Fitness Tracker as a Health Asset:
A Cross-Country Analysis

Masterarbeit

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1 Introduction

Fitness Tracker are becoming increasingly popular. Already now, they play an important role in the society by helping to get a better body feeling and self-control when monitoring their own health or improving fitness (see MaRS Market Insights, 2014, pp. 10.). A Fitness Tracker is a wearable that measures and monitors specific metrics of the user's activities (Rahman et al., 2016, p. 448). Most Fitness Tracker are worn on the wrist and records steps, distance travelled, sleep quality, blood pressure, movement or heart rate (Fitbit, 2017, a). Usually, the Fitness Tracker is linked to an IT system like a mobile phone and the user can see every daily and prior measured activity. By using a Fitness Tracker every person has the possibility to get fit by their own individual way (Fitbit, 2017, b). Fitness Tracker are used for monitoring different data like sleep patterns, movement or other data like blood pressure. A Fitness Tracker is considered as a health asset (see Andelfinger & Hänisch, 2016, pp.42). A factor or resource that have the possibility to help and to control the health of a person can be defined as a health asset. A health asset supports the well-being of an individual and helps to prevent further health issues (Morgan et al., 2010, p. 5).

Already 2015 a hugh amount of 33 million wearables devices were shiped all over the world and a growth up to 148 million until 2019 is expected (see Spil et al., 2016, p. 3621). Fitness Tracker were 2015 already one of the most successful sold wearables devices. Furthermore, the sales development of Fitness Tracker were predicted to grow up to 82% from 2014 to 2015 in Germany (see Bitkom e.V. & Research, 2015, p. 35). The quantified self has become a trend that is constantly growing (see Sjöklint et al., 2015, p. 1).

As a result of the constantly growing use of Fitness Tracker devices and the expected impovement of health issues the aim of this study examines if the utilization of Fitness Tracker leads to the perceived success. Furthermore, because of the constantly growing acceptance and utilization of a Fitness Tracker in Germany and other countries it would be interesting if the success of wearing a Fitness Tracker is perceived similar in countries with different cultural dimensions. Two research questions will be examined.

    RQ 1:   Does the use of Fitness Tracker as a health asset influence the success of individual's in different countries?

    RQ 2:   How and why do cultural differences affect the success of Fitness Tracker?

For the identification of the perceived value of Fitness Tracker that influence the individuals' success, the relevant literature will firstly be identified in chapter two. The development of the research questions are the results of the literature review. The methodology of Webster and Watson is used to identify the important and useful literature. To answer the constructed research questions a survey was conducted in three countries, Germany, Korea and America. For the first research question the model of Xu et al. (2013) are used and is extended with the model of DeLone and McLean (2003). With these models the survey and the hypotheses are build. The next section presents the results of the survey and the answer of the first research question. The fourth chapter the theory of Hofstede is used to answer the second research question. The different cultures of Germany, Korea and America are compared to each other and are interpreted with the six culture dimensions of Hofstede. The following chapter discusses the results of the first and second research question and provides some limitations and gives implications for further research. The paper ends with a conclusion.

2. Current State of Research (Webster & Watson)

In this chapter, an overview of the current state of research of Fitness Tracker is given. As a basis for the literature review the methodology of Webster and Watson is used. Firstly, the methodology is introduced and the findings of the literature research will be presented. The research questions will be deducted from the currant state of research at the end of this chapter.

2.1 Methodology from Webster and Watson

Webster and Watson (2002) describe in their article "Analyzing the Past to Prepare for the Future: Writing a Literature Review", recommendations for writing a literature review. A main reason why Webster and Watson developed this method was to identify in which fields in the science research is needed, and in which areas already sufficient information exist (see Webster & Watson, 2002, p. xiii). Especially, in the research field IS, which is widely unexplored and the young history of the research area, might gain from a literature review of Webster and Watson (see Webster & Watson, 2002, pp. xiii-xiv). To help other scientists to write a good research paper and to identify which articles are useful for writing a literature review, Webster and Watson established the following four guidelines and intentions.

The first step of writing a research paper is to determine the relevant literature (see Webster & Watson, 2002, p. xv). Relevant Literature which exhibits different methodologies of

6 Conclusion

Tha aim of study addresses the questions if a Fitness Tracker lead to the perceived success and examined how and why cultural differences between the three countries exist. It is expected that the use of Fitness Tracker devices will increase in recent years. The improvement of their own health is one of the main reason why indiviuals start self tracking. The question that this study tried to examine was to prove cultural differences. For that reason, an online survey was published to examine if the self tracking devices show success factors. To get as valid and reliable results as possible the survey was published online at more than three different countries. 167 answers from german people, 77 from American people and 56 respnses from Korean people were identified as valid for a good interpretation. The perceived data were in some cases unexpected different and similar at some cases that were proposed to be different. But with the reseived data a theoretical model of xu et al. (2013) could be significantly be extended. Furthermore, there exist cultural differences at the three countries. As discussed before the random sample of the three countries were different. For this study the results were interpreted as reliable and valid for comparing them. Both research questions could be answered positively. A Fitness Tracker as a health asset show that every of the three country perceive the utilization of a Fitness Tracker as successful. Cultural dimensions were considered and compared in the next chapter and even at this chapter the three countries show differences.

In future research the advanced model of Xu et al. (2013) and DeLone and McLean (2003) should be used to test if it will have validity on other devices as well as it did in this study. Furthermore, the random sample should be more balanced to get statistically reliable results. Furthermore, the investigation of differences in various countries should be continued. It could also be interesting, if cultural dimensions that are predicted to be similar present similar results or not. Moreover, a longer study should be implemented to observe if the trend of using a Fitness Tracker will be stable in the text years. Also organizations could use the information to analyze the usage behavior of costumers and what marketing strategy should be used in which country as well as which services, information's and systems a culture expect for a high-quality Fitness Tracker. Finally, as products like Fitness Trackers become more and more important at the society and at business, there could be more variables that need to be added in the future.