Review Article for the following paper:

IoT Application, A Survey

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1 Motivation

The Internet of things describes physical objects with sensors, processing ability, software, and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks. Generally, IoT is most abundant in manufacturing, transportation and utility organizations, making use of sensors and other IoT devices; however, it has also found use cases for organizations within the agriculture, infrastructure and home automation industries, leading some organizations toward digital transformation. The paper mainly summarizes the applications of IoT in industries. The authors have also identified and described the current research trends, key technologies, major applications, and key challenges of IoT.

2 Contributions

In this paper, Harika Devi Kotha and V Mnssvkr Gupta defined IoT and the current research trends. They have described some of the architecture used to build an IoT system such as Three Layer architecture, Cloud Based architecture, Fog based architecture, and Service Oriented Architecture.

The authors have described the key technologies, both Identification and Communication, also described the communication protocols used for IoT Communication Technology.

Provided a detailed insight on the applications along with some solid example of the usages of IoT and compared four survey papers with this paper on the basis of topics covered (Architectures, Technologies, Applications and Others).

The authors pointed out how the use of IoT can transform the operation of many existing industrial systems and also, the challenges we might face while working with IoT.

3 Critique

Strengths

- The title is clear and representative. The chapters and sections are well organized and

balanced, and the names of the chapters and sections are understandable and relevant.

- The topics are described in good writing and in an understandable way. The paper is easy to read and the definitions and descriptions are clear and concise.

- The arguments of the paper is believable because it contains real life examples and the references verify the arguments presented by the authors.

- The topics could be a good fit for the fields of ubiquitous computing or IoT as it describe the definitions, basic structures, challenges and also list the relevant works as reference which could be very useful for learning the basic design and applications of IoT.

Weakness

- The survey which is conducted by the authors does not provide proper insight on the selected survey papers.

- No specific problem statement was created and the paper does not contain any solution to any specific problem or provide any scope of further research statement.

- The usages of IoT is well elaborated, but the challenges are not. The challenges are mentioned in broad statement.
- The conclusion section does not cover the full scope of the paper. The paper is titled as a survey paper, but in conclusion, the authors did not mention or provide any insight on this matter.

4 Scope of Improvement

- The evaluation strategy can be improved. Instead of being a broad comparison of topics, the comparison can be more specific.
- Design constraints for an IoT application is an important factor which should be more elaborated.
- The authors have described some architectures for IoT in the paper while since IoT deals with heterogeneous devices there is no specific architecture designed for IoT. Depending on the type of application, a particular architecture can be opted. So instead of focusing on the architectural pattern, the three major layers of IoT architecture could be focused.

5 Conclusion

Overall, the paper was good to read. It could be a helpful content for the beginners to learn about IoT. This paper is descriptive, it gives an overall idea about IoT and the survey could direct to some other papers containing relevant content. But as a scientific paper, it does not provide any new insight on some problem and the survey does not contain any evaluation criteria or process which make it rather weak.