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Artificial Intelligence Effect on Marketing Mix

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ABSTRACTS

AI and big data to fight against the COVID-19 pandemic and review state-of-the-art solutions using these technologies. Thus, this study aimed to examine the effects of marketing mix dimensions (product, price, promotion, and place) to predict consumer behaviour, emotions and trend using AI for health care. This study will use mix method. First the qualitative research method which involved semi-structured interviews with different marketing professional belonging from different firms of Malaysia. A sample size of 10 is selected and the researcher interviewed 10 marketing professionals A quantitative approach whereby 300 questionnaires are distributed to different marketing professional from various firms in Malaysia. The analysis method used the Partial Least Square smart PLS descriptive methods. As Malaysian consumers exhibit serious concern towards to predict consumer behavior drives consumer resistance to healthcare, it is recommended that the managers focus their strategies on marketing strategies significance on to predict consumer behavior. The study discusses the implications to various stakeholders, its limitation, and recommendations for future studies.

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INTRODUCTION

Huang and Rust (2018) Artificial intelligence (AI) is Mechanical and analytical intelligences involve simple, rule-based tasks. Intuitive and empathetic intelligences involve complex tasks requiring empathy, holistic thinking, and context-specific responses. Moreover, AI is a thriving technology for many intelligent applications in various field (Pham et al., 2020). Accordingly, AI offers a powerful tool to fight against the COVID-19 pandemic (Beck et al., 2020). Additionally, healthcare is system undergoing a fundamental transformation fueled by regulatory shifts that reward value over volume, coupled with unprecedented advances in technological capabilities (Agarwal et al., 2020). With further refinements of this technology, data could be captured during natural medical conversations, freeing physicians to communicate effectively and compassionately with the patient instead. Healthcare organizations would benefit from applying insights from other technology-driven and consumer-oriented services (Huang & Rust, 2021).

Artificial intelligence (AI) in marketing is currently gaining importance, due to increasing computing power, lower computing costs, the availability of big data, and the advance of machine learning algorithms and models (Huang & Rust, 2021).

Therefore, AI in marketing is a crucial topic to research. By analyzing its current applications, its potential use cases in the near future, how to implement it and its areas such as healthcare for improvement, we can achieve a high-level understanding of AI's long-term implications in marketing. Therefore, coupling marketing theory and methods with emerging technology and analytics presents opportunities to deliver high-value healthcare.

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In line with these changes, patients are increasingly viewed as empowered consumers rather than captive recipients of healthcare products and services, a view further reinforced with increased focus on population health management and wellness (Koh, 2016). It is closely tied to patient preferences and experiences. he integration of healthcare, analytics, and marketing with the introduction of a conceptual framework for value-centered marketing in healthcare. value-centered marketing (VCM) in healthcare as the processes involved in defining, measuring, and delivering value for the promotion of wellness and treatment of illness.

That ecosystem the consumer (patient) as the focal point, providers, payers (insurance networks and governments), suppliers and regulators/policymakers.

Concerning data are about the individual in context, meaning that feeling AI needs to incorporate contextual and individual-specific data into modeling the emotional state of an individual.

There are three-stage for strategic marketing planning, incorporating multiple artificial intelligence (AI) benefits: mechanical AI for automating repetitive marketing functions and activities, thinking AI for processing data to arrive at decisions, and feeling AI for analyzing interactions and human emotions (Huang & Rust, 2021).

This study will focus on the strategic marketing planning artificial intelligence (AI) benefits that is feeling AI is designed for two-way interactions involving humans, and for analyzing human feelings and emotions. Although, emotional data are distinct from cognitive data, in that they are contextual, individual-specific, and typically multimodal (speech, gestures, and language). Such data are about the individual in context, meaning that feeling AI needs to incorporate contextual and individual-specific data into modeling the emotional state of an individual (Huang & Rust, 2021). Therefore, feeling AI is ideal for rationalization, that provides rationalization benefits (i.e., personalizes relationships), due to its capability to recognize and respond to emotions, for any marketing functions or activities that require interaction and communication, with the goal of relational benefits should consider feeling AI as one example being customer service. Hence, feeling AI is ideal for communicating with the targeted customers about the healthcare. Customer service and frontline customer interaction can benefit from rationalization by using feeling AI, such as social robots greeting customers and conversational AI providing customer service.

However, choosing the right segment requires domain knowledge, judgement, and intuition. Various technologies and analytics have been used for targeting, such as search engines using keywords searched and browsing history to target search consumers, and social media platforms using interests, content, and connections to target social media consumers (Xingyi Liu, 2020).

The four Ps/Cs for Artificial Intelligence at the level of feeling approach:

Product/ Customer: Understand and meet customer emotional needs and wants, such as, Sky uses ML to recommend programs according to the viewer’s mood, Real-time conversations with consumers, Replika, a ML chatbot, provides emotional comfort to consumers by mimicking their styles of communication.

Price/ Cost Price: Negotiate price and justify the cost interactively, such as, Interpersonal likeability would impact the price negotiation outcome in a B2B relationship, suggesting that interaction, communication, and sentiment may be critical for price negotiation (Pulles & Hartman, 2017). Djermani (2021) / Jurnal Aplikasi Manajemen, Place/ Convenience: Personalize experience for customer engagement. Customer greeting robots (e.g., Pepper) interact with customers in the frontline, such as, Consumers resistance to medical AI (Longoni et al., 2019)

Promotion/Communication: Tailor communication based on customer emotional preferences and reactions. Emotion sensing from post message or conversational content. Personalized ad backfires if privacy concern is heightened (Kim et al., 2019)

This paper contributes to the strategic application of AI in marketing by developing a framework that guides the strategic planning of AI in marketing.

Problem statement

Due to the era of Corona virus situation, digital tool in marketing become the main instruments to overcome the challenge of companies to rise issue of the customers and fulfill their needs. Therefore, in this study, the main strategies of marketing are explored towards artificial intelligence in marketing by identifying practical and theoretical problem. In qualitative approach Martínez-López & Casillas (2013), it has been reported that Scopus had less than 50 articles related to marketing and AI in business related journals (Martínez-López & Casillas, 2013; Shahid & Li, 2019)

The fact that marketers are using "lower" intelligence AI for using feeling AI to analyze emotional data, may inflate the perceived capability of AI to assist marketers in understanding customer emotions. For example, higher levels of customer activity on social media lead to disengagement (i.e., Facebook unlikes). Moreover, managerial issues related to AI, is some recent studies trying to tackle strategic marketing issues. Examples include unstructured data for various areas of marketing (Balducci & Marinova, 2018), analytics for consumer value in healthcare (Agarwal et al., 2020). Unlikes, as affective responses, may imply that customer responses may be polarized more easily if technologies (social media in their study) are not able to interact with customers appropriately (Xiao Liu et al., 2016). Agarwal et al. (2020) urge healthcare organizations to find ways of protecting patient privacy as a competitive advantage, towards healthcare consumers. However, digital tools for healthcare need to be developed, tested, and employed with consumers from vulnerable populations in mind. Furthermore, AI will shape the way your buyers research, shop and purchase. AI creates opportunities for brands and expectations from consumers that are unlike any that brands have previously experienced in the modern advertising age. Further, enabling your company's ability to create just the right content, for just the right buyers, at exactly the right time and place in marketing context(Coulter, 2019)

Hence, the study concern can be formulated to identify the following issue: How Artificial Intelligence for healthcare can be used through predicting consumer behaviors and emotion trend?

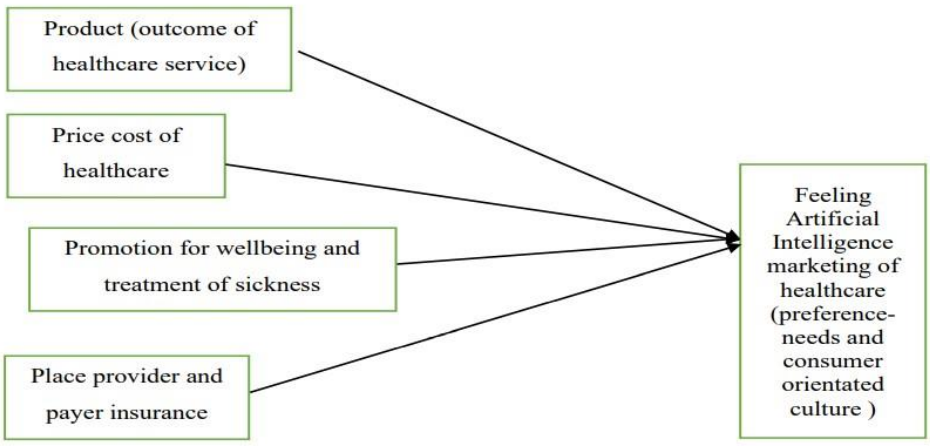

Figure 1: Research framework

Research Design

In this study mix method will be applied. The qualitative research method which involved semi-structured interviews with different marketing professional belonging from different firms of Malaysia. A sample size of 10 is selected and the researcher interviewed from different marketing professionals field(Shahid & Li, 2019). A quantitative approach whereby 300 questionnaires are distributed to different marketing professional from various firms in Malaysia.

CONCLUSION

The conclusions of this study includes, the major limitations of applying the feeling AI intelligences to marketing for marketers to use AI more wisely. Accordingly, health information and marketing sciences can drive healthcare stakeholders toward a consumer oriented culture that strives for a positive patient experience, but caution is needed to ensure the benefits (Agarwal et al., 2020). The digital revolution in healthcare can positively impact vulnerable consumers (Bhatt & Bathija, 2018). Some of the limitations is using feeling AI for two-way interactions involving humans and for analysing human feelings and emotions is common in marketing due to the high-touch nature of many marketing functions, and it is not yet having true emotional machines that can recognize, act, and react to human emotions appropriately. Moreover, in technological aspect, the fact that marketers are using "lower" intelligence AI for feeling functions (i.e., using mechanical AI to capture emotional data and using thinking AI to analyze emotional data) may inflate the perceived capability of AI to assist marketers in understanding customer emotions. Another consideration is that customers may not be ready for interacting with feeling AI. Luo et al. (2020) find that many customers hang up on call-out marketing chatbots once they realize they are talking to bots. Marketing primarily requires thinking intelligence and feeling intelligence. Until now there has been only limited ability of technology to help with those things (Luo & Andrews, 2020).

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