

The Impact of Marketing Mix and Digital Integrated Marketing Communication on Improving Private Vocational Colleges Image in Chonburi Province

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Abstract

This research aims to explore the role of digital marketing communication and the marketing mix in creating and enhancing the image of private vocational colleges in Chonburi Province. The study focuses on four main objectives: (1) analyzing the demographics of students at these institutions, (2) examining the digital marketing strategies employed by the colleges, (3) investigating the application of the marketing mix, and (4) assessing the relationship between digital marketing communication and the marketing mix in enhancing the colleges' image. Using a mixed-methods approach, the research collected quantitative data from 388 students and qualitative insights from interviews with five college administrators. The findings reveal that the majority of students are male, enrolled in industrial programs, and generally have positive opinions about the digital marketing efforts and marketing mix employed by their institutions. College administrators recognize the significant impact of these strategies, particularly in areas such as curriculum development, service delivery, and public relations, which play a crucial role in strengthening the institution's image. This research highlights the importance of integrating digital marketing communication and the marketing mix to create a strong and memorable image for vocational colleges. By effectively meeting the needs and expectations of students, parents, and other stakeholders, these institutions can enhance their reputation and appeal.

Keywords: marketing mix, digital marketing communication, private vocational colleges and college image

1. Introduction

Thailand's rapid economic growth and technological advancements, along with ASEAN integration, have significantly increased the demand for a highly skilled workforce. Despite efforts by various agencies and government initiatives to address labor shortages, these issues remain persistent (Channida Eamsaard, 2018). Although there is a rising demand for vocational professionals both domestically and internationally (Suriya Khongsena, 2014), many parents still prioritize academic education, perceiving vocational training as lacking future prospects and social acceptance (Somchai Janchaowana et al., 2012). Furthermore, the neglect of Thailand's vocational education system has resulted in a decline in quality and a less favorable perception, discouraging students from enrolling due to concerns about future job prospects (Nuttasit Rakskiattiwong, 2016).

This mismatch between workforce skills and market demand presents a significant challenge for Thailand's labor market (Channida Eamsaard, 2018). Promoting vocational education is essential for the country's economic development, offering students the opportunity to earn income while studying and secure high-paying jobs in specialized fields (Suriya Khongsena, 2014). To address this, the government must align vocational education with industrial sector needs through public relations and image enhancement initiatives (Jamejan Innuwat, 2019). Vocational institutions also need to build a positive image to attract students and gain support from parents and employers (Mongkol Kaewrod, 2021; Patchanee Petchaowut et al., 2018). Therefore, digital marketing communication plays a pivotal role in this process by effectively disseminating information, reducing costs, and improving institutional reputation (Nadda Kanjanannont, 2019).

Digital marketing communication, which includes methods such as digital advertising, personal selling, public relations, direct marketing, and event marketing via digital media (Kotler & Keller, 2016; Nadda Kanjanannont, 2016; Natta Changchuto, 2015; Shimp, 2000; Thanyawich Vichianphan, 2014), plays a crucial role in influencing consumer behavior

and aligning with current online habits. This approach is important for vocational colleges as it helps attract students by enhancing institutional recognition, disseminating information, raising awareness, and fostering interest in vocational education. Moreover, a well-designed marketing mix can significantly improve the image of vocational institutions, meet labor market demands, and help these institutions attract more students while boosting their reputation (Piriya Rithaplaek, 2019; Siriwan Serirat et al., 2009).

In this context, the research focuses on how the marketing mix and digital marketing communication can enhance the image of private vocational colleges in Chonburi Province, with the goal of improving perceptions among parents and students, increasing awareness, and fostering a better understanding of vocational education. Given the growth of industrial activities in Chonburi and the corresponding demand for skilled labor (Department of Industrial Works, 2023; Nirutt Butrsaenlee, 2022), local vocational colleges may face challenges in meeting these needs. Therefore, effective marketing strategies play a pivotal role in enhancing brand recognition, attracting more students, and supporting the region's economic growth. Ultimately, the strategic use of digital marketing and a well-crafted marketing mix are key to providing these colleges with a competitive edge.

2. Literature Review

The literature review examines the relationship between image, digital marketing communication, and the marketing mix in shaping the perceptions and success of educational institutions, particularly private vocational colleges. By analyzing these key areas, valuable insights are gained into how institutions can strategically enhance their image, engage with target audiences, and foster loyalty among students. The following sections explore the relevant concepts and theories underpinning these critical aspects.

2.1 Concepts and Theories Related to Image

In the competitive landscape of higher education, a well-crafted corporate image is paramount for institutions, especially vocational colleges. The concept of corporate image involves both functional dimensions—such as tangible, measurable aspects—and emotional dimensions that pertain to the psychological attitudes held by stakeholders (Kim, 2020). A strong corporate image enhances an institution's brand identity and reputation, making it a crucial factor in educational marketing strategies (Lee & Lee, 2018; Wu et al., 2011). The image significantly influences students' choices. Key determinants include location, public perception, graduate employment prospects, and academic quality (Hassan & Shamsudin, 2019; Manjinder Singh Dhaliwal et al., 2019).

A positive institutional image is shaped by strategic marketing efforts that align with government policies and societal expectations. For example, Dwiyama (2019) emphasizes that such strategic image-building enables institutions to meet the discerning choices of parents, students, and other stakeholders, thus ensuring competitive positioning in the market. Furthermore, Islamic educational institutions, as noted by Lamp et al. (2009), focus on aligning their image with global changes while maintaining the integrity of their products and services. This alignment requires integrating marketing strategies into operations, with marketing communication tools playing a vital role in evaluating performance and enhancing the corporate image.

2.2 Concepts and Theories Related to Digital Marketing Communication

Digital marketing communication has emerged as a critical tool for educational institutions, particularly in engaging with the tech-savvy Generation Z. Melnikova et al. (2016) highlight the significant role of digital marketing in modern education, emphasizing that it not only raises public awareness but also fosters a recognized and accepted image for institutions. This process is crucial for attracting students who are increasingly engaged with digital media for both academic and personal purposes.

Further supporting this, Junaidi, Biyanto, and Fahyuni (2021) found that digital advertising and public relations through platforms like WhatsApp, websites, and Instagram are particularly effective in improving an institution's image and drawing in prospective students. Their research underscores the importance of digital marketing strategies in boosting visibility and positively shaping public perception, which ultimately influences student enrollment decisions.

Additionally, Rutter, Lettice, and Nadeau (2017) argue that strategic marketing communication tools, such as social media and websites, are essential for creating brand awareness and enhancing student engagement. These tools are particularly effective in positioning an institution's brand personality, thereby shaping students' perceptions and fostering a strong connection with the institution.

The work of Shukla and Bhasin (2022) also contributes to this discourse by highlighting that the type and format of social media posts are critical factors in increasing engagement, such as likes, shares, and comments, which extend the institution's reach and enhance student involvement. This aligns with the findings of Saleem, Khan, and Magd (2022), who demonstrate how content marketing through online channels can significantly improve the image and enrollment rates of educational institutions, even during challenging times like the COVID-19 pandemic.

2.3 Concepts and Theories Related to Marketing Mix

The marketing mix, as articulated by Kotler (2003), consists of controllable marketing tools—Product, Price, Place, and Promotion—that institutions use to meet customer needs and drive satisfaction. In the context of educational institutions, an effective marketing mix can substantially enhance an institution's image and appeal to prospective students (Kotler et al., 2018).

Radiman et al. (2019) explored the impact of the marketing mix, service quality, and university image on student loyalty, finding that these elements are strongly interrelated. A well-perceived marketing mix not only attracts students but also fosters loyalty by ensuring their satisfaction with the institution's offerings. The study underscores that a positive university image and high service quality are key drivers of student loyalty, which are essential for retaining students and enhancing the institution's reputation.

Moreover, Abadi and Hidayatulloh (2022) demonstrated that integrating the marketing mix with institutional image significantly enhances the effectiveness of educational services, particularly in Islamic institutions. This approach aligns well with the findings of Ndofirepi et al. (2020) and Asiah et al. (2022), who observed that distinctive programs, market promotion, service processes, and physical evidence are crucial in improving a university's image. Moreover, Aziz et al. (2023) further support this by showing that such strategies not only influence students' choices in secondary education but also enhance the overall image of schools, highlighting the broader impact of a well-aligned marketing mix on institutional reputation.

In summary, the literature reviewed highlights the pivotal role of a well-crafted image, strategic digital marketing communication, and an effective marketing mix in shaping students' perceptions, satisfaction, and loyalty toward educational institutions. These components, when thoughtfully integrated, can significantly enhance the competitive standing and overall success of private vocational colleges.

The research employs a conceptual framework shown in Figure 1 to examine the impact of digital marketing and the marketing mix on the image of private vocational colleges in Chonburi Province. This framework posits that digital marketing, which includes strategies like digital advertising, personal selling, public relations, and direct marketing, plays a crucial role in shaping public perception of these colleges. Simultaneously, the marketing mix—encompassing product (curriculum), price (tuition and fees), place (location and accessibility), process (service delivery), and physical evidence (facilities and resources)—also contributes significantly to how these institutions are perceived.

The central hypothesis of the study is that both digital marketing and the marketing mix have a direct and significant influence on the image of private vocational colleges. This image, in turn, is reflected in several key factors: college reputation, course quality, college credibility, and the overall college environment. The framework suggests that effective digital marketing can enhance these aspects by promoting the strengths of the colleges, while a well-designed marketing mix can improve the actual experience and offerings, thereby reinforcing a positive image.

In this study, the framework will be tested by analyzing the extent to which digital marketing strategies and elements of the marketing mix contribute to improving the image of the colleges. The relationships between these variables will be assessed to determine how they interact to influence public perception, student enrollment, and overall institutional success. The findings will provide insights into how private vocational colleges can strategically use marketing to enhance their image and competitiveness in the education sector.



Figure 1. The conceptual framework

The conceptual framework presented in Figure 1 serves as a guide for this research, with the following expected benefits:

1. Guidelines for Improving Marketing Mix Tools and Digital Marketing Communication Strategies: The research findings aim to provide a framework for enhancing the marketing mix tools and digital marketing communication strategies used by private vocational colleges in Chonburi Province. By aligning these tools and strategies more effectively with the needs of the target audience, these institutions can better manage and promote their educational offerings, thereby increasing their appeal to prospective students.

2. Guidance for Effective Communication with Stakeholders: The research seeks to offer practical recommendations for private vocational colleges on how to communicate more effectively with students, parents, the public, and other relevant parties. Improved communication strategies are expected to enhance awareness and perception of vocational education, which, in turn, could lead to increased enrollment in vocational programs.

3. Improvement of Management Practices for College Administrators: The study is designed to provide valuable insights for administrators of private vocational colleges in Chonburi Province, helping them to refine their management practices. By applying these insights, administrators can improve the efficiency and effectiveness of their institutions, ensuring better outcomes for students and the community.

4. National Guidance for Vocational College Administrators: Beyond the local context, the research findings are intended to serve as a resource for vocational college administrators across Thailand. The insights gained from this study can help these administrators to manage their institutions more effectively, promoting higher standards of vocational education and ensuring that colleges remain competitive and responsive to the needs of the labor market.

This conceptual framework highlights the importance of using research-driven strategies to enhance both the marketing and management practices of vocational colleges, thereby contributing to the overall improvement of vocational education in Chonburi Province and beyond.

3. Research Methods

3.1 Research Procedures

This study employs a mixed-method approach, integrating both quantitative and qualitative research methodologies to achieve comprehensive research findings. The research process involves data collection through documentary studies and in-depth interviews. The procedures are outlined as follows:

3.1.1 Population and Sample

Quantitative Study

•Population: The study targets 37,031 students currently enrolled in private vocational colleges in Chonburi Province.

• Sample: A purposive sampling method is used to select specific student groups, focusing on final-year students in the Vocational Certificate (Year 3) and first- and second-year students in the Higher Vocational Certificate programs. Stratified sampling is applied to reach a sample size of 388, calculated using Taro Yamane's (1967) formula with a 95% confidence level and a 5% margin of error.

Qualitative Study

• Population: The qualitative study focuses on administrators from private vocational colleges in Chonburi Province, including managers, directors, deputy directors, or assistant directors.

•Sample: A purposive sampling method is employed to select 5 administrators, following Thomas T. Macmillan's (1971) guidelines, which recommend a sample of 5 experts.

The researcher's focus on private vocational colleges in Chonburi Province is particularly compelling due to the region's rapidly expanding industrial landscape. As noted by Nirutt Butrsaenlee (2022), Chonburi has seen a significant influx of new factories, a trend further supported by the Department of Industrial Works (2023), which highlights the province's increasing industrial activity. This surge in industrial growth places substantial pressure on the local labor market, demanding a highly skilled workforce that private vocational institutions in the area may currently struggle to supply. If these institutions are unable to align their programs with the evolving needs of the labor market, Chonburi could face critical labor shortages, potentially hindering its economic progress. This research, therefore, seeks to explore how private vocational colleges can better meet these demands, ensuring that they play a pivotal role in sustaining the region's economic growth and addressing the workforce requirements of its burgeoning industrial sector.

3.1.2 Data Collection Instruments

For data collection, the research utilized both quantitative and qualitative instruments to ensure a comprehensive understanding of the factors influencing the image of private vocational colleges in Chonburi Province. The quantitative data were gathered

using a structured survey questionnaire, which was divided into five main sections. The first section collected general respondent information, including details such as gender, education level, and parents' background. The second section focused on digital marketing communication strategies employed by the colleges to reach and influence students. The third section explored the marketing mix strategies, covering key aspects like courses offered, fees, location, service quality, and physical facilities, and how these factors impact students' perceptions of the colleges. The fourth section evaluated the colleges' image in terms of reputation, course quality, credibility, and overall environment. Finally, the fifth section examined the relationship between digital marketing communication, the marketing mix, and the colleges' overall image.

In addition to the survey, in-depth interviews were conducted with key college administrators to complement and validate the quantitative data. The interview guide was divided into two parts: the first part collected general information about the interviewees, such as their name, position, and experience, while the second part consisted of open-ended questions that allowed the administrators to share their insights on the impact of digital marketing, the marketing mix, and the overall image of the colleges, particularly within Vocational and Higher Vocational Certificate programs. These combined methods provided a robust and well-rounded view of how these factors contribute to shaping the image of private vocational colleges in the region.

3.1.3 Quality Verification of Research Instruments

The quality verification process for the research instruments involved several key steps to ensure accuracy, validity, and reliability. Initially, the questionnaire was revised based on feedback to improve its accuracy and completeness. Following this, it was assessed by five experts using the Index of Item-Objective Congruence (IOC) technique, which evaluated content validity and language accuracy. Necessary adjustments were made based on this assessment to finalize the questionnaire, ensuring it met ethical standards.

Subsequently, a pre-test was conducted with 30 participants who resembled the study sample to further validate the questionnaire. This pre-test focused on assessing the clarity, completeness, and reliability of the questionnaire, with a goal of achieving a Cronbach's alpha of 0.7 or higher, which would confirm the consistency of responses and the overall reliability of the instrument.

4. Data Collection Methods

The data collection process in this study was divided into two primary components: quantitative and qualitative methods, ensuring a comprehensive approach to gathering relevant information.

4.1 Quantitative Data Collection

Quantitative data was obtained from a carefully selected sample of 388 respondents using structured questionnaires. The data collection process was meticulously planned and executed as follows:

1. Initially, the researcher prepared a formal letter to seek permission from the administrators of private vocational colleges in Chonburi Province. This step was crucial for securing the necessary cooperation from teachers and staff, which facilitated the smooth distribution of questionnaires.

2. The researcher personally visited the selected colleges to distribute the 388 questionnaires, each accompanied by a consent form for the participants. To ensure the integrity of the data, it was imperative that all 388 questionnaires were returned. In cases where responses were incomplete or missing, additional efforts were made to gather the required data, ensuring a complete dataset.

3. Once all questionnaires were collected and verified for accuracy, the researcher proceeded with data analysis, systematically organizing the findings and interpreting the results for further discussion.

4.2 Qualitative Data Collection

Qualitative data was collected through in-depth interviews with five administrators from private vocational colleges in Chonburi Province, offering deeper insights into the research topic. The qualitative data collection process included the following steps:

1. The researcher sent a formal letter requesting the cooperation of the college administrators for the interview process. Interviews were conducted in person, with the researcher clearly explaining the purpose of the study and securing signed consent forms from each participant. To ensure a thorough and accurate recording of the interviews, permission was obtained to record the sessions, each lasting approximately 30-40 minutes.

2. In preparation for the interviews, the researcher carefully prepared notes and tested the recording equipment in advance, ensuring that data collection proceeded smoothly and without technical issues.

This methodical and structured approach to data collection, encompassing both quantitative and qualitative methods, provided a robust foundation for the comprehensive analysis and reliable findings of the research.

5. Data Analysis Methods

The data analysis in this study was divided into two main parts: quantitative and qualitative, each with its own approach to ensure thorough results.

5.1 Quantitative Data Analysis

This part focused on analyzing numerical data to understand relationships and test the study's hypotheses.

1. Demographic Analysis: The demographic information, such as gender, education level, field of study, and parents' background, was analyzed using basic statistics like frequency counts and percentages. This helped to provide a clear picture of the characteristics of the respondents.

2. Relationship Analysis: To explore the connections between digital marketing communication, the marketing mix, and the image of private vocational colleges in Chonburi Province, the data was analyzed using averages and standard deviations. This helped to identify any patterns or trends in the data.

3. Hypothesis Testing: Two main hypotheses were tested:

• Hypothesis 1: To compare the means of two groups, the Independent Sample t-

test was used. For more than two groups, the ANOVA F-test was applied. If significant differences were found, further comparisons were made using the Least Significant Difference (LSD) method at a significance level of 0.05.

• Hypothesis 2: The relationship between two variables was tested using Multiple Regression Analysis to see how strongly they were connected.

5.2 Qualitative Data Analysis

This part focused on understanding deeper insights from non-numerical data, such as interview responses.

1. Data Checking: The qualitative data was carefully checked for accuracy and completeness before analysis.

2. Content Analysis: The responses were grouped into themes or categories, helping to identify common ideas or patterns in the data.

3. Inductive Analysis: The data was reviewed and interpreted to draw conclusions. This analysis was done alongside data collection, allowing for the exploration of issues as they arose. If something was unclear, additional data was collected to clarify. Finally, the qualitative findings were compared with the quantitative results to see how they matched up.

By combining both quantitative and qualitative methods, this approach ensured a comprehensive understanding of the data, leading to well-supported conclusions and insights.

6. Research Findings

The analysis of data collected from a sample group of students currently enrolled in the Vocational Certificate Level (VCL 3) and Higher Vocational Certificate Level (HVCL 1-2) programs at private vocational colleges in Chonburi Province, encompassing a total of 24 institutions and a sample size of 388 students, yielded the following findings:

6.1 Descriptive Statistics

The demographic profile of students at the Vocational Certificate Level (VCL 3) and Higher Vocational Certificate Level (HVCL 1-2) indicates that the majority of respondents are male, totaling 202 individuals or 52.07% of the sample. Among these students, 296 or 76.29% are enrolled in VCL 3 programs. Regarding the field of study, 193 students, accounting for 49.75% of the sample, are pursuing industrial programs.

In terms of parental background, 290 students, representing 74.74% of the sample, reported that their parents have attained an education level equivalent to high school or higher. The majority of parents, totaling 210 individuals or 54.13%, are employed in private companies. The predominant range of parental income falls between 20,001 and 30,000 baht per month, with 200 students, or 51.55%, reporting this income bracket. Additionally, it was found that 324 parents, accounting for 83.51% of the sample, are living together.

These findings provide a comprehensive overview of the demographic characteristics of students in the targeted educational programs within Chonburi Province.

Aspect	Mean (M) Standard Devi	ation (S.D.) Level of Opinion
1. Product	4.51	0.55	Very High
2. Price	4.43	0.55	High
3. Place	4.18	0.66	High
4. Process	4.32	0.57	High
5. Physical Evidence	4.21	0.56	High
Overall	4.33	0.48	High

Table 1. Opinions on Marketing Mix: Overall and by Aspect of Students Currently Enrolled in Private Vocational Colleges in Chonburi Province

The data presented in Table 1 indicate that students currently enrolled in private vocational colleges in Chonburi Province hold generally high opinions regarding the marketing mix, with an overall mean score of 4.33. When examining individual aspects, the "Product" aspect received the highest rating, with a mean of 4.51, indicating a "Very High" level of opinion. The remaining aspects—Price, Process, Place, and Physical Evidence—were all rated at a "High" level, with mean scores of 4.43, 4.32, 4.18, and 4.21, respectively. The top three aspects, ranked by mean score from highest to lowest, are Product, Price, and Process

Table 2. Opinions on Digital Marketing Communication: Overall and by Aspect of Students Currently Enrolled in Private Vocational Colleges in Chonburi Province

Aspect	Mean (M)	Standard Deviation (S.D.)	Level of Opinion
1. Digital Advertising	3.95	0.66	High
2. Digital Personal Selling	4.09	0.64	High
3. Digital Public Relations	4.16	0.53	High
4. Digital Direct Marketing	4.23	0.57	High
Overall	4.11	0.53	High

As shown in Table 2, students currently enrolled in private vocational colleges in Chonburi Province generally hold high opinions regarding digital marketing communication, with an overall mean score of 4.11. When examining the individual aspects, all aspects received a "High" level of opinion. The top three aspects, ranked by mean score from highest to lowest, are Digital Direct Marketing (Mean = 4.23), Digital Public Relations (Mean = 4.16), and Digital Personal Selling (Mean = 4.09).

Table 3. Effects of Marketing Mix Variables on the Image of Private Vocational Colleges in Chonburi Province

Variable	В	Std. Error (I	b) β	t	Р	VIFs
Constant (a)	0.033	0.099		0.331	0.741	
Price (PRI)	0.343	0.036	0.365	9.454	0.000**	3.566
Physical Evidence (PHY)	0.322	0.027	0.348	11.789	0.000**	2.079
Product (PD)	0.245	0.036	0.260	6.822	0.000**	3.480
Process (PC)	0.074	0.025	0.081	2.917	0.004**	1.831

Note: P < 0.01; R = 0.917, $R^2 = 0.840$, Adj. $R^2 = 0.839$

Table 3 shows that the marketing mix variables—Price (PRI), Physical Evidence (PHY), Product (PD), and Process (PC)—significantly predict the image of private vocational colleges in Chonburi Province, with all variables showing statistical significance at the 0.01 level. These variables collectively explain 83.9% of the variance in the image of private vocational colleges, as indicated by the adjusted R² value.

Specifically, Price ($\beta = 0.365$), Physical Evidence ($\beta = 0.348$), Product ($\beta = 0.260$), and Process ($\beta = 0.081$) all have a significant positive influence on the image of these institutions. However, it is noted that the Place (PL) variable was not significant in influencing the image of private vocational colleges, even though it is not explicitly listed in the table.

These findings directly address the research objective concerning the impact of marketing mix variables on the image of private vocational colleges, highlighting the importance of Price, Physical Evidence, Product, and Process in shaping perceptions of these institutions.

Table 4. Effects of Digital Marketing	Communication on the I	Image of Private Vocational	Colleges in Chonburi Province
8 8		8	8

Variable	В	Std. Error (b)	β	t	Р	VIFs
Constant (a)	1.164	0.142		8.223	0.000**	
Digital Public Relations (PR)	0.351	0.060	0.360	5.810	0.000**	3.423
Digital Direct Marketing (DM)	0.325	0.053	0.356	6.197	0.000**	2.946
Digital Advertising (ADS)	0.082	0.036	0.105	2.294	0.022*	1.861

Note: P < 0.01, * P < 0.05; R = 0.755, $R^2 = 0.571$, Adj. $R^2 = 0.567$

Table 4 demonstrates that digital marketing communication—specifically Digital Public Relations (PR), Digital Direct Marketing (DM), and Digital Advertising (ADS)—significantly predicts the image of private vocational colleges in Chonburi Province, with statistical significance at the 0.01 and 0.05 levels. These variables collectively explain 56.7% of the variance in the image of these institutions, as indicated by the adjusted R² value.

The analysis shows that Digital Public Relations ($\beta = 0.360$), Digital Direct Marketing ($\beta = 0.356$), and Digital Advertising ($\beta = 0.105$) all have a significant positive influence on the image of private vocational colleges. However, it is noted that Digital Personal Selling (PS) was not found to have a significant influence on the image of these institutions, despite being part of the broader digital marketing communication strategy.

These findings address the research objective related to the influence of digital marketing communication on the image of private vocational colleges, underscoring the importance of strategic public relations, direct marketing, and advertising in shaping perceptions of these institutions.

Table 5. Effects of Marketing Mix and Digital Marketing Communication on the Image of Private Vocational Colleges in	
Chonburi Province	

Variable	В	Std. Error	(b) β	t	Р	VIFs
Constant (a)	-0.072	0.098		-0.741	0.459	
Price (PRI)	0.327	0.035	0.349	9.295	0.000**	3.593
Physical Evidence (PHY)	0.241	0.030	0.260	7.911	0.000**	2.768
Product (PD)	0.222	0.035	0.236	6.361	0.000**	3.531
Digital Public Relations (PR)	0.096	0.036	0.098	2.685	0.008**	3.412
Digital Direct Marketing (DM)	0.072	0.033	0.079	2.219	0.027*	3.256
Service Process (PC)	0.053	0.025	0.058	2.136	0.033*	1.879

Note: P < 0.01, * P < 0.05; R = 0.923, $R^2 = 0.851$, Adj. $R^2 = 0.849$

Table 5 illustrates that both marketing mix and digital marketing communication variables—including Price (PRI), Physical Evidence (PHY), Product (PD), Digital Public Relations (PR), Digital Direct Marketing (DM), and Service Process (PC)—have a statistically significant impact on the image of private vocational colleges in Chonburi Province at the 0.01 and 0.05 levels. These variables collectively explain 85.1% of the variance in the image of these institutions, as indicated by the adjusted R² value.

The results demonstrate that Price, Physical Evidence, Product, Digital Public Relations, Digital Direct Marketing, and Service Process all positively influence the image of private vocational colleges. However, the variables Place (PL), Digital Advertising (ADS), and Digital Personal Selling (PS) were not found to have a significant influence on the image of these institutions.

These findings address the research objective regarding the impact of marketing mix and digital marketing communication on the image of private vocational colleges, highlighting the key factors that contribute to shaping public perception and institutional image.

6.2 Qualitative Data from Interviews

The qualitative research findings offer a compelling narrative that aligns seamlessly with the quantitative results, particularly in the areas of Price, Physical Evidence, Product, and Process. These key elements serve as the backbone of how administrators strategically manage private vocational colleges, enhancing their image in the eyes of students, parents, and stakeholders.

When it comes to digital marketing communication, the findings reveal that private vocational colleges are effectively harnessing the power of technology to deliver services that are both quick and efficient, offering a one-stop service

approach. This proactive approach not only meets the immediate needs of students but also plays a crucial role in elevating the college's image. Digital Public Relations and Digital Direct Marketing emerge as powerful tools in this effort, helping to build trust and credibility in a digital age where information is accessed with just a few clicks. By embracing these strategies, colleges are not just keeping pace with technological advancements but are also positioning themselves as forward-thinking institutions in the competitive education landscape.

7. Discussion

Digital marketing communication is crucial in shaping the image of private vocational colleges in Chonburi Province, especially in today's digital age, where students are constantly engaged with online content. Effective digital strategies can significantly boost a college's visibility and positively influence student perceptions.

Research by Melnikova et al. (2016) highlights the role of digital marketing in modern education, noting its power to establish a recognized and accepted image for institutions. Public relations, when used effectively, not only meet student needs but also provide a competitive advantage. Shukla and Bhasin (2022) emphasize that the type and format of social media posts are critical in driving engagement, expanding a university's reach, and increasing student involvement.

Junaidi, Biyanto, and Fahyuni (2021) further support this by showing how digital advertising and public relations on platforms like WhatsApp, websites, and Instagram can enhance a college's image and attract students. Western and Chinese marketing strategies offer comparative insights, with Western approaches focusing heavily on public relations and social media, while Chinese strategies blend various methods to bolster both domestic and international perceptions (Yuriya & Lingb, 2020). Harahap et al. (2023) also underscore the importance of digital platforms in connecting schools with communities, thereby building a strong brand image.

In vocational education, the primary goal is to equip students with the skills needed to succeed in the labor market. Private vocational colleges employ various marketing tools, particularly the marketing mix, to align their offerings with student needs. Syam et al. (2019) and Rafdinal et al. (2020) found that marketing mix strategies significantly impact student decisions and, consequently, the institution's image.

Abadi and Hidayatulloh (2022) demonstrated that integrating the marketing mix with institutional image enhances the effectiveness of educational services, particularly in Islamic institutions. Similarly, Ndofirepi et al. (2020) and Asiah et al. (2022) observed that distinctive programs, market promotion, service processes, and physical evidence are vital in improving a university's image. Additionally, Aziz et al. (2023) showed that these strategies influence students' choices in secondary education and enhance the schools' overall image.

In summary, integrating digital marketing communication with a strategic marketing mix is essential for improving the image and competitiveness of private vocational colleges. These combined approaches not only enhance reputation but also position these institutions more effectively in a competitive educational landscape.

Recommendations for Research

The recommendations for research emphasize the need for private vocational colleges to strategically utilize research findings in their institutional planning and management. Administrators should focus on aligning curricula with labor market demands, enhancing skill-building activities, and upgrading educational tools while ensuring efficient operations through initiatives like One Stop Services and improved communication channels. Strengthening digital marketing communication is also crucial, with colleges encouraged to implement comprehensive social media strategies and develop engaging content tailored to the needs of young learners. Creating user-friendly applications for essential processes like payment, registration, and academic tracking will further enhance the student experience and solidify the college's online presence. Effective communication with key stakeholders, including students, parents, schools, and employers, should be prioritized, using tools like LINE groups and dynamic Facebook management to improve engagement and foster stronger relationships.

Future research should explore the image of private vocational colleges from diverse perspectives, including those of parents, employers, and the general public, to better understand and enhance the acceptance of vocational education. Additionally, a focused analysis of specific digital marketing channels, such as Facebook and websites, is recommended to optimize marketing strategies. Finally, as the educational landscape continues to evolve, research should examine brand communication strategies that bolster awareness and confidence in vocational education, helping colleges maintain a competitive advantage in the increasingly digital "Next Normal" era.

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The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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