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## **Original Research Article**

# **Integration Information System Program "Gancang Aron" In Banyuwangi Hospital**

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**Abstract:** The government seeks to improve public services through the emergence of innovative ideas, one of which is with the "Gancang Aron" program at a hospital in Banyuwangi. This study aims to provide a particular system design integrated with the primary program system to minimize errors in the pharmacy department. This research uses a descriptive qualitative approach with case studies—data obtained through observations, interviews, and documentation. The analysis technique used is the input-process-output-based information system development. This system's development will provide optimization of services, especially in the medicine section, to avoid errors that will impact reports and decision-making. This research implies that the system design results can serve as a basis or model for the development of information systems in various organizations and a guide in making policies and decision making.

Keywords: Design, Information Systems, Public Services, Hospital, Banyuwangi.

## **INTRODUCTION**

The government is tasked with providing full service to its citizens, both from the central government to the smallest government units. To improve services to the community, innovative ideas emerged aimed at service delivery. The services provided cover social, economic, education, health, and many more. One that is being intensified by the government is the existence of SINOVIK or the Public Service Innovation System. According to the PANRB Ministerial Regulation Number 30 of 2014, Public Service Innovation is a breakthrough in public service, whether it is an original creative idea and adaptation/modification that benefits society, both directly and indirectly. In other words, public service innovation itself does not require a new invention. It also includes a new contextual approach in public service innovation resulting from expansion and quality improvement of existing public service innovations.

Banyuwangi is one of the districts in East Java that has participated in implementing SINOVIK in its implementation. One of the SINOVIK programs used is the appearance of the GANCANG ARON program. GANCANG ARON is a new program implemented by the Banyuwangi government since November 2017. The program to deliver drugs to the homes of underprivileged patients is called Gancang Aron, short for Anticipation Cluster to Prevent Long Queues with Medicines to Patients' Homes. At the same time, in the Banyuwangi language, gancang aron means "get well soon."

At the beginning of its implementation, Gancang Aron used a pharmacist who directly delivered the patient's medication to the patient's address. However, starting in 2018, the Banyuwangi district government collaborates with the start-up company GO-JEK as a service provider to deliver medicines to patients for free. Of course, because drugs are not something that can be underestimated, GO-JEK drivers who want to take medication to patients must be provided with supplies first. Even so, it is still possible for errors in drug handling that must be given to patients. There is a need for direct education with pharmacists regarding the drugs delivered to patients.

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Through this research, a particular system from the GANCANG ARON program is needed to optimize system operations. The existence of system integration on the official website of the Blambangan Hospital makes it easy for pharmacists to provide education to patients online, not through GO-JEK drivers, in the hope of minimizing errors in taking medication.

## LITERATURE REVIEW

### **Development of Accounting Information System**

According to Bodnar, William, and Hopwood (2013), Information is organized data and is useful for making decisions based on the information obtained. According to Whitten and Bentley (2007), an information system is an arrangement of people, data, processes, and information technology that interact to collect, store, process, and provide it as a result or output (information) that will support an organization. At the same time, systems analysis and design is a process that integrates the use of many tools with the unique talents of systems analysts to systematically improve business through the implementation or modification of computerized information systems. Systems analysts can develop their work by taking on challenges and keeping new information technologies current in their profession through new application techniques and tools. There are three roles of a systems analyst: consultant, support expert, change agent, and ethical issues and guidance professionals to serve as a systems consultant. As users adopt new technologies, some systems analyst work will be devoted to integrating traditional systems with new ones to ensure a useful context.

As performed by systems analysts, system analysis and design seeks to understand what humans need related to systematically analyzing data input or data flow, processing or transforming data, storing data, and producing information in the context of a particular organization or company. Systems analysis and design are used to analyze, design, and implement improvements in user support and business functions that can be achieved by using computerized information systems. Systems analysis and design work by engaging current information system users and to support them in working with technology in organizational settings.

#### **Integrated Community Service System**

According to KEPMENPAN Number 25 of 2004 concerning general guidelines for the implementation of public services, the definition of public services is all service activities carried out by public service providers to meet the needs of service recipients and their implementation based on statutory provisions. Community service provides services to the community, which realizes the government's obligations as a public servant.

Meanwhile, according to Sinambela (Harbani Pasolong, 2010: 199), Public service is any activity carried out by the government for several people who have every activity and offer satisfaction even though the results are not tied to a product physically. According to Kepmen PAN, Number 58 of 2002, services from agencies and BUMN / BUMD are grouped into three types. This grouping is based on the characteristics and nature of the activities and service products produced: administrative services, goods services, and services.

Government regulation on the implementation of law No. 25 of 2009 on public services, says that an integrated service system is a management unit in the provision of services carried out in one place and controlled by a management control system to simplify, accelerate and reduce costs. To create quality public service activities, the Minister of State Empowerment issues Decree No.63 / KEP / M.PAN / 7/2003 regarding the pattern of organizing public services, including:

- a) Functional, namely the pattern of public services provided by service providers, following their duties, functions, and authorities.
- b) Centralized public service patterns are provided singly by service providers based on the delegation of authority from other relevant service providers.
- c) Integrated, one integrated, this service pattern is held in one place, which includes various services with no process linkages and will be served through several doors. Meanwhile, one door integrated, held in one place, includes various services related to the process and served through one door.

## **METHODS**

This research uses a descriptive qualitative approach. According to Neuman (2014: 34), this approach is used to describe a social phenomenon. Descriptive research provides detailed descriptions of specific situations, social settings, or relationships. Descriptive research begins with a well-defined problem or question and tries to describe it accurately. The research result is a detailed description of the problem or the answer to the research question. Descriptive researchers used most of the data collection techniques: surveys, field research, content analysis, and historical-comparative research.

This research uses a case study approach method. A case study, according to Basuki (2006), is a form of research (inquiry) or a study of a problem that has a particularity, can be done either with a qualitative or quantitative

approach, targeting individuals (individuals) or groups, even the wider community. Basuki (2006) adds that case studies emphasize maximizing understanding of the studied cases and not getting generalizations. Cases can be elaborate or simple. Time to study can be short or long, depending on the time to concentrate. Basuki (2006) also describes 3 (three) types of case studies, namely:

- a) Intrinsic case studies are research conducted because of interest or concern for a particular case. Research to fully understand the case, without producing concepts or theories or without generalizing.
- b) Instrumental case study is: research on an incredibly unique case is carried out to understand the issue better and refine a theory.
- c) The collective case study is an instrumental case study that is expanded to include several cases. Its purpose is to study a phenomenon or population, or general condition in more depth. Because it involves multiple cases with a focus both within each case and between cases, these case studies are often referred to as multiple case studies or case studies.

This research uses an intrinsic case study approach. The researcher chooses cases because of their interest and concern regarding the issues discussed in this research.

The method used in this research is the method of analysis and design by analyzing existing problems and providing designs or solutions that may be provided with sources of information obtained from journals, books, and other written references. Researchers use existing sources of information as a reference in constructing projects to solve or reduce existing problems, where researchers try to provide the best possible solution. This research is also practically based on where research is conducted to provide recommendations for solving a practical problem (problem-solving). Have the practical-based research results are often criticized for "not be generalized" because it was not intended for generalization and is intended to find solutions to specific practical problems related

## **FINDINGS**

Gancang Aron is a new program launched by the government in November 2017. The program Banyuwangi between drug into the patient's home. The underprivileged are named Gancang Aron, short for Anticipation Cluster to Prevent Long Queues by Delivering Medicines to Patients' Homes. At the same time, in the Banyuwangi language, gancang aron means "get well soon." At the beginning of the Gancang Aron program's implementation, the pharmacist will deliver the drug smoothly, and the pharmacist will immediately explain the medicine that the patient must take. However, along with its development, many patients have asked for Gancang Aron services. The insufficient fleet and insufficient workforce have made the government collaborate with GO-JEK as a delivery service provider for patients. In addition, this is also done for cost efficiency, where the government does not need to organize more fleets and add human resources. Although GOJEK drivers will receive training in advance, errors cannot explain the medication to the patient. Medication is not something that can be underestimated. If something goes wrong in taking medicine, it can have a dangerous impact on the patient.

Blambangan Hospital itself has implemented an online system for taking queue numbers. Every patient who has a hospital number can directly log in to the Blambangan Hospital website by entering the patient's hospital number and birth date. We use this to create a different system in the RSUD system, namely the Gancang Aron system, with the Gancang Aron system integrated with the Blambangan Hospital system, allowing pharmacists to explain the drugs they have finished mixing the medicines directly. In addition, patients can also see the status of their medication. Are the drugs being formulated, delivered, or have even arrived at the recipient's address? There will be a live chat feature available between the patient and the pharmacist to provide space for patients to ask the pharmacist directly about the GOJEK driver's drugs. Live chat will be closed automatically if the patient has stated that he has received the drug. This is done for the pharmacist himself is time-efficient if other patients want to ask questions. The existing live chat is not misused.

The Gancang Aron's business process, patients must first enter the hospital system or RSUD Blambangan. Blambangan Hospital has a website and application that can be used by patients in optimizing services. To enter the Blambangan Hospital system either through the website or the patient application, we only need the hospital number on their respective hospital card (for old patients). In contrast, you can register manually at the Blambangan Hospital counter for home membership for new patients. For the password, patients only need their date of birth. When registering for membership, prospective patients usually have to submit their identity cards or other identity cards (especially KTP). Suppose the prospective patient already has a hospital membership card. In that case, it makes it easier for prospective patients to log into the Blambangan Hospital system through the website or application.

After entering the hospital system, there are many services in the system, such as taking queue numbers online, checking the available hospital rooms, and adding the feature, namely Gancang Aron. Patients who want their medicine to be delivered can leave their prescription to the pharmacist and ask to make delivery via Gancang Aron. Patients can

wait at their medicine house and check through the Gancang Aron system their drugs' status, whether they are still waiting in a queue, concocted by pharmacists, delivered by Go-Jek drivers, or even arrived. This can minimize interdisciplinary errors because if the drug status has been received. In contrast, the patient has not received it; it can be ascertained if the drug is delivered to the wrong address. If something like that happens, the patient can call the Go-Jek driver who delivered their medicine. The driver's name and the number will be entered automatically on the Gancang Aron system when the driver delivers the drug because this requires a more complex integration between the hospital system, Gancang Aron, and Gojek. If the drug delivered has been received by the patient, the patient can confirm the receipt of the drug through gancang aron. However, suppose the patient still has questions regarding the medicine that was delivered. In that case, the patient can do a live chat with the pharmacist to ask about the medicine to be consumed. If the problem is resolved, the patient can confirm receipt of the drug. The live chat will be closed automatically if the patient has confirmed receipt of the drug. This is intended so that no spam chat gets to pharmacists to work more effectively and efficiently.

Previously, Gancang Aron was a program that was not integrated with the hospital system. However, with this system, Gancang Aron was able to enter the existing Blambangan Hospital system. In the master file above, Gancang Aron requires data from patients, pharmacists, and drivers who deliver drugs; all the required data will be integrated into the hospital system. For patients, when registering manually through the hospital counter, the hospital system will store some personal data such as name, address, gender, telephone number, and some personal data required and printed on the identity card. This simplifies the database required by the Gancang Aron system because the hospital system has provided it. For pharmacists themselves, they will need an employee ID and name to see who is responsible for the drugs made and given to patients. For Go-Jek drivers themselves, patients and drivers are not connected directly because the cooperation between Go-Jek and the Banyuwangi government regulates the intermediary costs of services provided by Go-Jek drivers, so patients do not have to pay inter-delivery fees drug. However, to be more integrated, Gancang Aron will require data such as the driver's name and the date the drug was delivered so that patients can check their drugs' status through the Gancang Aron system. In the Gancang Aron system, it will display the driver's name and driver's cellphone number, which the patient can contact to ask if there is a problem in the drug delivery process. In addition, drivers will receive patient addresses from the Gancang Aron database and hospitals to make drug delivery easier.

## **CONCLUSION**

The Gancang Aron program aims to make it easier for medicated patients to go to the Blambangan Regional Hospital to get better service. With the use of existing technology and some development, the Gancang Aron system can be integrated with the Blambangan Hospital system to minimize errors in patient understanding in taking drugs because they can directly consult a pharmacist. In addition, the Gancang Aron system will make it easier for patients to check their drug status so that patients do not have to worry about when their drugs will be delivered. It is hoped that the integration between the Gancang Aron system and the Blambangan Regional Hospital system will make it easier for patients, pharmacists, and even Go-Jek drivers as sender services in implementing this program from the Banyuwangi Regency local government.

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