PROPOSED SOLUTION DOCUMENT

NOVELTY:

As the name suggests, ‘big data’ represents large amounts of data that is unmanageable using traditional software or internet-based platforms. It surpasses the traditionally used amount of storage, processing and analytical power. Even though a number of definitions for big data exist, the most popular and well-accepted definition was given by Douglas Laney. Laney observed that (big) data was growing in three different dimensions namely, volume, velocity and variety (known as the 3 Vs) [1]. The ‘big’ part of big data is indicative of its large volume. In addition to volume, the big data description also includes velocity and variety. Velocity indicates the speed or rate of data collection and making it accessible for further analysis; while, variety remarks on the different types of organized and unorganized data that any firm or system can collect, such as transaction-level data, video, audio, text or log files. These three Vs have become the standard definition of big data. Although, other people have added several other Vs to this definition [2], the most accepted 4th V remains ‘veracity’. The term “big data” has become extremely popular across the globe in recent years. Almost every sector of research, whether it relates to industry or academics, is generating and analyzing big data for various purposes. The most challenging task regarding this huge heap of data that can be organized and unorganized, is its management. Given the fact that big data is unmanageable using the traditional software, we need technically advanced applications and software that can utilize fast and cost-efficient high-end computational power for such tasks. Implementation of artificial intelligence (AI) algorithms and novel fusion algorithms would be necessary to make sense from this large amount of data. Indeed, it would be a great feat to achieve automated decision-making by the implementation of machine learning (ML) methods like neural networks and other AI techniques. However, in absence of appropriate software and hardware support, big data can be quite hazy. We need to develop better techniques to handle this ‘endless sea’ of data and smart web applications for efficient analysis to gain workable insights. With proper storage and analytical tools in hand, the information and insights derived from big data can make the critical social infrastructure components and services (like healthcare, safety or transportation) more aware, interactive and efficient [3]. In addition, visualization of big data in a user-friendly manner will be a critical factor for societal development.

FEASIBILITY OF IDEA:

Researchers and their contacts involved in a nationwide research project focusing on digital health in Finland were asked to participate in a pilot study on collecting their own personal data from various organizations of their own choice, such as retail chains, banks, insurance companies, and healthcare providers. After the pilot, a qualitative inquiry was adopted to collect semi-structured interview data from twelve active participants in the pilot. Interviews comprised themes

such as the experiences of collecting personal data, as well as the usefulness of the data in general and for the participants themselves. Interview data was then analyzed thematically.

BUSINESS MODELS: