## IPRC/16/200

## **Identity Management and Data Privacy Protection in IoT Paradigm**

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Internet of things is a concept which has changed along with time. In this concept services can be provided using either centralized or distributive architecture. In centralized form a central entity will collect, store and process information whereas in distributive architecture information will be shared and processed collaboratively in a dynamic manner. These entities or 'Things' will have counterparts which can be either a human or another entity. Even though this concept provides a wide vision for organizations, implementing a single strategy to protect this paradigm is not feasible. In centralized approach entities which are located on internet will acquire information from entities which are located in other networks and provides these information as raw data or as processed to other entities. The data shared by these devices in distributed Internet of Things concept is creating a threat of identity theft and privacy violation. This paper will propose a trust management framework which will use identity as service and we articulate whether such approach is beneficial on improving security between devices. The issues in IoT framework are explored and discussed through use case scenarios, and a suitable framework will be proposed. A simulation of a food nutrition analysis will be used to show that by using trust, the analysis error can be reduced.

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