

## **ABSTRACT**

The development of the Internet of Things (IoT) is increasing in Indonesia so that cellular operators are competing in developing IoT products, but in this competition, cellular operator XYZ is in the smallest position compared to three other competitors in Indonesia so that XYZ needs to develop more innovative products to be able to compete with competitors.

This study aims to analyze the development process of IoT smart tracking products for XYZ mobile operators in Indonesia using a Design Thinking approach. Design Thinking is a creative and innovative approach that focuses on user-centered design. Unlike traditional design methods, Design Thinking involves strong creative thinking and a focus on the user's needs.

In this study, a qualitative research methodology was used, including in-depth interviews with several potential and existing customers of IoT intelligent tracking during the Design Thinking empathy stage. The next stage, defining problems and ideas, is validated by the XYZ IoT operator's product development team.

Through interviews with three participants from various business backgrounds who are interested in using IoT products and three experts from the IoT development team at mobile operator XYZ, the study identifies the question of "How Might We" (HMW), namely: "How can we develop a more reliable and real-time IoT smart tracking product?" After brainstorming and discussing of 19 proposed ideas with XYZ's IoT expert team, the results in the ideation stage determined that developing cybersecurity features and predictive algorithms is the most unique and impactful product, while also cost-effective solution in developing new IoT products for XYZ mobile operators.

By carrying out the design thinking process, it is hoped that innovations in product development can be carried out by companies with a high success rate. The design thinking process will be an important process that can be used by companies to produce products that will answer the needs of their customers more effectively. In turn, this will be a competitive advantage for the company.

**Keywords:** Mobile Operator, Internet of Thing (IoT), Product innovation development, Design Thinking Approach, Indonesia.