

# THE IMPACT OF PRODUCT DEVELOPMENT ON MARKET SHARE (AN APPLIED STUDY IN THE YEMEN COMPANY FOR INDUSTRY AND COMMERCE - YEMEN)

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## Abstract

The study aimed to measure the impact of product development on market share, with an applied study at the Yemen Company for Industry and Commerce (YCIC) in Yemen. To achieve the study's objectives, the descriptive-analytical approach was used. The study relied on a questionnaire as the main tool for collecting data, with a stratified proportional sample of (870) respondents selected from the company's customers in various sales outlet sectors across the Republic of Yemen. The data were analyzed using the Statistical Package for the Social Sciences (SPSS) and the Analysis of Moment Structures (AMOS) software. The study concluded with a number of findings, the most significant of which were: product development in the YCIC is carried out at a high level, the market share of the company is also high, and there is a statistically significant impact of product development on the company's market share. The study recommended several actions, including the company's continued to develop its product designs to align with customer needs and offer distinctive specifications, while ensuring high quality through strict control standards and regular testing. Efficiency in cost management should be improved without compromising quality, and customer experience should be enhanced through after-sales service and effective communication channels. Marketing efforts should be increased to raise awareness of the products, and customer satisfaction should be measured regularly to identify areas for improvement. Additionally, a continuous innovation strategy should be adopted to meet the growing market demands.

**Keywords:** Product development, market share.

## INTRODUCTION

Market share is a key indicator for assessing the competitive performance of organizations, as it reflects their ability to attract a wide customer base and achieve sustainable financial returns. The competitive advantages offered to companies by larger market shares allow such companies to have higher chances of continuous growth and to become stronger in the market in the long term. Achieving this success is dependent on management using effective strategy aimed at both identifying customers' needs and surpassing competitors in meeting those needs and product development. This positively feeds into improving product appeal and raising customer demand, thereby adding to growth in market share (Peng et al., 2020).

The organization needs to achieve a competitive market share and this is possible only when the organization is able to understand the customers' needs and their desires and also be exemplary in delivering unique value in the organization's products or services. Secondly, it includes monitoring and analyzing competitors' strategies and movements in the market and industry to take advantage of opportunities and challenges. Most organizations aspire to succeed and last long in the market, so improving market share is a strategic goal and therefore they give out excellent high-quality products and services all beyond customer expectations and also response to the new market transition and surrounding competition (Bhattacharya et al., 2022) (Al-Ghanim, 2003).

Product development has become the core of the responses of industrial companies to market challenges – tough competition, technological progress, and the rising costs. Driving economic growth and competitiveness (Al-Wedyan et al., 2019), innovation is the central process that allowed companies to innovate new products or find ways to amend existing ones to meet the needs and desires of the customers. This not only helps to attract new customers but also as customer satisfaction leads to increased purchasing behavior frequency that in turn leads to increased company revenue and profits (Alfoqahaa, 2018). Continuous development allows companies to effectively deal with market dynamics in order to achieve their strategic goals. This has direct impact on successful product development and on the increase of company's market share since such solution produces value for the customers and creates a positive reputation that leads to increasing customer loyalty. Additionally, such strategy allows companies to boost their competitiveness in the market and broaden their influence (Fayomi et al., 2021, Chitta et al., 2021).

This study attempts to highlight the importance that product development has in the organizations' market share. It also attempts to study the factors that have an effect on the product development process, strategies with a view to enhance customer loyalty and trust and ways in which companies may obtain sustainable competitive advantage in dynamic markets. The study adds to equipping organizations with strategic understandings that will help them to keep fit for the changing markets and provide a comprehensive understanding of this relationship.

However, industrial market in Yemen suffers from many challenges as the competition keeps rising, economic and technological changes and, in turn, caused the share of many industrial companies to decrease in the market. This is a clear indication that the institutions' ability to deal with the changing needs of the customers and cannot compete with rivals who offer more innovative and better solutions is very weak.

As noted by the study conducted by Al-Ameri and Al-Hakimi (2021), many industrial organizations face severe challenges in preserving their share of the market because of the intensification of and growth of competition. It is traced to some of the companies failing to consider factors that may affect growth in market share, denying them the capacity to adjust their affairs in response to the rapid changes experienced in the business environment.

Several previous studies, including the works of Saif (2023), Manhour & Belhahi(2021), Mouaizi & Douma (2019), Nassour and Salloum (2019) and Qumaiha (2018) emphasize the significance of market share increase and dealing with issues related to its decline as it is one among the main determinants of a firm's capability to compete and go on holding in the market. Although, most organizations do not take the factors related to the promotion of their market share into consideration, which in turn may prevent them to cope with the increasing competition and enduring progress.

Central Statistical Organization data for 2020 from (Yemen) shows that the annual industrial sector contracts 17 percent from 2015 to 2020 and suffer economic losses totaling 14.1 billion riyals and the loss of nearly 739,000 job opportunities illustrates the extent of the crisis on the sector.

These challenges are further aggravated by their structural distortion and weakening competitiveness of local industrial companies and unstable economic and political conditions. The researchers conducted a survey of a sample of experts in the company under study, and the results showed that foreign companies compete very fiercely with the company being studied, the costs of raw materials and customs, as well as devaluation of the currency all resulted in loss of the company's market share.

Given the importance of this issue and its insufficient coverage in existing studies and research, the Yemen Company for Industry and Commerce is an interesting area for further research, especially since it is one of the major private sector organizations in the industrial community. Several studies have found an impact of product development on market share and have recommended conducting further research linking product development and market share, including studies by Saif (2023), Qumaiha (2018), Hadhli & Shaikh (2021), Mouaizi & Douma (2019), Hamoud (2017), Sambo et al. (2022), Qohhar & GS (2022).

Therefore, in light of the aforementioned points, the research problem of this study can be framed through the following main questions:

1. What is the level of product development (product design, product specifications, product quality, product cost) at the Yemen Company for Industry and Commerce from the customers' perspective?
2. What is the level of market share (sales volume - customer satisfaction) at the Yemen Company for Industry and Commerce?
3. What is the impact of product development (product design, product specifications, product quality, product cost) on the market share of the Yemen Company for Industry and Commerce products?

## LITERATURE REVIEW

Product development is one of the practical and vital parameters of business management, which impacts on a company's competitiveness as well as the share of the market it controls. It involves a process of creating new or innovative ideas for new products, designing the new products, introduction of prototypes, and monetizing the new products. All four dimensions of product development, namely, product design, product specification, product quality, and product cost are essential in deciding the fate of a particular product vis a vis its success in the market and its ability to maintain market share.

Mohammed et al. (2018) defined product development as "an ongoing process that does not end or stop at a certain point; it includes all activities that lead to modifying, presenting, or removing products, also Rivas et al. (2020) defined it as a complex process with multiple stages that a product goes through, from idea generation to the final product , since Al-Essaoui & Abdul Jabbar (2018) described It is a process consisting of a set of administrative and technical activities aimed at making changes to the product, process, or services associated with the product, thus providing a competitive advantage that keeps pace with environmental changes and faces competitors. Product development is a multifaceted and strategic process that is vital to an organization with regard to competitiveness, market orientation and sustainability. The other product development components were structure, quality and cost, all of which have very high impact on how the product is likely to perform in the market in relation to the customers' expectations.

The product characteristics that give detailed features of a product size, features, performance standards and other features and the material used in producing the product are also very important because they dictate the buyer's needs and expectations that companies have to meet. Saif (2023) mentioned the product specifications are the attributes that differentiate one product from another, including factors such as components, origin, advantages, price, and other relevant aspects that enhance its appeal and competitiveness. Consequently, this motivates the company to modify the product in order to improve it and incorporate unique features that set it apart from competing products. The authors, Ahmed (2024) affirmed that plans provide development teams working on it with the end goal through the specification of the target end product to which to steer as well as help minimize design failures. This is due to the fact that clear specifications enhance organization and better engagement with design, engineering and the production subordinates. Jackson and Trakhtenberg (2025) stressed that if company specifies its products correctly to meet the targeted customer segment requirements, then it would barely experience product failures and already existing products will gain high levels of adoption. The specific and market-based specifications ensure standardization and quality assurance across batches, hence enhancing brand reputation.

Product design is one of the initial processes in developing a product. It is a traditional and organizational approach which deals with the design of a product that would best fit the needs of the customer, or appeal to the eyes, or be easily usable, or trend within the market. Ali & Aziz (2022) defined the product design as the process of turning innovative ideas into reality and making the idea something practical. The purpose of reality is to transform the idea into a market product. Also stated by Nawar et al. (2024), a good product design does not only make the product aesthetic but also functions well, can be operated with ease and can also be produced efficiently. Previously, brainstorming and user-focused strategies were used generally to make novel and change-responsive designs. In viewing Candri et al. (2021) literature, functional integration yields the functionality, appearance, comfort, and innovation aspects of the product that make customers happy thus being loyal. This is in respect to the fact that effective product design defines not only how a product is noticed but also how it can be used and this is pertinent to the improvement of market share resulting from purchases and word of mouth.

Quality of the product is a core aspect that embraces the extent to which a product is fit for a purpose and will perform to an expected level. Quality assurance in the development process entails the requirements that are needed for the product, whether internal or external. Saif (2023) defined it as the set of features and the overall image of the product that strengthens its ability to satisfy specific or implicit consumer needs. Ge et al. (2025) state on their part that inspections carried out at the altar point are more effective than inspection post-production as this approach incorporates quality right from the development phase. High product quality leads to developing company's image, decreased expenses connected to production of faulty products, and buyers' trust. It has been widely discussed and analyzed that product quality is one of the key drivers of market share. Excellent quality of products improves customer satisfaction, decreases the number of returns, and enhances the image of the brand. Subsequently in a competitive market, the quality of products delivered by the firms is likely to emerge as the key factor that can offer the possibility of gaining a bigger market share due to customer faith.

Montoya et al., (2008) defined the product cost as the refers to the total direct and indirect costs associated with producing goods. Product cost is one of the concepts of development and is related to the profitability, competitiveness and cost of products. Manufacturing cost has relationship with material choices, manufacturing process and complexity of product design. As Hansford et al. (2023) noted, through target costing and value engineering, it helps the firms to manage cost and create value that is acceptable to the customer. However, along the cost line, it is prudent to strike the right balance as going too low in cost might affect the performance and on the other hand extremely high costs might make the product expensive for the market. Cost of the product and it is a measure of a product's market competitiveness. But their quality and design should not be outdone at the expense of costs, should they stand a chance to penetrate the market convenient for price-conscious citizens. According to Stonig and Schmid (2022), strategic management of cost in product development enables organizations to come up with products that are cheaper to produce and in turn make them cheaper to the consumers hence improving the competitive advantage and the market coverage. The factors aforementioned also make it possible for firms to employ lower prices in their merchandise, they gain high market penetration without affecting their profits. In other words, the four dimensions of design, specifications, quality and cost should be aligned to get the best results in the process of product development. A high level of development in these dimensions assists various firms to produce better products that are fashionable, internationally competitive, efficient and cheap to satisfy the market needs.

Mohammed (2022) emphasizes the importance of product development for companies from several key perspectives. First, product development helps companies survive and thrive, enhancing their ability to continue operating in a highly competitive business environment. Second, this development contributes to achieving strategic objectives, supporting growth and expansion in local and international markets. Furthermore, product development is related to meeting financial goals, including enhancing profits, enhancing return on investment, raising sales, revenues, and net present values of shareholders. In addition, this approach further allows companies to increase their market share, consequently, it expands their scope of operations. Lastly, product development does not solely impact financial

aspects but also affects non-financial goals such as increasing Customer Satisfaction, Reducing Competitors or Improving the company image in market and market cover.

Product development is a main factor in companies' success and sustainability because the product offering, fulfilling the customer's needs through the development of improved and / or new products, which matches the customers' expectations in order to increase their satisfaction and loyalty. Moreover, it offers valued services and unique items that yield a competitive edge for companies thereby putting them a head above their competitors. Moreover, product development enhances financial performance through increased sales, revenue, and provides new market expansion opportunities. It is an opportunity to be able to continue with technological adaptations and innovations, all for a strong reputation as well as customer trust. Therefore, product development is a performance strategist in the continuity and development of companies in a competitive and dynamic business environment.

According to Manhour and Belhahi (2021), there are many aspects in product development which are part of companies' objectives in order to improve their competitiveness. For the first, companies are looking to be profitable by high yield products. Second, they aim to stabilize sales by integrating consistent products and eliminating those that hinder this stability. They also work to grow sales by introducing new products and improving existing ones, in addition to innovation and differentiation to achieve market exclusivity. Product development also enhances customer satisfaction by offering high-quality products, which contributes to increased sales and revenue by attracting new customers. The objectives also include improving efficiency and operations using technology, expanding the market to explore new opportunities, and focusing on sustainability and social responsibility by developing environmentally friendly products. These objectives demonstrate that product development is a vital strategic component of corporate success.

There are several methods for developing new products, Annacchino (2003) has classified these types according to specific purposes, as mentioned by Al-Awadi and Jawad (2021). These methods include new-to-the-world products, which are revolutionary products that the market has never encountered before, creating entirely new markets. They also include new product lines, which generate incremental revenue by expanding awareness of new product categories while maintaining existing ones. Also, they include modifications or additions to existing product lines, which support existing lines by creating complementary products, thus expanding brand influence. Additionally, improving existing products requires enhancing offerings to increase or maintain market share, through redesigning or repackaging products to enhance perceived value. Finally, product repositioning involves marketing the product in new ways to create a different impression. This is more of a marketing activity than a developmental one, and is a temporary measure aimed at generating revenue from existing products. These classifications demonstrate how companies use various strategies to develop products according to changing market needs.

According to Khidr (2020), the key considerations in developing a new product are multiple important points. The first one is that products should be developed based on a clear understanding of what customers want and like, and this is primarily related to the probability of success of the product. Secondly, the success of this process involves cross-functional teams; team members from marketing, finance, design and manufacturing understand the development process of this project to have the best development efficiency. Finally, the process has to be organized and systematic, this calls for innovative management systems to carry out a collection and evaluation of ideas. Such considerations help to improve the efficiency and efficiency of product development and then companies meet the market needs and strengthen competitiveness.

According to Sarsour (2019) and Belbahi (2015), product development strategies involve their key aspects. The first product quality development strategies try to improve performance and durability aiming at improving customer satisfaction and reducing costs. Second, product feature development strategies involved improving design and related services to build a good image. Third, product design development strategies aim to differentiate the company through aesthetic and functional aspects, despite the challenges associated with customer preferences. Finally, the technology used in product development emphasizes the importance of technological advancements in improving production and delivering innovative products, which requires ongoing investment in research and development.

Market share is of great significance to organizations, as it serves as A fundamental goal that companies strive to achieve. It is a key indicator of an organization's success, growth, and increased market value. Bhattacharya et al. (2022) defined market share as a relative market size in which the particular organizational market sales are divided with the whole industry sales volume and Jad Al-Rabb. (2016) defined market share as the total sales of a company in the market, which can be measured by the number of customers or the monetary value generated from the company's sales for each product or service, compared to the total sales value in the market. Also Mohammed (2017) defined it as the actual sales share, whether in the quantity sold or revenue generated for the product over a specific period and in a specific geographical area. It goes beyond merely being a key figure in analyzing corporate performance but equally as a factor that is used to determine the sustainability of a brand.

There are several dimensions of quantitative market share measures. The study has addressed two dimensions of market share: (customer satisfaction and sales volume), according to the studies of Ibrahim (2018), Mohammed (2018), and Al-Ameri & Al-Hakimi (2021). Haimar and Sharaf (2022) defined customer satisfaction as a set of emotions and feelings experienced by the customer as a result of comparing the service to their expectations, where

Taleb and Al-Janabi (2009) described as a measure related to the actual and expected performance of a product or service. For the other dimension of market share the sales volume was defined by Merliana (2024) as the total revenue from the number of units sold over a limited time period, since Al-Ameri and Al-Hakimi (2021) describe it as the reference to the quantities sold by the organization over a specified period of time.

Market share by sales volume is something rather direct and more traditional to measure since it reflects the quantity of products sold in a given time period. Mariam et al. (2023) have noted that the degree of market orientation, that is, the extent to which they respond to customer needs and wants usually leads to higher levels of sales. Thus, high levels of sales are synonymous with high levels of brand awareness and distribution and better prices. Another group of scholars such as Suprapti and Suparmi (2022) opine that the argument of volume of sales could be a misleading in an organization since it fails to incorporate the perception of the customers or the level of loyalty.

Customer satisfaction, on the other hand, serves as a qualitative yet vital metric. It means the level or standard up to which a product or service is capable of satisfying the customer. Karim and Rabiul (2024) has noted that organizational support leads to repeat patronage, word of mouth and increased customer loyalty that has a positive influence on the sustainable gain of market share. Marcos and Coelho (2022) also perceived that satisfaction precede customer retention and that the latter was cheaper than customer acquisition.

A lot of research studies exist which point towards the positive interaction between the volume of sales and customer satisfaction. According to Akanbi and Obafemi (2024) a firm that is capable of attracting long term loyal customers normally experiences steady sales growth in the future. Similarly, Danyal et al. (2024) proposed that customer satisfaction can enhance the sales force performance and hence increase the size of the market share within a firm.

This is why customer feedback has become imperative to be used in the formulation of marketing strategies in the current digital and customer-oriented systems. Companies such as Amazon and Apple leverage both real-time sales data and customer satisfaction indices to fine-tune their market approach (Mohapatra et al. 2025). The further help of CRM systems and the employment of AI-based analytics increase the likelihood of connecting fluctuations in the sales level with changes in customers' satisfaction rates.

Using sales volume and customer satisfaction as the key indicators of the market share allows for an adequate assessment of the product's performance. Although the sales volume tells the overall picture of competition status, customer satisfaction gives the real picture of their sustainability. In this sense, they are equally important to consider when it comes to the assessment of the market and its management.

The importance of market share lies in its ability to achieve growth and economic stability for an organization. Market share reflects the volume of sales and the organization's influence on the targeted market. As market share increases, the organization's opportunities to enhance competitiveness, attract more customers, and increase revenues rise. Market share also represents a form of recognition and trust from customers and investors. In addition, market share contributes to improving financial performance, encouraging innovation, and expanding into new markets. Market share is considered a key measure for assessing the marketing performance of business organizations (Bahamid, 2018). Sulaiman (2017) and Atari et al. (2022) identified several factors that influence an increase in market share. First, companies should promote the concept of comprehensive participation in sales operations. Second, there should be a greater focus on research and development activities while reducing reliance on a single product. Third, increasing human resources training and attracting specialized talent capable of advancing the business is essential for growth and development. Fourth, organizations must diversify and differentiate the services they provide. Finally, it's important to focus on pricing policies to ensure they are competitive with those of rivals.

market shares as being affected by multiple factors, the most prominent of which are strong price competition, marketing, innovation, and the standard of the products and services provided to customers. The company's strategies to meet the needs of different segments also vary with changes in the demography like gender, age and income of the segment. Moreover, technological changes are an important key factor since keeping abreast of the technological changes will provide a boost to the market share while failing to keep pace with the technological changes will mean that the market share is lost to competitors. Attracting customers from the competition is based on offering new products or services, with high quality offerings that meet the expectations of the customers to increase the demand, for control of loyalty, and to maintain customer satisfaction. Constant analysis of these factors is part of making you succeed long and stay long in this market.

Previous studies have been done about the influence of product development to market share, by Afrianti and Elmiwati (2023), Hadhli and Shaikh (2021), Al- Jobor et al. (2020), Zaher (2020), Qumaiha (2018) and Hamoud (2017) that indicate significant and positive effect of product development towards market share. The product development being one of the most important founding of Saif (2023), Sambo et al. (2022), Qohhar & GS (2022), Alzoubi et al. (2022), Mouaizi and Douma (2019), Ayodele and Oginni (2019) and Wantara & Tambrin (2019) helps to boost the sales and also increase market share which are supported by several empirical research. According to Liu (2024), some product service firms such as Apple and Xiaomi, who competed on both design and cost, had announced themselves on the most valuable markets they could crack. Similarly, all the hypotheses were developed and confirmed with the findings of the current study, along with reporting and confirming a positive and significant linkage between integrated product development and market share of the manufacturing firms in emerging economies.

A company's ability to achieve effective competition in present-day markets heavily depends on its product development efforts. Consumer preferences and market share success of a product depend heavily on the individual aspects of product development including product design along with product specifications and product quality and product cost.

The design of a product stands as the main factor which draws the attention of potential customers. The product design combines both visual attractiveness with features that impact functionality as well as user comfort and system navigation. Excellent design elements produce two key benefits which include competitive differentiation and enhanced customer satisfaction alongside sparking product repurchases. The successful creation of competitive market advantages happens when product design links user needs to engineering possibilities which boosts product worth perception according to Xu et al. (2024).

The specific characteristics defining a product known as Product Specifications need equal recognition. Companies can serve multiple customer requirements through their precise and competitive specifications across different market segments. Product specifications that result from market research combined with user feedback led to elevated customer satisfaction levels and better loyalty rates according to Atif (2023). Detailed specifications serve consumers as guidance since they help them select particular products from an available range of options. Companies benefit from market expansion and higher market share when they adjust their specifications toward the latest technology or changing market needs.

Product Quality demonstrates the strongest association with customer retention because it generates word-of-mouth marketing which strengthens market share dynamics. According to Cooper (2024) product quality consists of performance reliability durability and serviceability as its basic dimensions. Quality products decrease product returns and build strong brand standing to generate devoted customers who buy again. The research conducted by Li et al. (2025) demonstrates that customers who perceive quality in products tend to prefer brands and purchase them more frequently when markets are competitive with low switching costs.

Market positioning and share both depend heavily on the cost elements of products. The totality of product costs connected to manufacturing and shipping expenses as well as resource usage counts toward cost's definition. Market presence requires struck balance between making products affordable and ensuring profitability. Wang et al. (2025) explain that firms which achieve cost efficiencies through supply chain optimization and lean production systems can provide these cost reductions to customers while maintaining quality standards. Enacting competitive pricing combined with innovation and value creation enables businesses to gain customers beyond their initial market base while protecting their market standing against market competitors.

Product development using its essential four dimensions provides an immediate and quantifiable influence on market share achievements. The individual components in this system support each other because design attracts customers while specifications match expectations and quality create trust and cost establishes market access. Complete product development methods that combine all elements produce improved products alongside superior market results. The marketplace's evolution requires companies that develop products holistically because they will adapt better with additional innovation capacity for sustainable business growth.

Product development has increasingly become a global trend, driven by the need to adapt to rapidly changing markets and reduce reliance on imports, thereby promoting self-sufficiency. This shift aligns with the Sustainable Development Goals, emphasizing local production and continuous innovation. Companies are now compelled to develop a series of short-term competitive advantages through enhanced product development processes, which necessitate global coordination and the use of advanced technological tools (Gutterman, n.d.). The integration of cross-functional teams across different countries has led to improved product designs, faster market entry, and cost efficiencies (Eppinger & Chitkara, 2007). Furthermore, sustainable innovation is crucial, as it addresses environmental concerns by promoting durable production processes with reduced material consumption and lower carbon footprints (Leal Filho et al., 2024). Thus, the evolution of product development reflects a comprehensive approach to meet both market demands and sustainability objectives.

Although extensive research has explored the relationship between product development and market share, the majority of prior studies have focused on multinational corporations or firms operating in economically advanced or rapidly developing markets. There remains a critical lack of empirical investigations within fragile, under-researched environments such as Yemen, where market dynamics are shaped by political instability, economic constraints, and limited consumer purchasing power. Furthermore, existing literature tends to examine individual components of product development in isolation—such as design, cost, or quality—without addressing their combined, integrated influence within constrained environments. This study seeks to address this notable gap by focusing on the Yemen Company for Industry and Commerce (YCIC) as a representative case from a volatile economic context, providing new insight into how holistic product development strategies affect market share in emerging, resource-limited economies.

## **2- Objectives, Theoretical Model and hypotheses**

### **Objectives of the Study**

1. To assess the level of product development in its dimensions (product design, product specifications, product quality, product cost) at the Yemen Company for Industry and Commerce.
2. To evaluate the level of market share in its dimensions (sales volume - customer satisfaction) for the products of the Yemen Company for Industry and Commerce.
3. To determine the impact of product development in its dimensions (product design, product specifications, product quality, product cost) on the market share of the products of the Yemen Company for Industry and Commerce.

**Theoretical Model**

The determination of the dimensions of the independent variable, product development, is derived from various previous studies, such as Ali and Aziz (2022), Zaki (2019), Al-Nahhas (2022), Nasour and Salloum (2019), Sarsour (2019), and Belbahi (2018). Four dimensions were adopted for this variable: product design, product specifications, product quality, and product cost. Additionally, various studies were used to determine the dimensions of the dependent variable, market share, including Al-Rubai and Al-Janabi (2023), Al-Ameri and Al-Hakimi (2021), Mohammed (2019), Ibrahim (2018), Jad Al-Rabb (2016), and Sharaf (2015). Two dimensions were adopted for market share: sales volume and customer satisfaction, as illustrated in Figure 1.



**Figure (1): Theoretical Model of the Study**

**Hypotheses of the Study**

Based on the problem, objectives, and the theoretical model of the study, the hypotheses have been formulated as follows:

**Main Hypothesis:** There is a statistically significant effect at a significance level of ( $\alpha \geq 0.05$ ) of the dimensions of product development (product design, product specifications, product quality, product cost) on the market share of the Yemen Company for Industry and Commerce. From this main hypothesis, the following sub-hypotheses are derived:

1. There is a statistically significant effect at a significance level of ( $\alpha \geq 0.05$ ) of product design on the market share of the Yemen Company for Industry and Commerce.
2. There is a statistically significant effect at a significance level of ( $\alpha \geq 0.05$ ) of product specifications on the market share of the Yemen Company for Industry and Commerce.
3. There is a statistically significant effect at a significance level of ( $\alpha \geq 0.05$ ) of product quality on the market share of the Yemen Company for Industry and Commerce.
4. There is a statistically significant effect at a significance level of ( $\alpha \geq 0.05$ ) of product cost on the market share of the Yemen Company for Industry and Commerce.

**METHODOLOGY**

To accomplish the study's objectives, the researchers employed a descriptive-analytical approach. This approach is intended to describe the phenomenon being examined, answer the research questions, test the hypotheses, and analyze the data using a questionnaire specifically designed for the study's objectives, and interpret the appropriate descriptive-analytical methodology for the current study. The study used a questionnaire to collect data from a targeted sample of consumers of the company's products, with the goal of obtaining direct feedback from those most closely connected to the research topic. Participants were selected based on their actual users of the products under study, ensuring their opinions were closely linked to product quality and development and improvement processes, since the survey was distributed manually, with paper copies sent directly to participants in available locations. Additionally, electronic copies were distributed using a Google Forms form, with survey links sent via email and social media to targeted

respondents in remote areas. This was aimed at reaching the largest possible number of participants and facilitating the data collection process. Field staff were also used to collect data directly from hard-to-reach areas. Addition to that Semi-structured interviews were conducted with a group of product managers and key customers to survey their opinions on product development strategies.

**Study Population and Sample**

The study population comprises customers of the Yemen Company for Industry and Commerce (YCIC), distributed across 26 governorates in the Republic of Yemen, segmented into six major commercial zones: the Northern, Southern, Eastern, Central, Taiz, and Tihamah Sectors. These zones include governorates such as Sana'a, Aden, Hadhramaut, Al Hudaydah, and Taiz, covering over 50,700 retail outlets. This wide geographical dispersion ensures comprehensive representation of the consumer market.

A stratified random sampling method was applied, with stratification based on three key criteria: (1) Gender (Male ,Female) (2) Age ( Less than 35 years • 35 - to 40 years • 41 - to 45 years • 46 - to 50 years • Over 50 years (3) Educational Qualification ( High School ,Diploma, Bachelor's, Master's , Doctorate), (4) Sectors ( Northern Sector , Southern Sector , Central Sector , Eastern Sector , Western Sector , Taiz Sector) and (4) customer type (retail, wholesale, distributor). Each stratum's weight in the sample reflects its contribution to YCIC's total sales volume, as confirmed by company distribution data. For instance, customers in the Southern and Tihamah sectors accounted for a significant proportion of sales, and therefore received a correspondingly higher share of questionnaires.

The final sample size (n = 870) was determined using the recommendations of Hair et al. (2018), which suggest a ratio of at least 20–25 responses per item for structural models. Given that the questionnaire consisted of 40 items, the minimum required sample was 800; thus, the 870 responses collected exceed this threshold and enhance statistical robustness. The sample's focus on customers with direct product experience further ensures the validity and applicability of the findings within the company's operational context.

**Analysis programs:** The data were analyzed using the Statistical Package for the Social Sciences (SPSS) and the Analysis of Moment Structures (AMOS) software.

Table (1): Sample Distribution for Sales Outlets

No.	Sector	Population	Sales Contribution Percentage	Total Sample
1	Northern Sector	20,280	40%	348
2	Southern Sector	7,605	15%	130
3	Middle Sector	9,126	18%	157
4	Eastern Sector	1,014	2%	17
5	Western Sector	7,098	14%	122
6	Taiz Sector	5,577	11%	96
Total		<b>50,700</b>	<b>100%</b>	<b>870</b>

Source: Marketing Department, Yemen Company for Industry and Commerce

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**Result**

The validity of the questionnaire refers to "the extent to which the questionnaire measures what it is intended to measure" (Al-Jarjawi, 2010: 183). In terms of the expert's perspective, it is referred to as "apparent validity." The questionnaire was presented to a group of specialists in the fields of business management and statistics to ensure the correct formulation of the items, the clarity of the instructions, and the relevance of the items to the study's domains. Additionally, the experts verified the suitability of the tool for measuring the objectives related to this study. Based on the feedback from the experts, the researcher responded to their suggestions, making the necessary deletions and modifications. As a result, the validity of the questionnaire was confirmed from the experts' perspective.

The researcher assessed the reliability of the study tool using **Cronbach's Alpha** for each variable and its dimensions, as shown in the table below, to determine the reliability and validity of the measurement scale used.

Table (2): Cronbach's Alpha Coefficient for Measuring the Reliability of the Questionnaire Tool

Variable	Dimension	Number of Items	Cronbach's Alpha Coefficient
Product Development	Product Design	5	0.821
	Product Specifications	6	0.851
	Product Quality	6	0.879
	Product Cost	6	0.900



<b>Overall Reliability for Independent Variable</b>	-	23	0.947
<b>Market Share</b>	Sales Volume	8	0.864
	Customer Satisfaction	9	0.892
<b>Overall Reliability for Dependent Variable</b>	-	17	0.930

**Source:** Prepared by the researcher based on the outputs of the SPSS program.

It is evident from **Table (2)** that Cronbach's Alpha coefficients for the study's dimensions and variables are statistically significant and acceptable because they are greater than 70% (Malika et al., 2020: 53). The reliability coefficient for the independent variable (customer perception) is 0.938, and for the dependent variable (market share), it is 0.930, both of which indicate a high degree of reliability. This suggests that the questionnaire is valid for data analysis and answering the study's questions.

Descriptive analysis methods were used for the study's items, dimensions, and variables, which involve calculating the weighted mean to determine the average opinions of the study population, and the standard deviation to assess the dispersion of the responses within the target study population regarding the mean. The relative weight expresses the importance of each item to the study population.

The scale consists of seven degrees of agreement, where the highest score (7) indicates full agreement (Strongly Agree), and the lowest score (1) indicates full disagreement (Strongly Disagree). The values (2, 3, 4, 5, and 6) represent different levels of agreement: Agree, Agree to Some Extent, Neutral, Disagree to Some Extent, and Disagree, respectively. The study relied on ranking the arithmetic means at the level of variables, dimensions, and items, and the degree of agreement was determined according to the scale outlined in **Table (3)**, which shows the verbal interpretation of the arithmetic mean responses of the study population.

Table (3): Calculation of Verbal Interpretation for Responses of the Study Sample

Arithmetic Mean	Percentage Range	Response Degree	Level of Practice/Implementation
Less than 1.86	Less than 27%	Strongly Disagree	Very Weak
From 1.86 to less than 2.71	From 27% to less than 39%	Disagree	Weak
From 2.71 to less than 3.57	From 39% to less than 51%	Disagree to Some Extent	Weak to Some Extent
From 3.57 to less than 4.43	From 51% to less than 63%	Neutral	Moderate
From 4.43 to less than 5.29	From 63% to less than 76%	Agree to Some Extent	High to Some Extent
From 5.29 to less than 6.14	From 76% to less than 88%	Agree	High
From 6.14 to 7	From 88% to 100%	Strongly Agree	Very High

**First: Product Development Level:  
 Results Related to the First Question:**

*What is the level of product development (product design, product specifications, product quality, product cost) at the Yemen Company for Industry and Commerce from the customers' perspective?*

To review the results of the study sample's responses regarding the items and dimensions of the independent variable (Product Development), descriptive analysis tests, including (arithmetic means and standard deviations), were used as follows:

Table (4): Descriptive Analysis Indicators for the Independent Variable (Product Development)

No.	Dimension	Rank	Arithmetic Mean	Standard Deviation	Relative Weight	Verbal Interpretation
1	Product Design	1	5.58	1.14	80%	High
2	Product Specifications	2	5.42	1.20	77%	High
3	Product Quality	3	5.42	1.27	77%	High

4	Product Cost	4	5.10	1.45	73%	High to Some Extent
	Product Development (Overall)		5.38	1.26	77%	High

**Source:** Prepared by the researcher based on the SPSS program outputs.

The results presented in **Table (4)** indicate that the overall level of product development practices is high, with an overall arithmetic mean of (5.38) and a standard deviation of (1.26).

The analysis also shows the level of practice for the four dimensions constituting the product development of the Yemen Company for Industry and Commerce, based on their arithmetic means, as follows:

First, the dimension of "Product Design" has a high level with an arithmetic mean of (5.58), a standard deviation of (1.14), and a relative importance of (80%).

Second, the dimension of "Product Specifications" also shows a high level with an arithmetic mean of (5.42), a standard deviation of (1.20), and a relative importance of (77%).

Third, the dimension of "Product Quality" is rated highly with an arithmetic mean of (5.42), a standard deviation of (1.27), and a relative importance of (77%).

Finally, the dimension of "Product Cost" has a high level with an arithmetic mean of (5.10), a standard deviation of (1.45), and a relative importance of (73%).

### Second: Market Share Level

#### Results Related to the Second Question:

*"What is the level of market share in its dimensions (Sales Volume - Customer Satisfaction) at the Yemen Company for Industry and Commerce?"*

By reviewing the responses of the study sample regarding the items and dimensions of the dependent variable (Market Share), descriptive analysis results, including **arithmetic means and standard deviations**, were examined as follows:

Table (5): Descriptive Analysis Indicators for the Dependent Variable (Market Share)

N	Dimension	Rank	Arithmetic Mean	Standard Deviation	Relative Weight	Verbal Interpretation
1	Sales Volume	1	5.50	1.10	79%	High
2	Customer Satisfaction	2	5.35	1.16	76%	High
	<b>Market Share (Overall)</b>		<b>5.42</b>	<b>1.07</b>	<b>77%</b>	<b>High</b>

**Source:** Prepared by the researchers based on the outputs of the SPSS program.

The results in Table (5) indicate that the overall level of market share practices is high, with an overall arithmetic mean of (5.42) and a standard deviation of (1.07).

The analysis also shows the level of practice for the two dimensions of market share at the Yemen Company for Industry and Commerce, based on their arithmetic means, as follows:

First, Sales Volume Dimension got high rated, with an arithmetic mean of (5.50), a standard deviation of (1.10), and a relative importance of (79%).

Second, Customer Satisfaction Dimension also scored high, with an arithmetic mean of (5.35), a standard deviation of (1.16), and a relative importance of (76%).

### Third: Hypothesis Testing

#### Results Related to the Second Question:

*What is the impact of product development (product design, product specifications, product quality, product cost) on the market share of the Yemen Company for Industry and Commerce products?*

Structural Equation Modeling (SEM) using AMOS software was employed to test the validity of the main hypothesis and its sub-hypotheses, as follows:

#### Testing the Main Hypothesis

The **main hypothesis** states:

*"There is a statistically significant effect at a significance level ( $\alpha \geq 0.05$ ) of the dimensions of product development (Product Design, Product Specifications, Product Quality, and Product Cost) on the market share of the Yemen Company for Industry and Commerce."*

Figure (2) and Table (12) illustrate the results of testing the effect of product development dimensions on market share.

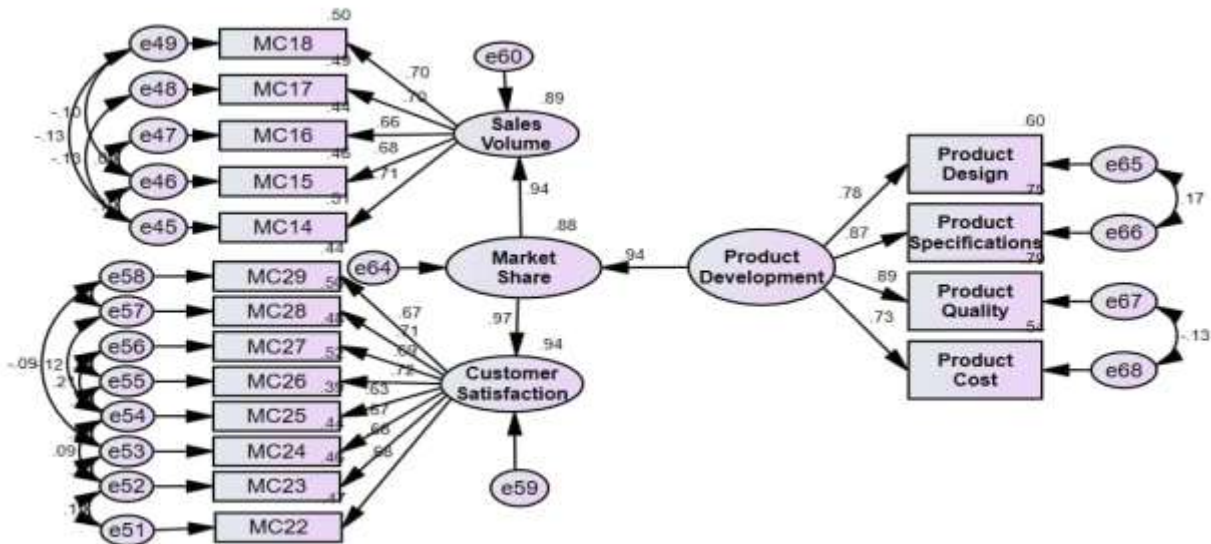


Figure (2): The Structural Model for Testing the Main Hypothesis

Figure (2) illustrates the structural model of the study, which represents the independent variable (Product Development) and the dependent variable (Market Share). The one-way arrows from the independent variables to the dependent variable represent the standardized regression coefficients. The value displayed above the market share variable represents the coefficient of determination ( $R^2$ ), also known as the standardized coefficients used for hypothesis testing.

The results indicate that Product Development explains 88% of the variations in Market Share, while the remaining 12% is attributed to other factors not included in the study model.

Table (6): Structural Model Estimates for Testing the Main Hypothesis

Path	S. R. W	Estimate	S.E.	C.R.	P
Market Share $\rightarrow$ Product Development	0.94	1.12	0.06	19.46	***
Product Specifications $\rightarrow$ Product Development	0.87	1.18	0.04	30.63	***
Product Quality $\rightarrow$ Product Development	0.89	1.28	0.05	28.03	***
Product Cost $\rightarrow$ Product Development	0.74	1.21	0.06	22.07	***
Product Design $\rightarrow$ Product Development	0.78	1.00			

From Table (6), it is evident that the marginal slope coefficient ( $\beta$ ) is 0.94, indicating that an increase in product development by one standard deviation unit leads to a 94% increase in market share by one standard deviation unit. Additionally, all model estimates are statistically significant at ( $P < 0.001$ ), and the Critical Ratio (CR) exceeds 1.96, meeting the required statistical condition. Based on the structural model outputs, which analyze the impact relationship between the independent variable (Product Development) and the dependent variable (Market Share), the main hypothesis is accepted.

**Testing the Sub-Hypotheses of the Main Hypothesis**

The researcher tested the sub-hypotheses of the main hypothesis using the Structural Model (SEM) and Structural Equation Modeling (AMOS).

As shown in Figure (2) and based on the coefficient of determination ( $R^2$ ), the dimensions of the Product Development variable explain 80% of the variations in Market Share, while the remaining 20% is attributed to other factors not included in the study model.

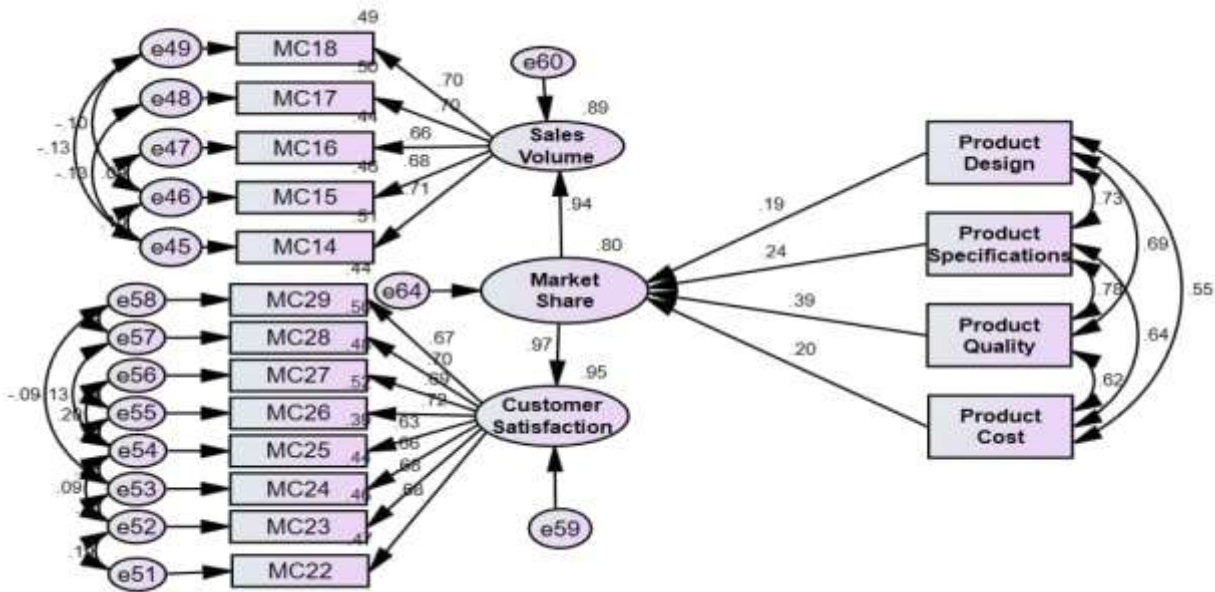


Figure (3): The Structural Model for Testing the Sub-Hypotheses of the Main Hypothesis

Table (7): Structural Model Estimates for Testing the Sub-Hypotheses of the Main Hypothesis

	Path	S. R. W	Estimate	S.E.	C.R.	P
Product Design	Market Share	0.188	0.173	0.029	5.996	***
Product Specifications	Market Share	0.237	0.208	0.033	6.354	***
Product Quality	Market Share	0.392	0.323	0.031	10.586	***
Product Cost	Market Share	0.206	0.149	0.02	7.376	***

### First Sub-Hypothesis

Based on Figure (3) and Table (7), the results of testing the first sub-hypothesis of the main hypothesis state: "There is a statistically significant effect at a significance level ( $\alpha \leq 0.05$ ) of product design on the market share of the Yemen Company for Industry and Commerce."

The results indicate that the impact of the Product Design dimension is ( $\beta = 0.19$ ), which has a positive and statistically significant effect. Additionally, the Critical Ratio (C.R.) is 5.996, which is greater than the threshold for acceptance (C.R. > 1.96). These results align with the study's expectations. Consequently, based on the structural model output, the first sub-hypothesis is accepted, confirming the significant impact of product design on market share.

### Second Sub-Hypothesis

Similarly, Figure (3) and Table (7) present the results of testing the second sub-hypothesis, which states: "There is a statistically significant effect at a significance level ( $\alpha \leq 0.05$ ) of product specifications on the market share of the Yemen Company for Industry and Commerce."

The results indicate that the impact of the Product Specifications dimension is ( $\beta = 0.24$ ), which is positive and statistically significant. The Critical Ratio (C.R.) is 6.354, exceeding the required threshold of (C.R. > 1.96). These findings support the study's expectations. As a result, based on the structural model output, the second sub-hypothesis is accepted, confirming the significant impact of product specifications on market share.

### Third Sub-Hypothesis

Figure (3) and Table (7) also present the results of testing the third sub-hypothesis, which states: "There is a statistically significant effect at a significance level ( $\alpha \leq 0.05$ ) of product quality on the market share of the Yemen Company for Industry and Commerce."

The results indicate that the impact of the Product Quality dimension is ( $\beta = 0.39$ ), which has a positive and statistically significant effect. The Critical Ratio (C.R.) is 10.586, well above the acceptance threshold of (C.R. > 1.96). These

findings align with the study's expectations. Consequently, based on the structural model output, the third sub-hypothesis is accepted, confirming the significant impact of product quality on market share.

#### **Fourth Sub-Hypothesis**

Lastly, Figure (3) and Table (7) present the results of testing the fourth sub-hypothesis, which states: *"There is a statistically significant effect at a significance level ( $\alpha \leq 0.05$ ) of product cost on the market share of the Yemen Company for Industry and Commerce."*

The results indicate that the impact of the Product Cost dimension is ( $\beta = 0.21$ ), which has a positive and statistically significant effect. The Critical Ratio (C.R.) is 7.376, exceeding the required threshold of (C.R. > 1.96). These results are consistent with the study's expectations. As a result, based on the structural model output, the fourth sub-hypothesis is accepted, confirming the significant impact of product cost on market share.

## **DISCUSSION**

The results presented in **Table (4)** indicate that the overall level of product development practices is high, with an overall arithmetic mean of (5.38) and a standard deviation of (1.26). This suggests significant attention from the Yemen Company for Industry and Commerce to product design, specifications, and quality. The four dimensions constituting the product development of the Yemen Company for Industry and Commerce, based on their arithmetic means, as follows:

**First, the dimension of "Product Design"** has a high level with an arithmetic mean of (5.58), a standard deviation of (1.14), and a relative importance of (80%). This confirms that the company's product designs have a wide reputation and recognition compared to other products, attracting customers at the point of purchase while reflecting the company's unique identity and brand. The product designs contribute to enhancing the positive perception of the company and attracting more customers.

**Second, the dimension of "Product Specifications"** also shows a high level with an arithmetic mean of (5.42), a standard deviation of (1.20), and a relative importance of (77%). This indicates that the company offers products of various sizes and packaging that meet customer needs, with packaging clearly showing the product's essential components. The variety in sizes and packaging is of significant importance to customers, while updating product specifications to meet their expectations ranks slightly lower. Nevertheless, all aspects show noticeable satisfaction among respondents, reinforcing the importance of product specifications in development and increasing their appeal.

**Third, the dimension of "Product Quality"** is rated highly with an arithmetic mean of (5.42), a standard deviation of (1.27), and relative importance of (77%) This implies that customers consider the company's products of good quality and they satisfy their needs. It increases the trust of the customers in the company concerning the reputation and quality of the products as they are very good. Nevertheless, there is room for improvement in the area of increasing the effectiveness of satisfying customer desires more than competitors. High quality is one of the company's products, providing customer purchase and repeat business. In addition to this, the products offer better product taste and quality, which meets customer demand and expectations better than the competitor's products. Moreover, the company's products have gained reputation, which is indeed a reflection of their quality and thus a strong competitive advantage where a better road to their high product quality.

**Finally, the dimension of "Product Cost"** has a high level with an arithmetic mean of (5.10), a standard deviation of (1.45), and a relative importance of (73%). This implies that, being in line with the purchasing power of the customers of the company, the product prices of the company are prompting them to take into account the decisions about purchasing. Customer satisfaction is due to the product prices of the company products given the fact that they choose the products because they offer reasonable costs. One of the company's advantages is its pricing as it makes all its products available to customers at affordable prices, therefore attracting more customers to its market.

The results of this study are consistent with the outcomes found by Saif (2023), Sarsour (2019), Belbahi (2015), Al-Tamimi and Al-Halaq (2011), and Belbahi (2018) that the level of the product development practices was very high. Nevertheless, the findings of this study are not consistent with the studies by Sachira et al. (2024) and Jin (2005).

#### **Second: Market Share Level**

The results in Table (5) indicate that the overall level of market share practices is high, with an overall arithmetic mean of (5.42) and a standard deviation of (1.07). This suggests that both sales volume and customer satisfaction play a crucial role in enhancing and improving the company's market share. The analysis also shows the level of practice for the two dimensions of market share at the Yemen Company for Industry and Commerce, based on their arithmetic means, as follows:

**First, Sales Volume Dimension** has high rated, with an arithmetic mean of (5.50), a standard deviation of (1.10), and a relative importance of (79%). This indicates that the company's sales volume increases as customer satisfaction improves, while price increases can negatively impact sales. The company achieves significant growth rates in its sales and reaches high market penetration when expanding distribution into new areas. The company also seeks to attract new customer segments by diversifying its products. Improving and developing products contributes

significantly to increasing sales volume. Additionally, the company offers promotional programs and special offers to enhance sales and focuses on continuously improving its existing products to maintain and increase sales.

**Second, Customer Satisfaction Dimension** has also scored high, with an arithmetic mean of (5.35), a standard deviation of (1.16), and a relative importance of (76%). This suggests that the company provides high-quality products to attract customers and ensures that they are available in convenient locations to enhance customer satisfaction. The company is committed to ensuring customer happiness and continuously measuring satisfaction levels. It also provides multiple communication channels, making it easier for customers to submit complaints and feedback. Customers feel satisfied when using the company's products, and the company pays special attention to customer complaints, working quickly to resolve them. Repeated purchases of the company's products indicate strong customer loyalty, and satisfied customers actively recommend the company's products to others through word-of-mouth marketing. These findings align with the results of Hassan & Al-Bakri (2022), Abdul-Rahman (2021), Mizyan & Dahmani (2021), Merhej & Maala (2017), and Nassour (2021), which confirmed the positive impact of customer satisfaction and sales volume on market share. However, the results differ from those of Al-Dhafri (2012) and Wilbur & Farris (2013).

The study of The Hypothesis Testing demonstrated a statistically significant impact of product development on market share and accepted all hypothesis suggested in this study. It indicated that improving product development elements such as design, specifications, quality, and cost significantly contributes to enhancing a company's competitiveness and increasing its market share. Results also indicate that each aspect of product development: product design, specifications, quality, cost, has statistically significant impact on market share. All these factors are necessary for the company to firm itself up in the market and this means that in the process all these factors play some key role in its position in the market. These hypotheses given results are also showed in the work of Saif (2023), Hadhli & Shaikh (2021), Hamoud (2017), and Afrianti & Elmiwati (2023) about the positive impact of product development towards market share. Nevertheless, these findings contradict the findings of Mouaizia and Douma (2019) and Qumaiha (2018), which reported that product development had little repercussion on market share. The qualitative data of Semi-structured interviews that conducted with a group of product managers and key customers to survey their opinions on product development strategies helped clarify and confirmed the statistical results and link them to the practical context within the company and the Yemeni market in general.

Despite the general alignment of this study's findings with prior literature emphasizing the positive influence of product development on market share, several divergences warrant detailed attention. Unlike the studies of Mouaizi and Douma (2019) and Qumaiha (2018), which reported minimal or non-significant influence of product development on market performance, the current study revealed statistically significant and positive effects for each of the four examined dimensions: design, specifications, quality, and cost.

These discrepancies can be attributed to contextual and methodological differences. First, the aforementioned studies largely focused on firms operating in relatively stable, mature markets, where product development may yield incremental rather than transformative effects. In contrast, the present study examines a firm embedded in a fragile economic environment—Yemen—where competitive advantage is more sensitive to product differentiation and value creation. The dynamic consumer behavior in such a constrained setting appears to amplify the strategic role of integrated product development.

Second, while many earlier works considered product development components in isolation, the current research adopted a holistic framework, measuring the simultaneous contribution of interrelated elements. This integrated approach may have captured synergies among the dimensions—particularly between design and quality or between specifications and cost—that were overlooked in narrower studies.

Third, discrepancies may stem from differences in research design. For instance, the use of structural equation modeling (SEM) in the current study allowed for a more nuanced analysis of latent variables and their effects, potentially offering higher explanatory power than regression-based models used in prior studies. Furthermore, the inclusion of qualitative interviews with managers and key customers offered an interpretive lens that grounded the statistical findings in practical market realities—an aspect that many of the earlier studies lacked.

Therefore, the present research contributes novel empirical insights by revealing that in emerging and resource-constrained markets, like Yemen, integrated product development strategies play a more critical role in influencing market share than previously reported. This divergence emphasizes the necessity of contextualizing product development research and avoiding overgeneralization of findings derived from economically advanced or structurally different settings.

Based on the study's findings, companies are advised to adopt clear policies for product development that align with local and regional market needs, by enhancing investment in research and development and encouraging teams to continuously innovate. It also emphasizes the need for government agencies to support these initiatives by providing financial incentives and regulatory facilitations to companies developing new products. Future researchers are encouraged to study the impact of implementing these recommendations on enhancing competitiveness and achieving economic sustainability in Yemen and the Arab region. These findings reflect the opinions of the selected sample only and cannot be generalized to all other companies or markets. However, these findings are an important preliminary indicator that paves the way for future, more comprehensive studies that include larger samples and employ diverse

research methods such as in-depth interviews and comparative studies, enhancing the accuracy and depth of understanding.

## CONCLUSIONS

This study seeks to establish the effect of product development on the market share for a case study of Yemen Company for Industrial and commerce and to assess the degree of product development and market share for the company. In addition to statistically significant product development dimensions' effects on market share, positive market average returns growth is also found. The results indicated that the company's customers appreciated the company's product development level very highly and gave the company's product market share very highly. The Yemen company for Industrial and commerce is advised to spend its resources in developing product designs which satisfy customer needs and the product specifications that make it distinguish from its competitors. In addition, product quality is given importance, and so strict quality control is implemented and periodic testing is conducted. Furthermore, cost management efficiency is expected to improve, while enhancing customer experience through improved after-sales services. At the same time, it is recommended to increase marketing efforts to enhance brand awareness, while regularly measuring customer satisfaction to ensure strategies are optimized based on market needs. This study contributes to the literature on product development in emerging markets and opens the door to future research exploring the relationship between product development and enhancing competitiveness in developing markets.

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**APPENDIX A**

**Questionnaire Axes**

**Axis One: Product Development**

The following is a set of statements related to measuring the extent of product development at the Yemeni Industrial and Trade Company. Please place a check mark (√) in front of each paragraph and under the option that reflects your opinion.

No.	Statements	agree Strongly	Agree	Somewhat agree	Neutral	Strongly disagree	Disagree	Somewhat disagree
		7	6	5	4	3	2	1
<b>(1) Product design</b>								
1	The company's product designs enjoy a strong reputation and popularity compared to other products.							
2	The company's product designs attract customers when they purchase.							
3	The company's product designs express its unique identity and brand.							
4	The company's product designs enhance positive perceptions of the company.							
5	The company's product designs attract customers.							
<b>(2) Product specifications</b>								
6	The company offers products of various sizes and packaging to meet customers' needs.							
7	The product packaging contains the main ingredients.							
8	The packaging specifications of the company's products I deal with are of high quality.							
9	The company's products use high-quality ingredients.							
10	The company's products have a longer shelf life than similar products.							
11	The company changes and updates product specifications to meet customer requirements and tastes.							
<b>(3)Product quality</b>								
12	The company's products are characterized by high quality.							
13	The high quality of the company's products motivates customers to purchase and repeat purchases.							

No.	Statements	agree Strongly	Agree	Somewhat agree	Neutral	Strongly disagree	Disagree	Somewhat disagree
		7	6	5	4	3	2	1
14	The company's products have a high-quality taste and flavor.							
15	The quality of the company's products meets the needs and desires of its customers compared to competitors' products.							
16	The reputation of the company's products is a true indicator of their quality.							
17	The company's products enjoy a competitive advantage stemming from the quality of their products.							
<b>(4)Product cost</b>								
18	The company's product prices are in line with its customers' purchasing power.							
19	The company's product prices motivate customers to purchase.							
20	The company's product prices achieve customer satisfaction.							
21	Customers choose the company's products because of their reasonable prices.							
22	The company offers its products at reasonable prices to attract customers.							
23	The company's product prices represent a competitive advantage.							

**Axis Two: Market Share**

The following is a set of statements related to measuring the market share of the Yemeni Industrial and Trade Company's products. Please place a check mark (✓) in front of each paragraph and under the option that reflects your opinion.

No.	Statements	agree Strongly	Agree	Somewhat agree	Neutral	Strongly disagree	Disagree	Somewhat disagree
		7	6	5	4	3	2	1
<b>(1) Sales volume</b>								
1	Sales volume increases with increased customer satisfaction.							
2	Sales volume is affected by price increases.							

No.	Statements	agree Strongly	Agree	Somewhat agree	Neutral	Strongly disagree	Disagree	Somewhat disagree
		7	6	5	4	3	2	1
3	The company achieves significant sales growth rates.							
4	The company achieves a high penetration rate by distributing its products in new areas.							
5	The company is keen to attract new customer segments through the diversity of its products.							
6	Improving and developing the company's products increases sales volume.							
7	The company offers and promotional programs to increase sales volume.							
8	The company seeks to increase its sales volume by focusing on and developing its existing products.							
<b>(2) Customer satisfaction</b>								
9	The company offers high-quality products to attract customers.							
10	The company provides its products in the right locations to achieve customer satisfaction.							
11	The company is always keen to achieve customer satisfaction and happiness.							
12	The company continually strives to measure customer satisfaction from time to time.							
13	The company provides all means of communication to facilitate the communication of customer complaints.							
14	Customers feel satisfied when dealing with the company's products.							
15	The company addresses customer complaints and provides quick solutions.							
16	Repeated purchases of the company's products are an indicator of customer satisfaction.							
17	Customers seek to share their positive experiences with the company's products with others and encourage them to try them.							