

CHAPTER I

INTRODUCTION

VI.1 Research Background

In the digital age, the Internet is a mandatory requirement for everyone including in Indonesia. In the year survey until 2015 more than 80% of the population in Indonesia uses the Internet. A very significant increase in Figure I.1, internet users in Indonesia caused a start to impact on the habits of daily activities. Starting from the need to work, study, even for everyday activities can not be separated from the Internet. The growing development of Information Technology in Indonesia will also result in a high demand involving the Internet.

Indonesia is a country rich in tourism spots. Indonesia has more than 962 places of tourism spread from all over Indonesia. Not separated from the number of tourists who are also continuously increasing every year. According to the Ministry of Tourism in 2014 to 2015 Indonesia experienced an increase in foreign tourists by 150%. According to the Central Bureau of Statistics, Indonesia has a total of foreign tourists in 2015 of 10,406,759 foreigners, and of that number 98% visited Indonesia aims to tour or travel in Indonesia. With the growth of tourists is very high it will be high also the need for a stopover place for the tourists who visit Indonesia.

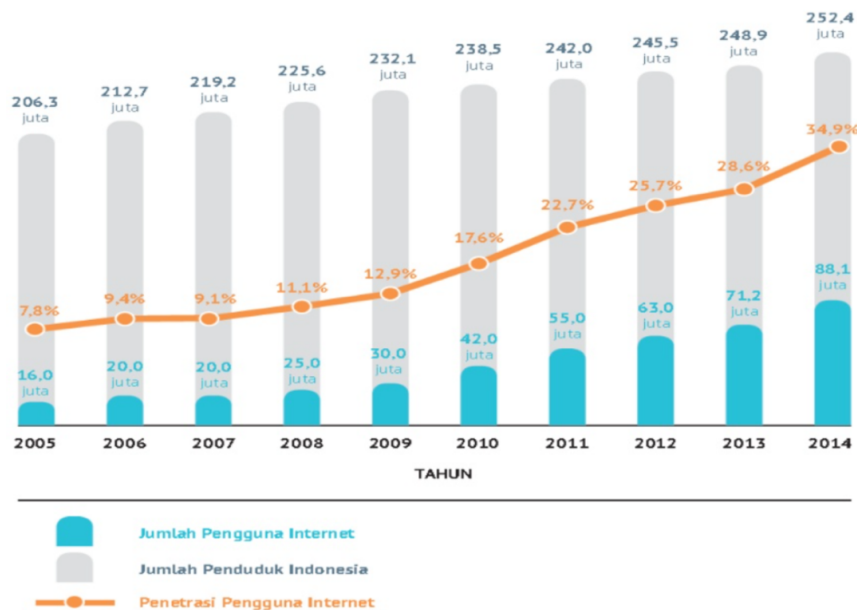


Figure I.1 Statistics of Internet Users (source: APJII, 2015)

The Indonesian state is not only rich in tourist attractions, but it also includes a country rich in culture. According to the USNews, Indonesia holds 8 hosts in UNESCO's World Cultural Heritage category and holds 6 cultures that belong to UNESCO's Intangible Cultural Heritage (USNews, 2016). It is a very good achievement in maintaining and introducing Indonesian culture in the eyes of the world.

Generally, tourists when traveling in a place do not need a luxurious residence, but they only need a place to put their luggage and for a place to rest. Most tourist attractions in Indonesia do not provide a special residence for tourists. The best option is the houses of the locals who have unused rooms. In addition, to facilitate the tourists get a place to stay while traveling, can also improve the economy of local communities. Bellow is the statistic of room rentals.

**PERKEMBANGAN JUMLAH KAMAR USAHA AKOMODASI
MENURUT KLASIFIKASI AKOMODASI, 2010 - 2014**

Jumlah Kamar Usaha Akomodasi (buah)		2010	2011	2012	2013	2014
TOTAL		353.138	381.457	405.778	430.793	469.277
Klasifikasi Akomodasi	Hotel Bintang	124.789	142.481	155.740	171.432	195.886
	Bintang 5	28.952	29.743	31.626	34.595	35.639
	Bintang 4	35.632	39.641	45.638	50.786	58.397
	Bintang 3	30.457	39.784	43.596	47.041	58.181
	Bintang 2	15.852	17.428	20.032	23.595	27.909
	Bintang 1	13.896	15.885	14.848	15.415	15.760
	Akomodasi Non Bintang	228.349	238.976	250.038	259.361	273.391
	Hotel Melati	183.047	189.780	195.014	203.216	219.936
	Penginapan remaja	4.928	5.472	6.172	5.228	5.778
	Pondok wisata	15.995	17.471	23.697	23.293	22.915
	Villa	Data tidak tersedia				8.749
	Jasa akomodasi lainnya	24.379	26.253	25.155	27.624	16.013

Figure I.2 Statistic of Room Rentals In Indonesia

It should be noted that tourism has a significant impact on tourism-related sectors (eg hotels, restaurants, shops, etc.) but also affects other sectors, such as textiles, food, the development due to the emerging sectoral relationships (Murillo Viu, 2014). With so the tourism sector will greatly help build the economy of the population around the tourism spots, cities, and areas around the sights.

By leveraging the development of Information Technology, the needs of travelers to find a place to stop while on the go and the richness of culture owned by Indonesia, came the idea to create an application that will be a place for tourists to find a place stopover while traveling. This app is new to Indonesia, as apps not only help travelers get a place to stop while on the go but the app also helps the tourists introduce local culture when they stop by.

Utilization of technology in the rental of rooms/shelter for tourists or backpacker is not new to be made. There is already some applications/software that provide rental or residential services for tourists/backpackers. Airbnb is a network of online and home-based accommodation markets that allow users to register or rent properties for use in the short term. A very contrasting difference from Airbnb with the product to be generated in this study is the utilization of the cultural sector for tourists. Thus the tourists will get a more in-depth knowledge of the culture where tourists stop.

This research will produce a product called Rumantara. Rumantara to be built using PHP language on the back-end side and Javascript on the front-end side then Java on the Android Mobile side. Rumantara uses the SaaS (Software as a Service) application delivery model, where software is developed by a vendor and software that develops hosted and operated web applications (either independently or through third parties) for use by customers via the Internet.

VI.2 Problem Definition

The problems definition based on this research background are as follows :

1. What facilities are needed by room providers to rent their rooms to fit the needs of the tenants?
2. What kind of application that researcher need to provide for target user?
3. How to improve user satisfaction for using Rumantara web application?
4. What feature that application need to provide to make transaction between users easier?

VI.3 Research Objectives

The research objectives as follows:

1. Create a Rumantara web application to provide a place for users who want to rent their empty or unused room to traveler or tenants.
2. Provide Rumatara web application to give more detail information and advantages about room renting.
3. Improving the performance of website to make user can access faster with less bandwidth usage.
4. Provide e-payment system to help users make payment of every transaction.

VI.4 The Limitation of Study

The problem scope of this research as follows:

1. The rooms and users data sources are not real as the application still in alpha version.
2. This research does not discuss the security of the process when tenants stay in the rented room.
3. This research is only limited to the development of front-end web application in Rumantara.
4. All data processing comes from the back-end system.
5. Application uses Restful-API to distribute the data from server.
6. This research only uses speed testing and cross-browser testing and load testing to test the web application.

VI.5 Benefits of Research

The benefits of this research defined as follows:

- 1 For room owner:
 - a. Can help to improve the economy by rent their unused room.
 - b. Can give a value for empty or unused room.
- 2 For traveler/tenant:
 - a. Can easily get a place to stay for a while as needed.
 - b. Can reduce the burden of traveler/tenant while doing the tour.
 - c. Can get detail information about available room with the advantages.

3 For the application providers:

- a. Can get the location of traveler/tenant destination and room location.
- b. Can get detail information of room that rented using the application.
- c. Can get private information of the users.

VI.6 Research Systematics

This research is described using the following systematics of writing:

CHAPTER I INTRODUCTION

This chapter contains a description of the background research, the formulation of the problem, research objectives, limitation of the study, the benefits of research, and systematic writing.

CHAPTER II LITERATURE REVIEW

This chapter contains literature relevant to the problems studied and discussed also the results of previous studies. The second section discusses the relationship between the concept and the description of the research study and research contributions.

CHAPTER III RESEARCH METHODOLOGY

In this chapter described the steps detailed study includes: step formulating the research problem, formulate hypotheses, and develop models of research, identify and conduct research operationalization of variables, preparing questionnaire research, designing data collection and processing, test instruments, designing analytical data processing.

CHAPTER IV ANALYSIS AND DESIGN

This chapter will explain the research design included use case diagram, activity diagram, and the design of methodology that will be implemented.

CHAPTER V TESTING AND IMPLEMENTATION

This chapter will explain about how the process of application development until the error checking step and users feedback.

CHAPTER VI CONCLUSION AND RECOMMENDATION

This chapter describes the results achieved in this study. Any problems that have been resolved by this study. In addition, also described the suggestions for future research.