Chapter 20
Navigating the Future of Healthcare:
A User-Centric Approach to Designing Lucrative Business Models for the IoMT

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ABSTRACT

The internet of medical things (IoMT) is a rapidly evolving technology that is set to revolutionize patient care, diagnosis, and monitoring. However, its success relies on the strategic design of user-centric business models. This research explores the relationship between technological innovation and business model design in IoMT, focusing on user perspectives and expectations. Findings reveal that trust-building mechanisms and subscription services are pivotal factors in IoMT adoption, demonstrating the importance of integrating successful digital technology business models to close the gap between technical progress and user expectations.

INTRODUCTION

The Internet of Medical Things (IoMT) is a prime example of how the healthcare business is constantly evolving to include new digital technologies in patient care (Mishra & Singh, 2023). The potential for the IoMT to provide game-changing breakthroughs that alter patient identification, treatment, and tracking has the potential to radically alter healthcare systems throughout the globe. The Internet of Medical Things (IoMT) cannot be realized via technological innovation alone; user-centric commercial models must also be developed (Razdan & Sharma, 2022). Looking forward to healthcare's potential, this chapter explores the complex interplay between IoMT, technological advancement, and the development of commercial models. Understanding and building user-centric IoMT business models is the focus of our study because of the vital necessity to combine

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innovative technology with realistic business strategies (Dwivedi et al., 2022). Research on IoMT business strategies has yielded new insights that might improve healthcare for everybody. Patient engagement and happiness may rise if healthcare practitioners invest in themselves to learn about user-centric components like trust-building strategies. To encourage innovation while safeguarding patient safety and data, it is essential to identify the fundamental elements impacting adoption. The potential effects of IoMT on the healthcare experiences of advocacy organizations and patients may be better understood. This study aimed to provide healthcare organizations and institutions with information on the strategic use of IoMT technology. With the use of IoMT technology, patients may be involved in their treatment plans according to their preferences. Improvements to staff training modules, patient-interest-tailored subscription services, and more trusting interactions are all potential new developments in this field. This data has the potential to shed light on the effectiveness of IoMT therapy and pave the way for potential new financing opportunities. Understanding customer preferences and satisfaction levels could be beneficial for insurance firms as the digital healthcare system develops. Researchers in the fascinating and dynamic area of healthcare information technology and business models may use this kind of data to better understand the relationship between the two. If comparable studies are conducted in the future, they may expand upon this one's results. These findings could inform the design and development decisions made by engineers and developers constructing IoMT systems. You need to be aware of user-centric components to make sure the technology meets end-user needs and expectations. Everyone involved in healthcare, from policymakers to practitioners to patients, stands to benefit from the study's conclusions. In order to improve patient outcomes and healthcare delivery efficiency, these institutions may collaborate to make sure that IoMT is readily integrated into healthcare systems. To do this, we will carefully consider customer feedback and ensure that our business models are in sync.

The critical innovative contribution of this study is the emphasis on a user-centric approach to building IoMT business models (Shah & Khang, 2023). In spite of the critical importance of technology capabilities, our research indicates that a dramatic change in approach is required to bring business models into harmony with customer tastes and expectations. The guiding concepts of existing digital technology business models are expanded upon in this study and applied to the IoMT (Sun et al. 2019). The multidisciplinary strategy, which draws on the expertise of long-standing digital technology firms, provides a fresh viewpoint that may influence the growth of IoMT business models. Our research delves into subjects including subscription services, training modules, pricing methods, customer happiness, and trust creation processes to uncover the essential components of successful IoMT business models (Wagan et al., 2022). Extending beyond theoretical models, this comprehensive study sheds insight into the actual world. Subscription services and trust-building strategies are user-centric components that are important to improve the acceptance of IoMT, according to the study. These studies acknowledge that the effectiveness and acceptance of IoMT solutions are impacted by human variables as well as strictly technological ones. The research analyses the user preferences and adoption potential of the significant components of the business model using both quantitative and qualitative methodologies. Potentially benefiting stakeholders from this data-driven strategy is the increased amount of empirical information for comprehending user perspectives in IoMT. If user preferences are considered, the research supports the premise that successful digital technology business models may be replicated. In order to improve their chances of success in the market, IoMT stakeholders might follow this guidance, which is based on current models. The study surveyed and assessed a wide range of stakeholders, including healthcare professionals,

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