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FITNESS APP WITH WORKOUT DIET & MOTIVATION- A SURVEY

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ABSTRACT

Fitness applications have undergone considerable development in the last few years and becoming popular and significant in both academic and practical areas. However, contributions to the systematic mapping of this field continue to be lacking. This paper constitutes the first bibliometric study in this field to better understand the current state of research. We examined 481 records from databases Scope and Web of Science (Core Collection) using several bibliometric analysis methods. All the records on this emerging topic were published between 2011 and 2019. We processed these records using statistical analysis and science mapping. The bibliometric analysis included the year of publication, journal name, citation, author, country, and particularly, research methodology. Additionally, we used the DreamViewer software to perform bibliometric mapping of co-authorship, co-citation of authors, and co-occurrence of keywords. This field of study, it was found, is currently in its precursor stage, contributing primarily to the fields of medicine, computer science, and health sciences. The United States appeared to have made the largest contribution to this field. However, author productivity, number of citations, and number of core journals all indicated a high degree of fragmentation of research in this filed. Remarkably, scientific research in this area is expected to progress tremendously over time. Overall, this study provides basic data and research classifications for the initial phase of research and research direction for future research in this area.

Keywords - Fitness, Workout, Diet Plan, Exercises, Yoga

[1] INTRODUCTION

Among the 165,000 health & medical apps now on the market, nearly two thirds are focused on general wellness issues like fitness, lifestyle & stress, and diet. The remainder is made up by apps focused on specific health conditions (9%), medication info & reminders (6%), and women's health & pregnancy (7%). Mental health apps led among disease specific apps, followed by diabetes.

In 2008, the App Stores were launched. After two years later, the first fitness and sports apps ("Fit Phone") were launched.

U.S. adults were asked if they could imagine themselves using an app to track and monitor their fitness and exercise. According to the survey, 29 percent of those aged 18 to 29 years utilize a fitness app regularly, compared to only 12 percent of those aged 61 years and older.
With the global outbreak of the COVID-19 pandemic in 2020, almost every country is facing problems concerning the shortage of medical and healthcare resources, and people have become more aware of the importance of following a healthy lifestyle and incorporating physical exercise into their daily lives. As the most downloaded type of mobile health applications (mHealth apps), fitness apps can help people manage their nutritional intake, assist their participation in fitness and physical activities, and promote a healthy lifestyle. Therefore, these apps are gradually occupying the commercial mobile app market.
As compared to fitness centers, fitness apps have more priority because of its many features, the most important being its mobility. These apps help to trace the fitness and well-being of an individual by analyzing their age, height, weight, and gender in customized way. Another important feature of these apps is their ability to record and track users' daily changes in health and fitness which can help in bringing a major progress in their fitness for a long period.

[2] RELATED WORK

Joshua H West, P. Cougar Hall, Carl L Hanson, Michael D Barnes, Christophe Giraud-Carrier and James Barrett (2012) in their paper "There's an App for That: Content Analysis of Paid Health and Fitness Apps" conducts a subjective analysis of the written interpretation provided by developers. The study examines the potentiality of apps in influencing the consumer behavior. The more expensive the app, more trustworthy it is. Apps should give more importance to public health behaviors and has to developed

Juliana Chen, Janet E Cade and Margaret Allman-Farinelli (2015) in their paper "The Most Popular Smartphone Apps for Weight Loss: A Quality Assessment" analyses the quality of top 200-rated weight-loss apps available for smartphone users. Those apps available in market were less than standard quality and Behavior Change Technique incorporation was also limited.
Maria D. Molina, and S. Shyam Sundar (2020) in the paper "Can Mobile Apps Motivate Fitness Tracking: A Study of Technological Affordances and Workout Behaviors" tries to examine whether the fitness apps drives the user to maintain workout regime. The study examined 682 profiles for analyzing and disclosing the use of fitness apps. The study includes a content analysis for analyzing the pivotal qualities which helps in retaining the users in a long run.
Brad Millington (2014) in his paper "Smartphone Apps and the Mobile Privatization of Health and Fitness" conducts an extensive research on the well-known smartphone fitness apps. It points out how the apps help users to associate with the rest of the world. It also concludes that the apps place great emphasis on activity tracking to promote fitness.
Steven S. Coughlin, Mary Whitehead, Joyce Q. Sheats, Jeff Mastromonico, and Selina Smith (2016) in the paper "A Review of Smartphone Applications for Promoting Physical Activity" focuses on analysing the fitness apps to determine whether they help in tracking physical activity and promoting health. The study reveals that respondents of different ages prefer smartphone apps for their physical activity as it favourably help in coaching and motivating them. Lynn Katherine Herrmann and Jinsook Kim (2017) in their paper "The fitness of apps: a theory-based examination of mobile fitness app usage over 5 months" focused on the effectiveness of fitness apps by examining three fitness apps for a period of 5 months.

[3] Proposed Work

This app is best suited to health-conscious people who wish to have a balanced diet. It provides users with the nutritional value of the food they consume and also motivates them in losing or gaining weight.

The app helps user with their physical and psychological health. It provides relaxation to body and mind and also beats stress. As compared to fitness centres, fitness apps have more priority because of its many features, the most important being its mobility. These apps help to trace the fitness and well-being of an individual by analysing their age, height, weight, and gender in customized way. Another important feature of these apps is their ability to record and track users' daily changes in health and fitness which can help in bringing a major progress in their fitness for a long period.

The popularity of fitness apps came with its advancing feature of integrating wearable technology which helps users to manage their fitness programs. The number of users for the apps has increased enormously over the past few years. The app helps users to identify their daily activities like running, walking, diet, etc. and analyze how it contributes to their overall fitness. This way the fitness app acts as a personal guide to its users.

As compared to fitness centers, fitness apps have more priority because of its many features, the most important being its mobility. These apps help to trace the fitness and well-being of an individual by analyzing their age, height, weight, and gender in customized way.

Features

Admin controls the system.
Admin can add a new customer in the system and can edit and view customer details as well.
Activity summaries by specific time period.
Goal setting.
User personalization. This feature refers to collecting user info like age, gender, weight, height, etc.

[4] Methodology

Implementation simply means convening a new system design into operation, which is the process of converting a new revised system design into an operational one. Once the system is successfully developed the next important step is to ensure that the administrators are well trained to handle the system. This is because the success of a system invariably depends on how they are operated and used.

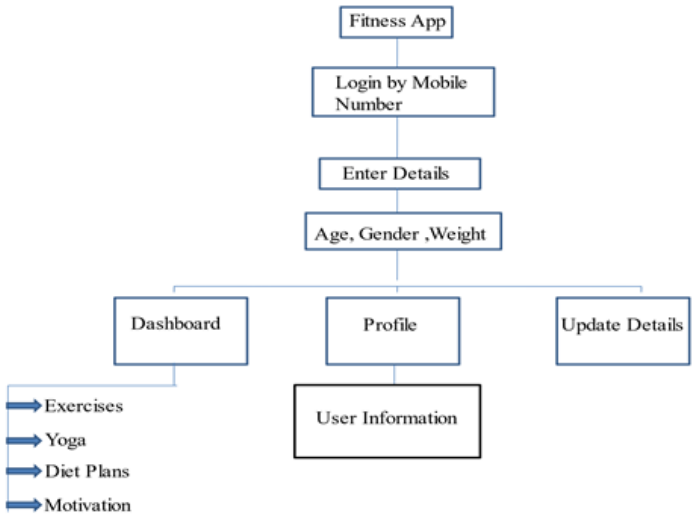

Figure 1.Working of The System

The implementation depends upon the right people being at the right place at the right time. It involves creating the right atmosphere and motivating the user. The administrators are familiarized with the run procedures of the system, working through the sequence of activities on an ongoing basis.

[5] Conclusion & Future Scope

The health and fitness industry is booming unprecedentedly. Researchers say people living with diabetics, heart disease, and obesity can increase their physical activity levels by using fitness app. Fitness app can provide accountability and help people at all levels motivate themselves. A study published in the Journal of Medical Internet Research says fitness app absolutely do promote positive behavioural changes. The Researchers concluded that on any given day, exercise app users are more likely to exercise during their leisure time, as compared to those who don't use any apps

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