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Desainku Application as an Effort to Improve the Quality of Fashion Industry Design in the 5.0 Era

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ABSTRACT

Fashion is becoming a lucrative industry in Indonesia as its growth rate continues to increase. According to Consumer News and Business Channel (CNBC) Indonesia 2019, development of fashion industry can contribute around 18.15%. According to Central Statistics Agency (BPS) Indonesia, in first 3 months of this year, apparel industry's production grew by 29.19%. Fashion entrepreneurs still lack skills in understanding fashion design, but they need a lot of adequate understanding and knowledge, to help high creativity also in creating fashion designs and fashion production. Based on the results of interviews show that fashion entrepreneurs still need to gain skills and understanding in creating the fashion designs they produce. The researchers made the Desainku Application. This research use ADDIE method, which consists of five stages of research, namely Analysis and Design, Development, Implementation. This application also has a business feasibility analysis. As a result, the Desainku application is useful for improving understanding of fashion design industries before they are finally implemented in fashion. Desainku application system uses material from modules adapted to existing learning competencies, design consultation features and instructional videos. Desainku application scored 4.4 in the very good category based on three tests. As a result, it can be concluded that Desainku application is appropriate for use as part of an effort to improve the quality of fashion design industries to realize the 2030 Sustainable Development Goals with 4th point Quality Industrial specifications.

Keywords: applications; sustainable development goals; fashion design.

1. INTRODUCTION

Fashion trends that exist in Indonesia reflect social and economic status that is generally accepted. Fashion is becoming a lucrative industry in Indonesia as its growth rate continues to increase. According to Consumer News and Business Channel (CNBC) Indonesia, in 2019, the development of the fashion industry can contribute around 18.15% or IDR 116 trillion. The Creative Economy Agency (BEKRAF) also continues to work on strengthening the ecosystem and encouraging the development of this sub-sector. With developments in the fashion business world, the apparel industry is a large segment and is currently recording the highest production growth among other sectors throughout the first quarter of 2019 (Kemenperin, 2019). According to the Central Statistics Agency (BPS) Indonesia, in the first 3 months of this year, the apparel industry's production grew by 29.19% on an annual basis. This data shows that the interest of the Indonesian people in the fashion sector is quite high.

There are various fashion design applications circulating in the community including the Fashion design app and T-shirt Design. The system results from the application have the advantage of being able to make fashion designs and sporty clothing designs. However, this application still has drawbacks, including only learning the basics of fashion design, so that the stages of fashion design still need to be completed, and there are design templates that are not suitable for fashion design applications. Successful fashion design requires a combination of adequate skills and knowledge. Someone who wants to become a fashion entrepreneur must understand how to make clothes, which will be a competitive advantage to ensure fashion entrepreneurs focus on improving their skills. (Jack, 2021)

Departing from these problems, the author took the initiative to create functional innovative works in the form of **Desainku Application as an Effort to Improve the Quality of Fashion Industry Design in the 5.0 Era**. This application is expected to improve the quality of design and also the quality of clothing for entrepreneurs in the fashion sector.

2. METHODOLOGY

2.1 Research Method

This research applies the ADDIE method. The ADDIE method in research and development design is a method popularized by Dick and Carey in 1996 which is used in industrial activities. The ADDIE method consists of five stages of research and development, namely: 1) Analysis, 2) Design, 3) Development, 4) Implementation, 5) Evaluation.

2.2. Development Procedure

The design stage of the Desainku application adapts the ADDIE model. As a guideline, the ADDIE method is needed to analyze the usability of the application on the screen display, application performance, and content suitability so that it is relevant to the needs of the community in making designs. The following is the stage of developing the Desainku application by adapting the ADDIE method.

The first activity carried out by a researcher in conducting development research is to conduct a needs analysis, with the aim: 1) As a tool to determine current capabilities and determine current gaps to the desired final condition; 2) Provide direction related to programs, projects, and activities. Researchers must carry out needs analysis to see the condition of the gap from a situation by enforcing directions for the program of the research. Product design is a stage that is carried out after a needs analysis. Researchers will design products according to the needs that exist in the field. At this stage, application development is carried out in collaboration with several experts to develop products. At this stage, media expert validation, material validation, and user testing of Desainku application were carried out with 30 correspondents At this stage, product evaluation is carried out so that the product can develop and be in accordance with current technological advances and benefit the community.

2.3 Research Object

The object of this research is the Desainku Application as an Effort to Improve the Quality of Fashion Design Industrials to Realize the 2030 SDGs.

2.4 Data Collection Techniques

Data collection technique used in this research is by interviewing several sources of fashion industrial who have difficulty in fashion practicum. In addition, it also distributes media evaluation questionnaires to get reviews and input from users in accordance with application development procedures. The purpose of the evaluation questionnaire is to determine the level of feasibility of developing the Desainku application.

2.5 Data Testing Techniques

Technical testing was carried out to determine the level of product feasibility. The author obtained qualitative data after conducting interviews and making questionnaires. Qualitative data were obtained based on opinions and criticisms from material experts, media experts, and application users. Qualitative data was obtained through a validation test questionnaire in the form of category values, namely very good, good, sufficient, less and very poor, then the qualitative data would be converted to quantitative data through a Likert scale as follows.

3. RESULTS AND DISCUSSION

In the design user interface of the Desainku application, you will be presented with an opening page, a login page, a Fashion Drawing material page, a Fashion Design material page 1, a Fashion Design Material page 2, a Design Tutorial Video page, and a Design Consultation Feature.

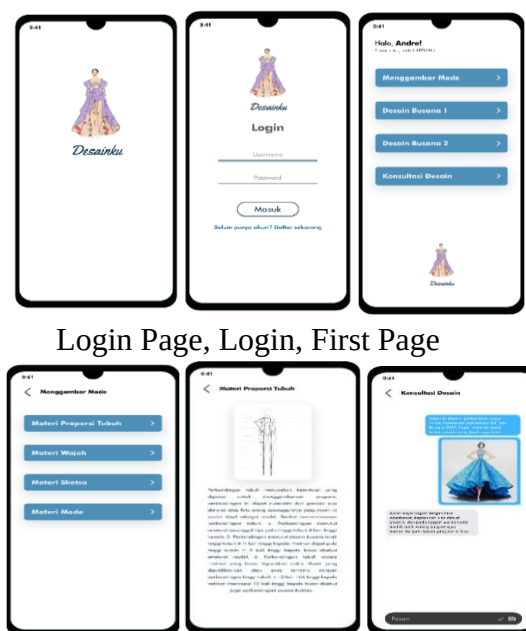


Figure 1. User Interface

The output product of this research is an Android-based mobile application named Desainku. This application emerged from a complaint regarding the difficulties of industrials comprehending practical fashion design coursework. There are several facilitators with backgrounds in fashion design experts. Desainku is an application that seeks to realize support Indonesia Gold 2045 on the pillars of Human Development and Mastery of Science and

Technology. Desainku offers free design consultations in an effort to improve the design quality of fashion designers. The Desainku Application's free service provides five major features, namely Fashion Drawing Learning, Fashion Design Learning 1, Fashion Design Learning 2, Fashion Design Tutorial Videos, Meet Tutors, and Design Consulting. Users are free to use these features according to their needs.

This application development process uses the ADDIE method. The testing phase is carried out using qualitative and quantitative methods for Media Expert Validation Lecturers, Material Expert Validation Lecturers and User Tests. The results of the Material Expert Validation are 4.5 with a very good predicate, the results of the media expert validation test are 4.0 with a good predicate, and the User Test Result is 4.7 with a very good predicate. From three tests, the results were obtained at 4.4, which can be concluded that the Desainku application is very good and feasible to be used as a learning media.

4. CONCLUSION

The development of information technology must be utilized, one of which is in the world of industry. Improvements in the industrial system must be carried out but with the distance learning system currently being implemented, industrials experience a little difficulty in the learning process, especially in practicum courses. The Fashion Design course is a compulsory subject for Fashion Design industrials.

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