

# The Mapping of Organizational Culture to Find Determinant Factors for Behavioral Intention to Use in IT Utilization Among Credit Unions in Indonesia

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**Abstract**—Measurement of IT acceptance at the organizational level is no more sufficient if only based on individual acceptance factors. There is an attempt to measure IT acceptance in organizations by considering organizational culture as a determinant factor. Competitive Value Framework is used to determine the position of the credit union organizations. This study used an organizational culture which derived from the Organizational Culture Assessment Instrument (OCAI) and used the value that influences the chosen quadrant as a determinant factor for behavioral intention to use IT. The result showed that Credit Union (CU) in Saluampak placed in Hierarchy quadrant. This result identified four factors: timelines, efficiency, uniformity, and consistency as a value that will use as a determinant of behavioral intention to use IT in CU. The most significant point is that this mapping creates cultural, organizational principles extracted from the hierarchical quadrant and is used as a determinant of conduct purpose to use IT in a CU context.

**Keywords**—organizational culture value, OCAI, behavioral intention to use IT, IT Acceptance, Competitive Value Framework

## I. INTRODUCTION

Information system researcher believes that organizational culture has a significant impact to become a determinant of the IT acceptance in the level of organization. The finding from [1] who said TAM and UTAUT are the popular models used by researcher to explore the IT adoption in the organization, but study in [2] that found that TAM and UTAUT models are popular and very useful inside of US but have a limitation if these model used in the country outside of US which have a low individual level. According to [3], TAM has a deficiency in the external calculation in IT acceptance. Furthermore, the model discusses culture in one of its variable, called social influence, but the variable in these models tend to treated as a mediation or additional variable [4,5]. In determining the success of the IT/IS implementation, culture, and human factors often not be taken into account [6].

The increase in the use of IT in the organization tends to increase the ability and competency of the user. To evaluate the acceptance of IT in the organization based on individual perception is no longer enough; there is an effort to find out the other factors which can be determinant of IT acceptance in the organization [6]. Acceptance models tend to evaluate the success of IT implementation based on individual perception [1], but interesting that many research discusses about some of these models and suggest that need further evaluation in the country that have high collectivity level [2, 3]. Furthermore, the research around the world examines the competence of organizational culture in the IT adoption, but the result not

enough to depict and explain the connection between determinant of IT adoption and organizational culture [2]. Based on the explanation above, the problem statement of the research are:

1) *Inconsistent results from using IT acceptance theory in different cultures and settings*

In the country that has high collectivity level such as India, China, and Thailand [7,8,9], TAM and UTAUT have given different result if compared to the country that has high individualist level. This fact explains that need more effort to find other factors besides the factors from TAM and UTAUT to evaluate the acceptance of IT of user in the organization [2,6]. A study in [10] was conducted in China found that ease of use as a variable of TAM does not have enough effect to teachers in the IT acceptance because the teacher focuses on improve their teaching effectivities.

Organizational culture as a trigger and determinant to behavioral intention to use IT in Indonesia not very popular. Researcher from Indonesia discusses IT acceptance using mature models such as UTAUT and TAM. Study in [11], using UTAUT and adopt national culture by [6] and found culture does not influence the behavioral intention to use IT, this research treats culture as a moderating factor. Moreover, study in [12] adopt TAM as an acceptance model have result that in the implement IS security policies, culture have influenced the perceived usefulness and ease of use.

2) *Lack of initiative to determine which cultural values caused the differences in the behavioral intention of using IT in an organization.*

Discussing organizational culture as a determinant of behavioral intention to use IT is very difficult because current research focuses more on comparing two countries and placing culture as a moderating factor [13]. It is emphasized by [9, 14], who stated that culture could not be underestimated in relation to IT acceptance because the culture has many definitions and measurements that can explain IT acceptance.

Credit Union is a unique organization. Organization tie by trust, organization that have a high level of collectivity build by the member and for the member. As an organization tie by trust, organizational culture becomes a glue and trigger that drive the member of the CU to develop the community. Interesting to find out the value of organizational culture that affect the acceptance of IT in this organization.

The objectives of the research are to mapping a CU organization used OCAI and use the value derived from the result as a determinant factor that can influence the behavioral

intention of use of IT utilization among Credit Unions in Indonesia (will present in another paper)

## II. LITERATURE REVIEW

### A. Organizational Culture

Hoffman [19] there are two problems when we want to do research in the subject of organizational culture. First, we do not know where we must begin because there is a lot of literature which discusses it, second because to many literatures there are a possibility to arise a new variable to explain organizational culture. Cameron [15] distinct organizations/companies into four types: first organization type: clan. This type of organization focus on flexibility and internal, second organization type: adhocracy. This type of organization focus on external and flexibility. Third organization type: hierarchy. This kind of organization has focus on internal and stability, and the last type of organization: market with focus on external and stability. The mapping conduct by this research will choose one of these organizational culture type and connect to its value drivers.

For a mapping organizational culture that embraced organization, this research uses a methodology from Cameron [15] called Competitive Value Framework (CVF). This methodology deliberate and place organizational culture values into one of four organization culture orientation. To identifying cultural orientation in the organization, this research using the Organizational Culture Assessment Instrument (OCAI), a questioner consists of twenty-four questions that used to gain hope of the employee about now and future cultural orientation.

The results of the questioner (OCAI) distinct organization into four cultural orientation [15]:

1) *Clan culture*: customer as a partner, therefore this culture focus on employee development, team work and flexibility and internal.

2) *Adhocracy culture*: typical risk-taking and creativity focus on flexibility and external.

3) *Hierarchical culture*: Focus on structured workplace, complete procedures, and emphasize to accountability and control procedure.

4) *Market culture*: focus on competitiveness and productivity. This type is external oriented and always perform stability and control.

To decide what cultural orientation that influences the organization, the word dominant must present. There is no company or organization that has just one cultural orientation. The organization after mapping, will decide the dominant cultural orientation and the rest will affect the dominant. Hence, in the management of cultural change, in [15] found that organizational leadership style vital to the organization for guide the change process. Organizational leadership style set an organizational cultural value which influence individual to change their behavior to increase the performance of the organization.

For example, organization dominated by clan, the leader act as facilitator and mentor. This will set value driver: commitment, development, and communication. When organization dominated by hierarchy, the leader is coordinator and will set value driver is efficiency, timeline, uniformity. When adhocracy dominant, leader act as innovator and set value: transformation, agility and output innovation. Last,

when dominated by market, value driver: goal achievement, market share, and profit, leader type is competing.

Value driver in this research as a result of mapping will be used as an antecedent to IT acceptance model (present in another paper).

### B. Behavior Intention to Use IT

Behavioral intention (BI) is used as a variable in TAM to describe user technology acceptance in the information system field. Although TAM is the most model used to explain users BI to adopt IT, interesting to see the findings of Teo [10] to evaluate an IT adoption in the organization, it is important to include culture. Culture influence people's act and thinking. In this research, BI is known as person has formulated plans regarding to perform a specified future behavior.

Research that discuss an influence of culture especially organizational culture is rarely seen [5], hence research focused on influence of culture especially organizational culture on technology acceptance in Credit Union organization is scarcer.

### C. Credit Union (CU)

Credit unions are cooperative-type financial institutions that are owned by members and they are also savings customers or customers. This understanding is much different from conventional banks. Conventional banks are bank financial institutions that are generally owned by federal authorities and customers are not necessarily the owners (shares) of the bank. The term where the savings and borrow is less relevant for CU activities. The reason to test this organization because CU is not just about saving or borrowing money, but it aims to help members to develop their capital. CU is also expected to educate members to manage their assets through sustainable member education activities. CU also aims to empower the members especially in business division on establishing the capital. Thus CU can be institute of empowerment life, towards the welfare of society.

This research takes three CUs that will be the object of this research. The CU: CU Mekar Kasih, Makassar which have 3 transaction point (TP), CU Mentari Kasih no transaction point, Kendari and CU Sauan Sibarrung which have 12 TP, Tana Toraja

Early 2017 these CU focus in implementation of Mobile CU; a mobile application that's provide function related to members fund i.e.: transfer, withdraw the fund in the bank's ATM. This organization is interesting because their build by member and for member, tie with trust thus worthies to study this organization related to IT adoption which driven by organization culture.

## III. METHODOLOGY

### A. Conceptual Framework

Researchers have long considered the influence of culture when examining user acceptance of IT. Culture directs to rules, rituals, norms, and procedures in our society and further according to [15] will influence human thought patterns.

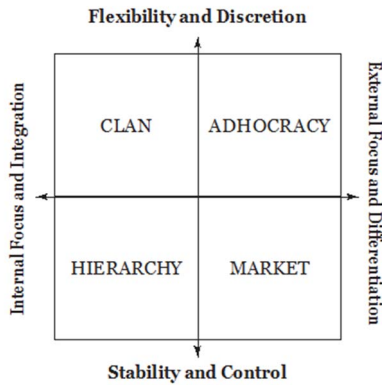


Fig. 1. Competitive Value Framework

Cultural orientation using CVF, see Fig. 1, will determine the position of the credit union organizations which are the object of this research. To define the culture orientation of each CU, it is start from spread questionnaires from OCAI instrument [22] to all of the employee of all CU. Analyze the data using CVF, we will define the position of each CU in the CVF quadrant (Clan, Hierarchy, Market, or Adhocracy). Each quadrant of CVF have a values driver that will used as an attribute of the culture orientation, i.e. Clan have a values driver: commitment, communication, and development. Hierarchy have a values driver: efficiency, timelines, consistency and uniformity.

Organizational culture as an influencer to individual that shapes their attitude and behavior [14] therefore in the China that have high collectivism, teacher have a 'we' credo that makes the teacher prefer to choose a decision based on we rather than personal like or dislike.

### B. Sampling

This research use all population as a sample from three CU. The sample from the position of chairman to staff, further we called employee. The age of employee are 24 to 47 years old. The research takes an employee as unit of analysis because want to explore the effect of organizational culture to employee, is it true that culture can influence individuals to plan their future behavior.

### C. Instrument

OCAI questionnaires [15] used to find the employee expectation about NOW and FUTUTRE organization culture in the CU. There are twenty four question plus nine demographic question that spread to employee. The survey will conducted in English with accompaniment to employee that not familiar in English.

### D. Analysis of Data

Data will analyze with CVF. The result will show us now and future organizational culture that employee expected. The research do not go further to discuss the shift from now and future organizational culture but will determine the value driver that influence dominant orientation culture. Cameron [15] organization culture set and influenced by leader of the organization, Therefore every quadrant in CVF provide value driver from leadership style. This value driver that will use as a result in this research.

This research conducts a pilot study and use data from TP Saluampak, TP Makassar, and TP Messawa. Each CU has one

transaction point to get a good spreading of a sample taken. The pilot gave an important answer and score. The result is shown in Fig. 2.

### E. Result

Fig. 2, shown the answer from 3 transaction point and based calculation by CVF, the result for NOW organization culture is Hierarchy. This type has a value driver: consistency, timelines, uniformity, efficiency. The values driver will be used as an antecedent to differentiation UTAUT construct.

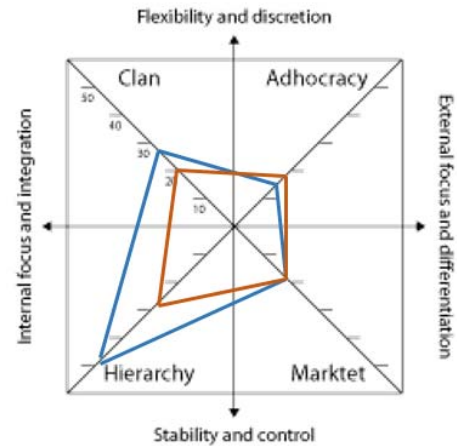


Fig. 2. Result of OCAI assesment

## IV. CONCLUSION

According to OCAI assessment, CU is a formal and structural place organization. There is a procedure that will arrange what people do and the leader have well organizer, and efficient thinking. The most important thing is make the operation of the organization running well, and have rules and formal policies that united the organization. Stability and efficient performance are a long term focus in this organization. The employee management is predictable.

Fig. 2, shown to us that employee of the TP Saluampak, in the future want to move from hierarchy to clan quadrant. This mean that they want to change their value driver to commitment, communication and development. They want their leader act as a facilitator. The organization that placed in clan quadrant will acting like a very friendly place that collect people in their family. Leader act like parents, and culture and tradition will united the member of the organization. For a long term focus, this quadrant emphasis to the development of human resources, and the most important things is teamwork. The change from hierarchy to clan quadrant need more analysis and time since the change is not instant.

For the future development of this research, we suggest that the process to mapping and to find a value of organizational culture can be derived from qualitative method since ours result came from one methodology which is a CVF. More, the result of the mapping in this research can be use as a moderator to find the individual behavioral intention to use IT.

The most important thing is that this mapping produces organizational cultural values derived from the hierarchy quadrant, and will be used as a determinant of behavioral intention to use IT in CU.

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