The Utilization Of Information Technology On Performance Improvement At Bank Perkreditan Rakyat Banten Province

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ABSTRACT

Purpose: This study aims to determine the effect of social factors, task suitability, long-term consequences, conditions that facilitate the use of information technology, and the complexity of the use of information technology in rural banks in Banten Province.

Design/methodology/approach: The sampling technique uses a stratified random sampling technique, which is proportionally random sampling from each group in each BPR in Banten Province.

Findings: The results of the research show that partially and simultaneously social factors, Affect, suitability of tasks, long-term consequences, conditions that facilitate the use of information technology, and complexity affect the utilization of information technology. And the utilization of information technology has a significant effect and has a very strong relationship to the performance of BPR in Banten Province.

Research limitations/implications: The target population in this study is BPR in Banten Province, while the affordable population is 15 BPRs in Banten Province, each of which is taken as many as 10 respondents.

Practical implications: User perception in viewing information technology is getting better, this is marked by a system that is then deemed to provide benefits in helping companies internally and externally. Internal includes activities in business processes such as making invoices, travel documents and others. While external factors include the company's business strategy which is assisted by information technology to win from its competitors, including to bind customers.

Paper type: Research paper

Keyword: social factors, task suitability, long-term consequences, the conditions that facilitate the use of information technology, and the complexity of the use of information technology, performance, BPR
I. INTRODUCTION

Information technology in business is very important. Many companies in the world want to transform themselves into powerhouses of global businesses through major investments in e-business, e-commerce, and other global Information Technology businesses. So there is a real need for business managers and business practitioners to understand how to manage this important organizational function. Managing systems and information technology that supports the company's modern business processes is a major challenge for business and IT managers and business practitioners (Amijaya, 2010).

User perception in viewing information technology is getting better, this is marked by a system that is then deemed to provide benefits in helping companies internally and externally. Internal includes activities in business processes such as making invoices, travel documents and others. While external factors include the company's business strategy which is assisted by information technology to win from its competitors, including to bind customers.

To make more informed decisions, system developers need to have a better understanding of the factors that influence the use of information technology (Jackson et al., 1997 in Tjhai, 2003: 5). The model developed by Thomson et al. (1991) in Tjhai (2003: 5) which adopts some of the theories proposed by Triandis (1980) states that the use of personal computers by users is influenced by social factors of the workplace that utilize computers, the effective factors (individual feelings) to the use of personal computers, complexity factors, suitability of information technology with individual tasks, long-term consequences expected by individuals from the use of computers, and conditions that facilitate a conducive environment utilizing personal computers.

From the results of Mohamad's (2005) and Nurul Huda 92010) study, individual social and feelings factors were found to have a positive and significant effect on the use of information system technology. The complexity factor has a negative and significant effect on the utilization of information system technology. However, other factors, such as suitability of tasks, long-term consequences, and conditions that facilitate cannot be proven to have a positive effect on the use of information system technology because the results obtained are negative and insignificant. Research conducted by Agus (2006) and Tri Rizkiah (2018) obtained results that social factors, affect, and conditions that facilitate the use of information technology have a positive and significant effect on the utilization of information systems technology.

In addition to the research above, Sagung (2008) also examined the factors that influence the use of information technology at BPRs (Bank Perkreditan Rakyat or rural bank) at Tabanan Regency. The results of his research indicate that social factors and conditions that facilitate positive and significant influence on the utilization of information technology. Affect factors (individual feelings), suitability of tasks and long-term consequences have a positive and insignificant effect on the utilization of information technology, while the complexity factor has a negative and insignificant effect on the utilization of information technology. Based on the results of the research above, there are several results that differ among researchers. Therefore, the authors want...
to re-examine the factors that influence the use of information technology and the influence of the use of information technology on the performance of rural banks in Banten Province.

In general, the system implemented in a company should facilitate users in identifying data, accessing data, and interpreting the data. Data in the information should be.

II. METHOD

In general, the system implemented in a company should facilitate users in identifying data, accessing data, and interpreting the data. The data in the information should be integrated data from all company/organization units so that it can be used for various job needs in the company. Computer facilities in the company greatly affect the implementation of information technology in the company. With more supporting facilities provided to users, it is easier for users to access data needed to complete individual tasks within the company. It is expected that individual information technology from companies or organizations that are users of the system will produce better output and performance that will increase (Jumaili, 2005: 725).

A. Framework

From the description above it can be described as follows:

Image of conceptual framework

The population in this study is all BPR employees in the province who use information technology in carrying out their main tasks. The sample in this study is

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all members of the population. The total number of BPRs in Banten Province amounted to 77, but there were several BPRs whose conditions were lost therefore that there were only 15 BPRs that could be sampled, of which fifteen BPRs took 10 employees who used information technology to carry out their tasks.

B. Definition of Variable Operations
1. Social factors (X1) is the support of someone or group to others to utilize information technology in carrying out work. Social factors are shown by the large support of colleagues, superiors, and organizations for the use of information technology in carrying out work.
2. Affect (X2) is an individual's feeling whether it is pleasant or unpleasant in doing work using information technology.
3. Task conformity (X3) is a match between information technologies that is applied to task characteristics. Task characteristics reflect the nature and type of tasks that require technological assistance. The use of technology by the user is expected to support the tasks performed.
4. Long-term consequences (X4) are the benefits of applying information technology in the future, such as career advancement and opportunities to get more important jobs.
5. Conditions that facilitate the use of information technology (X5) are factors that facilitate the use of information technology so as to facilitate users in carrying out a job, such as the availability of connection facilities between computers, the availability of guidebooks about application programs, and availability of assistance when finding in hardware related difficulties.
6. Complexity (X6) is the level of innovation in the development of information technology that is perceived as something that is relatively difficult to understand and use so that individuals become longer in completing their work.
7. Utilization of information technology (Y1) is behavior in using technology when doing work. Measurements such as the frequency of software usage, the amount of software that users control, and the perception of the benefits of the software.
8. Performance (Y2) is the achievement of a series of tasks by information technology users. Higher performance involves a combination of increased efficiency, effectiveness, productivity and quality.

C. Data Analysis Techniques
Analysis technique used
1. Validity and Reliability Test Data validity test is done with Pearson correlation with valid criteria Pearson correlation r-value above 0.30 (Sugiyono, 2007: 124). Data reliability test was done by one shot and tested by Cronbach Alpha statistical test with alpha reliability criteria ≥ 0.60 (Ghozali, 2012: 42).
2. Classical Assumption Test theoretically, the model used in this study will produce valid presumptive model parameter values if it is filled with classical regression assumptions. The classical assumption test is a test of normality, multicollinearity, and heteroscedasticity.

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3. Hypothesis Test. The first and second hypotheses were tested using multiple linear regression analysis techniques. The third hypothesis was tested by simple linear regression analysis techniques. In this study, the F-test was conducted on the first hypothesis, while the t-test was for the second and third hypothesis. Test F on H1 was used to determine the significant influence of social factors, affect, and suitability of tasks, long-term consequences, facilitating conditions, and complexity. Simultaneous use of information technology. The testing criteria used are comparing the significance level of F with (alpha) 5%. If the significance level of F is less than 5%, this means that simultaneously social factors, affect, suitability of tasks, long-term consequences, facilitating conditions, and complexity have a significant effect on the use of information technology in credit banks in Banten Province. The t-test is used in H2 and H3 to test the significance of each independent variable partially on the dependent variable. In this test, the significance level of each independent variable (sig t) is compared to (alpha) 5%. If sig t <5%, then H2 and H3 are accepted, meaning that each independent variable influences the dependent variable.

III. RESULTS AND DISCUSSION

A. Description of Research Objects

This study took a sample of 15 BPRs registered with the OJK in 2018. Specifically, the criteria for companies to disclose complete information related to the age of BPRs are BPRs that always generate profits, have employees numbering over 30 people. Based on purposive sampling technique, a sample of 15 BPRs was obtained, namely:

Table 1 BPRs being sampled

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of BPR</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PD BPR Kerta Raharja</td>
<td>JALAN RAYA SERANG KM 15 CIKUPA NO. 1 CIKUPA - TANGERANG</td>
</tr>
<tr>
<td>2</td>
<td>PD. BPR Serang</td>
<td>JL. RAYA SERANG - JAKARTA KM. 11 NAMBO - KESERANGAN</td>
</tr>
<tr>
<td>3</td>
<td>PT BPR Fidusia Civitas</td>
<td>Jl. Beringin Raya No. 146 B Perum Tangerang</td>
</tr>
<tr>
<td>4</td>
<td>PT BPR Indosurya Daya Sukses</td>
<td>PASAR MODERN MUTIARA KARAWACI BLOK B.03 TANGERANG</td>
</tr>
<tr>
<td>5</td>
<td>PT BPR Universal</td>
<td>Boulevard, Bintaro Jaya, Ruko Emerald Avenue EA/A16-17</td>
</tr>
<tr>
<td>6</td>
<td>PT. BPR Akasia Mas</td>
<td>Ruko Golden Madrid 1 Blok D NO.3 Bsd City Tangerang Selatan</td>
</tr>
</tbody>
</table>

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B. Characteristics of Respondents

Characteristics of respondents are a description of the state of the respondents consisting of age, education, income, years of service, working hours, and a number of family members (Arikunto, 2010). Characteristics of respondents in this study include age, gender, education, years of service, unit, position, status, and the number of training. Data collection in this study was conducted by distributing 150 questionnaires. The results of the frequency distribution recapitulation collected from the questionnaire regarding the characteristics of respondents are presented in Table 2.

<table>
<thead>
<tr>
<th>Characteristics of Respondents</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>59</td>
<td>39%</td>
</tr>
<tr>
<td>Female</td>
<td>91</td>
<td>61%</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMA</td>
<td>9</td>
<td>6%</td>
</tr>
<tr>
<td>Diploma</td>
<td>43</td>
<td>29%</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>84</td>
<td>56%</td>
</tr>
<tr>
<td>Postgraduate</td>
<td>14</td>
<td>9%</td>
</tr>
<tr>
<td>Years of service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 year</td>
<td>39</td>
<td>26%</td>
</tr>
<tr>
<td>3.1-5 year</td>
<td>40</td>
<td>27%</td>
</tr>
<tr>
<td>5.1-7 year</td>
<td>55</td>
<td>37%</td>
</tr>
</tbody>
</table>

Source: OJK data processed
C. Test Validity and Reliability

From the results of the validity and reliability test, it is known that the results of the instrument validity test show that the Pearson Correlation value is above 0.30. This means that all instruments used in this study are valid and can be used as a measuring tool. Reliability test results indicate that Cronbach alpha above 0.6 means that the instrument is said to be reliable.

D. Classic Assumption Test

In this study the value of Asymp. Sig (2-tailed) is 0.745 greater than alpha (0.05), so the data in this research regression model is stated to be normally distributed. Based on the analysis it can be seen that the multicollinearity test in both regression models is free from multicollinearity because the tolerance value is more than 10% and VIF is less than 10.

The first regression model, which is looking for the value of the use of information technology using the Glejser test, turns out to be social factors, Affect, suitability of tasks, long-term consequences, conditions that facilitate the use of information technology, complexity, it is known that p-value is greater than 0.05 (> 0.05), meaning that there is no statistically significant effect so that the variable is free of heteroscedasticity. The second regression model, which is looking for the value of the use of information technology variables significantly affect performance because p-value is greater than 0.05 (> 0.05) means that the variable is free of heteroscedasticity.

E. Hypothesis Testing

The first regression equation is as follows.

\[ Y = 14,270 + 0.475X1 + 0.442X2 + 0.256X3 + 0.179X4 - 0.225X5 - 0.139X6 \]

From the analysis, it is known that R2 is 0.79 or 79% meaning that 79% of the variation in the use of information technology in rural banks in the province can be explained by social factors, affect, suitability of tasks, long-term consequences, conditions that facilitate the use of information technology, complexity, whereas 21% is influenced by various other factors.

The results of testing the first hypothesis (H1) shows that the F value of 94.22 and the significance of F of 0.000 is smaller than the real level of 0.05. This shows...
that social factors, affect, task suitability, long-term consequences, conditions that facilitate the use of information technology, complexity, simultaneously have a significant effect on the use of information technology at BPRs in Banten Province. Similar results were also obtained by Tjhai (2003) and Sagung (2008).

The results of testing the second hypothesis (H2) shows the value of b1 (0,0,475)> 0. This means that social factors explain the variable utilization of information technology in a positive direction. The variable X1 has (p-value) 0,000 <(alpha) 0.05, which means that social factors have a significant effect on the utilization of information technology. The results of this study are not consistent with the results of the research by Tjhai (2003) and Sagung (2008). Value of b2 (0,442)> 0, means that the efficiency factor is able to explain the variable utilization of information technology in a positive direction. The variable X2 has (p-value) 0,000 > (alpha) 0.05, which means that the efficiency factor has a significant effect on the utilization of information technology at the BPR in Banten Province. Similar results were also obtained by Thompson et al (1991) in Tjhai (2003), Tjhai (2003), and Sagung (2008). The value of b3 (0,256)> 0, means that the suitability factor of the task is able to explain the variable utilization of information technology in a positive direction. The variable X3 has (p-value) 0,000 <(alpha) 0.05, which means that the suitability factor of the task has a significant effect on the use of information technology at the BPR in Banten Province.

The results of this study are not consistent with the results found by Tjhai (2003) and Sagung (2008). The value of b4 (0,179)> 0 means that the long-term consequence factors are able to explain the variable of information technology utilization in a positive direction. The variable X4 has a significance level (p-value) 0,000 <(alpha) 0.05. This means that long-term consequences factors have a significant effect on the use of information technology at BPRs in Banten Province. Similar results were also obtained by Thompson et al. (1991), but not consistent with the results found by Tjhai (2003) and Sagung (2008). The value of b5 (-0,225) <0, means that the condition factors that facilitate the use of information technology can explain the variable utilization of information technology in a negative direction. The variable X5 has a significance level (p-value) of 0.00> (alpha) 0.05, which means that the conditions that facilitate the use of information technology have a significant effect on the utilization of information technology at BPRs in Banten Province. The same results were also obtained by Tjhai (2003), but not consistent with the results found by Sagung (2008).

The second regression equation is as follows. Y2 = 31,430 + 0,553 Y1 (2)

From the analysis results obtained the value of Determination Coefficient is 0.659 or 65.9% meaning that 65.9% of BPR employee performance can be explained by variations in factors, while 34.1% is influenced by various other factors.

The results of testing the third hypothesis H3 shows that the coefficient value of Y1 (0.553)> 0. This means that the variable utilization of information technology is able to explain the performance variables in a positive direction.
The variable Y1 has a significance level (p-value) of 0.000 < (alpha) 0.05, which means that the use of information technology has a positive and significant effect on the performance of BPRs in Banten Province. The same results were also obtained by Sagung (2008), but not consistent with the results found by Tjhai (2003).

IV. CONCLUSION

A. Conclusion
1. Based on the issues raised and the discussion that has been done before, it can be concluded as follows:
2. Simultaneously social factors, affect, suitability of tasks, long-term consequences, conditions that facilitate, and complexity have a significant effect on the use of information technology at BPRs in Banten Province.
3. Partially social factors, task suitability factors, long-term consequences and complexity have a positive and significant effect on the use of information technology in rural banks in Banten Province. On the other hand, affect and conditions that facilitate conditions show a negative but significant relationship to the use of information technology in rural banks in Banten Province.
4. The use of information technology has a positive and significant effect on the performance of rural banks in Banten Province.

B. Suggestion
Based on the results of the analysis and conclusions, it can be seen that there are some contradictions between the results of this study and previous research on the factors that influence the use of information technology. Therefore, it is hoped that this research can be continued by other researchers with different locations in companies or organizations that are loaded with high utilization of information technology, such as telecommunication companies, private banks or government, and other companies that utilize information technology in their work.

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