

CHAPTER I INTRODUCTION

I.1 Research Background

In the Digital era, the Internet is a primary needs for almost everyone including in indonesia. In the 2015 survey more than 80% of the population in indonesia uses internet as their daily needs. Starting from the need to work, study, even for everyday activities people can not be separated from the internet. With the growth of information technology in Indonesia will also cause the high demand fore internet.

Indonesia is a country rich in tourism spots. Indonesia has more than 962 places of tourism spread from all over Indonesia. According to the Ministry of Tourism in 2016, the number of foreign tourist arrivals increased almost in every month when compared with the previous year. In addition, according to Pusdatin Kemenparekraf & BPS, from 2010 to 2014 Indonesia continues to experience an increase in tourist visits to more than 130 percent (BPS, 2016).



Figure I-1 Number of Tourist in indonesia for 2015 vs 2016

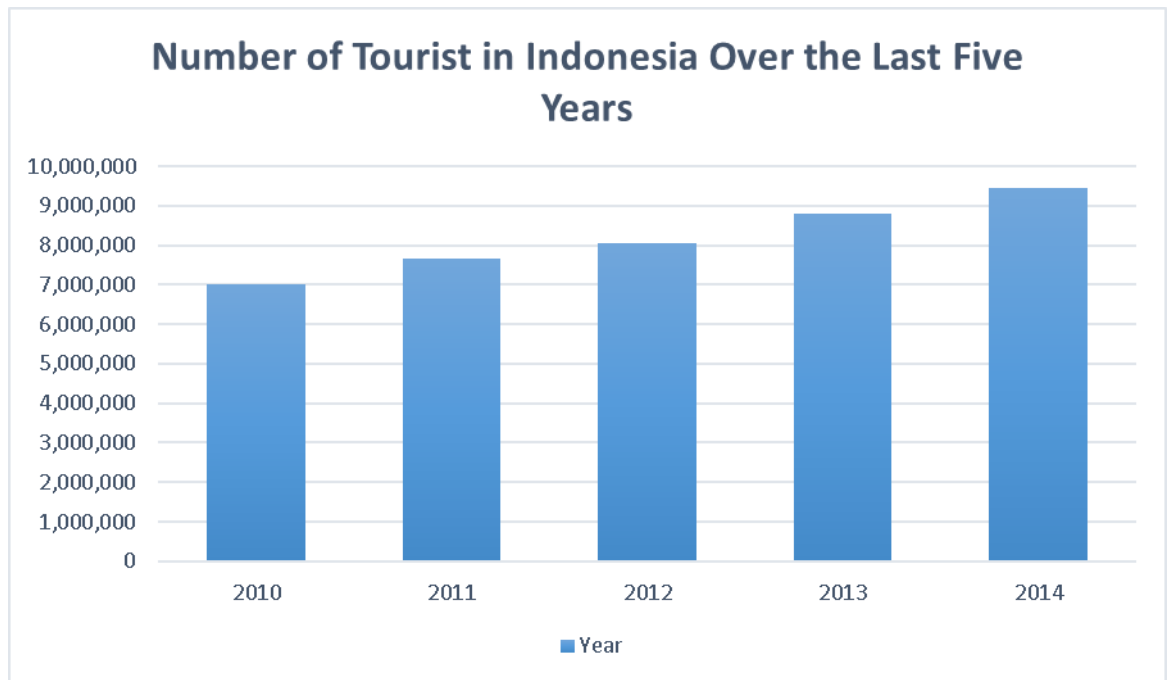


Figure I-2 The increase of traveler in indonesia over the last years

Based on data shown above, as we can see the number of tourist or traveler visits continues to increase for every year. With the high number of traveler in indonesia, directly affects to the high number of reservations for hotel rooms, apartments, villas, etc. This can be used as a business opportunity, which can also increase the income of local people by way of residents rent out rooms in their homes as a place stay over for the tourists. Different to villas or guest houses, locals who rent out their rooms will stay with tourists. This can be a social experience value for the tourists, by living together with the locals they will be more familiar with the local culture. In addition this will also help traveler to reduce their money cost.

**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

Sumber : Statistik Hotel dan Akomodasi Lainnya (BPS)

Figure I-3 Statistic of Room Rentals In Indonesia

Base on the information from Figure I-3, seen that the number of non-star hotel is higher than the star hotel. Which inside the non-star hotel contain five category.

With the utilization of information technology, the high number of traveler and needs of traveler to search a place for stay over. Rumantara exists as a bridge between the room renter as in this case traveler and the room hoster or locals to help their communication on room booking, payment, etc. Beside the application for the room hoster and traveler, the platform for an internal view will also provide to handle the master data, transaction, verification and showing a dashboard. With the utilization of dashboard, this can provide a better view for organization that can help the further move for improving their strategy. This will help to display data that originally came from many sources, and display metrics that are the result of simple or complex calculations

For managers, dashboarding is now perhaps the most popular area of their BI strategy, and after about 20 years of evolution in BI software and related technologies, this business tool is coming of age. One of the key ingredients of

successful performance management in any organization metrics, a dashboard is a popular way to provide those metrics to users (Nils Rasmussen, 2009).

I.2 Problems Definition

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

1. What kind of dashboard that needed to implement within the Rumantara web application especially for the user and admin?
2. What features that need to be provides within the Rumantara web application especially for the admin platform?
3. What data or information that should be categorized as a Key Performance Indicator and metrics within the Rumantara web application?

I.3 Research Objectives

The objectives of this research are as follows:

1. Create a dashboard within the Rumantara web application so that information can be visualize in terms of dashboard.
2. Provide features for enabling admin to verify user profile, verify top up request payment, confirm request for withdraw and manage some master data within the Rumantara web application.
3. Create a list of KPIs and Metrics,from the current information that can be use to give an insight for measuring the performance of the Rumantara web application.

I.4 Research Limitation

The problem scope of this research are:

1. This application will be develop in web application.
2. For the user dashboard, due to the use of RESTful-API concept within the Rumantara web application especially for user side . API service will be created to distribute data to the client.
3. The rooms and users data sources are not real as the application still in alpha version.

4. For software testing, will be used unit testing, usability testing, and integration testing.

I.5 Benefits of Research

The benefits of this research defined as follows :

1. For admin
 - a. Able to monitor performance for Rumantara web application
 - b. Helps in managing master data.
 - c. Help in the process of verifying the user profile.
 - d. Helps in confirming topup requests from users while adding credit or balance to users.
 - e. Helps in confirming withdraw request from users.
2. For Room Hoster
 - a. Providing a notification related to any verification done by admin.
 - b. Providing information related to the average order per month for room hoster.
 - c. Providing information related to the income for the room hoster.
3. For Traveler
 - a. Providing information related to the current ordered room for traveler.

I.6 Writing Systematics

This research is described using the following systematics of writing:

CHAPTER I

Introduction

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

CHAPTER II	Literature Review This chapter contains basic literature and relevant theory of the problem examined from different sources to support the research.
CHAPTER III	Research Metodology This chapter contains information on related conceptual methods into an overview of the application. Explains detailed step of the research, these steps include formulating research problems, formulating hypotheses, developing research models identifying and operationalizing research variables, designing data collection and processing, conducting instrument tests and designing data processing analysis.
CHAPTER IV	Analysis and Design This chapter discusses the stages of identification of problems and solutions to the features that will be used on applications in achieve the target of research. Any analysis and design will be documented in each iteration stage on the attachment. For the business, will be explained business analysis, market potential analysis, business model analys, analysis of competitor, actor, system functionality identification.
CHAPTER V	Implementation and Testing This chapter will divide into business implementation and produt implementation including testing that will be conducted in this research.
CHAPTER VI	Conclusion This chapter describes the results achieved in this study. Any problem that have been resolved in this study. In addition, also described the suggestions for the future research.