

## 1. INTRODUCTION

Information technology (IT) is currently utilized by organizations or universities for business activities and as a means of supporting information delivery [1]. IT has been adopted by many individuals from diverse backgrounds to access various pieces of information, typically presented on websites that can be accessed anytime and anywhere [2].

Human Centric Engineering is a central research institution at Telkom University that focuses on various essential fields such as computing, informatics, electronics, robotics, mechanical engineering, and biomedical [3]. As a research institution playing a role in developing technology and innovation, its website should represent the institution's excellence and professionalism [4]. However, the current condition shows a gap between user expectations and the reality of accessing the Human Centric Engineering website. In order to assess the usability score of the Human Centric Engineering website, measurements of usability were performed by utilizing an SEQ and SUS with a sample of 5 participants [5], respondents who were representatives of the staff of the Human Centric Engineering central research institution and students from Telkom University who had accessed the website. SEQ and SUS were selected due to their demonstrated capability in identifying distinctions in smaller sample sizes, unlike other surveys. The achieved SEQ score stood at 5.5 out of 7, suggesting that the Human Centric Engineering website performed better than average in terms of user-friendliness, surpassing 4.8 [6]. In the meantime, the acquired SUS score registered at 43, implying that the Human Centric Engineering website achieved a usability score lower than the average, exceeding 68 [7]. The range of acceptability landed in the "unacceptable" classification, the grading scale received an "F" rating, and the descriptive evaluations were within the "acceptable" spectrum.

Moreover, the investigators carried out observations and interviews with users of the Human Centric Engineering website to gather more detailed data concerning the interface challenges encountered by participants who utilized the site. The results of observations and interviews showed that respondents still felt uncomfortable when accessing the website due to several interface deficiencies, such as unresponsiveness when accessed via smartphones, cluttered content placement, confusing navigation, inconsistent writing style, unclear font colors reducing text readability, and inaccessible website pages.

Based on the identified issues, a redesign of the Human Centric Engineering website interface is needed. In order to tackle these concerns, a revamping of the user interface for the Human Centric Engineering website was undertaken through the implementation of the UCD methodology [8]. This method entails engaging users at each stage of the design process to guarantee that the resultant design genuinely fulfills their requirements and inclinations [9].

The study entitled "Enhancing User Interface and User Experience on Telkom University Open Library Website Through User-Centered Design Approach" by Rakha Labib Ramadhan, Alvi Syahrina, and Ahmad Musnansyah asserts that the application of the UCD method to redesign the UI and UX of the Telkom University Open Library website led to suggestions for website design enhancement. The usability was gauged using SUS and yielded a usability score of 84.75, signifying that the revamped website's usability surpasses the average usability score of websites [5]. The study titled "User-Centered Design (UCD) Approach for Analyzing User Experience and Enhancing Online News Portal Website (Case Study: Cakrawala.co)" authored by Mochamad Ihza Yudhakesuma, Anita Muliawati, and Helena Nurramdhani underscores the importance of achieving a commendable level of usability on a website to ensure its ease of comprehension and user-friendliness. This research employed the UCD approach to address user needs through methods like questionnaires, surveys, prototyping, and assessing usability using the SUS calculation. The findings demonstrated a 37.5% increase in usability scores and yielded recommendations for refining the website's format in order to enhance its efficiency and effectiveness [2]. The study titled "Enhancing Website Interface through User-Centered Design Method and System Usability Scale Approach (Case Study: Agricultural Census Dissemination Website)" authored by Migunani Puspita Eugenia, Muhammad Abdurrofi, Bagus Almahenzar, and Ardita Khoirunnisa outlines the study's objective of revamping and appraising the interface of the agricultural census dissemination website. According to the initial assessment, the achieved System Usability (SUS) score amounted to 60.05 points. Following the redesign process, the concluding evaluation outcomes indicated that the design solution yielded by the system redesign utilizing the UCD approach surpassed the original system design in terms of effectiveness [10]. The study entitled "Incorporating User-Centered Design Approach in UI/UX Design of Employee Website" authored by Christofer Veronica, Hasniati, and Izmy Alwiah Musdar reveals that the utilization of UCD for evaluating and enhancing the user interface and user experience effectively improved the ease of use of the employee website. This enhancement was substantiated by questionnaire outcomes, scoring 84 and classified as "Excellent" or "acceptable" by users within the parameters of the SUS method guidelines [11]. The study titled "Designing User Interface and User Experience for a Mobile-Based Medical Tourism Indonesia Application using User-Centered Design Method (Case Study: PT Cipta Wisata Medika)" authored by Sulistya Ernawati and Aries Dwi Indriyanti asserts that employing the UCD method yielded a design and prototype for the mobile app. Subsequently, the app underwent evaluation using the SUS method and attained a rating of 80.125, categorizing it as "Good." This score indicates that the interface of the Medical Tourism Indonesia application is of high quality and effectively caters to user requirements [12].

The objective of this article is to revamp user interface of Human Centric Engineering website by employing the User-Centered Design (UCD) approach, all based on user requirements. The goal is to assess the outcomes of the

revamped user interface for the Human Centric Engineering website through the employment of the SEQ and SUS. Furthermore, it involves analyzing the outcomes of the conducted evaluation.