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Gilbert Nartea

IJMBE International Journal of Management, Business, and Economics

Welcome Address from President, Sripatum University

Welcome to the ninth volume of International Journal of Management, Business, and Economics (IJMBE). IJMBE is dedicated to increasing the depth of the subject across business disciplines with the ultimate aim of expanding knowledge of the subject. The IJMBE is a thrice peer-reviewed journal published by Graduate College of Management, Sripatum University; University of Greenwich; and Lincoln University.

In retrospect, Sripatum University, one of the oldest and most prestigious private universities in Thailand, was established in 1970 by Dr. Sook Pookayaporn by the name " Sripatum College." The name "Sripatum" meaning "Source of Knowledge Blooming like a Lotus" was conferred on the college by Her Royal Highness the Princess Mother. In 1987, the college was promoted to university status by the Ministry of University Affairs, and has since been known as Sripatum University. The university's main goal is to create well-rounded students who can develop themselves to their chosen fields of study and to instill the students with correct attitudes towards education so that they are enthusiastic in their pursuit of knowledge and self-development.

To strive to be among the best, this third issue of the IJMBE is therefore instrumental for the most important academic growths to extend a high quality tradition in the education field to the world. The journal welcomes the submission of manuscripts that meet the general criteria of significance and scientific excellence, and will publish original articles in basic and applied research, case studies, critical reviews, surveys, opinions, commentaries and essays. It is hoped that this third issue will set a new benchmark in terms of academic publications. Through the support of our Editorial and Advisory Boards, I hope this journal could provide academic articles of the highest quality to all readers.

Dr. Rutchaneeporn Pookayaporn Phukkamarn
President, Sripatum University

Welcome Address from Dean, Sripatum University

It is appropriate to celebrate the continuity of an exciting and esteemed journal. The IJMBE will serve and provide a forum for exchange of ideas among business executives and academicians concerned with Management, Business, and Economics issues. With the rapid evolution of corporate business from international to global in recent years, general business has been one of the areas of greatest added complexity and concern for corporate managers. The IJMBE will be an academic journal combining academic inquiry and informed business practices. It will publish empirical, analytical, review, and survey articles, as well as case studies related to all areas of Management, Business, and Economics. A sentiment often expressed by practitioners is that academic research in general may not be addressing the most relevant questions in the real world.

It is fair to say that the IJMBE will publish high-quality applied-research papers. Nevertheless, studies that test important theoretical works and shed additional light on the issue with some business implications will also be solicited. Each submitted paper has been reviewed by several members of the IJMBE international editorial board and external referees. On the basis, we would like to thank all of them for their support with review process of submitted papers.

I cordially invite papers with theoretical research/conceptual work or applied research/applications on topics related to research, practice, and teaching in all subject areas of Management, Business, and Economics, or related subjects. I welcome paper submissions on the basis that the material has not been published elsewhere. The ultimate goal is to develop a journal that will appeal to both management and business practitioners. I expect the IJMBE to be an outstanding international forum for the exchange of ideas and results, and provide a baseline of further progress in the aforementioned areas.

Assoc. Prof. Dr. Vichit U-on
Dean, Graduate College of Management
Sripatum University

The Editors

Editor-In-Chief

Dr. Ungul Laptaned is an Assistant Professor in the Graduate College of Management, Sripatum University. He graduated with a Ph.D. in 2003 from the University of Nottingham, United Kingdom in the field of Manufacturing Engineering and Operations Management. Ungul has published over 60 proceedings and journal papers; for instances, Industrial Engineering Network, Asia Pacific Industrial Engineering and Management, International Association of Science and Technology for Development, Operations and Supply Chain Management, Intelligent Manufacturing System, Business and Information, etc. He served as a program chair and a steering committee for several domestic and international conferences. He was a journal editor of International Journal of Logistics and Transport, and Thai Researchers' Consortium of Value Chain Management and Logistics Journal, and has consulted for several public organizations and industrial firms on logistics and supply chain management such as Thailand Research Fund, Phitsanulok Province, Public Warehouse Organization, Amatanakorn Industrial Estate, Wyncoast Industrial Park, Iron and Steel Institute of Thailand, Chacheongsao Province, JWD Infologistics Co., Ltd., Kerry Distribution (Thailand) Co., Ltd., TKL Logistics and Supply Chain Co., Ltd., and Ministry of Transport (Thailand).

Associate Editor

Dr Ioannis Manikas holds a Bachelor in Agriculture and a Master of Science in the field of logistics from Cranfield University. He holds a PhD from the Department of Agricultural Economics in AUTH and his primary interest includes supply chain management, logistics and agribusiness management. Dr Manikas has conducted research for projects regarding supply chain modelling, development of IT solutions for agrifood supply chain management and traceability both in Greece and the UK. He has a wide experience in the elaboration of research proposals under FP6, FP7, and Eurostars-Eureka funding mechanisms; lifelong learning oriented programmes such as Leonardo; and Interregional development programmes such as Interreg III and Interreg IV. His work as a self employed project manager and consultant in the agrifood sector includes the design and development of regional operational programmes; analysis of regional needs and respective development policies focused on rural and food production; definition of funding areas and financing resources; definition of strategic goals for regional development and formulation of respective performance monitoring systems; and assessment (ex-ante, on-going, ex-post) of the implementation of EC and national funding mechanisms in national and regional levels.

Guest Editor

Dr. Gilbert Nartea is an Associate Professor in the Waikato Management School, University of Waikato, New Zealand. Dr. Nartea graduated a Master's Degree from New England and a Ph.D. from Illinois, USA. He is a senior lecturer in Finance. His teaching interests are in the area of investments, futures and options, and finance. The area of research interests area asset pricing, investment management, decision-analysis and risk management, and microfinance and poverty alleviation. He has published several papers in such journals as of Property Investment and Finance, International Journal of Managerial Finance, Asian Journal of Business and Accounting, Australian Journal of Agricultural and Resource Economics, Pacific Rim Property Research Journal, Review of Applied Economics, Review of Development Cooperation, American Journal of Agricultural Economics, and Journal of the American Society of Farm Managers and Rural Appraisers.

Foreword

Welcome to the 3rd issue of the 9th volume of International Journal of Management, Business, and Economics (IJMBE), the Editors received a number of papers from different countries such as Cambodia, China, and Thailand. The received papers encompassed many areas of marketing, banking, economics, insurance and risk management, industrial and operation management, strategic management, and international and global business management. After the review process, a total of ten manuscripts were selected for publication.

The first article is conducted by *Chakarat Kanakasai*, and is entitled "*Causal Factors Affecting Operations and Customer Loyalty in the Digital Restaurant Business in Thailand*". The objective of this article is to present knowledge from a literature review about the study of causal factors affecting operations and customer loyalty in the digital restaurant business in Thailand.

The second article is authored by *Dissatat Prasertsakul and Thanyaporn Chinthammit,* and named as "*The Effects of Perceived Risks on Consumers' Attitudes Towards Social Commerce: A Case of Bangkok, Thailand*". This research proposes a conceptual framework to investigate the impact of perceived risks on the attitudes of Bangkok people towards social commerce shopping.

The third paper is examined by *Korakot Pookayaporn and Vichit U-on*. Their paper is entitled "*Causal Factors of Quantum Marketing Strategy Affecting the Marketing Performance in Higher Education Sector*". The objective of this research was to model the causal factors of quantum marketing strategies affect performance.

In the fourth article, entitled "*A Guideline on the Change Management in Thai Language Programs at Universities in Yunnan Province, China*" is conducted by *Li Yang, Waraporn Thaima, and Sirinthorn Sinjindawong*. The objective of this research was to study the change management and find a guideline in Thai language discipline of universities in Yunnan, China.

The fifth article is authored by *Metaratt Chullasara, Kamontip Bonyasuwon, and Thanarit Thanaiudompat*, and is entitled "*The Influence of Workplace Happiness Factors on Organizational Commitment in Sport Competition Management Business*". This descriptive analytical study aimed to study workplace happiness factors influencing organizational commitment.

Article number six is entitled "*Research on the Mediating Role of Entrepreneurial Motivation in the Factors Influencing Entrepreneurship Growth*", and is examined by *Qian Wu and Xing Huawang*. This study takes entrepreneurial growth as a guide to systematically study the influencing factors of college students 'entrepreneurial motivation, analyzes entrepreneurial motivation from multiple perspectives.

The seventh article is conducted by *Rungpol Virochpoka*, and is entitled "*Causal Factors of Marketing Risk Outcome Affecting the Corporate Performance and Business Performance Co-Operation*". The main objective of the study was to identify, characterize, and assess threats, and assess the vulnerability of critical assets to specific threats.

In the eight article, entitled "*Causal Factors Affecting Team Leader Competency and Operating Results of Direct Sales Business in Thailand*" conducted by *Tanida Phoosuwan*.

Article number nine is written by *Tawit Thinkohyao, Theerapat Kueachoo, and Sirawit Sirirak*, and is entitled "*Relationship of Service Marketing and Quality on Customer Satisfaction and Loyalty of Full-Service Car Care Customer in Phuket*". This research aimed to study the relationship of service marketing and quality on customer satisfaction and loyalty of full-service car care in Phuket Province.

Last but not the least, the article entitled "*The Analysis of Logistics' System in Cambodia*", is conducted by *Vannary Chin*. The research claims about an introduction of the growth under the Logistic field in Cambodia after the economic instability has returned to normal condition

It is hoped that you will enjoy reading these articles and that they will generate responses and discussions that will help advance our knowledge of the field of Management, Business, and Economics. The Editors and the Editorial Board of the IJMBE would like to welcome your future submissions to make this journal your forum for sharing ideas and research work with all interested parties.

Ungul Laptaned
Editor-In-Chief

Associate Editor
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Contents

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Abstract

The problem of the decline in the number of students in the education system is due to the declining birth rate. Each year a student leaves the basic education system midway. The highest exit rate was at the lower secondary school level followed by high school and the least is the primary school and students have difficulty entering the compulsory education system from the beginning. Today, technology is changing the world so quickly that the market has to change as any organization. We are entering the transition to 5.0 of the marketing paradigm that traditional ideas, tools and strategies will not work, the world of quantum marketing. It will help build a brand that won the hearts of consumers as technology is rapidly changing at the quantum level. The objectives of this research were 1) to study causal factors affecting quantum marketing strategy and market performance in higher education sector, 2) to study the influence of causal factors of quantum marketing strategy affecting and 3) to model the causal factors of quantum marketing strategies affect performance. The researcher collected data from interviews and collected online questionnaires from higher education institutions. Addresses of the Office of the Commission on Higher Education from January 2023 to March 2023 amounting to 440 cases for professional benefits. Higher education institutions can use the results of research studies to develop research. as well as develop a progressive market management system resulting in promoting quantum marketing strategies and modifying the marketing performance of higher education institutions.

Keywords: Inputs and Expenditures, Market Demand, Brand Communication, Quantum Marketing Strategy, Marketing Performance

1. Introduction

1.1 Background and Importance of the Problem

The problem of the decline in the number of students in the education system is due to the declining birth rate. Each year a student leaves the basic education system midway. The highest exit rate was at the lower secondary school level followed by high school and at least in primary school, as well as students having difficulty entering the compulsory education system at the beginning. Therefore, tertiary marketing plays an important role in attracting new students. Raising awareness and awareness among potential students can set the stage for effective targeted recruitment efforts by recruiting teams and communication programs by public relations. Problems related to marketing in education, Pabian (2014) stated that there are now many changes that have made universities focus on the market. The situation has caused many controversy over the use of marketing in education. Changing the university culture by introducing business rules only damages the university.

In addition, Aphapat Boonrawd (2019) spoke about the concept of marketing through easily accessible channels. Starting with Marketing 1.0 that focuses on linking Product Feature and Market Needs. It was the first era of 4 P (Product, Price, Place, Promotion). Marketing 2.0 era was the era of the flow of information because it was a strategic information revolution because consumers were more knowledgeable and demanding from the brand. Building understanding of consumers and building a good relationship with them is paramount. When entering the era of Marketing 3.0 focuses on interactive communication because it is the era of the growth of social networks. Then lead to the era of Marketing 4.0, which is marketing in the digital age, which is the era where brands have to adapt their marketing strategies to the new world. Technology brings more convenience and connectivity including changing consumer behavior completely Consumers can access products and services and brand information anytime, anywhere through digital mobile devices, with consumers becoming more engaged and connected online.

Therefore, Marketing 4.0 or Digital Marketing It is a form of marketing by promoting products or services through digital media and can create engagement with consumers to increase sales by using various strategies through digital media which is becoming widely popular today Because consumers can easily access these media and can be accessed anytime, anywhere, 24 hours a day (Advanced Iservice, 2022). We are entering the transition to 5.0 of the marketing paradigm that traditional ideas, tools and strategies will not work, the world of quantum marketing. It will help build a brand that reigns with consumers as technology is rapidly changing at the quantum level (Rajamannar, 2021). Higher education institutions should adapt their strategies with quantum marketing as a measure of their market performance to keep up with rapidly changing technologies such as Deep Data, Internet of Things. (Internet of Things), Artificial Intelligence, 5G (Fifth-Generation Technology), or Blockchain (Block Chain), etc. The researcher is interested in researching various factors. of marketing strategies in the 5.0 era that affect the marketing performance of higher education institutions Collecting data from higher education institutions located in the Office of the Higher Education Commission Ministry of Education Its purpose is to test whether quantum marketing strategies have an impact on market performance. The results of this research can be used as a key guideline in the preparation of capacity building in higher education institutions and enhance competitive performance.

With the problems and importance of the problems mentioned above. This is the main reason why researchers are interested in studying and conducting research on this topic in order to solve such problems.

Also, Student Insights (2017) states that tertiary marketing issues include limited budgets, media saturation, outdated information, increased competition, and perception and perception gaps. with Napaporn Armstrong (2019) said that the Office of the Higher Education Commission In 2014-2016, the Ministry of Education has monitored the quality of 36 private higher education institutions that were reclassified to universities, representing 50 percent of all private higher education institutions under the Office of the Higher Education Commission during 2014-2016. It summarizes the situation of changes affecting higher education management. This is a challenging issue that has a huge impact on private higher education institutions: 1) facing disruptive technological changes. The rapidly developing technological advances have completely changed the learning needs of the learners, 2) the liberalization of trade that creates more competition in the management of higher education institutions both at home and abroad. , or 3) The structure of the school-age population continues to decline. while the number of public and private institutions exceeded the demand as well as increasing the number of seats and admission channels in public universities whether it is a special course off-site education center This caused the problem of student competition between public and private institutions of higher education, resulting in severe impacts on private institutions of higher education, especially smaller institutions of higher education.

Research related to input and cost factors affecting quantum marketing strategy and market performance. The research was carried out by Pakula et al. (2007); Rajamannar et al. (2021). The research section deals with market demand affecting quantum marketing strategy and market performance. Research has been carried out by Sladkowski (2001); Pakula et al. (2007); Rajamannar et al. (2021). In addition, research related to brand communication affecting quantum marketing strategy and performance market Research was conducted by Sladkowski (2001); Rajamannar et al. (2021); Blanchet (2022) for research related to quantum marketing strategies or others. that affect market performance Research conducted by Farida (2020); Morrison (2022); Aree and Ali (2022); Shehata (2022) on the market performance in the tertiary sector with a small number of identified 3 variables (input and expenditure factors). market demand or brand communication) and this research is a study that arises from applying System Theory to develop and study the empirical variables that influence quantum marketing strategies and market performance and the researchers saw that The results of this research will be important to administrators of higher education institutions including academic benefits such as academics, researchers, students who can apply the results of this empirical study to develop an integrated and further academic studies. Therefore, this research will study the relationship between input and expenditure factors market demand or brand communication with quantum marketing strategies and enhancing marketing performance, especially in higher education institutions and explain how quantum marketing strategies affect the marketing performance of higher education institutions along with a good strategy of quantum marketing to achieve Organizational Success (Becker, L. 2014)

1.2 Research Question

1) What are the causal factors affecting quantum marketing strategy and marketing performance in the higher education sector?
2) In what ways are the influence of causal factors affecting quantum marketing strategy and marketing performance in the higher education sector?
3) The model of causal factor of quantum marketing strategy affects marketing performance in the higher education sector, and what does it look like?

1.3 Research Objective

1) To study the causal factors affecting quantum marketing strategy and marketing performance in the higher education sector.

2) To study the influence of causal factors of quantum marketing strategy affecting marketing performance in the higher education sector.

3) To develop a model the causal factors of quantum marketing strategy affecting marketing performance in the higher education sector.
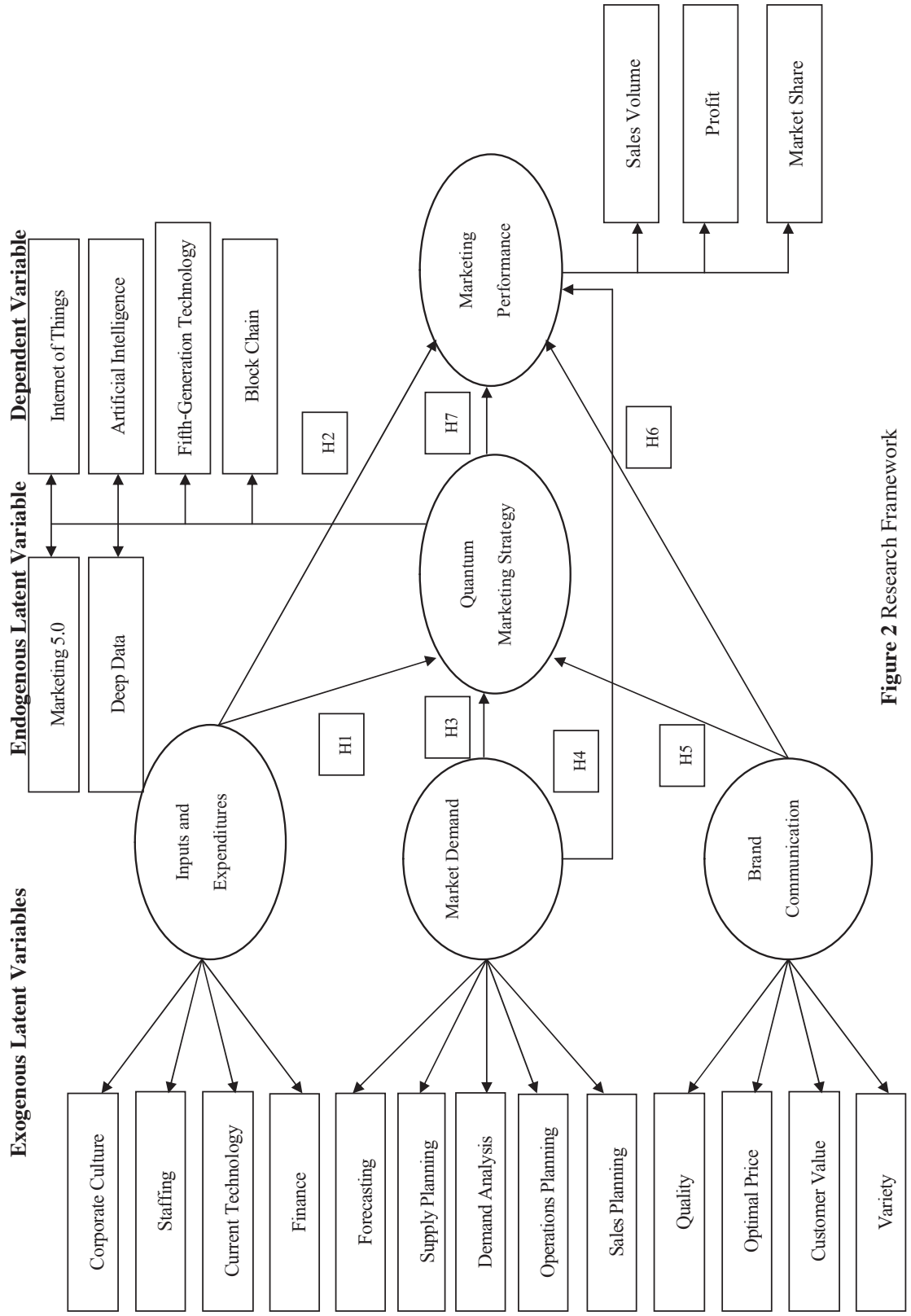
1.4 Research Framework

Figure 2 Research Framework

1.5 Research Hypothesis

Hypothesis 1: Inputs and expenditures affect quantum marketing strategy.

Hypothesis 2: Inputs and expenditures affect marketing performance through quantum marketing strategy.

Hypothesis 3: Market demand affects quantum marketing strategy.

Hypothesis 4: Market demand affects marketing performance through quantum marketing strategy.

Hypothesis 5: Brand communication affects quantum marketing strategy.

Hypothesis 6: Brand communication affects marketing performance through quantum marketing strategy.

Hypothesis 7 Quantum marketing strategy affects marketing performance.

2. Literature Review

2.1 Concepts, Theories and Related Research Results

2.1.1 Inputs and Expenditures

Nickolas (2021) discusses the inputs used to produce products or services. It is a resource that companies need in their efforts to make profits by producing goods and services. Like Eckstein (2020), it is important to understand that inputs are important because they are the upstream of results and outcomes, said Eckstein (2020). If product marketers do poor research that makes erroneous assumptions, CFI (2022) states that expenditures represent payments made in cash or credit to purchase goods or services. It was recorded at a single point in time (time of purchase) compared to the cost recorded for the time spent until exhausted or expired.

2.1.2 Market Demand

Urna (2010) said that when entering a business it is necessary to take into account the market demand for the product which means the market demand for the product The total number of all products purchased by the customer during the specified period under the premise of marketing Market demand is displayed vertically. The horizontal segment is basically the industry's marketing effort. The function of market demand is expressed as an upward curve. According to BigCommerce (2003), market demand describes the demand for a given product and who wants to buy it. It is determined by the willingness of consumers to spend a certain price on a particular product or service. When the market demand increases when demand decreases The price will decrease accordingly.

2.1.3 Brand Communication

Bhasin (2021) states that brand communication is an essential part and tool of brand management where companies inform, persuade, clarify, teach, remind and enhance stakeholders' knowledge about brands, strengths, values, fundamentals and presentation. products and services Brand communications are influencing the company's stakeholders. The Essential (2020) states that brand communications aim to create recognition and understanding of the value of a product or service. Build confidence in the identity of the business Information used as facts in various fields

which is filtered and shortened to communicate easily suitable for the target group Delivering content takes a continuous and consistent time to the target audience of a business's product or service, but Molek (2015) says that marketing is part of marketing. In the past, communication was marketing communication. in communicating the identity of the brand you want to be Or would like consumers to think that it is through communication in the form of advertisements or creative works through various media. It is the creation of brand image and identity through good branding. But in today's times, does the old method still work?

2.1.4 Quantum Marketing Strategy

Kotler et al. (2021) proposed that the adoption of Marketing 5.0 requires data-driven marketing by building a data ecosystem, and marketers need to forecast by estimating return on investment. investment in marketing and understand the specific context of the customer at the point of sale. It is an effect that cannot be explained by traditional approaches. Due to the rapid development or immeasurable quantity Quantum marketing is a new framework for the world of tomorrow. As the world is changing with unprecedented speed and volatility, traditional marketing theories, strategies and practices become impractical.

2.1.5 Marketing Performance

Chalida Kongmuang (2005) said that competence is the attributes and abilities that come from the whole self that are reflected in the form of work behaviors that are related in a causal way, resulting in the ultimate result that you want to have. based on knowledge Competencies in each profession differ according to certain attributes and abilities that must be achieved in accordance with the profession. Hoge et al. (2005) identified components of competence in marketing: knowledge, skills, abilities, and personality traits. But according to data from Krungsri Research (2021), the global economy has changed its structure from relying more on the industrial sector to the service sector. Technological developments will drive services that are more modern and in demand as they create added value in the product, Wrike (2006) said. Measuring marketing performance is an important process for marketing departments to undertake. continually But determining how to measure market performance can be difficult. This is partly because there are several methods for assessing market performance. Knowing how to monitor marketing performance can help marketing departments understand which campaigns are working.

2.2 Research Variable

2.2.1 Concepts and Theories about Inputs and Expenditures

2.2.1.1 Meaning of Inputs and Expenditures

The CFI (2022) states that expenses are payments made with cash or credit for the purchase of goods or services. It was recorded at a single point in time. (time of purchase) compared to the cost recorded for the time spent until exhausted or expired. This guide will review the different types of expenses used in accounting and finance.

Tamplin (2022) states that expenditure is defined as the purchase of goods or services that are expected to be economically beneficial for a given period of time.

2.2.1.2 Composition of Inputs and Expenditures

Inputs and Expenditures It contains important elements from the literature review. By choosing highly repetitive variables, organizational culture, employees, current technology, and finance, the inputs and expenditures have the following components.

1) Corporate culture It is a behavior created or molded together by people in the organization. Born from learning from each other, including the practice that has become a tradition for that organization.

2) Employees are employees or employees at all levels and positions that the establishment employs to work on a regular basis and full time with salary or wages.

3) Current technology It is the use of knowledge, tools, ideas, principles, techniques, knowledge, methods, processes as well as scientific works, both inventions and methods to be applied in the work system to help make changes in the work for the better up and to increase the efficiency and effectiveness of the work.

4) Finance is the study and defining the way that individuals, business entities and organizations to procure, allocate and use financial resources with consideration of various risks that may affect the project.

2.2.2 Concepts and Theories about Market Demand

2.2.2.1 Meaning of Market Demand

According to Paulus (2022), demand refers to the desire and willingness of consumers to purchase goods or services during a specified period or over time. Consumers also need to be able to pay for what they want or need as dictated by their disposable income budget. Therefore, demand is the driving force that influences economic growth and market expansion.

Toppr (2022) states that demand refers to the consumer's desire to purchase goods and services and the willingness to pay a price for a particular good or service. Demand refers to the desire to have a commodity. This is supported by the willingness and ability to purchase that product at a set price over time.

2.2.2.2 Composition of Market Demand

Market demand It contains important elements from the literature review. It selects the relevant variables such as forecasting, supply planning, demand analysis, operations planning, and sales planning. Therefore, market demand has the following components.

1) Forecasts are predictions based on historical data and patterns. Many businesses use tools and software systems to analyze large amounts of data collected over a long period of time. Used to forecast future demand and trends to help companies Make financial, marketing and operational decisions.

2) Supply planning It manages customer needs with suppliers' ability to deliver goods.

3) Demand Analysis It is an important tool in determining the feasibility of a project to achieve its objectives or to ensure that, when a product or service is produced, it meets market demand or has a

market to support it. Indicates that the project will have income or have a worthwhile return on investment.

4) Implementation planning It is the process of turning a strategic plan into a detailed map that clearly states what actions the team will perform on a weekly or sometimes even daily basis. The action plan includes a list of actions and milestones that each team or department must complete in order to implement the strategic plan.

5) Sales Planning It is a set of strategies designed to help sales teams meet their target sales quotas and help the company reach its overall sales goals. Sales planning helps predict the level of sales you want to achieve and draft plans to achieve goals.

2.2.3 Concepts and Theories about Brand Communication

2.2.3.1 Meaning of Brand Communication
Onlinemkt (2021) Brand communication means a way to make brands more humane and have meaningful conversations with people. These connections can take a few seconds or a lifetime between a brand and its target market.

Kenton (2022) Brand communication is a business and marketing concept that helps people identify a specific company, product or individual. Brands are intangibles and may not be able to actually touch or see They help shape the perception of a company, product or person.

2.2.3.2 Composition of Brand Communication
Brand communication It contains important elements from the literature review by choosing important variables such as quality, reasonable price, customer value, and variety. Therefore, brand communication has the following elements.

1) Quality is an efficient operation that meets the required requirements by products or services that create satisfaction for customers and has reasonable operating costs to gain an advantage over competitors satisfied customers and willing to pay the price to buy that satisfaction.

2) Reasonable price, the price point at which the seller's total profit is the highest when the price is too low. The seller moves a lot of units but doesn't get the maximum possible total profit.

3) Customer Value is the customer's perception of the value of a product or service. Value can mean many things. The benefits these products or services provide to the target market or the value for money they offer.

4) Diversity is a multitude of sources and types of both structured and unstructured data.

2.2.4 Concepts and Theories about Quantum Marketing Strategy

2.2.4.1 Meaning of Quantum Marketing Strategy
Weinberg (2022) states that quantum marketing strategies mean more accurate forecasting and investing in marketing strategies. the most uncertainty In marketing, it will be squeezed out with better data or better technology.

Williams (2022) states that quantum marketing strategy means a completely different approach to marketing that elevates all the frameworks and concepts of classic marketing. At the

edge of the fifth paradigm which will be brought in by many new technologies such as artificial intelligence, augmented reality, virtual reality, internet of things, wearables, autonomous vehicles, smart speakers, blocks and so on.

2.2.4.2 Composition of Quantum Marketing Strategy

Quantum Marketing Strategy It contains important elements from the literature review. By choosing highly iterative variables, Marketing 5.0, Insights, Internet of Things, Artificial Intelligence, 5G Technology, and Blockchain are the key components proposed by Rajamanar (2021). There are the following components.

1) Marketing 5.0 is a marketing strategy based on Marketing 3.0 and the integration of technology in the marketing process from Marketing 4.0 by Philip Kotler. Utilize technology with the ability to imitate humans to create, communicate, deliver and enrich the customer experience throughout the process.

2) Insights It's quality big data relevant and can be operated Data professionals have processed it for use with every employee in the organization for more efficient management All unnecessary or unusable data will be removed to ensure their relevance.

3) Internet of Things Every device connected to the Internet is a selling device. and expands that Internet-connected devices are marketing devices. or use tools for marketers to collect data and communicate information such as robots and drones.

4) Artificial Intelligence It is the artificial intelligence created for the inanimate. Artificial intelligence is a branch of computer science. and engineering mainly but also in other fields such as psychology, philosophy or biology, where artificial intelligence is learning about the processes of thinking, action, reasoning, adaptation or inference. and brain function.

5) 5G technology is the fifth generation of wireless communication technology that has been developed to increase the capability of uploading and downloading on wireless networks to be more stable and faster when compared to 4G technology used. Now, 5G will be able to achieve speeds up to 10 times faster than 5G, which can reach speeds of up to 20 Gbps.

6) Blockchain is a technology that facilitates the security and reliability of financial transactions without intermediaries. A marketing value chain is a sequence of marketing processes or activities that add value at each stage.

2.2.5 Concepts and Theories about

2.2.5.1 Meaning of Marketing Performance

Visionedge (2021) states that market performance is defined as the measurement of marketing performance and quantifying how marketing contributes to the overall success of a company.

According to Gartner (2022), market performance is a comprehensive measure of technology and services for solutions that support marketing's ability to access insights. Analyze data, forecast and optimize marketing programs, campaigns, and resources.

2.2.5.2 Composition of Marketing Performance

Marketing performance It contains important elements from the literature review. By choosing variables that are highly repetitive, such as market share and profit. For sales volume is important to measure business performance, market performance has the following components:

1) Sales volume is a projection or estimate of the amount or value of goods and services that an entity will sell on principle make predictions or make predictions, such as calculating from the results of a market survey The target population of the entity's goods and services opinions of various individuals both inside and outside the business.

2) Profit is the income that is distributed to owners in the production process in a profitable market. Profit is a measure of profitability, which is the main interest of the owner in the monetization process of market production. There are several profit measures that are commonly used.

3) Market share is the proportion of sales of one brand compared to the total sales of all brands of such products. Market share is a measure of how much of a brand's product is in sales compared to its total purchasing power.

2.3 Relationship between Variables and Hypothesis

2.3.1 Hypothesis 1
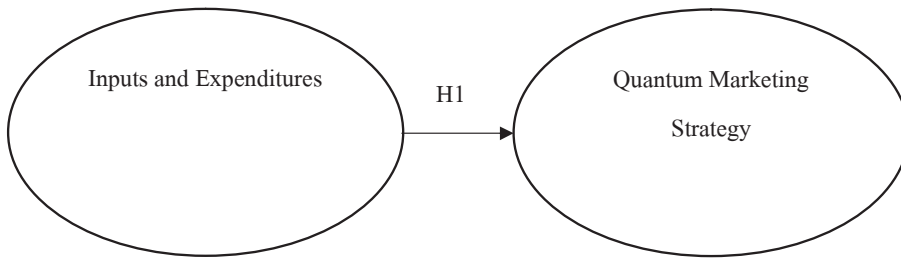
References Author(s) / Year	Inputs and Expenditures				Quantum Marketing Strategy					
	Corporate Culture	Staffing	Current Technology	Finance	Marketing 5.0	Deep Data	Internet of Things	Artificial Intelligence	Fifth-Generation Technology	Block Chain
Hart (2021)			√		√	√	√	√	√	√
Rajamannar (2021)		√			√	√	√	√	√	√
Rajamannar et al. (2021)			√		√	√	√	√	√	√

2.3.2 Hypothesis 2

	Inputs and Expenditures				Marketing Performance		
References Author(s) / Year	Corporate Culture	Staffing	Current Technology	Finance	Sales Volume	Profit	Market Share
Cammarano et al. (2022)			√		√		
McCourt (2022)				√		√	√
Nurjaman (2022)							√

2.3.3 Hypothesis 3
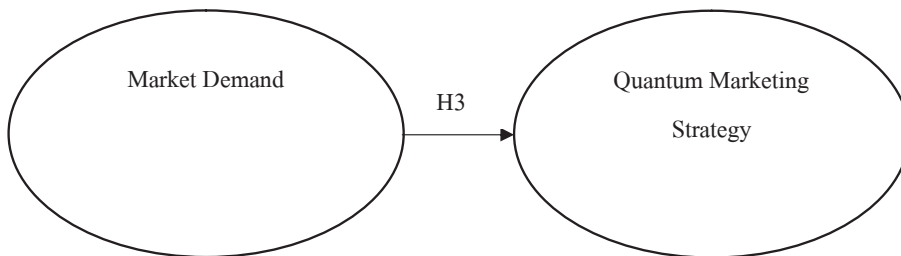
References Author(s) / Year	Market Demand					Quantum Marketing Strategy					
	Forecasting	Supply Planning	Demand Analysis	Operations Planning	Sales Planning	Marketing 5.0	Deep Data	Internet of Things	Artificial Intelligence	Fifth-Generation Technology	Block Chain
Hart (2021)			√			√	√	√	√	√	√
Rajamannar (2021)		√	√			√	√	√	√	√	√
Rajamannar et al. (2021)		√	√			√	√	√	√	√	√

2.3.4 Hypothesis 4
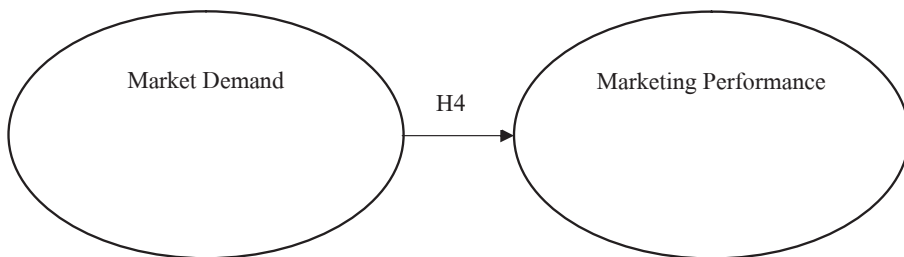
References Author(s) / Year	Market Demand					Marketing Performance		
	Forecasting	Supply Planning	Demand Analysis	Operations Planning	Sales Planning	Sales Volume	Profit	Market Share
Kuncoro et al. (2022)			√	√				√
Mehraj and Kaur (2022)				√				√
Shehata (2022)			√		√	√		√

2.3.5 Hypothesis 5
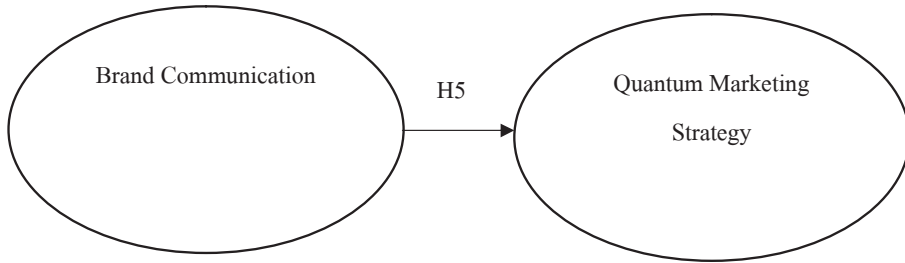
References Author(s) / Year	Brand Communication				Quantum Marketing Strategy					
	Quality	Optimal Price	Customer Value	Variety	Marketing 5.0	Deep Data	Internet of Things	Artificial Intelligence	Fifth-Generation Technology	Block Chain
Hart (2021)			√		√	√	√	√	√	√
Rajamannar (2021)			√		√	√	√	√	√	√
Rajamannar et al. (2021)			√		√	√	√	√	√	√

2.3.6 Hypothesis 6
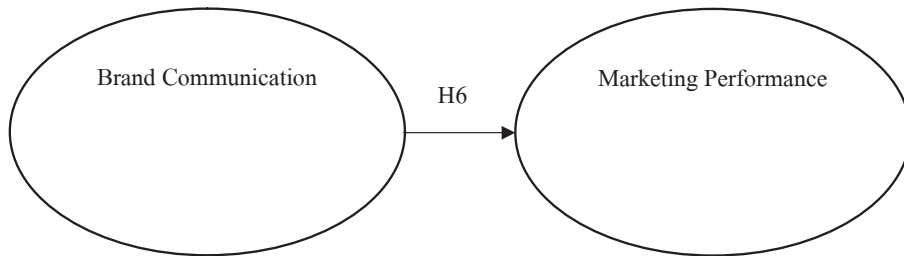
References Author(s) / Year	Brand Communication				Marketing Performance		
	Quality	Optimal Price	Customer Value	Variety	Sales Volume	Profit	Market Share
Mohammad (2020)			√	√			√
Pjero et al. (2020)		√	√		√	√	
Goyal et al. (2022)	√		√	√	√		

2.3.7 Hypothesis 7
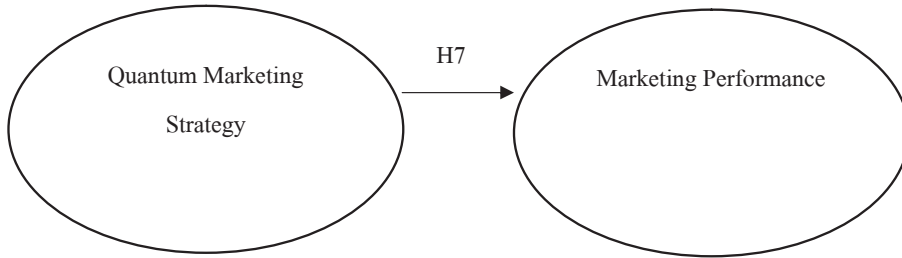
References Author(s) / Year	Quantum Marketing Strategy						Marketing Performance		
	Marketing 5.0	Deep Data	Internet of Things	Artificial Intelligence	Fifth-Generation Technology	Block Chain	Sales Volume	Profit	Market Share
Hart (2021)	√	√	√	√	√	√			√
Rajamannar (2021)	√	√	√	√	√	√	√		√
Rajamannar et al. (2021)	√	√	√	√	√	√	√		√

3. Research Methodology

3.1 Research Design

A review of the variables and components was carried out and reviewed. The questionnaires of variables and components were analyzed in order to formulate a preliminary questionnaire to be used in this study by considering the level of data measurement and questions that can be appropriately applied to the study of the causal factors of quantum marketing strategies affecting market performance in the higher education sector. A qualitative research study approach to develop questionnaires or research tools that are questionnaires and to corroborate the conceptual frameworks and factors used in research studies. Analysis results by content analysis It was used to draw up a study tool questionnaire where findings were grouped and sorted according to consistent and comprehensive details on variables and components.

3.2 Population and Sample

Proportional allocation of sample sizes in each category of higher education (Proportional Allocation) because the number of higher education institutions in each group is not the same. The researcher therefore used a proportional stratified random sampling method. In the case of data analysis using statistical techniques, Structural Equation Modeling, from the research conceptual

framework, there were 5 latent variables and 22 Observed Variables. Statistics suggest that the sample size should be 15 to 20 times the number of observable variables in determining the sample size (Hair, et al., 2006) to be considered an appropriate sample size for variable analysis. Multiple, therefore, the appropriate and sufficient sample size should range from 15 x 22 = 330 to 20 x 22 = 440.

3.3 Research Instruments

Semi-structured In-depth interview (Semi-Structure Interview) by preparing questions about elements or variables at a level and if it is found that the interview has other interesting issues, the interview will be conducted or additional questions will be asked. The researcher analyzes the results of the interview by using content analysis to summarize the content issues. or individual findings for consideration in building a questionnaire tool.

3.4 Data Collection

The researcher collected data from interviews and collected online questionnaires from higher education institutions. From January 2023 to March 2023.

3.5 Statistics Used for Data Analysis

1) Descriptive statistical analysis

This study established descriptive statistics to describe data or outcomes from questionnaires or survey collections. The statistics of frequency (Frequency) and percentage (Percentage) were also used statistical mean (Mean) and standard deviation (Standard Deviation, SD) to measure the level of variable data, namely inputs and costs, market demand, brand communication, quantum marketing strategy, and market performance.

2) Inferential Statistics

Inferential statistics were used to answer the study hypothesis on the causal factors of quantum marketing strategies affecting market performance in the higher education sector.

Pearson Correlation Analysis Statistics

A Pearson Correlation statistical analysis was performed to determine the relationship of the 22 components to confirm that the elements. There is a certain correlation in order to be able to properly analyze the Structural Equation Model (SEM) in the next order.

Confirmative Elemental Analysis Statistics (CFA)

The KMO and Bartlett's Test were performed by the researcher to determine the suitability of the variables and elements before the confirmation element analysis. The KMO must be greater than 0.5 and the Bartlett's Test must be greater than 0.05 before the confirmation element analysis can be performed. to confirm that the elements found from literature review And the data collection from the questionnaire is consistent with and can measure the variables (Latent Variable) appropriately.

Structural Equation Model (SEM) Statistics

In this study, structural equation analysis was designed to examine the coherence of the model or model obtained from the literature review with the empirical data (Model Fit). with empirical data (Assessment of Model Fit).

4. Anticipated Results

The researcher saw that The results of this research will be important to administrators of higher education institutions including academic benefits such as academics, researchers, students who can apply the results of this empirical study to develop an integrated and further academic studies. Therefore, this research will study the relationship between input and expenditure factors. market demand or brand communication with quantum marketing strategies and enhancing marketing performance, especially in higher education institutions and explain how quantum marketing strategies affect the marketing performance of higher education institutions along with a good strategy of quantum marketing to achieve success of the organization.

5. Conclusion and Recommendation

5.1 Conclusion

The researcher brought the results of the study to draw conclusions for easier understanding of the results of this study's data analysis. and the results were discussed to demonstrate the consistency of the study results with the literature reviews. as well as giving suggestions to users to enhance marketing performance in the higher education sector. as well as recommendations for further research.

5.2 Recommendation

Higher education institutions can use the results of research studies to develop research. as well as develop a progressive market management system resulting in promoting quantum marketing strategies and modifying the marketing performance of higher education institutions.

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