

Android-Based Smartphone Application Create Reports Results for Packaging On Garment Company

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ABSTRACT

Android is a mobile operating system based on Linux open for developers to create their own applications that can be used by a variety of mobile devices, so that the operating system most widely used today. With the development of the utilization of the android operating system is not only used for communication but can be used to help an industry. In the manufacture of the ongoing reporting is often a lot of manual, so it takes a long time. To solve this problem, we need the appropriate application, which can solve this problem. The author would like to make an application for smartphones based on the Android operating system for help in making a report on the packaging PT. Sansan Brothers Tex Jaya. By utilizing an application that has the writer asked.

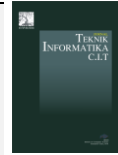
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1. Introduction

The rapid development of technology could be felt by all people, especially the industry players were greatly assisted by the transfer of jobs from manual to computerized. The use of computerization can reduce the cost of production and the results achieved can exceed the target. The use of computers has been applied across the industry sector in management, further technological developments that began to be applied in the industrial sector is the use of mobile technology. Technological developments at the moment we know very rapid indeed. In the cellular technology used only to communicate remotely or send each other messages, now this technology has features that are already approaching the computer features. In addition, now only with mobile technology from the hands, we've been able to find and access even get information that is very complete and comprehensive. Of the many operating systems that can provide interesting features for mobile users, android operating system is the most widely used operating systems are also the most rapid development in Indonesia. The use of the android operating system is in great demand because of its use is very easy and from the other side of the license can be obtained for free. Therefore, the authors want to implement the use of smartphones in the garment industry where the author works. Because at this time the use of the android operating system in the garment industry only a means of communication between employees and the communication that took place in the group has not been used for an information system in the industry itself. Other than that, utilization of the android operating system is already fit for use by a company to its employees. Since it was almost all employees have a smartphone.

The information system currently uses PC and reporting manually, we already know that the desktop is not effective as a smartphone. Other factors, the authors have problems when viewing admin wrote a report on the packaging in the preparation of the report still manually, then the results of the report distributed to employees WhatsApp group production by the report photographed and then uploaded to the group so that the group members know the report of the packaging. How are considered less effective because many obstacles in the implementation, including the quality of the picture is less clear, tertimpunya photo report by another chatter, which takes quite a long time in progress reports and reports that there is not necessarily updated.

Based on the above background, the authors wanted to make research into developing



Android-based smartphone application to make an application "Packaging Result Report". With the application that the author developed this, admins can quickly create reports and they can be directly monitored by all employees. If the delivery of reports has been good to the employee, the employee will soon be working on stuff that's still wrong. When the packaging is always updated report of the packing of goods can be maximized by adding employees to pack or with other additives. In addition, this report can control the entry of goods into the packaging area that does not accumulate goods and goods in and out is always balanced.

2. Research methods

2.1. Types and Data Collection Methods

Types and data collection methods used by the author to obtain data as the study material in this study. In this case the author uses the method of data collection in the form of primary data sources (observation, interview and literature study) and secondary data sources (documentation).

2.2. Type of Data Collection

a. Primary Data Sources

- 1) Observation techniques by performing the direct observation and recording of the production process to packaging the garment company where the research will be using the application of this android-based report creation.
- 2) Interview technique is by doing question and answer directly to the competent authority on the production, packaging and quality control in the manufacturing To know the problems during this reporting
- 3) Mechanical literature that by collecting data from books or writing materials which are irrelevant to this study.

b. secondary data

Is data that has been collected by the relevant institutions dlaam terms of collecting data and published to the user community data. Secondary data in this research is data - data about garment production and packaging report generation applications.

2.3. Method of collecting data

In preparing this study, using three technical reference material used as collecting data and information, including:

- 1) Observe firsthand observation of how the field to the processes that occur on each system to be used as an analysis
- 2) Interviews with relevant officials and employees in charge of garment where research administration section reports on the packing of goods
- 3) The study of literature as the base material of reference of the study preparation

2.4. Software Development Methods

Android-based application to report the results of this packaging is built through an object-oriented approach by using Rational Uni fi ed Process (RUP) is a software engineering process that uses a disciplined approach to assigning tasks and responsibilities in the development of the system (Manalil, 2010). RUP is created, developed and managed by IBM Rational Software now. The purpose of the RUP is to produce high-quality software that meets the needs of users and predictable scheduling and development costs (Kruchten, 2003). Phases and iterations of software development with Rational method Proces Uni fi ed as follows.

a. phase

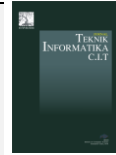
In Rational Uni fi ed Process (RUP) software development cycle is divided into four phases, namely:

1) Inception

At the beginning or inception phase the developer defines the limits of activities, define business processes, perform analysis of user requirements, conduct preliminary design software (design use case). This phase will result in business processes, use cases early.

2) Elabration

The goal of the elaboration phase (Elaboration) is to analyze the main problems, build the basic architecture, developing the project plan, and eliminate the highest risk of the project.



Hasildari elaboration phase is a use case that already, descriptions of software architecture, non-functional requirements, and a general description pengembangan perangkat lunak.

3) construction

Construction phase focused on the development of both software and the main component. It is a supporting role by performing a series of iterations. In each iteration there is a process of analysis, design, implementation, and testing. In the process of development can use the parallel construction in order to speed up the results of the software. The expected outcome of this phase is a software product that is ready for use by end-users, which is a software product that is integrated with an adequate platform and explanation of the product.

4) Transition

The transition phase is a phase which results from the development of software distributed to end users (end-user). Activities to do in this phase include: beta testing to validate the new system against user expectations, operational database conversion, training for users and administrators, and marketing of products.

b. iteration

Each phase in a unified rational process selanjut divided into iterations. Iteration is a complete development loop resulting in a release (internal or external) of an executable product, a part of the final product under development, into a system of gradual end of the iteration keiterasi. The user benefits pendekatan iterations than water fall approaches, as follows:

- 1) The risk had been anticipated earlier.
- 2) A change management easier.
- 3) Higher reuse rate.
- 4) Developers can learn the project development process.
- 5) Overall had a good quality

3. Results and Discussion

3.1. Design Home Menu

The design of the menu in the application report is based on the needs of the packaging so that development can be developed easily.

3.2. Design Home

Main page serves to display the main menu for the user / user application, the user selects the menu to obtain the desired information, following the plans for the main page:

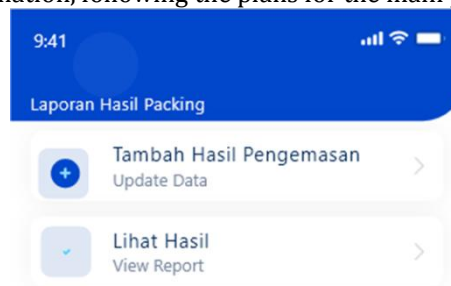
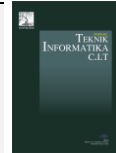


Fig 1. Home

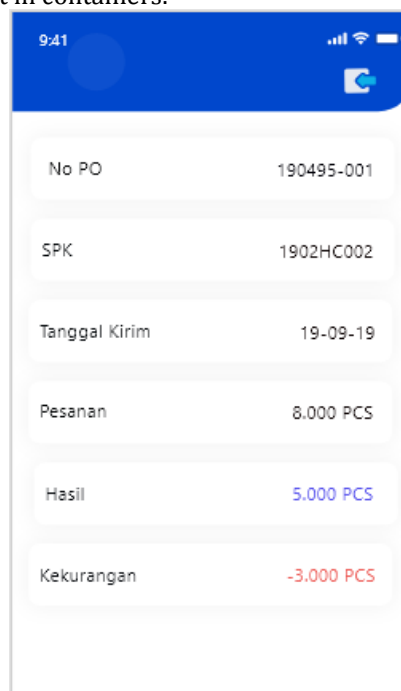
3.3. Designing Page View Results

See the results page to display information about the results of the packaging in the form of percentage and the percentage beam.

**Fig 2.**View Results

3.4. Draft Results Details page

Result details page serves to display detailed information about the data from the information presented, consisting of No. PO, SPK, date sent, number of orders, the result of the packaging, and the lack of packaging or goods not in containers.

**Fig 3.**Result Details



3.5. Forms Reports Packaging

NO PO	Tgl Hasil	Total Hasil	Nama Admin
190405-001	2019-10-28	1	unap
190405-001	2019-10-28	300	unap
190405-001	2019-10-28	200	unap
TOTAL		501	

Fig 4. Report of Packaging

4. Conclusion

At the end of this study, the authors will present some of the conclusions that can be drawn based on the findings of the research results. In general, the authors conclude that the application affects the efficiency of time and human resources for a company, but does not make the data presented strictly in accordance with the reality on the ground. More specifically the author can draw the following conclusion:

1. Smartphone utilization in manufacturing in a company report can either efesienkan time required. It can dilihat of admin processes in the manufacture of the report is supported by the system.
2. Besides efficient time for the administrator, this app also provides information to the user more simple and up to date.

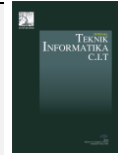
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