

# Modification Of TAM Model Application Of System Of Information Of Management Of BAZNAS In Indonesia

Ahmad Roziq, Cici Wijayanti, Ririn Irmadaryani

**Abstract**— SIMBA contains information from BAZNAS for each province or district for a period, both the muzakki list and its financial statements. SIMBA has two systems, namely Operational Information Systems (SIO) and Reporting Information Systems (SIP). SIMBA is a technology-based management information system that is expected to ease the burden of performance from users. Not all users can accept the use of technology. The purpose of this study is to analyze user acceptance of the application of SIMBA with the Technology Acceptance Model (TAM) Theory and to assess the financial statements produced by SIMBA. This research is a qualitative study using a case study approach. The object of this research is BAZNAS in Jember Regency with informants or as SIMBA users, namely administrative, information technology and financial and reporting staff. The results found that user acceptance of SIMBA, namely the administration, IT and financial sections following factors that influence the main factors in the TAM (Technology Acceptance Model) theory, namely perceived usefulness (perceived usefulness) and perceived ease to use (perceived ease usage). Researchers find other factors that influence users accepting technology, including knowledge and skills. Therefore this study produced a Davis (1986) version of the TAM model that was modified by adding 2 new factors, namely knowledge and skills.

**Index Terms**— SIMBA, Technology Acceptance Model, BAZNAS

## 1 INTRODUCTION

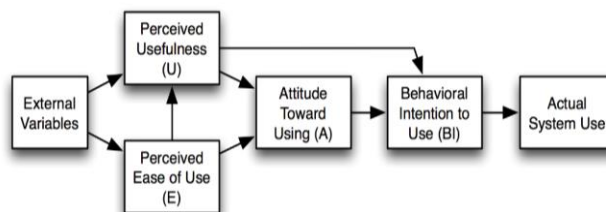
In 1986, Davis first coined the Technology Acceptance Model (TAM) theory that explained the determinants of general information-based technology acceptance and end-user behavior with wide variations and user populations. Two main factors that influence users receive technology are perceived usefulness (usefulness perspective) and perceived ease of use (ease of use perspective). This theory also explains the influence of external factors to accept the use of this technology, such as internal beliefs, attitudes and intentions. In 2016 BAZNAS launched a zakat data entry system called SIMBA by the Minister of Religion Lukman Hakim at the Ministry of Religion in Jakarta. The Chairman of BAZNAS said that through this system the process of recording and reporting zakat became integrated nationally from BAZNAS to the Ministry of Religion. The integrated online and interconnected system, Minister of Religion Lukman hopes that the value of public trust in setting aside money for tithe and donation / alms is higher and can be utilized to the maximum of others in need. SIMBA can be used by BAZNAS throughout Indonesia as an operational standard for zakat institutions and national zakat reporting. In its operation, SIMBA must use the internet, so it needs stability from its internet connection. The process of sending data via the internet also needs to be kept confidential, because technological sophistication can misuse information. From these factors, it is necessary to evaluate the application of SIMBA. BAZNAS Jember Regency is a non-profit organization. Non-profit institutions are institutions in which operations are not looking for profit. BAZNAS Jember Regency was only established in August 2017. The BAZNAS has implemented SIMBA in its system. This institution still implemented the system about a year ago or in 2018. The

group that was classified as operating by implementing this system still found obstacles in its performance, especially from the users themselves. These obstacles can be found through internal and external. If these obstacles are not immediately overcome, it will affect the information that will be generated by this institution, both from social and financial information. From this explanation, researchers are interested in studying the modification of the TAM model of management information systems application for amil zakat bodies in Indonesia.

## 2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1 Technology Acceptance Model (TAM)

The technology acceptance model is a model built to analyze and understand the factors that influence the acceptance of the use of computer technology. This theory was first put forward by Davis in 1986 and subsequently developed by several scientists such as Adams et al. (1992), Szajna (1994), Igbaria et al. (1995) and Venkatesh and Davis (2000). TAM introduced by Davis is an application and development of the Theory of Reasoned Action (TRA) which is devoted to modeling user acceptance of information systems. The purpose of TAM is to explain and predict user acceptance of technology. The TAM formulated by Davis (1989) is perceived usefulness, perceived ease of use, attitude, behavioral intention, and actual use. Also coupled with some external perspectives, namely the suitability of the job fit, experience and complexity. Following is an explanation of each factor and a simple description of the relationship of all.



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## 2.2. System of Information of Management of BAZNAS (SIMBA)

SIMBA is a web-based zakat management program, developed national data and information storage. SIMBA is also equipped with a reporting printing feature covering 88 different types of sub-reports, including 33 types of reports in 5 large groups. Amil zakat bodies throughout the archipelago do not need to go through a complicated installation process because SIMBA is web-based. Here are some features of SIMBA, among others:

1. Zakah and infaq / alms collection.
2. Distribution and use of zakat funds and donations/alms.
3. Recording of assets (including assets under management).
4. Print proof of zakat deposit.
5. Issuing NPWZ cards.
6. Budget management.
7. Prints 89 types of standard reports.

Every system has a concept to support the running of the system. There are four concepts in SIMBA, including ERP (Enterprise Resource Planning), SIMBA, Public, and Supporting.

### 3 METHODOLOGY

This type of research uses qualitative research with a case study approach. Based on this approach, researchers will prepare, collect, and analyze data in the form of interviews with the administration section, the information and technology section, and the financial and financial reports BAZNAS Jember Regency so that they can illustrate how users' perceptions in using SIMBA. The data used in this study are (1) primary data and (2) secondary data. There are three techniques used to collect related data: (1) observation, (2) interview, (3) documentation. The data analysis technique in this study uses the model of Miles and Huberman (2009), consisting of three activities that occur simultaneously, consisting of data reduction, data presentation, and drawing conclusions / verification. In this study, researchers initially collected the data needed to carry out data reduction by focusing on user acceptance of SIMBA based on the technology acceptance model (TAM) theory. The data obtained is then reduced, the data is presented in the form of a description and model of the image.

### 4 RESULTS AND DISCUSSION

SIMBA is a BAZNAS management information system so that information can be accessed by the center starting from muzakki and mustahik data input to financial reporting. The purpose of the establishment of this SIMBA is that the activities of each BAZNAS can be controlled by the center. SIMBA can only be accessed by workers in BAZNAS themselves according to their respective roles. Some workers cannot access financial reports in SIMBA. Muzakki cannot access SIMBA, so the system is still not transparent enough to muzakki. SIMBA is not an application that must be preceded by a complicated install process, but the system is web-based. All BAZNAS only need internet stability so they can operate SIMBA optimally. Possible risks are that the internet speed is down. SIMBA can be accessed at the [simba.baznas.go.id](http://simba.baznas.go.id) address with the initial display below. Administrators can then enter according to their respective roles with e-mail and personal passwords.

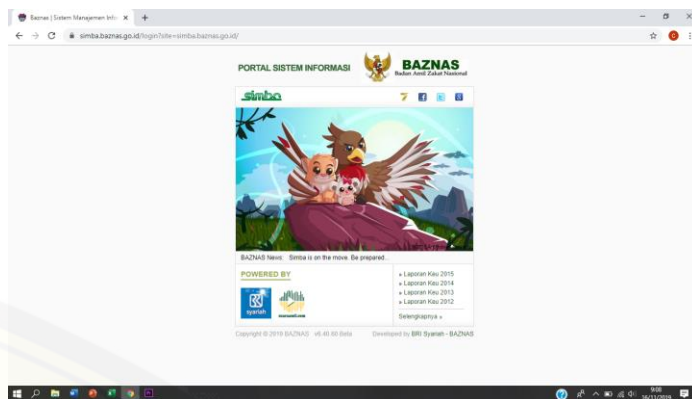


Figure 2. Homepage Web Address: [simba.baznas.go.id](http://simba.baznas.go.id)

### User Perception of SIMBA

Implementation some of the perceptions expressed by each informant have been explained above, then the following analysis from the researcher

#### 1. Perceived Usefulness

SIMBA has significant uses in Baznas, especially in Jember Baznas. This was evidenced by each informant that they were very receptive to SIMBA following their functions. Through SIMBA, the trust of muzakki can increase, because financial reports or other data if needed at any time are easily printed. Muzakki can easily ensure that the money that has been distributed to the Jember Baznas has indeed been handed over to those entitled to it. Baznas Jember itself still has not maximized the use of the SIMBA menu because the budget is still uncertain from the government itself, so while Baznas Jember still uses manual software to prepare the next period's budget. Some functions of SIMBA itself can easily input muzakki data and mustahik data. Muzakki individuals or institutions will be registered if not yet registered, and if paying zakat, infaq/shadaqa can choose "Pay ZIS" then enter the nominal amount. Mustahik data at Baznas Jember is arguably less valid, because of the difficulty of finding mustahik data that does not yet have a nationality card or other identity card. Utilization of menus in other SIMBA can be easily applied by users so as to make them accept this system as a supporting application

#### 2. Perceived Ease to Use

The simplicity of SIMBA can be seen from how the time-lapse of the user to understand how it works. Some informants who have used the system still mention convenience only in certain parts or following their respective jobs, in the sense of not knowing anything about other menu functions besides their work at SIMBA. Different perceptions with users who almost completely understand the contents of SIMBA say that SIMBA is easy to learn because it is only by following the usage procedures. From the results of the field, it is true that for beginning users who are still unfamiliar with menus in SIMBA it is only easy to understand in the data input process. Said to be easy because the choice in the system can be understood and more familiar in a name. Reports on SIMBA are also systemized so as to produce information according to data input. The ease of application of SIMBA greatly affects the performance of users and acceptance of applications made by the government. The fact can be seen from the informant (Rania) who still does not understand financial reporting, he



has not been able to operate in that part because it is still considered difficult to learn and there is no specific training related to this for him.

### 3. Attitude Toward Using

This attitude can be seen from the user in operating SIMBA. Users at Baznas Jember agree and support the existence of SIMBA because it is considered helpful in its operations. The muzakki data input or when paying zakat and infaq / shadaqah, workers at Baznas Jember do not need to confirm to one muzakki, because it is systemized by the SIMBA itself. Another thing users support the existence of SIMBA is the advantages of storing data systematically, if there is no SIMBA the data will be messy recording. The supportive attitude of each user influences the reception of SIMBA as a good data store for a period.

### 4. Behavioral Intention to Use

SIMBA aims to be accessed by all administrators of Jember Baznas in accordance with their respective jobs. Not all management can change existing data, for example muzakki or mustahik registration. However, the management of Bember National Committee in Jember supports the existence of this SIMBA because it facilitates performance. Support from one party alone allows the rejection of this system, so it is important and needs support from other parties in the use of SIMBA to be accepted easily.

### 5. Actual Use

The attitude and behavior of SIMBA users shows that there is full support so that this is proven by how the use of SIMBA for their daily lives. In terms of data input, the user does not need a long time. Request reports in accordance with the needs of muzakki, for example weekly, monthly, yearly, are greatly helped by SIMBA. Users can easily print what is needed by muzakki as a form of accountability of Baznas Jember. The user himself is very satisfied with the application of this SIMBA. The existence of such satisfaction can affect how users accept the application of SIMBA.

### 6. Job Fit

SIMBA itself has a function not only for financial reporting, but includes muzakki and mustahik data. Users in Baznas Jember themselves have their respective roles to access the system. The Jember Baznas is currently not properly divided into tasks, where the part that is supposed to regulate correspondence or administration must operate the SIMBA in data input. Not every account owned by each user on the SIMBA menu can be accessed, except for those who have important roles such as the chairman of Baznas and the finance department. Judging from the role of each user in SIMBA it can be understood that the suitability of the task affects the user's ease to access SIMBA and see the benefits of SIMBA itself.

### 7. Experience

Experience according to the informant has little influence on the acceptance of the system, where users may not have experience. Training of new users can help with its operation. However, experienced users are needed to run the system well. The training in East Java, which was attended by one of the Jember Baznas, became the basis for a smooth SIMBA operation. According to information obtained, the training is

indeed held once a year. In 2019 workers at the Jember Baznas were unable to attend because HR were not yet ready to attend. At least one person in Bember National Jember has the experience of operating SIMBA in order to be able to share his experience with others. Even though there is a possibility that there are new workers who don't understand anything about SIMBA. Experience can also influence the acceptance of the system at Baznas.

### 8. Complexity

Some informants said that complexity had been encountered in SIMBA, where as the initial user did not understand the parts of SIMBA. For some users who are not part of finance do not understand how the system can automatically become financial statements. They only understand about data input and have no complexity at all. SIMBA does not show significant complexity, so it makes understanding to users. The following technology acceptance model according to Davis (1989) is equipped with external perceptions.

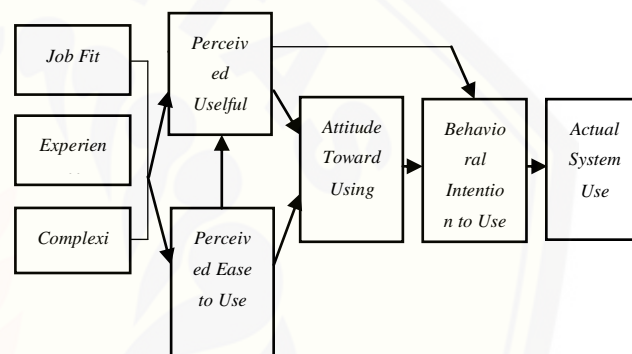


Figure 3 Technology Acceptance Model (Davis:1989)

### Modification of TAM

From the field results, the researchers found that the technology acceptance factor for users could be influenced by human resources. One of the organization's success in achieving its goals is largely determined by the ability and skills of its human resources, which is meant by employees. The importance of the quality of human resources in the company makes competence as one of the critical aspects of success (Jufri, 2018). Without competence, work will not be completed properly. Jember Baznas still has a lack of quality human resources, where the problem is more specific competence. According to Hutapea and Thoha (2008: 4) competence is the capacity that exists in someone who can make that person able to fulfill what is required by the work in an organization so that the organization is able to achieve the expected results. In the Jember Baznas case that human resource competencies can optimize the function of SIMBA so that it can be utilized properly. According to Hutapea and Thoha (2008: 8) revealed that there are three main components of the formation of competencies, including knowledge, skills, and attitude.

### 1. Knowledge

Knowledge is defined as information possessed by an employee to carry out duties and responsibilities in accordance with the field in which he is engaged. Jember Baznas employees in operating SIMBA must have knowledge about SIMBA itself, its benefits, specifically for the finance and

reporting section, must have knowledge about accounting, which has to do with recognition, presentation, and disclosure, but must also have knowledge of computers and information systems so that no difficulty in operation. The field of finance and reporting is minimally positioned by a graduate of economics majoring in accounting.

## 2. Skill

Skills are abilities that a person has in doing and completing a job. Skills are needed in organizations, for example, communication skills and using information technology. The results of research at Baznas Jember that in general employees, especially SIMBA users, already have skills such as using computer technology because in these fields special skills are not needed. In contrast to the financial and reporting fields that SIMBA has provided information related to Baznas operations in a period where users need special skills and are given training before occupying the position. SIMBA as a whole both management information and reporting information for initial users looks complicated and difficult so that it can only be operated by users who have special skills. As a financial and reporting field, accounting skills in operations are certainly needed, for example how cash or non-cash assets are recognized, depreciation of assets, disclosures in Notes to Financial Statements, and others. Users are required to have ideas for fulfilling financial information. A minimum of employees attends training in the use of SIMBA that has been carried out by the SIMBA team.

## 3. Attitude

Attitude is a pattern of behavior of an employee in the role of carrying out duties and responsibilities in accordance with company regulations. This point does not need to be discussed by researchers because it has been included in the technology acceptance model expressed by Davis. Researchers modify the technology acceptance model by adding two additional factors, namely knowledge, and skill.

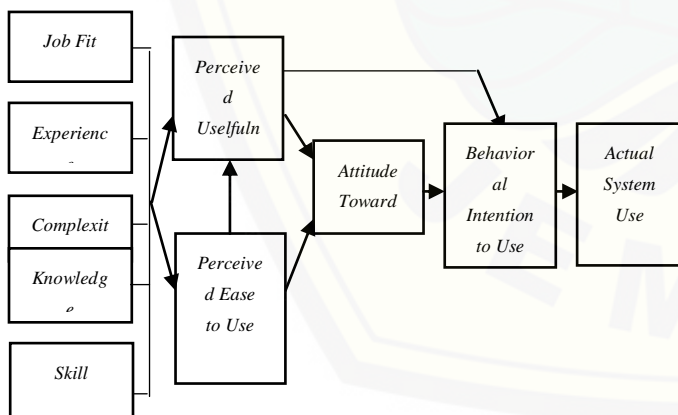


Figure 4 Modification of the TAM Model

## CONCLUSION

Based on the results of research and discussion by researchers, it can be concluded that user acceptance of SIMBA, namely the administration, IT and financial departments in accordance with factors that influence the main factors in the TAM (Technology Acceptance Model) theory, namely perceived usefulness (perceived usefulness) and perceived ease to use (perception of ease of use). Based on

the results of the analysis, the researcher suspects that there are other external factors that influence the user accepting technology, including knowledge and skills.

## Recommendation

Based on the operational limitations of Baznas Jember and SIMBA, the researcher suggests that the management of Baznas Jember needs to recruit HR (Human Resources) who have knowledge and skills related to accounting and information systems to complete the data in SIMBA. Recruitment in finance and reporting, in particular, requires a minimum of an economics graduate majoring in accounting and having attended training in the use of SIMBA.

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