
The Effect Of Customer Brand Co-Creation On Product Quality: The Interactive Role Of Perceived Brand Authenticity: An Exploratory Study Of Some Smartphone Brands

Asst.Prof .Dr.Bushra Abdul Hamza Abbas ¹, Ali Abid Alhassan jahil Al janabi ²

¹(Department of Business Administration, College of Administration and Economics, University of Al-Qadisiyah, Bushra.abbas@qu.edu.iq).

²(Department of Business Administration, College of Administration and Economics, University of Al-Qadisiyah, admin.mang.21.19@qu.edu)

Corresponding Author: Ali Abid Alhassan jahil, Affiliation:University of Al-Qadisiyah Email:admin.mang.21.19@qu.edu

Abstract:

The key objective of the current study is to verify the impact of the customer's involvement in the innovation of the label (development, reverse feeding, defense (advocacy), and assistance) on the product quality (product aesthetic, durability, ease of use, product performance, and serviceability) through the interactive role of the realized brand authenticity (continuity, integrity, credibility, symbolism) of certain mobile brands. As the sample study was represented by 732 customers, Therefore, the study problem was formulated in relation to the relationship between study variables, following which the study's objectives were set, and the hypothetical outline of the study crystallized the formulation of special hypotheses tested in the statistical package to model structural equations in a small square manner (AMOS.V.25). To analyze what the study tool provided, a set of statistical methods, namely, confirmatory working analysis, Cronbach's alpha coefficient, identification coefficient (R2), natural distribution of data, and descriptive statistics of computational medium and standard deviation, The correlation coefficient and the results of the study showed a clear and important perception of the relationship between the customer and label innovation. The continuity of the realized brand and the quality of the product, perhaps the most important findings of the study, are reflected in the high level of awareness by the sample of the importance of the perceived brand authenticity in order to encourage customers to participate in the innovation of the brand to enhance the quality of the products. This enables the organization to improve its ability to effect change in a manner commensurate with the skills and expertise of its service providers during the service meeting. In light of these findings, the study presented a set of recommendations

Keywords- Customer In Brand Co-Creation, perceived brand authenticity, product quality .

I.INTRODUCTION

The global economic developments represented by the market economy are the phenomenon of globalization, technological developments and the emergence of several new products. The challenges of international competition have increased and organizations are threatened with leaving the market if they are unable to meet the growing demands of consumers. The twenty-first century is the century of technology and innovative ideas, the century of renouncing old methods by adopting new and different methods and making essential improvements in all performance elements. Technical and technological development enabled organizations to realize the idea of faster production, which greatly contributed to increasing the volume of production, expanding markets and intensifying competition, and this also helped narrow local markets, which led all industrial organizations to seek external markets to manage their products. Local markets are no longer capable of absorbing all production .

In order to cope with developments and to take the largest market share, developed countries were the first to discover production methods that would enable this to happen, especially with regard to the production of high-quality products. This was reflected in the emergence of a new management philosophy and a shift in the way organizations are run in the so-called comprehensive quality management, which includes focusing the energies of organizations on continuous improvements in all operations and functions in order to deliver products that are impeccable and exceed the expectations of customers. The challenge for organizations in implementing the comprehensive quality management methodology is to introduce changes in processes within organizations .

General production in particular, to meet the needs of customers that change from time to time .

Consequently, dealing in the markets requires business organizations to exert much effort in marketing their products, due to the high competition on the markets, which made these organizations seek to attract a larger number of customers through using different methods in their field of activity. In order to keytain their marketing position, these organizations have resorted to some marketing methods, especially with

regard to the participation of the customer, but many organizations have exaggerated the use of the means of customer participation in the creation of the brand in order to improve the quality of the product. This prompted these organizations to develop their potential through the Perceived Brand Authenticity and to build their emotions, especially with regard to (continuity, integrity, credibility, and symbolism).

II. Study Methodology

First: The problem of study

Product quality is a key element through which customers are attracted to buy, and as a result industrial companies get a high importance due to their fundamental impact on the economic and social society as they provide high quality products, which satisfy the needs and desires of the customers. The company has been operating in the Middle East and has been operating in the Middle East since the end of the year, and has been operating in the Middle East and the Middle East.

Proving that the customer is involved in Brand Co-Creation needs to focus on refining the brand's authenticity, so a more interactive relationship has been developed between customer in brand innovation and brand authenticity. This helps organizations to reach a high degree of quality and accuracy by using tools and techniques to improve the processes that depend on customer feedback. This is why study problem can be reflected in the fundamental question of whether the customer's participation in brand innovation affects product quality through the interactive role of brand authenticity? Therefore, in order to answer this question, the following sub-questions must be answered:

1. What is the level of interest of the sample study in the customer's participation in the creation of the brand?
2. What is the level of interest of study sample in promoting Customer In Brand Co-Creation in order to achieve product quality?
3. To what extent does the thoughtful intent have the capabilities necessary to achieve the interactive role between customer in brand innovation and brand authenticity?
4. How well does study sample have the techniques necessary to achieve product quality (product esthetics, durability, ease of use, product performance, serviceability)?
5. What is the interactive relationship between the customer's in brand innovation and brand authenticity?, does this relationship improve study sample potential in product quality?
6. Do the dimensions of Customer In Brand Co-Creation directly affect product quality?

Second: The importance of study

The importance of study lies in measuring the nature and type of relationship between the customer's in brand innovation, product quality, and perceived brand authenticity, through the following:

The scientific significance of this study stems from the fact that the subjects of study (customer participation in Brand Co-Creation, product quality, and brand authenticity) are important topics that have received the attention of a large number of researchers. These studies reflected the interest of many States and the competent authorities, which set basic grounds for improving customer participation.

The practical importance of this study is highlighted by the contribution of its results to the formulation of a good strategy that contributes to demonstrating the importance of the customer's participation in the creation of the brand over the quality of the product through the interactive role of brand authenticity in the sample studied. In addition, focus the considered sample's attention on using the client's share dimensions to develop its potential and build a positive sample reputation with customers.

Third: Objectives of study

The researcher in this study has the following objectives:

1. Determine the level of interest of study sample in involving the customer in Brand Co-Creation.
2. Recognize the level of interest of study sample in promoting Customer In Brand Co-Creation in order to achieve product quality.
3. Demonstrate the extent to which the considered intent has the potential to achieve the interactive role between customer in brand innovation and brand authenticity.
4. Determine the extent to which study sample has the techniques necessary to achieve product quality (product esthetics, durability, ease of use, product performance, and serviceability).
5. Measure the interactive relationship between the customer's in brand innovation and brand authenticity?, and does this relationship improve the ability of study sample to build product quality.
6. Demonstrate how the dimensions of the customer's in Brand Co-Creation directly affect product quality.

Fourth: The hypothesis of the search

In the light of study methodology and its objectives, study hypothesis scheme has been prepared, see Figure 1, to express the relationship between study variables.

1) **The independent variable** is the customer's in Brand Co-Creation, including four dimensions (development, feedback, advocacy, and assistance), as the standard (France et al.,2020) was adopted.

2) **Dependent variable:** Product quality, represented by five dimensions (product esthetic, durability, ease of use, product performance, serviceability), A standard (Gervan, 1987) has been adopted.

Interactive variable: The Perceived Brand Authenticity, including four dimensions (continuity, integrity, credibility, and symbolism), as a standard (Morhart et al., 2015) was adopted; Haider & Khan,2018; Jian et al.,2019).

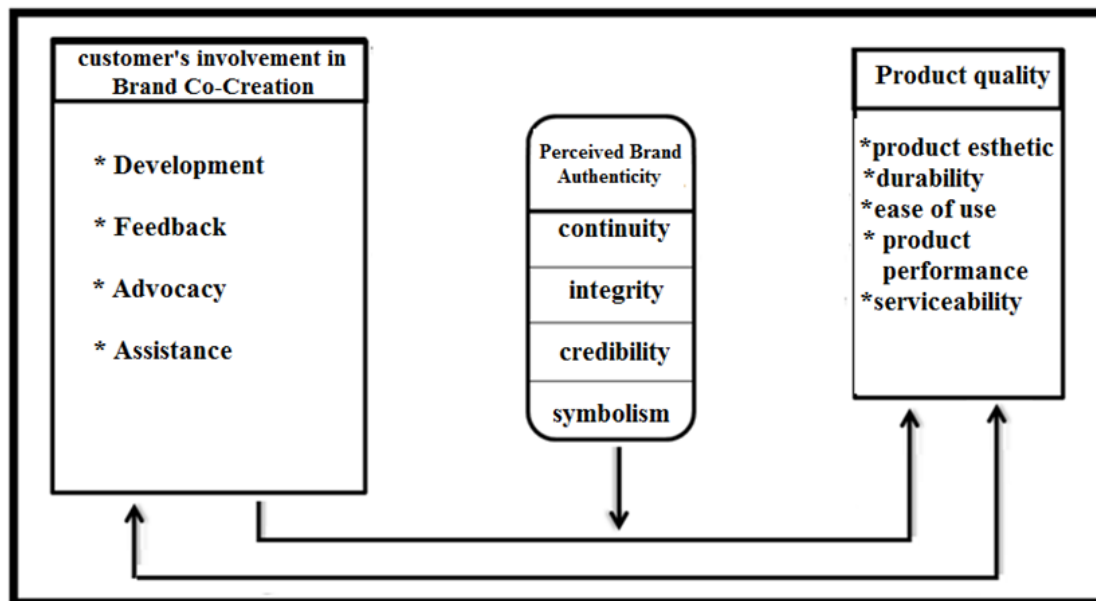


Figure (1) Study hypothesis diagram

Fifth: Study assignments

In order to achieve the objectives of study, the following assumptions have been formulated:

The first key hypothesis: (There is a statistically significant correlation between the customer's in brand innovation, the brand's perceived authenticity, and product quality).

The second key hypothesis: (There is an interactive effect of perceived brand authenticity between customer's in Brand Co-Creation in product quality)

Sixth: Society and study sample

The study population is represented by a group of brands of mobile phones in Iraq, while the sample of the study consisted of customers of brands of mobile phones in Iraq. or components of the community in such a way that the description of these components accurately portrays the characteristics of the community from which they are selected. The study adopted the method (Hair, 2014: 101). Therefore, (750) questionnaires were distributed to a group of customers, and after tabulating the data, the number of valid forms for analysis was (732) customer forms.

III. Part Two: Theoretical Framework**First: Customer In Brand Co-Creation****1. The concept of Customer In Brand Co-Creation**

Participation is the importance that customers find in products or brand based on their needs, values or interests (Zaichkowsky, 1985:341), and therefore the customer's in Brand Co-Creation is a new concept in marketing literature, as it is first beginnings in relationship marketing. More deeply than the customer-brand relationship, this subject has gained significant academic and administrative importance in recent years (Brodie et al., 2011:252), The concept of Customer In Brand Co-Creation is also of great importance in building customer engagement by focusing on customer value in favor of a brand, which has improved the organization's capabilities and marketing activities by understanding more customer tastes and preferences and reflecting them on product development (BILRO,2017:52-53).

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The various definitions of Customer In Brand Co-Creation include, to a large extent, customer engagement as a multidimensional concept, which illustrates the interactive state of the customer based on the cognitive, mental and behavioral components (Hollebeek, 2011:785), The subject of Customer In Brand Co-Creation can therefore be highlighted by focusing on the extent to which the customer is emotionally or unemotionally engaged in brand building through emotional, behavioral and cognitive innovation, which positively affects other customers' opinions (Goldsmith et al., 2010:1189), It is very difficult to find a comprehensive definition of customer in brand innovation because there is no agreement between researchers on a trend or definition to be adopted, and the table (1) shows some definitions that have been covered by a group of researchers for customer in brand innovation.

Table (1) The concept of the customer's participation in the creation of the brand according to the opinion of some researchers

NO.	Researcher	Definition
1	Vivek et al, 2012: 133	Intensive customer in the organization's presentations, organizational activities and communication.
2	Hollebeek et al.,2014:154	A positive customer brand awareness, emotional and behavior activity that is assessed as the customer interacts with the brand related to the organization's products
3	Kumar&Pansari,2016:2	Attitudes, behaviors and levels that represent the relationship between customers, the organization and service providers
4	Bilro,2017:53	A mechanism to build a relationship with customers and to participate in guiding the marketing goals that the organization aspires to achieve.
5	Nobre& Ferreira,2017:352	The customer's cognitive, emotional and behavioral response to interaction and consistency with the brand.
6	Srivastava& Sivaramakrishnan,2020:2	Customer behavioral aspects that are relevant to the organization's brand and drive their buying motives
7	Molina-Prados et al.,2022:3	The level of the customer's ability to innovate and develop the organization's brand ideas

In this way, it can be said that the customer's participation in Brand Co-Creation is a collaborative activity in which customers actively contribute to creating brand identity and image and designing products to their preferred specifications.

2. Dimensions of Customer In Brand Co-Creation

Customer in brand innovation can be measured by identifying several important dimensions (France et al.,2020):

a. Development

The development of customer in brand innovation is linked to the significant knowledge processing the customer offers to develop new ideas and provide new resources to the organization that directly contribute to brand development, provide opportunities to easily recognize its value, and enhance the perceived value of other customers (France et al. 2015).

The development also points to the fact that the organization is responsible for developing strategies and practices that promote the growth and development of its service providers, with happy providers contributing to the development of the organization (Munar et al.,2020:3-4).

b. Reverse feed

Feedback on customer in brand innovation involves the extent to which customers provide brand feedback to help balance customer product requirements with the organization's long-term goals (Yi&Gong 2013:1280). According to Wu et al., 2010:722-726), feedback consists of varying skills, processes, and procedures to react quickly and easily to changes in input and output requirements, so that the process can consistently meet the customer's requirements with little time or cost (ALAPO,2018:31-32).

c. Defense (Advocacy)

The defense of customer in brand innovation represents customer acceptance of the organization's branded products and a large contribution to brand support and sacrifice for its development (France et al. 2018:336).

Manuscript ID:

Defending the organization contributes to improving the ability to quickly and accurately select the best products from among different resources and programs that serve the benefit of the organization and satisfy the needs and desires of its customers (Al-Saadi,2016:131).

d. Helping

Customer In Brand Co-Creation is the amount of help the customer offers in social attitudes to support the brand and address its cognitive problems (France et al.,2020:468), and (Al-Saadi, 2016:131); (ALWAN&TALIB,2016:377) Help is in the organization's recognition of the importance of encouraging customers to participate in brand innovation through the function of systematically identifying negative externalities, adverse internal factors and internal pyramid factors. This means that recognizing the organization's help in developing its brand represents a replay of the recurring risk monitoring cycle.

Second: Product quality

1. The concept of product quality

In recent years, awareness has increased about the need to apply the concepts of comprehensive quality management in all organizations' work with a view to improving their products, increasing their profits and achieving competitive advantage. This will enable them to meet new challenges linked to strong competition both domestically and internationally (India, 2017:329). Quality according to the American Quality Control Association (ASQC) is represented as the overall characteristics and characteristics of a good or service that matches its ability to meet the demands or implied needs (Masouda and people, 2021:8).

The concept of product quality has become strategically important as it has been shown to be the key factor in the success of organizations and is one of the most important competitive priorities in increasing competition between international organizations and sweetness, and has become an important pillar in the face of competition (Kazem et al., 2022:194). "We are not going to be a party to the conflict," he said, adding that "we are not going to be a party to the conflict." "we are not going to be a party to the conflict," he said.

It is difficult to find a comprehensive definition of product quality because there is no agreement between researchers on a trend or definition to be adopted, and the table (2) shows some of the definitions that have been covered by a group of researchers for product quality.

Table (2) the concept of product quality according to the opinion of some researchers

NO.	Researcher	Definition
1	Sam& Dhanya,2012:1	A set of product features and features that contribute to meeting customer requirements
2	Asmayadi& Hartini,2015:2	Fair relationship between quality and performance
3	Watson et al.,2015:790	It is essential to reflect the marketing efforts of the Organization to achieve it
4	Yulisetiari et al.,2017:215	The extent to which the new product can deliver the expected performance including reliability, durability, accuracy, ease of operation, and the ability to attract and create value for customers
5	Fulgione,2022:5	The general customer's awareness of the product's contaminant and intangible characteristics
6	Sipakoly,2022:850	Customers assess product characteristics that meet their needs and expectations
7	Tran,2022:13	Customer satisfaction with a product that meets or exceeds their expectations

Based on the above, it can be said that the quality of the product is the customer's assessment of the features in the product that will meet their needs and desires.

2. Product quality dimensions

Improving the organization's ability to offer high quality products is very important by examining the fact that this matter requires extensive studies by the organization to determine the requirements of the customer and achieve a balance between these requirements and its capabilities in order to achieve the quality of the products preferred by customers. This requires a set of dimensions from which product quality can be measured: (Gervan 1987):

a. Product esthetic

Esthetics is one of the most important values in product design (Hanafy,2015:1489) because it reflects the beauty of the product (Alfakri et al.,2018:531), and most marketing systems lack the value of the product esthetic (Salian & Tiwari, 2018:237). Esthetic knowledge represents the ability to classify the conscious, conscious, and physical data (Berger et al.,2015:75). (Wang&HSU, 2019:5) considers product esthetics to be an important factor in communicating with potential customers by identifying and working on their preferences.

b. Durability

Product design means to determine the general structure of the product to be produced, the components involved in this commodity, their interconnection, their functioning, their installation, and the use and keytenance of this commodity, and design quality is the tangible and intangible characteristics of the product design (AbdelHaq,2018:43).

c. Product performance

The performance of the product is directly related to the ability of the product to perform the expected function of the product, which has been redesignated as a reliability or merit system, as well as the ease of keytenance and repair of the commodity when needed (DICH, 2015:53). (Lobasenko,2017:76 ; Ansari,2014:385 ; Walugembe et al.,2017:69) the performance of a product indicates the level at which the core characteristics of a product operate, and organizations must design a level of performance appropriate to the target market and competition.

d. Serviceability

The labor sector in business organizations does not mean only providing services, earning profits and leaving the customer without following up or knowing the extent of satisfaction and new desires, following the level of service and the degree to which it is satisfied with the customer's need. Post-sales services have become an important promotional element to identify and convince the beneficiary of the service provided (Jaber and Al-Baldawi, 2015: 128). Customers are satisfied when they meet the requirements, needs and expectations of the organization (Kotler & Armstrong, 2012:20).

e. Ease of use

The ease of use and the availability of instructions and instructions to the customer on how to use the product increase the ability of the products to perform properly and safely as designed (Masoed and people, 2021:12). (Coursaris& Kripintres,2012:34-35) the easier it is to use, the more attractive it is to be, which means that the esthetics of the product reflects the customer's usage and the products offered are easy, accurate, durable and high quality.

Third: Perceived Brand Authenticity

1. The concept of Perceived Brand Authenticity

The concept of authenticity is derived from the Greek-Latin word authentic, which is related to the meaning of trustworthiness, imitation and modernity (Hernandez-Fernandez& Lewis, 2019:223); (Khashan, 2021:94), when the word "originality" refers to the qualities of truth, truth and reality. It contains synonyms for authenticity such as real, actual and good faith. His synonyms include terms such as: Ethical, natural, sincere, simple, unwoven, and simple. Sustainable, beautiful, rooted, and humane (Athwal & Harris, 2018:4).

The discussion centers on the relationship between authenticity and the pursuit of what is good in the life of the customer or revealing the real self of others, and the division between reality and subjectivity rekeys central to understanding authenticity in sociology. Originality is not so much a state of existence as it is the objective of a particular process, and refers to a set of qualities agreed upon by individuals at a particular time and place that are a perfect model (Guevremont, 2018:507). Originality is part of the ongoing search for meaning and belonging to life (södergren,645:2021).

The concept of brand authenticity, though recently focused on modern researchers, has also grown rapidly in both definition and perception. It can be said that originality is a much more complex phenomenon than just being real or original, although this view is clear in many early definitions. Social and scholarly sources rarely attempt to define the meaning of authenticity with any degree of precision, given the difficulty of defining it. They usually choose a fairly comprehensive enumeration of meanings and connotations (Hernandez-Fernandez & Lewis, 2019:223).

It is very difficult to find a comprehensive definition of brand authenticity because there is no agreement between researchers on a trend or definition to be adopted, and the table (3) illustrates some of the definitions that have been covered by a range of researchers for brand authenticity.

Manuscript ID:

Table (3) the concept of brand authenticity according to the view of some researchers

NO.	Researcher	Definition
1	Schallehn et al., 2014:192	The degree to which individuals are honest with their identity and are influenced by social attitudes.
2	Morhart et al,2015:200	The extent to which customers believe the brand is sincere and sincere to themselves and to their customers through continuity, integrity, credibility and symbolism
3	Moulard et al.,2016:422	The extent to which customers believe brand managers are motivated by their motivation and are dedicated to providing the best services.
4	Fritz et al,2017:325	The perceived consistency of brand behavior that reflects its core values and history, whereby the brand is seen as being honest with itself, objective, modern and not imitation to other brands
5	Hamid& Helali,2018:29	The customer considers the extent to which the brand is considered genuine or non-genuine
6	Chen et al.,2020:1	The extent to which customers realize that the organization's brand is self-sustaining, credible, responsible and helpful in enabling them to be of their nature (symbolic)
7	Ahmad et al.,2022:609	Is an honest brand with itself whose behavior is driven by real thoughts and feelings

From the above, it can be said that the **Perceived Brand Authenticity** is the degree to which the customer considers the organization's brand to be continuous, fair, credible, symbolic, objective, modern and not imitated.

2. Dimensions of the authenticity of the Perceived mark

Although brand authenticity is adopted in managing a brand theme, most researchers are satisfied that the philosophical underpinnings of the topic vary in terms of both objective and structural, and because authenticity itself is of great importance to customers, most researchers are more likely to measure it in four dimensions:

(Yi et al., 2017; Morhart et al., 2015 ; Haider & Khan,2018; Jian et al.,2019; Schallehn et al., 2014 ; Napoli et al.2014)

a. Continuity

Continuity determines the timeliness of an organization's brand based on the organization's ability to move beyond its current trends, keytain its ability to meet customer requirements over time, and focus on understanding customer traditions and beliefs through continuous communication of their tastes and requirements (Bruhn et al., 2012:567). (Jian et al.,2019:4) sees continuity as related to the Organization's ability to meet customers' requirements over time and to conform to their perception and expectations in a way that contributes to a positive impact on customers' feelings.

b. Integrity

Integrity is expressed through open information sharing, high reliability, and joint fulfillment that contributes to the organization's goals (Gillespie et al., 2020:2). (Mayer et al., 1995:719) explained that integrity is about honesty and confidence in the perception of the individual's commitment to accepted and impartial principles. In the same vein (Krot & Lewicka, 2012:226), integrity refers to the ability of workers to follow the ethical standards of desired and undesirable behavior set by the organization.

c. Credibility

Credibility suggests the manager should be a trusted worker and address undesirable behaviors, issues and events at work (Ashoori & Weisz, 2019:3; Selmi et al.,2016:1). (Jimenez-Barreto et al.,2020:3) believes that the credibility of the organization's brand is consistent with the level of transparency and honesty that customers perceive in terms of the organization's ability to meet their expectations. The credibility of the Organization's brand must therefore take into account the degree to which the promotion of the Organization and its brand are consistent with a realistic and coherent awareness of what customers can experience when visiting the Organization in person.

d. Symbolism

Symbolism is an important foundation for shaping the brand authenticity of an organization by measuring the extent to which a brand can effectively transmit all its symbolic aspects through organization-specific incentives such as images, text, videos and design on-line product interfaces, which allows consideration of individual, nature and reality Organization trademark (Morhart et al., 2015:200)

IV. Part Three: The practical aspect

1) Analyze the normal distribution

The results in Table (4) show that data extracted from the scanned community is normally distributed, indicating that the value of study variable is higher than (0.05), indicating that study results can be generalized to the scanned community), Table () shows that study data is the normal distribution.

Table (4) Testing the normal distribution of study variables

Comparison criteria		Variables		
		Customer In Brand Co-Creation	Product quality	Perceived Brand Authenticity
Arithmetic mean		3.82	4.11	4.04
Standard deviation		0.684	0.584	0.626
Kol-Smi	Absolute	0.083	0.095	0.111
	Positivity	0.056	0.062	0.063
	Negative	-0.083	-0.095	-0.111
Statistical parameter		2.242	2.574	3.009
Sig.		0.200 ^c	0.200 ^c	0.200 ^c

2) Statistical description

First: The independent variable (the customer's participation in Brand Co-Creation)

The results of the table (5) resulted in the availability of a variable of customer participation in brand innovation by a percentage (76%), an arithmetic mean (3.82), a standard deviation of (0.684), and a variation factor of (18%), which means that the clients who are looking for the importance of focusing on spreading a positive and beautiful word about the products that the brand represents. This variable was measured through several dimensions, foremost of which came after the defense (Al-Manasra) with an arithmetical mean (4.2) and a standard deviation of (0.655), which means that the clients in search realize the importance of 000, which came within a relatively high interest (84%) and a differential factor of 16%. The development came at the last stage within the variable of the customer's participation in creating the brand with a mean (3.18), a standard deviation of (0.986), and a variation factor of 31%, which means that the research customers realize the importance of focusing on creating content on the Internet about the work of the products carried by the organization's brand. This provided a relative attention of 64%.

Table (5) Description and analysis of the customer's variable in Brand Co-Creation

Dimension	Arithmetic mean	Answer direction	Answer level	Standard deviation	Relative importance %	Availability level	Coefficient of variation %
Development	3.18	I agree	Moderate	0.986	64%	Moderate	31%
Reverse feed	3.74	I agree	High	0.892	75%	Good	24%
Defense	4.2	I agree	High	0.655	84%	Good	16%
Help	4.15	I agree	High	0.652	83%	Good	16%
Variable rate customer participation in Brand Co-Creation							
	3.82	I agree	High	0.684	76%	Good	18%

Second: Dependent variable (product quality)

The results of the table (6) resulted in the availability of the product quality variable by a percentage (82%), which was accompanied by an arithmetic mean (4.11), a standard deviation of (0.584) and a variation factor of (14%), which means that the clients who are looking for the importance of concentrating on not causing any side damage to the products used. This variable was measured through several dimensions, which came at the forefront after ease of use with an arithmetic mean (4.07) and a standard deviation of (0.605), which means that research customers understand the importance of focusing on the organization's interest in providing guidance on how to use the products offered. This came within a relatively high interest (81%) and a difference factor (15%), while the product's performance

in the last stage came after the product's performance in the product quality variable with a mean (4.07), a standard deviation of (0.69) and a differential factor of (17%). This means that research customers understand the importance of focusing on product quality and its attractiveness to other customers.

Table (6) Description and Analysis of the Product Quality Variable

Dimension	Arithmetic mean	Answer direction	Answer level	Standard deviation	Relative importance %	Availability level	Coefficient of variation %
Product esthetic	4.21	I totally agree	Too high	0.673	84%	Good	16%
Durability	4.05	I agree	High	0.693	81%	Good	17%
Ease of use	4.07	I agree	High	0.605	81%	Good	15%
Product performance	4.07	I agree	High	0.69	81%	Good	17%
Serviceability	4.07	I agree	High	0.623	81%	Good	15%
Product quality variable rate							
	4.11	I agree	High	0.584	82%	Good	14%

Third: Interactive variable (perceived brand authenticity)

The results of the table (7) resulted in the availability of a perceptive % (81%) of the badge's authenticity variable, with an arithmetic mean (4.04), a standard deviation of (0.626), and a variation factor of (16%), which means that the researched customers are aware of the importance of the organization's ability to meet their requirements over time. This variable was measured through several dimensions, which came at the forefront of which after continuity with an arithmetic mean (4.21) and a standard deviation of (0.643), which means that the clients in search realize the characteristics and advantages of their brand, which came within a relatively high interest (84%) and a difference factor (15%). At the last stage, the reliability of the Perceived mark was followed by an arithmetic mean (3.96), a standard deviation of (0.852), and a variation factor of 22%, which provided a relative interest of (79%).

Table (7) Description and Analysis of the perceived Brand origin variant

Dimension	Arithmetic mean	Answer direction	Answer level	Standard deviation	Relative importance %	Availability level	Coefficient of variation %
Continuity	4.21	I agree	High	0.643	84%	Good	15%
Integrity	4.07	I agree	High	0.705	81%	Good	17%
Credibility	3.96	I agree	High	0.852	79%	Good	22%
Symbolism	3.92	I agree	High	0.701	78%	Good	18%
Rate of the Perceived tag's origin variable							
	4.04	I agree	High	0.626	81%	Good	16%

3) Test hypotheses

Key hypothesis one:

The first key hypothesis states: **(There is a statistically significant correlation between the customer's in brand innovation, the brand's perceived authenticity, and product quality).**

The table (8) indicates that there is a significant statistically significant correlation between the customer's participation in brand innovation and the perceived authenticity of the mark and the correlation coefficient (0.755) is at a significant level (0.01), i.e., with a reliability of 0.99. Based on the above, the correlation can be interpreted as a positive-direct association relationship.

Manuscript ID:

The following is a list of the most important and important factors in the development of the product: The value of the correlation coefficient (0.541) is 0.01, which is a reliable point of 0.99.

It is noted from the table (8) that there is a significant statistically significant correlation between the perceived authenticity of the mark and the quality of the product, and that the correlation coefficient (0.721) is at a significant level (0.01), i.e., with a reliability of 0.99.

Table (8) correlation Matrix

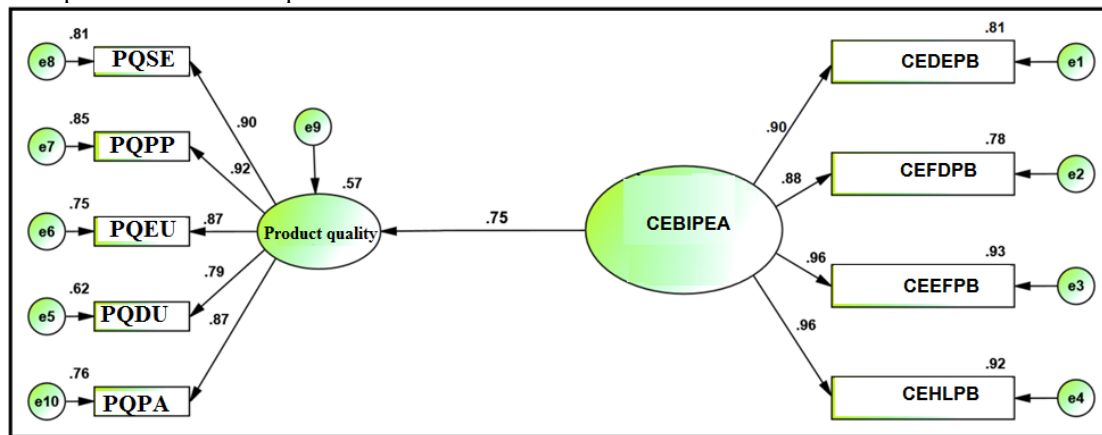
Variables	Perceived Brand Authenticity	Product quality
Customer In Brand Co-Creation	0.755**	0.541**
Perceived Brand Authenticity	1	0.721**
Sig. (2-tailed)=0.000		** . Correlation is significant at the 0.01 level (2-tailed).

Key hypothesis 2:

The second key hypothesis states: (There is an interactive effect of perceived brand authenticity between the customer's in Brand Co-Creation in product quality)

To test this hypothesis, interactive variables need to be built first, so the variable (CEBIPEA) expresses the interactive relationship between the customer's in brand innovation and brand authenticity, (CEDEPB) the interactive relationship between post development and brand authenticity, and (CEFDPB) the interactive relationship between feedback and brand authenticity. CEEFPB is the interactive relationship between the defense dimension (advocacy) and brand authenticity, and CEHLPB is the interactive relationship between the help dimension and brand authenticity

The results in table (9) and figure (2) show that the interactive role of brand authenticity leads to a significant improvement in the quality of products offered by the organization at 0.754, which means that the interactive role of brand authenticity that the organization plays when dealing with customers can be enhanced This allows the organization to improve its ability to effect change in a way that matches the skills and experience of its service providers during the service meeting. The results are that brand authenticity improves the organization's capabilities by developing its internal processes, addressing backfeed, defending the brand's reputation and prestige, and helping and mentoring customers to use their products as much as possible.



Form (2) the structural model of the interactive impact between customer in brand innovation and brand authenticity on product quality

The results of the table (9) show that the interactive role between customer in brand innovation and brand authenticity can explain (0.569) the reasons for improving the quality of the organization's products, and the residual value is outside study limits.

Table (9) The final results of the interactive impact between brand authenticity and customer in brand innovation on product quality

Path			Standard estimate	Standard error	Critical value	Value R ²	Sig.
Brand authenticity and Customer	--->	Product quality	0.754	0.020	37.7	0.569	0.001

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V.Four Part: Conclusions and recommendations

First: Conclusions

- 1- A high awareness by the sample of the importance of the Perceived Brand Authenticity to encourage customers to participate in brand innovation to enhance product quality, allowing the organization to improve its ability to make changes in a way that matches the skills and expertise of its service providers during the service interview.
- 2- The sample examined reflected the customers' feeling that brand authenticity improves the organization's capabilities by developing its internal processes, addressing backfeed lashes, defending the reputation and prestige of the brand and helping and mentoring customers to use their products as much as possible, as it is:-
 - a. Develop new ideas about customer in brand development, and this comes from the sample's recognition of the importance of focusing on creating and promoting ads in order to direct other customers' attention to the importance of their brand.
 - b. Sample expression of the experience of services in order to identify their views by the organization and invest them in order to reverse brand changes and develop them to suit the needs and desires of customers.
 - c. The sample expressed its commitment to encouraging customers to participate in Brand Co-Creation by providing direct advice and guidance to the organization to develop its brand in line with the orientations of other customers.

Second: Recommendations

- 1- The importance of applying the importance of the principles and codes of ethics of the organization's brand should be enhanced by the quality of the organization's brand integrity.
- 2- Strengthen the relationship between the customer's in brand innovation and the brand's perceived originality by ensuring that the brand relates to their needs, desires, beliefs and traditions, as this requires:-
 - a. Focus on satisfaction and peace of mind when using company products.
 - b. Focus on the convenience of using the product with the tools and applications it uses.
 - c. To keep abreast of current and competitive technological developments in order to invest opportunities that contribute to the development of FAO's products

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