

## **Impact On The Product Quality And Customer Attitudes In The Baking Industry Toward Product Quality Improvement**

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### **ABSTRACT**

This study set out to assess a Bekasi bakery's efficiency from the perspective of the quality of its products and services as perceived by its clientele. When discussing the manufacture of bakery items, the food sector has a unique position among the processing industries. The authors of this study were motivated to investigate the causes of the wide range of product quality available on the market, so they conducted a comparative analysis of the quality control methods most commonly used in bakery plants, as well as other "convenient" methods, to highlight the limitations of these approaches and to argue for the benefits of using them to better test product quality.

**Keywords:** Importance-Performance A lysis, product quality, service quality, customer satisfaction baking, sensory evaluation

### **INTRODUCTION**

There is a wide range of items in the banking sector, and each one finds a home in the marketplace. They do a good job of predicting the quality of products for future generations of buyers. When looking at the big picture, it may be challenging to maintain a consistent level of manufacturing quality. Gaining market share is difficult, but losing it is trivial. To maintain success in a business as competitive as baking, it's essential to do all in one's power to preserve one's current level of expertise. Quality, speed, and cost are the traditional yardsticks by which professionals are judged.

The baking business in our nation is booming. With a yearly revenue of almost RS 3,000 crore, this sector is India's most lucrative food business. When it comes to biscuit production, India is second only to China. Industrial bakers of Fast-Moving Consumer Goods (FMCG) are under the category of large industrial units with market activities in many regions of the nation, whereas small-scale bakeries serving local markets are called artisan bakers.

Having happy customers is crucial. It becomes crucial to the smooth operation of any organization. It also overtakes all other areas as the primary focus of global corporations. If buyers are pleased with what they get, they will come back for more and spread the word. If not, they'll switch to a different brand or voice their displeasure to the firm and others. The company's reputation may suffer as a result (Nair, 2013).

Providing high-quality service is a well-investigated marketing strategy. Establishments may get a lasting competitive edge thanks to this, which aids in the expansion of their businesses by bringing in and keeping existing clients. Customer happiness contributes to an organization's bottom line by fostering loyalty and repeat business. If you consistently provide a high level of service, your customers will be more than satisfied with your efforts. The ultimate goal of every company is the flourishing of its business, and this leads to that end.

We place a high value on bakery goods because of their widespread usage and importance in Indian culture. Because of their convenient ready-made nature and high nutritional content, bakery goods are quickly rising to the top of the list of necessary foods in the contemporary diet. These are the most widely consumed items made from wheat. These goods are widely accessible in India since the necessary raw ingredients, including wheat and other shortening agents, are readily available there. India has all of the necessary resources, including the equipment and machinery, and technology, to produce these goods. The demand for bakery goods is skyrocketing since their consumption is on the rise. Even if there are many commercial and public sectors, they will not be able to fulfill the demand on their own anytime soon. So far, it seems like a promising area for startup companies to enter. From these many perspectives, it's clear that bakery goods play an extremely vital role in our modern civilization.

## LITERATURE REVIEW

**Harish Jadhav (2019)** In this context, a "bakery product" refers to any baked good that may be bought at a bakery. The rising purchasing power and changing diet preferences of India's middle class bode well for the country's fast food and bakery sectors. In today's competitive market, it is essential to know what your clients want if you want to keep and grow your business. When making a purchase, consumers consider a number of factors. As a result, marketers need to be aware of and capitalize on these factors in order to convince people to purchase their product. Bakery items are a staple in many people's diets and can provide a fast and easy supper alternative. An exploratory factor analysis revealed that customers' preferences for certain bakery products were strongly influenced by factors like product/brand recognition, price/availability, and packaging. According to the data, the level of education a customer has has little effect on their opinion of the quality or popularity of different types of baked goods. Customers' ability to pay has little influence on how much weight they give to issues like packaging efficiency and product accessibility.

**Svein Ottar Olsen (2022)** This study examines the variables that impact the attitudes and intentions of Norwegian consumers (N = 810) toward the consumption of functional foods. We employ the Theory of Planned Behavior (TPB) as our theoretical foundation, drawing on its extensions of self-efficacy and descriptive norms, as well as hedonic and utilitarian eating values. Structural equation modeling (SEM) is used to validate these hypothesized relationships. The results showed the greatest discordance between the two models on the PBC dimensions. However, the extended model did find a significant inverse link between perceived control and either intention or consumption frequency. Self-efficacy, or the confidence in one's ability to stick to a balanced diet that includes functional foods, was shown to be the most significant factor in determining whether or not people really did so. Descriptive and injunctive norms were revealed to be major and relatively robust drivers of intent. However, injunctive norms lost some of their predictive power when descriptive norms were included into the structural model. Attitude's influence on intent was similarly dampened by the expanded model. As an explanation for why humans consume functional meals, utilitarian values much outweigh hedonic ones. However, a substantial and positive relationship was found between participants' utilitarian

eating values and their attitude toward the consumption of functional meals, whereas a significant and negative relationship was found between participants' hedonic eating values and their attitude. For this reason, the food industry has to improve the hedonic value of functional foods if they are to be commercially viable.

**Nathalie Barbosa Reis Monteiro (2021)** The corporate focus of several commercial and industrial sectors has moved from being primarily profit-driven to including include environmental and social concerns. This indicates that people are starting to value sustainability more highly. Life cycle management is one potential strategy and concept that could aid in this transition (LCM). Analysis of the whole bread-making value chain was performed to see whether LCM could be used successfully in the bakery sector (inputs, packaging, suppliers, customers, waste management).

**Carl Dominic Virginio (2022)** Bakeries are a vital source of income for small companies that provide a variety of services and items. Companies that consistently provide customers with high-quality service and goods should expect to grow and thrive. The bakery industry has been especially hard struck by the COVID-19 epidemic. Bakery production, customer happiness, and income are all factors that have been studied in relation to the challenges bakeries confront across the world. However, the survey also includes the perspectives of customers who have been completely pleased by the bakery's offerings. Research indicates that the COVID-19 pandemic has significantly impacted the worldwide bakery business by increasing the value of bakery items' costs due to store constraints that diminish suppliers' sales and delivery delays that interrupt their services. Moreover, various business owners have offered suggestions for maintaining the bakery's output, services, and food safety. The purpose of this literature review is to gain insight into the challenges and consequences of the COVID-19 outbreak on bakeries so that recommendations may be made to improve the quality of service and production at this time of crisis.

**Humiras Hardi Purba(2019)** Before making a purchase, consumers think about a number of aspects, one of which is the quality of the goods. Quality attributes asked for by customers have become the core of new product innovation. The study's goal was to establish which aspects of bread and chocolate cake should be worked on first. Eleven various characteristics of chocolate bars were grouped into categories, including taste, texture, aroma, appearance, availability, freshness, quality, cost, and timeliness. Filling out questionnaires on the relevance and performance level of consumers' preferences for the quality of bread and chocolate cake items was beneficial in acquiring this information. Based on the findings of a critical performance study, it has been established that changes should be made in the following areas: taste, texture, aroma, product appearance, variety, freshness, health, and packaging.

## **METHODOLOGY RESEARECH**

**Primary data:** Questionnaire- Primary data was collected by preparing questionnaire and the people were randomly requested to fill them.

**Secondary data-** Secondary data was consisting of different literatures like books which are published, articles, journals, magazines, internet and websites.

**Selection of sample size:**

This study analyzes the references in food business and enhances the indicators by using triangulation with bakery expert, practitioner, and academician to strengthen the questionnaire design. The questionnaire comprises 27 indicators. It comprises of 11 measures of product quality and 16 indications of service quality. The product quality indicators are described as indicators that are affixed to the finished product. Thus, the other indicators are included in service quality.

The convenience sampling approach is used since the bakery only offers takeout and not all of its customers are amenable to taking part in the study. Inconveniently, most of the samples are collected at busy times on weekdays and weekends. It helps scientists paint a picture of a diverse client base. Moreover, to prevent bias sampling like taking incorrect ample (like new customer), purposive sampling is utilized. In order to get a more accurate assessment of the bakery's product and service quality for the sake of refinement, this study employed a unit analysis or sample consisting of consumers who have made recent purchases there. Out of a total of 132 questionnaires, about 127 are utilized as samples. Five of the forms were found to be unfinished and were thus discarded. Acceptance or preference testing necessitates between seventy-five and one hundred and fifty untrained panelists. So, it can be concluded that the sample sizes used here are adequate for the purposes of this study.

Then, validity and reliability tests are conducted as statistical procedure. It is to make sure that the research instrument is valid and reliable. In addition, nonparametric statistical test is applied to know the significance difference between importance and performance. The indicators of customer satisfaction analysis applied in the research are represented in Table 1 and Table 2.

**Table 1 Product Quality Indicators**

No	Indicators	Indicators' Information	References
1	Taste	Delicious taste	Nair (2013), Al-Tit (2015), Marić <i>et al.</i> (2009)
2	Texture	Fine texture	Nair (2013), Marić <i>et al.</i> (2009)
3	Aroma	Nice aroma	Al-Tit (2015), Marić <i>et al.</i> (2009)
4	Product Appearance	Good appearance	Marić <i>et al.</i> (2009), Donkoh <i>et al.</i> (2012)
5	Portion	Good portion	Sahari <i>et al.</i> (2012)
6	Variety	Large variety of products	Nair (2013), Al-Tit (2015), Marić and Arsovski (2010)
7	Freshness	Good freshness	Nair (2013), Al-Tit (2015), Tzeng and Chang (2011), (Donkoh <i>et al.</i> (2012)
8	Health	Healthy nutritious products	Al-Tit (2015), Tzeng and Chang (2011), Donkoh <i>et al.</i> (2012)

9	Packaging	Nice packaging	Nair (2013), Marić <i>et al.</i> (2009), Marić and Arsovski (2010), Al-Tit (2015)
10	Price Fairness	Compatible price	Nair (2013), Hanaysha (2016), Jakpar <i>et al.</i> (2012), Marić <i>et al.</i> (2009)
11	Discount	Interesting discount	Jakpar <i>et al.</i> (2012)

Tabel 2 Service Quality Indicators

No	Indicators	Indicators' Information	References
1	Outlet	Clean, neat, and comfortable outlet	Adinegara and Turker (2016), Al-Tit (2015), Tzeng and Chang (2011)
2	Food Storage Staffs' Appearance	Good food storage	Marić <i>et al.</i> (2009)
3		Clean, neat, and charming appearance of the staffs	Adinegara and Turker (2016), Al-Tit (2015)
4		Sufficient product information	Nair (2013)
5	Competence	Bakery staffs comprehend to answer questions	Al-Tit (2015), Tzeng and Chang (2011), Rahman <i>et al.</i> (2012)
6	Courtesy	Bakery staffs serve customers politely and friendly	Adinegara and Turker (2016), Al-Tit (2015), Tzeng and Chang (2011)
7	Process	Production process assurance (Hygiene process)	Marić <i>et al.</i> (2009)
8	Accurate Charge	Accurate transaction of payment	Al-Tit (2015), Adinegara and Turker (2016)
9	Committed Service	Commitment to the services as promised	Al-Tit (2015), Rahman <i>et al.</i> (2012)
10	Product Supply	Products are available in	Marić <i>et al.</i> (2009), Marić and Arsovski

		sufficient amount	(2010), Donkoh <i>et al.</i> (2012)
11	Operating Hours	Comfortable operating hours	Al-Tit (2015), Donkoh <i>et al.</i> (2012)
12	Personal Attention	Bakery staffs give personal attention to the customer	Adinegara and Turker (2016), Tzeng and Chang (2011), Donkoh <i>et al.</i> (2012)
13	Keeping Manner	Bakery staffs keep and pack the products in a good manner	Al-Tit (2015)
14	Response	Bakery staffs are responsive to the customers' need	Adinegara and Turker (2016), Tzeng and Chang (2011), Donkoh <i>et al.</i> (2012)
15	Promptness	Bakery staffs provide prompt services	Adinegara and Turker (2016), Al-Tit (2015), Tzeng and Chang (2011)
16	Complaint Handling	Complaints or questions are responded quickly	Adinegara and Turker (2016)

### DATA ANALYSIS

Validity and reliability test are conducted by the questionnaire. Table 3 and Table 4 show the validity test results for product and service quality.

**Table 3 Validity Test of Product Quality**

Item	Coefficient	r Table	Remark
p1	0,786	0,362	Valid
p2	0,842	0,362	Valid
p3	0,856	0,362	Valid
p4	0,885	0,362	Valid
p5	0,864	0,362	Valid
p6	0,817	0,362	Valid
p7	0,817	0,362	Valid
p8	0,855	0,362	Valid
p9	0,816	0,362	Valid
p10	0,875	0,362	Valid
p11	0,704	0,362	Valid

(Source: Data proceed, 2017)

Based on Table 3, here is no item has a validity coefficient value below 0,362 (r Table). It can be concluded that 11 items of product quality in the questionnaire are valid. Meanwhile, the alpha value of liability coefficient is 0,952. It means the research instrument is reliable.

Similarly based on Table 4, no item has a validity coefficient value below 0,362 (r Table). It can be concluded that 16 items of service quality in the questionnaire are valid. The alpha value of reliability coefficient is 0,977. It means the research instrument is reliable.

**Table 4 Validity Test of Service Quality**

Item	Coefficient	r Table	Remark
p1	0,862	0,362	Valid
p2	0,794	0,362	Valid
p3	0,824	0,362	Valid
p4	0,846	0,362	Valid
p5	0,836	0,362	Valid
p6	0,850	0,362	Valid
p7	0,872	0,362	Valid
p8	0,882	0,362	Valid
p9	0,844	0,362	Valid
p10	0,880	0,362	Valid
p11	0,858	0,362	Valid
p12	0,876	0,362	Valid
p13	0,866	0,362	Valid
p14	0,888	0,362	Valid
p15	0,832	0,362	Valid
p16	0,892	0,362	Valid

(Source: Data processed, 2017)

Table 5 shows mean importance and performance of product quality indicators. It results from questionnaire data processing.

**Table 5 Mean Importance and performance of Product Quality Indicators**

IPA Code	Product Indicators	Importance ( )	Performance ( )
1	Taste	4,46	4,27
2	Texture	4,39	4,29
3	Aroma	4,31	4,28
4	Product appearance	4,44	4,31
5	Portion	4,34	4,28
6	Variety	4,43	4,29
7	Freshness	4,50	4,37
8	Health	4,51	4,36
9	Packaging	4,41	4,32
10	Price fairness	4,48	4,38
11	Discount	4,38	4,34

(Source: Data processed, 2017)

Table 6 how's the mean importance and performance of service quality indicators.

**Table 6 Mean Importance and Performance of Service Quality Indicators**

IPA Code	Service Quality Indicator	Importance ( )	Performance ( )
1	Outlet	4,39	4,18
2	Food storage	4,40	4,20
3	Staff's appearance	4,42	4,23
4	Product information/ cues	4,35	3,98
5	Competence	4,33	4,16
6	Courtesy	4,43	4,24
7	Process	4,49	4,27
8	Accurate charge	4,43	4,27
9	Committed services	4,38	4,21
10	Product supply	4,32	4,13
11	Operating hours	4,33	4,29
12	Personal attention	4,40	4,27
13	Keeping manner	4,42	4,38
14	Response	4,39	4,33
15	Promptness	4,45	4,36
16	Complaint handling	4,37	4,33

The results obtained in this research are different from previous research because of the different research objects with different features. As mentioned earlier that customer satisfaction analysis for bread product and bakery service are still rarely discussed. Thus, this research gives contribution in building a customer satisfaction framework in a bakery using product and service quality features. It gives a whole insight for management to analyze its external customers. The results achieved in this research only valid for this case study and cannot be generalized. However, the framework can be applied to other bakeries which have similar condition.

## CONCLUSION

Evidence from the bakery case study suggests that both product and service quality may be gauged by how they taste and how friendly the staff is. Both of these signals are important for this bakery to pay attention to. It's advised that higher-quality components be used to improve the dish and get the desired flavor. Meanwhile, it's recommended that employees be given the tools and training they need to provide excellent customer service. Although such a strategy to bread assessments exists, its implementation in our settings is now restricted to research due to the complicated training of evaluators required to implement it. The purpose of this research was to try to determine the aspects and dimensions that contribute to the difficulties in marketing bread goods. The implementation of LCM is difficult but not insurmountable, as was



shown in the sample of bakeries that was surveyed. Managers having sufficient knowledge of LCM tools to actively prioritize their decisions in light of relevant environmental factors is a far-fetched ideal.

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