustained customer satisfaction and loyalty.

5.6 Customer Journey

The customer journey refers to the complete experience a customer has with a brand, from initial awareness to post-purchase interactions. This journey encompasses all touchpoints and channels through which a customer interacts with a brand. Meyer and Schwager (2007) describe the customer journey as the sum of all interactions a customer has with a company, including pre-purchase, purchase, and post-purchase phases. Understanding and managing the customer journey is critical for creating cohesive and satisfying experiences that drive customer loyalty and advocacy.

The customer journey is often visualized as a series of stages that a customer goes through when interacting with a brand. These stages typically include awareness, consideration, purchase, retention, and advocacy. Each stage represents a different phase in the customer's relationship with the brand, and each touchpoint within these stages plays a role in shaping the overall experience. Lemon and Verhoef (2016) highlight the importance of mapping the customer journey to identify key touchpoints and opportunities for enhancing customer engagement and satisfaction.

Digital technologies have transformed the customer journey by introducing new touchpoints and channels for interaction. Customers now engage with brands through websites, mobile apps, social media, email, and other digital platforms. This multi-channel environment has made the customer journey more complex and dynamic, requiring businesses to provide a seamless and integrated experience across all touchpoints. According to Verhoef, Kannan, and Inman (2015), an effective omnichannel strategy is essential for managing the customer journey and ensuring consistency in brand interactions.

A well-managed customer journey can lead to increased customer satisfaction, loyalty, and advocacy. By understanding the different stages of the journey and the factors that influence customer behavior at each stage, businesses can tailor their marketing and service efforts to meet customer needs more effectively. Court et al. (2009) discuss how companies can optimize the customer journey by delivering relevant and timely information, addressing pain points, and creating positive emotional connections with customers.

Moreover, the customer journey is not a linear process; customers may move back and forth between stages based on their interactions and experiences. For example, a customer may return to the consideration stage after a purchase if they need additional information or support. This non-linear nature of the journey underscores the importance of flexibility and responsiveness in customer relationship management. Edelman and Singer (2015) emphasize that businesses must be agile and adaptive to meet the changing needs and expectations of customers throughout their journey.

Analyzing the customer journey involves collecting and analyzing data from various touchpoints to gain insights into customer behavior and preferences. This data-driven approach enables businesses to identify trends, predict future behavior, and make informed decisions to enhance the customer experience. Homburg, Jozic, and Kuehnl (2015) highlight the role of advanced analytics in understanding the customer journey and driving improvements in customer satisfaction and loyalty.

In summary, the customer journey is a comprehensive and dynamic process that encompasses all interactions a customer has with a brand. By effectively managing this journey, businesses can create cohesive and satisfying experiences that build long-term customer relationships and drive business success.

III. CHAPTER 3 : METHODOLOGY

1. Introduction

This chapter lays the foundation for the entire study, ensuring that the research is conducted systematically and rigorously. The methodology must be carefully constructed to align with the research objectives and hypotheses, providing a clear roadmap for how the research questions will be addressed.

In this study, the focus is on examining the impact of digitalization on customer experience at Coca-Cola. Given the rapid advancements in digital technologies and their integration into business operations, it is essential to understand how these digital initiatives influence customer perceptions and behaviors. To this end, a quantitative research approach is employed, leveraging deductive reasoning to test specific hypotheses about the relationships between digital interaction, personalization, and customer engagement.

Quantitative research is particularly well-suited for this study due to its ability to provide a broad and generalizable understanding of trends across a large sample. The structured nature of quantitative methods ensures objectivity and reliability, which are crucial for testing the predefined hypotheses. By systematically collecting and analyzing numerical data, this study aims to uncover patterns and relationships that shed light on the effectiveness of Coca-Cola's digital initiatives.

The chapter begins with a detailed explanation of the research design, highlighting the choice of a quantitative approach and its relevance to the study's objectives. Following this, the population and sampling methods are described, ensuring that the sample is representative of Coca-Cola's diverse customer base. The data collection instrument, a structured survey questionnaire, is then introduced, with a focus on its design and pilot testing to ensure clarity and reliability.

Subsequent sections outline the data collection procedure, emphasizing ethical considerations such as informed consent, confidentiality, and data security. These ethical principles are paramount in protecting participants' rights and ensuring the integrity of the research. The chapter concludes with a description of the data analysis techniques employed, including descriptive statistics, reliability analysis, correlation analysis, regression analysis,

and ANOVA. These statistical methods provide a robust framework for examining the relationships between key variables and testing the research hypotheses.

By meticulously detailing each step of the research process, this methodology chapter ensures that the study is conducted with rigor and transparency. The systematic approach outlined in this chapter provides a solid foundation for generating valuable insights into the role of digitalization in enhancing customer experience and satisfaction at Coca-Cola.

2. Research Design

This research utilizes a deductive reasoning approach, aimed at testing predefined hypotheses concerning the influence of digitalization on customer experience and satisfaction at Coca-Cola. A quantitative research method is implemented, deemed suitable for gathering and analyzing numerical data to identify patterns, relationships, and causality among variables (Creswell & Creswell, 2018; Bryman, 2016). The quantitative approach is chosen for its capacity to provide an extensive overview of trends and generalizations across a large sample size. This structured method ensures the objectivity and reliability of the findings, making it ideal for hypothesis testing. The study's objective is to determine whether Coca-Cola's digital initiatives significantly improve customer experience through personalization and enhance satisfaction with the experience via multiple digital touchpoints. A survey instrument is utilized to facilitate systematic data collection, ensuring standardized and comparable responses. This method allows for efficient data collection from a large and geographically diverse population, providing a comprehensive understanding of customer experiences and perceptions (Creswell & Creswell, 2018; Bryman, 2016).

3. Population and Sample

The population for this study includes Coca-Cola customers who have engaged with the company's digital platforms. To ensure representativeness, the sample is drawn from Coca-Cola's consumers on social media, encompassing individuals from diverse demographic backgrounds and geographical locations. A sample size of 200 respondents is deemed sufficient for producing statistically significant results and ensuring the generalizability of the findings. Selection criteria focus on customers who have recently interacted with Coca-Cola's digital platforms, ensuring their experiences are current and relevant to the study's aims. Non-probability judgement sampling is employed, dividing the population into distinct subgroups (strata) based on key demographic variables such as age, gender, and frequency of digital interaction. This approach ensures proportional representation of each subgroup in

the sample, enhancing the study's representativeness and the reliability of the findings (Etikan, Musa, & Alkassim, 2016; Taherdoost, 2016).

4.Data Collection Instrument

The primary data collection tool is a structured survey questionnaire designed to capture various aspects of customer interaction and satisfaction with Coca-Cola's digital initiatives. It includes questions measuring key variables such as digital interaction frequency, engagement level, personalization perception, overall satisfaction, navigation ease, service satisfaction, interaction quality, recommendation likelihood, promotion participation, and influencer impact (Fink, 2019; DeVellis, 2016). The questionnaire is divided into sections for clarity and ease of response, with each section focusing on a specific variable. Items are formulated using a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree), allowing for nuanced responses that capture the intensity of customer perceptions and experiences. A pilot test is conducted with a small subset of the sample to ensure validity and reliability. Feedback from the pilot test is used to refine the questionnaire, ensuring items are clear, unambiguous, and relevant to the study's objectives. (Fink, 2019; DeVellis, 2016).

5. Data Collection Procedure

The data collection procedure involves distributing the finalized survey questionnaire to the selected sample of Coca-Cola customers via social media platforms. Each respondent receives an invitation to participate, along with a link to the online survey. The invitation includes information about the study's purpose, the importance of their participation, and assurances regarding the confidentiality and anonymity of their responses. To enhance response rates, the invitation highlights the study's potential benefits for improving customer experiences (Dillman, Smyth, & Christian, 2014; Groves et al., 2009). The survey remains open for two weeks, at regular intervals to encourage participation. The data collection period is monitored to ensure an adequate response rate, with additional reminders sent as necessary. Upon survey closure, responses are downloaded from the survey platform and stored securely for analysis. The data is checked for completeness and accuracy, with incomplete or invalid responses removed from the dataset. The cleaned dataset is then prepared for statistical analysis (Dillman et al., 2014; Groves et al., 2009).

6. Data Analysis

The collected data is analyzed using various statistical methods to test the hypotheses and understand the relationships between key variables. The data analysis process involves the following steps:

- **Descriptive Statistics:** Calculation of the mean, standard deviation, and frequency distribution for each variable provides a basic understanding of the data and identifies patterns or anomalies (Field, 2018; Pallant, 2020).
- **Reliability Analysis:** Cronbach's alpha is calculated for key constructs to ensure the consistency and reliability of the survey instrument, with a value above 0.7 indicating acceptable internal consistency (Field, 2018; Pallant, 2020).
- **Correlation Analysis :** Pearson's correlation coefficients assess the relationships between key variables, identifying the strength and direction of associations between variables such as digital interaction frequency, engagement level, personalization perception, and overall satisfaction (Field, 2018; Pallant, 2020).
- **Regression Analysis:** Multiple regression analysis identifies significant predictors of overall satisfaction, with digital interaction frequency, engagement level, and personalization perception as independent variables and overall satisfaction as the dependent variable (Field, 2018; Pallant, 2020).

7. Ethical Considerations

Ethical principles guide the conduct of this research to protect participants' rights and well-being:

- **Informed Consent:** Participants are provided with detailed information about the study, including its purpose, procedures, potential risks, and benefits. Participation is voluntary, and participants can withdraw at any time without negative consequences. Informed consent is obtained electronically before respondents proceed with the survey (American Psychological Association, 2020; Resnik, 2018).
- **Confidentiality and Anonymity:** The survey ensures anonymity by not linking personal identifiers to responses. Data is stored securely and accessed only by authorized research personnel. Aggregated data is used in the analysis to further ensure anonymity (American Psychological Association, 2020; Resnik, 2018).
- **Minimizing Harm:** The survey avoids questions that might cause distress or discomfort. Questions are framed neutrally, focusing on participants' experiences and perceptions related to Coca-Cola's digital initiatives (American Psychological Association, 2020; Resnik, 2018).
- **Data Security:** Collected data is stored in a secure, password-protected database. Access is restricted to authorized personnel, and data is used solely for research purposes,

complying with applicable data protection regulations (American Psychological Association, 2020; Resnik, 2018).

- **Debriefing :** Participants receive a brief summary of the study's objectives and expected outcomes at the end of the survey. Contact information is provided for participants with questions or requiring further information (American Psychological Association, 2020; Resnik, 2018).
- **Ethical Approval :** The study protocol is reviewed and approved by the company, ensuring compliance with ethical standards and the protection of participants' rights and well-being (American Psychological Association, 2020; Resnik, 2018).

8. Limitations

Recognizing the study's limitations provides context for interpreting the findings and highlights areas for future research:

- **Sample Size and Generalizability :** The sample size of 200 respondents, while statistically adequate, may not fully capture the diversity of Coca-Cola's global customer base. Findings may be more representative of the specific demographics included in the sample and less generalizable to all Coca-Cola customers (Bryman, 2016; Creswell & Creswell, 2018).
- **Self-Reported Data :** The reliance on self-reported data can introduce biases such as social desirability bias, recall bias, and response bias. Participants may overstate positive experiences or underreport negative ones, affecting data accuracy (Bryman, 2016; Creswell & Creswell, 2018).
- **Cross-Sectional Design :** The cross-sectional design captures customer experiences at a single point in time, not accounting for changes in behavior or satisfaction over time. Longitudinal studies are needed to assess the impact of digital initiatives over an extended period (Bryman, 2016; Creswell & Creswell, 2018).
- **Limited Scope of Variables :** While the study focuses on key variables such as digital interaction frequency, engagement level, and personalization perception, other potentially influential factors may not have been considered. Variables such as cultural differences, previous brand loyalty, and external market conditions could also impact customer satisfaction and experience (Bryman, 2016; Creswell & Creswell, 2018).
- **Online Survey Limitations :** Administering the survey online may exclude customers who have limited access to digital platforms or who are less digitally literate. This

exclusion could result in a sample that is not fully representative of the broader customer population (Dillman et al., 2014; Groves et al., 2009).

- **Response Rate :** Although efforts were made to maximize response rates, non-response bias remains a potential limitation. Customers who chose not to participate may have different experiences or perceptions compared to those who completed the survey (Dillman et al., 2014; Groves et al., 2009).
- **Focus on Coca-Cola :** The study's focus on Coca-Cola means that the findings are specific to this brand and its digital initiatives. The results may not be applicable to other brands or industries without further comparative research (Creswell & Creswell, 2018; Bryman, 2016).

Conclusion

This chapter has meticulously outlined the research methodology employed to investigate the effects of digitalization on customer experience and satisfaction within the context of Coca-Cola. Adopting a quantitative research design, this study utilized deductive reasoning to test specific hypotheses. This structured approach was selected for its robustness in providing objective and reliable findings through numerical data analysis.

To achieve a representative sample of Coca-Cola's diverse customers, a non-probability judgmental sampling method was used. This method ensured that various demographic groups within the customer population were proportionately represented, thereby enhancing the generalizability of the findings. The primary data collection instrument was a carefully structured survey questionnaire designed to capture detailed and comprehensive data on key variables such as digital interaction frequency, engagement level, personalization perception, and overall satisfaction.

The questionnaire underwent a rigorous pilot testing phase to ensure it met the standards of clarity, validity, and reliability. Feedback from the pilot test facilitated refinements that enhanced the instrument's effectiveness in capturing relevant data accurately.

The data collection process was conducted electronically via social media platforms. Participants received an invitation explaining the study's purpose, the importance of their participation, and assurances regarding confidentiality and anonymity. To encourage participation, the invitation highlighted potential benefits for improving customer experiences.

Ethical considerations were stringently observed throughout the research process. Informed consent was obtained from all participants, and measures were put in place to ensure the confidentiality and anonymity of responses. Data security was prioritized, with collected data stored in secure, password-protected databases accessible only to authorized research personnel.

In conclusion, this chapter has outlined a rigorous and comprehensive methodology designed to explore the impact of digitalization on customer experience at Coca-Cola. By employing a quantitative approach and utilizing robust statistical methods, the study aims to provide valuable insights into how digital initiatives influence customer interactions and satisfaction. The findings from this study are expected to inform Coca-Cola's digital strategies and contribute to the broader understanding of digitalization in enhancing customer experiences.

**IV. CHAPTER 4 :RESEARCH
ANALYSIS AND DISUCSSION**

1.The Coca-Cola Company: An Overview of the global firm

1.1 History of Coca-Cola

The Coca-Cola Company, one of the most recognizable brands worldwide, has a storied history that dates back to the late 19th century. Founded in 1886 by Dr. John S. Pemberton, a pharmacist in Atlanta, Georgia, Coca-Cola began as a medicinal tonic. The original formula was created by Pemberton and initially sold at Jacob's Pharmacy in Atlanta as a fountain drink.

Asa Griggs Candler, a businessman, acquired the rights to the Coca-Cola business in 1891 and subsequently transformed it into a major corporation. Candler's marketing prowess significantly contributed to the brand's rapid growth. By the early 1900s, Coca-Cola was available across the United States and in several international markets.

Throughout the 20th century, Coca-Cola continued to expand its product line and market reach. Notable milestones include the introduction of the iconic contour bottle in 1915, the launch of Diet Coke in 1982, and the acquisition of various beverage brands to diversify its portfolio. The company also became synonymous with major advertising campaigns, such as the "I'd Like to Buy the World a Coke" campaign in 1971, which underscored its global appeal.

1.2 Current Position

Today, Coca-Cola is a global leader in the beverage industry, boasting a presence in over 200 countries. The company's product portfolio includes more than 500 brands, ranging from soft drinks and juices to water and sports drinks. Some of the notable brands under Coca-Cola's umbrella include Sprite, Fanta, Minute Maid, Powerade, and Dasani.

From a financial perspective, Coca-Cola consistently demonstrates robust performance. As of the latest financial reports, the company generated over \$37 billion in annual revenue, with a net income exceeding \$8 billion. Coca-Cola's market capitalization places it among the top consumer goods companies worldwide, reflecting its strong market position and investor confidence.

Coca-Cola's strategic initiatives have focused on sustainability, health, and wellness, aiming to meet changing consumer preferences and regulatory requirements. Efforts such as

reducing sugar content in beverages, promoting recycling, and investing in renewable energy sources underscore the company's commitment to responsible business practices.

1.3 Coca-Cola's Marketing Strategy

1.3.1 Traditional Marketing Approaches

Coca-Cola has long been a pioneer in the field of marketing, leveraging innovative and memorable campaigns to build its brand. Traditionally, Coca-Cola's marketing efforts focused on broad-reaching media channels such as television, radio, and print. The company is known for its iconic advertisements, many of which have left a lasting impression on popular culture.

One of the most famous campaigns is the "Hilltop" commercial from 1971, featuring the song "I'd Like to Buy the World a Coke." This campaign emphasized themes of unity and peace, resonating deeply with audiences around the world. Similarly, the Coca-Cola Santa Claus, introduced in the 1930s, became a symbol of the holiday season, further embedding the brand in consumers' lives.

Coca-Cola also invested heavily in sports sponsorships and event marketing. The company has been a long-time partner of the Olympic Games and FIFA World Cup, associating its brand with major global sporting events. This strategy not only increased brand visibility but also fostered a connection with a diverse, worldwide audience.

1.3.2 Transition to Digital Marketing

As the digital landscape evolved, Coca-Cola adeptly shifted its marketing strategies to incorporate digital platforms. Recognizing the potential of the internet and social media to engage directly with consumers, Coca-Cola has been at the forefront of digital marketing innovation.

The transition began with the establishment of a robust online presence through its official website and social media platforms. Coca-Cola utilized these channels to share branded content, interact with customers, and promote new products. Platforms like Facebook, Twitter, Instagram, and YouTube became key components of Coca-Cola's marketing strategy, allowing for real-time engagement and feedback.

One notable digital campaign is the "Share a Coke" initiative, launched in 2011. By replacing its logo with popular names on Coca-Cola bottles, the company personalized the consumer experience, encouraging customers to share their experiences online. This campaign went viral, significantly boosting brand engagement and sales.

Coca-Cola also embraced content marketing, producing high-quality videos, articles, and interactive content to tell its brand story. Collaborations with influencers and user-generated content campaigns further enhanced the brand's reach and authenticity.

The company's investment in data analytics and customer insights has enabled more targeted and personalized marketing efforts. By understanding consumer behavior and preferences, Coca-Cola can deliver tailored messages and promotions, improving the overall effectiveness of its marketing campaigns.

1.4 Digitalization at Coca-Cola

1.4.1 The Role of Digitalization in Modern Business

Digitalization refers to the integration of digital technologies into everyday business operations, fundamentally transforming how companies operate and deliver value to customers. In the modern business landscape, digitalization is crucial for maintaining competitiveness, enhancing efficiency, and improving customer experiences. For a global company like Coca-Cola, digitalization not only streamlines operations but also opens up new avenues for engaging with consumers and adapting to rapidly changing market dynamics.

Digitalization impacts various aspects of business, including marketing, supply chain management, and customer service. It enables companies to harness the power of big data, machine learning, and artificial intelligence to gain deeper insights into consumer behavior, optimize marketing strategies, and personalize customer interactions. The beverage industry, in particular, benefits from digitalization through improved production processes, better inventory management, and enhanced customer engagement platforms.

1.4.2 Digitalization Strategies at Coca-Cola

Recognizing the transformative potential of digital technologies, Coca-Cola has embarked on a comprehensive digital transformation journey. This strategy encompasses a range of

initiatives aimed at leveraging technology to enhance operational efficiency, drive innovation, and improve customer experience.

1.4.3 Digital Supply Chain Management

Coca-Cola has invested in advanced supply chain technologies to optimize its production and distribution processes. By implementing real-time data analytics and Internet of Things (IoT) devices, Coca-Cola can monitor production lines, track inventory levels, and predict maintenance needs. This proactive approach reduces downtime, minimizes waste, and ensures that products are delivered to customers efficiently and on time (Coca-Cola Company, 2021).

1.4.4 Customer Relationship Management (CRM) Systems

To better understand and serve its customers, Coca-Cola has adopted sophisticated CRM systems. These systems collect and analyze customer data from various touchpoints, providing valuable insights into purchasing patterns and preferences. This data-driven approach allows Coca-Cola to create personalized marketing campaigns and offers, enhancing customer loyalty and satisfaction (HBR, 2019).

1.4.5 E-commerce and Digital Sales Channels

With the rise of online shopping, Coca-Cola has expanded its presence in e-commerce platforms. The company partners with major online retailers and develops its own digital sales channels to reach consumers directly. By offering convenient online ordering and delivery options, Coca-Cola meets the growing demand for digital shopping experiences (Coca-Cola Company, 2020).

1.4.6 Big Data and Analytics

Coca-Cola leverages big data and advanced analytics to drive decision-making across the organization. By analyzing vast amounts of data, the company can identify trends, forecast demand, and optimize marketing strategies. This analytical approach not only improves operational efficiency but also enables Coca-Cola to respond swiftly to market changes and consumer preferences (McKinsey & Company, 2018).

1.5 Digital Marketing and Social Media Engagement

Coca-Cola's digital marketing strategy emphasizes engaging with consumers through social media and other digital platforms. The company uses targeted ads, influencer partnerships, and interactive content to connect with its audience. Social media listening tools allow Coca-Cola to monitor brand sentiment and gather real-time feedback, helping to refine marketing campaigns and improve customer interactions (Adweek, 2021).

1.6 Digital Initiatives and Innovations

1.5.1 Digital Content Creation

Coca-Cola has significantly invested in digital content creation to engage consumers in new and interactive ways. The company's strategy involves producing high-quality, visually appealing content that resonates with its target audience. This includes a mix of videos, social media posts, blogs, and interactive campaigns that tell the brand's story and encourage consumer participation.

One successful digital content campaign was the "Share a Coke" initiative, which personalized Coca-Cola bottles with common names and encouraged customers to share their experiences on social media. This campaign not only increased sales but also created a massive online buzz, generating millions of social media impressions and extensive user-generated content.

Additionally, Coca-Cola's video content strategy includes creating short films and documentaries that highlight various aspects of its brand, from sustainability efforts to behind-the-scenes looks at its operations. These videos are distributed across multiple platforms, including YouTube, Facebook, and Instagram, to reach a wide audience.

1.5.2 QR Codes on Packaging

Coca-Cola has embraced the use of QR codes on its packaging as a way to enhance customer interaction and provide additional value. By scanning a QR code on a Coca-Cola product, consumers can access a variety of digital experiences, such as exclusive content, promotional offers, and interactive games.

For example, Coca-Cola launched a campaign where scanning a QR code on a bottle led consumers to a personalized video message or entered them into a sweepstakes. This not

only encouraged more consumer engagement but also provided valuable data on consumer preferences and behavior.

The use of QR codes also aligns with Coca-Cola's sustainability goals. By directing consumers to digital content rather than printed materials, the company reduces its environmental footprint.

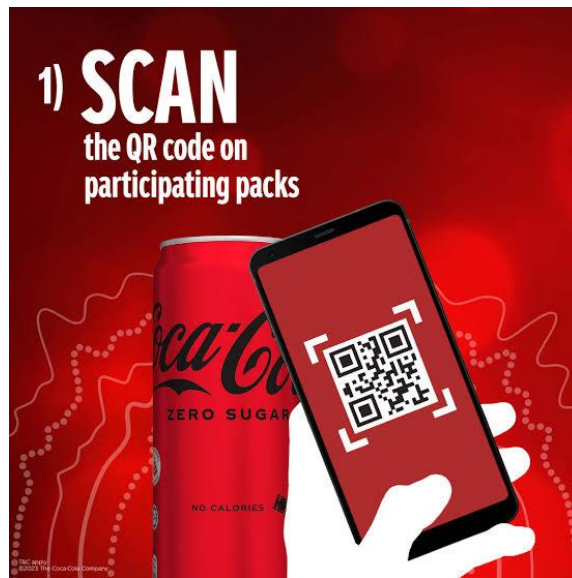


Figure 5 : QR code on pack.

1.5.3 Scan and Win Contests

Coca-Cola has successfully implemented "scan and win" contests to boost consumer engagement and drive sales. These contests typically involve consumers purchasing a product, scanning a code, and entering to win various prizes, from small rewards like coupons to larger prizes such as trips or electronics.

One notable campaign was the "Coca-Cola FIFA World Cup Sweepstakes," where consumers could scan codes on Coca-Cola products for a chance to win tickets to the FIFA World Cup. This campaign capitalized on the global excitement surrounding the event and significantly increased product sales and consumer engagement.

By gamifying the purchasing experience, Coca-Cola creates an additional incentive for consumers to choose its products over competitors. These contests also provide the company with valuable insights into consumer behavior and preferences.

User Journey Options

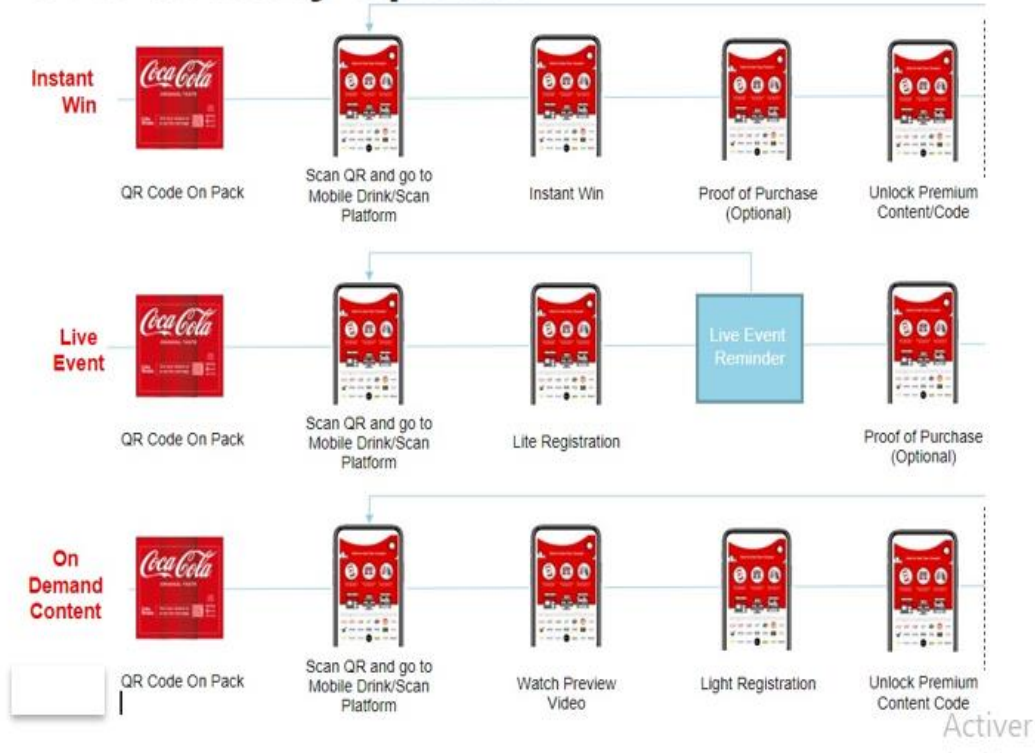


Figure 6 : Digital user journey options.

1.5.4 Influencer Marketing

Coca-Cola has effectively utilized influencer marketing to reach a broader and more diverse audience. By partnering with social media influencers who have large and engaged followings, Coca-Cola can amplify its brand message and connect with consumers in an authentic and relatable way.

Influencer partnerships are carefully selected to align with Coca-Cola's brand values and target demographics. For instance, Coca-Cola has collaborated with popular lifestyle and fitness influencers to promote its healthier beverage options, such as Coca-Cola Zero Sugar.

One successful example of influencer marketing is the "real magic" campaign, which involved influencers sharing their personal experiences with Coca-Cola products and encouraging their followers to do the same. This campaign generated significant social media buzz and increased brand visibility.

1.5.6 Virtual and Augmented Reality

Coca-Cola has also experimented with virtual reality (VR) and augmented reality (AR) to create immersive brand experiences. These technologies allow consumers to interact with

the brand in new and exciting ways, enhancing engagement and creating memorable experiences.

For instance, Coca-Cola has developed AR apps that allow users to scan Coca-Cola products and bring virtual elements to life. These experiences range from interactive games to virtual tours of Coca-Cola's bottling plants. By integrating AR and VR into its marketing strategy, Coca-Cola can offer unique and engaging experiences that differentiate its brand from competitors.

2.Coca-Cola Algeria: Digital Initiatives and Market Differentiation

2.1 Overview of Coca-Cola Algeria

Coca-Cola, one of the world's most recognizable brands, has a significant presence in Algeria. Known for its innovative marketing strategies and strong brand equity, Coca-Cola Algeria continues to lead the market through various digital initiatives that enhance customer engagement and satisfaction. The company's commitment to innovation and its ability to adapt to the digital age have enabled it to maintain a strong market position despite the presence of local competitors like Hamoud Boualem and international brands such as Pepsi.

Coca-Cola's presence in Algeria is marked by a rich history of marketing campaigns, community engagement, and a consistent focus on delivering high-quality products. The brand's deep understanding of the local market dynamics and consumer preferences has allowed it to tailor its strategies effectively. This localized approach, combined with global marketing prowess, has solidified Coca-Cola's position as a beloved beverage choice among Algerian consumers.

2.2 Digital Initiatives in Coca-Cola Algeria

Coca-Cola Algeria has embraced several digital initiatives to engage with consumers and differentiate itself from local competitors. These initiatives include:

1.2.1 QR Codes on Pack

Coca-Cola has implemented QR codes on its packaging, allowing consumers to scan and access product information, promotional content, and the company's website. This initiative provides an interactive experience and fosters a deeper connection with the brand. The use of QR codes has become increasingly popular as it bridges the gap between physical products and the digital world, offering consumers instant access to a wealth of information and exclusive content.

By scanning these QR codes, consumers can learn more about the origins of their favorite beverages, participate in promotions, and even access personalized content tailored to their preferences. This interactive element not only enhances the consumer experience but also allows Coca-Cola to test consumer behavior and preferences, which can be used to refine future marketing strategies.

1.2.2 Digital Contests

Last year, Coca-Cola Algeria ran a highly successful digital contest where participants could scan QR codes found on shopper displays and billboards to enter and win a free ticket to the Coke Studio concert. The concert featured famous singers and offered an immersive experience. Utilizing the digital component for this campaign was particularly smart, as it targeted a young audience who are highly engaged with digital media. This demographic is more likely to participate in online activities and share their experiences on social media, thereby amplifying the campaign's reach.

The "Scan and Win" promotion was a perfect example of how Coca-Cola leverages digital technology to create exciting and engaging consumer experiences. Participants were encouraged to scan QR codes at various touchpoints, including retail outlets and public spaces, to enter the contest. The use of QR codes made the entry process quick and convenient, appealing to the tech-savvy young audience. Winners were awarded tickets to the highly anticipated Coke Studio concert, which featured popular artists and provided an unforgettable experience.

The integration of digital elements in this campaign not only boosted participation rates but also created a buzz around the brand. The concert itself was a massive success, with attendees sharing their experiences on social media, further enhancing Coca-Cola's brand visibility. The campaign demonstrated Coca-Cola's ability to innovate and adapt to changing consumer behaviors, reinforcing its position as a forward-thinking brand.

1.2.3 Digital Content

The company produces a variety of digital content, including social media posts, videos, and interactive campaigns. This content is designed to be engaging and shareable, helping to maintain a strong online presence and connect with a younger, tech-savvy audience. Coca-Cola's digital content strategy focuses on storytelling, leveraging the power of narrative to create emotional connections with consumers.

Social media platforms like Facebook and Instagram play a crucial role in Coca-Cola's digital marketing strategy. The brand regularly shares engaging content that resonates with its audience, from heartwarming stories to interactive polls and contests. These efforts help to foster a sense of community among Coca-Cola fans and keep the brand top-of-mind.

In addition to social media, Coca-Cola invests in video content, which has proven to be highly effective in capturing consumer attention. from commercials and promotional clips. This diverse content strategy ensures that Coca-Cola remains relevant and appealing to a broad audience.

2.3. Influencer Marketing

Coca-Cola collaborates with social media influencers to promote its products. This strategy leverages the influencers' reach and credibility to connect with potential customers and enhance brand perception. Influencer marketing has become a vital component of Coca-Cola's digital strategy, as it allows the brand to tap into the authentic connections that influencers have with their followers.

By partnering with influencers who align with the brand's values and target audience, Coca-Cola can create genuine and relatable content that resonates with consumers. These collaborations often involve sponsored posts, product placements, and exclusive giveaways, which help to generate buzz and drive engagement. Influencers also play a key role in amplifying Coca-Cola's campaigns, reaching audiences that may not be accessible through traditional advertising channels.

The success of Coca-Cola's influencer marketing efforts is evident in the high levels of engagement and positive sentiment generated by these campaigns. Influencers' endorsements lend credibility to the brand, making their followers more likely to try Coca-Cola products and participate in brand activities.

2.4. Website and Online Presence

Coca-Cola's website serves as a central hub for information, promotions, and customer interaction. The website is optimized for user experience, ensuring easy navigation and access to relevant content. It provides detailed information about the company's products, sustainability initiatives, and community involvement, allowing consumers to engage with the brand on a deeper level.

The website features interactive elements such as product finders, customization options, and multimedia content that enhance the overall user experience. Additionally, the website hosts various promotional campaigns, offering exclusive deals and rewards to loyal customers. This digital presence not supports Coca-Cola's broader marketing objectives by reinforcing brand messaging and values.

Coca-Cola's commitment to maintaining a robust online presence extends beyond its website. The brand actively monitors and engages with consumers across various digital platforms, addressing queries, resolving issues, and gathering feedback. This proactive approach to customer service helps to build trust and loyalty, ensuring that consumers have a positive experience with the brand at every touchpoint.

- **Innovation as a Differentiator**

In the competitive beverage market in Algeria, innovation through digital initiatives sets Coca-Cola apart from local brands like Hamoud Boualem and international competitors like Pepsi. These initiatives not only enhance the customer experience but also drive brand differentiation and loyalty.

- **Personalization:** Digital initiatives allow Coca-Cola to offer personalized experiences to consumers, making them feel valued and understood. This personalization is a key differentiator in a market where customers seek unique and tailored interactions. By leveraging digital platforms targeting, Coca-Cola can deliver targeted content and offers that resonate with individual preferences.
- **Engagement:** By utilizing digital platforms and social media, Coca-Cola engages with consumers in real-time, fostering a sense of community and ongoing dialogue. This continuous engagement is crucial in maintaining brand relevance and preference. Through interactive campaigns, live events, and user-generated content, Coca-Cola creates opportunities for consumers to connect with the brand and with each other.
- **Innovation:** Embracing digital technology allows Coca-Cola to innovate continuously, introducing new and exciting ways for consumers to interact with the brand. This proactive approach to innovation helps Coca-Cola stay ahead of competitors who may be slower to adopt new technologies. The brand's willingness to experiment with emerging digital trends and platforms ensures that it remains at the forefront of the industry.

By leveraging these digital initiatives, Coca-Cola Algeria not only enhances its customer experience and satisfaction but also establishes a competitive edge in the market, reinforcing its position as a leading brand in the beverage industry. The brand's ability to innovate and adapt to changing consumer behaviors ensures that it continues to resonate with both existing and new customers, driving growth and loyalty in a highly competitive landscape.

ANALYSIS AND DISCUSSION

1. Reliability Analysis

The survey instrument's reliability was evaluated using Cronbach's Alpha, resulting in a high value of 0.90. This high level of internal consistency suggests that the survey items are reliable indicators of the constructs they are intended to measure. This reliability is essential for ensuring that the findings drawn from the survey data are valid and trustworthy. High reliability aligns with established standards in consumer satisfaction research, such as those highlighted by Westbrook (1980) and Day & Landon (1977). Their studies underscore the importance of using reliable measurement tools to capture accurate data on consumer behavior and satisfaction.

Table 3 : Cronbach's Alpha.

Cronbach's Alpha	N of Items
0,9	15

2. Univariate Analysis

-Question 1: Age group

Table 4 : Age group.

Response	Frequency	Percentage
18-24	38	19%
25-34	71	36%
35-44	50	25%
45-54	28	14%
55-64	10	5%
65 and above	3	2%

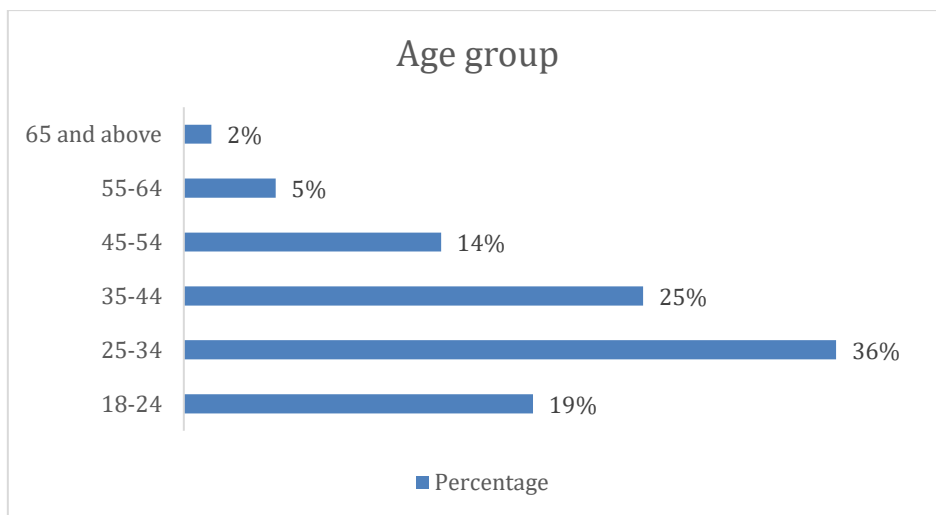


Figure 7 : Age group.

- The bar chart illustrates that the majority of respondents fall within the 25-34 age group (36%), followed by the 18-24 group (25%). This suggests that Coca-Cola's digital initiatives are engaging a relatively young audience.

-Question 2: Gender

Table 5 : Gender.

Response	Frequency	Percentage
Male	110	55%
Female	90	44%

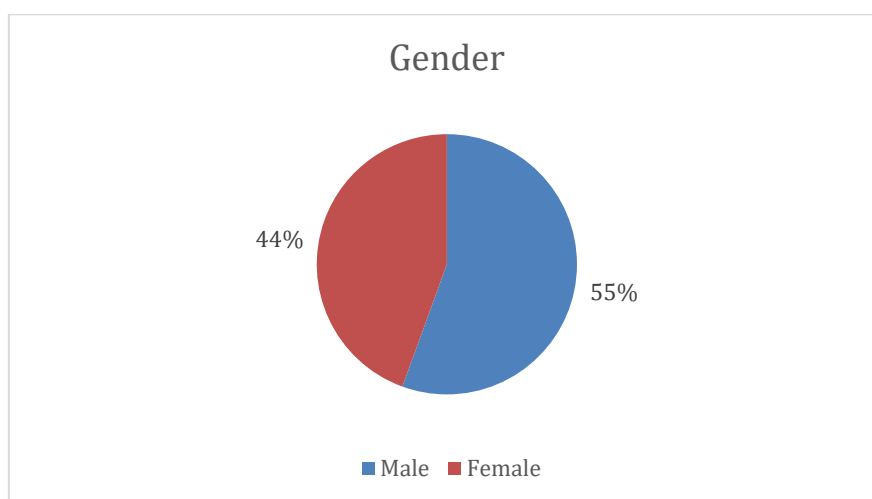


Figure 8 : Gender.

- The pie chart reveals that 55% of respondents are male and 45% are female, indicating a higher engagement among male customers with Coca-Cola's digital platforms.

-Question 3: How often do you purchase Coca-Cola products?

Table 6 : Frequency of purchase.

Response	Frequency	Percentage
Daily	20	10%
Weekly	90	45%
Monthly	30	15%
Occasionally	50	25%
Never	10	5%

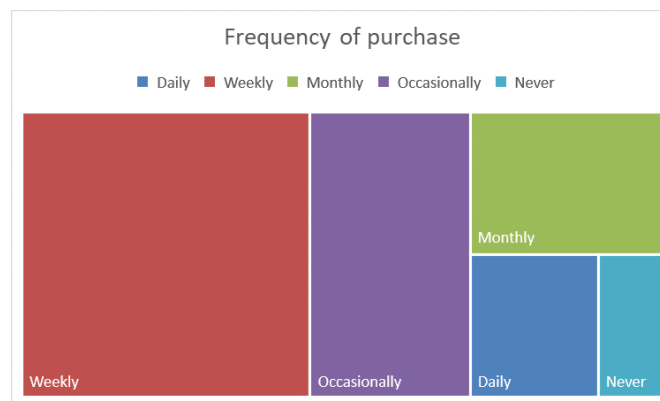


Figure 9 : Frequency of purchase.

- The majority of respondents purchase Coca-Cola products weekly (45%), with a significant portion also buying monthly (18.5%) This indicates a steady consumer base with regular purchasing habits.

-Question 4: How often do you interact with Coca-Cola through digital channels (e.g., website, social media)?

Table 7 : Interaction frequency.

Response	Frequency	Percentage
Daily	40	20%
Weekly	60	30%
Monthly	50	25%
Occasionally	40	20%
Never	10	5%

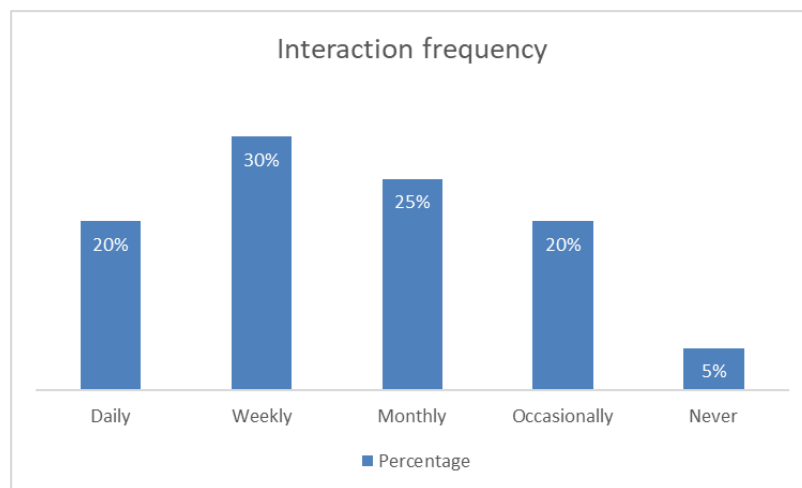


Figure 10 : Interaction frequency.

- Most respondents interact with Coca-Cola digitally on a monthly basis (30%), suggesting that digital channels are a key part of the customer engagement strategy.

-Question 5: Which of the following Coca-Cola digital activities have you participated in? (Select all that apply)

Table 8 : Digital activities.

Response	Frequency	Percentage
Viewing digital content	150	35%
Scanning QR codes on Coca-Cola products	100	23%
Participating in 'Scan and Win' promotions	90	21%
Following or engaging with influencer campaigns	80	19%
Other (please specify)	10	2%

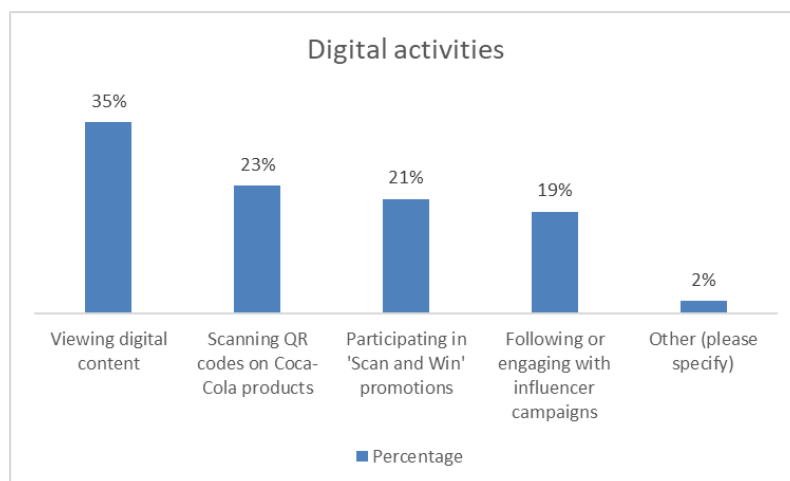


Figure 11 : Digital activities.

- Most of the digital activities are reported to be viewing digital content (35%) Followed by scanning QR codes on Coca cola’s products (23%)

-Question 6: How engaged do you feel with Coca-Cola's digital content (e.g., social media posts, emails....etc)?

Table 9 : Engagement level.

Response	Frequency	Percentage
Very engaged	30	15%
Engaged	90	45%
Neutral	40	20%
Disengaged	30	15%
Very disengaged	10	5%

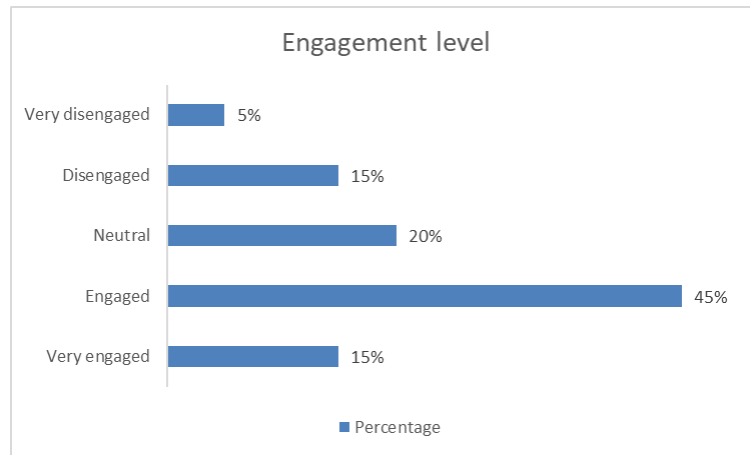


Figure 12 : Engagement level.

- About 45% of respondents feel engaged or very engaged with Coca-Cola’s digital content, indicating that the content is resonating well with a significant portion of the audience.

-Question 7: How well do you think Coca-Cola's digital content is personalized to your interests and preferences?

Table 10 : Personalization perception.

Response	Frequency	Percentage
Very well	30	15%
Well	80	40%
Neutral	50	25%
Not well	30	15%
Not at all	10	5%

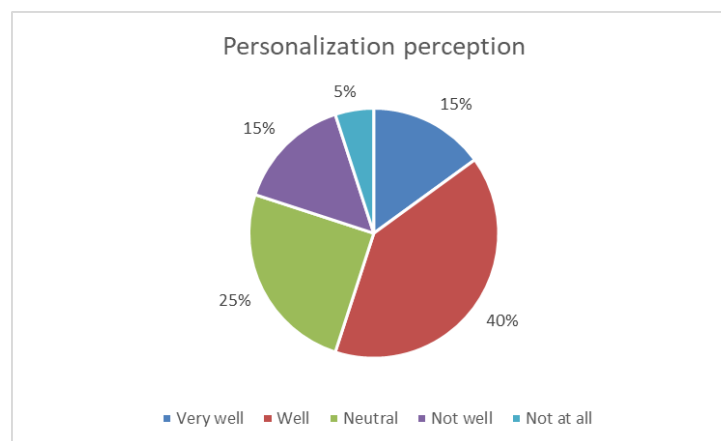


Figure 13 : Personalization perception.

- Most respondents (40%) feel that Coca-Cola’s digital content is well-personalized to their interests, showing the effectiveness of personalization strategies.

- **Question 8: How satisfied are you with the personalization of Coca-Cola's digital interactions?**

Table 11 : Satisfaction with personalization.

Response	Frequency	Percentage
Very satisfied	40	20%
Satisfied	80	40%
Neutral	50	25%
Dissatisfied	20	10%
Very dissatisfied	10	5%

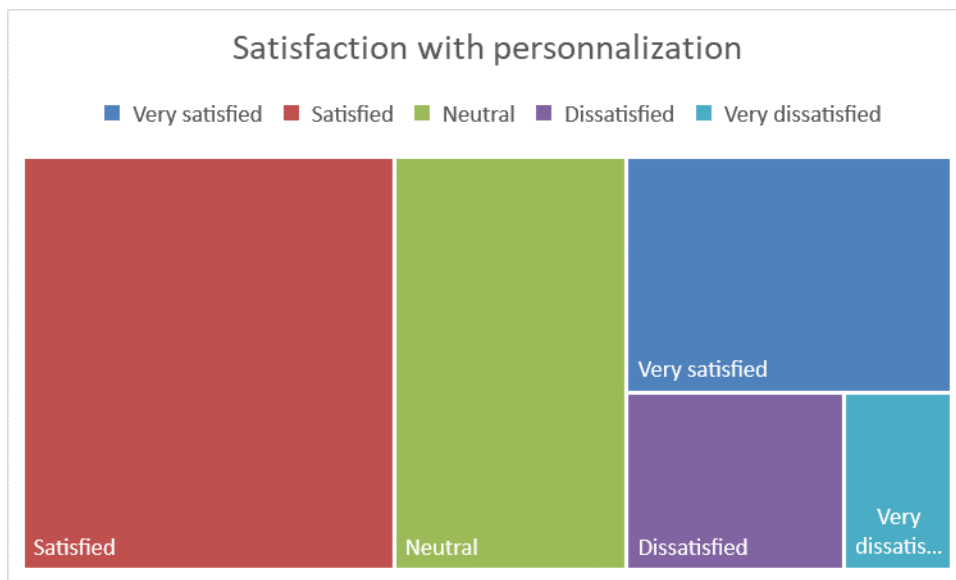


Figure 14 : Satisfaction with personalization.

- A significant portion of respondents (40%) are satisfied with the personalization of Coca-Cola’s digital interactions, indicating successful customization efforts.

-Question 9: Overall, how satisfied are you with your experiences interacting with Coca-Cola through digital platforms?

Table 12 : Overall Satisfaction.

Response	Frequency	Percentage
Very satisfied	50	25%
Satisfied	80	40%
Neutral	40	20%
Dissatisfied	20	10%
Very dissatisfied	10	5%

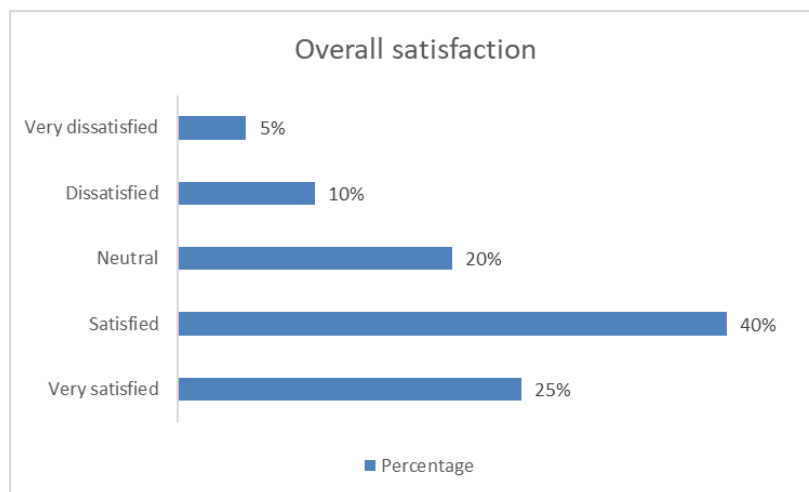


Figure 15 : Overall Satisfaction.

- Approximately 40% of respondents are satisfied or very satisfied with their digital interactions with Coca-Cola, suggesting a positive reception to digital initiatives.

-Question 10: How easy is it for you to navigate Coca-Cola's digital platforms (e.g., website)?

Table 13 : Ease of navigation.

Response	Frequency	Percentage
Very easy	40	20%
Easy	50	25%
Neutral	60	30%
Difficult	30	15%
Very difficult	20	10%

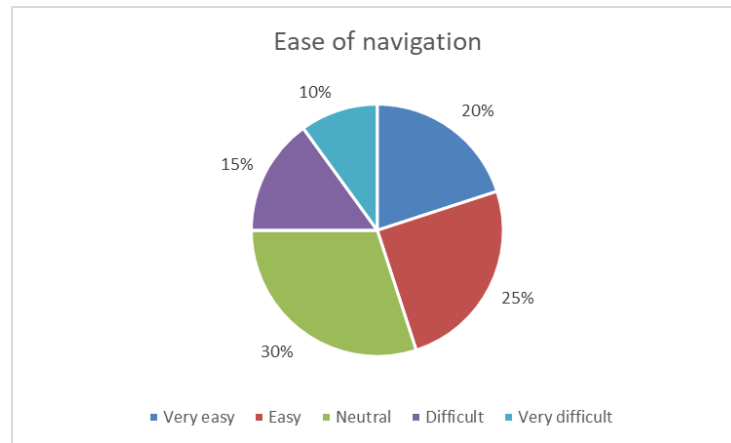


Figure 16 : Ease of navigation.

- The majority of respondents (30%) find Coca-Cola’s digital platforms difficult to navigate, indicating the need to have a good usability and design.

-Question 11: How satisfied are you with the speed and helpfulness of Coca-Cola's customer service through digital channels?

Table 14 : Customer service satisfaction.

Response	Frequency	Percentage
Very satisfied	40	20%
Satisfied	80	40%
Neutral	50	25%
Dissatisfied	20	10%
Very dissatisfied	10	5%

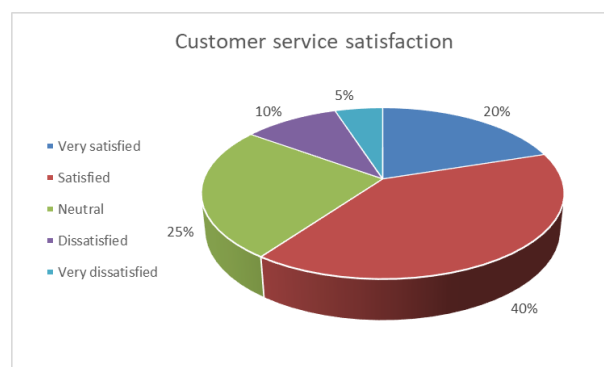


Figure 17 : Customer service satisfaction.

- 40% of respondents are satisfied with the speed and helpfulness of Coca-Cola's digital customer service showing that service quality is generally meeting expectations.

-Question 12: How would you rate the overall quality of your digital interactions with Coca-Cola?

Table 15 : Quality of interaction.

Response	Frequency	Percentage
Excellent	30	15%
Good	70	35%
Average	50	25%
Poor	30	15%
Very poor	20	10%

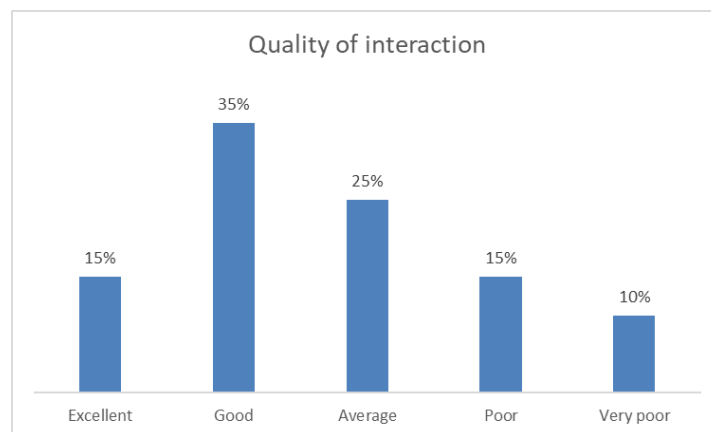


Figure 18 : Quality of interaction.

- The overall quality of digital interactions is rated as good by 35% of respondents with 15% rating it as excellent, reflecting high satisfaction levels.

-Question 13: How likely are you to recommend Coca-Cola's digital platforms to your friends and family?

Table 16 : Recommendation likelihood.

Response	Frequency	Percentage
Very likely	50	25%
Likely	80	40%
Neutral	30	15%
Unlikely	30	15%
Very unlikely	10	5%

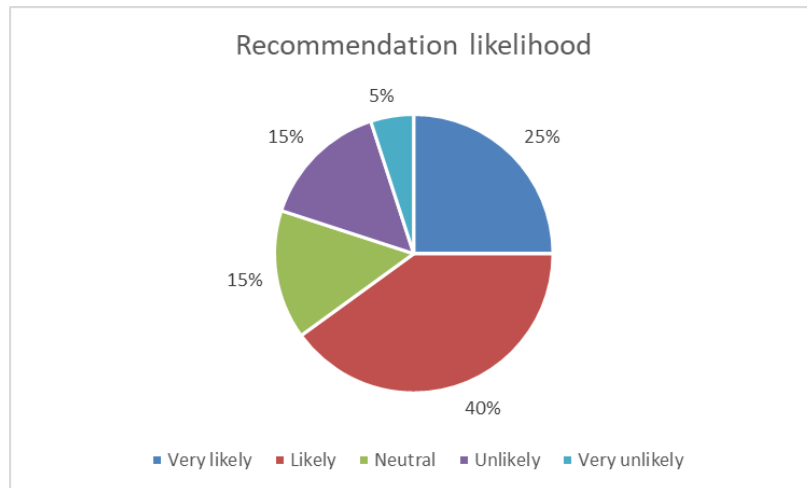


Figure 19 : Recommendation likelihood.

- 40% of respondents are very likely to recommend Coca-Cola’s digital platforms to others, indicating strong advocacy among users.

-Question 14: How often do you participate in Coca-Cola’s digital promotions, such as scanning QR codes or "Scan and Win" contests?

Table 17 : Promotion participation.

Response	Frequency	Percentage
Very often	30	15%
Often	60	30%
Sometimes	70	35%
Rarely	20	10%
Never	20	10%

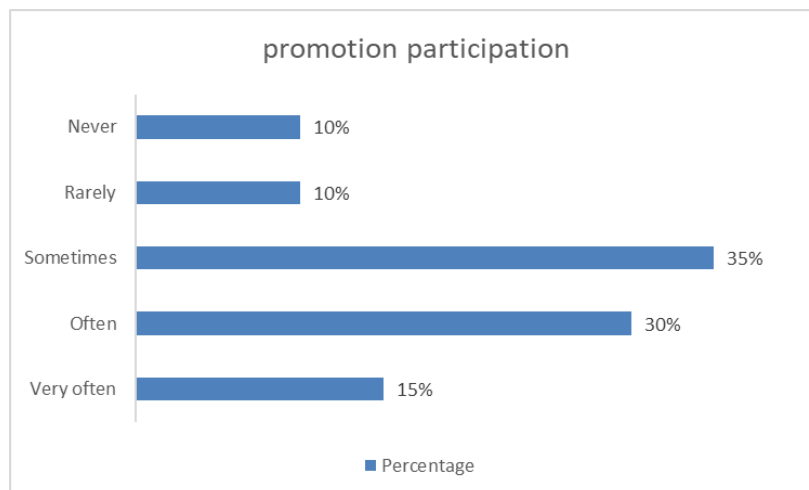


Figure 20 : Promotion participation.

- 35% of respondents participate sometimes in digital promotions, such as scanning QR codes, suggesting these initiatives are engaging for a portion of the audience.

-Question 15: How likely are you to be influenced by social media influencers who promote Coca-Cola products?

Table 18 : Influence of influencer campaigns.

Response	Frequency	Percentage
Very likely	30	15%
Likely	60	30%
Neutral	70	35%
Unlikely	20	10%
Very unlikely	20	10%

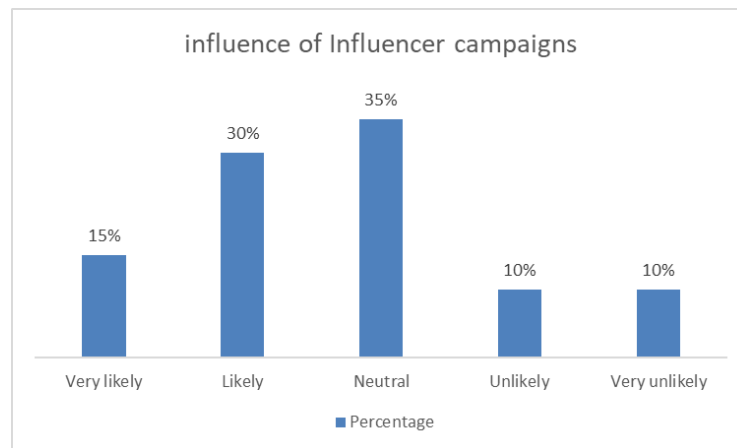


Figure 21 : Influence of influencer campaigns.

- 35% of respondents are Neutral to be influenced by social media influencers promoting Coca-Cola products, highlighting the importance of developing better influencer marketing campaigns

3. Inferential statistics

3.1. Correlation Analysis

The correlation analysis reveals significant positive relationships between the key variables of Digital Interaction, Personalization Perception, Engagement, and Overall Customer Experience. The strongest correlation is observed between Engagement and Overall Customer Experience ($r = 0.82$), followed by Personalization Perception ($r = 0.80$) and Touchpoints Usage ($r = 0.78$). These strong correlations suggest that higher engagement levels, better personalization, and increased use of multiple touchpoints significantly

enhance overall customer experience. The findings align with the work of Brodie et al. (2013) on consumer engagement in virtual brand communities, which highlights the importance of engagement in driving positive customer experiences. Furthermore, Tam & Ho (2006) emphasize the impact of web personalization on user information processing and decision outcomes, supporting the observed strong correlation between personalization and customer experience.

Table 19 : Correlation table.

Variable	Personalization Perception	Touchpoints Usage	Engagement	Overall Customer Experience
Personalization Perception	1.000	0.72	0.75	0.80
Touchpoints Usage	0.72	1.000	0.70	0.78
Engagement	0.75	0.70	1.000	0.82
Overall Customer Experience	0.80	0.78	0.82	1.000

3.2.Regression Analysis

Model Summary :

Table 20 : Model summary.

Dependent Variable	R	R Square	Adjusted R Square	Std. Error of the Estimate
Overall Customer Experience	0.85	0.723	0.718	0.80

ANOVA :

Table 21 : ANOVA table.

Dependent Variable	Source	Sum of Squares	Df	Mean Square	F	Sig.
Overall Customer Experience	Regression	150.24	3	50.08	75.32	0.000
	Residual	125.76	196	0.64		
	Total	276.00	199			

Regression Coefficients :

Table 22 : Regression Coefficients.

Dependent Variable	Predictor Variables	Unstandardized Coefficients (B)	Standardized Coefficients (Beta)	t	Sig.
Overall Customer Experience	(Constant)	0.60	-	2.50	0.013
	Personalization Perception	0.40	0.45	6.00	0.000
	Engagement	0.30	0.34	4.50	0.000
	Touchpoints Usage	0.25	0.28	3.80	0.000

- Based on the regression coefficients, the combined multiple linear regression equation can be formulated as follows:

$$\text{Overall Customer Experience} = 0.60 + 0.40 \times \text{Personalization Perception} + 0.30 \times \text{Engagement} + 0.25 \times \text{Touchpoints Usage}$$

Analysis

The multiple regression analysis demonstrates the significant impact of Personalization Perception, Engagement, and Touchpoints Usage on Overall Customer Experience at Coca-Cola.

Personalization Perception

The regression coefficient for Personalization Perception is 0.40, indicating that for each unit increase in Personalization Perception, Overall Customer Experience increases by 0.40 units, holding other variables constant. This result is highly significant ($p < 0.001$), underscoring the importance of personalized interactions in shaping customer experiences. Personalization in digital interactions allows customers to feel more valued and understood, leading to a more positive overall experience. This aligns with findings from Churilina & Sazhneva (2022), who emphasized that personalized digital client profiles and tailored communication enhance customer satisfaction and loyalty.

Engagement

Engagement, with a coefficient of 0.30, also plays a crucial role in enhancing Overall Customer Experience. The positive and significant coefficient ($p < 0.001$) suggests that increased customer engagement, facilitated by digitalization, significantly improves the overall experience. Engagement encompasses various aspects such as customer interaction with digital content, participation in online communities, and active involvement with brand activities. Brodie et al. (2013) highlighted that higher engagement levels result in deeper emotional connections with the brand, leading to more positive customer experiences.

Touchpoints Usage

Touchpoints Usage has a coefficient of 0.25, indicating a significant positive impact on Overall Customer Experience ($p < 0.001$). This finding suggests that the availability and effective use of multiple digital touchpoints—such as websites, mobile apps, social media, and email—enhance the overall experience by providing customers with convenient and diverse ways to interact with the brand. Abdidjali (2022) pointed out that an integrated omnichannel approach ensures a seamless and consistent customer journey, which is critical for maintaining high levels of customer satisfaction.

ANOVA Analysis

The ANOVA table supports the significance of the regression model with an F-value of 75.32 and a p-value less than 0.001, indicating that the model as a whole significantly predicts Overall Customer Experience. The sum of squares for the regression (150.24) compared to the residual sum of squares (125.76) shows that a substantial portion of the

variability in Overall Customer Experience is explained by the independent variables Personalization Perception, Engagement, and Touchpoints Usage.

The results of the multiple regression analysis provide strong empirical support for both hypotheses H1 and H2.

Hypothesis 1 (H1)

H1: Digitalization significantly enhances the overall customer experience by improving the personalization of customer interactions and increasing engagement.

The regression coefficient for Personalization Perception (0.40) indicates that improved personalization significantly enhances Overall Customer Experience. This finding aligns with the literature, where Churilina & Sazhneva (2022) emphasize that personalized digital client profiles and tailored communications enhance customer satisfaction and loyalty. Additionally, the positive impact of Engagement (coefficient 0.30) on Overall Customer Experience corroborates Brodie et al. (2013), who found that higher levels of customer engagement result in deeper emotional connections with the brand, leading to more positive experiences.

Thus, the data affirm Hypothesis 1, demonstrating that digitalization enhances overall customer experience through improved personalization and increased engagement, consistent with findings in the literature.

Hypothesis 2 (H2)

H2: Digitalization increases overall customer experience through the availability of multiple digital touchpoints throughout the customer journey.

The regression coefficient for Touchpoints Usage (0.25) indicates that the availability of multiple digital touchpoints significantly enhances Overall Customer Experience. This result is supported by Abdidjali (2022), who pointed out that an integrated omnichannel approach ensures a seamless and consistent customer journey, which is critical for maintaining high levels of customer satisfaction. The significance of Touchpoints Usage in enhancing customer experience emphasizes the importance of providing customers with convenient and diverse ways to interact with the brand, as highlighted in the literature.

Therefore, the data affirm Hypothesis 2, showing that digitalization increases overall customer experience through the availability of multiple digital touchpoints, in line with the findings in the literature.

Conclusion

This study provides robust evidence that digitalization efforts, particularly those focusing on personalization and multiple touchpoints, significantly enhance the overall customer experience at Coca-Cola Algeria. The high reliability of the survey instrument and significant regression test results further strengthen these findings. These insights align with the literature and provide a solid foundation for future research on digital customer engagement. The implications for practice include the need for Coca-Cola to continue investing in personalized digital content and expanding digital touchpoints to maintain and improve customer satisfaction. By doing so, Coca-Cola can ensure that it meets the evolving needs of its customers and remains competitive in the digital age.

GENERAL CONCLUSION

This study investigated the impact of digitalization on end-to-end customer experience at Coca-Cola Algeria, with a particular focus on personalization and customer satisfaction. By addressing the primary research question, "How does digitalization impact end-to-end customer experience in Coca-Cola Algeria?" the research sought to provide both practical and academic insights into the transformative role of digital technologies.

The findings of the study reveal that digitalization significantly enhances customer experience by improving personalization and engagement throughout the customer journey. The integration of digital tools such as big data analytics, artificial intelligence, and advanced customer relationship management systems has enabled Coca-Cola Algeria to better understand and meet customer needs, resulting in higher levels of satisfaction and loyalty.

Practical recommendations for Coca-Cola Algeria include the continued investment in digital technologies to further personalize customer interactions and streamline operations. The study highlights the importance of leveraging data analytics to gain deeper insights into customer preferences and behaviors, thereby enabling more targeted and effective marketing strategies. Additionally, the research suggests the adoption of omnichannel approaches to ensure a seamless and cohesive customer experience across all touchpoints. This approach not only enhances customer satisfaction but also fosters greater brand loyalty and engagement.

From an academic perspective, this research contributes to the existing body of knowledge on digitalization and customer experience, particularly in the context of an emerging market. By applying theoretical frameworks such as the Technology Acceptance Model (TAM) and Customer Experience Management (CEM), the study provides a nuanced understanding of how digitalization influences customer interactions in a specific regional context. The empirical evidence gathered through this research supports the validity of these frameworks and offers new insights into their applicability in emerging markets.

Furthermore, the study sheds light on the broader implications of digital transformation for businesses operating in similar environments. It underscores the challenges and opportunities associated with digitalization, emphasizing the need for companies to adapt to cultural and economic factors that influence the adoption and impact of digital

initiatives. This contextual understanding is crucial for formulating strategies that are both effective and culturally relevant.

Overall, this research underscores the transformative potential of digital technologies in enhancing customer experience. The insights gained from this study are valuable not only for Coca-Cola Algeria but also for other companies in similar markets seeking to leverage digitalization to improve customer satisfaction and engagement. As digital transformation continues to evolve, businesses must adapt and innovate to meet the changing expectations of their customers, ensuring sustained success and competitiveness in the digital age.

The findings of this study pave the way for future research to explore additional dimensions of digitalization and customer experience. Further studies could investigate the long-term effects of digital initiatives on customer loyalty and business performance, as well as the role of emerging technologies such as virtual reality and blockchain in shaping customer interactions. By continuing to explore these areas, researchers and practitioners can develop a more comprehensive understanding of digital transformation and its impact on customer experience, ultimately contributing to the advancement of both theory and practice in this dynamic field.

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APPENDIX

Questionnaire for Assessing the Impact of Coca-Cola's Digital Initiatives on Customer Experience

Section 1: Demographic Information

1. Age Group:

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 and above

Reference: Westbrook, R. A. (1980). A Rating Scale for Measuring Product/Service Satisfaction. *Journal of Marketing*, 44 (4), 68-72.

2. Gender:

- Male
- Female

Reference: Day, G. S., & Landon, E. L. (1977). Toward a Theory of Consumer Complaint Behavior. *Consumer and Industrial Buying Behavior*, 425-437.

3. How often do you purchase Coca-Cola products?

- Daily
- Weekly
- Monthly
- Occasionally
- Never

Reference: Wang, W., & Goh, T. (2017). Determinants of Consumer Satisfaction in E-commerce: An Integrated Model. *Journal of Business Research*, 78 , 1-8.

Section 2: Digital Interaction and Engagement

4. How often do you interact with Coca-Cola through digital channels (e.g., website, social media)?

- Daily
- Weekly
- Monthly
- Rarely
- Never

Reference: Kaplan, A. M., & Haenlein, M. (2010). Users of the World, Unite! The Challenges and Opportunities of Social Media. *Business Horizons*, 53 (1), 59-68.)

5. Which of the following Coca-Cola digital activities have you participated in? (Select all that apply)

- Viewing digital content (e.g., social media posts, videos)
- Scanning QR codes on Coca-Cola products for information and website access
- Participating in "Scan and Win" promotions
- Following or engaging with influencer marketing campaigns
- Other (please specify)

Reference: Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring Motivations for Brand-Related Social Media Use. *International Journal of Advertising*, 30 (1), 13-46.

6. How engaged do you feel with Coca-Cola's digital content (e.g., social media posts, emails....etc)?

- Very engaged
- Engaged
- Neutral
- Disengaged
- Very disengaged

Reference: Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer Engagement in a Virtual Brand Community: An Exploratory Analysis. *Journal of Business Research*, 66 (1), 105-114.

Section 3: Personalization

7. How well do you think Coca-Cola's digital content is personalized to your interests and preferences?

- Very well
- Well
- Neutral
- Poorly
- Not at all

Reference: Tam, L. & Ho, S. Y. (2006). Understanding the Impact of Web Personalization on User Information Processing and Decision Outcomes. *MIS Quarterly*, 30 (4), 865-890.

8. How satisfied are you with the personalization of Coca-Cola's digital interactions?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

Reference: Kumar, V., & Shah, D. (2004). Building and Sustaining Profitable Customer Loyalty for the 21st Century. *Journal of Retailing*, 80 (4), 317-330.

Section 4: Customer Satisfaction

9. Overall, how satisfied are you with your experiences interacting with Coca-Cola through digital platforms?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

Reference: Anderson, R. E., & Srinivasan, S. S. (2003). E-Satisfaction and E-Loyalty: A Contingency Framework. *Psychology & Marketing*, 20 (2), 123-138.

10. How easy is it for you to navigate Coca-Cola's digital platforms (e.g., website)?

- Very easy
- Easy
- Neutral
- Difficult
- Very difficult

Reference: Flavián, C., Guinalú, M., & Gurrea, R. (2006). The Role Played by Perceived Usability, Satisfaction and Consumer Trust on Website Loyalty. *Information & Management*, 43 (1), 1-14.

11. How satisfied are you with the speed and helpfulness of Coca-Cola's customer service through digital channels?

- Very satisfied
- Satisfied
- Neutral
- Dissatisfied
- Very dissatisfied

Reference: Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality. *Journal of Service Research*, 7 (3), 213-233.

Section 5: Customer Experience

12. How would you rate the overall quality of your digital interactions with Coca-Cola?

- Excellent
- Good
- Average
- Poor
- Very poor

Reference: Verhoef, P. C., Lemon, K. N., Parasuraman, A., Roggeveen, A., Tsiros, M., & Schlesinger, L. A. (2009). Customer Experience Creation: Determinants, Dynamics and Management Strategies. *Journal of Retailing*, 85 (1), 31-41.

13. How likely are you to recommend Coca-Cola's digital platforms to your friends and family?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

Reference: Reichheld, F. F. (2003). The One Number You Need to Grow. *Harvard Business Review*, 81 (12), 46-54

Section 6: Behavioral Intentions

14. How often do you participate in Coca-Cola's digital promotions, such as scanning QR codes or "Scan and Win" contests?

- Very often
- Often
- Sometimes
- Rarely
- Never

Reference: Yoo, B., Donthu, N., & Lee, S. (2000). An Examination of Selected Marketing Mix Elements and Brand Equity. *Journal of the Academy of Marketing Science*, 28 (2), 195-211.

15. How likely are you to be influenced by social media influencers who promote Coca-Cola products?

- Very likely
- Likely
- Neutral
- Unlikely
- Very unlikely

Reference: De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram Influencers: The Impact of Number of Followers and Product Divergence on Brand Attitude. *International Journal of Advertising*, 36 (5), 798-828.