

# Innovations

## Reliability Test on the Extent of Marketing Mix Practices of Small and Medium Enterprises: A Pilot Study in Catbalogan City

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**Abstract:** *This paper aimed to identify the reliability of the instrument to be used on the primary study on the extent of marketing mix (7Ps) practices of small and medium enterprises. A quantitative methodology was employed, and data were gathered from 58 respondents from small and medium enterprises in Catbalogan City. The data was analyzed using Statistical Package for Social Sciences (SPSS) version 31. The reliability tests for the seven constructs exhibited Cronbach's alpha coefficients greater than 0.70, confirming the reliability of the instrument. In conclusion, the findings highlighted the instrument's reliability in measuring the extent of marketing mix practices of small and medium enterprises, indicating its readiness in application during the primary research.*

**Keywords:** *Marketing Mix, 7Ps, Small and Medium Enterprises, Reliability, Pilot Study*

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### Introduction

Marketing mix is the set of marketing tools businesses use to achieve customer satisfaction, engage customers, build customer relationships, and accomplish targets (Kotler & Armstrong, 2021). Marketing mix is a crucial activity for different businesses do to significantly influence the achievement of their objectives.

The marketing mix is often summarized as the four P's – product, price, place, and promotion – serves as the fundamental framework for marketing professionals to achieve their targets in connection with the market they are serving (Anjana & Sreeya, 2019).

In the early 1980s, authors Bernard H. Booms and Mary J. Bitner recognized other variables that the 4Ps of marketing ignored. Because of this, they developed the 7Ps model of the marketing mix. The additional 3Ps include People, Process, and Physical Evidence. These elements of the 7Ps of marketing mix collectively influence consumer purchasing decisions (Safitri et al., 2023).

According to Praesri et al. (2022), Products are those offered by a firm to the market, responding to consumers' needs and wants. The Product then is connected to price. Price is the value of a good or service that is to be paid by a consumer (Praesri et al., 2022). Place, sometimes referred to as distribution,

involves different interdependent firms to make goods and services available to markets in different areas (Do & Vu, 2020). Promotion involves different marketing channels to make products known to prospective customers and make them interested in what is being offered (Ryńca & Ziaeeian, 2021). Promotional activities may involve both traditional and online marketing communications. People as an element of the marketing mix is one of the additional 3Ps. According to Hutomo & Wijaya (2021), People in the marketing mix play a vital role in the presentation of services to influence customers' perceptions. People in the marketing mix are the firm employees, owners, and consumers. Physical evidence is also another important variable in the marketing mix. According to Purohit et al. (2021), Physical Evidence is associated with the surroundings or the firm's environment that a consumer, influences the consumer's decision to buy. Moreover, they added that physical evidence involves not just actual products but also the firm's infrastructure, customers' comfortability in the area, accessibility of counters, sufficient parking spaces, cleanliness of premises, and other physical factors that may influence a customer's perception on the firm and their buying intention. The last P in the 7Ps of marketing mix is the Process. According to Ngai & Wu (2022), Process pertains to a firm's procedures, mechanisms, and flow of different activities.

Marketing mix is crucial in the survival of a business, especially for small and medium enterprises. The 7Ps of marketing mix model helps enterprises strategize their marketing efforts effectively and influence the buying decisions of the consumers (Kuliman et al., 2023). Past studies by Febriansyah (2019), Lima et al. (2024), and Elgarhy & Mohamed (2022), acknowledged the significance of the 7Ps of marketing for different enterprises. These 7Ps of marketing are crucial in enhancing customer satisfaction and loyalty, which are significant for customers retention in a competitive market (Fajrin & Aprianingsih, 2024).

Understanding the extent of marketing mix practices of small and medium enterprises is crucial as it influences their performance, entrepreneurial orientation, and competitive advantage (Zainuddin & Sudarmiatin, 2023). The researcher, aims to conduct the primary research in Calbayog City on the extent of marketing mix practices of small and medium enterprises. The researcher found a plethora of studies pertaining to the 7Ps of marketing mix practices, but none were specific to small and medium enterprises in Calbayog City. Therefore, this study aimed to test the reliability of the developed instrument and provide the basis for the conduct of the primary study in Calbayog City. In this study, the researcher carried out a pilot study on the extent of 7Ps practices of small and medium enterprises in Catbalogan City. The purpose of the pilot study is to ensure the reliability of the research instrument as well as to get a clear view before conducting the primary study.

## Methods and Data

Researchers need to validate the constructed research questionnaire and ensure that respondents understand it thoroughly before conducting the actual

primary field study. According to Njeri Muasya & Kyalo Mulwa (2023), conducting a pilot study is crucial for validating a research instrument, enhancing the reliability and validity of the data collected in the main study. Moreover, they emphasized that the findings from a pilot study allows researchers to make necessary adjustments to their instrument. This ensures accuracy, reliability, and clarity for the respondents. Moreover, a pilot study helps researchers determine the time required to complete survey, practice quantitative analysis, gather useful information about the research environment, and analyze the findings to improve the likelihood of success of the main study (Brooks et al., 2016). This pilot study was conducted on 58 respondents consisting of small and medium enterprise owners, employees, and customers in Catbalogan City, Samar. This sample size for the pilot study is sufficient to provide reliable estimates and it aligns with common practices in pilot studies, allowing for initial insights (Sorzano et al., 2017; Colman & Halstead, 1973; Teare et al., 2013). The respondents were randomly sampled.

The reliability of the research instrument was tested using Cronbach's alpha to analyze the consistency of the constructs. Cronbach's alpha is a measure of internal consistency used in assessing the reliability of a research instrument (Ikhsanudin et al., 2024) with a reliability coefficient threshold of 0.70 considered as good reliability (Kumar, 2024). The constructs such as Product, Price, Place, Promotion, People, Physical Evidence, and Process were tested with their corresponding items. The responses were recorded on a 5-point Likert scale, with 5 = Excellent, 4 = Above Average, 3 = Average, 2 = Below Average/Poor, and 1 = Very Poor. The measuring of the items to measure the extent of marketing mix practices of small and medium enterprises are shown in the following tables.

**Table 1.** Items Representing the Marketing Mix Practices in terms of Product

Items		Codes
1	Characterization of enterprise based on the provision of high-quality products	Prod1
2	Provision of better products compared to competitors	Prod2
3	Product variety according to the needs of the market	Prod3
4	Offering of product bundles to the market	Prod4
5	Establishment of product's market position	Prod5
6	Provision of product's unique selling proposition	Prod6
7	Increase in the number of product lines or depth	Prod7
8	Elimination of low-performing products or lines to simplify products or lines	Prod8
9	Without modifying in any way, the enterprise positions the products as a superior choice to a competitive product	Prod9

**Source: Author**

**Table 2.** Items Representing the Marketing Mix Practices in terms of Price

<b>Items</b>		<b>Codes</b>
1	Appropriateness of products' prices for the market according to Philippine laws	Price1
2	Competitive pricing compared to other businesses in the industry	Price2
3	Offering of payment installment options to provide convenience to customers	Price3
4	Offering of price discounts to customers	Price4
5	Implementation of value-based pricing strategy (value-based pricing is setting prices according to what consumers think your product is worth)	Price5
6	Implementation of competitive pricing strategy (competitive pricing is setting prices based on what the competition is charging)	Price6
7	Implementation of price skimming strategy (Price skimming is setting a high product price up to what the market can possibly tolerate and then lower them over time)	Price7
8	Implementation of cost-plus pricing strategy (Cost-plus pricing is adding a certain percentage to the product's actual production cost.)	Price8
9	Implementation of penetration pricing strategy (Penetration pricing is the offering of a much lower price of a new product to penetrate the market.)	Price9
10	Implementation of economy pricing strategy (Economy pricing is pricing a product cheaper than its competitors.)	Price10
11	Implementation of dynamic pricing strategy (Dynamic pricing is the constant changing of prices to match the current demand of the product.)	Price11

**Source: Author****Table 3.** Items Representing the Marketing Mix Practices in terms of Place

<b>Items</b>		<b>Codes</b>
1	Taking order and sending of products directly to consumers (direct distribution)	Place1
2	Working with intermediaries to distribute products (indirect distribution)	Place2
3	Distribution of products is as many locations as possible (intensive distribution)	Place3
4	Distribution of products to more than one retailer, but being very selective about which ones to work with (selective distribution)	Place4
5	Distribution of products to a single enterprise/retailer/individual (exclusive distribution)	Place5
6	Enterprise reduction of logistical costs	Place6

7	Meeting the delivery deadlines	Place7
8	Prevention of problems in the supply chain	Place8

**Source: Author**

**Table 4.** Items Representing the Marketing Mix Practices in terms of Promotion

Items		Codes
1	Use of social media to promote products and services	Prom1
2	The enterprise has websites where customers can check its product offerings online.	Prom2
3	Use of television ads to promote the business and its products	Prom3
4	Use of radio ads to promote its business and products in areas where	Prom4
5	Use of radio ads to promote its business and products in areas where the internet is not available	Prom5
6	Use of print ads to promote business and products	Prom6

**Source: Author**

**Table 5.** Items Representing the Marketing Mix Practices in terms of People

Items		Codes
1	The owner/s and employees of the enterprise are highly skilled.	Peo1
2	The employees of the enterprise deal with customers in a tactful, respectful, and elegant manner.	Peo2
3	The enterprise attracts highly skilled applicants.	Peo3
4	Customer service is provided 24/7.	Peo4
5	Employees give nothing but the best experience to customers	Peo5
6	Employees give nothing but the best experience to customers	Peo6
7	Both employers and employees are well-trained.	Peo7

**Source: Author**

**Table 6.** Items Representing the Marketing Mix Practices in terms of Physical Evidence

Items		Codes
1	The external and internal appearance of the enterprise is good and attractive to potential customers.	PE1
2	Modern facilities are being used by the enterprise.	PE2
3	General cleaning is a feature of the enterprise.	PE3
4	The enterprise is physically welcoming for persons with disabilities (PWDs)	PE4
5	A breastfeeding area is available within the premises of the enterprise.	PE5
6	Areas for leisure activities are available within the premises of the enterprise.	PE6
7	A convenient parking space is provided by the business.	PE7
8	The location of the enterprise is convenient for customers.	PE8

9	Provision of guideboards and maps on the enterprise website to help customers get to the physical store	PE9
10	Training facility for the employees to develop and maintain high-quality services	PE10

**Source: Author**

**Table 7.** Items Representing the Marketing Mix Practices in terms of Process

Items		Codes
1	Customer-friendly order of buying process	Proc1
2	The online store checkout process is being practiced by the enterprise	Proc2
3	Enterprise electronic (use of barcodes, receipts, and other forms of graphics logos, and information about a product or the business that come with them)	Proc3
4	Technological processes (processes involving the creation of products to fulfill customers' needs)	Proc4
5	Direct activities (processes involving real-time or present-time interaction between customers and employees)	Proc5
6	Indirective activities (Processes involving support to customers happening before, during, or after the product is bought or service is provided.)	Proc6

**Source: Author**

## Results

Measuring the reliability of a research instrument refers to the internal consistency and stability of the results. Cronbach's alpha is used to assess the internal consistency of a set of items in a scale instrument (Vaske et al., 2017). Table 8 shows the general rule of thumb for identifying the internal consistency of an instrument.

**Table 8.** General Rule of Thumb for Rule of Thumb on Determining the Internal Consistency of an Instrument

Cronbach's Alpha	Internal Consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

**Source: Glen (2023)**

In this study, the Cronbach's Alpha values for the reliability test of the items per variable, such as product, price, place/distribution, promotion, people, physical evidence, and process, for the extent of marketing mix practices of small and medium enterprises, all exceed 0.70 which is the threshold for acceptable internal consistency of a scale instrument (Glen, 2023).

As indicated in the findings in Table 9, the Cronbach's alpha coefficient for Product, Place, and Physical Evidence were found to be 0.811, 0.818, and 0.863, respectively, reflecting a good internal consistency within their parameters. On the other hand, Price, People, and Process were revealed to have Cronbach's alpha coefficients of 0.793, 0.742, and 0.792, respectively, reflecting that the internal consistency of their parameters was acceptable. Moreover, Promotion got a Cronbach's alpha coefficient of 0.917, which is considered as excellent in terms of its internal consistency. This shows that the internal consistency of the instrument used during the pilot study was above the acceptable threshold. Thus, the research instrument is reliable and is ready to be used during the primary research.

**Table 9.** Reliability Analysis of the Extent of Marketing Mix Practices of Small and Medium Enterprises Instrument

<b>Variable</b>	<b>Cronbach's Alpha</b>	<b>No. of Items</b>
Product	0.811	9
Price	0.793	11
Place/Distribution	0.818	8
Promotion	0.917	6
People	0.742	7
Physical Evidence	0.863	10
Process	0.792	6

**Source: Author**

### **Concluding Remarks**

The main purpose of this paper is to measure the reliability of the research instrument through the conduct of a pilot study. Based on the results, the researcher concludes that the respondents did not encounter major problems in answering the items in the instrument. The results showed acceptable to excellent reliability of the instrument as the variables were all above the minimum acceptable internal consistency. Moreover, the variables such as Product, Price, Place, Promotion, People, Physical Evidence, and Process were found to be reliable to be used during the primary field of study. Additionally, no revisions were done on specific items in the instrument. This study contributes to the body of knowledge by comprehensively analyzing the reliability of the instrument to be used in the primary field of study. This study will pave the way to effectively understand the extent of marketing mix practices of small and medium



enterprises. This study presents a significant also presents a noteworthy contribution to research, especially in the field of marketing management, as the instrument can be used in different locations.

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