

Article

Analysis of the Effectiveness of Marketing 4.0 Approaches and Customer Path Models to Increase Clinical Visits

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A B S T R A C T

The development between hospitals in the digital era is getting more advanced day by day. Marketing 4.0 can be used as a method to increase clinic visits in hospitals. The study aims to analyze efforts to increase clinic visits through marketing 4.0 and analysis of the effectiveness of Marketing 4.0 approaches and Customer Path Models to increase clinical visits. The cross-sectional analytic study was conducted in a single private hospital institution in East Java, Indonesia in pediatric health clinics, integrated services, and an effective hospital reach of 2 kilometers. 175 respondents consisting of 97.7% of respondents who know about child health clinics and/or integrated services, 87.7% of respondents who are interested in using these two services, 90.7% of respondents who seek information about these two services, and 90.7 % of respondents who use the child health clinic and/or integrated services by 74.3%. The results of in-depth interviews and focus group discussions with hospital leaders found that the use of social media was not maximal, the number of insurance companies that joined the hospital was not enough, a special community for children with special needs had not been formed, there were no mobile phone applications and online registration systems, and the system had not yet been integrated. comprehensive hospital management information. The customer path in both services is a funnel pattern, so the hospital must increase its commitment and affinity through omni-channel marketing, mobile application establishment, social CRM, and gamification.

I. INTRODUCTION

The development between hospitals in the digital era is getting more advanced

day by day. Every hospital has a target that has been set by the owner, and management must strive to meet these

targets. Various ways are taken to meet these targets, including collaborating with several health insurance companies and making innovations that are different from other hospitals. Hospitals are required to run a healthy business, but the demands they face are also not easy. The era of disruption makes invisible competition more real.¹ Service quality is the essence of service that directly affects customers; service quality is also the reason that shapes consumer perceptions in increasing rationalization and solid customer (patient's) decision-making.²

In this digital age, the various conveniences and conveniences offered by companies to their consumers are a cultural shift, from traditional to modern. Marketing 4.0 was introduced by Kotler (2017), and discusses the birth of new competitors that can make an old company that is already stable, gradually be defeated.³ Marketing 4.0 generally focuses on the digital environment, and on themes such as big data and artificial intelligence.⁴ Brand identity and brand image are significant factors in determining customer satisfaction and purchase intention.⁵

Health for everyone including children's health is one of the important points in the Sustainable Development Goals (SDGs).⁶ Based on the results of a preliminary study at the research site, it is known that the average percentage of visits in almost all clinics has decreased. Maternal and child clinics with the highest average declining percentage trend every year. This may also be influenced by the national health insurance services that can be accessed by participants in the community health centers that have collaborated. The number of outpatient visits at child health clinics and integrated services has decreased despite the collaboration with the national health insurance. The rooms provided for integrated services and children's health clinics have

actually been made as comfortable and conducive as possible, with service rates that are quite affordable.

This study aims to analyze efforts to increase clinic visits through marketing 4.0 and analysis of patient loyalty with the customer path model approach. This research can provide an overview of market research that can be useful for hospital marketing, provide tactical marketing applications in the digital economy for hospital marketing through a marketing 4.0 theory approach to increase child health clinic visits and integrated services..

II. METHODS

This cross-sectional analytic study identifies the characteristics of consumers and potential consumers of child health clinics and integrated services. The study population was outpatients and the community with a range of 2 kilometers from the hospital. The sample size is 175 respondents, consisting of 88 outpatients and 87 the public resident. Sampling for the target patient is done by random sampling, while the community's advice is by cluster random sampling.

The research was conducted in three stages. Stage 1: data collection to identify the characteristics of the respondents. Stage 2: measure the level of consumer loyalty to the hospital and develop a customer path. Stage 3: focus group discussion with leaders regarding the results of the customer path and asking for appropriate tactical marketing suggestions. This research has gone through an ethical test process and is certified under number 1305-KEPK from the Faculty of Nursing, Universitas Airlangga, Indonesia.

III. RESULT

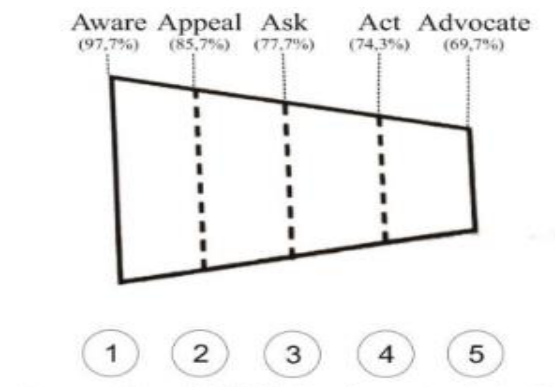
Customer characteristics consist of personal, social, and psychological factors. Personal factors consist of age,

distance, education, occupation, expenses, social class, and habits of paying health costs. Social factors consist of reference groups, families, and communities. Psychological factors consist of motivators, media and partner expectations, and perceptions. The results of the characteristic assessment show that more than half of the customers are children aged 1-<5 years, half are male, almost all of them check with their parents, almost all of them have a hospital-to-residence distance of < 1 km, almost half have an education level high school and have jobs as service businesses and salespeople in shops and markets, almost half have expenses in the range of 2,500,000 – < 5,000,000, and almost half pay in cash. The characteristics of the respondents are shown in table 1. Table 2 shows the sources of information about hospitals from the respondent's perspective. Most of the sources of information are from families, both customers and non-customers.

Based on the Pareto principle, which means that a value above 80% is considered good, then the position of the level of consumer loyalty of children's health clinics and integrated services at the hospital is still in the appeal stage, that is, respondents are interested in using these services. Loyalty level data is shown in table 3.

The level of customer loyalty resulting from the respondent's calculation shows that the customer path with a funnel pattern through five stages from aware to advocate is decreasing. The number obtained shows that there is a continuous decline at each stage of the level of customer loyalty. This shows that according to marketing theory 4.0 that

child health clinic services and integrated services at the hospital have weaknesses in terms of commitment and affinity. The customer path that is formed is the funnel pattern. Based on Marketing 4.0 theory, this pattern is related to developing technology. Strategic issues include components in commitment and affinity. These two aspects include omnichannel marketing. Focus Group Discussion (FGD) results showed that in terms of commitment to the hospital, it does not yet have a comprehensively integrated hospital management information system, both with hospital's internal data and with external systems, the hospital has not mapped all touch points and channels along the customer path. In terms of affinity, the hospital has not developed a mobile application, the use of social media has not been maximized, the lack of cooperation with private insurance, does not yet have a good reward system for customers. Figure 3.1 showed funnel pattern in Customer Path Model Approach.



3.1 Figures Funnel (Primary Data, 2022)

Table 1. Characteristics of customers related to personal factors, social factors and psychological factors

Factor	Category	Total	%
Personal			
Age	<1 year	41	23,4
	1- <5 years	102	58,3
	5-10 years	28	16
	>10 years	4	2,3
Gender	Man	89	50,9
	Woman	86	49,1
Respondent Relationship with customers	Parent	163	93,1
	Grandpa or Grandma	8	4,6
	Uncle or Aunt	1	0,6
	Sibling	3	1,7
Residence Distance with hospital	< 1 km	163	93,1
	1-< 2 km	8	4,6
	2-<6 km	1	0,6
	6-10 km	3	1,7
Level of education	No school	3	1,7
	SD-SLTP or equivalent	40	22,9
	High school or equivalent	86	49,1
	D3-S1	43	24,6
	S2-S3	3	1,7
Work	Legislative officials, high-ranking officials and managers	4	2,3
	Professionals	15	8,6
	Professional technicians and assistants	13	7,4
	Administration staff	18	10,3
	Service personnel and salespeople in shops and markets	60	34,3
	Agricultural and animal husbandry workers	1	0,6
	Processing and crafting related to it	11	6,3
	Machine operators and assemblers	4	2,3
	Manual labor, cleaning staff, and related personnel	25	14,3
	Members of the Indonesian National Armed Forces (TNI) and the Indonesian National Police	2	1,1
	Doesn't work	22	12,5
Expenditure (in Rupiah)	< 1.000.000	1	0,6
	1.000.000 - < 2.500.000	77	44
	2.500.000 - < 5.000.000	79	45,1
	5.000.000 - < 7.500.000	10	5,7
	7.500.000 - 10.000.000	5	2,9
	> 10.000.000	3	1,7
How to Pay Fees	Cash/private/general	79	45,1
	Private insurance	8	4,6
	BPJS Health Insurance -Non PBI	30	17,1

	BPJS Health Insurance- PBI	52	29,7
	Company	6	3,5
Social			
Recommender	There isn't any	50	38,5
	Family	50	38,5
	Another doctor	30	23
Community ownership	Yes	78	44,6
	Not	97	55,4
Want to join the hospital community?	Yes	99	56,6
	Not	76	43,4
Respondents are willing to join the community hospital	Yes	41	52,6
	Not	37	47,4
Community type	Sport	13	16,7
	Religious	19	24,3
	Lottery club	33	42,3
	Profession	2	2,6
	Other	11	14,1
Community location	Surabaya	77	98,7
	Outside Surabaya	1	1,3
Community activities	1 year 2 times	66	84,6
	1 year < 2 times	12	15,4
Age of members in the community	Varies	64	82,1
	< 40 years old	10	12,8
	40-50 years	4	5,1
Number of members in the community	50 people	41	52,6
	< 50 people	37	47,4
Network with other communities	There is	17	21,8
	There isn't any	61	78,2
Expected type of activity in the community	Seminar	60	76,9
	Gymnastics	13	16,7
	Other	5	6,4
Psychological			
Media selection	Website	25	19,2
	Social media	51	39,2
	E-mail	5	3,8
	SMS	11	8,5
	Seminar or counseling	17	13,1
	Print media	7	5,4
	Electronic media	6	4,6
	Other	8	6,2
Partner/media expectations	Private insurance	84	64,6
	Credit card	12	9,2
	Other	34	26,2

Perception	Good service	79	60,8
	Friendly doctor/nurse	46	35,4
	Neat building	4	3
	Other	1	0,8

Source: Primary Data, 2021

Table 2. Sources of information about hospitals

Source	Total		Percentage
	Customer	Prospective customers	
Parents or family	89	19	61,7
People other than family (neighbor or friend)	32	14	26,3
Doctor who has treated	2	1	1,7
Other health agencies	0	1	0,6
Passing in front of the hospital	7	6	7,4
No answer	0	4	2,3
	130	45	100,0

Source: Primary Data, 2021

Table 3. Loyalty level

Loyalty level	Category	Total	Percentage
Knowledge of child health clinics and/or integrated hospital services	Know	171	97,7
	Don't know	4	2,3
Interested in using child health clinics and/or integrated hospital services	Interested	150	87,7
	Not interested	21	12,3
Looking for information on child health clinics and/or integrated hospital services	Yes	136	90,7
	Not	14	9,3
Using child health clinics and/or hospital integrated services	Yes	130	74,3
	Not	45	25,7
Recommend child health clinics and/or integrated hospital services	Yes	119	91,5
	Not	11	8,5

Source: Primary Data, 2021

IV. DISCUSSION

The results obtained indicate that in services at child health clinics and/or integrated services in hospitals, there is a funnel pattern. This pattern is formed because the results obtained through question 5A, namely aware, appeal, ask, act, and advocate show that the number of respondents starting from aware to

entering the advocate stage is decreasing, while the ideal pattern is the bow tie pattern. This shows that according to marketing 4.0 theory that child health clinic services and integrated services have weaknesses in terms of commitment and affinity. This shows that an increase in commitment and affinity is needed in the digital era so that this pattern can become the expected ideal

pattern and can become a model for other services.

Increasing commitment in marketing 4.0 through omnichannel marketing, which consists of two stages, namely generating omni channel marketing and making omni channel marketing step by step. Omni-channel marketing is the practice of blending multiple channels to create a seamless and consistent customer experience.³ Suggested recommendations regarding SMS gateways can also be considered. SMS gateway is an application system that is used to send and receive SMS, and is usually used for promotional broadcasts, service information to users, distribution of service products, reminders for users, to confirmation of the selected service and will be used. The concept of omni channel describes omni channel management as a synergistic management of the various number of available channels and customer touch points, based on various customer experiences from various channels and optimization of multiple channels.⁷ At each step, customers have different feelings, thoughts and behaviors which together result in a different customer experience as well.⁸

The importance of consumer touch points to brands is growing at a very fast pace. This is due to five forces of change, namely advances in science and technology, proliferation of the media landscape, skeptical and empowered consumers, a volatile and highly connected world, and disruptive new business and revenue models.⁹ Lamberton, et al (2016) in their article tracked changes in scientific researchers' perspectives on the three themes of digital, social media and mobile marketing from 2000 to 2015, and identified the main themes that emerged over a five-year time frame during this period, which then the result is as a facilitator of individual expression, as a decision support tool, and as a

source of market intelligence.¹⁰ However several studies report mixed or neutral effect. Findings need to be interpreted with caution due to the relatively small number of studies and methodological limitations of many studies (e.g., a lack of comparison of gamified interventions to non-gamified versions of the intervention).¹¹ Key challenges and opportunities for future research include increasing user engagement, involving users during development and testing of digital interventions, carefully considering risks/harms and rigorously evaluating effectiveness and costs to support the scalability and sustainability of promising digital approaches.¹²

Gamification is the use of game principles in non-game contexts, where this method is effective for increasing customer engagement.³ Research on gamification has been done before. Further exploration of the use of gamification in smoking cessation applications may provide insight into its role in smoking cessation.¹³ Research conducted by Xi & Hamari (2019) shows that there is a relationship between consumer interaction and gamification features. The results showed that achievement and socially related features were positively related to emotional, cognitive, and social brand engagement. Overall, the results imply that there is a positive chain of associations between gamification, brand engagement, and brand equity. Gamification seems to be an effective tool for brand management.¹⁴ Gamification help people induce positive health behavioural change.¹⁵ However several studies report mixed or neutral effect. Findings need to be interpreted with caution due to the relatively small number of studies and methodological limitations of many studies (e.g., a lack of comparison of gamified interventions to non-gamified versions of the intervention).¹⁶

V. CONCLUSION

The position of the level of consumer loyalty of children's health clinics and integrated services in hospitals is still in the appeal stage, where respondents are interested in using these services. The customer path that is formed based on the level of consumer loyalty for children's health clinic services and integrated services in hospitals is a funnel or funnel pattern. The recommendation is to develop tactical marketing in the digital economy to increase the number of visits to child health clinics and integrated services at hospitals based on the customer path formed, namely the Commitment and Affinity dimensions.

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