SWOT ANALYSIS OF MOBILE SOLUTIONS FOR HEALTH PREVENTION, PROMOTION, AND FITNESS ACTIVITY

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Summary

The need to understand and use modern information and communication technologies in the appropriate way is one of the successful key approaches to our health welfare in cooperation with modern services. Using a mobile phone today is of the utmost importance not only to communicate with people around us but also to personally collect and process information about our healthy surroundings.

This article aims to present a multidimensional approach – combination of SWOT analysis and survey between 200 mobile app users – for evaluation the use of mobile and wireless technologies, supporting health.

The hypothesis of the study aims to demonstrate Strengths, Weaknesses, Threats and Opportunities of mobile solutions that assist healthy and sports way of life. A cross sectional study was designed to analyse the relationship between app use and physical activity, health and lifestyle.

The analysis and the conducted survey show that this is the modern way to maintain and support good personal health and ensure prevention style. The variety of opportunities for consumers to constantly monitor their activity, authorize their fitness programs and regimes with the help of global experts, and manage load, type and number all their activities are just some of the challenges facing professional fitness trainers in the new technological age.

Key words: mobile solution, health prevention and promotion, fitness, swot analysis

Introduction

By definition, mobile health (mHealth) is the use of technology to deliver health-conscious activities via mobile communications. mHealth combines the use of all mobile telecommunication and multimedia technologies as they are integrated within the wireless configurations for health and are part of patient-centered systems for the provision of health services and care. mHealth services are based on a variety of mobile devices through which to register and collect health and clinical data, real-time monitoring of vital signs, as well as directly providing consulting care. (Mikalajunaite, 2015)

The growth of health-related applications, and in particular – sports and fitness solutions, in combination with the availabilities of the mobile device, drive the growth of mHealth. In 2010, only about 4,000 health-related applications were available and today they are more than 100,000. [3] The top 20 free applications for sports, fitness, and health have already been downloaded 231 million times worldwide. [4]

Aim and Objectives of the study

Mobile devices and Apps are the newest accessible version of ICT for personal health needs. They, through their functions and capabilities, are the mobile way to perform health prevention. This is the modern way to record, monitor, and process health information. [5,6]

Health and fitness related apps on mobile devices are often easy to use and appeal to many users. They allow

users to take measurements whenever they need to. The apps offer a lot of functionality, usually are free and provoke health and fitness professionals to start using the physiological data collected from these apps in their practice.

The study discusses benefits and opportunities that mobile apps present through the vision of sporting people.

It will be needed time to study the lasting impact of mobile applications on the health of users and whether they influence more in a positive direction.

Methods

We used a multidimensional approach – combination of SWOT analysis and survey between 210 mobile app users – for evaluation the use of mobile and wireless technologies, supporting health and fitness.

The survey was conducted for 30 days among professional bodybuilders and fitness amateurs.

The subsequent SWOT analysis presents strengths, weakness, opportunities and threats of using mobile application for sport practice and fitness training.

Results

The most significant data from the study is presented below. 50% of the inquired people use at least one mobile app for personal training and dietary. From 5–15 apps on the mobile phone 70% are sport and fitness solutions.

Fig.1. Age and gender distribution

9. Use of apps for personal training and dietary

Fig.2. Apps for personal training

6. Average number of Apps on the personal mobile phone

Fig.3. Average apps number on personal mobile device

Fig.4. Apps types

Many frequent users of wellness and fitness apps are becoming increasingly dependent on this technology to give them information about their health and according to our results 75% of the interviewed participants point out that they use apps in combination with personal fitness trainer, who discusses their out fitness regime.

A 2015 study from Harvard Medical School and the RAND Corporation including 726 participants found that despite the drawbacks, health and fitness apps are far from being the worst technology on the market. It showed that current users of fitness apps were 27% more likely to self-report being active than participants who did not use fitness apps. (Semigran, 2015)

The study highlights that measurements recorded using mHealth apps are mainly entered manually by the user. This can lead to inaccurate data entries, which could compromise its reliability. Self-motivation to record data over a longer period also can be a challenge.

On the other hand, the growing awareness of health and fitness apps in the sport and fitness community as well as the growing proportion of sporting people using mobile devices will encourage the professionals to exploit, the opportunities, provided by smartphone technology and incorporate applications into their sport and dietary management plans.

The SWOT analysis below presents benefits, opportunities, and some factors that are negative for the application of mobile apps in sports and fitness.

Discussion

The need for understanding and use of modern ICT is the key to our health and well-being modern services. Mobile technologies are a constant contributor to our time, new cultural attitudes, and communication, just as health and personal fitness activities are transformed into particularly current practices to date.

Table 1 SWOT analysis

INTERNAL FACTORS	
STRENGTHS (+)	WEAKNESSES (-)
<ul style="list-style-type: none"> • A large market • Access to world-famous programs • Rapid exchange of information • Direct and immediate contact with the trainees and those who want to train • Allows access to different groups that interest the user – but are not necessarily friends • Building strong, long-term relationships through online social networks faster than simply relying on traditional networks • Free • Generated hundreds of applications daily • Organizations and companies use profiles and generate new products and services – the opportunity to exchange information between athletes, trainers and businesses • Real-time / live and 24/7 recordings • Best option for tracing the score of the trainee • Saves time to exchange information • Increases personal competences and knowledge, through exchange of experience and unrestricted access to specialized information 	<ul style="list-style-type: none"> • Requires constant updating and current uploading of updates in the field • It is difficult to train or persuade some people to apply mobile solutions in their sport activity • The unequal distribution of posts – 90% of them come from the top 10% of the most active users • Lack of resources to analyze results • Loss of information, responsibility, security and knowledge management • Efforts to achieve results: Even if they are more measurable than other channels, it is often difficult to prove the benefits of balancing the social media efforts against the results • Compatibility • Responsibility for entering the correct data manually
EXTERNAL FACTORS	
OPPORTUNITIES (+)	THREATS (-)
<ul style="list-style-type: none"> • Involvement of interested new members and strong public support • Allows to build short-term and long-term relationships with perspectives • Providing users with personal contact • A major marketing tool for popularizing the business • Fast delivery of desired services, branding opportunities, and better marketing opportunities • Access to certain groups that traditional media does not allow • Opportunity for feedback from trainees and their results 	<ul style="list-style-type: none"> • Privacy • Sharing information online leads to risks and strain • Danger of spam and malicious information from malicious users • No validated data measurement tools

Opportunities for users to constantly monitor their activity, authorize their fitness programs and regimes with the help of global experts, and manage load, type and number activities are just some of the challenges facing professional fitness trainers in the new technological age.

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