Design Of SOQ Tour And Travel Information Systems Web Based For Promoting

Lulu Jola Uktolseja, Melda Agnes Manuhutu, Natasya Virginia Leuwol, Ferdinando Solissa, Berti Pakaila

Abstract: Raja Ampat as a potential tourist destination in Indonesia has the power to introduce Indonesia in the eyes of the world. However, currently Raja Ampat is not yet widely known because information about various tourist attractions there is still being distributed manually. This can still be optimized by using a website-based information system that has been used massively by various groups throughout the world. This research helps tour and travel parties, one of which is SOQ Tour and Travel to promote various tourism programs through a website that can be accessed via the internet on computers or mobile phones.The method used in writing this paper is research consisting of interviews and observations as well as library research, while the programming language used is PHP and software for designing interfaces using Abobe Dreamweaver CS 6. Making a database using MySQL with the XAMPP application. The system is made on a website basis, so it is easily accessible to every user, and can be accessed anywhere if connected to the internet

Index Terms : SOQ Tour and Travel, Information Systems, Web Based

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1. INTRODUCTION
The amount of internet surfersis increasing at a staggering rate nowadays. Today's changes in the digital direction, make each person flock to adjust and use various electronic devices. Information technology and the Internet are becoming a necessary resource for the convenience and enjoyment of individuals [1]. For many users of the Internet, checking social networking sites has become part of daily computer usage, and numbers of these intensive users is rising rapidly [2]. Furthermore, the internet has brought huge advances for businesses. Within organisations themselves it has revolutionised communication, accelerated decision-making, enabled collaboration across organisation and geographic borders and provided platforms for the adoption of innovation [3]. The benefits of using information technology is quick and easy procedure can also support the company's business processes, to further improve services and the quality of information produced and provide great financial benefits for the company. The rapid development of information technology becomes a big challenge for all parties. Implementation of information system is a form of development information technology [4]. Rapid changes delivery system throughout the world have been possible by the advancement of Information System (IS).The use of a well-informed and directed information system will be very possible to help a lot of work in various aspects of life. Therefore, by adopting Information System(IS) applications such as website would help tour and travel to gain the great benefit. The information can contribute to effective decision making or planning to be carried out [5]. Sophistication and technological excellence can also be used well to introduce tourist areas in Indonesia, where Indonesia as the world's largest archipelago, has so many beautiful tourist destinations that are worth visiting and enjoying. Moreover, Indonesia has been placed seventh in Lonely Planet's top 10 countries to visit in 2019, highlighting the island's diverse destinations. This has proven the position of Indonesia in the eyes of the world so that it cannot be denied that many people all over the world flock to Indonesia to enjoy its beauty. Raja Ampat as one of the tourist destinations known as Hidden Heaven is still not known to many people, because of the limited information about it. Tourism information is one of the most important elements of tourism infrastructure [6]. Getting and collecting tourism information, especially a new tourist destination is certainly not easy. This will lead to the development of tourist

areas to be slow and even stagnant. One factor that can be a successful opportunity for a tourism business is the use of information technology. Since the information becomes so much popular and influents towards many kinds of businesses. Information technology is used to assist improving the work performance and organization business processes [7]. This is also an opportunity for travel businesses such as tour and travel as a forum for travel promotion to introduce tourism programs owned. Especially for tour and travel in Raja Ampat in particular, they can take advantage of this technological development optimally to improve the effectiveness and efficiency of their work. SOQ Tour and Travel as a Raja Ampat tour and travel service provider is aware of the opportunity to gain business profits by utilizing a network that is internet marketing. The high public interest in the field of travel, especially Raja Ampat as one of the most loved tourist destinations in the world, causes SOQ Tour and Travel as a tour and travel provider must improve its services to be able to compete with many other companies. In carrying out its current business activities SOQ Tour and Travel still uses brochures / pamphlets to do marketing services as well as telephones or cell phones as a reservation tool. The problem that exists in the current corporate system is that tourists find it difficult to register because they have to first come to the company, and the company has difficulty promoting the institution to be widely known to tourists. The use of brochures is only able to reach potential tourists in the Sorong city and district area. To reach tourists outside of Sorong City and Regency or foreign tourists, SOQ Tour and Travel requires a more maximal and more effective service system. With the internet in this case the website, SOQ Tour and Travel can offer their products or services for 24 hours which will enhance and expand this business. The public can quickly get the latest information about SOQ Tour and Travel, as well as helping companies in making decisions to improve the spread of the tour package market. In addition, through computerized systems, data is more neatly arranged and structured and stored safely in the database. It can avoid errors caused by user or staff at the organization itself besides of easy and fast access to deliver new information [8], which makes it easier for service providers to evaluate data. Service users can get information more accurately and quickly. With the increasing promotion of a tourist area, it also directly increases regional income and increases various other economic aspects. In this globalization era, the small company

should to compete according to be exist still and stay. The competitive environment has changed dramatically in past two decades and has become very complex [9]. About 39 million people watch a video online everyday, 66 million read a blog, and 16 million post to blogs, creating an explosion of new writers and new forms of customer feedback that did not exist five years ago [10]. It means people waste their times a lot on the internet. Meanwhile, by taking the steps to do innovation, the company will get more incomes.

2 REVIEW OF LITERATURE
In this section will be discussed about the general definition of the key terms and the objectives of system.

2.1 Definition of Information System
Information system is a system in an organization that brings together the daily transaction processing needs, supporting managerial operations and activities of one and providing parties with reports that are needed [11]. Thus, an information system is a system within an organization coordinated by resources to change input (data) in order to reach the target.

2.2 Information System Objectives
The purpose of information systems is to produce information (information) from the form of data that is processed into a form that is useful for the users [12]. The purpose of the information system consists of Usefulness, Economy, Reliability, Customer Service, Simplicity, and Flexibility.
1. Usefulness
   The system must produce accurate, timely and relevant information for management decision making and operating personnel within the organization.
2. Economic
   All system component parts include reports, controls, machines must contribute a value of at least the amount needed.
3. Reliability
   The output of the system must have a high degree of accuracy and the system itself must be able to operate effectively even when human components are absent or when the engine components do not operate temporarily.
4. Customer Service
   The system must provide good or friendly service to customers. So that the system can be sought after by its customers.
5. Simplicity
   The system must be simple enough so that it is structured and its operation can be easily understood and the procedure is easy to follow.
6. Flexibility
   The system must be flexible enough to handle the changes that occur, its interests are reasonable in conditions where the system operates or in the requirements required by the organization.

3 METHOD
As briefly mentioned in the introduction, the purpose of this study is to design and implement SOQ Tour and Travel Information System, Web Based. In this section, the system development model is explained and the details of the system design analysis are explained below. The details include the flowchart and Unified Modelling Language (UML).

3.1 System Development Method
The system development method consists of a series of activities that can be grouped into several stages, which help researcher in developing the system. In this study researchers used a prototype development model. It defines a set of general goals for software, but does not identify detailed requirements for functions and features [13]. In other cases, developers may be unsure of the efficiency of an algorithm, the adaptation of an operating system, or the form that human-machine interaction must take. In this and other situations, the prototype paradigm might offer the best approach.
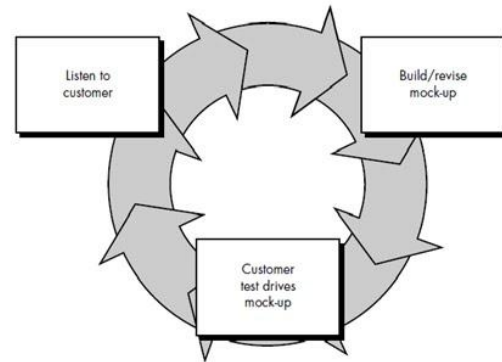
Figure 1 Prototype Method

1. **Listen to Customer**
   a. Collection of needs
      Customers and developers together define the format of all software, identify all needs, and outline the system that will be created. In this stage, the developer conducts observations and interviews with the admin of SOQ Tour and Travel.
2. **Build/Revise Mock Up**
   a. Build prototyping
      Build prototyping by creating a temporary design that focuses on presenting to customers.
   b. Evaluation of prototyping.
      This evaluation is carried out by the customer whether the prototyping that has been built is in accordance with the customer's desires. If it is appropriate, step 4 will be taken. Otherwise prototyping is revised by repeating steps 1, 2, and 3.
   c. Encoding the system
      In this stage the agreed prototyping is translated into the appropriate programming language.
3. **Customer Test Drives Mock-Up**
   a. Test the system.
      After the system has become a software that is ready to use, it must be tested before use. The test in this study is Black box testing.
   b. System Evaluation.
      Customers evaluate whether the finished system is as expected. If yes, step 7 is done; if not, repeat steps 4.
   c. Using the system.

Software that has been tested and accepted by customers is ready to use

4   System Design

The system design will show the following steps of making this system. It included by flowchart and unified modelling system especially the use case diagram.

4.1 Flowchart

The flow chart is a chart that explains in detail the steps of the program process [14]. The following is a flowchart of the travel agency website system that will be built:
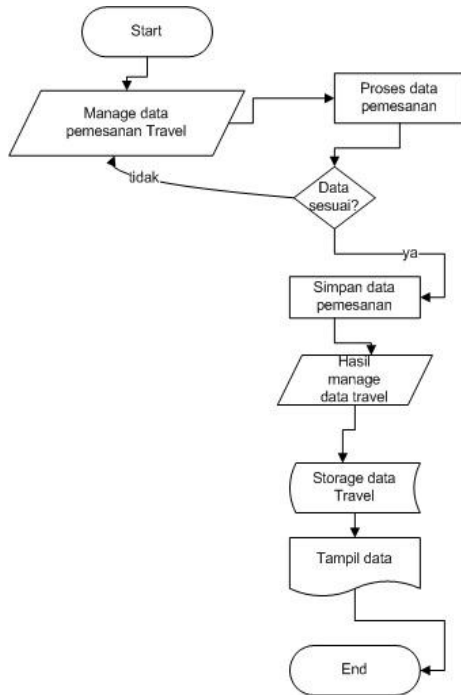

Figure 2: Flowchart System

Figure 2 illustrates the condition of the system when it starts. User manages the order data such as registering, editing and deleting then the data is processed. If the data is not suitable then it will return to the initial menu. Whereas, if the data is appropriate, the data will be stored in the database, then the results of managing the data will appear as output. The last step to do is logout as the end of the entire process.

4.2. Unified Modeling Language (UML)

The use case diagram system will explain who is involved in the system (actor) and what is done by the system [15]. UML is a visual modeling method as a means to design and or make software. UML is a visual language for object-oriented language modeling, so all elements and diagrams are based on object oriented.
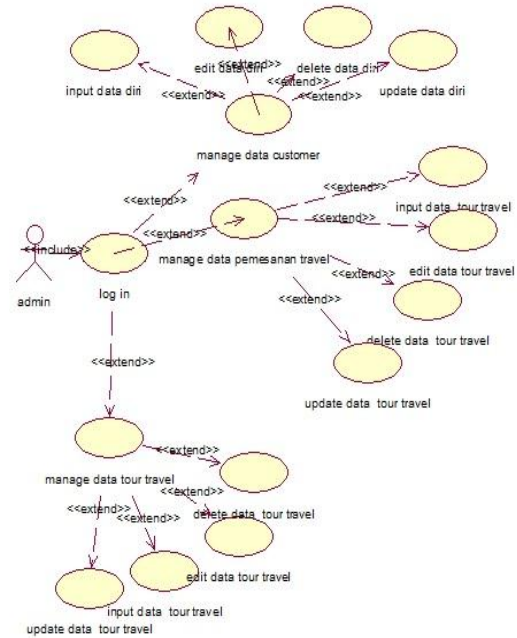
4.1.1   Use case Diagram (Admin)

Figure 3: Usecase (Admin)

Figure 3 explains that in the use case diagram, after entering the system, the officers/staff can manage the data on this system. Manage the data that can be done, among other things, through customer data such as entering, changing, deleting and updating customer data. Then manage travel booking data such as entering, changing, deleting and updating ordering data. The last admin can manage travel tour data such as entering, changing, deleting and updating travel tour data.
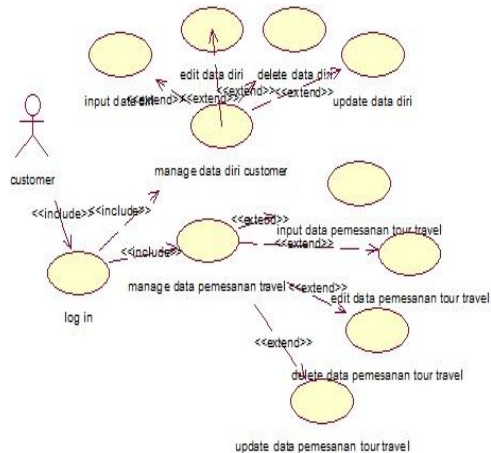
4.1.2   Use case Diagram (Customer)

Figure 4: Use case Diagram (Customer)

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Figure 4 explains that in use case this diagram the customer after entering the system can manage the data on this system. Manage data that can be done including avoiding personal data such as entering, changing, deleting and updating customer data. Then manage travel booking data that customers do such as entering, changing, deleting and updating ordering data.

5   Implementation

5.1 Website Page

5.1.1   Main Page

Figure 5: Main Page

The main page of the system is the initial appearance of the website. This page contains all menus that can be accessed by users including travel pages, tour packages, galleries, contacts, news and logins.

5.1.2   Tourism Package Page
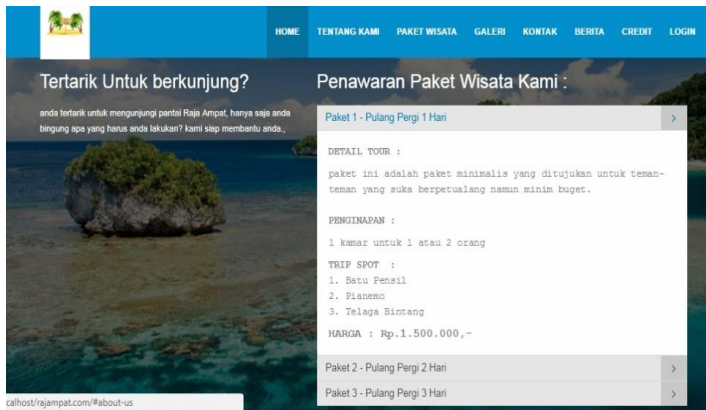
Figure 6: Tourism Package Page

This page shows the package details chosen by the user. There is information about the selected package.

5.1.3   List of Package Page

Figure 7: List of Package Page

This page shows a list that users must fill in when they want to register. Among them, the user must fill in their full name, email address, password, confirm password, mobile number, number of participants, select the package.
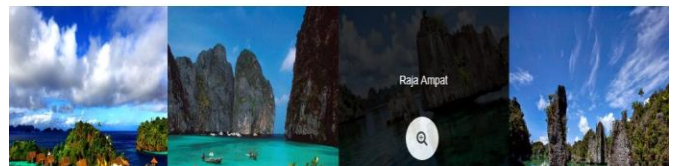
5.1.4   Gallery Page

Galeri Kami

Figure 8: Gallery Page

This page shows the image display that aims to introduce the place that the user will visit.

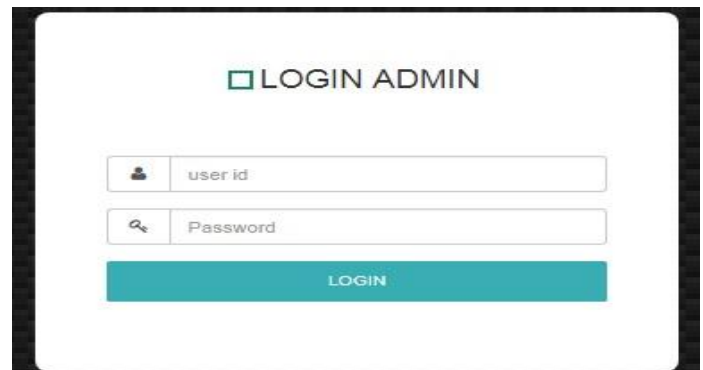## 5.2 Admin Page

5.2.1   Login Page

Figure 9: Login Page

The login page is the main display page of this system, on this page there are 2 (two) columns that must be entered, as follows:

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- Username: Officer / staff input the specified username
- Password: Charging passwords is done by staff for further system access processes.

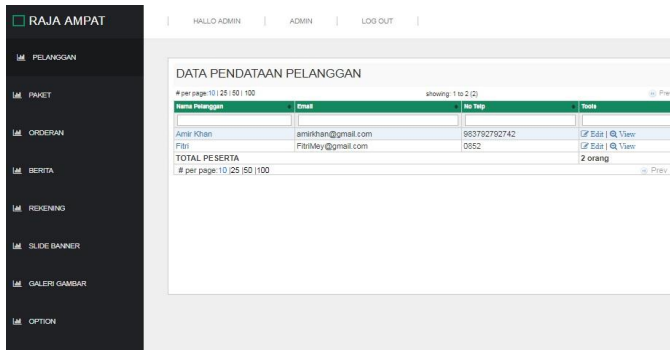### 5.2.2   Subscriber Data

Figure 10: *Subscriber Data*

This page displays subscriber data that has been registered.
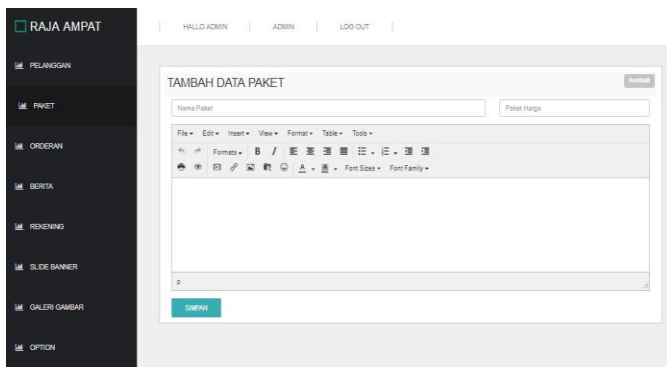
5.2.3   Input Package Data

Figure 11: *Input Package Data*

This page is managed by an administrator with the aim of adding or reducing package data provided by travel.
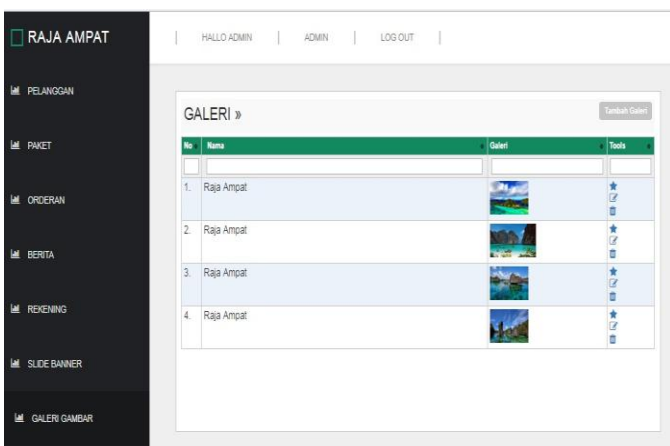
5.2.4   Gallery Edit

Figure 12: *Gallery Edit*

Through this page, administrators can display the images displayed on the website in order to encourage users to buy tour packages.

5.3 Website Testing

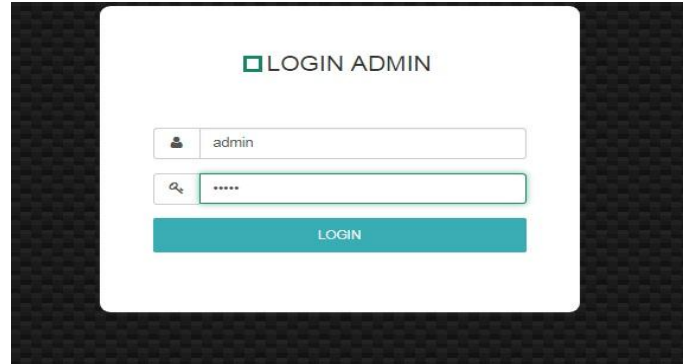### 5.3.1   User Login System Testing

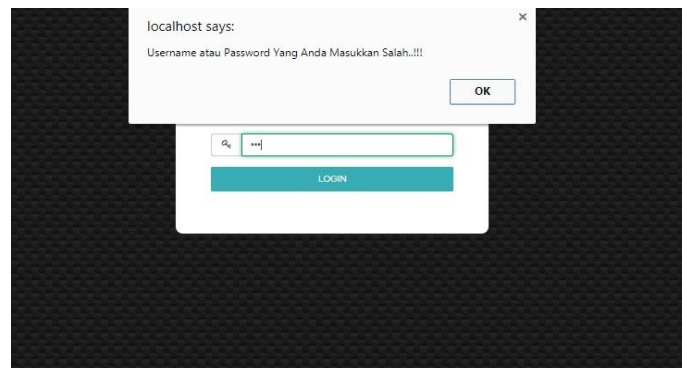***Figure 13:*** *User Login System Testing*

Figure 14: *Notification of Failed Login Process*

Figure 13 is tests of the login system, where the system login test is successful when the user inputs the username and password data. If the input of the username and password is wrong, the system will provide failed login information (Figure 14).
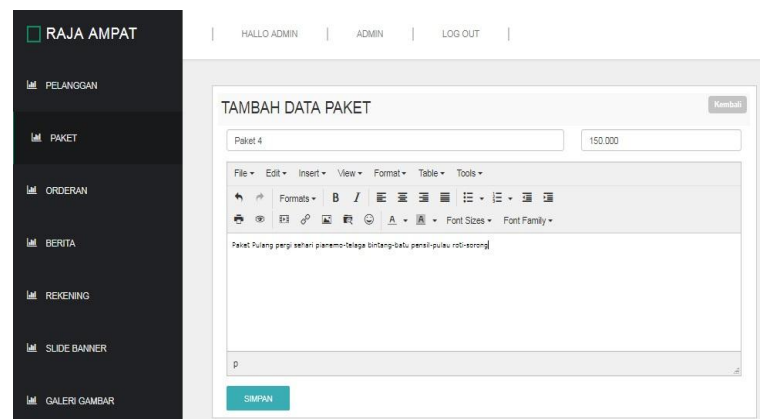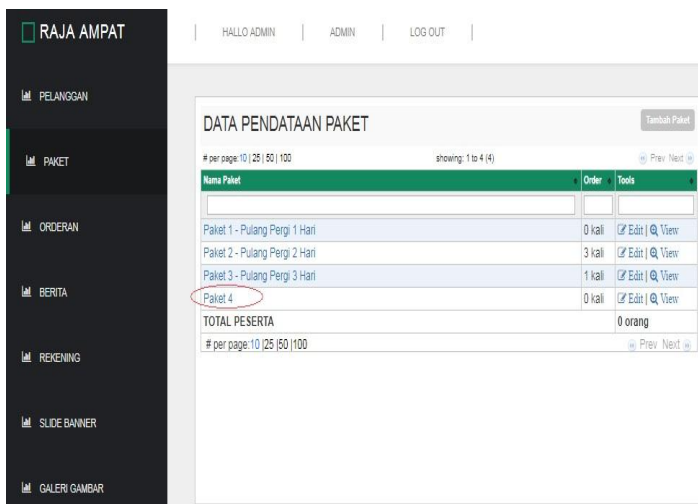
5.3.2   Add Data Package Testing

Figure 15: *Add Data Package Testing*

Figure 16: *Data Package*

The picture above illustrates the process of testing the packet data add function. All fields from the add package page must be inputted. After inputting, the data will automatically be stored in the database system and will appear on the package data page as shown in figure 16.

5.4 The Comparison of Old and New System

This system testing is done to test the effectiveness between the old system and the new system. The following is a table of differences between old systems and new systems:

Table 1: *Testing Old Systems with New Systems*

OLD SYSTEM	NEW SYSTEM
1. The package registration process uses the telephone system or directly visits travel 2. Registration of registrants is done manually by writing on books so that sometimes they are not accurate or accurate 3. Promotion is done through print media such as brochures	1. The registration process is done automatically by listing directly on the website 2. The process of data collection and data back-up can also be done in a computerized manner 3. Promotion is done through a website so that it allows users to see anytime and anywhere

6 CONCLUSIONS

Based on the results of testing and analysis of the Raja Ampat travel website, some conclusions can be drawn including:
1. Based on the results above it can be concluded that the difference from the old system with the new system, where the system is currently more effective in carrying out data collection and promotion so that it can save time and effort and work processes.
2. The website system that is built can run well and can update the manual system while it is still being used
3. With this system made, the need for information about travel schedules and prices can be more easily accessed
4. This system also helps the ordering and promotion process so that it can be carried out more effectively and efficiently compared to the old system that is currently done.

5. The system implemented will greatly help officers to manage the information needed both for promotion and managing order data

REFERENCES

[1]. Walsham, G. ICT's and global working in a non-flat world. Information technology in the service economy: Challenges and possibilities for the 21st century (pp. 13- 25). Boston: Springer. 2008.

[2]. Smith, J.: Intreguing trends in social networking growth during 1H 2008. from http://www.insidefacebook.com/2008/07/27/intriguing-trends-in-social-networkinggrowth-during-1h-2008/. 2008

[3]. Mark Goodridge. Competitive Advantage or Challenge? Tthe Impact of Social Media on the Organization's Effectivenes. The OE Journal. Number 5 Issue 1, 2013. 2013.

[4]. Manuhutu, Melda. Uktolseja Lulu, Gaspersz, Sherly.: Academic Information System for Student (Case Study: Victory University of Sorong). International Journal of Computer Applications (0975 – 8887)Volume 180 – No.43, May 2018.pp.26-33, 2018.

[5]. Patterson, A.: Information Systems - Using Information. Learning and Teaching Scotland. 2005.

[6]. Renata Biadacza , Marek Biadaczb.: The use of modern information technology in tourist information systems on the example of city of Czestochowa. International Conference on Communication, Management and Information Technology (ICCMIT 2015), https://ac.els-cdn.com/S1877050915028690/1-s2.0-S1877050915028690-main.pdf?_tid=212611bb-ae95-40fe-ad1f-96bd8153f694&acdnat=1543064837_3c3f9a4eaa0b23f8bec7e34780349de0, 2015. 1105 – 1113. 2015.

[7]. Manuhutu, Melda. Et al.: SOMA Method in Modeling Business Process Automation of Thesis Proposal Submissions (case study: SWCU – Psychology Faculty). Journal of Theoretical and Applied Information Technology . ISSN: 1992-8645, Vol 58, No.2 pp.327-335. 2013.

[8]. Manuhutu, Melda, Uktolseja, Lulu.: Design and Implementation of Online Students' Complaint (Case Study of English Study Program at Victory University, Sorong). International Journal of Computer Sciences and Engineering. 2018.Volume-6, Issue-1, E-ISSN:2347-2693. pp.228-232. 2018.

[9]. Stock, G., Greis, N. and Kasarda, J.: Logistics, strategy and structure", International Journal of Physical Distribution & Logistcs, Vol. 29, no. 4, pp. 224-239. 1999.

[10]. Pew Research Center Internet And Technology.: Generation Online 2010. By Kathryn Zickuhr http://www.pewinternet.org/2010/12/16/generations-2010/December 16, 2010. Accessed November 26th 2018. 2010.

[11]. Jogiyanto.: Sistem Teknologi Informasi,, Yogyakarta: ANDI. 2003.

[12]. Jogiyanto.: Analisis dan Desain Sistem Informasi. Yogyakarta : ANDI. 2010.

[13]. Pressman.: Software Engineering : a practitioner's approach. New York: McGraw-Hill, , 68. 2. 2010.

[14]. Lasminiasih, et al. Perancangan Sistem Informasi Kredit Mikro Mahasiswa Berbasis Web. Jurnal Sistem Informasi (JSI), VOL. 8, No. 1, April 2016, ISSN Print : 2085-1588 ISSN Online : 2355-4614. 2016.

[15]. Ade Hendini. Pemodelan Uml Sistem Informasi Monitoring Penjualan Dan Stok Barang (Studi Kasus: Distro Zhezha Pontianak). Jurnal Khatulistiwa Informatika, Vol. Iv, No. 2 Desember 2016 107. 2016.