

Chapter 11

KPIs for Mobile Apps and Digital Data Management in Healthcare

Rebeca Antolín-Prieto

Rey Juan Carlos University, Spain

Nuria Ruiz-Lacaci

Rey Juan Carlos University, Spain

Ana Reyes-Menendez

 <https://orcid.org/0000-0003-0636-9573>

Rey Juan Carlos University, Spain

ABSTRACT

This study aimed to identify quantitative and qualitative KPIs for the implementation of apps and use of digital data in healthcare management. To this end, a systematic review of the literature was undertaken to analyze relevant scientific articles downloaded from reputed scientific databases (Scopus, PubMed, PsycINFO, ScienceDirect, and WOS). The databases were searched using the following keywords: “Big Data,” “Artificial Intelligence,” “Mobile Technologies,” “APP,” “Disease,” “Geolocation,” and “Health.” Subsequently, 25 qualitative and quantitative KPI values, as rating, product quality, or unique users, were identified for the successful preparation and management of healthcare based on apps and the use of digital data.

INTRODUCTION

Today, due to people’s ubiquitous use of mobile devices, smartphones have become

DOI: 10.4018/978-1-7998-7263-4.ch011

a key element of any business strategy (Reyes-Menendez et al., 2020). According to the Global Mobile Market Report (2019), the number of mobile devices worldwide is also growing exponentially (see Table 1).

Table 1. Global smartphone users

Ranking	Country	Smartphones users (millions)		
		2017	2018	2019
1	China	747M	800M	851M
2	India	241M	291M	346M
3	Asia Pacific	381M	426M	472M
4	Middle East and Africa	328M	364M	403M
5	Eastern Europa	202M	212M	220M
6	Western Europe	298M	306M	313M
7	Latin America	230M	259M	288M
8	North America	268M	278M	288M

Source: Global Mobile Market Report (2019)

From the years 2017 to 2019, the number of smartphone users worldwide has increased from 2.7 billion to 3.2 billion (The Global Mobile Market Report, 2019). According to the aforementioned report, assuming an increase of 7.8%, by 2022, the number of smartphone users will reach 3.9 billion. This growth has important consequences for all business sectors.

Considering these data, it is necessary to carry out an analysis based on the KPIs for mobile apps and the digital data management in the healthcare sector. To this end, this section will present relevant data on the use of smartphones, mobile applications in general and more specifically those related to health, as well as the possible implications and applications that should be taken into account from the marketing area and the main trends in the field of mhealth.

While smartphone users use their devices for multiple purposes, mobile applications—also known as apps—are used particularly frequently. The first mobile applications date back to the late 1990s; however, apps' development has been spectacular in the last decade. Accordingly, companies need to adapt their strategies based on this new trend (Allen, et al., 2010). Popularity of apps also open new venues for market research.

Smartphones support the installation of mobile applications that perform specific and predetermined functions on the terminal (Lin et al., 2014). The global increase in the use of smartphones (Agrebi & Jallais, 2015), improvements in the infrastructure

26 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/kpis-for-mobile-apps-and-digital-data-management-in-healthcare/285809

Related Content

Cross-Cultural Decision-Making in Healthcare: Theory and Practical Application in Real Clinical Conditions

Tomasz Komendziski, Emilia Mikoajewska and Dariusz Mikoajewski (2018). *Healthcare Administration for Patient Safety and Engagement* (pp. 276-298). www.irma-international.org/chapter/cross-cultural-decision-making-in-healthcare/197566

Managed Healthcare: A Temporary Trend or a New Standard for Providing Health Services?

Karolina H. Czarnecka and Filip Pawliczak (2018). *Healthcare Administration for Patient Safety and Engagement* (pp. 1-12). www.irma-international.org/chapter/managed-healthcare/197551

Patient Advocacy and the Policy Making Process

(2020). *Managing Patients' Organizations to Improve Healthcare: Emerging Research and Opportunities* (pp. 24-44). www.irma-international.org/chapter/patient-advocacy-and-the-policy-making-process/246993

A New Era for Safety Measurement

Sarah Jane Jones and Mairi Macintyre (2015). *Healthcare Administration: Concepts, Methodologies, Tools, and Applications* (pp. 219-246). www.irma-international.org/chapter/a-new-era-for-safety-measurement/116217

Patient Satisfaction

Nafisa Fatima Maria Vaz (2018). *Healthcare Administration for Patient Safety and Engagement* (pp. 186-200). www.irma-international.org/chapter/patient-satisfaction/197561