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Chapter

6

**FROM IDEA TO PRODUCT IN HEALTHCARE:  
TRANSFORMING SECTOR NEEDS INTO  
INNOVATIVE TECHNOLOGICAL SOLUTIONS**



# FROM IDEA TO PRODUCT IN HEALTHCARE: TRANSFORMING SECTOR NEEDS INTO INNOVATIVE TECHNOLOGICAL SOLUTIONS

Bruno Bandeira Brasiliano<sup>1</sup>

**Abstract:** The healthcare sector, characterized by high complexity, intense regulation, and constant demand for therapeutic and operational advancements, presents unique challenges for technological innovation. As evidenced by Topol (2019), transforming clinical and operational needs into innovative solutions is fundamental for improving health outcomes, increasing system efficiency, and democratizing access to medical care. This article analyzes the process of designing, developing, and implementing technological innovations in the healthcare sector, with emphasis on critical factors that drive real impact on business and society.

**Keywords:** Idea, Product, and Innovation

## Theoretical Development

In the healthcare environment, identifying market needs involves active listening to healthcare professionals, patients, and hospital managers. According to Herzlinger (2006), effective healthcare innovation deeply depends on understanding the “unmet needs of patients and the ecosystem that supports them” (HERZLINGER, 2006, p. 59). Tools such as clinical interviews, patient journey analysis, and expert panels are utilized for this purpose.

The ideation process relies on methodologies such as Biodesign, developed by Stanford

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<sup>1</sup> It professional with 22 years of experience focused on CRM implementation, digital transformation, and complex project management, with strong impact in the healthcare sector. Recognized for leading innovative solutions, creating the CRM HOLISTICUS (INPI), acting as a Salesforce architect in multiple corporations, and co-founding AzimuteMed, later acquired by the Viveo group.



University, which proposes a systematic approach to healthcare innovation: identifying clinical needs, inventing solutions, and implementing innovations (YOCK; BRINTON; ZEHNDER, 2015). According to the authors, “significant healthcare innovation begins and ends with a real clinical need” (YOCK; BRINTON; ZEHNDER, 2015, p. 27).

During solution development, the use of functional prototypes is crucial to test clinical efficacy and usability. In biotechnology, medical devices, and digital solutions, Lean and Agile methodologies are adapted to regulatory contexts, prioritizing the generation of scientific evidence from the early stages (FELDMAN et al., 2020).

In the implementation phase, regulatory aspects, such as approval by agencies like the FDA (Food and Drug Administration) or ANVISA (Brazilian Health Regulatory Agency), present critical stages. Porter and Teisberg (2006) emphasize that “value creation in healthcare depends as much on process innovation as on product innovation” (PORTER; TEISBERG, 2006, p. 215), requiring effective integration strategies between technology development and healthcare delivery systems.

## **Practical Analysis**

A paradigmatic example is the development of telemedicine as a response to emerging needs, intensified by the COVID-19 pandemic. Prior to 2020, telemedicine adoption was limited by regulatory and cultural barriers. With the health crisis, the need to ensure remote medical care became critical. According to Keesara, Jonas, and Schulman (2020), “the pandemic catalyzed a decade of digital transformation in healthcare within a matter of months” (KEESARA; JONAS; SCHULMAN, 2020, p. 1125).

Health technology companies applied the concept of MVP (Minimum Viable Product) by rapidly launching teleconsultation platforms, progressively improving them based on user feedback. Stakeholder engagement, compliance with emerging regulations, and prioritization of data security were essential aspects for the success of these initiatives.



Additionally, the development of wearable devices for remote monitoring of patients with chronic diseases exemplifies how incremental innovation, combined with insights from clinical needs, can generate high-impact solutions (PANTELIS; KUMAR; BARNETT, 2021).

## **Final Considerations**

Transforming a market need in the healthcare sector into an innovative solution is a process that demands methodological rigor, clinical sensitivity, and regulatory adaptability. The precise identification of clinical needs, agile development of solutions with scientific validation, and effective integration into healthcare systems are determining factors for success. As stated by Berwick, Nolan, and Whittington (2008), healthcare innovation must always pursue the “Triple Aim”: improving the patient experience, improving population health, and reducing per capita healthcare costs (BERWICK; NOLAN; WHITTINGTON, 2008).

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