

DESIGN OF MARKETING PLAN FOR DENTAL HOSPITALS IN THE DIGITAL ERA

Rancangan Rencana Pemasaran untuk Rumah Sakit Gigi dan Mulut di Era Digital

Yusuf Arifin¹, Jane Firsty Melia¹, *Fushen²

¹Master of Management Program, Pasundan University, Indonesia

²Faculty of Economics and Business, Krida Wacana Christian University, Indonesia

Correspondence*:

Address: E Building 2nd Floor, Jl. Tanjung Duren Raya No.4, Jakarta, Indonesia | e-mail: dr.fushen@ukrida.ac.id

Abstract

Background: The development of the digital world has snowballed since the 2000s and has accelerated since the 2010s. Social media is a part of everyday life, and the COVID-19 pandemic has been a significant catalyst for digital life. Despite this, the healthcare industry is lagging compared to other industries in terms of digital marketing.

Aims: The output of this research is a design of a digital marketing plan for a dental hospital based on a robust theoretical foundation and ongoing practical research in dental hospitals.

Methods: This study utilized a qualitative approach and descriptive method to describe the existing condition related to the challenges and the use of digital marketing in dental hospitals. The focus of this study was the development of a digital marketing plan for a dental hospital.

Results: The study obtained several data related to digital marketing activities that have been carried out, challenges in digital marketing, and the preparation of digital marketing development plans at dental hospitals.

Conclusion: The proposed model includes situation analysis, goal analysis, strategy planning, action, and control based on the existing marketing plan. A novelty in this model emphasizes technology components including technoware, hardware, software, infoware, humanware, and organiware.

Keywords: dental hospital, digital era, digital marketing

Abstrak

Latar Belakang: Perkembangan dunia digital telah bergulir sejak tahun 2000-an dan mengalami percepatan sejak tahun 2010-an. Media sosial adalah bagian dari kehidupan sehari-hari, dan pandemi COVID-19 menjadi katalis yang signifikan bagi kehidupan digital. Terlepas dari tantangan tersebut, industri kesehatan tertinggal dibandingkan dengan industri lain dalam hal pemasaran digital.

Tujuan: Luaran dari penelitian ini adalah desain rencana pemasaran digital untuk rumah sakit gigi dan mulut berdasarkan landasan teoritis yang kuat dan penelitian praktis yang terus berkembang di rumah sakit gigi dan mulut.

Metode: Penelitian ini menggunakan pendekatan kualitatif dan metode deskriptif untuk menggambarkan kondisi eksisting terkait tantangan dan pemanfaatan pemasaran digital di rumah sakit gigi dan mulut. Fokus penelitian ini adalah pengembangan rencana pemasaran digital untuk rumah sakit gigi dan mulut.

Hasil: Pada penelitian ini diperoleh beberapa hal terkait kegiatan pemasaran digital yang telah dilakukan, tantangan dalam pemasaran digital, dan penyusunan rencana pengembangan pemasaran digital di rumah sakit gigi dan mulut.

Kesimpulan: Model yang diusulkan meliputi analisis situasi, analisis tujuan, perencanaan strategi, tindakan dan pengendalian berdasarkan rencana pemasaran yang ada. Kebaruan dalam model ini menekankan pada komponen teknologi yang meliputi technoware, hardware, software, infoware, humanware, dan organiware.

Kata kunci: era digital, pemasaran digital, rumah sakit gigi



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Introduction

The development of the digital world has snowballed since the 2000s and has accelerated since the 2010s. Social media is a part of everyday life, and the COVID-19 pandemic has been a significant catalyst for digital life. The health industry cannot be separated from the impact of the disruption of the digital era, especially during the COVID-19 pandemic. Social media with its benefits and risks is always interconnected with human life where dentistry is no longer exceptional (Mary *et al.*, 2020). Despite those challenges, the healthcare industry is lagging compared to other industries in terms of digital marketing (Lindgren, 2020).

Based on the data from the Indonesian Ministry of Health, the number of hospitals in Indonesia registered as of 2019 was 2,877 hospitals, and those certified by national accreditation amounted to 2,465 hospitals. There are 32 hospitals spread throughout the city of Bandung. Four of these hospitals specialize in oral and dental health, namely Maranatha Dental Hospital, Bandung Dental Hospital, Padjadjaran University Dental Hospital, and Jendral Achmad Yani University Dental Hospital.

The continually-increasing number of hospitals has allowed patients the massive opportunity to choose and determine the desired hospital for their treatment. As institutions that provide services, hospitals must carry out business functions because many hospitals have similar services to one another. Each hospital must compete to produce a high-quality service product blended with an excellent marketing strategy.

Based on government regulations, health service facilities in organizing advertisements and publications must provide data and/or facts that are accurate, evidence-based, informative, educative, and responsible. Based on the Hospital Promotion Ethics Guidelines, the promotion must be honest, responsible, and comply with regulations. The promotion must not offend or demean the country, religions, morals, customs, cultures, ethnicities, and sectional groups. The principle of fair competition must inspire promotion, it has

to remain socially responsible, and the services offered must be professional and high-quality.

A digital marketing plan is a strategic document that takes the current situation of a particular organisation to set some midterm goals and determine the strategy and means to accomplish them (Piñeiro-Otero and Martínez-Rolán, 2016). A study related to digital marketing in dental services showed the need for digital methods of promoting medical care services. This is intended to expand a business by offering them quality healthcare services which ensured their satisfaction and increased the probability of their recommending the health facility further (Radu *et al.*, 2017). Another study also showed that emerging technologies could be combined with insights from marketing science to develop successful value-centered marketing in healthcare (Agarwal *et al.*, 2020). From a broader perspective, healthcare IT systems are complex in the implementation process. They aim to support safe and high-quality patient care (Marcu and Popescu, 2020).

Over the past decade, healthcare has experienced fundamentally altered marketing trends. These include developing a more specific marketing approach, service marketing, personalisation, long-lasting relationship with clients, market intelligence, and utilisation of high-tech channels (Purcarea, 2019). In contrast to that fundamental change, there has not been enough research on marketing for healthcare companies (Lindgren, 2020).

The internet/social media is one of the new media widely used as a marketing platform. In the business world, social media is used as a practical liaison and communication tool between companies and customers that can eliminate time and location barriers. Some hospitals in Bandung have seriously taken advantage of digital marketing. This includes websites and social media such as Facebook, Instagram, YouTube, Twitter, and TikTok with more content about health promotions and special events. A recent study showed that internet marketing and current marketing approaches have unquestionably assisted the growth curve.

Meanwhile, conventional marketing tactics are gradually losing their influence among the youth (Gaur and Tonk, 2021). More specific research for dental hospitals in Saudi Arabia showed that social media had become a commonly used marketing strategy in dental practice. It was especially useful for sharing and getting information, as well as to attract new patients (Ajwa *et al.*, 2018).

Digital media have an important role in hospital marketing nowadays. Currently, dental hospitals do not have an integrated digital marketing model. This study looked at the opportunities for a dental hospital to market themselves digitally. This study aimed to answer the challenges in the field of digital marketing and formulate a digital marketing plan for a dental hospital based on a robust theoretical foundation and existing research.

Method

This study used a general qualitative approach related to professional services in marketing research. The qualitative approach for professional services is defined as qualitative dominant. Healthcare topics in marketing research are often balanced with the quantitative approach (Valtakoski, 2020). This study used a descriptive method to describe the challenges and use of digital marketing in dental hospitals.

This study is a single case study which was conducted in a private dental teaching hospital in Bandung. The purpose of selecting a single locus in this study is to get the depth of findings related to digital marketing for dental hospital. However, research conducted at the hospital is expected to produce a role model for other dental hospitals. The selection of a private dental hospital is considered from the flexibility in funds allocation and management compared to that of a government-owned dental hospital.

There is currently a lack of scientific publications on digital marketing plans for dental hospitals. This encourages a phenomenological approach to identify unstructured problems. The key informant of this study was an expert in marketing

responsible for media promotion at one of the dental hospitals in Bandung. Other informants were policy makers or hospital leaders, as well as customers or patient representatives. Data collection was done through an in-depth semi-structured interview, observation, documentation, and panel consultation with two experts of information systems and two experts of marketing. The interpretation of findings was classified according to the context of the problem. Triangulation was carried out through different data collection methods (interviews, observations, and document searches). The interview during the triangulation process was conducted to informants with different backgrounds, and thus it could cross-checked the information from each informant.

The focus of this study was the development of a digital marketing plan for dental hospitals. The validity of the digital marketing plan was ensured through discussions with experts representing academics and practitioners. In-depth discussions were conducted to analyze each of the variables proposed in the model. These variables were to be adapted for practical conditions, the experience of experts, and supporting academic theories. This was done to ensure that the digital marketing plan was suitable for the needs of the dental hospital market. Recommendations from experts were considered for the refinement of the final digital marketing plan. In the final phase, the marketing plan was applied to the dental hospital business plan. A continuous marketing performance evaluation will be carried out to increase the efficiency of digital marketing (Qian *et al.*, 2018).

Result and Discussion

This study was conducted in a dental teaching hospital in Bandung, West Java. It is a hospital that organises dental and oral health services. It is also used as a means of learning, education, and research processes for dental health professionals and other health workers through collaboration with the faculty of dentistry. The facilities and infrastructure available in

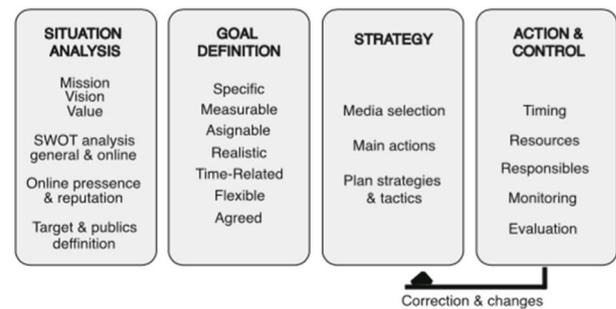
this hospital included clinical laboratories, radiology (panoramic, dental, cone beam computed tomography), pharmacy, ambulances, educational facilities, general dentistry, oral surgery, orthodontics, oral diseases specialist, pedodontics, dental conservation specialist, prosthodontics, periodontists, general practitioners, anesthesiologists, pediatricians, internal medicine, inpatients, operating rooms, and emergency rooms.

In the current era of digital marketing, management and marketing can easily take advantage of various existing facilities. This hospital itself had a marketing method to gradually improve service, patient loyalty, and the number of patient visits every year. Some used internet-based media to support digital marketing. This included Instagram, Facebook, Twitter, YouTube, websites (designated for registration and information), e-mail, and cooperation with one of the city's radio stations.

This study found several challenges for dental hospitals related to digital marketing: (1) there is no specific unit in charge of digital marketing (currently under the public relations and marketing department); (2) minimal digital marketing support facilities (no dedicated room, ordinary camera, and lack of digital editing facility); (3) slow responses to take advantage of the momentum in a fast-changing situation; (4) limited content and lack of creativity; and (5) unstructured publication times.

In initiating this research, the marketing plan's basic framework was used to analyse the existing condition, set up goal definition, and plan the digital marketing strategy, action, and control plan (Figure 1).

Based on this framework, the results of this study produced a specific digital marketing framework for the dental hospital (Figure 2.). The main phases of the basic marketing framework were still followed by deepening of each component in each phase.



Source: Piñeiro-Otero and Martínez-Rolán, 2016

Figure 1. Marketing Plan in general



Source: prepared by the authors

Figure 2. Digital marketing plan for dental hospital

In the context of SWOT analysis, it is essential to highlight the advertising and online marketing components as the primary focus in designing a digital marketing plan. These also can be described as the following: setting the objectives of advertising (mission); information objective (providing information to the patients about the latest products or medical services); persuasive objective (to influence patients' perspective); reminder objective (to remind patients of existing medical services which are already well-known); value-added objective (increasing the value of a medical services or hospital brand); and activity assistance objective (facilitating other services in the marketing process). It is important to highlight that all the steps in this phase needed to align with the primary vision and mission of the dental hospital. The use of the SWOT analysis in

developing marketing strategies has been conducted in previous studies on dental hospitals, but those studies did not focus on digital marketing (Pertwi, Hariyanto, and Aprilia, 2017).

The next critical step in developing a solid foundation for digital marketing is determining the budget. This can be done by considering several things such as the hospital's capability, percentage of sales budget, competitors' budget, targets and function (if there are specific targets), and market share. The dental hospital needs to set priorities in setting up a solid digital marketing plan. It should invest in supporting facilities for digital marketing before allocating more of the budget towards marketing programs.

Furthermore, it is also necessary to determine message decisions in this phase. This usually starts with data searches, problems, studies, data analysis, and predetermined advertising objectives. In dental health, it is necessary to be familiar with the problems that commonly occur in the community related to dental health. This includes both the most common problems and emergency problems that require immediate treatment. The purpose of determining the message to be delivered is to build a close relationship with prospective patients. Selected messages encourage the use of the dental hospital when needed.

Another important component to consider in conducting a situation analysis for digital marketing is media determination. The steps in selecting advertising media include determining reach, frequency, and impact, as well as selecting the primary media type and service time. An example of choosing the right time for dental hospital advertisement could relate to the time people carry out activities related to dental health. This means targeting promotional material to appear before or after having meals and before going to bed. The selected media will be based on the growing popularity of the media in the community.

The last step in situation analysis is the measurement. This means determining the hospital's reputation online and the potential of followers that can be considered targeted patients (prospective patients). During the study period, the number of primary social media followers of this dental hospital was 3,189 Instagram followers. They had an average of 400 participants during a live question and answer session. It was determined that the content created was lacking variation, and prospective patients were not interested. Suggestions for this problem were improvement of the design using the latest creative technology. This content development also needs to address the target patients and segments in online media.

In the goal analysis phase, a measurement should be made to measure patients' satisfaction related to several variables: (1) the relationship between hospital services and patients; the digital marketing program must accommodate hospital services with the care needs of prospective patients; (2) convenience of service; this can involve staff friendliness, hospital cleanliness, and short waiting time; (3) patients' autonomy to choose their treatments; (4) knowledge and technical competence offered through digital media; this will benefit the prospective patients in prevention and early care of their conditions; (5) service effectiveness; speed up services provided with an appointment before coming to the hospital; and (6) patient safety.

The third phase of the digital marketing plan is planning a strategy. This can be done by utilizing online media such as Facebook, Instagram, YouTube, websites, Twitter, and TikTok. Additionally, paid media and earned media could be used. Paid media refers to paid promotion. Earned media includes online word of mouth with mentions, reposts, reviews, and review recommendations by outsiders. After determining the media selection, an action should follow accordingly. This

action should be specific, such as creating exciting content tailored to the majority of the prospective patients. Suitable content must consider factors affecting patient satisfaction and loyalty. This may include patients' perceptions of dentist services assurance and reliability, staff services, responsiveness, empathy, prices, and facilities or tangibility (Asih *et al.*, 2018; Akbar, Pasinringi, and Awang, 2019; Santosa and Azam, 2020; Siripipatthanakul and Bhandar, 2021). The content developed can be directly related to dental health, such as educational information about dental health and oral hygiene. It can be delivered through media feeds or webinars from experts. However, this content can also be combined with indirect messages related to dental and oral health, such as quizzes, competitions, dances, and viral media that develop in the community.

This phase also includes planning strategies and tactics which involve technoware and supporting facilities. Technoware consists of hardware, software, and networks. Hardware components such as computer sets and photographic tools are essential. Software in digital marketing can be used for digital editing, content development, optimizing the utilization of earned and paid media, and analysing the company's online presence. A company's presence can be monitored through mentions, Google alerts, Hootsuite, web positioning, Alexa ranking, Klout, peer index, or kred. Network components consists of the network infrastructure, network security and accessibility, and high-speed internet connections. Supporting facilities needed to support the digital marketing include particular rooms for digital marketing staff and editing.

The last phase in the digital marketing plan is action and control. Although the period or target for digital marketing must be achieved quickly, resources in a digital context should be determined as humanware. This means suitable criteria for human resources related to digital

marketing. This includes certified staff in digital design, digital marketing communication, and digital human relation. Besides that, medical staffs also need attention because the determination of the content is related to the performance of the medical personnel of a hospital. A study in Iran showed one of the important factors in the delivery of health services in hospitals is quality of service (Bafghi *et al.*, 2018). Another challenge that needs to be addressed is the perception of dentists about marketing. This might be an issue due to the perspective that marketing may make dentistry seem more like a trade than healthcare service (Shukla *et al.*, 2019). In addition, the infoware component must be fulfilled in designing a proper digital marketing plan. Infoware is information content that must be presented in digital marketing. This includes the variation of content and digital communication styles that suit the majority of prospective patients in online media. According to Hootsuite, content that involves asking questions, comparisons, interviews, promotions, giveaways, treatment packages, testimonials, and interactive content can be used in hospital promotion. On the other hand, prices, product discounts, and services should not be displayed. A literature study showed digital marketing has proven to be of great importance in the dental services market. However, it must comply with regulations and ethical precepts of the Dental Ethics Board to prevent ethical challenges (Lira and Magalhães, 2018). The organizational component is also included in the required resources for digital marketing. It consists of formal policies and instructions for operating the system, organizational structure, management system, data processing procedures, and usage guidelines.

The organization is fully responsible for everything related to hospital promotion activities; therefore, it is necessary for the "organiware" section to regulate all regulations related to promotional activities.

Leaders in organizations have an essential role in driving digital marketing maturity (Negricea and Purcarea, 2017). After the action has been taken, monitoring and evaluation will always be needed for every activity that has been carried out or is currently running. This is to ensure they are on track, do not violate existing rules, and are meeting the goals. Every challenge needs to be solved dynamically depending on the changing situations.

Conclusion

The design of a digital marketing plan for the dental hospital was adapted from a basic marketing plan framework (Piñeiro-Otero and Martínez-Rolán, 2016). The revised model includes the following: situation analysis (determining the mission, SWOT analysis, marketing budget, media determination, message category, and measurement of the company's online reputation and the target market); goal analysis (relationship, amenities, choice, scientific knowledge and technical skill, service effectiveness, and safety); strategy planning (media selection, main actions, strategy, and tactics); action and control (timing, resources, monitoring, and evaluation). A novelty in this model emphasizes technology components, including technoware, hardware, software, infoware, humanware, and organiware. The digital marketing model can be started by modifying the organizational structure that specifically facilitates digital marketing units in terms of structure and reliability of human resources, adequate provision of hardware and networks, integration of data and applications between websites, social media, and various digital marketing channels. The digital marketing plan of this study can be applied to other dental hospitals in Indonesia. The application of this model in public hospitals may require adjustments and further investigation.

Abbreviations

SWOT: strength, weakness, opportunity, threat

Declarations

Ethics Approval and Consent Participant

Respondents were addressed before the survey about the survey's objectives and purposes. Verbal consent to participate in the study was obtained from respondents.

Conflict of Interest

The authors declare that there were no significant competing financial, professional, or personal interests that might have affected the performance.

Availability of Data

Data can be provided by request to the corresponding authors.

Authors' Contribution

YA, JFM, and FS conceptualized the study; YA, JFM, and FS created the methodology; YA, JFM, and FS wrote, reviewed, and edited the manuscript; YA, JFM and FS wrote the original draft.

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