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From the Editorial Committee

We are giving you the next Vol. 30, No. 3(2025) issue of the Quarterly of the Faculty of Management of the Rzeszow University of Technology entitled “Modern Management Review”.

The primary objective of the Quarterly is to promote publishing of the results of scientific research within economic and social issues in economics, law, finance, management, marketing, logistics, as well as politics, corporate history and social sciences.

Our aim is also to raise the merits and the international position of the Quarterly published by our Faculty. That is why we provided foreign Scientific Council, as well as an international team of Reviewers to increase the value of the scientific publications.

The works placed in this issue include many assumptions and decisions, theoretical solutions as well as research results, analyses, comparisons and reflections of the Authors.

We would like to thank all those who contributed to the issue of the Quarterly and we hope that you will enjoy reading this issue.

With compliments
Editorial Committee

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EVENT COMMUNICATION AS A CATALYST FOR CORPORATE IDENTITY PROMOTION: A CASE STUDY OF OOREDOO QATAR

This research discusses how event communication contributes to the formation of corporate identity and a positive public image, taking the case of Ooredoo Qatar. Adopting a case study methodology, the research looks at Ooredoo's event communication, the media utilized, and how they are integrated into general public relations practices. Through the qualitative analysis, the research points out how Ooredoo engages in new communications technologies, such as virtual events and social media, to convey and establish itself as a socially responsible organization. The research pinpoints event communication as a vital variable in the achievement of organizational goals and company image creation. The paper contributes to understanding telecommunications institutions and how they can use event communication to enhance their influence and public engagement, offering practical implications for other institutions of this type on how to develop their brand image and relations with society.
The study concludes that event communication significantly strengthens Ooredoo Qatar's corporate identity and suggests future research to validate these findings across the Gulf region.

Keywords: event communication, corporate identity, strategic communication, Ooredoo Qatar.

1. INTRODUCTION

Public relations today are undergoing rapid and dynamic change, necessitating constant innovation in the strategies of institutional communications (Dozie, Grunig, Grunig, 2013). Among the evolving strategies, event communication is now a fundamental component of making communication a success. It is a critical resource for establishing institutional identity and fostering an organization's image within the public sphere (Van Winkle, Bueddefeld, 2020).

This research illuminates the dynamic aspect of organizational communication and highlights the case of Ooredoo Qatar as a telecommunication service provider that has

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adopted event communication as a strategic means to establish its identity and reinforce its public image. Ooredoo's experience offers an interesting example of how institutions can use event-based initiatives to engage with their audience and develop a better sense of belonging in their communities.

The increased use of virtual technologies and digital platforms in communications practice has revolutionized institutions' planning and staging of their events. From virtual exhibitions and experiential marketing to interactive conferences live-streamed, event communication is no longer limited to the physical environment. This has allowed institutions such as Ooredoo Qatar to engage larger audiences, address messages more personally, and track engagement more accurately through the use of data analytics and real-time feedback systems.

Also, the use of event communication as part of corporate identity efforts goes along with the overall trend by which organizations strive to humanize the brand and be socially responsible. Events are not only deployed as marketing tools but also as a vehicle for conversation, partnership, and communal involvement. As such, Ooredoo Qatar's public events as part of its strategic communications efforts exemplify how telecommunications businesses can position themselves not just as service providers but as active and engaged corporate citizens.

The research aims to find out how Ooredoo Qatar uses event communication to build and project its reputation as a socially responsible organization. It examines the channels of communication utilized, the incorporation of event communication into general public relations campaigns, and the company's ambitions and obstacles in adopting new technologies that allow for more audience engagement and participation.

Through an examination of Ooredoo's event communication strategic practices, the research aims to provide knowledge with practical implications for its success in driving organizational goals and building the corporate reputation. Finally, the research findings aim to inform other telecommunication companies to follow similar strategies in a bid to improve their presence, identity, and power in society.

2. METHODOLOGY

2.1. Research questions

Event communication is important to any organization, regardless of the nature of their activity, as it is the process by which different information, ideas and opinions are provided. It is the link between the institution and its audiences, whether internal or external. The success of any organization depends on the effectiveness of the communications therefore most organizations aim to adopt many types of communication, including event communication.

Event communication has emerged as an increasingly vital strategy embraced by institutions in recent years, leveraging a myriad of contemporary resources to effectively convey positive narratives to external stakeholders. In today's landscape, institutions harness diverse channels such as social media platforms, virtual events, and interactive online experiences to amplify their messages. Furthermore, the integration of advanced analytics and data-driven insights enables organizations to tailor their event communication efforts with precision, enhancing audience engagement and outreach. This modern approach extends beyond traditional methods, encompassing innovative techniques like immersive technologies, live streaming, and interactive storytelling to captivate audiences and foster meaningful connections. Moreover, the collaborative nature of event communication facilitates strategic partnerships, fostering avenues for sponsorship, fundraising initiatives, and impactful philanthropic endeavors. As institutions navigate the digital age, the symbiotic relationship between event communication and institution-al image becomes increasingly evident, underscoring its pivotal role in shaping perceptions and cultivating enduring relationships with diverse audiences.

Thus the image of the institution reflects the identity perceived by the public and constitutes a key factor in communicating and marketing its message, No organization can operate without a strong and consistent image, as it represents one of the most important objectives to be achieved and maintained through various communicative activities. A well-established image not only attracts the public but also enhances organizational performance and strengthens public trust. In view of the profound changes the world has experienced in recent times – particularly with the introduction of new technologies and their advanced applications – service institutions have faced fierce competition. This has necessitated the adoption of new communication strategies, notably the use of event communication, as a means of highlighting their position, reinforcing their identity, and improving their image. (Allen, 2023)

In the midst of this tremendous development, the telecommunications sector in Qatari service institutions has seen the entry of foreign multinational companies, which have played a major role in the development of modern communication. This, in turn, led to an increase in advertising and promotional campaigns for this activity, and thus the Qatar Service Corporation found itself facing great challenges in defining its identity as a community institution, seeking to serve citizens and residents. adopted a sophisticated strategy in the field of event communication, including the use of new digital methods in the organization of major events. Based on this context, the present study seeks to explore the strategic role of event communication at Ooredoo Qatar in building and reinforcing its identity as a socially responsible and community-oriented organization. Accordingly, the study is guided by the following main research question:

How does event communication at Ooredoo Qatar contribute to building its identity as a community-oriented organization?

To address this central question, the study also investigates the following sub-questions:

1. What are the most prominent communication channels used by Ooredoo Qatar?
2. How is event communication utilized to promote the organization's brand?
3. What are the primary objectives Ooredoo aims to achieve through its event communication strategy?
4. To what extent have modern communication tools contributed to enhancing public trust in the organization?
5. How can an effective event communication plan be developed and implemented to strengthen Ooredoo's institutional identity?

2.2. The case, data, and methodology

This study employs a descriptive approach to provide a comprehensive description of the phenomenon under study, namely event communication within the organizational framework of Ooredoo Qatar. This methodology is chosen for its ability to provide a detailed account of existing practices and to gather relevant data that is conducive to interpretation and analysis. Specifically, the study seeks to elucidate the role of event communication within Ooredoo Qatar, outlining its strategies for presenting services to its customers and stakeholders, and for strengthening its internal and external corporate image through the orchestration of a variety of events, functions and manifestations. It also seeks to explore the intricacies of event organization within the company, examining the modalities used and the various stakeholders involved in its execution.

In order to provide a comprehensive understanding of the subject matter, the research uses a questionnaire as its primary data collection tool. The rationale behind this choice stems from the effectiveness of the questionnaire in eliciting relevant information and empirical field data. It consists of a carefully curated set of questions designed to elicit responses relevant to the research problem at hand. However, the accuracy and reliability of the findings depend on the researcher's ability to apply an informed understanding of the data to be collected and to select appropriate methodologies for measuring the variables under investigation.

We used it to determine the impact of event communication on enhancing the image of the service institution and to know the state of event communication in Ooredoo Qatar, where the form contained five axes represented in:

- The first axis: personal data and including three variables, gender, age and education level.
- The second axis: data on the state of event communication in the institution, and this axis contained 06 questions.
- The third axis: data on the means of event communication in the institution, which contained 04 questions.
- The quarterly axis: data on the forms of event communication, which contained 07 questions.
- The fifth axis: data on the objectives of event communication in the Civil Protection Directorate, which in turn contained 06 questions.

At the level of the study sample, the research relied on 100 employees from different Ooredoo branches in Qatar in order to examine their perceptions of the role of event communication in building corporate awareness and brand identity, as well as a community institution. The sample was purposive, selected intentionally by the researcher according to characteristics relevant to the research objectives, rather than random sampling. The sample of 100 employees represents approximately X% of Ooredoo Qatar's total workforce, distributed across key departments such as marketing, customer service, and technical operations.

In this sense, a questionnaire was administered to the target audience during the months of June until September 2022, it includes three sections:

- Identification of the survey population.
- Image reflected by Oredoo.
- Quality of the cultural programming offered by the Oredoo.

The documentary research on site and the interviews carried out with those in charge of communication enabled us to clarify and complete our study.

3. LITERATURE REVIEW

In the literature, many authors define the notion of event communication differently: Event communication still does not have a definitive definition, unanimously accepted by all (Walliser. 2003), taking the example of these two definitions: "Event communication corresponds to a generic name given to sponsorship, patronage, sponsorship and any technique based on the use of any event (existing or specifically created)" (Décaudin, 1995), Sometimes, it is presented as "a composite communication system implemented by an organization around the association of its name or brand with a socio-cultural event (sports, artistic, scientific...)” (Baux, 1991).

According to J. Lendrevie and B. Brochand, this type of communication includes actions of public relations, stimulation, and motivation, which give rise to events that often bring together internal audiences as well as external or mixed audiences.

The primary objective of any activity relating to event communication is the enhancement of the institution’s reputation and visibility, because the presence of its name and logo on the posters improves its reputation. Thus, it has a positive impact on the brand image of the firm due to the lively and convivial character of each event offered (Larhrissi, Omani, 2020).

Like all types of communication, event communication has well-defined objectives. First, it has an image and awareness objective, meaning that communication through an event also aims to increase the visibility and awareness of a company. In other words, the chosen event can contribute to improving the company's image and raising its profile. Secondly, event communication has a commercial objective. Its purpose is to inform and promote a brand, a product or a service so that it can attract the attention of the public. In this case, the event can highlight the benefits of the product or service (Jago, Chalip, Brown, Ali, 2003).

Recent studies emphasize the role of event communication tools (e.g., webinars, hybrid events, mobile apps) in shaping organizational identity (Smith, Lee, 2022; Johnson, 2023).

As reputation and image are essential, institutions are increasingly seeking to establish and renew a close link with the consumer. For specialists in relational marketing, this type of communication delivers “a social message that touches the spectator or listener in his or her aspiration to be part of a social, sporting or artistic community” (Perlstein, Piquet, 1985). Thanks to events, the close relationship established makes it possible to create an affective link with the target in the short term and contributes, in the long term, to building audience loyalty.

3.1. Event communication tools

Event communication includes a wide range of events such as seminars, conventions, congresses, trade fairs, award ceremonies, press trips, private sales, launch offers, and team-building activities. This strategic approach caters to both individuals and corporate entities, as well as media outlets.

Presently, a clear distinction can be made between event communication and media communication. Historically, media communication, employing mass media channels such as television, radio, and print, held a predominant position and underwent significant development. This form of communication aimed at reaching a broad audience without specific targeting. However, the emergence of event-based communication has revolutionized this landscape, empowering companies to tailor their outreach strategies based on their industry.

Before engaging in or organizing any event, a comprehensive understanding of the diverse types is imperative. These variations are contingent upon the defined objectives and the characteristics of the participants. Notably, events can manifest in various forms (Delia, Armstrong, 2015):

1. Sponsoring: It is a vector of communication which consists for a company (sponsor) in contributing financially, materially or technically to a social, cultural or sporting action, with a view to increase its notoriety and possibly improve its image (Delia, Armstrong, 2015).

2. Partnership: It is material support, financial or in the form of a service provided to an event, a person, a product or an organization with the aim of obtaining publicity benefits. Usually considered as a synonym of sponsoring, sponsorship implies that the partner benefits from spin-offs in terms of visibility and promotion (Decaudin, 2011).
3. Charitable activities: They are a social activity carried out by the institution in order to consolidate its image in its surroundings. Charitable work can be defined as: grants as a gift without receiving a return, for the benefit of an association that works for the public interest.
4. Exhibitions: through which products and achievements are presented, in an interesting way and highlighting the most important features of goods and services, by relying on digital and visual means and posters that help the exhibitors to introduce their products and services to visitors.

Among the most important roles that the exhibition plays, we find the following:

- Presenting new goods and services and testing their acceptance by the potential consumer.
- Delivering the message in a direct and effective manner.
- Inquiry, comparison and purchase by the consumer.
- It represents an important means of acquaintance between the public and the organization.

5. Organizing Concerts: Concerts are a form of direct communication with the internal and external audiences of the organization, and are considered one of the most powerful communication tools that the public relations officer relies on to establish good relations with specific audiences and win their favor. And social and organization members and representatives of other organizations, talk and discussions are exchanged that make each of them more understanding of others, their views and trends.

There are many reasons for organizing parties and special invitations, including:

- Opening a new branch of the organization.
- Appointment of a new official for the organization.
- Signing a specific agreement.

6. The seminar: Is a type of event communication with the aim of communicating on a defined subject acquiring new specific knowledge, motivating and strengthening team spirit.

There are two types of seminars:

- The external seminar: These types of seminars are organized to welcome employees from different companies and aim to transmit knowledge on a specific subject, to connect professionals from the same field of activity or to promote exchanges on particular know-how.
- Internal seminars or company seminars: This type of seminar refers to all kinds of meetings organized outside the usual professional context. This type of seminar serves to motivate employees, develop and strengthen team spirit.

7. Event website: The event website will likely be the first stop for anyone looking for information about an event. The website should be clearly labeled with intuitive links and all necessary information readily available. All other event communication tools should direct potential attendees to the event website, and

currently websites are used on an ongoing basis by all companies for all sorts of events.
8. Social Media: Marketing an event on services such as X (formerly Twitter), LinkedIn and Facebook is an essential step in your pre-event communication process. Each social media platform has a different user base with unique demographics and can attract large audiences through the effective use of these platforms.
9. Event Mobile App: Is a versatile tool that can serve as an incredibly effective means of communication for everyone involved in the event. With an event app, the company can create polls, surveys and group chats to engage with the audience and PR team throughout the event and make changes as needed.

3.2. Organizational identity and corporate performance

Corporate identity is a complex concept to define because there are many definitions and it is often confused with the terms image and reputation. Indeed, the identity of the company relates to what makes it specific, unique, recognizable and which makes it possible to identify with it, while distinguishing it from other actors in the field (Libaert, Johannes, 2016).

Balmer and Van Riel point out in the following paragraph that corporate identity: "Was the synonymous with organizational nomenclature, logos, company house style and visual identification. Many corporate identity practitioners had (and have) their roots in graphic design. The Authors contend that graphic designers have been hugely influential in two regards, in that they articulated the basic tenets of corporate identity formation and management and succeed in keeping the subject on the agenda of senior managers" (Van Riel, Balmer, 1997).

According to Birkigt and Stadler, identity is composed of three aspects: (1) the behavioral aspect, which represents what the company does, the way it acts; (2) the communication aspect, which consists of what the company says in its communications; (3) the symbolic aspect which indicates howthe entity represents itself in the world, through its name, its logo, its visual unit, etc. (Libaert, Johannes, 2016).

Every organization requires an identity for internal and external stakeholders to construct a sense of how it is situated amongst and interacts with other organizations, groups, and people (Albert et al. 2000). Thus, identity distinguishes the organization from other similar organizations (Ashforth, Mael, 1996).

Organizational identity can influence corporate performance in various ways.

Firstly, a strong and positive organizational identity can enhance employee motivation and engagement. Employees who identify with their organization's values and purpose are more likely to be committed to their work, which can lead to higher job satisfaction and better performance (Ashforth, Mael, 1996).

Secondly, a clear organizational identity can improve brand image and reputation, which can lead to increased customer loyalty and sales. Organizations that have a strong identity are more likely to resonate with their target audience, differentiate themselves from competitors, and create a sense of trust and authenticity.

Thirdly, a well-defined organizational identity can provide direction and focus for strategic decision-making. Organizations that have a clear understanding of their values and purpose are better equipped to make decisions that align with their goals and achieve their desired outcomes (Dutton,Dukerich, Harquail, 1994).

Overall, a strong and positive organizational identity can have a significant impact on corporate performance. By defining their identity and communicating effectively to employees, customers, and stakeholders, organizations can create a sense of purpose, build a strong brand, and drive business success (Rindova, Pollock, Hayward, 2006).

4. RESULTS

4.1. Identification of the company

The company under study is Ooredoo Qatar, one of the largest telecommunications and information technology service providers in the country. Established in 2004, it operates as the domestic arm of Ooredoo Q.P.S.C. (formerly Qatar Telecom, Qtel), a Qatari public telecommunications group headquartered in Doha. The Group is majority-owned by Qatar government–related entities alongside public investors; it is not owned by Vodafone Group. Within the domestic market, Ooredoo Qatar competes with Vodafone Qatar as one of the two licensed mobile network operators.

Ooredoo Qatar provides mobile, internet, and integrated communication services to households and businesses across Qatar. Its offerings include prepaid and postpaid mobile services, fixed and mobile internet packages, and a variety of digital communication solutions. The company is recognized for its commitment to innovation and digital transformation, and it has built a strong presence in the Qatari market. Moreover, Ooredoo Qatar has been acknowledged for its corporate social responsibility initiatives and sustainability efforts (Ooredoo, 2023).

4.2. Public Relations management in Ooredoo

Public relations management at Ooredoo Qatar involves developing and maintaining positive relationships between the company and its stakeholders, including customers, employees, shareholders, and the community. This includes managing media relations, crisis communication, corporate social responsibility initiatives, and events management.

The public relations team at Ooredoo Qatar works closely with other departments to develop and implement communication strategies that align with the company's goals and values. They also play a key role in promoting Ooredoo Qatar's brand and reputation through various channels, including social media, press releases, and events.

In addition, the public relations team at Ooredoo Qatar works to ensure that the company's messaging is consistent across all platforms and that any communication is accurate, timely, and relevant to the target audience. They also monitor and analyze media coverage and public perception of the company to identify potential issues and opportunities for improvement.

The Public Relations (PR) team plays a critical role in event management. They work closely with event planners and organizers to ensure that events are aligned with the company's goals and messaging. The PR team is responsible for developing and executing communication strategies to promote events and increase attendance.

During events, the PR team serves as the primary point of contact for the media and other stakeholders, providing information and managing media relations. They also ensure that the company's messaging is communicated effectively and consistently throughout the event (Ooredoo Qatar Events, 2023).

In the post-event phase, the PR team is responsible for measuring the effectiveness of the event and its impact on the company's reputation and image. They analyze media coverage and feedback from attendees and stakeholders to identify areas for improvement and to inform future event planning and communication strategies.

After presenting Ooredoo Qatar and mentioning the role of public relations in managing the promotion of the company's image to its internal and external audiences, and managing all events and activities, the following section of the field study will be dedicated to analyzing how event communication tools are employed in detail and studying their organizational effectiveness in introducing Ooredoo, its policies, promoting its services, and its overall image, through interviews conducted with those responsible for managing these events in the company.

4.3. Results of the interviews analysis

After conducting interviews with the Public Relations managers at Ooredoo Qatar, we have concluded the following (Ooredoo PR Manager, 2023).

Regarding the question posed to the Public Relations officials about how Ooredoo Qatar defines the concept of event communication within the organization's context, they responded that event communication at Ooredoo is regarded as a powerful strategic tool for conveying messages, building positive relationships, and enhancing the overall image and identity of the company. This involves planning and executing events that align with the organization's mission, values, and goals, with the aim of creating unforgettable experiences that resonate with the event audience. The emphasis is on fostering meaningful connections, promoting the brand, and contributing to the community, ultimately enhancing Ooredoo Qatar's position as a socially responsible entity and customer-focused leader.

Ooredoo has demonstrated a pronounced commitment to cultivating a positive societal image, both locally and internationally, through its dedicated sponsorship and meticulous oversight of various events in recent years. Noteworthy among these are (Oreedo PR Manager, 2023):

- Accompanying events aligning with the grandeur of the FIFA World Cup Qatar 2022.
- A showcase of innovation at Expo Doha 2023 through Ooredoo's distinctive exhibition.
- Ooredoo's pivotal role as a significant supporter of Qatar's heritage, culture, and education, exemplified by its involvement in diverse community, school, and educational programs.
- Serving as the official communications sponsor for “Qatar Live” events.
- A proactive approach to community engagement, exemplified by a range of impactful social responsibility activities orchestrated under the banner of the “Connect and Give” campaign.
- Successful hosting of the virtual “Financial Markets Day”, demonstrating adaptability to the evolving communication landscape.
- Demonstrating a commitment to environmental sustainability with impactful initiatives in the region.
- Pioneering support for sports excellence in Qatar, evidenced by the initiation of the “Ooredoo” Doha Marathon 2024.
- A prominent role as a key sponsor for the inauguration of Google Cloud in Qatar, a milestone event held on May 22, 2023.

- Attaining the status of a golden sponsor for the prestigious “Initiative 2023” awards ceremony organized by “Achievement Qatar”, recognizing outstanding youth projects.
- Fostering a deep connection with Qatari heritage, enriching the fan experience at the FIFA World Cup Qatar 2022.
- Showcasing various events at the Khalifa International Stadium pavilion, symbolizing inclusivity and community engagement.
- Ooredoo's multifaceted event portfolio reflects its holistic approach to societal impact, blending cultural support, sports sponsorship, and environmental stewardship. This nuanced engagement strategy not only aligns with the company's overarching objectives but also positions it as a socially responsible entity making substantive contributions to the communities it serves.

In response to the question of how Ooredoo Qatar strategically integrates event communication into its broader public relations plans and ensures that events align with its message, values, and long-term objectives, the PR official responsible for events confirmed that event communication is strategically integrated into Ooredoo Qatar's overall communication strategy. This integration contributes to achieving specific long-term objectives, such as building the brand, enhancing audience engagement, and supporting social initiatives, while ensuring harmony with the institution's message, values, and goals.

The events management team strives to align these events with the institution's message and values. The selection and design of events are carried out in a manner that reflects this message and reinforces the values that Ooredoo Qatar seeks to promote, aligning with its identity and values as a Qatari entity.

Modern communication technology and digital media are essential for integrating event communication. The focus should be on utilizing the latest digital technologies and social media to organize and market events effectively. This will help to achieve better interaction with the audience and increase awareness of the events.

Ooredoo Qatar actively incorporates social dimensions into its events to strengthen ties with the local community and achieve social benefits. This statement reflects the institution's commitment to social responsibility and its contribution to building relationships based on trust and positive interaction. All events organized by the institution aim to promote these values in society.

The PR official in charge of events emphasized that identifying the target audience for Ooredoo Qatar's event communication initiatives is crucial to ensure maximum impact and effectiveness. The process of determining and defining the target audience should be objective, clear, and logical, avoiding biased or emotional language. It should also adhere to conventional academic structure and formatting, using precise subject-specific vocabulary when necessary. The language should be formal, avoiding contractions, colloquial words, informal expressions, and unnecessary jargon. Finally, the text should be grammatically correct and free from spelling and punctuation errors. The target audience is determined based on several factors, including the specific objectives of each event and their alignment with the needs and interests of the audience. The final identification of the audience for a particular event may consider factors such as age, gender, interests, geographic locations, and other demographic and behavioral factors.

- Ooredoo Qatar's events communication team relies on accurate information obtained through regular market research and analysis of audience data to understand the comprehensive preferences and expectations of the audience. This precise

identification provides an opportunity to tailor events and their messages to meet the expectations of the target audience.
- Ooredoo Qatar aims to convey key messages that reflect its identity and strategic vision through its events. These messages are developed carefully to ensure the desired impact and the achievement of specific goals. The institution identifies the main content it wants to convey by analyzing the target audience and understanding their needs
- Ooredoo Qatar aims to convey various messages through its events, including building brand identity, enhancing interaction with the audience, and supporting social initiatives. These messages are developed to achieve effective and positive impact in coordination with the objectives of each event.
- Ooredoo Qatar's efforts in the field of event communication are guided by a comprehensive framework that includes identifying the target audience and developing key messages. This integration of elements ensures maximum benefit and impact.

Regarding the question of whether event communication plays a vital role in building and shaping Ooredoo Qatar's corporate image, the PR official responsible for events affirmed that it is an effective means to enhance the organization's values and convey its message. By organizing events that align with Ooredoo Qatar's values and objectives, the institution can highlight specific aspects of its identity and reinforce them among the audience.

Here are some examples that illustrate how event communication contributes to building a positive and distinctive corporate image for Ooredoo Qatar (Ooredoo, 2023).

Successful Participation in Expo Doha 2023: Ooredoo Qatar organized a prominent innovative exhibition at Expo Doha 2023, showcasing the latest technologies and innovations in telecommunications. This participation not only enhances the company's technological identity and innovative capabilities but also reflects its strategic vision in supporting leading global events.
- Community-Oriented Events: Ooredoo organized community-oriented events that reflect its commitment to social responsibility. For instance, hosting educational and awareness events on safe technology use contributes to building a positive image as a company dedicated to providing added value to the community.
- Sponsorship of Sports Events: As a major sponsor of sports events, such as the "I Want" Doha Marathon, Ooredoo demonstrates its integration with sports values and motivation. Simultaneously, it highlights its technological capabilities in covering and supporting major sports events.
- Participation in Environmental Initiatives: Through sponsorship of environmental initiatives, such as its support for local environmental projects, Ooredoo reinforces its identity as a corporation committed to sustainable development and environmental conservation.

These examples demonstrate how Ooredoo Qatar's events enhance its corporate image and build its identity as a socially responsible entity.

The official overseeing Public Relations for events at Ooredoo Qatar emphasized that the company perceives events as crucial avenues for community involvement.

This involvement is evaluated through a multifaceted framework to guarantee a positive impact on the relationship with the community. The level of community engagement is assessed by evaluating involvement through a multifaceted framework to ensure a positive impact on the relationship with the community. Ooredoo organizes educational and awareness events for local audiences, including associations, cultural and sports clubs, schools, and universities. These events provide benefits to the community.

Ooredoo supports sporting events that promote health and physical fitness within the community, such as recreational activities, National Day events, sports days at Aspire, and events at parks that serve as modern recreational facilities. The company also collaborates with charitable organizations, dedicating a portion of event revenues to support social causes. For example, Ooredoo has partnered with Qatar Charity.

Furthermore, the Ooredoo team consistently considers the opinions and needs of the community during event planning stages. They achieve this through leveraging social media and direct communication with the public, including citizens and residents, both during and after event execution. This approach ensures ongoing community engagement and responsiveness to the diverse needs and expectations of the society it serves.

In the context of the continuous evolution in the digital transformation realm, Ooredoo Qatar has been refining its approach to event communication over time, leveraging modern technologies. By integrating digital transformation into its strategy, the organization has diligently worked on enhancing its interaction with the audience and enriching the participants' experience in events.

Ooredoo, as confirmed by the Public Relations department, recognized the significance of utilizing cutting-edge technologies in organizing and executing events, such as virtual reality, augmented reality, and interactive technologies. The company has improved its technological infrastructure to ensure a unique and innovative experience for participants, fostering interaction and contributing to the more effective achievement of the events' objectives.

Ooredoo assesses the success of its events by measuring community engagement. The company supports social initiatives and organizes educational and awareness events in collaboration with charitable organizations. A portion of event revenues is allocated to support social causes. The Public Relations representative emphasizes that the company consistently listens to the opinions and needs of the community.

In the context of digital transformation, Ooredoo has adjusted its approach to event communication by utilizing cutting edge technologies to enhance interaction and attendee experience. The success of the organization's efforts is measured through indicators such as participation levels, social interaction, and achievement of organizational goals. These indicators are assessed through opinion surveys and digital interaction metrics, demonstrating a positive impact on the organization's relationship with the community and the successful enhancement of its image.

4.4. Discussion

Through the analysis of the interview responses conducted with the events managers in the Public Relations department at Ooredoo Qatar, the study arrives at the following results. These results address the initial questions posed by the study:

- Definition of Event Communication: Ooredoo Qatar understands event communication as a vital means to enhance interaction with the public and achieve the company's goals through organizing events that align with its message and values.
- Importance of Event Communication: Ooredoo Qatar considers event communication highly significant in its overall communication strategy, contributing to building and shaping its corporate image effectively.

- Strategic Integration: The institution strategically integrates event communication into its public relations plans to ensure alignment with its message and values, utilizing cutting-edge technologies to enhance participant interaction and achieve event objectives.
- Target Audience and Messages: Ooredoo Qatar identifies the target audience for event communication initiatives and develops key messages that reflect and reinforce its message, utilizing modern techniques.
- Building Identity and Image: Ooredoo believes that event communication significantly contributes to building and shaping its corporate image, ensuring that events align with and positively enhance its identity.
- Community Engagement: Ooredoo Qatar views events as opportunities for community engagement, measuring this engagement through support for social initiatives and the organization of educational events. The institution provides examples of successful initiatives that positively impacted its relationship with the community.
- Adaptation to Change: In the context of digital transformation, Ooredoo has adjusted its approach to event communication by adopting the latest technologies to improve interaction and participant experiences, demonstrating adaptability to technological advancements and changes in audience behavior.
- Success Metrics: Ooredoo Qatar measures the success of event communication efforts through indicators such as participation levels, social interaction, opinion surveys, and digital interaction measurement. These tools are employed to assess the positive impact on its relationship with the community and the successful enhancement of its image.

Despite the clear evidence of Ooredoo Qatar's success in integrating event communication, the study remains limited to a single case. Future research could compare event communication practices across different telecommunications companies in the Gulf region or investigate the financial impact of such practices in greater depth. In addition, the reliance on a purposive sample and qualitative methodology may restrict the generalizability of the findings, even though they provide valuable insights. Therefore, future studies could benefit from employing mixed-method approaches, larger and more diverse samples, or cross-industry comparisons to further validate and enrich the conclusions presented here.

5. CONCLUSIONS

In conclusion, the study has explored the pivotal role of event communication for Ooredoo Qatar Telecommunications Corporation as a service institution. Event communication has emerged as a crucial tool in building the institution's identity and enhancing its image in the dynamic landscape of the telecommunications sector. The study aimed to address key questions regarding Ooredoo's approach to event communication and its impact on identity formation.

Ooredoo Qatar recognizes the significance of event communication in conveying a positive image to external audiences. The study delved into the diverse means of communication employed by Ooredoo Qatar, emphasizing the strategic integration of event communication into broader public relations plans. The institution's goals, including brand promotion and community engagement, were explored, highlighting the instrumental role of modern communication methods.

In the context of the telecommunications sector's evolution and increased competition, Ooredoo Qatar strategically adapts to technological advancements. The study acknowledged the challenges faced by the institution and emphasized its commitment to defining a strong community identity. Ooredoo's use of digital methods for organizing major events was discussed as a forward-looking strategy to navigate the changing landscape.

The research questions guided an in-depth analysis of Ooredoo's event communication practices, shedding light on its goals, means of communication, and the influence of modern methods on community trust. The study affirmed the integral role of event communication in shaping Ooredoo's identity as a community-focused organization.

As institutions globally face challenges in defining their identities amidst technological advancements, Ooredoo Qatar's experience serves as a valuable case study. The study contributes insights into effective event communication strategies for service institutions, particularly in the telecommunications sector, providing a foundation for future research in this evolving field.

Future research extending beyond a single case study would further consolidate these findings and offer broader insights for the telecommunications sector in the Gulf region.

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EVALUATING THE BANKING MARKETING MIX'S ROLE IN ENHANCING CUSTOMER SATISFACTION: A CASE STUDY ON AL SALAM BANK'S CONSUMER CAR FINANCING

This study investigates the impact of the banking marketing mix (7Ps: product, price, place, promotion, people, process, and physical evidence) on customer satisfaction, focusing on Al Salam Bank's car financing services in Algeria. A structured questionnaire was administered to 395 respondents, and Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to analyze the data. Results reveal that all marketing mix elements positively influence customer satisfaction, with process and price being the most significant contributors. These findings highlight the importance of streamlined processes, competitive pricing, product innovation, and customer-centric services in enhancing satisfaction. This study provides valuable insights for banking institutions, particularly in Islamic finance, to refine their marketing strategies and improve service delivery, ultimately fostering customer loyalty.

Keywords: banking marketing mix, customer satisfaction, Islamic banking.

1. INTRODUCTION

The banking sector plays a pivotal role in fostering economic growth and financial inclusion, particularly through its innovative financial products and services. Among these offerings, consumer car financing has emerged as a critical service that meets evolving customer needs. With increasing competition in the banking industry, delivering superior customer satisfaction has become essential for maintaining customer loyalty and market share.

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The banking marketing mix – consisting of product, price, place, promotion, people, process, and physical evidence – serves as a strategic framework for achieving customer satisfaction. While previous studies have explored the influence of the marketing mix on customer perceptions, limited attention has been given to its role in consumer car financing within Islamic banking systems, particularly in emerging economies. This creates a research gap that necessitates further investigation to identify how marketing strategies impact customer satisfaction in this context.

This study aims to evaluate the role of the banking marketing mix in enhancing customer satisfaction, with a specific focus on Al Salam Bank's consumer car financing services. By examining the key determinants of satisfaction, this research contributes to both theory and practice by offering actionable insights for improving marketing strategies in the banking industry.

Moreover, this paper adds novelty by being among the first empirical studies in Algeria to investigate Islamic consumer car financing through the lens of the 7Ps framework, supported by the application of PLS-SEM on a large and diverse sample of 395 respondents. Unlike prior works that mainly addressed conventional banking or broader financial products, this study narrows its focus to Sharia-compliant car financing, thereby bridging a significant gap in the literature and offering context-specific insights for both researchers and practitioners.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

2.1. Introduction to the Banking Marketing Mix

The banking marketing mix, comprising product, price, place, promotion, people, process, and physical evidence (Sipayung, Sinaga, 2017), is a strategic tool used to align marketing activities with customer needs and expectations. Kotler and Armstrong (2018) define the marketing mix as a set of controllable variables that banks use to influence customer decisions. In the context of banking services, these elements play a critical role in shaping customer satisfaction and loyalty, particularly in competitive and service-driven industries (Kusumawati, Oswari, Yusnitasari, Mittal, Kumar, 2021).

While the marketing mix is widely applied across conventional banking systems, its application in Islamic banking requires specific adjustments. Islamic banks operate under Sharia principles, which prohibit interest (riba) and emphasize fairness, transparency, and ethical financial practices. Instead of conventional loans, contracts such as Murabaha (cost-plus financing) and Ijarah (leasing) are used to provide financing in a Sharia-compliant way. These unique characteristics shape how the 7Ps are applied in Islamic banks, as products must not only meet customer needs but also align with religious and cultural expectations. This dual requirement makes the study of the marketing mix in Islamic banking particularly relevant, especially in emerging economies like Algeria where demand for Sharia-compliant financial services is growing rapidly (Faizi, 2024).

2.2. Product and Customer Satisfaction

Product quality and innovation are essential components of the banking marketing mix (Kotler, Armstrong, 2018). Financial products, including car financing solutions, must meet the specific needs of customers while adhering to Sharia-compliant principles in Islamic banking. Research by Faizi (2024) highlights that innovative and customized financial products improve satisfaction by addressing individual financial needs.

In Islamic banking, products such as Murabaha-based financing and Ijarah contracts offer transparency and alignment with customers' religious beliefs, which enhances trust and satisfaction (Faizi, 2024). Despite these advancements, limited studies have analyzed product quality within the context of consumer car financing.

2.3. Price and Its Impact on Customer Perception

Price sensitivity is a determining factor in customer satisfaction, especially in financial services. Transparent pricing, competitive interest rates, and the absence of hidden fees significantly influence customer (Haruna, 2015). In Islamic finance, pricing mechanisms are rooted in ethical principles, avoiding interest (riba) while ensuring fair profit margins for the bank.

Noviarita et al (2024) found that pricing models in Islamic banking enhance satisfaction when they are perceived as fair and transparent (Noviarita, Anggriani, Hilal, Madnasir, Ekawati, 2024). However, pricing challenges remain, as customers often compare Islamic financing costs with conventional alternatives, leading to a perception gap.

2.4. Place (Distribution Channels) and Accessibility

The accessibility of banking services, both physical and digital, is a critical component of the marketing mix. Banks have increasingly adopted omnichannel distribution strategies, including digital banking platforms, mobile applications, and physical branches, to meet customer expectations (Islam, Rahman, 2015).

A study by Amin and Fontiane (2011) emphasized the importance of convenient access in driving customer satisfaction in Islamic banking (Amin, Isa, Fontaine, 2011). While digital platforms enhance convenience, physical branch availability remains significant for relationship-based services like car financing.

2.5. Promotion and Communication Strategies

Effective promotion strategies play a key role in creating awareness and influencing customer decisions. In Islamic banking, promotional efforts must emphasize the ethical and transparent nature of products, aligning with customers' values (Al-Omari, Aljawarneh, Davut, Salah, 2018).

Al-Omari et al. (2018) highlight the importance of targeted advertising and relationship marketing in enhancing satisfaction and trust. However, promotional efforts for car financing remain underexplored, particularly in the context of customer-centric approaches.

2.6. People, Process, and Physical Evidence

The human element (People) in banking, including frontline staff and relationship managers, significantly affects customer perceptions (Kumar, 2013). High service quality, professionalism, and effective communication drive satisfaction (Parasuraman, Zeithaml, Berry, 1988).

Similarly, streamlined processes, such as loan approval and document verification, enhance the customer experience (Zeithaml, Bitner, Gremler, 2005). Studies emphasize that efficient processes reduce waiting times and simplify transactions, which is crucial in car financing.

Lastly, physical evidence, including branch design, website usability, and overall service environment, influences customer perceptions of the bank's credibility (Kusumawati, Oswari, Yusnitasari, Mittal, Kumar, 2021).

2.7. Theoretical Framework:

This study is grounded in two primary theories:

Service Marketing Theory: (Zeithaml, Parasuraman, Berry, 1988):

The theory highlights the importance of service quality and its impact on customer satisfaction. The SERVQUAL model, which measures gaps between customer expectations and perceptions, is applied to analyze how elements of the marketing mix contribute to satisfaction.

Customer Satisfaction Theory: (Oliver, 2010):

This theory emphasizes that customer satisfaction results from the alignment between customer expectations and actual service delivery. In Islamic banking, satisfaction is influenced by ethical compliance, transparency, and trust in the financial institution (Hossain, et al., 2020).

2.8. Research Gap

While numerous studies have explored the relationship between the marketing mix and customer satisfaction, limited attention has been given to consumer car financing in the context of Islamic banking. This research addresses this gap by:

Evaluating the individual and combined impact of the marketing mix on customer satisfaction.

Providing insights into how Al Salam Bank's car financing services meet customer needs.

2.9. Research Hypotheses

Based on the literature review and identified research gaps, the following hypotheses are proposed to evaluate the impact of the banking marketing mix elements on customer satisfaction in the context of consumer car financing:

H1: The overall banking marketing mix (7Ps) has a significant positive impact on customer satisfaction.

H1a: The Product element of the banking marketing mix has a significant positive impact on customer satisfaction.

Supporting evidence: Product innovation and customization improve satisfaction in Islamic banking (Wahab, Mufti, Kamal, Parvaiz, 2016).

H1b: The Price element of the banking marketing mix has a significant positive impact on customer satisfaction.

Supporting evidence: Fair and transparent pricing models enhance trust and satisfaction (Amin, Isa, Fontaine, 2011).

H1c: The Place (distribution channels) element of the banking marketing mix has a significant positive impact on customer satisfaction.

Supporting evidence: Omnichannel strategies, including digital platforms and branch networks, improve accessibility and satisfaction (Mainardes, Rosa, Nossa, 2020).

H1d: The Promotion element of the banking marketing mix has a significant positive impact on customer satisfaction.

Supporting evidence: Effective communication and ethical promotion strategies enhance trust and engagement (Hermawati, 2022).

H1e: The People element of the banking marketing mix has a significant positive impact on customer satisfaction.

Supporting evidence: Professionalism, responsiveness, and service quality drive customer satisfaction (Parasuraman, Zeithaml, Berry, 1988).

H1f: The Process element of the banking marketing mix has a significant positive impact on customer satisfaction.
Supporting evidence: Streamlined processes reduce complexity and improve customer experiences (Zeithaml, Bitner, Gremler, 2005).

H1g: The Physical Evidence element of the banking marketing mix has a significant positive impact on customer satisfaction.
Supporting evidence: Modern infrastructure and a pleasant service environment enhance customer perceptions (Bitner, 1992).

3. RESEARCH METHODOLOGY

3.1 Data collection

Within the context of our research, we placed significant emphasis on collecting objective data and information directly from the bank's actual clientele. To achieve this aim, a structured questionnaire was meticulously designed to capture the opinions and experiences of customers interacting with Al Salam Bank. The questionnaire was distributed both electronically and in person across different Algerian states to ensure randomness and diversity in the sample.

A total of 395 responses were obtained out of approximately 620 distributed questionnaires, yielding a response rate of around 64%. Respondents were required to be existing or potential customers of Al Salam Bank who had experience with, or an intention to use, its car financing services. Incomplete or inconsistent responses were excluded from the final dataset.

To enhance accessibility and representativeness, electronic forms were used as the primary means of distribution, supplemented by dissemination through diverse social media platforms. This strategy ensured extensive outreach while maintaining inclusion from different demographic groups in terms of gender, age, occupation, and geographic location. Such measures reduced the risk of selection bias and provided a broad cross-section of the bank's customer demographic, thereby strengthening the validity and transparency of the methodology

3.2 Measures

A self-administered questionnaire was designed as the primary instrument for data collection and was structured into three main sections. The first section captured demographic and personal information of the respondents. The second section addressed the banking marketing mix, assessing its seven elements and their perceived impact on customers and banking operations. The third section focused on customer satisfaction in the specific context of consumer car financing at Al Salam Bank, measuring satisfaction with the services and products provided, as well as identifying areas where the bank could improve the customer experience to strengthen satisfaction and loyalty.

To ensure measurement accuracy, a five-point Likert scale was employed, enabling respondents to express their views and evaluate the given statements on a continuum from one to five. This approach generated precise and analyzable data, providing deeper insights into customer expectations and perceptions. The use of this questionnaire aimed to collect reliable evidence for analyzing the relationship between the banking marketing mix and customer satisfaction, thereby contributing to the academic understanding of marketing strategies in the banking sector.

4. DATA ANALYSIS AND RESULTS

4.1. Path model estimation

To analyze the relationship between the elements of the banking marketing mix and customer satisfaction, particularly in the context of consumer car financing at Al Salam Bank, this study employed partial least squares structural equation modeling (PLS-SEM). This method was selected because it is well-suited for studies with relatively small to medium sample sizes, such as our 395 respondents from different Algerian states, and because it performs reliably when data are not normally distributed (Goodhue, Lewis, Thompson, 2012).

Given its strong reputation in marketing research for handling smaller sample sizes effectively and for producing reliable results even with non-normal data (Hair, Sarstedt, Ringle, Mena, 2011), PLS-SEM was considered the most appropriate method for this analysis.

4.1.1. Measurement model

Since all constructs were modeled reflectively, the study adopted the guidelines of Anderson and Gerbing (1988) to assess internal consistency, convergent validity, and discriminant validity before proceeding to the structural model. Reliability and validity were evaluated following Chin (2010) and Fornell & Larcker (1981) and are summarized in Tables 1 and 2. Specifically:

Internal consistency reliability was considered satisfactory if the composite reliability exceeded 0.7;

Convergent validity of the scales was established if factor loadings were statistically significant ($p < 0.01$) and the average variance extracted (AVE) exceeded 0.5.

Discriminant validity was confirmed if the square root of the AVE for each construct was greater than the correlations between pairs of latent variables.

Table 1. Measurement items, reliability and construct validity

Construct	Indicator	Factor loading	AVE	Composite reliability	Cronbach's alpha
Product	1. Al Salam Bank provides a wide selection of car financing solutions.	0.825	**0.703**	**0.877**	**0.791**
	2. The bank’s financing services add significant value to the car acquisition process.	0.862			
	3. Al Salam Bank consistently strives to enhance and innovate its car financing offers to align with customer expectations.	0.828			

Table 1 (cont.). Measurement items, reliability and construct validity

Construct	Indicator	Factor loading	AVE	Composite reliability	Cronbach's alpha
Price	1. Al Salam Bank applies adaptable and flexible pricing policies for vehicle financing.	0.771	**0.671**	**0.859**	**0.757**
	2. The financing costs reflect fairness in relation to the value delivered.	0.868			
	3. The bank presents multiple payment schemes that suit different customer needs.	0.815			
Place	1. Al Salam Bank's branches are situated in convenient, easily reachable areas.	0.866	**0.728**	**0.889**	**0.816**
	2. The bank ensures that its services are accessible and provided promptly at suitable locations.	0.813			
	3. Services are delivered through diverse channels – digital platforms and physical branches – for greater customer ease.	0.879			
Promotion	1. Al Salam Bank organizes impactful promotional campaigns.	0.791	**0.700**	**0.875**	**0.788**
	2. Multiple communication channels are used to promote the bank's offerings.	0.879			
	3. The bank actively provides customers with timely information on its services and products.	0.836			
People	1. Al Salam Bank's employees demonstrate personal attention to my requirements.	0.857	**0.715**	**0.883**	**0.801**
	2. Staff members are responsive and ready to address inquiries quickly.	0.833			
	3. Employees possess the necessary expertise to offer relevant guidance and support.	0.846			
Process	1. Al Salam Bank ensures its services are straightforward to access.	0.860	**0.750**	**0.900**	**0.834**
	2. The bank delivers prompt online car financing services.	0.845			
	3. Transparency and clarity are maintained throughout the financing process.	0.892			
Physical Evidence	1. The bank's facilities are modern and well-designed.	0.861	**0.722**	**0.886**	**0.809**
	2. Advanced technologies are integrated into the delivery of services.	0.864			
	3. Branches provide a comfortable and welcoming atmosphere for clients.	0.824			

Table 1 (cont.). Measurement items, reliability and construct validity

Construct	Indicator	Factor loading	AVE	Composite reliability	Cronbach's alpha
Customer Satisfaction	1. The service received from Al Salam Bank's staff during the car financing process was excellent.	0.929	**0.848**	**0.971**	**0.964**
	2. The financing rates I paid were fair and reasonable.	0.916			
	3. The time taken to finalize my financing application was satisfactory.	0.941			
	4. The simplicity of the procedures involved in financing met my expectations.	0.907			
	5. The terms and conditions of the financing agreement were clear and understandable.	0.918			
	6. The support and assistance provided throughout the financing period were appropriate and helpful.	0.912			

Source: Outputs of Smart PLS V3.

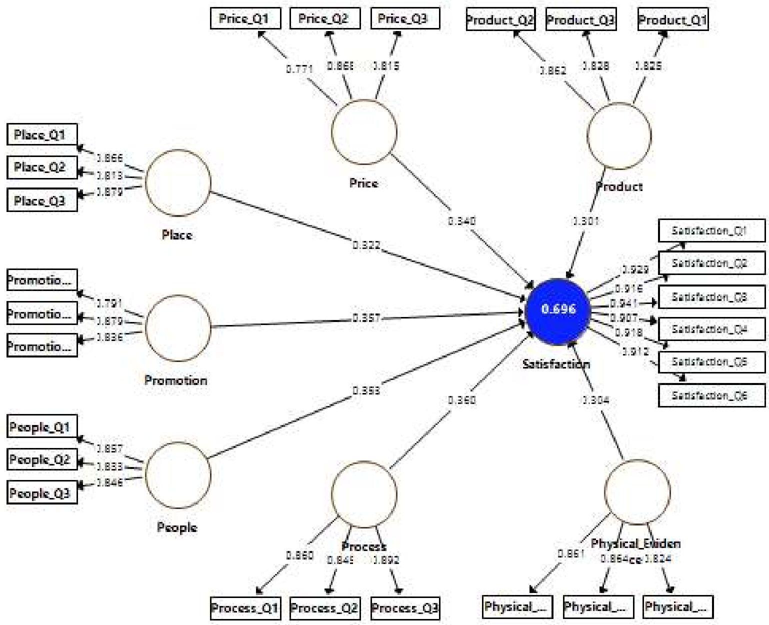

Figure 1. Results of the path analysis

Source: Outputs of Smart PLS V3.

Table 2. Discriminant validity (Fornell–Larcker criterion)

	People	Physical Evidence	Place	Price	Process	Product	Promotion	Satisfaction
People	**0.845**							
Physical Evidence	-0.036	**0.850**						
Place	-0.113	0.007	**0.853**					
Price	-0.027	0.085	-0.004	**0.819**				
Process	-0.024	-0.079	0.048	0.022	**0.866**			
Product	0.057	-0.144	-0.006	-0.018	-0.041	**0.838**		
Promotion	0.003	0.014	-0.030	-0.093	-0.017	-0.007	**0.836**	
Satisfaction	0.307	0.255	0.288	0.324	0.333	0.252	0.313	**0.921**

Source: Outputs of Smart PLS V3.

The bold values indicate that the diagonal elements are the square root of the Average Variance Extracted (AVE). The diagonal elements should be greater than the off-diagonal elements (i.e., the correlations among constructs) to establish discriminant validity.

All indicators displayed reliable indicator performance, as the magnitude of outer loading exceeded 0.70 (see Figure 1).

The AVE for each construct surpassed 0.50, signifying convergent validity. The measurement model demonstrated satisfactory internal consistency reliability, as both the composite reliability and Cronbach's alpha for all constructs exceeded 0.70. Furthermore, the discriminant validity of the measurement scale was affirmed. This is attributed to the HTMT confidence interval excluding 1, and the square root of the AVE of each construct surpassing the construct's maximal correlation with any other constructs, thereby satisfying the Fornell–Larcker criterion (see Table 2). The construct measures were deemed reliable and valid, meeting all non-parametric quality criteria.

4.1.2. Structural model

Based on the outcomes of the measurement model, the analysis proceeded with the structural equation model. The evaluation of the structural model adhered to the recommendations outlined by Hair, Hult, Ringle, and Sarstedt (Hair, Hult, Ringle, Sarstedt, 2016). These include:

- an R^2 value above 0.25, which reflects a satisfactory level of explanatory power;
- variance inflation factor (VIF) scores between 0.2 and 5, ensuring that multicollinearity does not pose a concern;

- evidence of predictive relevance ($Q^2 > 0$) for the endogenous variable;
- and an acceptable Goodness of Fit (GoF) value, which indicates the adequacy of the model.

The analysis revealed that the R^2 for the dependent construct "Satisfaction" was 0.696, surpassing the recommended threshold of 0.25. This means that approximately 69.6% of the variation in customer satisfaction is explained by the proposed model, confirming its strong predictive capacity. In addition, multicollinearity was not detected, as all VIF values were within the acceptable range. The predictive relevance criterion was also met, with Q^2 values greater than zero across the predictors.

Furthermore, the overall model fit was evaluated using the GoF index proposed by Tenenhaus et al. (2005), which is calculated as:

$$GoF = \sqrt{AVE_{mean} \times R^2_{mean}}$$

Substituting the values from the present study (AVE_{mean} = 0.730; R²_{mean} = 0.696), the resulting GoF was:

$$GoF = \sqrt{0.730 \times 0.696} \approx 0.713$$

This value exceeds the recommended cut-off of 0.36, providing strong evidence of the robustness and adequacy of the model.

4.1.3. Hypothèses tests

The relationships between variables were scrutinized utilizing a bootstrapping technique to assess the significance of the paths within the structural model. The results of the path analysis for the impacts of various factors on Satisfaction are summarized in Table 3 and Figure 2:

H1a **Product → Satisfaction**: β = 0.340, p = 0.000
H1b **Price → Satisfaction**: β = 0.322, p = 0.000
H1c **Place → Satisfaction**: β = 0.357, p = 0.000
H1d **Promotion → Satisfaction**: β = 0.353, p = 0.000
H1e **People → Satisfaction**: β = 0.360, p = 0.000
H1f **Process → Satisfaction**: β = 0.304, p = 0.000
H1g **Physical Evidence → Satisfaction**: β = 0.301, p = 0.000

Each path demonstrates substantial statistical significance ($p<0.05$), indicating that all the independent variables exert a positively notable impact on Satisfaction. Furthermore, the path coefficient (β) values elucidate the strength of the relationships among the variables. From these findings, encapsulated in Table 3 and Figure 2, it can be deduced that all the elements – People, Physical Evidence, Place, Price, Process, Product, and Promotion – positively influence Satisfaction to various extents, ensuring high accuracy and reliability in our estimations.

The findings strongly validate the central hypothesis of this research H1 7P mix → Satisfaction β = 0.301, p = 0.000), formulated as: "*The banking marketing mix exerts a significant effect on customer satisfaction in the case of consumer car financing at Al Salam Bank*". The statistical results confirmed that all path coefficients were positive and highly significant, with notable β values across the different marketing mix dimensions. These outcomes provide clear evidence that the banking marketing mix, when considered holistically, plays a decisive role in shaping customer satisfaction. Such results highlight the strategic importance of designing and implementing a comprehensive marketing mix within the banking industry, particularly in areas of consumer financing such as car acquisition.

Table 3. Summary of partial least squares structural equation modeling (PLS-SEM) path analysis and hypotheses testing

	Hypothesis	Original Sample (O) β-values	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Supported?
7P mix -> Satisfaction	**H1**	0.301	0.301	0.032	9.541	0.000	Yes
Product -> Satisfaction	**H1a**	0.340	0.339	0.032	10.585	0.000	Yes
Price -> Satisfaction	**H1b**	0.322	0.322	0.032	10.052	0.000	Yes
Place -> Satisfaction	**H1c**	0.357	0.357	0.029	12.444	0.000	Yes
Promotion -> Satisfaction	**H1d**	0.353	0.353	0.028	12.434	0.000	Yes
People -> Satisfaction	**H1e**	0.360	0.357	0.030	11.969	0.000	Yes
Process -> Satisfaction	**H1f**	0.304	0.300	0.031	9.715	0.000	Yes
Physical_Evidence -> Satisfaction	**H1g**	0.301	0.301	0.032	9.541	0.000	Yes

Source: Outputs of Smart PLS V3.

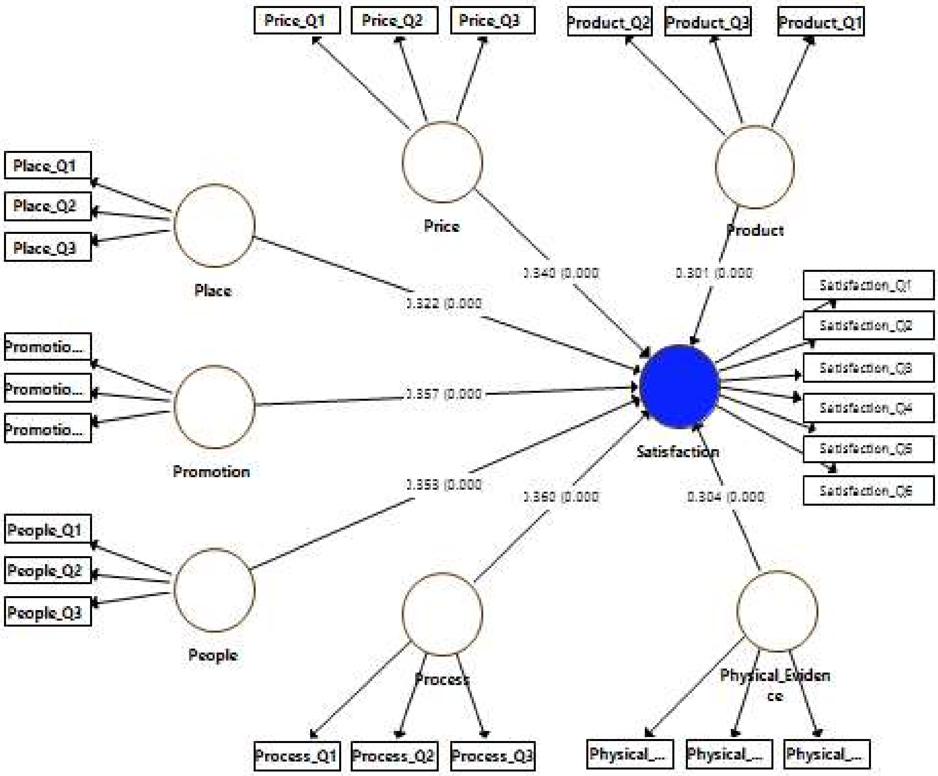

Figure 2. Results of the path analysis and hypotheses testing

Source: Outputs of Smart PLS V3.

5. DISCUSSION

The purpose of this section is to interpret the findings of the study and relate them to the existing literature. This discussion highlights the significance of each dimension of the banking marketing mix (7Ps) in influencing customer satisfaction, with specific insights drawn from the case of Al Salam Bank’s car financing services.

5.1. Impact of the Banking Marketing Mix on Customer Satisfaction

5.1.1. Product

The findings indicate a significant positive relationship between the product element and customer satisfaction ($\beta = 0.340$, $p = 0.000$). This aligns with previous studies that emphasize the role of innovative and tailored financial products in enhancing customer experiences (Wahab, Mufti, Kamal, Parvaiz, 2016). Al Salam Bank's efforts to provide a diverse range of car financing solutions and continuous improvement of services appear to address the specific needs of its customers, particularly in a market where Islamic finance principles play a critical role.

5.1.2. Price

Price emerged as one of the strongest predictors of satisfaction (β = 0.322, p = 0.000), highlighting the importance of competitive and flexible pricing strategies. This result corroborates findings by Amin and Fontaine (2011), who argue that customers in Islamic banking are highly sensitive to pricing fairness and transparency. Al Salam Bank's flexible payment plans and value-driven pricing align with customer expectations and significantly contribute to satisfaction.

5.1.3. Place

The accessibility and convenience of Al Salam Bank's services demonstrated a substantial impact on satisfaction (β = 0.357, p = 0.000). This result supports research by Mainardes and Nossa (2020), who emphasize the importance of multichannel service delivery in banking. Customers benefit from both physical branch accessibility and digital channels, which enhance convenience and service reliability.

5.1.4. Promotion

The promotional strategies employed by Al Salam Bank were found to have a notable influence on satisfaction (β = 0.353, p = 0.000). This is consistent with the findings of Hermawati (2022), who highlighted the role of effective communication in raising awareness and building trust. Targeted promotional campaigns that emphasize the bank's ethical principles and value-added services play a significant role in engaging customers and fostering satisfaction.

5.1.5. People

The People element, encompassing the skills, responsiveness, and professionalism of bank staff, also exhibited a significant positive effect on satisfaction (β = 0.360, p = 0.000). These findings align with Parasuraman et al. (1988), who stress the importance of human interaction in delivering high-quality banking services. Al Salam Bank's emphasis on employee expertise and customer-centric service contributes to building trust and improving overall satisfaction.

5.1.6. Process

The Process element emerged as the most influential factor (β = 0.304, p = 0.000), underscoring the importance of efficient and transparent procedures**.** This result aligns with Zeithaml et al. (2005), who argue that streamlined processes enhance the customer experience by minimizing delays and simplifying complex financial transactions. Al Salam Bank's focus on digital solutions, quick approvals, and clear documentation processes ensures a smooth experience for customers seeking car financing.

5.1.7. Physical Evidence

The role of physical evidence, including the bank's infrastructure, technology, and service environment, was also significant (β = 0.301, p = 0.000). This finding supports Bitner's (1992) servicescape theory, which emphasizes the impact of physical surroundings on customer perceptions. Al Salam Bank's modern facilities and welcoming atmosphere create a positive impression and contribute to higher satisfaction levels.

5.2. Theoretical Implications

This study contributes to the existing literature by providing empirical evidence of the impact of the 7Ps of the marketing mix on customer satisfaction in the context of Islamic car financing services. While previous studies have examined individual elements of the marketing mix, this research highlights their combined influence, offering a more holistic understanding of customer satisfaction in Islamic banking.

The findings also validate the application of the Customer Satisfaction Theory (Oliver, 1980) and Service Marketing Theory (Parasuraman et al., 1988) in the banking sector. The alignment between customer expectations and the bank's service delivery underscores the relevance of these theories in evaluating satisfaction.

5.3. Practical Implications

The results of this study provide actionable insights for bank managers and decision-makers:

Product Innovation: Banks should continuously improve and tailor their financial products to meet evolving customer needs.

Competitive Pricing: Offering flexible and transparent pricing plans is crucial for building trust and satisfaction.

Omnichannel Accessibility: Enhancing physical and digital service delivery ensures convenience and reliability for customers.

Promotional Strategies: Effective communication of value-added services and ethical principles strengthens customer relationships.

Employee Training: Investing in staff training ensures that employees deliver responsive and high-quality service.

Streamlined Processes: Simplifying procedures and adopting digital solutions enhances the customer experience.

Physical Environment: Modernizing infrastructure and ensuring a comfortable environment improves customer perceptions.

5.4. Limitations and Future Research

Despite its contributions, this study has certain limitations:

The study focused on a single bank (Al Salam Bank) and a specific service (car financing), which may limit the generalizability of the findings.

The sample was restricted to Algerian customers, which may not represent broader regional or international contexts.

Future research could explore:

The impact of the marketing mix on other banking services (e.g., housing finance, investment products).

Comparative studies between Islamic and conventional banks.

The role of digital transformation in enhancing customer satisfaction

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Author Contributions Introduction: M. R. D.; Literature Review: A. M.; Gaps in Literature: T. M.; Methodology: M. R. D., A. M.; Results: A. M., T. M.; Conclusion: M. R. D., T.M.; References: M. R. D., A. M.; Writing – Review and Editing: all authors.

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TARGET FUNCTION OF UKRAINE'S ECONOMY AS A SYSTEM IN A CHANGING VUCA – WORLD

The analysis of approaches to the definition of the target function of the Ukrainian economy as a system in the changing VUCA – world has been carried out. The main target function is defined as ensuring, at least, the survival of society in interaction with the external environment, realized by ensuring the reproduction of material goods, labor resources and production relations. It is proved that the economic system, by definition, is an open system whose type is determined depending on the quantity and quality of incoming and outgoing flows. The system of "closed type" is limited to incoming and outgoing flows formed by the environment and the processes of production, distribution, exchange, and consumption of material goods. The system of "open type" assumes the presence of a greater number of flows "input – output", formed in the process of integration of Ukraine into the world economic space.

Keywords: economy, system, target function, reproduction, VUCA – world.

1. INTRODUCTION

The target function, by definition, is a mathematical expression of the goal of optimal control of a complex system, formalized in the form of a control quality functional. The target function together with the constraints imposed on the values characterizing the state of the system form a mathematical model of the control problem to be solved. Optimal in the process of control the solution of the problem delivers the extremum of the target function – minimizes or maximizes (depending on the meaning of the problem) the expression of the target function. The solution is provided by appropriate selection of values of controlled variables, which in a real system are specific physical quantities characterizing production and economic processes. The search for an optimal solution is usually very difficult. The presence of constraints makes it impossible to find the extremum

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of the target function using the classical method with the use of derivatives. The choice of a particular method is determined by the type of the target function and constraints.

2. LITERATURE REVIEW

For many years now, organizations have been using change management to tackle necessary changes: This means changing processes, structures and cultures or even fundamentally transforming the entire company. The Gabler Business Dictionary defines change management as: "Ongoing adaptation of corporate strategies and structures to changing conditions".

However, given the fast pace of today's world, the demand for change management has increased dramatically. Conditions for people, companies and the economy are changing ever faster: technical innovations are coming onto the market at ever shorter intervals, the complexity of the world is becoming greater and more confusing, and globalization is increasing networking and intercultural cooperation.

Added to this are the demographic changes that are transforming the labor market, economic crises, and rapidly changing competition. There is always new territory to explore; the world is changing rapidly.

We cannot foresee today what changes we will face tomorrow. This unpredictability that characterizes our time has a name: VUCA.

The relevance of specifying the target function of the economy of Ukraine as a system in the changing VUCA – world is determined by the multi-criteriality of assessing the effectiveness of economic processes and the diversity of interests of their participants, which come into conflict at the stages of crisis development of society.

Identification of fundamental goals of functioning of economic systems allows to form an objective basis for their management, the dominance of which over subjective factors determines the long-term and sustainable ability to fulfill the functions inherent in them from nature.

Ukrainian and foreign scientists, among which should be noted (Ambrose Gavin, 2022; (Efimenko, 2022; Dolgalova, Yeshchenko, Fasolko, Mykhalchenko, Udovychenko, 2020; Zhalilo, 2019; Zabolotskyi, 2024).

3. METHODOLOGY

Goal setting – determination of mutually agreed characteristics of desired and potentially realizable for a specified period results of economic system functioning. Goal setting for economic systems of different levels of organization is based on the general objectives of the economy as a functional sphere of life activity of society.

Goal setting arises wherever there is a problem, i.e., a discrepancy between the desired and the actual. Thus, the dialectic of objective and subjective is the basis of goal-setting activity of an individual, collectives and society. This feature of goal setting of social systems, consisting in the possibility for each of its elements to have its own set of goals of different orientation, determines the multiplicity of approaches to the formulation of the target function in various spheres of society, including the economy.

When managing economic systems of different levels of organization, the definition of the target function is a priority task, as it allows not only to assess the effectiveness of this process, but also to coordinate the actions of its participants in a single direction, which is especially important for systems, the element of which is a person.

Theoretical and empirical methods: analysis, synthesis, generalization, comparison.

Purpose of the article: Given the variety of approaches to the definition of the target function of the Ukrainian economy as a system in the changing VUCA – world, the purpose of this publication is to analyze them and identify the approach that best reflects the essence of the managed object.

4. RESULTS

Effective management requires the fulfillment of objective conditions, such as the presence of the management goal and the presence of the criterion of management effectiveness (Hays, 2021).

The management goal is understood as a set of values of quantitative or qualitative characteristics that determine the required state of the control object (CO). If the goal is unknown, control has no sense, and the change of states turns into aimless wandering.

The goal is represented by the point to which the system should be transferred from the existing state, or by the trajectory of the control object transfer to the required state in the form of, for example, additive convolution:

$$F\max = \sum_{i=1}^{n} a_i y_i \tag{1}$$

restricted

$$\sum_{i=1}^{n} b_i y_i \le c, \tag{2}$$

where:

y_i – i-th characteristic of the system;
a_i – importance (weight) of the i-th characteristic;
b_i – resource consumption to maintain the i-th characteristic in the required state;
c – total amount of resources.

Presence of the criterion of management efficiency. The generalizing criterion of management effectiveness is the degree of achieving the goal of system functioning. In addition to the degree of goal achievement, the quality of management can be assessed by private criteria: the degree of compliance of control actions with the required states of (CO), the quality of decisions, the accuracy of management (Ambrose Gavin, 2022).

One of the most common approaches to the formulation of the goal of functioning of the Ukrainian economy as a system in the changing VUCA – world, is the orientation to human existence and satisfaction of human needs: primary and secondary, individual, collective.

Thus, within the framework of political economy it is stated that from the point of view of production as such, man is not only its subject, but also its goal. The social product, having passed through distribution and exchange, completes its way in consumption. Without consumption, any production is meaningless. And this means that the satisfaction of human needs, human development is the natural destination of social production.

In this case, we are talking about social production in general, without regard to its socio-economic form. In addition to the ultimate purpose of social production, as such, there is its direct purpose, inherent in each, historically determined mode of production. It arises from the property relations prevailing in this or that social system (Werker, 2020).

According to the study by O. Dolgaleva, there is an objective and subjective aspect of goal setting in the economic system. Based on the multivariable of the realization of the main goal of society, the multivariable of the criterion of its effectiveness is possible. Nevertheless, the value system in the form of value orientation of the management system (state macroeconomic regulation) is the main generator of assessments of the significance of the realization of one or another goal, i.e., it is a criterion one.

The global target function of social production and the criterion of efficiency of its management system is the quality of life. The specificity of the criterion of efficiency of social production and macroeconomic regulation mechanism for the given conditions of the country is its compliance with this target function, i.e., such a system of state regulation of the economy, which provides the fastest realization of the target function, can be considered effective (Dolgaleva, 2018).

Y. A. Zhalilo gives an economic interpretation of the basic goal of any organization – the subject of strategy. This goal is to ensure the continuity and integrity of the existence of the organization as a system. In the economic system, this existence is ensured through the continuous functioning of the organization in the system of production relations that ensure its continuous reproduction (Zhalilo, 2019).

Karl Marx returns political economy to the analysis of reproduction not only in monetary, but also in the natural equivalent. In his complex socio-economic analysis of social production, it is presented both as a prerequisite for the existence of mankind and as a system-forming factor of the conditions of its existence, changing depending on specific historical conditions. In “Capital” reproduction is considered as a single process: reproduction of material goods, the reproduction of labor power, reproduction of production relations.

However, the assumption of the target function of the economy exclusively as reproduction without reservations and limitations is currently actively debated. Thus, until the middle of the 20th century, natural resources, which constitute the means of human life, were abstractly assumed to be limited (the factor of rarity), but in principle inexhaustible. At present, the “simple reproduction” (and, even more so, depletion) of natural goods comes into conflict with the increasing needs of the continuing population growth.

Nevertheless, expanded reproduction is still presented in economic theories and economic models as a “norm”, as a synonym of progress. This situation has led to the fact that the inviolability of the paradigm of economic growth, especially realized on an extensive basis, is questioned (Dolgalova, Yeshchenko, Fasolko, Mykhalchenko, Udovychenko, 2020).

Within the framework of the political-economic aspect of the analysis of the criterion of efficiency of state regulation of the economy as a system in the changing VUCA – world, two stages are distinguished: the problem statement (definition of the target function) and the mechanism of its realization. Consequently, the criterion of efficiency combines two components of the socio-economic genotype – the goal and the means of its achievement. In the target situation of managerial decision-making two main components are distinguished – social needs and the system of values of society. It is they that fix the directions along which the desired state of society and economy is determined (Khetagurova, Khetagurova, Dzukaeva, 2018).

As for the second component of the criterion of efficiency of state macroeconomic regulation – the definition of ways and means of goal realization, it reflects the mechanism of decision-making in accordance with the resource base and socio-economic norms of economic management. Both components of the criterion of efficiency of state regulation of the economy are integrated in the concept of “socio-economic efficiency of social production”. Thus, in a certain sense, the criterion of macroeconomic regulation efficiency is manifested in the criterion of efficiency of social production.

Regarding the issue of unambiguity or multiplicity of criteria for the effectiveness of a phenomenon, according to T. I. Efimenko, we should proceed from its essence as the main distinguishing feature of this phenomenon, reflecting its essence. Since the essence of concrete things and phenomena (as opposed to the forms of their manifestation) is unambiguous, so the criterion (as a measure of evaluation of the phenomenon) should also be unambiguously defined (Efimenko, 2022). This does not mean that the criterion of this or that phenomenon is static and eternal. It changes historically along with the development of the phenomenon.

Therefore, it can be specific, just as the goals of society and the mechanism of their realization are specific in different historical conditions. (Besides, it can be reflected by a system of various quantitative indicators characterizing the phenomenon). Nevertheless, about the universal goals of socio-economic development and the means of their realization, an unambiguous criterion of effectiveness is quite acceptable (Sarris, 2019).

Speaking about the essence of the phenomenon and a single criterion of effectiveness, it is necessary to refer to the philosophical approach, within the framework of which the main purpose of living systems, as well as systems, of which a human being is an element, is existence. Existence – (Latin exsistentia/existentia from exsisto/existo – appearing, appearing, appearing, arising, originating, appearing, existing) – is an aspect of any being, as opposed to its other aspect - essence. Unlike the term “being”, the term “existence”, as a rule, expresses only an aspect of being, while the term “being” is also used in the sense of “everything existing”, “the world as a whole” (Eden, 2020).

For economic systems, existence is ensured by reproduction, which, depending on the conditions of internal and external environment, can be simple, expanded and, at certain intervals of time, narrowed. It is important to note that in the late XX century, some researchers (Kelly, 2022) began to use the term (English contracted reproduction), regressive, contracted reproduction – in fact, underproduction - to denote the collapse, degrading trend in the development of the object. And, despite the criticism of this term from the point of view of linguistics, the reproduction of the system, characterized by a decrease in quantitative and/or qualitative indicators of its development, can be defined as a management goal at some stages of its development (Figure 1).

It is important to clarify that, despite the existence of a common goal of functioning of the economy as a system regardless of its model (predominantly closed or open), there is a difference in goal setting for these types of models. In the framework of the systemic approach, the goal of the economy of the “closed type” is, at least, the simple reproduction of the economic system itself and the human being as its element.

This goal is achieved by organizing the interaction between society and its environment. For the “open-type” model, the goal of ensuring at least simple reproduction requires taking into account not only natural-resource flows “input-output”, but also several other flows that ensure the interaction of the national economy with the global economic system (Figure 2).

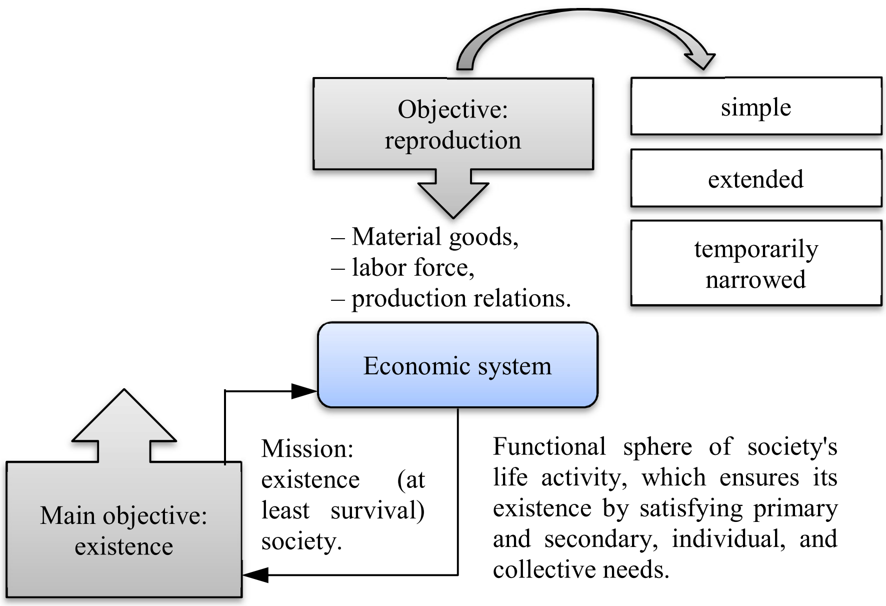

Figure 1. Mission and goals of economic systems functioning

Source: Author's research.

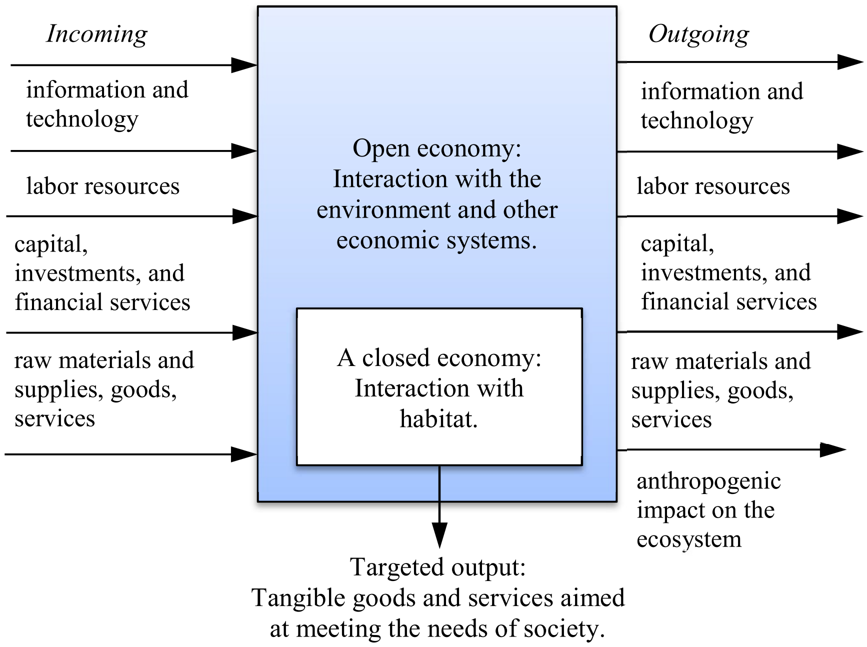

Figure 2. Input-output flows for closed and open economic systems

Source: Author's research.

5. DISCUSSION

Thus, given the presence of constantly operating flows “input – output”, the economy, by definition, cannot be a closed system from the point of view of systems theory. At the same time, the national economy as a system can be limited by the interaction of society exclusively with the environment, in which case it is called “closed”.

An economic system, by definition, is an open system, the type of which is determined depending on the quantity and quality of incoming and outgoing flows: a “closed-type” system is limited to incoming and outgoing flows formed by the environment and the processes of production, distribution, exchange and consumption of material goods; an “open-type” system assumes the presence of a greater number of flows “input – output” formed in the process of its integration into the world economic space.

6. CONCLUSIONS

Thus, the authors concluded that various conceptual variants of institutional theory, despite their internal heterogeneity and contradictions, are effective tools not only for analyzing the role of the state, but also for developing the target function of economic policy.

The key to the successful realization of the target function of the economic policy of the state is the optimal combination of personal, collective, and public interests according to the criterion of socio-economic efficiency. Experience shows that this can be achieved only through the consolidation of efforts of state and non-state institutions, market, and state instruments of regulation of socio-economic processes using the positives of international economic institutions.

As a direction for further research in the framework of the considered topic, we can highlight the problem of interaction of various social and economic institutions in the issues of coordination of interests realized in specific spheres of activity, for example, in the communal sphere, in the sphere of wage labor or in the sphere of consumption.

As the main target function of the Ukrainian economy as a system in the changing VUCA – world, it is possible to define ensuring, at least, the survival of society in interaction with the external environment, realized through the reproduction of material goods, labor resources and production relations.

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THE IMPACT OF SELF-EFFICACY ON PERFORMANCE MEDIATED BY INTRAPRENEURIAL BEHAVIOR AMONG HEALTHCARE MARKETING PROFESSIONALS: A MULTIPLE MEDIATION MODEL

Generally, self-efficacy has a positive impact on job performance. As a standalone attribute, self-efficacy does not provide empirical evidence to show the intervening role of intrapreneurial behaviors such as proactive, opportunity-recognition, opportunity-taking, and networking behavior to facilitate employees' performance. Based on the integrated model of intrapreneurial behavior and stimulus-organism-response theory, the mediating effect of intrapreneurial behaviors on the direct effect of self-efficacy on performance were tested using structural equation modeling. Data was collected using online questionnaires from 162 healthcare marketing employees in Nigeria. Results showed that self-efficacy independently had a significant influence on performance. Interestingly, self-efficacy had no direct effect on performance in the presence of the mediators indicating full mediation by proactive and networking behavior apart from opportunity-recognition and opportunity-taking behavior, which is suggestive of an apparent gap in behavior. The study affirms that employees' perceived self-efficacy impacts job performance when the right intrapreneurial behavior is displayed.

Keywords: intrapreneurial behavior, self-efficacy, stimulus-organism-response theory, integrated model of intrapreneurship, job performance.

1. INTRODUCTION

Every performance-driven organization is triggered by the need for employees to deliver organizational set goals consistently. Since every organization exists in a highly competitive space, especially in pharmaceutical marketing, the standalone attribute of self-efficacy is not a necessary guarantee that organizational goals will be attained by the employee. This is because self-efficacy does not necessarily imply actions but rather a state of self-perception (Bandura, 2001; Bandura, 2006). Therefore, the employee is required to develop entrepreneurial skills or competencies (also known as intrapreneurial behavior) to

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navigate through the challenges inherent in the task and business environment, to succeed in their designated jobs (Gawke et al., 2019; Oamen, Lawal, 2024). In other words, these intrapreneurial behaviors are actions taken by the individual employee when performing job-related activities that impact job performance. In the context of the pharmaceutical marketing industry, although generally speaking, self-efficacy directly influences performance, the connecting and mediating role of intrapreneurial behavior in translating employees' self-perceived capability to actual performance has not been fully empirically explored. To empirically address this gap, using structural equation modeling, the structural relationships between employee self-efficacy, intrapreneurial behavior, and job performance of healthcare marketing professionals were assessed based on substantive theory. The theoretical framework of the integrated model of intrapreneurial behavior and the mechanism of the stimulus-organism-response theory provided the structure for the development of models, hypotheses, and inferences. The purpose of this study is to investigate the explanatory (linking) effect of intrapreneurial behavior on the relationship between self-efficacy and job performance.

This paper is presented as follows: first, the theoretical basis, literature review and hypotheses development, followed by study methodology. Thereafter, the results were presented and extensively discussed in line with extant literature. Finally, the conclusion and limitations of the study were presented.

1.1. Theoretical Framework of the study

1.1.1. Integrated model of intrapreneurial behavior

The integrated model of intrapreneurship was synthesized by Neessen et al (2019) and aimed to provide an integrated perspective of the attitudes, characteristics, and behavior of employees which impacts organizational performance outcomes. The model framed intrapreneurship as a bottom-up process in which employees' exhibit intrapreneurial behaviors to support organizational growth and performance. The intrapreneurial behaviors are considered to be influenced by the attitudes and characteristics of the employees. Neessen et al (2019) affirmed that in the workplace, proactive, opportunity recognition, opportunity taking, and networking are critical behavioral aspects of intrapreneurship among employees. Furthermore, the model identified the moderating influence of organizational factors (such as support from management, organizational climate, resource availability, reward structure, etc.) in shaping the feasibility of attaining desired outcomes. For an individual employee to produce results and support business growth, more proactive persons need to display the right mix of intrapreneurial behavior towards the external market and within the organization (Fellnhofer et al., 2016). Likewise, employees would actively recognize and utilize business opportunities in a nutshell; intrapreneurial behaviors work in tandem with employee characteristics toward delivering the performance goals expected of the employee (Fellnhofer et al., 2016). Therefore, the framework of the integrated model of intrapreneurship establishes a guideline for testing the impact of employee characteristics [such as self-efficacy] on performance with intrapreneurial behavior which acts as a mediator.

Based on the theoretical framework of the study, two models were developed to answer critical research questions- Is self-efficacy a standalone predictor of job performance? Is the effect of self-efficacy on job performance different in the presence of intrapreneurial behavior? Are intrapreneurial behaviors, opportunity recognition, opportunity taking, and networking significant mediators of the relationship between self-efficacy and job performance among healthcare marketing executives?

1.1.2. Stimulus – Organism – Response Theory

The stimulus – organism – response theory (SOR) advanced by Mehrabian and Russell, (1974), and Jacoby (2002) provided the theoretical basis for describing the behavior of an individual as it relates to the external triggers from the environment [stimuli S], which leads to an internalization or internal, cognitive processing within the individual [organism O], leading to an outcome or expected behavior [response R]. The SOR theory has been extensively applied in psychology and the behavioral sciences to explain consumer behavior; online sales and shopping (Park, Lennon, 2009; Lin et al., 2021; Gong et al., 2022), marketing (Anisimova et al., 2019), healthcare marketing (Mishra et al., 2022), healthcare services (Suess, Mody, 2017), and buying decisions (Jornales, 2023). The SOR model is considered an extension of the decision-making model which utilizes the learning, reasoning, and perceptive processing capability of an individual to arrive at a reasonable decision or action (Hochreiter et al., 2023).

The SOR theory is an improvement to the simplistic input-to-output model which was inherently limited in that it did not accommodate or make provision for the rational processes of the individual in making a response or to elicit a behavior. Simply put, the theory posits that a stimulus (S) from the environment (internal or external), triggers an internal reaction in an individual regarded as an organism (O), which eventually results in a behavioral response (R). In other words, the stimuli S influence the cognitive and emotional state of the individual which finally results in actions that are reflected as behavior (Fu et al., 2021). An individual based on the nature of the stimuli he or she receives analyzes it using the cognitive, psychological, and emotional capabilities available to him or her to generate rational information before responding to the stimuli (Sun et al., 2021). The stimulus (S) is the external factor or marker that triggers a reactionary behavior from a person or individual. The response R based on the definition of Floh and Madlberger (2013) and Perez-Vega et al. (2021) is the delivery of expected outcomes and service based on the cognitive, psychological, and emotional processing of the employee. It is noteworthy that the behavioral response may have negative or positive outcomes depending on the quality of the organism [O] component (Jacoby, 2002).

1.1.3. Conceptual Framework of the study

Based on the framework of the integrated model of intrapreneurship and SOR, it is plausible that self-efficacy [characteristic] influences Intrapreneurial behavior [proactive, opportunity recognition, opportunity taking, and networking] which in turn influences organizational performance. In other words, self-efficacy is the stimulus – S which triggers the Organism – O [behavior] to yield performance [Response – R]. Hence, a primary focus of the study is to further our understanding of the underlying intrapreneurial behavioral mechanisms that explain the effect of self-efficacy on job performance using structural equation modeling. This research paper expounds the SOR model and integrated model of intrapreneurship by comparing results from two structural models – Model 1 which is the simplistic input-output model (direct effect of self-efficacy on job performance), and Model 2 which explores the indirect effect of self-efficacy on job performance through the intervening mechanism of intrapreneurial behavior.

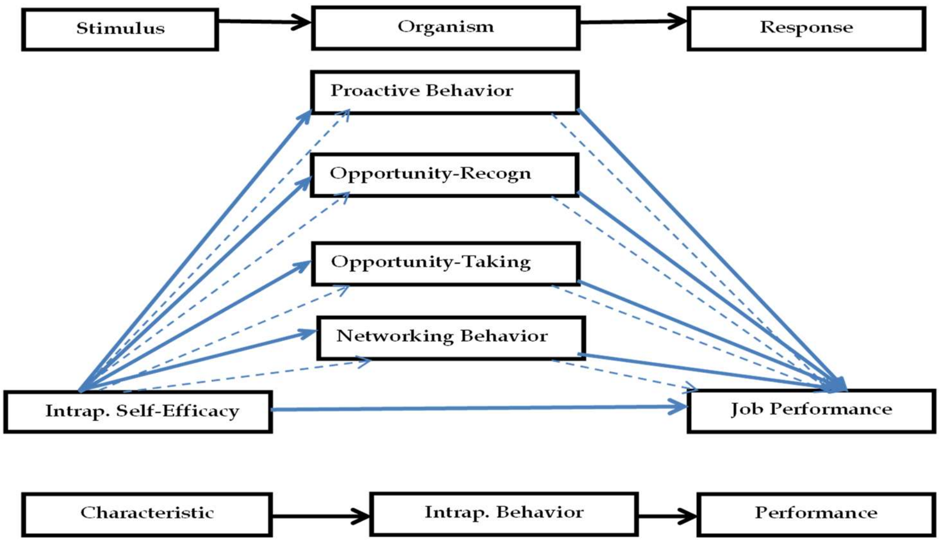

Figure 1. Conceptual diagram showing research focus in line with theoretical frameworks

Note: Solid lines show causal or direct relationships while broken lines show mediating effects.

Source: Author's conceptualization.

2. LITERATURE REVIEW

2.1. Job performance

Job performance relates to the behaviors and consequent outcomes that result in the attainment of set goals. In organizations, job performance may be implied to mean engagement in key activities that contribute to the overall performance objectives of an organization (Oamen, Lawal, 2024). This invariably means that job performance aligns with a set of firm-based behaviors that places the employee in a vantage position to achieve expected results (Oamen, 2023). These behaviors could be work prioritization, planning, focus on work objectives, right communication skills, work behavior, organizational citizenship behaviors, etc. (Bergeron, 2007; Oamen, 2023). Employee performance at work can be assessed through a variety of measures namely – daily work reports, superior based reports, and self-reported measures. Although daily work reports seem to be the most objective measure, they lack strength in feasibility due to work schedule constraints (Pransky et al., 2006; Carlos, Rodriguez, 2015). Viswesvaran (2001) defined job performance as behaviors that may be subjected to periodic evaluation and/or measurable based on the criteria set by the organization. In addition, Kock (2017) from an empirical study recommended the use of self-reported measures compared to annual supervisor-based evaluations for assessing the job performance of employees. This perspective is supported by Campbell and Lee (1988) and Carlos and Rodriguez (2015) who posited that self-reported measures tend to complement supervisor-based assessment of a subordinate's job performance.

Generally, in research studies, job performance is measured as a construct using structured self-measured approaches in which the perspective from the individual employee is sought depending on the study context (Greenslade, Jimmieson, 2007; Molefe, 2010: Carlos, Rodriguez, 2015; Oamen, Lawal, 2024). Broadly, two dimensions of job performance are applied in management literature namely Task and contextual performance. Task or In-role performances relate to the activities that are directly associated or linked to the execution of given roles and responsibilities (Motowidlo et al., 1997; Griffin et al., 2000). Contextual or extra role performance refers to those that are not directly linked to an employee's primary work responsibilities but are behaviors that influence and support colleagues, defend company image, firm reputation, and attitude of employees for the attainment of organizational objectives (Motowidlo et al., 1997; Carlos, Rodriguez, 2015; Oamen, Lawal, 2024). According to Kock (2017), job performance is preferably self-reported instead of supervisor-reported; because more objective assessments of performance tend to be achieved when self-reported measures are used. In this study, the self-reported approach was adopted with a focus on the task and contextual performance of employees involved in healthcare marketing (Oamen, Lawal, 2024).

2.2. Intrapreneurial self-efficacy

For intrapreneurial employees, self-efficacy as a construct refers to the belief of an individual about his or her ability to perform a task or a job (Bandura, 2001; Bandura, 2006). It is a characteristic that defines an individual's perception of his or her capability to act entrepreneurially in their organization (Wang et al., 2013; Hanson, 2017). Several studies have shown that intrapreneurial behavior and performance have a positive relationship with employees who display high levels of self-efficacy (Hanson, 2017; Urbano et al., 2013; Rutherford, Holt, 2007; Douglas, Fitzsimmons, 2013; Neessen et al., 2019). Generally, among managers in the pharmaceutical marketing industry in Nigeria, self-efficacy has been established to be a positive predictor of job performance (Oamen, 2022). The construct of intrapreneurial self-efficacy is required because individuals without it tend to view uncertainties or challenges as barriers rather than opportunities for enhancing performance (Maitlo et al., 2020). Despite the direct relations between self-efficacy and performance, little research has been done to explore the intervening mechanisms of intrapreneurial factors that may explain this effect.

Therefore, the following hypothesis is proposed:

Hypothesis 1a (H1a): Intrapreneurial self-efficacy positively influences job performance in the absence of intrapreneurial behavior.

Hypothesis 1b (H1b): Intrapreneurial self-efficacy positively influences job performance in the presence of intrapreneurial behavior.

2.3. Proactive Behavior

Proactive behavior is exhibited by an individual or employee when he or she anticipates situations, business opportunities, risks, and challenges, and takes steps or actions to overcome them in the pursuance of individual career, and organizational goals (Crant, 2000; Crawshaw et al., 2012; Schmitt et al., 2016). Proactive employees make things happen and not just wait for things to happen (Pitt et al., 2002). In other words, employees display proactive behavior when they look for opportunities, information, and avenues to improve their operations (Gulyani, Bhatnagar, 2017; Schmitt et al., 2016). According to Crant (2000), proactive employees act by identifying gaps and opportunities, anticipating change, and questioning current ways of doing things to create enabling conditions to support performance. Proactiveness is exemplified when an employee perceives or identifies unfavorable business opportunities that may hurt current or future business

(Wongsuwatt, Suntrayuth, 2019). As a consequence, proactive behavior as an intrapreneurial behavior supports improved performance outcomes (Crant, 2000; Wongsuwatt, Suntrayuth, 2019). In marketing organizations, the business environment is ever-changing, and as a result, employers need employees who display proactive behavior as an adaptive trait in changing situations (Salanova, Schaufeli, 2008; De Stobbeleir et al., 2010). From the literature, it is suggestive that self-efficacious employees should proactively pursue the attainment of key performance goals in their organization (Pitt et al., 2002; Oamen, 2022). In the light of the above review, the following hypotheses were generated.

Hypothesis 2 (H2): Intrapreneurial self-efficacy positively influences proactive behavior.
Hypothesis 2b (H2b): Proactive behavior positively influences job performance.

2.4. Opportunity recognition and Opportunity taking or exploitation behavior

Opportunity recognition and taking behavior is an essential characteristic or trait that shows whether an individual or employee identifies and takes advantage of business opportunities as they present themselves in the workplace or environment (Shane, 2007; Short et al., 2010; Bergner et al., 2023). For employees, this behavior supports the ability to identify, and maximize potential opportunities by developing new markets, products, and services (Shane, Venkataraman, 2000). According to Shane (2007) and Bergner et al. (2023), Opportunity recognition and taking behavior is first presented as a trait in an individual which consequently influences actual behavior when opportunities present themselves in the business environment. In general, many authors in management literature present opportunity recognition and exploitation behavior as a single construct without providing a clear distinction between the two dimensions (Nicolaou et al., 2009; Kuratko et al., 2005). However, Kuckertz et al. (2016) argued that opportunity recognition and opportunity-taking or exploitation behavior should be contextually defined and differentiated as separate constructs. Opportunity recognition behavior as a cognitive process identifies opportunities inherent in the market and workplace while opportunity-taking behavior encompasses the planning, resource utilization, and actual use of the opportunities (Baron, Ensley, 2006; Kuckertz et al., 2016).

2.5. Opportunity Recognition Behavior

An opportunity is any situation that when harnessed or utilized, has the possibility or potential to yield positive outcomes. Therefore, opportunity recognition refers to the ability of an individual to identify avenues or situations that have not been harnessed that can potentially give economic benefit (Shane, Venkataraman, 2000). According to Gaglio and Katz (2001), and Baron and Ensley (2006). Such avenues or situations could be- uncover customer or consumer needs, gaps in the supply chain, under-utilized resources or raw materials, the effect of changes in technology, changes in specific industries and/or industries, new information, organizational changes, market changes, policy shifts, and government policy changes (Alvarez, Barney, 2007). These opportunities underscore the relevance of intrapreneurial competence in recognizing opportunities when they present themselves. Opportunity recognition behavior is a cognitive process that seeks to isolate avenues that create opportunities instead of relying on existing businesses. For instance, among a group of employees, not all of them can identify opportunities for additional business or economic value (Kirzner, 1997; George et al., 2016; Kim et al., 2018). According to Kuckertz et al. (2016), opportunity recognition behavior is characterized by business opportunity alertness, the quest to seek them, and the collection of key data about products and services. Therefore, in organizations, employees who show opportunity recognition behavior are best able to identify opportunities, and perhaps, may be more inclined to exploit them (Shane, 2007; Short et al., 2010; Bergner et al., 2023). Wennberg, Kim (2014), Planko et al. (2017), and Chen et al. (2019) argued that employees or individuals who identify opportunities in the workplace or marketplaces are more likely to maximize opportunities to improve performance.

Hypothesis 3 (H3): Intrapreneurial self-efficacy positively influences opportunity recognition behavior

Hypothesis 3b (H3b): Opportunity recognition behavior positively influences job performance

2.6. Opportunity-taking or exploitation behavior

The identification or existence of a business opportunity or opening cannot be maximized or utilized if they are taken advantage of or exploited for value or benefit (Shane, Venkataraman, 2000). By definition, this is the key difference between opportunity recognition and opportunity (Jarvis, 2016; Kuckertz et al., 2016). Opportunity-taking behavior refers to the ability of an individual or employee to use details of opportunities discovered to furnish resources (either financial or human) and organization required to generate economic value, profit, and set organizational goals (Wihler et al., 2014; Kuckertz et al. 2016). In other words, it is the link between opportunity recognition and performance or attainment of goals (Ardichvili et al., 2003). The competitive nature of marketing organizations requires that employees use every opportunity at their disposal to attain individual and corporate performance goals.

Hypothesis 4 (H4): Intrapreneurial self-efficacy positively influences opportunity-taking behavior.

Hypothesis 4b (H4b): Opportunity-taking behavior positively influences job performance.

2.7. Networking Behavior

According to Wolff and Moser (2006), networking is socially oriented behaviors that an employee exhibits to achieve a pool of potentially useful contacts or social networks that facilitate future exchange of resources and business. Networking behavior is perceived as an important behavioral strategy to support desirable professional outcomes such as work growth, improved pay, enhanced job performance, and reduced work stress (Blickle et al., 2009; Volmer, Wolff, 2018; Blickle et al., 2012; Wolff, Moser, 2010). Networking behavior is an individual-level characteristic that helps a person to get important contacts, and information sharing, socialize with colleagues and business partners as well and social event attendance is linked to work purposes (Forret, Dougherty, 2001; Wolff, Moser, 2006; Wolff, Spurk, 2020). According to Wolff and Spurk (2020), individuals with good networking behaviors tend to improve their social capital status. Social capital facilitates the desired exchange of favors and resources in sync with organizational objectives (Porter, Woo, 2015). Therefore, networking behaviors are formal and informal behaviors exhibited by employees with a substantial impact on performance (Blickle et al., 2012; Gibson et al., 2014).

Hypothesis 5 (H5): Intrapreneurial self-efficacy positively influences networking behavior.

Hypothesis 5b (H5b): Networking behavior positively influences job performance.

2.8. Mediating mechanisms of Intrapreneurial Behavior in the relationship between self-efficacy and job performance

2.8.1. Mediation analysis

A mediation effect exists or occurs when the relationship between an independent variable and a dependent variable is explained by a third variable called a mediator (Hayes, 2018; Yoon, 2021). In other words, mediators are the mechanisms through which we can assess how the change in a predictor or exogenous variable causes a change in a dependent or endogenous variable (Hayes, 2018; Yoon, 2021). Simple mediation models could involve a single mediator and complexity increases as the number of mediators in the model increases. A multiple mediation model within the framework of structural equation modeling involves a simultaneous estimation of the mediation effects of more than one intervening variable in a structural model. Mediation models improve our understanding of the real-life underlying mechanisms that link the causal relationship to two or more variables (Yoon, 2021; Sim et al., 2022).

In the context of this study, based on the integrated theory of intrapreneurship and SOR as presented in Figure 1, we proposed that the effect of self-efficacy on job performance of pharmaceutical executives is positively explained by or through the intrapreneurial behaviors (proactive, opportunity recognition, opportunity taking, and networking behavior) they exhibit.

Therefore, the following hypotheses were presented as follows:

Hypothesis 6 (H6): The effect of Intrapreneurial self-efficacy on job performance is positively mediated by proactive behavior

Hypothesis 7 (H7): The effect of Intrapreneurial self-efficacy on job performance is positively mediated by opportunity recognition behavior

Hypothesis 8 (H8). The effect of Intrapreneurial self-efficacy on job performance is positively mediated by opportunity exploitation or taking behavior.

Hypothesis 9 (H9): The effect of Intrapreneurial self-efficacy on job performance is positively mediated by networking behavior.

3. METHODOLOGY

3.1. Study design

A cross-sectional survey study design was used to obtain data from 162 pharmaceutical marketing executives in the healthcare industry in Nigeria from April to June, 2024.7 The data sample was 162 healthcare professionals based on the recommendation of Memon et al (2021) and Kline (2005) on the adequacy of between 100 to 300 respondents for studies utilizing structural equation modeling. Data was collected using a mixed approach of snowballing and random sampling techniques.

3.2. Study population and Industry context

A purposive sample of marketing executives from the healthcare industry in Nigeria was selected. This industry is traditionally known to be high-performance driven which requires highly motivated and self-driven employees to attain set organizational objectives in the short and long term (Oamen, 2021; Oamen, 2022). However, employers and managers in the industry are constantly exploring different ways of enhancing employee sales performance using training and development programs (Oamen, 2022). In this regard, it is appropriate to identify and support employees with the key intrapreneurial attributes that drive performance. This necessitated the need to empirically evaluate the intervening role of intrapreneurial behavior in linking self-efficacy and performance in the healthcare marketing industry using a representative sample. We adopted self-reported performance measures to capture the subjective perspectives of the marketing employees on the key variables of the study.

3.3. Data analysis

Descriptive statistics was executed using Statistical Package for the Social Sciences (SPSS). Partial least squares or Variance-based structural equation modeling was used for model development and hypotheses testing for the study with the Advanced Analysis of Composites (ADANCO version 2.4.1; Henseler, 2024). The bootstrapping technique with 4,999 resamples was applied to obtain a 95% confidence interval (lower and upper limits) for significance testing. As a decision rule, the absence or presence of zero value in the interval indicates significant and non-significant relationships.

3.4. Model specification

As expected for structural equation models (SEM), the study model should be specified to develop the study hypotheses. The main predictor or independent model was intrapreneurial self-efficacy, and the main dependent variable was job performance. The mediator variables used in the model are proactive behavior, opportunity recognition behavior, opportunity-taking behavior, and networking behavior. Two hypothetical models were tested; Model 1 was the direct effect of Intrapreneurial self-efficacy on job performance. Model 2 was the direct effect of Intrapreneurial self-efficacy on job performance mediated by intrapreneurial behaviors.

3.5. Measurement of variables

The constructs (or latent variables) used for the study were measured using measurement items or indicators using Likert scale type scales as presented in Table 1. The intrapreneurial self-efficacy construct was measured with 8 indicators on a 4-point Likert scale ranging from 1 (rarely) to 4 (always). Proactive behavior was measured with 10 indicators on a 5-point Likert scale from 1 (never) to 5(always). Opportunity recognition behavior (5 items), Opportunity behavior (4 items), networking behavior (6 items), and job performance (13 items or indicators) were measured on a 4-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree).

Table 1. Constructs, Indicators, and Reliability Statistics

Construct	Indicators with standardized factor loadings	Reliability coefficients
Intrapreneurial self-efficacy	1. When faced with difficult tasks, I am certain I can accomplish them [0.534]	CR = 0.823, CA = 0.809,
	2. I think I can achieve important tasks [0.528]	
	3. I believe I can succeed at any endeavor to which I set my mind [0.343]	
	4. I can overcome challenges at work [0.534]	
	5. I am confident that I can perform effectively in the task assigned [0.444]	

Table 1 (cont.). Constructs, Indicators, and Reliability Statistics

Construct	Indicators with standardized factor loadings	Reliability coefficients
	6. Even when things are tough, I perform well [0.695]	
	7. I can solve most problems when I put in the necessary effort [0.707]	
	8. When faced with a problem, I find several alternative solutions [0.771]	
References	Bandura, 2001; Bandura, 2006; Neessen et al., 2019; Oamen, 2022	
Proactive Behavior		CR = 0.901, CA = 0.896,
	1. I suggest ideas for solutions to company problems [0.609]	
	2. I tried to apply new and effective ways of doing things [0.643]	
	3. I make an effort to improve work methods in the workplace [0.699]	
	4. I try to express my opinion where it might be useful at work [0.565]	
	5. I express my opinion about work issues even if they are different [0.514]	
	6. I take on tasks that will benefit my career [0.615]	
	7. I feel a personal sense of responsibility to bring about change at work [0.697]	
	8. I am great at tackling problems or changes head-on [0.719]	
	9. I am great at turning problems into opportunities [0.811]	
	10. I try to learn new ways of doing things at work [0.833]	
References	Schmitt et al., 2016; Gawke et al., 2019; Oamen, Lawal, 2024	
Opportunity Recognition Behavior		CR = 0.846, CA = 0.841,
	1. I am always alert to business opportunities [0.639]	
	2. I research potential markets to identify business opportunities [0.728]	
	3. I search systematically for business opportunities [0.779]	
	4. I look for new information about new ideas on products/services [0.698]	
	5. I regularly scan the environment for new opportunities [0.749]	

Table 1 (cont.). Constructs, Indicators, and Reliability Statistics

Construct	Indicators with standardized factor loadings	Reliability coefficients
References	Shane, Venkataraman, 2000; Kim et al., 2018; Kuckertz et al., 2016,	
Opportunity taking Behavior		
	1. I set up my work schedule to pursue perceived business opportunities [0.779]	CR = 0.798, CA = 0.794
	2. I am willing to develop my business based on the opportunities I perceive [0.712]	
	3. I am willing to collaborate and partner with colleagues to pursue business [0.633]	
	4. I am willing to get whatever I need to acquire funding for a business opportunity [0.672]	
References	Shane, Venkataraman, 2000; Jarvis, 2016; Kuckertz et al., 2016;	
Networking Behavior		CR = 0.824, CA = 0.806
	1. I spend a lot of time and effort social networking with colleagues [0.478]	
	2. I invest time to nurture my relationship with colleagues [0.592]	
	3. I use the advantage of my relationship with colleagues for the good of my organization [0.713]	
	4. I spend a lot of time and effort social networking with clients [0.537]	
	5. I invest time to nurture my relationship with clients [0.780]	
	6. I use the advantage of my relationship with clients for the good of my organization [0.729]	
References	Wolff, Moser, 2006; Porter, Woo, 2015; Volmer, Wolff, 2018	
Job Performance		CR = 0.922, CA = 0.918
	1. I have the requisite skill/experience to execute my job [0.581]	
	2. I perform work roles in line with company expectations [0.650]	
	3. I attain work goals within assigned timelines [0.769]	
	4. I put a lot of planning/organization into my work activities [0.714]	
	5. I attain tasks with maximum output possible [0.803]	
	6. I am a vital member of my work team due to my performance [0.619]	
	7. My work receives my full effort despite the challenges I face [0.681]	

Table 1 (cont.). Constructs, Indicators, and Reliability Statistics

Construct	Indicators with standardized factor loadings	Reliability coefficients
	8. I invest in my self-development for the good of my organization [0.700]	
	9. I perform tasks not directly linked to my primary work role [0.538]	
	10. Mt work activities align with my organization's goals [0.791]	
	11. My personal goals align with organizational goals [0.683]	
	12. I am a good communicator in my organization [0.651]	
	13. I have good work relationships in my workplace [0.620]	
References	Viswesvaran, 2001; Carlos, Rodriguez, 2015; Kock, 2017; Oamen, Lawal, 2024	

Source: Author's compilation based on literature.

Table 1 shows factor loadings of each indicator or measurement item forming or measuring the latent variables or constructs. Generally, standardized factor loadings between 0.3 and 0.7, are considered acceptable (Hair et al., 2009; Blunch, 2016; Cheung et al., 2024). Apart from two items [items 3 and 5 measuring self-efficacy], every other item was above 0.5. which affirms the convergent validity of the constructs from the confirmatory factor analysis, The composite reliability coefficient and Cronbach alpha coefficients of each construct were well above the benchmark of 0.7 (Cheung et al., 2024). This implies that the indicators or measurement items are measuring their respective constructs adequately.

3.6. Model Fit of Measurement Models (Model 1 and Model 2)

The measurement model was assessed for model fit to determine if the measurement model fits the data adequately. Based on the recommendation of Henseler et al. (2020) who stipulated a standardized root mean squared residual (SRMR) of less than 0.1. The obtained values for model 1 (0.083) and model 2 (0.068) respectively were within acceptable limits. Therefore, the model is suitable for further evaluation of construct validity.

Table 2. Discriminant validity of the Measurement Model 1

Construct	Self-Efficacy	Job Performance
Self-Efficacy		
Job Performance	0.574	

Source: Author's output from analysis using ADANCO.

Table 2 shows the discriminant validity between both constructs. Based on the recommendation of Henseler et al (2015), the HTMT values should be below 0.85 to justify considering the constructs or latent variables in the model as distinct from each other.

Table 3. Discriminant validity of the Measurement Model 2 (Heterotrait Monotrait Ratios)

Construct	1	2	3	4	5	6
1. Self-Efficacy						
2. Proactive Behavior	0.665					
3. Networking Behavior	0.550	0.486				
4. Job Performance	0.574	0.655	0.676			
5. Opportunity-Recognition Behavior	0.596	0.759	0.637	0.662		
6. Opportunity-Taking Behavior	0.620	0.665	0.646	0.628	0.817	

Source: Author's output from analysis using ADANCO.

Similar to model 1, model 2 as presented in Table 3, shows the independence and distinctiveness of each construct from the other with HTMT ratios below the strict value of 0.85 (Henseler et al., 2015). This is relevant because it justifies the quality of each construct as a measure without undue contamination from other constructs in the specified model. Therefore, the Models 1 and 2 are valid constructions by the researcher.

4. RESULTS

4.1. Demographic Characteristics of Sample

The survey sample of healthcare marketing executives consists mainly of males (n=111, 68.5%), and fewer females (n=51, 31.5%). The average age of the respondents was 32.1 years (standard deviation, SD=4.8) and all participants were first-degree holders (N=162). Most respondents work with local or privately owned pharmaceutical marketing companies (n=90, 55.6%), and a minority with multinational companies (n=72, 44.4%). Finally, for the years of experience in pharmaceutical marketing, the average experience was 4.6 years (SD=3.2) with a minimum and maximum value of 2 and 16 years respectively.

4.2. Direct Effects of Intrapreneurial behavior on job Performance

As shown in Figure 2 and Table 7, Model 1 assessed the standalone effect of self-efficacy on the job performance of healthcare marketing professionals; the direct influence of self-efficacy was positive and significant ($p<0.001$). The R-squared (R^2) or coefficient of determination of Model 1 was 0.372 or 37.2% which based on Cohen's recommendation stimulates that ≥0.1 (small), ≥0.3 (medium), and ≥0.5 (large) (Cohen, 1988). The r-squared coefficient is also a measure of effect size; it gives information about the meaningfulness or practical significance of a relationship. This result implies that self-efficacy accounts for 37.2% of the variation or change in job performance (dependent variable). In other words, the R-squared value measures how well the predictor or exogenous or independent variables in a model predict the outcome, endogenous or dependent variable.

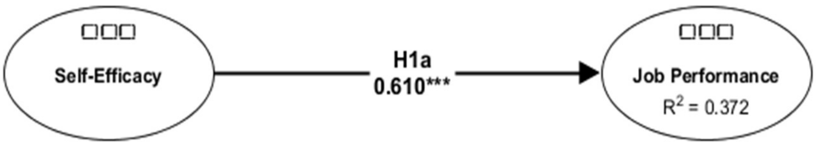

Figure 2. The direct effect of self-efficacy on job performance (without mediators)

Note: ***p<0.001.

Source: Author's output from analysis using ADANCO.

In structural model 2 as presented in Figure 3, self-efficacy accounted for over 30% of each of the intrapreneurial behavioral constructs namely: proactive behavior (0.498 or 49.8%), opportunity recognition behavior (0.388 or 38.8%), opportunity-taking behavior (0.411 or 41.1%), and networking behavior (0.325 or 32.5%). Also, self-efficacy and intrapreneurial behavior accounted for a large proportion (61.1%) of the variance in the main dependent variable – Job Performance. This confirms the substantial predictive capacity of the structural model.

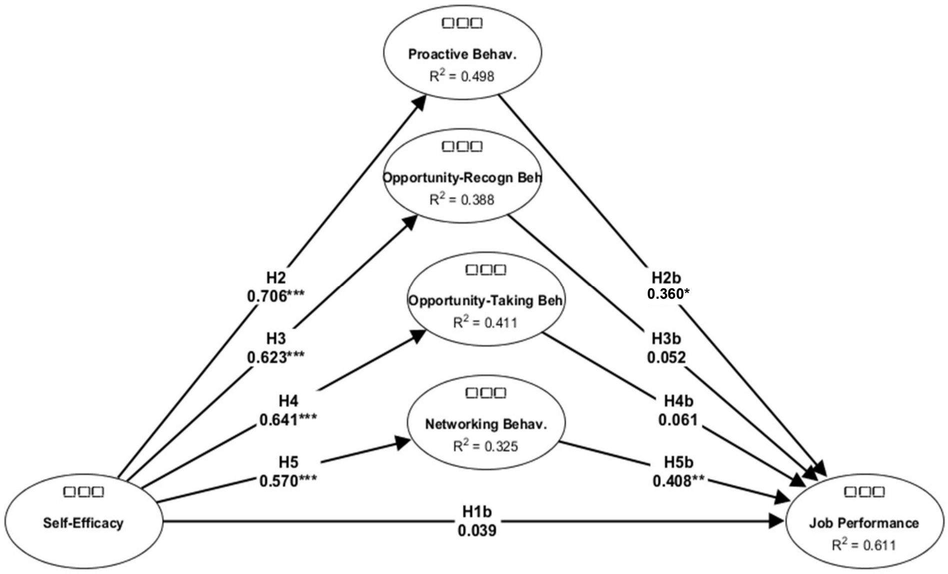

Figure 3. Structural model showing test of hypotheses of the direct effects

Note: *p<0.05, **p<0.01, ***p<0.001.

Source: Author’s output from analysis using ADANCO.

4.3. Results of Hypotheses Testing

Based on the developed models, the proposed hypotheses were tested.

Table 4. Direct effects of Self-efficacy on job performance (in the absence of mediators)

Structural Path	coefficient	t-value	p-value	95% C.I	Inference
Self-Efficacy -> Job Performance	0.610	9.738	0.001	[0.503, 0.747]	H1 supported

Source: Author’s output from analysis using ADANCO.

Hypothesis 1a (H1a) was supported because intrapreneurial self-efficacy had a positive and statistically significant effect on job performance.

Table 5. Direct Effects of Self-efficacy and intrapreneurial behavior on Job Performance

Structural Paths	β	t-value	p-value	95% C. I	Inference
H1b: Self-efficacy---> Job Performance	0.039	0.232	0.408	[-0.276, 0.315]	not supported
H2: Self-efficacy--->Proactive Behavior	0.706	12.943	0.001***	[0.604, 0.816]	supported
H2b: Proactive Behavior----> Job Performance	0.360	1.735	0.041*	[0.090, 0.655]	supported
H3: Self-efficacy---> Opportunity Recognition Behavior	0.623	9.215	0.001***	[0.493, 0.758]	supported
H3b: Opportunity Recognition Behavior---> Job Performance	0.052	0.145	0.442	[-0.359, 0.488]	not supported
H4: Self-efficacy---> Opportunity Taking Behavior	0.641	8.859	0.001***	[0.502, 0.787]	supported
H4b: Opportunity Taking Behavior ---> Job Performance	0.061	0.200	0.421	[-0.353, 0.480]	not supported
H5: Self-efficacy---> Networking Behavior	0.570	8.526	0.001***	[0.443, 0.704]	supported
H5b: Networking Behavior---> Job Performance	0.408	3.146	0.001***	[0.183, 0.677]	supported

Note: *p<0.05, ***p<0.001.

Source: Author's output from analysis using ADANCO.

Table 5b. Effect Sizes of Direct Effects for Significant Paths

Hypothesis	Cohen's f^2	Comment
H2	0.991	large
H2b	0.110	small
H3	0.633	large
H4	0.699	large
H5	0.481	large
H5b	0.211	medium

Note: f^2=Cohen's effect size, $f^2 < 0.02$ (unsubstantial), $f^2 \geq 0.02$ (small), $f^2 \geq 0.15$ (medium), and $f^2 \geq 0.35$ (large or strong).

Source: Author's output from analysis using ADANCO.

As presented in Tables 5 and 5b, Hypothesis 1b showed that self-efficacy in the presence of the mediating variables had no significant impact on job performance (t=0.232, p>0.05), Hence, hypothesis H1b was not supported by the findings.

Hypotheses H2 and H2b were supported since self-efficacy had a positive effect on proactive behavior (large effect size, f^2=0.991), and proactive behavior (small effect size, f^2=0.110) on job performance respectively.

Hypothesis H3 revealed that self-efficacy had a positive effect on opportunity recognition behavior (large effect size, f^2=0.633), but opportunity recognition behavior did not significantly influence job performance (H3b not supported).

Furthermore, Hypothesis 4 was accepted because self-efficacy positively influenced opportunity-taking behavior (large effect size, f^2=0.699) but Hypothesis 4b was rejected because opportunity-taking did not have any significant impact on job performance.

Finally, the results show that self-efficacy had a positive and significant effect on networking behavior (moderate effect size,f^2=0.481); hence, hypothesis 5 is supported. Also, hypothesis 5b is supported since networking behavior had a statistically significant influence on job performance (small effect size, f^2=0.221).

Table 6. Mediational effects of intrapreneurial behavior on job performance

Mediation Effects	**β**	**t-value**	**p-value**	**95% C.I**	**Inference**
Self-efficacy--->Proactive Behavior---> Job Performance	0.254	1.670	0.048*	[0.063, 0.492]	H6 supported
Self-efficacy--->Opportunity Recognition---> Job Performance	0.032	0.142	0.444	[-0.236,0.319]	H7 not supported
Self-efficacy--->Opportunity Taking---> Job Performance	0.039	0.193	0.423	[-0.238,0.337]	H8 not supported
Self-efficacy--->Networking Behavior---> Job Performance	0.233	2.648	0.004**	[0.101, 0.433]	H9 supported

Note: *$p<0.05$, **$p<0.01$.

Source: Author's output from analysis using ADANCO.

As presented in Table 6, tests of hypotheses of the mediating or intervening effects of intrapreneurial behavior in the relationship between self-efficacy and job performance in Model 2, were presented as follows:

Hypothesis H6 was supported as proactive behavior mediated the causal relationship (β=0.254, $p<0.05$). The mediation effect is full because of the insignificant direct effect of self-efficacy on job performance.

But hypotheses H7 and H8 were not supported since opportunity recognition (β=0.032, $p>0.05$) and opportunity-taking behavior (β=0.039, $p>0.05$) did not mediate the relationship between self-efficacy and performance.

Finally, networking behavior was a significant mediator (β=0.233, $p<0.01$) of the relationship. Hence, hypothesis H9 was supported. The mediation effect is full since the significant indirect effect of self-efficacy on job performance was not statistically significant.

5. DISCUSSION

The study using empirical data and structural equation modeling attempts to address the relevance of intrapreneurial behaviors (proactive, opportunity recognition, opportunity taking, and networking behaviors) in translating the influence of self-efficacy on job performance. The study was based on the theoretical frameworks of stimulus-organism-response, and integrated model of intrapreneurship, developed hypotheses to be tested.

From the study results, a prior analysis of the independent effect of self-efficacy on job performance (Model 1) showed a strong direct causal relationship between both constructs (β=0.610). The finding aligns with the assertion of extant literature (Hanson, 2017: Neessen et al., 2019; Oamen, 2022). However, as a standalone relationship, very little evidence is available to explain the behavioral mechanisms that convert an employee's perception of capability to performance as described by Bandura (2006).

Model 2 revealed an insignificant effect of self-efficacy on self-reported job performance in the presence of intrapreneurial behavior in the presence of mediating variables. This finding substantiates the overarching relevance of employee adoption of intrapreneurial behaviors in the pursuit of enhanced work performance despite the level of perception of self-efficacy of employees in other words; they are mechanisms to ensure the attainment of individual and organizational goals (Neessen et al., 2019; Gawke et al., 2019).

In study model 2, the results showed that self-efficacy was a significant determinant of intrapreneurial behavior (Hypotheses H2, H3, H4, and H5 supported). This means that employees with high levels of self-efficacy tend to exhibit positive intrapreneurial behaviors to improve performance. This deduction is corroborated by Wang et al (2013), Baggen et al. (2016), Hanson (2017), and Maitlo et al. (2020). This means that self-efficacious employees are more likely to exhibit or apply intrapreneurial behaviors in their work than those who do not (Hansen, 2017).

Interestingly, proactive behavior and networking behavior had a significant impact on job performance (H2b and H5b were supported) compared to opportunity recognition and opportunity-taking behavior (H3b and H4b were not supported). The direct effect of proactive behavior in the study is in sync with studies that affirm that this behavioral trait enables employees to respond positively to multifaceted changes in the business environment (De Stobbeleir et al., 2010; Wongsuwatt, Suntrayuth, 2019).

In the same vein, the positive effect of networking behavior on job performance was evident among the study population. This is because networking behavior is critical among marketing professionals, principally because it is a relational skill or competence that focuses on developing social connections that promotion business transactions or relationships thereby engenders job performance (Porter, Woo, 2015; Wolff, Spurk, 2020).

Furthermore, the direct effects of opportunity recognition and opportunity-taking behavior on job performance although positive were not substantial in the study. This finding contradicts established knowledge that an employee's ability to identify new opportunities and alert to improvement determines the possibility of positive work outcomes (Wennberg, Kim, 2014; Planko et al., 2017; Chen et al., 2019). Specifically, the non-significant effect of opportunity-taking behavior on job performance is contrary to the assertion of Sambasivan et al. (2009) as to its positive direct and indirect impact on performance. This finding suggests an apparent deficit in this behavioral characteristic among healthcare executives. This behavioral gap may be linked to low risk-taking behaviors among healthcare marketing executives as discovered in a related study (Oamen, Lawal, 2024).

The mediating effects of intrapreneurial behavior provide insights into how these behaviors influence job performance. The full mediation effect of proactive behavior aligns with the understanding that employees who anticipate change (in areas of risk, technology, opportunities, and challenges) achieve better performance outcomes (Wongsuwatt, Suntrayuth, 2019). Therefore, based on the results of this study, proactive behavior substantially explains how employees' perception of ability and capability translates to actual job performance. This full mediation effect is also substantial in networking behavior which implies that developing and nurturing business relationships enables self-efficacious employees to improve their performance (Porter, Woo, 2015). This is particularly relevant in marketing-based organizations where relationships with internal (within the organization) and external (business clients and associates) customers are essential to productivity. Similarly, the full mediation effect of networking behavior suggests that the job performance is enhanced when marketing employees channel their abilities through effective social relationships and social capital (Wolff, Spurk, 2020).

Consequently, the study outcomes are aptly justified by the stimulus-organism-outcome model, in which self-efficacious (stimulus) employees perform well at their jobs (outcomes) when they cultivate and apply intrapreneurial behaviors. Hence, assuming that self-efficacious employees exhibit better job performance is not a sufficient explanation as it may not convey the behavioral aspects that affect this performance. In the same vein, the integrated model of intrapreneurship proposed by Neessen et al. (2019) complements the stimulus-organism-outcome model, by framing how employee characteristics (self-efficacious employees) influence behavior, which in turn impact performance. This model also helps to identify opportunity recognition behavior and opportunity-taking behavior as not sufficiently utilized behaviors among the respondents in the study.

As a contribution to knowledge, therefore, intrapreneurial behavior (opportunity recognition and opportunity-taking) must be cultivated and nurtured within healthcare marketing organizations. Management should intentionally pursue this objective as a remedial approach to encourage alertness and sensitivity to new business prospects in the marketplace. In addition, the human and planning skills required to maximize the opportunities uncovered should be taught and demonstrated.

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The study primarily focussed on opportunity tasking, networking, and proactive behavior, and hence, other intrapreneurial behaviors such as were not included in the study model. Therefore, there is a need for a study incorporating other intrapreneurial behavior constructs. Also, this study used self-reported performance measures compared to the actual sales performance scores. Hence, there is a possibility of self-report and social desirability bias. This should be considered in further studies to give a sense of organizational perspective.

6. CONCLUSIONS

The study addressed the paucity of empirical evidence to support the connecting and mediating role of intrapreneurial behavior in translating employees' self-perceived capability to actual performance on the job. Results showed that self-efficacy independently had a significant influence on performance. However, self-efficacy had no direct effect on job performance of healthcare marketing professionals in the presence of the mediators. Thereby indicating full mediation effects from proactive behavior and networking behavior apart from opportunity recognition and taking behaviors. This suggests an apparent behavioral deficit in opportunity identification and exploitation among respondents.

The study concludes that while self-efficacy is a direct predictor of job performance among employees in an organization, it is essential not to ignore the intrapreneurial behaviors that translate this individual characteristic into actual performance. In other words, the study asserts that the effect of intrapreneurial self-efficacy on job performance is optimally exerted or expressed through the intentional adoption of intrapreneurial behaviors.

The structural model developed from constructs provided a means of evaluating the magnitude and presence of dimensions of intrapreneurial behavior in a population of interest. However, the structural model revealed that opportunity recognition and taking behaviors did not play an intervening role in the relationship. Thus, from the study results, it is evident that employees lack the utilization of opportunity recognition and taking behaviors in pursuit of their job performance objectives. Thereby substantiating the non-statistically significant effect of self-efficacy on job performance in the presence of intrapreneurial behavioral constructs. As a result, Therefore, it implies that these mediators play a pivotal role in translating perceived self ability to execute tasks to actual performance.

Finally, employers and managers should as a matter of practice encourage their employees and subordinates to consciously look out for business growth opportunities and take full benefit or advantage of them. In addition, healthcare companies should intentionally provide targeted training aimed at improving the capacity of healthcare marketing professionals to explore opportunities and harness them for organizational benefit.

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CREATING PRO-ENVIRONMENTAL CONSUMER BEHAVIOR USING MOBILE MARKETING TOOLS

The article addresses the issue of environmental awareness among modern consumers. The aim of the study is to analyze the usefulness of mobile applications used in pro-environmental activities as tools for communication and promotion. The study has a review-empirical character. In its preparation, literary sources, internet websites and research findings from professional agencies were used. The applied research methods include a literature review to formulate the research problem and case studies of selected mobile applications that may contribute to solving environmental issues such as food waste, mass clothing production, and lack of waste segregation. The conclusion indicates the effectiveness of mobile applications in raising environmental awareness and, consequently, shaping consumer behavior in accordance with the concept of sustainable development.

Keywords: environmental awareness, eco-consumption, sustainable development, mobile application.

1. INTRODUCTION

The discussed issue is a crucial aspect considering the real threat of an ecological catastrophe, accompanied by the phenomenon of advanced consumerism and overproduction. Manifestations of consumerism are evident in the attitudes and behaviors of many individuals and households, with diverse motives and causes. One notable example is the phenomenon of mass consumption of goods and services that is not justified by actual needs, often driven by the marketing strategies of companies and brands. Such behaviors are frequently accompanied by a complete disregard for social and economic costs. Another observable trend is the increasing consumption of products harmful to health, such as alcohol, cigarettes, and fast food, which, in the long run, negatively impacts public health. Additionally, there is a growing tendency to replace physical labor with technologically advanced electronic devices in households, a consequence of rising financial capabilities and the pursuit of greater comfort in daily life.

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Considering these phenomena, there is a recognized necessity to raise public awareness about the numerous negative consequences of the current reality. A desirable response to this issue is the promotion of eco-consumption.

Eco-consumption, also referred to as the greening of consumption, sustainable consumption, ecological consumption, or green consumption, has emerged as a reaction to the progressive degradation of the natural environment caused by excessive consumption and production. Its essence lies in the conservation and rationalization of consumer goods usage, reducing the consumption of goods with an above-average demand for non-renewable and scarce resources, and minimizing waste generation during production. Moreover, eco-consumption is characterized by the preference for ecological products, particularly organic food. The greening of consumption is also oriented towards the principle of eco-rationalization, which seeks an optimal balance between consumer choices and environmental well-being (Goryńska-Goldmann, Mytko, 2021; Barendregt, Rivke, 2014). Environmental marketing tools support environmentally conscious decision-making; therefore, the use of mobile marketing and mobile applications can effectively facilitate eco-consumption.

In this context, the aim of this study is to analyze the usefulness of mobile applications employed in activities that enhance environmental awareness and serve as tools for social and marketing communication. The article utilizes literary sources, online sources, and reports presenting the results of scientific research. The applied research methods include a literature review to formulate the research problem and case studies of selected mobile applications that may contribute to solving environmental issues such as food waste, mass clothing production, and lack of waste segregation. In the article, the term "eco-consumption" is adopted as the primary one. The concepts of "green consumption" and "sustainable consumption" are treated as synonyms and used supplementarily.

In conclusion, the study emphasizes the effectiveness of mobile applications in raising environmental awareness, thereby shaping consumer attitudes and behaviors in alignment with the concept of sustainable development and the trend of greening consumption.

2. LITERATURE REVIEW

The literature provides various definitions of the crucial term ecology in relation to the discussed issues, along with other key concepts influencing consumer behavior in the ecological sphere. A fundamental issue is the understanding of the difference between ecology and environmental protection. These terms are often equated, but this is a misconception since the field of ecology does not directly encompass issues related to environmental and nature protection.

According to Misiołek, Kowal, and Kucińska-Landwójtowicz (2014), ecology is a sub-discipline of biology concerned with studying the interdependencies between organisms or groups of organisms and their environment, including biotic factors (living organisms) and abiotic factors (stars, planets, rocks, air, water), which influence them or are modified by them. Technological progress and its impact on the environment have led to the expansion of the term ecology. According to these authors, we now encounter, among others, human ecology, which examines the influence of the environment on humanity in connection with biology and geography; social ecology, which deals with the spatial aspects of coexistence among individuals and social groups; and ecological engineering, which is linked to natural and technical sciences and aims to rationalize the impact of anthropogenic activities, including the use of natural resources.

As stated in a recognized knowledge compendium, the term environmental protection is broader and refers to a set of measures and actions aimed at preserving the most natural character of the environment and maintaining it in a state that ensures optimal living conditions for humans; it seeks a rational and law-compliant approach to shaping the environment, integrating natural elements with civilizational achievements. It includes the protection of atmospheric air, water, and soil from contamination, as well as the conservation of living resources (Łabno, 2006).

Researchers in this field cite the contemporary understanding of the important term ecological awareness, defined as a layer of social consciousness in which the conditions and possibilities for realizing human values related to the surrounding natural world are recognized. The level of ecological awareness significantly determines people's attitude toward nature, their ability to use its resources sparingly and efficiently, the application of environmentally friendly technologies, and the choice of a model of moderate consumption (Misiołek, Kowal, Bień, 2021).

The most significant influence on ecological awareness comes from environmental education, which develops within the family and peer environment, schools, and the long-standing promotion of the idea of protecting and shaping the natural environment by various state institutions. Table 1 below presents the key concepts related to the term ecological awareness.

Table 1. The key concepts related to the term Ecological awareness

Concepts	Description
Pro-ecological Ethics	The appropriate moral attitude of every individual – user of the environment, social groups, and entire nations. Broadly understood environmental protection should be perceived not only through legal norms but primarily through internal-moral motives and justifications.
Ecological Education	The transmission of relevant knowledge and the shaping of attitudes regarding issues related to nature conservation and environmental management.
Sustainable Development	Social and economic development that ensures the satisfaction of the needs of the present society without compromising the ability of future generations to meet their own needs. This concept entails achieving social and humanitarian goals, as well as ecological and economic objectives.
Environmental Monitoring	A system of measurements, assessments, and forecasts of the environmental state carried out by various entities, ranging from administrative bodies to economic entities
Environment	The entirety of natural elements, present in both natural and transformed states due to human activity. It can be distinguished between natural and altered environments

Source: Own elaboration based on literature review.

According to many specialists, societal ecological awareness is of paramount importance, as no system of mandates, prohibitions, or market instruments alone is fully capable of addressing environmental issues. Effective pro-ecological actions can be undertaken most of the society exhibits pro-environmental attitudes, while different approaches are required when ecological awareness is still in the process of being shaped.

3. METHODOLOGY

The aim of this study is to analyze the usefulness of mobile applications employed in activities that enhance environmental awareness and serve as tools for social and marketing communication. The article utilizes literary sources, online sources, and reports presenting the results of scientific research. The applied research methods include a literature review to formulate the research problem and case studies of selected mobile applications that may contribute to solving environmental issues such as food waste, mass clothing production, and lack of waste segregation. In the article, the term "eco-consumption" is adopted as the primary one. The concepts of "green consumption" and "sustainable consumption" are treated as synonyms and used supplementarily.

In conclusion, the study emphasizes the effectiveness of mobile applications in raising environmental awareness, thereby shaping consumer attitudes and behaviors in alignment with the concept of sustainable development and the trend of greening consumption.

4. RESULTS

The cyclical study of ecological awareness among Polish residents is conducted as part of a long-term research program by the Ministry of Climate and Environment. The program was initiated in 2011 with an in-depth exploratory study. Every two years, follow-up measurements (tracking studies) are carried out, allowing for monitoring of changes in environmental awareness and the development of actions, particularly in the field of environmental and climate education (e.g., ecological projects, including nationwide social campaigns).

The most recent published results on ecological awareness and behavior among Polish residents were collected in 2022 using the CATI technique (computer-assisted telephone interviews). The nationwide sample included individuals aged 15 and older, selected randomly, and was representative based on demographic variables such as gender, age, and place of residence (settlement size and voivodeship). The maximum margin of error for the random sample of 1000 (Report Ministry of Climate and Environment, 2022).

The study results indicate that since 2011, Polish residents have increasingly positively assessed the environmental conditions in their surroundings and have developed greater ecological awareness regarding quality of life. Respondents stated that:

- The state of the environment depends primarily on individual actions (62%), followed by effective legal regulations (36%) and society's recognition of environmental issues as an important problem (33%).
- The most important sources of environmental information are the Internet (74%) and television (52%).
- Responsibility for shaping ecological attitudes and behaviors lies primarily with individuals (44%), but schools (38%), central authorities (31%), families (31%), and local governments (22%) also play significant roles.
- 75% of respondents feel they do not waste food, 72% are willing to bear additional costs for eco-friendly solutions, and 67% use public transport or bicycles whenever possible.

Research indicates that over the years, society has become increasingly sensitive to environmental changes and has gained more knowledge on this subject. The Internet, the growing accessibility of information, and the ability to filter it provide young people with opportunities to understand the importance of environmental protection and the potential consequences of indifference toward it. Individual actions for environmental protection and sustainable consumer behaviors are becoming more common. Young people actively engage in improving environmental conditions, thereby setting a positive example for future generations.

In 2024, the Environmental Performance Index (EPI), a periodic ranking that measures environmental efficiency and includes data on the state of sustainable development worldwide, was published. The research is regularly conducted by scholars from Yale and Columbia Universities. The 2024 Environmental Performance Index (EPI) provides a data-driven summary of global sustainability, using 58 performance indicators across 11 issue categories. The EPI ranks 180 countries based on their climate change performance, environmental health, and ecosystem vitality. The indicators allow for the identification of environmental problems, trend monitoring, and the discovery of best practices to support sustainable development (Block, Emerson, Esty, de Sherbini et al., 2024).

The study revealed that Estonia ranked as the top-performing country in the 2024 sustainability ranking, followed closely by Luxembourg and Germany. Poland secured 20th place among the 180 ranked countries, showing a significant advancement from 37th place in 2022.

To sum up, the process of developing environmental awareness, based on the respect for environmental values, is long-term. This process is not only about perceiving potential threats and being concerned about environmental issues, but also about accepting and integrating pro-ecological behaviors into daily life. These behaviors stem from continuous education and lifelong learning (Patrzałek, 2017).

Nationwide studies confirm that over the years, society has become increasingly sensitive to environmental changes and has gained greater knowledge in this area. The Internet, which provides growing access to information along with the ability to filter and evaluate it, offers an opportunity to understand the importance of environmental protection and the potential risks associated with negative consumer behaviors related to ecology and environmental conservation. Young people engage in environmental improvement efforts, setting a positive example for future generations.

A crucial factor in shaping pro-environmental attitudes and consumer behaviors is the ability to communicate effectively within the digital environment. Achieving effective communication largely depends on choosing the right tools and channels. The process of selecting key communication tools should not be random; rather, channels should be aligned with the company's nature and the target audience (Malinowska, 2015).

Communication tools are classified into traditional and new media, also referred to as offline and online channels. Online channels include owned media, such as websites, blogs, newsletters, mobile applications, SMS campaigns, and popular social media platforms like Facebook, Instagram, TikTok, and YouTube. Additionally, paid online channels include sponsored articles on external websites, while free online channels encompass user reviews and opinions.

Although offline communication channels, such as flyers, posters, brochures, catalogs, and samples, have been utilized for many years, their reach and effectiveness in promotional activities have significantly declined. The superiority of online channels is attributed to their advantages, including:

- Reaching a vast audience without geographical limitations.
- Precise targeting capabilities.
- Low costs.

- Measurable results.
- Fast feedback loops.

As a result, we are witnessing a fundamental shift in communication strategies, driven by the declining effectiveness of traditional communication methods and the emergence of new media. According to research by Gemius, an organization analyzing the Polish Internet market, since 2019, there has been a clear dominance of mobile device usage (72% smartphone penetration) over PCs (26%). This indicates that Internet users primarily rely on mobile devices for online access (Report Gemius, 2024).

One of the popular tools has therefore become mobile applications. Mobile applications refer to software designed for portable devices, such as smartphones or tablets. The most popular platforms for which these applications are developed include Android, iOS, and Windows Phone. The primary goal of creating such applications is to enable users to perform everyday tasks that require Internet access via smartphones or tablets. Some of the key services offered by mobile applications include bank transfers with account access, online shopping, reading e-books, and email access. The utility of these applications is derived from multiple advantages, such as:

- High efficiency and fast performance,
- The ability to utilize built-in phone functionalities, including GPS, Bluetooth, camera, microphone,
- The ability to run in the background while performing other tasks (Zhao, 2025).

In practice, mobile applications serve a wide range of purposes, from entertainment to informational and educational functions. Many applications, although primarily designed for entertainment, also carry significant social value, particularly in environmental protection. A notable example is Vinted, a platform that facilitates the sale and exchange of second-hand clothing between private individuals. Through the circulation of pre-owned clothing, the demand for newly manufactured clothing is reduced, contributing to a conscious reduction in consumerism. While such solutions do not eliminate food waste or the substantial CO_2 emissions generated by clothing production, they promote responsible consumption habits and offer individual engagement opportunities in environmental conservation.

Mobile applications can be categorized into three functional types:

- Web-based applications – displayed on a phone screen via an internet browser.
- Native applications – designed for a specific operating system, such as iOS or Android.
- Hybrid applications – function like native applications but have access to all platform-specific features.

Regarding purpose, mobile applications are classified into various categories, including:

- Educational (e.g., *Duolingo*),
- Navigation (e.g., *Google Maps*),
- Financial (e.g., *mBank*),
- Social networking (e.g., *Instagram*),
- Sports and fitness (e.g., *Endomondo*).

People increasingly demand convenience and innovative solutions, leading to the widespread development of mobile applications across nearly all industries. One of the major business advantages of mobile applications is facilitating easy customer interaction, allowing businesses to gain insight into customer emotions and preferences, which significantly enhances long-term relationship building (Kłosińska, 2018).

5. DISCUSSION

It is worth referring here to well-known psychological theories that help explain how and why people change their behaviors – in this case, under the influence of mobile applications. The first is Ajzen's Theory of Planned Behavior, which focuses on explaining the relationship between attitudes, intentions, and behaviors. This theory posits that behaviors result from intentions, which in turn depend on attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). In light of Ajzen's Theory of Planned Behavior, mobile applications can influence intentions toward pro-environmental behaviors by reinforcing attitudes (e.g., highlighting ecological benefits), social norms (e.g., features for sharing results), and a sense of control (e.g., through personalized reminders).

The second well-known psychological theory is the Self-Determination Theory (SDT) developed by Edward Deci and Richard Ryan. This theory focuses on what motivates people to act and how these motivations affect their well-being (Ryan, Deci, 2000). In the context of this theory, social, health, and educational mobile applications support the need for autonomy (e.g., personalization features), strengthen intrinsic motivation (e.g., reward systems), and foster relationship development (e.g., sharing achievements).

In the following discussion we will examine the sources and manifestations of undesirable consumer behaviors in key areas such as food waste, mass clothing production, and waste segregation. Subsequently, we will identify mobile applications specifically designed to promote pro-environmental consumer habits and eliminate harmful consumption patterns within these areas.

The problem of food waste

Food waste is one of the many pressing issues currently faced by societies and economies. This problem affects both highly developed and less developed countries. According to the 2024 United Nations Report, nearly one billion tons of food are wasted worldwide annually. On average, each household discards approximately 79 kg of food products per year. These figures are particularly controversial given that around 730 million people worldwide suffer from undernourishment (Report UNEP, 2024).

Such statistics call for immediate action, which is why the reduction of food waste by 50% by 2030 has been included among the 17 key Sustainable Development Goals (SDGs) of the United Nations. (Report SGGW, 2021).

Mobile applications supporting food waste reduction

One of the most popular applications that helps individuals support the food industry is Too Good To Go. This platform, founded in 2015, allows grocery stores, supermarkets, and restaurants to offer surplus food to private consumers (Toogoodtogo, 2024). The application promotes its mission with the message: "We dream of a world without food waste and fight for it – one bite at a time!" Thanks to this app, users can easily contribute to reducing food waste and helping the planet in just three clicks. The app states: "what you save is a surprise at a great price, and at the same time, a good deed for the planet".

Through the application, food service establishments can list surplus food that remains unsold at the end of the day. These businesses post their offers on the platform, typically selling food packages at a 60–70% discount compared to their original value. The contents of the packages remain unknown to consumers until they pick them up. Each listing includes a brief description that hints at the general type of food being offered. Users can set their location and specify a preferred distance radius for available offers.

When a user finds an available food package from a selected venue, they can reserve it and immediately complete the payment within the app. The listing displays both the original price of the products and the discounted price at which the user can purchase them. The app also provides the address of the establishment and the available pickup times. After collecting the order, users can rate their experience within the app. As of now, nearly 2 million people worldwide have downloaded the application.

A similar food-saving mobile application is Foodsi, which operates under the same principles and promotes itself with the slogan: “Discover. Save. Live Consciously”. Like Too Good To Go, Foodsi helps prevent food waste in shops and restaurants while allowing consumers to purchase food at lower prices. More importantly, these applications enable users to feel a sense of fulfillment by ensuring that perfectly edible food does not end up in the trash.

The problem of large-scale apparel manufacturing

One of the industries with the most significant negative impact on the planet is the fashion industry. The Polish market is among the largest in Central and Eastern Europe, estimated to reach $15.5 billion in 2024. Poland ranks 12th globally in apparel exports (Report The Clothing Market, 2024).

Fashion brands continuously produce new collections in line with the “fast fashion” trend, which encourages consumers to perceive clothing from the previous year as outdated and discard it. A substantial portion of these discarded garments has never been worn, and materials such as elastane, polyester, and acrylic take hundreds of years to decompose. Large corporations in the textile industry emit enormous amounts of greenhouse gases during the production process.

For instance, producing a single cotton T-shirt requires 2,700 liters of water – which is equivalent to an adult’s 2.5-year water consumption based on the recommended daily intake of 3 liter. Additionally, the dyes and chemicals used in textile production often end up in seas and oceans, polluting the water and harming marine life (Ekowymiar, 2024).

To encourage behavioral changes among consumers, motivational tools in the form of mobile applications have emerged. These apps enable users to make more environmentally conscious choices, ultimately contributing to sustainability and environmental protection.

Mobile application supporting the reduction of clothing production

The well-recognized Vinted application serves as an excellent example of how individuals can contribute to reducing global clothing production by providing a platform for buying and selling second-hand items. On this platform, users can sell, exchange, or purchase clothing, cosmetics, toys, and other items. The app’s motto promotes minimalism and a zero-waste lifestyle.

The application is user-friendly; after registering and creating a profile, users only need to take pictures of items they wish to give a second life to, provide descriptions, and list them for sale. Interested buyers contact sellers and make purchases, while Vinted does not charge commission fees on transactions. As of 2024, the platform has recorded over 6 million registered users worldwide. Vinted is frequently promoted by influencers, who encourage their followers to reduce consumerism by selling their collections through the platform.

The problem of waste segregation

Proper waste segregation has a positive impact on the natural environment. Research reports indicate that most Poles regularly separate their waste. Society is striving not only to sort waste but also to reduce its quantity within households.

The User Experience Agency conducted a study on proper waste segregation. The findings reveal that only 52% of respondents correctly assigned waste to the appropriate bins. The study's summary states: “The greatest difficulty in proper waste classification was encountered with deodorant containers. Only 14% of respondents correctly identified the appropriate bin for disposal. Similarly, mirrors posed a significant challenge, with only 19% providing the correct answer” (Report CSR, 2024).

For individuals who are still uncertain about where to dispose of certain products, applications that provide guidance on proper waste management can be helpful.

Mobile applications supporting proper waste segregation.

In Poland, the platform Where to throw away? is gaining popularity. This simple and user-friendly application allows users to enter the name of a product they are unsure how to dispose of, guiding them through the entire process. Additionally, there is a section titled "How to Sort Municipal Waste?" which provides fundamental information regarding the segregation of different types of waste.

One exemplary application in this domain is Scrapp**,** available in English in the United Kingdom and the United States. This application employs a highly modern approach by primarily relying on barcode scanning. Once a product’s barcode is scanned, the app provides information on the appropriate disposal method and specifies which parts of the item can be recycled. Moreover, users can manually enter an item into the search engine to receive disposal recommendations.

Notably, the application adapts its recommendations to local waste segregation regulations. Scrapp promotes itself with the slogan: “Together, we're making an impact”.

6. CONCLUSIONS

In summary, the availability of mobile applications aimed at combating environmental threats and promoting pro-ecological behavior is visibly increasing. However, on the other hand, it is crucial to effectively promote the active use of these applications among mobile device users.

The adoption of new technologies, such as apps promoting eco-consumption, can be uneven – early adopters (innovators) differ from most of the population in terms of skills and openness to change (Rogers, 2003). Therefore, it is crucial to provide less tech-savvy social groups with digital education or to adapt app interfaces to the needs of older individuals.

This article focuses on the issue of studying consumer attitudes and behaviors toward ecological problems and the role of new technologies. The conducted analyses and described practical examples highlight the necessity of an active and modern approach to pro-ecological actions and the need for their implementation both in personal life and on a societal level. The aim of this study was to assess the effectiveness of mobile applications in shaping social attitudes related to ecology and sustainable development.

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CUSTOMERS' PERCEPTION OF SERVICE DELIVERY AT A PROVINCIAL GOVERNMENT INVESTMENT PROMOTION AGENCY

This study evaluates customers' perceptions of service delivery at Trade and Investment KwaZulu-Natal (TIKZN), a provincial investment promotion agency in South Africa. Using a quantitative approach, the data were collected via structured questionnaires from a sample of 400 businesses in Durban Central, selected through probability cluster sampling. The SERVQUAL instrument measured customer expectations and perceptions across five service quality dimensions. The data analysis, conducted using SPSS, revealed a consistent negative gap between expectations and perceptions, indicating widespread dissatisfaction with TIKZN's service delivery. The largest gaps were observed in responsiveness and reliability, suggesting that clients found the agency insufficiently prompt and dependable. Despite high expectations for modern facilities and professional staff, actual service experiences fell short. The study recommends implementing rigorous customer satisfaction measures, regularly monitored by independent auditors, and investing in targeted employee training to improve service quality and responsiveness, thereby enhancing stakeholder satisfaction and institutional performance.

Keywords: customer perceptions; service delivery; service quality assessment; service quality.

1. INTRODUCTION

Trade and Investment KwaZulu-Natal (TIKZN) is a South African commerce promotion organisation established to position the KwaZulu-Natal province as a prime destination for investment and trade. It facilitates access to international markets for local

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companies, following a governmental shift that transferred investment promotion responsibilities from national to provincial levels (TIKZN, 2019). This strategic change mandates TIKZN to focus on driving investment and trade initiatives. To promote its offerings, TIKZN utilises a mix of social, electronic, print, and audio-visual media, complemented by roadshows and informational booklets. These tools form part of its service marketing communications strategy, aimed at raising awareness, showcasing services, and sharing success stories with municipalities and districts. TIKZN's clientele includes both local and international businesses, investors, exporters, workshop attendees, and clients seeking one-stop-shop advisory services through various engagement channels.

Service quality is critical to customer retention, regardless of outreach effectiveness or cost-efficiency (Bushe, 2019). Poor service delivery can adversely affect customer satisfaction and, by extension, broader socio-economic conditions. Moreover, customers may lack clarity on the nature and delivery of TIKZN's services (Singh, 2019), highlighting the need to evaluate their service experiences and expectations. Despite the critical role of provincial investment promotion agencies like TIKZN in driving regional economic development, there is limited research evaluating their service delivery from the customer's perspective. Poor service quality can hinder customer satisfaction and retention, ultimately affecting the agency's effectiveness. Customers may also lack clarity on the nature and delivery of services offered. This study addresses the problem by examining the gap between customer expectations and perceptions of service quality at TIKZN, aiming to identify shortcomings and propose improvements that enhance service delivery and contribute to public sector performance and accountability.

This study, therefore, aims to assess customer satisfaction with TIKZN, identify gaps between expectations and perceptions, and explore ways to improve service delivery. Although service quality has been studied in various government entities, limited research exists on customer perceptions within provincial investment promotion agencies like TIKZN. These agencies are vital to regional economic development, yet their performance remains underexplored from the perspective of business clients and investors. This study addresses that gap by applying the SERVQUAL model to evaluate service quality dimensions, offering structured insights into areas needing improvement. In the South African context, where public sector accountability is increasingly scrutinised, the findings will inform strategies to enhance customer satisfaction and operational efficiency. The study also contributes to academic discourse by extending service assessment tools to provincial agencies, promoting customer-centric evaluation and enabling comparative research across similar institutions.

The study is guided by three key research questions: What are customers' expectations and perceptions of service quality at TIKZN? What gaps exist between these expectations and perceptions? How can these gaps be addressed to enhance service delivery? By answering these questions, the research aims to identify service delivery shortcomings and propose actionable improvements, ultimately contributing to better institutional performance and public sector service quality.

2. LITERATURE REVIEW

2.1. Theoretical framework

The theoretical framework for this study is based on the SERVQUAL model, which is a well-established tool for measuring service quality in various sectors, including public institutions. Developed by Parasuraman, Zeithaml, and Berry, the SERVQUAL model identifies five key dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy (Yarimoglu, 2014). These dimensions provide the basis for assessing the gap between customer expectations and perceptions of service delivery at Trade and Investment KwaZulu-Natal (TIKZN). This model is particularly relevant in the public sector, where service quality is often scrutinised due to its direct impact on citizen satisfaction and the credibility of institutions (Leach, 2018). In the South African public service sector, the Batho Pele principles emphasise the significance of service quality. These principles promote transparency, consultation, courtesy, and value for money in public service delivery (DPSA, 2014). They closely align with the SERVQUAL dimensions and offer a framework for evaluating how effectively public institutions meet the needs of their clients. By combining SERVQUAL with Batho Pele, this study adopts a dual perspective, both empirical and normative, to assess the quality-of-service delivery at TIKZN.

The study also incorporates principles from Total Quality Management (TQM) theory, which emphasises the importance of continuous improvement, a focus on customer needs, and employee involvement in enhancing service quality (Vencataya et al., 2019). TQM posits that service excellence is not just a one-time achievement but an ongoing process that requires institutional commitment and strategic alignment. Understanding this perspective is vital for TIKZN as it seeks to evolve its service delivery mechanisms to meet changing customer expectations. Additionally, the framework includes insights from public value theory, which differentiates between private and collective value in service delivery (Musaba et al., 2014). For TIKZN, service quality must not only satisfy individual business clients but also contribute to broader economic development goals. This dual responsibility highlights the importance of evaluating service delivery from both micro (customer-level) and macro (institutional and societal) perspectives. By synthesising these theoretical concepts, SERVQUAL, Batho Pele, TQM, and public value theory, the study establishes a comprehensive framework for analysing service quality at TIKZN. This approach facilitates a deeper understanding of customer satisfaction, institutional performance, and the strategic implications of service delivery within a provincial investment promotion agency.

2.2. Service Quality

In the service sector, service quality is the propensity to concentrate on the needs of the client and their confidence in and expectations of the product in question. Additionally, service quality refers to a service provider's capacity to satisfy clients to improve the company's performance effectively (Ali et al., 2021; Ramya, Kowsalya & Dharanipriya, 2019). Service quality is frequently cited as a significant factor in creating frameworks for community audits and questionnaires. When consumers or customers compare their expectations and the services provided, service quality is a benchmark for customer satisfaction for excellent organisational performance (Leach, 2018; Singh et al., 2020). Service quality is based on comparisons between perceptions, expectations, and real performance or services received (Yarimoglu, 2014). Helao (2015) asserts that any organisation seeking success should consider investing in developing policies devoted to managing output quality while integrating perceptions with institutional goals for growth and development. Service quality is an organisational dedication to the ongoing enhancement of customer satisfaction. Therefore, total quality management enables institutions to strengthen their commitment to service quality management and development (Vencataya, Pudaruth, Juwaheer, Dirpal, Sumodhee, 2019).

Considering the above definitions, Batho Pele principles are observed in South Africa to ensure effective and efficient service delivery. The Batho Pele principles guide the planning and implementation of community or customer surveys and audits and promote enhanced customer service delivery (Department of Public Service and Administration (DPSA, 2014). The DPSA (2014) further notes that the principles provide mechanisms for assessing service quality by laying out the steps and guidelines for better service delivery, which include public consultations, the establishment of service standards, enabling and increasing access, providing information, courtesy, redressing, as well as ensuring value for money. In other words, the principles not only guide how key customer services are delivered but also serve as a basis for guiding how critical services are rendered. El-Nabolsi and Kidane (2015) maintain that over the years, scholars have concurred on the definition of service quality, agreeing that service quality is simply the difference between the expectations and perceptions of customers.

2.3. Service Quality Assessment

Service quality assessment is crucial in promoting continuous service quality improvement and management. According to Malefane (2019), engaging communities and applying their views and perceptions is crucial, particularly on service performance, as such assessments may lead to better service quality standards. Including perceptions in service quality assessments is crucial, especially when exploring public services (Sleep, Bharadwaj & Lam, 2015). The quality of services is what determines customer satisfaction with the services. Leach (2018) identifies six perspectives on quality, and among these is, firstly, the transcendent view, which is tantamount to excellence and entails high achievement with uncompromising standards. The second one is the product-based approach, which views quality as a palpable variant without taking cognisance of other variances, including the customer's or user's personal choices and preferences. Thirdly, the user-centred approach compares service quality with high customer satisfaction, and this depends on demand. The fourth is the manufacturing-based approach, which focuses on engineering and manufacturing practices. The fifth is affordable excellence, which views quality in terms of value and price. The sixth, a service-based approach, speaks to the precise nature of services requiring unique approaches to measuring quality.

Service quality assessment is an essential multidisciplinary study area for academics as well as industry professionals because it provides critical data that can be used to improve business performance and market positioning. Even though service quality has been shown to improve customer satisfaction, most companies do not devote enough resources to measuring the benefits of quality standard systems. It is, therefore, essential to assess the quality of services rendered to understand customer satisfaction and establish plans for organisational enhancement. (Mathong et al., 2020; Mendocilla, Miravitlles Matamoros, Matute, 2021; Tian et al., 2020). Service quality assessment is also linked to service excellence, differentiation, and competitive characteristics and is crucial for customer loyalty and retention. Technical and functional approaches can be used to evaluate service quality. Quality in technical evaluation can be rated according to professional scientific standards, whereas in the functional approach, the service can be evaluated from the customers' perspective. The most evaluated part of service quality is functional quality, which has the greatest impact on quality improvement (Aboubakr, Bayoumy, 2022; Goula et al., 2021).

2.4. Service Delivery

Worldwide, "service delivery" is a common phrase that signifies the movement of basic communal requirements and services (Reddy, 2016). The Organisation for Economic Cooperation and Development (2019) defines service delivery as "any contact with the public administration during which consumers, residents, enterprises, customers or citizens provide or seek data, handle their affairs or fulfil their duties". Service delivery should be provided in an affordable, reliable, predictable and effective manner. Considering the above, Reddy (2016) maintains that service delivery is determined to promote public value and achieve public good, which is determined by customer perceptions of the anticipated quality of service, which forms the theoretical basis of this study. Smith (2020) observed that having a deeper understanding of the value systems that shape the public when discussing public services is imperative. On the same note, Musaba et al. (2014) postulate that the difference between public and private value is that private value focuses on the individual, whereas public value focuses on the collective or the generality of the populace.

Customer participation is critical in in-service delivery, including customers or clients who provide positive suggestions and feedback or reactions to the service provider's services and products (Mustak, Jaakkola, Halinen, 2013). The authors further maintain that the customers or clients share their appreciation or concerns and thoughts on new services or products. Customers' active participation ensures the incorporation of their perceptions and critical inputs to the public value systems processes (Habib, 2015). The author further notes that when customers or citizens are not engaged and their expectations are not met, the staging of protests is the result. In other words, the negative value would have been created by the poor or lack of engagement processes in which perceptions were neglected. Customer service expectations represent their perceptions of anticipated services and should form a vital part of the public service delivery process (Yi, Ul Haq, Ahmed, 2022).

2.5. The Customer Service Perception

The whole cycle of customer perception begins when a customer sees or acquires information about a specific service, and then the customer begins to form an opinion about the service. As a result, the business's performance is determined by how well the services fulfil client expectations (Tulcanaza-Prieto, Aguilar-Rodrguez, Lee, 2022). There are also many perspectives on service quality, with customer expectations and subjective evaluation being the most essential components of service quality perceptions. As a result, customers are impacted not just by service pricing but also by their impressions, which are formed through comparison and subjectivity. (Choi et al., 2020; Zhong, Moon, 2020).

Obtaining customer perceptions entails public involvement in the decision-making processes of public and private companies (Hanyane, Naidoo, 2015). Matiza and Oni (2014) concur and further note that the involvement of the general populace through customer service evaluation is vital to ensure the collection of the right feedback information that enables institutions to work hard in improving service delivery. This, in turn, will transform the livelihoods of others who are less privileged. There are several ways of incorporating customer perceptions of service delivery. Customer satisfaction surveys are a very good example, and these are in the form of community audits or communication (Catlin, Luchs, Phipps, 2017).

3. METHODOLOGY

This study was descriptive and quantitative in nature. According to Bhasin (2020), quantitative research is a systematic way of gathering data using sampling techniques, questionnaires, online polls, and online surveys. A descriptive research design was adopted to assess how customers felt about the way TIKZN delivered its services and to give a reliable and accurate picture of the variables influencing customer satisfaction levels. The TIKZN's business database, which is thought to contain over 250,000 units, served as the study's target population. Using the probability sampling method, a sample size of 400 respondents from different businesses affiliated with TIKZN was selected. According to Sekaran and Bougie (2019), a sample size of 368 to 370 respondents should be sufficient to validate the study findings. Therefore, a sample size of 400 respondents from different businesses affiliated with TIKZN was chosen using the probability sampling method. To choose the participants, a cluster sampling method was employed. According to Thomas (2020), cluster sampling is a common technique for probability sampling employed to examine large populations, particularly those widely dispersed geographically. The reality that the cluster sampling technique is more time and cost-efficient was a factor in the choice of method.

For data collection, this investigation employed a questionnaire with closed-ended (structured) questions. Google Docs was used to create the SERVQUAL questionnaire, which was then made available online and via email to respondents in the TIKZN database. The severity of the social isolation necessary during the worldwide COVID-19 pandemic also made this approach essential. The questionnaire, particularly the digital version, was inexpensive to use and enabled quick responses from the participants. The latest version of the Statistical Package for the Social Sciences was used to analyse the data in this study.

4. RESULTS

Table 1 depicts the business sectors under study. The sectors range from Agriculture, Business Services, Health Services, and Manufacturing.

Table 1. Business sectors

		Frequency	Percent
Sector	Manufacturing	109	28.0
	Health Services	79	20.3
	Agriculture	16	4.1
	Business Services	153	39.3
	Other	32	8.2
	Total	389	100.0

Source: Researcher's Self-Computation from Field Survey, 2024.

The mean scores of the expectations and perceptions, and the mean gap scores are shown in Table 2. The average expectation score was high, ranging from 3.97 on a scale of 1-5 where 1 is strongly disagree and 5 agrees for item 8 (The physical facility at an excellent government agency should be visually appealing and in an excellent government agency material associated with the service such as pamphlets and brochures should be visually appealing) to 4.52 for item 15 (The behaviour of employees in an excellent government agency will instil confidence in customers). The expectations had a total mean score of 4.22. This value is closest to "strongly agree", which suggests that the respondents have a positive agreement with their service delivery expectations.

Table 2. Respondents' Expectations and Perceptions of Service Quality

	Expectation		**Perception**		**P-E Mean Gap score**
	Mean	**Std**	**Mean**	**Std**	
An excellent government agency will have up-to-date and modern technology to assist with my needs.	4.06	0.719	2.86	1.233	-1.2
The physical facility at an excellent government agency should be visually appealing.	3.97	0.653	3.27	1.142	-0.7
In an excellent government agency, materials associated with the service, such as pamphlets and brochures, should be visually appealing.	3.97	0.649	3.50	1.088	-0.47
When an excellent government agency promises to do something by a particular time, it certainly will.	4.23	0.589	2.80	1.059	-1.43
When a customer has a problem, an excellent government agency will show sincere interest in solving it.	4.10	0.633	3.02	1.039	-1.08
An excellent government agency will perform the service correctly the first time.	4.11	0.541	3.06	1.069	-1.05
The employees from an excellent government agency will advise customers exactly what services will be performed.	4.16	0.762	3.42	0.975	-0.74
The employees from an excellent government agency will give prompt services to customers.	4.23	0.601	2.94	0.998	-1.29
The behaviour of employees in an excellent government agency will instil confidence in customers.	4.52	0.640	3.26	1.035	-1.26
Customers of excellent government agencies will feel safe in their transactions.	4.36	0.613	3.09	1.057	-1.27
The employees of an excellent government agency will have the knowledge to answer customers' questions.	4.52	0.632	3.43	0.973	-1.09
The employees of an excellent government agency will understand the specific needs of their customers.	4.37	0.799	3.59	1.098	-0.78
Average score	4.22	0.653	3.19	1.064	-1.03

Source: Researcher's Self-Computation from Field Survey, 2024.

Table 3. Association between Expectation, Perception and Respondents' socio-demographic variables

Socio-demographic		Expectations	Perceptions
		Mean (SD)	**Mean (SD)**
Gender	Male	4.17 (0.506)	2.93 (0.941)
	Female	4.32 (0.485)	3.71 (0.527)
	Sig.	**0.005**	**0.000**
Age group	Below 24	4.61 (0.314)	3.66 (0.489)
	25-34	4.07 (0.498)	2.79 (0.856)
	35-44	4.16 (0.467)	2.99 (0.967)
	45-54	4.07 (0.713)	3.50 (1.139)
	55 and above	4.36 (0.316)	3.57 (0.434)
	Sig.	**0.000**	**0.000**
Racial group	Black	4.22 (0.491)	3.20 (0.880)
	Indian	4.01 (0.504)	3.23 (0.952)
	White	4.23 (0.448)	3.16 (0.717)
	Coloured	4.62 (0.303)	3.08 (0.976)
	Sig.	**0.000**	**0.784**
Level of education	Less than Certificate (Grade 12 Matric)	3.92 (0.786)	3.03 (1.621)
	National Certificate	4.42 (0.443)	2.78 (1.385)
	National Diploma	4.21 (0.402)	2.69 (0.796)
	Degree	4.23 (0.476)	3.69 (0.603)
	Postgraduate	4.04 (1.234)	3.18 (1.145)
	Sig.	**0.191**	**0.000**
Area	Southern Basin	4.32 (0.566)	2.82 (0.903)
	Northern basin	4.11 (0.589)	3.47 (0.730)
	Central Durban	4.34 (0.367)	3.66 (0.797)
	Inner West basin	4.03 (0.316)	2.71 (0.990)
	Outer West basin	4.17 (0.393)	3.53 (0.863)
	Eastern basin	4.15 (0.228)	3.65 (0.228)
	Sig.	**0.001**	**0.000**
Business sector	Manufacturing	4.13 (0.451)	2.79 (0.896)
	Health Services	4.07 (0.435)	3.48 (0.631)
	Agriculture	4.16 (0.386)	3.63 (0.970)
	Business Services	4.37 (0.483)	3.24 (0.955)
	Other	4.18 (0.755)	3.38 (0.766)
	Sig	**0.000**	**0.000**

Source: Researcher's Self-Computation from Field Survey, 2024.

In terms of the respondents' gender, the results of the ANOVA in Table 3 reveal that there is a statistically significant difference measured for the respondents' expectations ($P=0.005$) and perceptions ($p<0.001$) with regard to their age group, home language, and qualifications ($P>0.05$). It was found that the expectations ($M=4.32$) and perceptions ($M=3.71$) for females were higher than those measured for males. This suggests that female respondents have very good expectations and perceptions of service quality when compared to their male counterparts.

In terms of the age group of the respondents, the ANOVA value measured suggests that there were significant differences in both expectations ($p<0.001$) and perceptions ($p<0.001$). It was found that the expectations ($M=4.61$) and perceptions ($M=3.66$) of service quality were the highest among respondents below 24 years of age. This suggests that respondents below 24 years of age have very good expectations and perceptions of service quality.

Table 4. Correlation between expectation and perception of service quality

		Expectation	Perception
Expectation	Pearson Correlation	1	.130*
	Sig. (2-tailed)		.011
	N	387	387
Perception	Pearson Correlation	.130*	1
	Sig. (2-tailed)	.011	
	N	387	389
* Correlation is significant at the 0.05 level (2-tailed).			

Source: Researcher's Self-Computation from Field Survey, 2024.

Pearson correlation was used to analyse the association existing between the respondents' expectations and perceptions of service quality. The results indicate that the respondents' positive expectations of service quality correlate weakly with their perceptions of service quality ($r=0.130$; $P=0.011$).

Table 5. KMO and Bartlett's Test for Expectation and Perception of Service Quality

Section	Service quality	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
			Approx. Chi-Square	df	Sig.
1	Expectation	0.830	7080.276	66	0.000
2	Perception	0.803	9120.802	66	0.000

Source: Researcher's Self-Computation from Field Survey, 2024.

The data in Table 5 indicates that the Kaiser-Meyer value for both expectations and perception of service quality exceeded the recommended values, while Bartlett's Test of Sphericity was statistically significant, thus supporting the suitability of the correlation matrix.

4.1. Summary of Results

The findings revealed a consistent negative gap between customer expectations and perceptions across all five dimensions of service quality: tangibles, reliability, responsiveness, assurance, and empathy. Customers had high expectations, particularly in areas such as modern facilities, visually appealing materials, prompt service, and employee competence. However, their actual experiences were lacking, indicating dissatisfaction with service delivery. The expectation that received the highest positive rating was that "the behaviour of employees in an excellent government agency will instil confidence in customers". Conversely, the most favourable perception was that "employees understand the specific needs of their customers". These results highlight the need for TIKZN to enhance service responsiveness, reliability, and customer engagement to better meet stakeholder expectations.

This pattern of gaps between expectations and perceptions is consistent with findings from other studies in South Africa's service sectors. For example, a study on fashion retail stores in Durban (Tlapana et al., 2024) also utilised the SERVQUAL model. It found that while customers had high expectations for physical aspects, such as modern equipment and well-groomed staff, the perception scores were slightly lower. However, these scores were not as significantly negative as those observed in the TIKZN case. Interestingly, the fashion retail study reported positive gap scores in some areas, such as modern-looking equipment and visually appealing facilities. This suggests that retail stores were generally more successful in meeting customer expectations compared to TIKZN. The retail sector's emphasis on customer experience and competitive positioning may account for this difference. Similarly, a study conducted on supermarket chain stores in KwaZulu-Natal (Noel, Govender, 2024) found that customers had positive perceptions of service quality, particularly regarding personal interaction, physical aspects, and store policies. Utilising structural equation modelling (SEM), the study identified strong positive relationships between personal interaction and customer satisfaction, as well as between satisfaction and customer loyalty. However, the study revealed that reliability did not significantly impact customer satisfaction, which aligns with the findings from TIKZN, where reliability was noted as one of the weaker dimensions. This indicates that, across different sectors, customers prioritise interpersonal engagement and tangible service aspects over procedural reliability, which may be seen as a basic expectation rather than a distinguishing factor.

In contrast, the study on uShaka Marine World theme park (Kalanga, 2022) underscored the significance of the physical environment and staff interactions in shaping customer satisfaction. Visitors had high expectations for service quality and generally expressed satisfaction with attractions such as "Dangerous Creatures" and "Sea World". However, the study identified shortcomings in areas like food offerings and the diversity of attractions. It emphasised that both emotional and experiential factors play a crucial role in service quality, indicating that customer satisfaction in leisure and tourism settings is influenced by both tangible and intangible elements. This finding aligns with TIKZN's research, which revealed that customers expect visually appealing materials and genuine employee engagement. This suggests that emotional connections and presentation are essential across various sectors.

The TIKZN study is notable for its focus on a government agency, where service delivery is often hindered by bureaucratic processes and limited resources. In contrast to the retail and tourism sectors, which are driven by profit and prioritise customer satisfaction, public agencies may find it challenging to respond quickly to customer feedback and implement improvements in their services. This context may account for the larger gaps between expectations and perceptions observed in the TIKZN study. Nevertheless, the findings from all three comparative studies emphasise the importance of aligning service delivery with customer expectations, investing in staff training, and improving both the physical and interpersonal aspects of service environments. In conclusion, the TIKZN study provides valuable insights into the quality of public sector services, identifying areas for improvement and aligning with broader trends seen in the retail and tourism sectors. The consistent focus on tangibles, responsiveness, and personal interaction across various studies indicates that these factors are universally important to customers. To bridge the gap between customer expectations and perceptions, TIKZN and similar agencies must prioritise customer-centric strategies, invest in employee development, and continuously monitor service performance using validated tools like SERVQUAL. By doing so, they can enhance customer satisfaction, build trust, and improve their effectiveness in delivering public services.

4.2. Limitations of the study

This study has limitations due to its focus on a single provincial agency, TIKZN, which may affect the applicability of the findings to other regions or government entities. The specific context and operational dynamics of TIKZN may not represent broader service delivery trends. Additionally, the use of self-reported data collected through structured questionnaires introduces the risk of response bias as the participants might provide socially desirable answers or misinterpret the questions. Furthermore, relying solely on quantitative methods limits the depth of understanding regarding customer experiences, which could be enhanced through qualitative approaches such as interviews or focus groups.

5. RECOMMENDATIONS

This study highlights a significant gap between customer expectations and perceptions of service quality at Trade and Investment KwaZulu-Natal (TIKZN). To address these discrepancies and enhance service delivery, several strategic recommendations are proposed. First, it is suggested that TIKZN improve the overall quality of its services. This can be achieved by implementing rigorous customer satisfaction measures that are continuously monitored. To ensure objectivity and transparency, these measures should be assessed by an independent external service, such as a market research company. Regular audits will help identify gaps between actual performance and customer expectations, allowing the organisation to take corrective action promptly.

The quality-of-service delivery starts with education. TIKZN should invest in comprehensive training programs for employees at all levels. These programs should focus on enhancing technical skills, promoting behavioural changes, and nurturing a customer-centric attitude. A specialised customer service course should be introduced, particularly for frontline staff who interact directly with clients. This will ensure that employees are well-equipped to provide services that meet or exceed customer expectations. In addition to technical training, TIKZN should establish a robust internal support system that encourages teamwork and recognises employee achievements. Team-building initiatives and recognition programs with incentives can significantly enhance morale and performance. Senior management should publicly acknowledge outstanding service delivery, and a dedicated section in the organisation's newsletter or brochure should be used to celebrate employee excellence. This approach will cultivate a culture of appreciation and foster long-term commitment to customer service.

To enhance employee capabilities and improve client service at TIKZN, clear guidelines should be established focusing on continuous learning, goal setting, and performance management. These guidelines will foster an environment that promotes professional growth and accountability. Additionally, improved engagement and communication between management and staff will enhance reliability and responsiveness. It is important to explore internal communication platforms to facilitate the sharing of ideas and to identify challenges in service delivery. A key recommendation is to establish a dedicated "Client Care Unit" within the One-Stop-Shop department. This unit will be responsible for managing customer complaints and ensuring they are directed to the appropriate departments or unit heads. The Client Care Unit must maintain a structured reporting system, submitting weekly or monthly reports that detail common issues, their frequency, resolution timelines, and mitigation strategies. This proactive approach will enable TIKZN to address recurring problems effectively and improve customer satisfaction.

6. CONCLUSIONS

This study highlights the urgent need for TIKZN to address the gap between customer expectations and actual service delivery. The consistent negative gap across all five SERVQUAL dimensions, tangibles, reliability, responsiveness, assurance, and empathy, indicates that clients are not receiving the level of service they anticipate. Addressing this issue is critical for improving customer satisfaction and enhancing institutional credibility.

By implementing the recommended strategies, TIKZN can improve operational efficiency, foster a culture of excellence, and strengthen relationships with its clients. These strategies include rigorous customer satisfaction monitoring, employee training, improved internal communication, and the establishment of a dedicated client care unit to manage complaints and feedback. Additionally, conducting external audits and performance evaluations will ensure accountability and transparency in service delivery.

The integration of these initiatives will position TIKZN as a responsive and customer-focused investment promotion agency. Ultimately, such improvements will enhance public sector performance, boost investor confidence, and promote sustainable economic development in KwaZulu-Natal. This study provides a foundation for future service quality enhancements and underscores the importance of aligning institutional practices with stakeholder expectations.

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EFFECT OF TOTAL QUALITY MANAGEMENT ON ORGANISATIONAL PRODUCTIVITY, AND MARKET SHARE

There is a very high mortality rate among small manufacturing firms, leading to high unemployment and a larger negative implication for the society. In addition, literature is scanty on total quality management on organisational productivity and market share in small manufacturing firm in Nigeria. this study filled that gap in literature. The study employed a descriptive research design for research instrument distribution. The sample size for the study was 987 respondents and data was gathered using a questionnaire. The analysis of data was done using the Amos – Structural Equation Model (SEM). The results show that total quality management had positive and significant effects on organisational productivity and market share. The results also revealed that organisational productivity had a significant and positive effect on market share. The study contributes to literature by uniquely testing the effect of total quality management on market share using a large number of manufacturing firms in Lagos.

Keywords: total quality management, organisational productivity, market share, manufacturing.

1. INTRODUCTION

The Nigerian economy is home to many small firms (National Bureau of Statistics NBS, 2021), however, the mortality rate of these firms (specially manufacturing firms) continues to pose a tough puzzle for practitioners and researchers, as 80 percent die in their first five years (Ikpoto, 2023), while 50 percent of micro and small firms die in their first year (Omisakin, 2025). Small firms make up a significant portion of employment in the country (Busari, Oduwole, 2014; Olaore, Adejare, Udofia, 2021; Oluremi, Maku, 2024), thus, when they fail in numbers, the repercussion is far reaching, individually and nationally. The need to support decision making for small manufacturing firms with

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research-based recommendations form the bedrock for this study. In addition, though literature on total quality management (TQM) has grown over the years, its effect on certain operational performance matrices (organisational productivity and market growth) in small manufacturing firms remain scanty in existing literature.

In this era of globalization and hardcore competition, the concept of total quality management (TQM) has become of utmost importance. Thus, the total quality management is the art of managing the whole, so as to achieve an excellent result. One important thing to discover here is that, the aim and the philosophy of TQM, is not just to measure quality performance, but also to ensure continual improvement of quality. It is people-driven and the outcomes are evident in terms of improved teamwork, company moral and organisational climate, that will result in increased profitability and productivity (Abbas, 2020; Aigboje, Itai, 2023).

Total quality management, plays a vital role within the food and beverage industry, across many different stages of sourcing, processing and packaging. In addition to the basic laws and regulation on nutritive value, quality levels also incorporate factors such as, shelf life, raw materials, taste texture, use of preservatives and many other indicators too (Olabimtan, Olopete, 2024). There is the need for food manufacturers to adhere to an efficient quality management system (QMS), so as to achieve standardization and also meet up with the demands of customers and its authorities. When it has got to do with quality control and management, however, the term is used universally to ensure that all food products are processed according to strict guidelines.

Quality within the Nigerian food and beverage industry is a continuous occurring subject that involves everyone, right from the farmers and the producers, down to the stores. Since the food and beverage industry is concerned with fresh products, the importance that is placed on logistics, packaging and even storing are very essential in this particular industry than in any other industry. In this industry, emphasis is placed on the need for quality as one of the major success factors. The food and beverage industry are also one of the industries that have a great number of regulations on how best quality should be implemented. The standard of quality is constantly changing, not just from the legal aspect alone, as per the regulations, but also, from the customer's perspective (Udofia, Adejare, Olaore, Udofia, 2021a). Customer perceptions and demands concerning quality are shifting along with trends and developments in the area. Implementation of total quality management in the manufacturing sector may increase operational efficiency, reduce manufacturing costs and may make companies in the sector to be strategically competitive in many countries (Elhawi, 2022).

In the food and beverage industry, the basis of competition and the reputation of the companies, simply lie in their ability to maintain and deliver products that meet and exceed expectations of the customers. Quality is never an accident; because it is always the result of high intentions, sincere efforts, intelligent direction and skillful execution (Udofia, 2019). It represents the wise choice of many alternatives (Foster, 2006), of which implicitly means that all aspects and persons of the organisation need to collaborate to attain quality.

The adoption of TQM has been hampered due to non-compliance with the procedure and principles of TQM implementation. While some organisations run TQM like a program which they expect to function and perform the magic by itself, others have used half-hearted approach to it, by using some bits and pieces of the principles. This has counted for the failure of most organisations in meeting their expected target from implementing this ideology (Zhang, Moreira, Sousa, 2021). Due to the high mortality rate of manufacturing firms in the country, this study's purpose is to evaluate the relevance of

TQM in aiding the survival of manufacturing firms by testing its effect on operational matrices like productivity and market share. The rest of study is structured as follows: literature review, methodology, results, discussion and conclusion.

2. LITERATURE REVIEW

Resource Based View

The Resource Based View (RBV) is a main theory in the field of management because of its wide spread applicability (Rumelt, 1984; Kraaijenbrink, Spender, Groen, 2010; Oghazi, Rad, Zaefarian, Beheshti, Mortazavi, 2016). The RBV supports the claim that you are as good as your resources, and though a firm may see a million business opportunities, they can only exploit what their capacity base allows (Wenerfelt, 1984; Barney 1991). TQM is important in this study because it focuses on several aspects of the firm and it is expected that these areas will have improvements. One of them is the employee force, that is, an improvement in knowledge and its application is expected after implementing TQM. It is also expected that employee productivity should improve with the improvement in knowledge and technical problem-solving skills. Which should lead to more satisfied customer and an increased market share.

Total Quality Management

In some organisations TQM is a program to be executed, and to some; a way of life. Irrespective of how it is applied, TQM has continued to evolve in the sphere of manufacturing firms (Zhou, Li, 2020; Chen, Reyes, Dahlgaard, Dahlgaard-Park, 2022). Practitioners and researchers alike are united on the relevance of TQM to firm performance (Negron, 2020; Zhang et al., 2021). TQM can be described as the institutionalising of certain principles and practices tested and trusted to lead the organisation to good product quality outcome (Udofia, 2019). It is implemented and maintain for desired results to be experienced. The measurement of TQM varies in most studies, however, there are practices that are most frequent in TQM literature; as suggested by Abbas (2020) and Negron (2020). They are leadership, employees focus, supplier quality management, customer focus and knowledge & information management.

Organisational productivity

The concept of productivity is generally described as the relation between output and input (Owalla, Gherhes, Vorley, Brooks, 2022), and has been available for over two centuries and applied in several scenarios on various levels of aggregation in the economic system (Tangen, 2002). It is argued that productivity is one of the basic variables governing production activities, and it is arguably the most important one (Singh, Motwani, Kumar, 2000). One of the most important issues facing the applied behavioral sciences is that of productivity, the quality and quantity of work. Productivity is frequently discussed by managers but rarely defined, often misunderstood and confused with similar terms, ultimately leading to productivity being disregarded. According to Bhatti and Qureshi (2007), in this twenty-first century, if we do not fully understand what productivity is, how can we properly measure, interpret, or take the appropriate steps to improve it? Evidently, this confusion surrounding the subject warrants further investigation of the contemporary measurement of productivity. Dalota (2011) gives evidences through research that many manufacturing organisations produce without understanding the changing needs of their customers. That statement re-echoes Khan (2003), who argued that efficiency do not equate organisational goals. In his opinion, some efficiently ran production companies do not meet organisational goals, because irrespective of how efficiently a unit is, if its product or service does not attract its target market, then its goals of profit and market share will no longer be feasible. Such was the case of Nokia, who totally lost track of the needs of their target market and secured incredible losses. Therefore, productivity concerns both effectiveness and efficiency (Khan, 2003; Olusanya, Awotungase, Ohadebere, 2012) and without it, organisational target would not be met (Udofia, Adejare, Olaore, Udofia, 2021b).

Market share

The increase or decrease of market share is a major concern for any profit-making organisation. It tells a company how well the target market accepts and appreciates the offerings that they give for a price. The market share of an organisation gives it a bargaining strength in negotiating with suppliers, as well as a competitive edge against its industry rivals (Roberts, Chernew, McWilliams, 2017; Aigboje, Itai, 2023). It aids the organisation to bargain with suppliers because of the sheer volume they order from the suppliers. Suppliers tend to please the industry leaders because the make up the large chunk of their sales. Therefore, they try to please them to foster re-patronage. Market share also gives competitive edge to organisations because they have the patronage to enjoy economies of scale, thus, a reduction in unit cost production and the ability to initiate a cost-leadership strategy to continue to dominate the industry (Ele, Nwekpa, Egede, Eneh, 2023). Especially in a country like Nigeria where poverty is on a geometric increase, the relevance of market share to remain profitable is most essential in the current times.

Hypotheses Development

In the contemporary literature of quality management, several studies that focus on the impact of quality management on performance dimensions. However, there is little or no literature on how quality drives productivity in manufacturing firms in developing nations such as Nigeria. In addition to above literature gaps, after the level of disruption that we have witnessed in the last two (2) years, this study intends to shed light on how quality management practices influence market share growth in times of unprecedented supply disruption. Though there are contemporary studies that examined TQM and its influential capacities on various aspects of the firm (Bakotic, Rogosic, 2015; El-Manzani, Sidmou, Cegarra, 2019; Peng, Prybutok, Xie, 2019; Udofia, 2019; Yan, Zhang, Zhu, Fan, 2019; Abbas, 2020), there are minimal studies that examine its effect on organisational productivity and market share.

Abbas (2020) focused on how quality management practices could improve the performance in the area of sustainability, while Bakotic and Rogosic (2015) highlighted the relevance of employee focus in the practices of quality management practices to yield desired results. Bakotic and Rogosic (2015) argues that all core practices of total quality management is influenced by employee focus, implying that once employees are properly trained and equipped with the knowledge they need, their involvement in decision making is invaluable to the firm. This notion also implies that employee focus has the capacity to transform the organisational productivity of the firm because of the knowledge resource and problem-solving capacity imbedded in them. This supports the conceptualization that employee focus (and/or any other TQM practice) can influence significant change in organisational productivity. Yangailo, Kabela and Turyatunga (2023) is among the very few studies that attempt to unravel the relationship between TQM practices and organisational productivity in the Nigerian business environment. However, though the study reveals a positive relationship and highlights the individual practices' effect on organisational productivity, the study's context is not similar to this study, as it focused on a service-based industry. This study focuses on a manufacturing sector in Nigeria. Yangailo (2023) equally focused on TQM and productivity, however; on a service-industry in Zambia. Both studies called for more empirical studies in manufacturing to corroborate their findings in TQM-productivity dynamic. This creates the inquisition if these results will remain constant in a different business environment. Maddala, Thyagaraju, Karim, Nirmala, and Kumar (2023) researched TQM mediating capacity in the operations management and productivity relationship. Though direct relationship was not tested, it is extracted from the variable interactions that TQM had a direct effect on productivity, else, there would be no positive and significant mediation. Being an Asian study, it called for more studies to test the efficacy of TQM being a predictor of organisational productivity. Based on the discussion above, the study hypothesises that:

H1: TQM practices have a significant effect on organisational productivity

Peng et al. (2019) studied how quality management practices that were executed by the top management (focus on the workforce, leadership, and strategic planning) could improve supply chain performances and by extension overall performance of the firm. Yan et al. (2019) and Udofia et al. (2021) examined TQM and integrated performance models. Though the performance model adopted by both studies were comprehensive, performance metrics like organisational productivity and market share were not captured in their studies. El-Manzani et al. (2019) focused on TQM's role in driving innovation, and the study supported the concept of improved product innovation through TQM implementation. While the study did not directly test TQM and market share relationship, it suggests that innovation provides the platform for improved market share by superior customer satisfaction. In similar indirect tests, Olabimtan and Olopete (2024) hypothesized an indirect influence in the quality management – market share relationship. The result was positive. Both studies suggested the need for a direct effect test between quality management and market share, implying a possibility of an improved market share through the implementation of TQM. Contemporary studies in the sphere of quality management and market share direct effect like Aigboje and Itai (2023) and Ele et al. (2023) both found significant effect and relationship respectively. However, Ele et al. (2023) was conducted on a singular bottled-water manufacturer in Cross River State, while Aigboje and Itai (2023) was conducted on few manufacturers domiciled in Port Harcourt, Rivers State. Both studies lack the ability to generalize their findings to a national level. Thus, there is a need for a more comprehensive study that covers more manufacturing firms and is focused on the economic capital of the country, Lagos, which is also the best representation of the country in terms of manufacturing presence. This discussion therefore drives the study to hypothesise that:

H2: TQM practices have a significant effect on market share

In several studies, organisational productivity is usually the dependent variable (Alsughayir, 2013; Guzman, Brun, Dominguez, 2019), even in the earlier hypothesis of this study. In this study, the authors argue based on existing literature that organisational productivity have a predicting relationship with market share. As concluded in the study of Jorge and Suarez (2014), using longitudinal secondary data of 8 years between 1999- 2007 and involving 303 firms, the most successful firms had very consistent high levels of productivity. This insinuates that the higher the productivity of the firm, the higher the market share, because without market share, a firm cannot be a market leader nor successful. However, there is paucity of empirical studies that attempted to investigate this salient relationship. Rambe and Khaola (2022) tested organisational productivity effect on market competitiveness using both South Africa and Zimbabwe as its study focus. The result was positive and significant, and the study called for replication on other African business environments. This study therefore intends to fill this gap. The study hypothesises that:

H3: Organisational productivity has a significant effect on market share

Conceptual Model

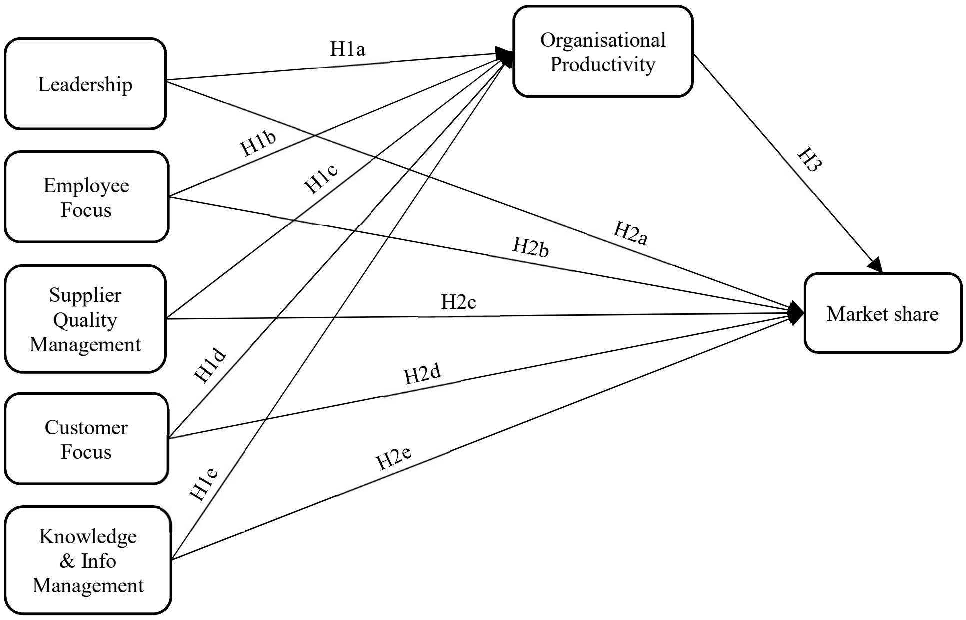

Figure 1. Pictorial reflection of the study's research hypotheses

Source: Authors, 2024.

The conceptual model explains the intention of the researchers to test the effect of TQM on organisational productivity and market share. The first and second hypotheses are broken into sub-hypotheses to capture the exclusive effects of the individual practices on the dependent variables in the respective hypotheses. Hypothesis one (TQM on organisational productivity) is broken into five sub-hypotheses to highlight the effect of TQM individual practices on organisational productivity in small manufacturing firms. In similar vein, hypothesis two (TQM on market share) was broken into five sub-hypotheses to test the effect of individual TQM practices on market share in small manufacturing firms.

3. METHODOLOGY

The study adopted the descriptive research design, and particularly, the cross-sectional survey sampling method was employed. This study focuses on small manufacturing firms in Lagos State (Nigeria). Thus, the population of the study is the number of small manufacturing firms in Lagos State. Small firms (10–49 employees) in Lagos are 8,042 out of 71,288 nationwide (NBS, 2021), and Lagos accounts for 11.3 percent of small firms, making it the largest contributor to small firms in the country. Small manufacturing firms in Nigeria are also recorded as 16,322 (NBS, 2021). This means that manufacturing firms make up 23 percent of the small firms in the country, making their research invaluable to the growth and survival of the country's employed labour force. Especially when considering that the manufacturing firms in the country account for 21 percent of job creation in the country. Due to unavailable specific data on small manufacturing firms in Lagos, 11.3 percent of small firms in Nigeria are in Lagos, as computed by the researchers. Therefore, the study estimates small manufacturing firms in Lagos as 1,844. The sample of the study was 987 respondents from 329 small scale manufacturing firms in Lagos. For specificity, each firm was given three copies of the study questionnaire to be filed by managers of the production, supply chain/logistics, and the marketing departments.

Measurement items

The study questionnaire was carefully drafted using existing item from literature. Questionnaire items on total quality management were adopted from the study of Udofia et al. (2021). Items on organisational productivity were adapted from Zhang Waszink, and Wijngaard (2000), Kumar, and Kumar (2012) and Yan, Zhang, Zhu, and Fan (2019). Items on market share growth were adapted from Pekovic and Galia (2009) and Delić, Radlovački, Kamberović, Vulanović, and Hadžistević (2014).

Table 1. Measurement items

	Total Quality Management	
	Leadership (Top Management Commitment)	Udofia et al. (2021).
1	The head and supervisory positions of the firm constantly communicate the vision and relevance of the quality level of product we must produce	
2	Our top management review problems related to the quality of product as top priority to protect the quality image of the firm & maintain performance	
3	Management is personally involved in activities that enlighten the firm on what customers actually want to see in the product	
	Customer focus	Udofia et al. (2021).
4	We use the recommendations of our customers as basis for product quality of subsequent production	
5	Our company analyses the satisfaction reports from customer surveys, and the results are used for quality improvements to improve acceptability and market share	
6	The customer complaints to our products are constantly relayed by a mechanism and promptly attended to by a team of production and marketing experts	

Table 1 (cont.). Measurement items

	Total Quality Management	
	Employee focus	Udofia et al. (2021).
7	Management is totally committed to improving the level of staff competence (through relevant training) to deliver optimum product quality	
8	Our company forms teams to solve problems related to the quality of product	
9	Ideas from employees (besides management) are visibly implemented to improve the quality of products.	
	Knowledge & Info management	Udofia et al. (2021).
10	In our company, quality data (for example, error rates, complaint rates etc.) regarding our product are available to those within relevant departments	
11	We exchange information regarding quality of product inputs with other companies in partnership with us	
12	Data is quickly converted to information that is complete, concise and comprehensible. And shared across the organisational information system for interdepartmental decision making	
	Supplier quality management	Udofia et al. (2021).
13	We continually audit our suppliers to make sure we receive quality inputs from them	
14	Our suppliers are certified by the ISO for quality, and we value quality over price in selection	
15	Our suppliers are incorporated into our quality management trainings to aid their development	
	Organisational Productivity	
16	There is a significant improvement in our deliveries	Lakhal et al. (2006)
17	There is a significant reduction in inventory waste levels	Lakhal et al. (2006)
18	There is a significant reduction in product re-work hours	Lakhal et al., 2006)
19	We produce and deliver what customers in full on time	Kim et al. (2012); Yan et al. (2019)
20	Warranty claims on our products and the defect rate on our products is low.	Zhang et al. (2000)
	Market Share	
21	Participation in entirely new market segments for the firm	Delić, et al. (2014)
22	Share of new Products has significantly improved the firms market contribution	Pekovic, Galia (2009).
23	Share of modified products have greatly elevated the company's earnings	Pekovic, Galia (2009).
24	Our innovative products have set market trends for others to mimic	Delić, et al. (2014)

Source: Literature Review, 2024.

Measurement model

Multivariate normality was tested by looking at the Mahalanobis number range for the data, which was 26.701 to 91.021. The critical value was calculated be 66.12, and 2 rows with higher Mahalanobis were deselected. Tolerance and the VIF values were within range (tolerance < 0.2 and VIF < 5), thus, multi collinearity was not violated. Respondents being 987 proved sufficient for SEM, and there was no violation of positive definiteness as seen in Determinant value and Kaiser-Meyer-Olkin (KMO) value of 1.993 and .788 respectively, while maintaining statistical significance (0.001) (Lowry, Gaskin, 2014).

Table 2. Model fit indices

Construct	items	Factor loading	CFI	GFI	RMR	IFI	*p*	Cronbach α	AVE	CR
Leadership (L)	L1	.712	.932	.920	.071	.924	.061	.724	.616	.722
	L2	.881								
	L3	.824								
Customer focus (CF)	CF1	.739	.919	.913	.052	.961	.059	.702	.522	.827
	CF2	.875								
	CF3	.799								
Employee focus (EF)	EF1	.711	.922	.951	.044	.932	.049	.870	.612	.892
	EF2	.832								
	EF3	.790								
Knowledge & Info Mgt (KIM)	KIM1	.811	.910	.942	.069	.975	.154	.794	.598	.873
	KIM2	.847								
	KIM3	.793								
Supplier Quality Mgt (SQM)	SQM1	.772	.938	.933	.047	.988	.044	.731	.638	.877
	SQM2	.897								
	SQM3	.821								
Organisation al Productivity (OP)	OP1	.644	.919	.908	.079	.944	.063	.703	.688	.701
	OP2	.723								
	OP3	.689								
	OP4	.801								
	OP5	.905								
Market Share (MS)	MS1	.644	.929	.921	.066	.952	.072	.826	.691	.744
	MS2	.599								
	MS3	.603								
	MS4	.854								

Source: Field Survey, 2024.

The model fit indices were within acceptable range (above .90). Table 2 also captures the result of the convergent validity test, thus, revealing values for average variance extracted (AVE) and composite reliability (CR). RMR below 0.08; and AVE and CR values above 0.5 and 0.7 respectively are adequate (Bagozzi, Yi, 1988; Hair et al., 1998). Table 2 also highlights the factor loadings for the items and they were above .50, indicating good loadings for the items (Bagozzi, Yi, 1988; Hair et al., 1998).

Table 3. Discriminant Validity – Construct squared correlation and squared root AVE values

Constructs	Mean	SD	L	CF	EF	KIM	SQM	OP	MS
L	4.762	0.700	***.784***						
CF	4.035	0.425	.533**	***.722***					
EF	4.271	0.319	.672*	.609*	***.782***				
KIM	4.339	0.455	.704*	.711**	.652*	***.773***			
SQM	4.095	0.567	.688*	.632*	.620*	.715*	**.798**		
OP	4.102	0.381	.767**	.693*	.677*	.733*	.601*	**.829**	
MS	4.533	0.660	.698**	.719**	.704*	.739*	.769*	.783**	***.831***

Source: Field Survey, 2024. ** ≤ .01 significant value and * ≤ .05 significant value

Bold diagonal figures are the squared root AVE values.

Discriminant Validity was satisfied by observing that squared correlation values of the constructs were lower than the squared root AVE values the same construct (Fornell, Larcker, 1981).

4. RESULTS

The study analysis was conducted on 462 responses from managers of small-scale manufacturing firms domiciled in Lagos, Nigeria. There is a need to focus on small scale manufacturers because most studies (especially in manufacturing context) relegate them and focus on large scale firms, even though they contribute significantly to lives and society. Other studies lump them with medium scale firms (SME studies), but that does not truly highlight what the relationship might be when small manufacturers are isolated. The analysis was done with the use of descriptive statistics (frequency and percentages) in analysing the demographic data, and structural equation model for testing the hypotheses of the study. The data collection for this study was carried between March 2024 – August 2024. Table 4 presents the summary of the demographic data analysis.

Table 4. BIODATA

		Frequency	Percent	Cumulative (%)
Gender	Male	275	59.5	59.5
	Female	187	40.5	100
	Total	462	100	
Department	Production	199	43.1	43.1
	Supply chain/Logistics	101	21.9	65
	Marketing	162	35	100
	Total	462	100	
Managerial experience	1–10	147	31.8	31.8
	11–20	243	52.6	84.4
	Above 20 years	72	15.6	100
	Total	462	100	
Manufacturing industry	Food, Beverages and Tobacco	163	35.3	35.3
	Textile, Apparel and footwear	79	17.1	52.4
	Pulp paper and paper products	136	29.4	81.8
	Chemicals	84	18.2	100
	Total	462	100	

Source: Field Survey, 2024.

From Table 4, the respondents of the study were majority male, as the table reveals that 59.5 percent of the respondents were male (275 men), while 40.5 percent of the respondents were female (187 women). The table equally reveals that most respondents were in the production department in their respective firms. Production department had 199 respondents, representing 43.1 percent, supply chain/logistics department had 101 respondents, accounting for 21.9 percent of the respondents. While marketing department had 162 respondents, representing 35 percent. On managerial experience, data shows that 147 respondents (31.8 percent) had between 1-10 years of experience. 243 respondents (52.6 percent) had between 11-20 years of experience. Lastly, 72 respondents (15.6 percent) had over 20 years of experience. The spread of industries covered 4 major manufacturing industries. Food beverage and tobacco had 163 respondents, representing 35.3 percent. Textiles and footwear had 79 respondents, representing 17.1 percent. Pulp paper and paper products had 136 respondents, which accounts for 29.4 percent. Lastly, chemicals industry had 84 respondents, representing 18.2 percent.

Test of Hypotheses

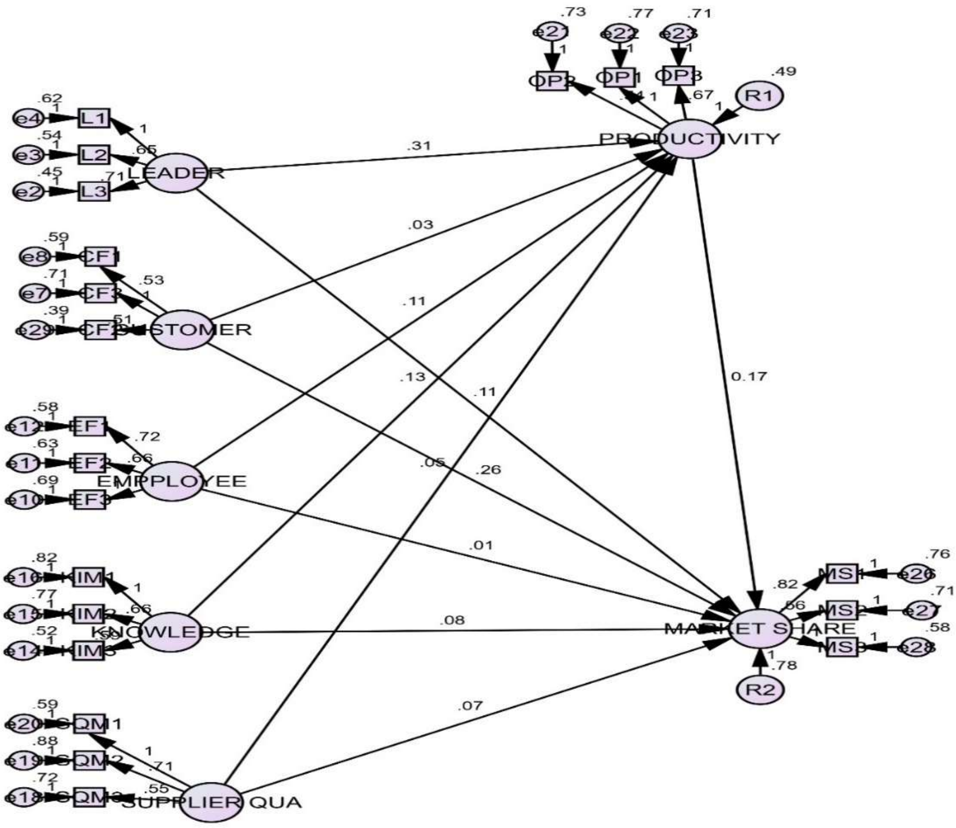

Figure 2. Results Model

Source: Field Survey, 2024.

Table 5. Hypotheses Result

Hypothesis	Path	Standardised Coefficient β	*p*-value	*t*-values	Result
H1a	L – OP	.310	.000	4.117	Supported
H1b	CF – OP	.031	.130	1.466	Not Supported
H1c	EF – OP	.111	.003	3.004	Supported
H1d	KIM – OP	.130	.002	2.332	Supported
H1e	SQM – OP	.053	.017	2.201	Supported
H2a	L – MS	.11	.000	4.805	Supported
H2b	CF – MS	.26	.000	3.327	Supported
H2c	EF – MS	.01	.010	2.033	Supported
H2d	KIM – MS	.08	.003	2.893	Supported
H2e	SQM – MS	.07	.001	3.301	Supported
H3	OP – MS	.17	.000	5.092	Supported

Source: Researcher, 2024.

5. DISCUSSION

The study tested the effect of total quality management practices on organisational performance. Based on the effect of its dimensions, total quality management has a significant effect on organisational productivity. The findings align with findings of Kontoghiorghes (2003), Tanninen, Puumalainen, and Sandstromb (2010) and Putri, Yusof, Hasan, and Darma (2014) who all found total quality management to be a predictor of productivity. The study also established that total quality management dimension had a positive effect market share. These finding aligns with prior contemporary studies by Aigboje and Itai (2023) and Ele et al. (2023) who equally established positive significant effect and relationships. The study establishes a direct effect between organisational productivity and market share. The finding gives credence to the finding of prior study by Rambe and Khaola (2022) on organisational productivity and market share. On the effects of the exclusive dimensions of TQM on organisational productivity, it reveals that leadership had a positive effect, customer focus had an insignificant effect, employee focus had a significant effect, knowledge and information management had a significant effect and supplier quality management had a significant effect. However, leadership had the most effect (0.310), followed by knowledge and information management (0.130) and employee focus (.111). This suggests that companies could focus on these three TQM practices in their pursuit of organisational productivity improvement. Exclusive TQM practices on market share highlights customer focus as the most impactful TQM practice in elevating market share.

6. CONCLUSIONS

The study concludes that total quality management has a positive and significant effect on organisational productivity. Equally, total quality management has a positive and significant effect on market share. Finally, organisational productivity also has a positive and significant effect on market share. The study result re-echoes the relevance of the RBV, as it saliently connects the dot between total quality management (a philosophy that is also an intangible resource because of its uniqueness in implementation) and organisational performance outcomes like productivity and market share. It is recommended that manufacturing firm implement total quality management practices to aid their productivity and market share improvement goals. Consideration must be given to leadership/top management commitment practice because of its effect on both organisational productivity and market share. In addition, firms focused on organisational productivity should also implement knowledge and information management and employee focus. On the other hand, in addition to leadership, firms focus on market share should implement customer focus. Though this study made significant contributions, some limitations exist. Firstly, the study examines manufacturing sector as a whole and pays no attention to the respective industries in the sector. Therefore, it fails to shed light on the relationship at the respective industry level. Also, the study limits its focus to Lagos. Though Lagos accounts for majority of the manufacturing sector, it may hamper generalisation of the study findings. Future studies may consider a more niche study, narrowing down into just one manufacturing industry. Future studies may also consider the relationship at exclusive industry level, thus, comparative analysis among industries to highlight the changes (if any) when considering manufacturing industries individually. Lastly, future studies may expand the focus to cover the entire Western Nigeria.

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Author Contributions: Introduction: E. E. U.; Literature review: E. E. U., J. E. E.; Gaps in literature: E. E. U.; Writing-review and editing: J. E. E.; Methodology: E. E. U.; Results: E. E. U.; Conclusion: J. E. E.; references: E. E. U., J. E. E.

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