Design of Tourism Object Website Model in North Sulawesi Province

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ABSTRACT

Tourism is one of the sectors of concern, according to the program of the President of the Republic of Indonesia Joko Widodo, which was followed up by the Governor of North Sulawesi with one of North Sulawesi's priority programs as a competitive tourist and tourism place. Various steps were taken for the interests of North Sulawesi.

The internet is one of the means to promote, but also to improve the internet. A system is needed that can provide information and information through the internet, allowing to increase and attract tourists no longer need to access other websites.

This study is to create a North Sulawesi Tourism Website Model that presents information for promotion and information information needs in North Sulawesi Province.

Model Website is built using several stages and methods. The initial stage in developing a system is collecting data, using techniques, interviews, and literature. The system design uses the waterfall method, the credit system uses the Black box method. The system used with the Usability Scale (SUS) system.

This research produced a tourist website model in North Sulawesi Province. The resulting system can be used with the SUS method using an average of 79.75, a value that states that the system built is categorized as good. It is expected that the Model Website built with various methods including testing

to ensure the quality of the software, is a reference for the development and application of the North Sulawesi website

Keywords
Model, Tourism Object, Website, North Sulawesi.

1. INTRODUCTION
Tourism is one of the sectors of concern at this time, in accordance with the nawacita program set

by the President of the Republic of Indonesia Joko Widodo, which was followed up by the Governor of

North Sulawesi with one of the priority programs, namely realizing Sulut as a competitive investment and tourism destination . North Sulawesi Province is one of the provinces that has tourism objects and tourism potential which are spread throughout the city districts within the North Sulawesi Province. Various steps were taken in order to promote various tourism potentials in North Sulawesi Province, one of them through the internet. The internet is one of the media that is quite effective and efficient in promoting tourism objects so that it can increase tourist visits. Information presented about tourism objects in the North Sulawesi Province is considered incomplete.

Prospective visitors and tourism visitors to the province of North Sulawesi really need tourism information [1].

From the results of the study United Nation World Tourism Organization (UNWTO) in 2017

regarding the activities of tourists using digital platforms, it is known that around 82% of tourists prefer to search for information directly about a tourist destination using this platform.

While it can be said that the Tourism Office still relies on paper media to carry out tourism promotions. Of the 16 Tourism Offices in North Sulawesi, only 3 Tourism Offices have websites with website conditions that require structuring, for example in 2016 North Sulawesi provincial government websites that can be accessed via address http://disbudpar-sulut.org/ presents information about tourism objects and tourism is very limited, from 15 districts / cities, only 5 (five) districts / cities whose information is on the website. In 2017 the tourism website of North Sulawesi Province is not accessible. In 2018 the North Sulawesi Province tourism website can be accessed again at the address https://disparda-sulut.info/. The information on the website is about 80% in Latin which has nothing to do with tourism information. According to Researcher's observations, the website needs rearrangement, for example accessing the "akomodasi" menu, no data displayed. Accessing "destinasi wisata", only displays two of the 55 tourist destinations in the province's strategic tourism area. The Manado City Tourism Office has a website with sufficient information for attractions, but does not have a link to the hotel website and there is no link to other tourism businesses. The tourism website of Bolaang Mongondow Selatan District has not provided adequate information. Search for North Sulawesi Province tourism information that seeks information on the internet requires patience to find information by accessing more than one internet site on the internet. A web site is needed that can provide information and promote tourism objects in North Sulawesi Province, so that the tourism sector in North Sulawesi Province can be improved and prospective tourists no longer need to access other websites because the information presented has met the information needs of prospective tourists and tourists.

Information technologies (IT) adoption has been a key subject in the information systems studies since 1980s. As it has been showed that IT play a crucial role in the travel industry, many tourism and hospitality researchers also have started to focus on the travelers' attitudes towards using different technologies [2], [3], [4]. Technology continues to experience very rapid development. The internet is a form of technological development that is very influential, including affecting the search for information related to tourism visits.

Developments in information technology, particularly the Internet, have shaped the way travel-related information is

organized and distributed and the way people search for travel information. [5]. By the year 2008, Buhalis & Law (2008) explained with great confidence that the internet is very influential on the world of tourism, including the tourism marketing side [6].

This study is to produce a website model that can provide information for tourism promotion in North Sulawesi Province and also answer the need for information seekers on tourism objects in North Sulawesi Province. The system which is a website model is built using methods and tools for making software that have been tested in producing software. This is done to ensure the quality of software to be built considering the amount of resources that must be spent due to the failure of software which is a phenomenon that must be considered by software developers. Software production failure can occur due to the lack of utilization of tools that are in line with industry standards for software development and testing techniques that do not use and run software testing methods correctly.

0To build software, it is important to go through a series of predictable steps. The steps are like a roadmap that helps to develop a high quality system. This roadmap is also called a software process. The software development life cycle (SDLC) is the entire process of formal, logical steps taken to develop a software product [7]. SDLC has five stages of system development [8]. These phases are requirements definition, design, coding, testing and maintenance. SDLC models are created based on the order in which they occur and the interaction between them [9].

The SDLC is a domain of competency used in systems engineering, information system and software engineering describe a process for planning, creating, testing, and deploying an information system [10], [11].

By carrying out the stages according to proven rules, the system model produced in the future can be used as a reference for software development in the form of tourism websites that can be implemented for North Sulawesi tourism promotion, so that it can have an impact on increasing tourist visits which have a positive effect on the economy of North Sulawesi residents.

2. RESEARCH METHOD

Several methods are used in this study, the method used in data collection consists of: 1). Observation method is a technique or approach to obtain primary data by directly observing data objects. 2). The interview method is two-way communication to get data from respondents [12] 3). Library studies are conducted to enrich the knowledge of various concepts that will be used as a basis or guidance in the research process. Literature studies in this technique of data collection are a kind of secondary data used to assist the research process, by gathering information contained in newspaper articles, books, and scientific works on previous research. [13]. This research is a system development research, on how to build a system that can record, process and present information about attractions in North Sulawesi Province. The method used is the method of developing the waterfall system [14]. The waterfall method can be seen as follows:
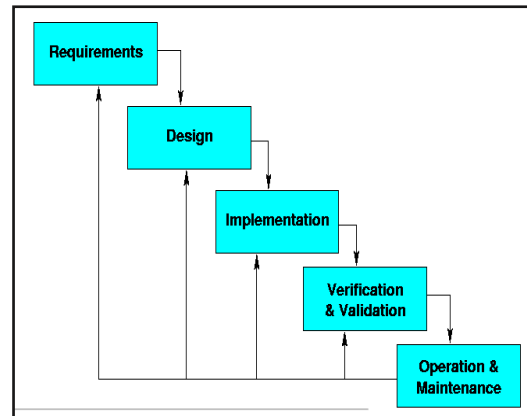

Fig. 1 : Waterfall Models

3. RESPONDENTS

Determination of the number of samples used in this study refers to the opinion of Nilsen who argues that five users are enough to get the problem of a system design. According to Nielsen, the identification of problems by more than five users will only repeat the same problem. [14] The researcher took 20 samples of respondents consisting of 8 respondents in the category of users / information seekers and 12 respondents in the category of the Tourism Office. Respondents involved were respondents who had been reliable using software

4. DATA ANALYSIS

Quantitative data collection is done by distributing questionnaires to respondents. Data processing steps: 1. The first step in calculating the SUS questionnaire is to process the score of each question. This score ranges from 0-4. Statements in the order of odd numbers are calculated by the formula, $(x_i - 1)$.

Whereas, for even sequences, use a formula $(5 – x_i)$, with x_i is the number on the Likert scale chosen by the respondent. Then, calculate the value of SUS by multiplying each score obtained by 2.5 and summed to get the total score of each respondent that ranges between 0-100. 2. The next step is to calculate the average value. If the average value is> 68, then the usability of the system being evaluated is considered good [15].

5. RESULTS AND ANALYSIS

The results of this study are in the form of a tourist website model in North Sulawesi Province which was built using the waterfal method using several tools for design.

The methods and tools used in this study including for system design have been tested and so far have been used by system developers to design and also build software, where at the stage of implementation and operation, the software runs effectively or in other words is a device software that works and not software that fails production. To ensure the quality of the website model and to avoid the failure of production of software, the website model of tourism objects in North Sulawesi Province is tested through several stages and uses black box testing techniques that test the functions that exist in the software whether it is running properly and correctly.

The tourist website model in North Sulawesi Province accommodates the needs of the tourism agency to be able to input data from districts / cities in the North Sulawesi region, because so far the Provincial Service has collected tourism data with manuals from the Regency / City.
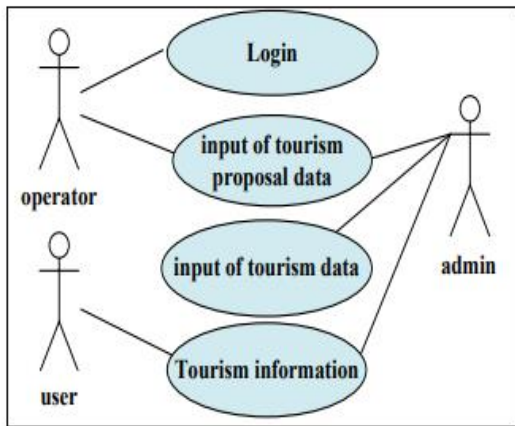
Data input system design as shown below:

Fig 2. Data input system

With this system, the Regional Tourism Office of North Sulawesi Province can receive computerized data input through the system. Design System for inputting tourism data from districts / cities which will be processed by the admin at the provincial level and then displayed as tourism information on the website.

The system built is a system that provides information on tourism in North Sulawesi Province. System users can obtain Tourism information on a Provincial scale by accessing the district / city menu on the system, so that users or information seekers about sulut tourism no longer seek information on other websites.

System model The tourist website in North Sulawesi Province can be seen in the following figure:

System model The tourist website in North Sulawesi Province can be seen in the following figure:

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Fig 3. Tourism Information in North Sulawesi Province

It can be seen as in Figure 3, through this system the District / City Tourism Office can also see tourism information presented on the system, so the District / City Tourism Service can be motivated and compete with each other to present updated tourism information. Given that at present there are only two districts / cities that have tourism websites from 15 regencies / cities in North Sulawesi Province.

The model system of the North Sulawesi Province tourism website is also expected to be a solution from the North Sulawesi Provincial Tourism Office website where based on the Observation conducted by the Research Team, the website of North Sulawesi Province Tourism Office actually displays sulphurous tourism information in conditions that need to be organized, because the website content is around 80% contains or presents information in Latin that has nothing to do with Tourism.

The website condition of the North Sulawesi Tourism Office can be seen as shown in the following picture

Fig 4. Display of Website Content of the Regional Tourism Office of North Sulawesi Province

After the software is built and tested, the next step is to know the usefulness of the software. Evaluation of the use of software is done by the SUS method by involving respondents.

Several studies have been conducted to evaluate the usefulness of the system using the SUS method based on data and responses obtained from system users whether or not the system is built [16], [17], [18], [19].

The results of processing data from respondents obtained an average of 79.75, so it can be said that the usefulness of tourist website models in North Sulawesi Province is categorized as good. So it is expected that this website model can be applied as a container for presenting tourist information in North Sulawesi Province

The following is the recapitulation of results and calculation of the SUS questionnaire data presented in table one.

Table 1. Processing usability data

Questions	Respondents																			
	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*
1	4	3	2	2	3	2	2	3	2	3	2	3	4	4	3	4	4	2	4	4
2	3	3	4	3	4	3	4	4	4	3	4	3	3	4	3	3	4	4	3	2
3	3	3	4	4	3	3	3	3	3	3	4	4	3	3	4	4	2	2	3	3
4	3	4	4	4	3	4	3	4	4	4	3	3	2	2	4	3	3	4	3	3
5	3	3	3	4	4	3	4	2	2	2	3	4	4	3	3	3	4	3	3	4
6	3	4	3	3	3	4	4	4	3	4	4	4	3	3	2	3	3	4	4	4
7	4	4	3	3	3	2	2	3	3	3	2	2	3	4	4	3	3	2	2	2
8	3	4	3	4	3	4	3	2	3	3	4	2	3	3	4	3	3	4	3	3
9	3	4	3	4	3	3	3	2	4	4	2	2	2	3	3	4	4	3	3	3
10	4	2	2	3	3	4	4	3	3	3	4	3	2	2	3	4	3	3	4	4
Total	33	34	31	34	32	32	32	30	31	32	32	30	29	31	33	34	33	31	32	32
Result	83	85	78	85	80	80	80	75	78	80	80	75	73	78	83	85	83	78	80	80
Average	79.6																			

6. CONCLUSION

This study discusses that a system is needed as a means of promoting tourism that can provide information effectively through the internet. This research designs and builds the North

Sulawesi tourist object website model using several proven methods and tools and produces software that runs well and effectively. Tourist attraction information such as tourist sites, tourist attraction descriptions, facilities around the tourist

attraction area, can easily be found by information seekers, so that information seekers get complete tourist information about tourist objects. Website Model Attractions in North Sulawesi Province were built and have gone through testing phases, getting good categories by respondents in terms of usability. In the future, the results of this study are expected to be developed and implemented online so that tourism in North Sulawesi Province can be promoted to further boost the tourism sector and improve the welfare of citizens.

7. ACKNOWLEDGMENTS

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