
| RESEARCH ARTICLE

Analysis of Control and Evaluation of Digital Marketing in the Hospital

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| ABSTRACT

The increasing use of digital marketing in the hospital sector is accompanied by soaring marketing costs allocated for digital marketing. Hospital management must determine the appropriate steps and types of measurement to evaluate the magnitude of the impact of the digital marketing strategy used on overall hospital performance. This study examines the digital marketing evaluation stage model and the metrics that can be applied in hospitals. This literature review was conducted by browsing articles using Google Scholar, ProQuest and Emerald Insight search databases. Mendeley is used to compile, identify and evaluate articles and to remove duplicate articles. From the literature search, two outputs were obtained in the form of a framework that allows it to be used in evaluating digital marketing in hospitals, namely The Social Media Marketing Evaluation Framework and eight types of generic measurements that can be chosen. Digital marketing in hospitals has become necessary to survive in the era of digital disruption, so a reliable strategy is needed in controlling and evaluating the impact of digital marketing on the success of hospital marketing. Digital marketing control and evaluation efforts aim to ensure that the marketing strategy is on target, accurate and measurable.

| KEYWORDS

Evaluation, social media marketing, marketing control, metrics, hospital

| ARTICLE INFORMATION

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1. Introduction

In a time of relentless digital disruption accelerated by the COVID-19 pandemic, all business forms are required to adapt to the digital world, including data analysis and big data. This disruption has also caused a race to build new technology platforms, products, innovations, and infrastructure, including the world of health. Healthcare organizations, especially hospitals, are also experiencing an extraordinary leap in digital transformation and challenges that are tough enough that hospitals have to use the method entirely new to build loyalty and long-term relationships with patients and potential customers. One of them is that hospitals are trying to stay connected with patients and potential customers, leveraging digital marketing to take hospital business processes to a different level (Fitzpatrick, 2021)

Digital marketing or digital marketing is an effort to promote a brand or service product by utilizing digital media that can reach all appropriate consumers. Digital marketing is a rapidly evolving and cheap solution that connects hospitals with patients and potential customers to the maximum without a hitch. However, digital marketing must be followed by another promotional mix to create a well-integrated message to make it more optimal. Digital marketing is a digital technology used to facilitate the marketing process to create customer engagement and interaction. In digital marketing, the digital platform must be identified, and the target must be segmented correctly. The marketing message is tailored and must resonate with the patient's needs (Purcarea et al. 2019).

According to the CMO Survey in 2021, marketers agree that digital marketing has been a pillar of a company's success during the pandemic. Across all sectors and company sizes, the average reported contribution of 5.5 (on a 7-point scale), and the

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healthcare field gave a score of 5 to the success of existing companies. The survey also reported an increase of 32.7%, which is the contribution of digital marketing to the company's performance over the past year. For this reason, since February 2020, various companies worldwide have made significant investments to continue expanding digital marketing capabilities. Website optimization companies have been a significant focus, with 73.8% of companies making investments. Marketers reported a 26.9% increase in digital marketing skills over the past year. In addition, with increasing customer demand for digital experiences, marketing has been placed in a stronger position to provide strategic direction and growth (American Marketing Association, 2021)

In addition, from a business point of view, one of the main challenges of social media as part of digital marketing is that social media is a user-centric technology made for individuals, not companies or brands. Customers have high control over messages from social media channels and play an essential role in creating company content. Therefore, the simultaneous use of social media marketing can lead to various opportunities and challenges for organizations. Efficient utilization of opportunities through social media marketing has been a significant concern of marketing managers. As reported in 2021, social media ad spending in the United States is estimated to amount to 47.9 billion dollars or about 25% of the total online media advertising circulation (Jami, 2021).

Although marketers report good progress on the impact of using digital marketing, this does not guarantee that organizations, including hospitals, have increased revenue, profitability, market share, and efficiency only through digital marketing, so performance measurement is required. Actual investment towards digital marketing. The importance of digital marketing evaluation aims to find out and identify the generic measurements used in assessing digital marketing. This will help marketing managers avoid falling into the trap of developing hospital digital marketing without measuring the magnitude of the impact of digital marketing on hospital performance. In addition, due to the organization's limited resources in implementing a digital marketing strategy, prioritization is necessary for choosing the digital marketing strategy to use. There still needs to be more research is done in this field, and little literature discussing it, so the author is interested in discussing the control and evaluation of digital marketing in hospitals (Keegan, 2017).

2. Material and Methods

The method used in this study is Literature Review, which is a library study method. While the data base used in the article search is Emerald Insight, ProQuest, and Google Scholar using the keywords evaluation, social media marketing, digital marketing, marketing controls, metrics and hospitals. Next, potential articles were filtered through titles and abstracts to find relevant sources. The full text of the corresponding articles was then reviewed and assessed against inclusion and exclusion criteria. The inclusion criteria in this study included articles in Indonesian or English from 2017 to 2021, and the studies taken were all studies regarding the control and evaluation of digital marketing in hospitals.

In addition, the PICOS guidelines (Population, Intervention, Comparison, Outcome, and Study design guidelines) were also used in determining the inclusion criteria in this study. Concerning the population, the authors included a study of hospitals. As for intervention, the authors include studies on hospital digital marketing. For the results (outcomes), the authors chose articles on digital marketing control and evaluation in an effort to support hospital marketing, as well as with regard to study design, the authors included all study designs. For comparison, the authors do not include comparisons in this literature. Meanwhile, the exclusion criteria in this article include articles that cannot be accessed or are only in the form of abstracts or proceedings, articles that do not discuss the control and evaluation of digital marketing in hospitals, and articles other than English and Indonesian.

Table 1. PICOS Method

PICOS	Explanation
Population	Hospital
Intervention	Digital marketing in the hospital
Comparison	-
Outcome	Control strategies, evaluations and metrics that can be used to measure the impact of digital marketing on hospitals
Study Design	All study design

3. Results and Discussion

Kotler mentioned that marketing control and evaluation generally assess the impact of marketing activities and programs that aim to compile the necessary changes and adjustments. Marketing control consists of controlling annual plans, profitability, efficiency, and strategic control. Control of the annual plan aims to determine the marketing achievements of what is planned. This is closely related to the preparation of a strategic marketing plan that has been prepared. Commonly used generic measurements are sales analysis, market share analysis, sales-to-cost ratio, financial analysis and scorecard based on market analysis. Profitability control aims to know the company's gains or losses through marketing. Financial control is often the only measure or indicator of general marketing success. Generic measurement of profitability can be viewed through product profitability, region, customer group, segment, trade channel and order size to determine a strategy to expand, reduce, or eliminate each product or marketing activity. Strategic control ensures hospitals periodically reassess market-constrained strategic approaches by conducting marketing audits. A marketing audit is a comprehensive, systematic, independent, and periodic audit to examine a company's or business unit's marketing environment, objectives, strategies, and activities, aiming to determine problem areas and opportunities and recommending an action plan to improve the company's marketing performance (Kotler, 2015).

Marketing efficiency control is used to evaluate and improve the efficiency of spending and the impact of marketing expenditure, whether the budget spent is proportional to the marketing impact obtained by the hospital. Efficiency can be measured using generic measurements in the form of efficiency in salesforce, advertising, sales promotion and distribution. Control of marketing efficiency consists of checking compliance with profit plans, preparation and planning of marketing budgets, measurement of promotion efficiency, analysis of marketing media production costs, evaluation of customer and geographical profitability, and education and marketing staff training on the financial implications of marketing decisions. (Kotler, 2015)

Due to the lack of research and literature that discusses the control and evaluation of digital marketing, the author found one of the frameworks used in the evaluation of social media marketing, namely The Social Media Marketing Evaluation Framework introduced by Keegan and Rowley in 2017. This model expands the evaluation of social media marketing performance into 6 stages. The stages in evaluating the performance of social media and digital marketing are: (Keegan, 2017)

1. Setting evaluation goals

A significant first step is that the identification process of the evaluation must be specific, explicit and aligned with overall marketing and business objectives. This is inseparable from digital marketing being part of marketing in general. The evaluation objective is a benchmark for measuring the hospital's marketing performance. This process is usually developed in strategic marketing planning, then set up Key Performance Indicators (KPIs) and generic metrics/measurements collected in marketing performance appraisals.

2. Identify digital marketing KPIs.

Identify performance indicators that best fit and support digital marketing goals and activities. The challenges faced in this stage are uncertainty about KPIs that are specific or appropriate to digital marketing, setting repetitive targets for KPIs and linking KPIs solely on financial indicators such as Return of Investment (ROI) without specific KPI references. Strategies that can be used in identifying KPIs include looking at previous marketing reports to clarify performance indicators and linking them to the type of digital marketing that is considered successful or achieves targets.

3. Identify generic metrics/measurements of each KPI.

Identify specific generic measurements that need to be collected and calculated in the evaluation process. The influence of analytical tools on measurement selection, too many generic measurement types and changes in digital transformation that last extra quickly is a challenge in determining the generic measurements to be used in digital marketing evaluation.

4. Data collection and analysis.

Data collection is carried out after specific and relevant KPIs and generic measurements are identified and established. The collected data was analysed using media analysis tools, some well-known media analysis tools including Google Analytics and Facebook Insight.

5. Report Preparation

The results of the data analysis are compiled in the form of KPI achievements and generic measurements presented in a clear format, providing a big picture of the achievements of marketing in general and digital marketing.

6. Decision management

The evaluation report that has been prepared will be presented to interested parties to enable reflection on marketing performance and inform future strategies.

3.1 Types of Digital Marketing

In evaluating digital marketing, marketers or hospital management must be able to distinguish types of digital marketing, making it easier to choose the appropriate generic measurement for each type of digital marketing. Some types of digital marketing that hospitals can use in fig : (4,9,10)

1. Search Engine Optimization (SEO)

As many as 72% of internet users in the United States search for health information through the internet, and most use Google so that hospital marketers can use SEO strategies where hospital websites will rank high in search to open up opportunities to be seen more and get potential customers.

2. Pay Per Click Paid Ads

Pay Per Click or PPC is a strategy where marketers pay every time an ad displayed is clicked or opened by a website user. PPC allows marketers to organize relevant keywords, making it easier to organize target customers.

3. Social Media

During the pandemic, the use of social media has increased, and this is an opportunity that hospital marketers must also grasp. Some social media that are quite familiar with digital marketing are TikTok, Instagram, Youtube, Twitter and Facebook. Usually, hospitals use more than one social media platform in conducting marketing aimed at capturing customers with specific demographics, needs and interests.

3.2 Digital Marketing Generic Measurement

The stages of control and evaluasi digital marketing are inseparable from the selection of appropriate generic measurements. The generic measurement used for digital marketing evaluation aims to measure the magnitude of the impact of a type of digital marketing on hospital marketing performance, so the classification is more likely to lead to a type of efficiency control according to Kotler. Generic measurements that hospitals can use in digital marketing evaluation are

1. Patient Acquisition Cost

Patient acquisition cost (PAC) is an essential generic measurement in understanding the overall success of a hospital's marketing strategy. PAC is the cost incurred to get new patients through various marketing channels in a certain period. To calculate the total cost of this PAC, hospital management must consider a complete list of costs, including SEO, digital advertising, content marketing, website development and maintenance, marketing personnel and marketing technology vendors. The way PAC is calculated is that The total marketing cost is divided by the number of new patients who come in a given time.

2. Patient Life Time Value (PLTV)

PLTV is a generic measurement that assesses a hospital's strategy to keep patients connected so that patients are willing to choose the same hospital in re-visits, implementation of procedure procedures and consultation appointments. PLTV can be calculated simply on certain practices that require re-visits, such as dentists and pregnancy check-ups. However, in other cases, the calculation will be quite tricky.

3. The ratio of PLTV to PAC (PLTV: PAC)

The ratio of PLTV to PAC can be used as an indicator of sustainable growth, especially concerning marketing expenditure. A suboptimal ratio of PLTV to PAC may indicate that the current spending and performance of sales and marketing strategies could be more efficient, sustainable, and profitable.

4. Patient Retention Rate

Getting new patients is half the struggle, and the other half is retaining those patients, which can be measured by the patient retention rate (PRR). The way PRR is calculated is done by knowing the following compound en, namely:

- a. Number of patients at the end of a period = PE.
- b. The number of new patients acquired during the period = PN.
- c. Number of patients at the beginning of that period = PS.

The PRR calculation is performed by subtracting the number of patients at the end of the period by the number of new patients acquired during the period, and then the results are divided by the number of patients at the beginning of the period $((PE - PN)/PS) \times 100$). In measuring PRR, the relevant period must be adjusted to the service time to be measured, just as the measurement period of the orthopaedic service will be different from the dental service.

5. Patient Satisfaction

Measuring patient satisfaction is suitable for revealing gaps or friction points in the patient's experience interacting with the hospital. Patient satisfaction surveys can be carried out in various ways, namely:

1. Usually, a patient satisfaction survey is delivered by telephone or through traditional patient satisfaction surveys sent via email or the form provided.
2. Use of Net Promoter Score.
The survey is simple but represents the overall patient experience by asking a straightforward question: "How likely are you to recommend a hospital to your family, friend or colleague?"
3. Open response from patients.
This way can provide valuable feedback in the patient's own words. This input will improve the hospital's website or advertising message.
- d. Hospital mobile app rating.
If the hospital has its telemedicine app, patient satisfaction can be judged by its rating. Therefore, it is recommended that hospitals make it easier for patients to provide assessments and feedback on the experience of the hospital mobile application being used.

6. Paid Advertising Metric measurement

Paid advertising, as outlined in the digital marketing types, can be Pay Per Click (PPC) and display ads on social media. Although the marketing strategy will vary from type to ad, the generic measurement will be consistent. Some of the generic measurement values used are:

1. Click A fixed value indicates how many users clicked on the hospital ad.
2. Click-through rate (CTR): An indicator of the number of people who clicked compared to the number of times an ad was shown or viewed. The calculation is by clicks divided by impressions multiplied by 100.
3. Cost per click (CPC): The amount charged each time a user clicks an ad. This value is beneficial for managing ad spend.
4. Cost per conversion (CPC): Calculated for a specified period by dividing the cost of advertising by the number of conversions. A conversion is a user interacting with the advertised hospital.
5. Conversion rate measures the rate at which users exposed to ads reach the finish line of interacting or visiting the hospital.

7. SEO generic measurement

Generic SEO measurement indicates the extent to which a hospital website is ranked, visited and found on Google. SEO generic measurement consists of website traffic according to search keywords, and conversion from **uran** search traffic means how often hospital site visitors interact and visit.

8. Lead Source Attribution

Primary source attribution (LSA) will show marketers or hospital management through marketing channels through which patients decide to interact and visit the hospital. Some of the LSA models common to healthcare marketing are patients visiting at the first touch of a digital marketing channel, the last touch or the most user-viewed content or through multiple sources, which means that users have been exposed to several types of digital marketing until they then decide to get health services from certain hospitals. Most of the patient experience is through multiple sources, which is a challenge in conducting digital marketing evaluations.

5. Conclusion

The increase in the use of hospital digital marketing and the amount of budget spent makes it necessary for hospital management to carry out control analysis and evaluation of digital marketing that has been carried out. Control and evaluation of digital marketing consist of several stages. One of the stages that are quite important is the determination of generic measurements that are g following the type of digital marketing used.

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