EXECUTIVE INVOLVEMENT AND PARTICIPATION IN THE MANAGEMENT OF INFORMATION TECHNOLOGY

Keterlibatan dan Partisipasi Eksekutif dalam Manajemen Teknologi Informasi

Hernawati Pramesti¹ dan Supriyadi²
Program Studi Akuntansi
Program Pascasarjana Universitas Gadjah Mada

ABSTRACT
Executive support indicates one of the aspects determining corporate effectiveness in implementing IT. Therefore, this study aims to provide empirical proofs on impact of executive support in term of executive participation and involvement in company’s information technology management improvement and impact of company’s condition and background on management information technology improvement.

Companies that were study objects were banking, retailers, publishers and investments, and the respondent were IT, SI or EDP department chief. Data collection was carried out with mail survey and directly visiting to intended respondents. Total respondents were 109 respondents. The study result indicated that executive participation had positive association on information technology development. In addition, the further result indicated significant relation between executive involvement and information technology improvement. Therefore, the last testing showed enough strong association between executive participation, organization condition and executive background variables and development of information technology management used in the companies through information involvement.

Key Words: Management Information Technology, Executive Participation, Executive Involvement.

INTRODUCTION
The development of information technology, recently, is an important aspect in determining the success of the business of a company starting to help the development of new products, support the sales, ie the

¹. Fakultas Ekonomi Universitas Kristen Sanurkarta
². Fakultas Ekonomi Universitas Gadjah Mada, Yogyakarta.
provision of market mastery and as the analysis tools to make a decision. Recently, the implementation of IT becomes the center of attention of business strategy, so that the executives have a role to support the investment in IT (McFarlan et al., 1983).

Technology will keep developing. Strong IT will be competitive edge for companies and also be the entry barrier (Fasio, 1994 in Sri Maharsi, 2000). Meanwhile, Rukart (1995) stated that the era of 1990s, IT was the fourth source after human resource, money and machine, used by managers to operate the company activities.

The previous study of the participation of executives had been carried out, such as a study carried out by Javerpa and Ives (1991), finding that the involvement factor had a stronger relation from participation factor. Stair (1992) stated that the adequate role of CEO, personally, in the IT management would give contribution to the development of IT usage, but, at least, CEO found out about what should be given by IT to the company. In Indonesia, the same study was carried out by Grabis (1996), observing the relation of the user participation with the satisfaction in the IT development, in which the result stated that there was a significant relation between the user participation of information system with the satisfaction in the IT usage.

Based on that thought, the researcher wishes to examine the relation of support of executives, in the form of executive participation and involvement, and other variables, such as the condition of the company and the background of the executive on the development of IT management in the company. This study is the replication of the study carried out by Javerpa and Ives in the year of 1991, that is: Executive Involvement and Participation in the Management of Information Technology, testing about the involvement and the participation of executive in the management of IT.

The good of this study is the differentiation of the terms of executive support, that is the participation and the involvement in the construct, which is different by referring to the organizational behavior and the literature of psychology. The terms of participation and involvement used in this study are referring to the terms used by Berk and Hartwick (1989). The involvement of executive is reflected as the psychological statement of the executive, related with IT, that is a level showing how far the executive view the IT, an important thing to the success of the organization. In this case, the executive involved in the IT management needs wide knowledge about IT. While, the participation is reflected as the real behavior and activities, either the needed energy or time.
Other good thing is by transforming the initial research model in the form of path diagram. This model is used to find out the impact given by each variable toward the development of IT, and can be found out whether or not there is a simultaneous relation among the observed variables. Therefore, the reason of the writer differentiating the term of participation and the involvement of the executive, and transforming the model to find out the form of the support of the executive assumed as adequate to develop the IT management of the company.

The problems in this study can be elaborate as follow: 1) is the participation factor of the executive in IT management positively affecting the development of IT management in the company; 2) Is the involvement factor of the executive in IT management positively affecting the development of IT management in the company, and 3) are the participation and background of the executives, and the condition of the company simultaneously, positively affecting the development if IT management in the company, through the factor of executive involvement.

This study is an empirical study aiming to see the relation or the impact of the variables of participation and the background of the executive and the condition of the organization in the company toward the development of IT management in the company through the variable of executive involvement. While, the benefit expected from this study is for the practitioners in developing IT or IS used in the company, for the academics in giving explanation about what, how and the form of executive support assessed as adequate for the company. Also, it is hoped that it can give additional contribution in the accounting informational system in the future.

THE CONCEPT OF THE MANAGEMENT OF INFORMATION TECHNOLOGY

The conceptual theory framework of IT management, which not only to implement the function of management in managing routine operational problems and new technology, but also to manage the activities, because the IT manager, not having commitment to the IT development will be reduced. If the international business needs the IT function in its organization to support the operational needs and increase its competitive eminent (Earl, J. Michael and David S. Fomby, 1994). Besides, the IT is also the key to success for the global business because it can increase the information quality, i.e. by conveying information fast, punctual, accurate and eminent (Sunwardi, 1996).

There are four concept of the way so that IT can be managed well
(Cash et al., 1992), they are:

1. Strategic relevance. The idea to differentiate the strategic relevance is an important thing in understanding the width of the practice in the technology, and can be used to manage and interpret IT in a company.

2. The culture of the company. Business culture is a phrase needed to consider in identifying the way why IT is managed.

3. Contingency. IT management in the era of 1990s strongly affected by conceptual things, and not accidental, compared with the previous era. Therefore, in implementing the organization, the handling of management and the planning is better.

4. Technology transfer. The IT distribution has to be managed, if not, then the IT is only affecting the function of organizational system.

The success of the implementation can be achieved if the people in the organization are able to change their habit and the way of thinking into the newest IT.

Based on the description above, the understanding of the new concepts are more developed in the management and Information System and the understanding about how to relate those concepts with IT so that the company become efficient. It is strongly determine the role of information system in the company. The understanding on these concepts will be implicated in the attitude and behavior of management, so, the gist, management is required to always be opened and proactive toward the development of business environment. Only companies able to do adaptation with its environment and have eminent in the IT department can exceed their competitor, which can survive and have competitive advantage.

THE IMPACT OF INFORMATION TECHNOLOGY IN THE BUSINESS

IT development is strongly affecting many aspects in the management, the job structure and activities in the organization. In many industries, IT has been able to make the company able to transform many operational aspects of the company in the form of value chain. Interpreting technology in the product, Computer-aided design and manufacturing (CAD/CAM), factory automation and logistics, give contribution to the better quality of performance, and reduce significant enough the cost.

The newest information technology also affects other functions, such as sales, distribution and service focused in the market. Cash et al., (1992) reflected it different competitively. The IT can be reflected as follows:
Table 1. Industry leader position

<table>
<thead>
<tr>
<th>IT affects manufacturing (cost, complexity, coordination, integration, etc.)</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense</td>
<td>Paper</td>
<td>Lumber</td>
</tr>
<tr>
<td>Electronics</td>
<td>Retailing</td>
<td>High fashion</td>
</tr>
<tr>
<td>Airlines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bank</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the Table 1 above, it is found out how the IT affects the operation and marketing. If it is seen today, how the banking industry aggressively compete to differentiate their product and service through the use of effective IT. Rockat (1998) stated that IT was a strategic weapon and using IT was very important.

THE ROLE OF EXECUTIVE IN THE MANAGEMENT OF INFORMATION TECHNOLOGY

Ross et al., (1996) in Ludigdo (1998) stated that a business organization succeeding to win the competition is not because it implements certain important IT, but more because it is developing a capability to implement IT in facing the change of business development. Similar idea is conveyed by McLeod (1995) in Siti (1998) stated that things to meet in the use of IT:

1. The awareness that the eminent to compete can be obtained through the use of IT, meaning that the company can reach eminent from its competitor by controlling the information flow.

2. The awareness that the information service is the main function in the company, meaning that the organizational structure of the company reflects that the IS department has the same importance with other departments.

3. The confession that the Chief of Information Officer (CIO) is the top management, meaning that CIO has an authority to make a decision that can affect all activities in the company.

4. Considering the information resource, when setting the strategic planning, meaning that when the executive carries out strategic planning, they considers that the information resource is bad needed to reach the strategic goal.
5. Having strategic planning for information resource formally needed to obtain and control resource.
6. Having strategy in developing and managing end-user-computing.

The most succeeding factor in system development based on the idea above is Executive management support. The problem what is the form of executive support to give the facility of the relevant use of IT, because the change from manual to computerization is not only related to the change of technology implemented, but also related to the change of the behavior of the workers and organization as a whole (Bodnar and Hopwood, 1995)

THEORETICAL FRAMEWORK AND HYPOTHESIS FORMULATION

The fast growth of microcomputer technology and software used by the company as on of eh tools to increase competitiveness gives consequence in the form of executive is badly needed to maximize IT. Several things can be considered to develop IT and those several variables are tested in this study.

1. The Relation of Executive Participation in the Management of IT Development

In the IT management literature (Izzo, 1987; Sprague and McNurlin, 1986) in Priyastiwi (1999) stated that the adequate role of executive is the personal participation in the IT management and that this personal participation gives contribution to the development of the use of IT in a company. The study was carried out by Saleem (1996) showed that there is a relation between the participation and achievement of IS, in which low-skilled user will give weak participation in the IS development. So, the impact of the user in the IS development is important because the participation level is depended on the impact given by the user.

The study about the participation in the IT development in Indonesia is carried out by Grahiht (1996). The result of his study reflected the existence of positive relation between the participation an user satisfaction in IS development. Similarly is Nurika and Indriastoro (2000) supporting the result of this study.

The participation in this study is defined as “user participation” from Barhi and Harwick (1994), meaning the participation meant as personal activities or real CEO intervention toward the IT management, in which the Executive Participation takes time and physical energy regarding to the IT. Based on the above study, writer present the first hypothesis (H1):

H1: Executive participation in IT management is positively affecting the management of IT development in the company.
The model representing the hypothesis 1 (H1) is:

![Diagram](image1)

Picture: 1. The Relation of Executive Participation in the Management IT Development

2. The Relation of Executive Involvement in the Management of IT Development

The top management involvement has important role in system development, not only to allocate the needed resource, but also give strong signal for the employees that the change applied is important (Munoro, 1994).

Kunde (1989), in his study showed that CEO did not have to be expert in using IT, but, at least, CEO had to know what IT could give to the company. Javerpaa and Ives (1991) identified that the executive involvement reflected the level of CEO understanding on IT. So, the executive involvement in this study is meant as psychological statement from CEO reflecting its importance level of IT, CEO did not need to play a direct role in IT management, but its knowledge on IT in giving achievement to the company, this term is referring to the finding of Javerpaa and Ives (1991). Based on several studies, the writer proposed second hypothesis:

H2: The executive involvement in IT management has positive impact on the Management of IT development in the company.

The model used appropriate with this hypothesis is:

![Diagram](image2)

Picture: 2. The Relation of Executive Involvement in the IT Management Development
3. The Relation of Executive Participation, Executive Background, and the Condition of the Company through the Executive Involvement in Management of IT Development in the Company

Executive background can affect the involvement psychologically in IT management. The difference between the dimensions of age, education and working experience will affect individual knowledge of the related person. Song (1992) stated that someone's background can affect one's knowledge, while Javervas and Ives (1991) illustrated that the executive background affected the executive psychological involvement in IT management.

The relation of organizational condition and the executive involvement can be explained based on the literature of organizational behavior, stating that the organizational condition will affect the involvement psychologically in carrying out activities. Cash et al. (1992) stated in several organizations that IT activities can reflect the most important activities in the organization. The condition of the company is a condition giving a chance to make important decision or giving contribution significantly to the individual psychological involvement in the organization.

IT management meant here is the function of management having responsibility to handle the problems related to the implementation of IT. While, IT meant is the technology used in IS, covering hardware, software, database, telecommunication, human resource and procedure.

Based on the above studies, the writer proposes the third hypothesis (H3) as follows:

H3: Executive participation, executive background and the condition of the company relate simultaneously and affect positively on the IT management development in the company through the executive involvement.

The model developed/proposed to represent the research is:

![Diagram](image)

Picture: 3 The model developed/proposed to represent the research
RESEARCH METHOD

Research Sample

The objects of the research are chosen using purposive random sampling, by choosing the companies, whose business competition is strongly affected by the IT development. Thus, from the selection, it is taken companies that will be used as sample randomly. The samples used are Publisher Company, banking, retailer, and investment. The company selection is caused by the activities of their business has the process and product focusing on the information. The second reason is that the number of their company is more that 30, it is carried out to represent the normal distribution characteristics (Wonnacott and Wonnacott, 1995). The sample is chosen from the companies registered in Standard Trade and Industry Directory of Indonesia, 7th edition, 2000, volume 1, published by PT. Kompas Indonesia. The population of this study is the IT or IS department leaders, or electronic data processing or whose position is under the IT manager from the related company.

The total number of the banking and retailer companies listed will be sent a questionnaire, because these companies have business competition strongly affected by the use of IT. While, the publisher and investment companies are only taken 50% from the data available, because the competition of the use of IT in the company business is not so aggressive as bank and retailer.

Data Collecting Techniques

This study is carried out using primary data through questionnaire using two way: mail survey (through post service) and visiting directly the directed respondant, besides, there are also secondary data collected from the library research, i.e. the previous studies on problems similar with relevant basics theory.

VARIABLE MEASUREMENT

Executive Participation

The understanding of executive participation is measured using executive personal participation, the executive role in the steering commit tee of the company, executive knowledge about IT used by the competitor, personal relation in IT management and the executive knowledge about the IT chance that can be used by the company. These five items are measured using Likert 5 scales.
Executive Background
Executive backgrounds is measured using how long an executive sits on his or her position or can be said based on the executive experience during sitting in his or her position. This item also uses Likert 5 scales.

Organizational Condition
The condition of this company will be measured using the instrument developed by Javerpa and Ives (1991). The item of organizational condition is measured using how far the organization had research and developmental budget for IT using Likert 4 scales.

Executive Involvement
The executive involvement comprises of four items, the way of thinking of IT, executive vision toward IT, and executive agrees to use IT. Those instruments are measured using Likert 5 scales.

IT Development
The measure of IT is using ranking with interval of 5, in which showing the ranking from the simplest technology to the most advanced. The response value of those ranking is the measurement of the development of IT in the company.

RELIABILITY AND VALIDITY
In this study, the testing is carried out toward the instrument used. For the instrument of participation, it is obtained alpha value of 0.689, next, the alpha value for the instrument of involvement is 0.671 and the cut-off value to determine the reliability of an instrument is if the value of cronbach alpha > 0.60 (Nunnally, 1978 in Grabhier, 1996). Therefore, the two instruments, executive participation and executive involvement can be used as measurer. For Construct Validity in this study, it shows estimated value for each indicator is above 0.3, so the indicator used is valid.

DATA ANALYSIS METHOD
To find out the relation among the statistic analysis variables used is Structural Equation Modeling (SEM), to find out the amount of the relation among the variables, and can test research model as a whole simultaneously test the hypothesis by using the AMOS program. In the use of path analysis, it will be obtained the amount of the coefficient of each variable and the amount of the impact of independent variables on the
dependent variables. SPSS Program is also used to analyze the reliable and validity levels and to check whether the data is normal or not.

DATA ANALYSIS AND DISCUSSION

The number of sample finally used is of 109 (N=109) from 123 questionnaires returned, thus the samples are coded for each pieces using the number code from 1 to 109.

Data Normality Assumption

Data analysis in this study is using SPSS program to test the data normality, that is using NORMAL PROBABILITY PLOT picture and the data obtained is normal. It is seen from picture 4, in which the data distribution in around the straight line, not away from it. So, it can be concluded that the data distributed normally.

Picture: 4 Normal Probability Plot

Multicolinearity Assumption

To determine whether or not there is multicolinearity, there are requirements needed to meet, according to Singgih (2002) by seeing the table in the SPSS output:

a. Seeing eigenvalue, if value closing to zero, there will be multicolinearity.
Outlier: a deviation of data having unique characteristic seen very different from other observations and appear in extreme value, either for a single variable or combination variables (Hair, 1995 in Ferdinand, 2000). To determine whether or not there is outlier by determining first the merit value that will be categorized as outlier by reversing the value of the research data in standard score commonly called z-score.

Based on the outlier evaluation for samples above 80 observations, the merit value of z-score is on interval 3 to 4 (Hair, 1995 in Ferdinand, 2000) therefore, the observation has z-score ≥ 3.0, thus it is categorized as outlier. There not is z-score exceeding than 3 or above 4, thus it is said that there is no univariate outlier.

The evaluation of Goodness-Of-Fit-Model

To find out the fit model of the research, it is carried out the testing of Goodness-of-fit, the index of the result of the testing carried out is compared with the value of cut-off, required to determine whether this model can be said good or bad. The result of the Goodness-of-fit can be seen in picture 5 and its summary of the testing in table 2.
Picture 5: Goodness-of-fit in AMOS program

Table 2: Goodness-of-fit

<table>
<thead>
<tr>
<th>Goodness-of-fit index</th>
<th>Cut-off value</th>
<th>Result</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>$x^2$ Chi-square</td>
<td>Small</td>
<td>47,700</td>
<td>Good</td>
</tr>
<tr>
<td>DF</td>
<td>Positive</td>
<td>40</td>
<td>Accepted</td>
</tr>
<tr>
<td>Significance Probability</td>
<td>$\geq 0.05$</td>
<td>0.188</td>
<td>Good</td>
</tr>
<tr>
<td>RMSEA</td>
<td>$\leq 0.08$</td>
<td>0.042</td>
<td>Good</td>
</tr>
<tr>
<td>GFI</td>
<td>$\geq 0.90$</td>
<td>0.934</td>
<td>Good</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>$\geq 0.20$</td>
<td>1.192</td>
<td>Good</td>
</tr>
<tr>
<td>TLI</td>
<td>$\geq 0.95$</td>
<td>0.963</td>
<td>Good</td>
</tr>
<tr>
<td>CFI</td>
<td>$\geq 0.94$</td>
<td>0.981</td>
<td>Good</td>
</tr>
</tbody>
</table>
From table 2, it can be found out that the requirements have been met for its model, so, generally, it can be concluded that this research model is appropriate and can be accepted.

**DISCUSSION**

In this research, the statistical model used to test each hypothesis using AMOS (Analysis of Moment Structure) Program and SPSS Program. Indicator used to accept or refuse the hypothesis in AMOS is CR (Critical Ratio) in Regression Weights. The minimum value is determined absolutely of 2 (Arbuckle, 1997) in the significance level of p ≤ 0.05, while using the SPSS program, the R and P values are used as the basis to refuse or accept the hypothesis. Table 3 below presents CR (Critical Ratio) of the regression analysis result.

Table: 3 Regression Result CR (Critical Ratio)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>3.095</td>
</tr>
<tr>
<td>Involvement</td>
<td>1.958</td>
</tr>
<tr>
<td>Involvement</td>
<td>2.349</td>
</tr>
<tr>
<td>IT Development</td>
<td>3.013</td>
</tr>
<tr>
<td>IT Development</td>
<td>4.597</td>
</tr>
</tbody>
</table>

Table: 4 Regression Weights for Models

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>S.E.</th>
<th>P</th>
<th>Ket</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>0.245</td>
<td>0.079</td>
<td>0.002</td>
<td>Sig</td>
</tr>
<tr>
<td>Involvement</td>
<td>0.057</td>
<td>0.029</td>
<td>0.650</td>
<td></td>
</tr>
<tr>
<td>Involvement</td>
<td>0.262</td>
<td>0.112</td>
<td>0.019</td>
<td>Sig</td>
</tr>
<tr>
<td>IT Development</td>
<td>0.460</td>
<td>0.153</td>
<td>0.003</td>
<td>Sig</td>
</tr>
<tr>
<td>IT Development</td>
<td>0.950</td>
<td>0.207</td>
<td>0.000</td>
<td>Sig</td>
</tr>
</tbody>
</table>
From the table 4 above, it can be seen that the estimated coefficient value of the impact of condition of organization on the positive executive involvement is of 0.245. The estimated coefficient of executive background impact on the executive involvement is less significant (0.057), but still positive and the estimated coefficient of executive participation on the executive involvement also positive of 0.262, while the executive participation on the IT development has positive estimated coefficient of 0.460. The last is the positive impact between the executive involvements on the IT development of 0.950. Therefore, as a whole, it can be concluded that there is positive and significant relation.

Hypothesis 1

The model representing the hypothesis 1 (H1) is:

Executive Participation \[ \text{CR} = 3.018 \]
\[ P = 0.003 \]
\[ R = 0.660 \]

Management of Information Technology in company

The objective of this hypothesis testing is to find out whether the executive participation will have impact on the IT management development of the company. Seen from the C.R value, having positive value of 3.018, in which the C.R. Value is identical with t-test in regression (Ferdinand, 2000).

Next, from the result of correlation between the participation levels with the IT management development, shown with positive R-value of 66%, with the value of 0.033 (≤ 0.05). Thus it can be concluded that the bigger the executive participation, the bigger the development or growth in IT management of the company.

Hypothesis 2

The model representing the hypothesis 2 is:

Executive Involvement \[ \text{CR} = 4.397 \]
\[ P = 0.000 \]
\[ R = 0.700 \]

Management of Information Technology in Company
The objective of this hypothesis is to find out whether or not the executive, having the involvement, affects the IT management development of the company. Seen from the result of the CR value for the relation between the variables of executive involvement and the IT management development having a value of 4.597, shows a significant relation.

The result of executive involvement with the IT management development of the company, shown with the positive R-value of 70%, this shows the existence of positive relation. With the p-value of 0.007(< 0.01) it can be concluded that the higher the executive involvement level on the IT management development of the company, the higher also the IT management development in the company.

**Hypothesis 3**

![Diagram showing the relationship between executive participation, condition organisation, executive involvement, and management of information technology development in the company.]

The objective of this research is to find out whether the executive participant, the condition of the organization and the executive background simultaneously can affect the IT management development of the company through the variables of executive involvement. Seen from the result of CR value, for the relation of each variable in above 2, show-
ing significant relation, except for the variable of executive background is not so significant.

For the relation of the variables participation and involvement of the executive, it is obtained positive R-value of 46.9% with p-value of 0.019% (< 0.05), we believe that the executive participation affects the executive involvement, and the relation between the organizational condition and the executive involvement is obtained positive R-value of 32% with p-value of 0.002 (< 0.05). This proofs that the organizational condition has an effect on the level of executive involvement, but for variable executive background in the executive involvement is not so affecting. This is seen by the obtained CR value less than 2, but this variable has positive R-value of 28% at p-value of 0.050. With the convenience level of 95%, as a whole, it can be said that the variables of participation, organizational condition, and executive background is affecting the executive involvement.

The result of the data testing above using the AMOS 4.0 program, it is found out that after resulted a fit research model with research data and also the hypotheses proposed by the researcher, either hypothesis one, two, or three are proven. So, it can be said that the form of executive support, in the form of executive participation and involvement has an impact of the IT management development in the company.

CONCLUSION, LIMITATION AND IMPLICATION

Conclusion

The result of the research gives support to the three hypotheses proposed by the researcher. The variables of executive participation have positive relation with the information technology management development in the company. The testing result of executive participation, positively related and significant to the information technology in the company, indicates that the hypothesis is accepted.

Next, in the testing of second hypothesis, the result of the analysis obtained, shows the existence of positive and significant relation between the variable of executive involvement and the information technology management development in the company, and affects bigger than using executive participation. Therefore, the result of the test carried out accepts the hypothesis proposed in this research.

The last test is carried out toward the third hypothesis, which also shows a strong enough relation for executive participation variable, organizational condition, and executive background toward the development of information technology management used in the company.
through the information involvement.

Limitation
Several limitations rather disturbing in this research are the use of different scale, because the researcher, in fact, used fixed instrument. This is not so good, because maybe it is not appropriate with the answer meant by the respondent, therefore, for the next research, it is better to use the same scale instrument.

Implication
This research gives a chance to carry out subsequent research by studying other variables that have not been observed by the researcher in this research. Those variables are the existence of bureaucratic, the requirement of competition, and customer assessment, which can encourage the development of the use of information technology in the company, used to increase the service to the customer.

The next research also needs to consider the executive background based on the educational level, age, and his or her function, and widening the samples and research objects, so that the data distribution is fairer and more sensitive in detecting the data difference.

DAFTAR PUSTAKA