#### Research Article

# Interactive Display as HKI Learning Media for **Design Students (Case Study: Faculty of Creative Industries, Telkom University)**

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#### Abstract.

In the design learning curriculum, students are required to create design work for each course they take. As a person who works on art and design, students also get HKI (Intellectual Property Rights) courses that support works created in terms of protection law so that their work is protected from various kinds of detrimental actions such as piracy, imitation, and plagiarism. However, from a practical point of view, it turns out that not many design students understand the importance of HKI and register their work, even though the campus has facilitated it. Through a design method, an interactive display is designed to invite design students at Telkom University to register HKI for their work, with course lecturers as intermediaries and the faculty environment as a support system. Interactive displays placed in strategic locations can be an option for HKI learning media to provide motivation, information, and behavior change for students to care about and register their work with HKI.

Keywords: behavior change, design student, intellectual property rights, interactive display

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#### 1. Introduction

Along with the times, technological developments continue to develop and be felt by various groups. Currently, people can easily view and access various works created by others through various digital media, such as social media, websites, e-books, etc. The public can also easily download and even use other people's work without the creator's knowledge if the work is not legally protected. Work should be legally and economically protected under Intellectual Property Rights (HKI). By registering their works with HKI, creators of works and industrial designs get protection and can also make a major contribution to Indonesia in building the economy [1].

In education, design students, especially students from the Faculty of Creative Industries (FIK) Telkom University, cannot be separated from the works of art and industrial

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designs they have made while studying. This is due to the demands of FIK students in the studio class every semester to produce work from the course's learning process. Thus, FIK students during their study period have produced many works of art and industrial designs that need protection to protect their work from various kinds of detrimental actions such as piracy, imitation, and plagiarism [1].

At this time, it is very unfortunate that the knowledge of FIK Telkom University students regarding the importance of registering HKI in their work has not been followed by a personal willingness to start moving to register it through the facilities provided by the campus. The existence of an HKI clinic that facilitates the registration process has not been used optimally by FIK students. Therefore, there is a need for an innovation that can invite FIK Telkom University students to start registering HKI in their works to protect various works of art and designs belonging to FIK Telkom University students.

# 2. Research Methods

At this time, it is very unfortunate that the knowledge of FIK Telkom University students regarding the importance of registering HKI in their work has not been followed by a personal willingness to start moving to register it through the facilities provided by the campus. The existence of an HKI clinic that facilitates the registration process has not been used optimally by FIK students. Therefore, there is a need for an innovation that can invite FIK Telkom University students to start registering HKI in their works to protect various works of art and designs belonging to FIK Telkom University students.

#### 3. Result And Discussion

In creating value through design innovation, the defining stage is a crucial initial stage for setting the core and limits of the problem to be solved [2]. This phase results from an previous empathizing process by seeking additional information about the target and its internal and external environment. In the early stages of the definition, the design team carried out the empathize process that included the Focus Group Discussion (FGD) activities together with student representatives from each of the study programs available at FIK, namely visual communication design, interior design, product design, textile and fashion creations, and fine arts. The activities are carried out to find information about the perceptions, experiences, and needs of students in FIK related to HKI. From the results of the FGD, it is noted that FIK students have understood some

points or rules related to data ownership and have worked through HKI courses in the classroom; however, the FIK student personally has not been interested in registering his work because of their perception of the complex and long HKI registration process.

Following the research phase, the researchers collect various information or facts through target or user exposure and related theories, then categorize the information according to the design needs.

## 3.1. Stages of Behavior Change

Prochaska J. mentioned in his theory called The Transtheoretical Model of Behavior Change Model that there are six stages of human behavior change, each of which has strategic steps to raise its level, as in the chart below [3]:

# THE TRANSTHEORETICAL MODEL OF BEHAVIOR CHANGE + STRATEGIES

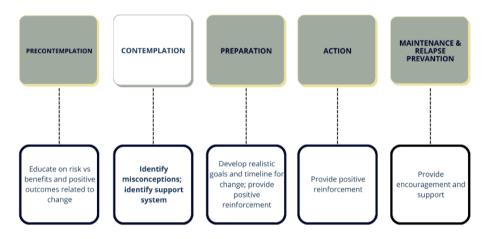


Figure 1: The Transtheoretical Model of Behavior Change and Strategies (Wang et al., 2019).

Through this theory, the researchers identified that FIK students are in the contemplation phase, which means they are already aware that there is a need for a change in behavior and are already planning to start doing it but are not yet committed to making the change [3]. To increase the level of contemplation to the preparation level, the strategy that can be used is to identify misconceptions that occur in the FIK student environment and identify support systems that are able to support and have a big impact on the presence of behavioral changes in FIK students, such as fellow students and lecturers [4].

## 3.2. Interactive Media on Behavioral Change Processes

The Journal JMIR Mhealth Uhealth produced research on the effect that occurs if a process of behavioral change produces a greater impact if there is a two-way interaction involving capacity, motivation, and physical opportunity. The presence of interaction in this process is better when compared with the use of one-way interaction, which only affects automatic motivation and physical opportunities [5]. The research results provide a reference for creating these innovations with a media that has two-way interactions and can be applied as a medium or system to impact behavioral change processes better.

## 3.3. Factors of Behavioral Change

In some literature that discusses behavioral change, several factors can support the process of behavior change: availability of complete information, emotional approach, building the right self-identity, and assessment or threat to yourself and the environment [6]. In addition, Internet-based applications and media interventions adapted to the character of the user and its environment can also encourage behavioral changes in society and enhance its existence at present [7][8]. Therefore, this internet-based media design can be conceptualized in three stages: user character review, interaction method technique design, and easy-to-understand delivery [9].

# 3.4. Student Design's Character and Habits

Using the observation method, the researcher observes the activity, character, habits, and environmental conditions of design students on campus and collects the necessary information related to creating these innovations. The information collected is as follows:

- a. Design students often come and go out of class together with friends in groups;
- b. Design students often work on their tasks in the surrounding area or in the FIK campus environment;
- c. Design students have a high level of empathy and creativity;
- d. Design students often carry out organizational activities within the campus.

From the research process described above, the researchers draw a few conclusions that can be applied in the innovation creation process according to the problem cap already set: delivering information to the target as a first step; involving a support system on campus such as a lecturer and other design students to bring the greatest impact; using technology that contains two-way interactions to be more effective; and considering the nature of users in decision-making such as system, font style, color, etc.

Next, the researcher performs the stage of ideation through brainstorming to find ideas for solutions to the problem raised. Brainstorming done with the theoretical considerations discussed eventually reduced some ideas of solutions into one solution idea, namely interactive display. The interactive display ideas selected and defined as this solution are based on the following considerations: it is easily visible physically in the campus environment; can load a variety of types of content; involve two-way interaction; and displayed student work is expected to be able to motivate other students to enroll in HKI through their work.



Figure 2: HKI Interactive Display User Journey (Researcher's Data).

#### 4. Conclusion

From the value creation process of innovation that has been described above, the researchers draw the conclusion that the acquisition of this HKI Interactive Display, with its features involving two-way digital interaction, adding social support systems on campus, and the system design according to the character of the user, is expected to become a media learning tool for students by encouraging behavioral change to

start caring about the legal protection of their work through HKI registration. It is also worth taking with the development of features and appearances to be more useful and attractive for design students.

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