

Internet of Things Products have been popular in every country in the world nowadays, the functionality has become an important part of the impact of implementing smart living [1]. However, at this time the Internet of Things (IoT) technology has several limitations mainly related to data validation [2]. Many factors affect the occurrence of errors when the IoT device sends data, such as the damaged sensing device when transmitting the data [3]. For a small scale IoT system, developers might rapidly be able to identify and the risk of errors still can be reduced. Errors that related to data integrity will affect other systems and create high-risk potential [4]. Thus, it can be ascertained that the handling of invalid data received from the sensing node, is the main problem of this research. One model that can be used to identify the risk of errors in technology adoption is the Risk Management Process Model [5]. The Risk Process Model is a model that guides to find ways to overcome and mitigate the risks that exist in current technology [6]. It is because all risks that may arise from incorrect sensing data have an impact that can be detrimental to the system that deals with it. Platform as a data container or server makes it easily to be a central regulator of every data activity [7]. For this reason, it has been determined that in addition to node sensing, the platform is also the part of the IoT technology to be identified in this study. After each risk that might arise has been identified, the threat level will be measured. Impact and probability became two important factors in this assessment. It is expected that after planning of mitigation the new services emerging would be different from the previous one. Furthermore, one proposed in implementing a new mitigation service is about architecture, using micro service as a platform architecture. With micro service-based architecture, it is expected that it can improve services performance compared to monolithic architecture [8]. In the last stage of the Risk Process Model, namely Monitoring, it will be seen whether the Service Level Agreement [9] that has been proposed can ensure all arising risks. At the end of the section, it can be seen that the model used has successfully guided this research to realize a platform [10], [11] that can answer the hypothesis in which the proposed error handling service has been able to overcome the risks that might arise, especially related to the data filtering process.