

Research Article

Effectiveness of E-Audit Implementation in the Indonesian Audit Board

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Abstract.

This paper aimed to find the effectiveness of e-audit implementation in the Indonesian Audit board (BPK). This research was conducted on the auditors who have used e-audit when conducting financial audits. 225 auditors were given questionnaires in four BPK regional offices: namely Jakarta, West Java, Central Java, and East Java. The results show various levels of the effectiveness of e-audit implementation among the auditors from the 4 regional offices. The test results of the effectiveness show that the implementation of e-audit is quite effective in supporting state financial audits. The results show that there are different levels of the effectiveness of the e-audit implementation; this means there is a need to increase the socialization of the use and implementation of e-audit to support a state financial audit. Future research is expected to examine the factors that influence the difference of the effectiveness level of e –audit implementation in BPK. A broader examination of types of e-audit systems used by BPK will increase the general understanding of the research results.

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1. Introduction

According to the constitution, Indonesian Audit Board (BPK) was founded to conduct audits of state finances accountability and management. The process of financial audits carried out by BPK encountered some obstacles such as the length of the audit period. This condition is caused by the entity's delay in submitting documents to the BPK. These documents are very vulnerable to acts of corruption, plus the scope of BPK audits is getting wider with a limited number of auditors, making it difficult for BPK to increase the number of performance audits [1].

BPK addressed these problems are by developing a new system called e-audit in order to improve the performance of state financial audits so as to reduce all corruption practices that occur [2]. In addition, the implementation of e-audit in the audit process is believed to improve the efficiency and effectiveness of the audit process [3, 4].

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The research result of [5] regarding the e-audit system that the e-audit used by BPK is that it is appropriate to use for state financial audits and it supports the implementation of state financial audits. Given the importance of implementing e-audits in reducing corruption, in order to maximize the implementation of e-audit, a continuous improvement is needed in terms of information systems, support, synergy and evaluation of the e-audits [6].

The development of e-audit applied by BPK requires support from the availability of high speed stable internet and also human resources who have knowledge of the Internet [7]. Therefore, the optimization of transparent and accountable management and, accountability of state finances can also be realized. Based on the description above, the researchers are interested in conducting research on the effectiveness of the implementation e-audit system in BPK.

2. LITERATURE REVIEW

According to BPK News, edition 02 Vol IV (2014: 11), e-audit is interpreted as a system that creates a synergy between the information systems of BPK and the information system of the entity which uses data communications to systematically build a data resourch of state finances accountability and management in BPK. In short, e-audit is a technology and software that helps auditors in analizing and verifying financial data as well as monitoring and continuous auditing [8].

The implementation of e-audit in the public sector provides several advantages compared to the implementation of audits in general. The following are some of the identification of advantages of implementing e-audit that have been revealed by several publications and researches:

1. The implementation of data collection is faster because it can save up to 70% of time compared to conventional audits [9, 10]. In addition, e-audit helps auditors to perform data population tests more quickly [11].
2. Using examination with e-audit, it is possible to save double entry checks of documents and invoices [9].
3. The examination of audits can be used to develop a wider and in-depth scope of audits [6, 12].
4. The audit process will be easier to carry out both from the point of view of the examiners of BPK and the party being audited (entity/ auditee) [6].

For BPK, the implementation of e-audit can be an early warning system, if there is a deviation in the financial management of the public sector which will encourage accountability for state financial management [13]. In addition, there are 5 benefits of implementing the BPK e-audit [14].

1. BPK examiners can see the indications of irregularities in a grant and social donation more quickly by checking whether they are in accordance with the rules, distributed to and used by those who are entitled.
2. BPK examiners are able to check an official trip by Garuda Airways in just a few minutes and can verify whether the official trip is fictitious or made up.
3. Examiners are able to examine the state revenues through the State Recipient Number (NTPN) and LKPP/LKLL/LKPD systemically.
4. Examiners can easily monitor and check systemically the correctness of motorized vehicle taxes and regional tax assessment letters (SKPD) that have been entered into the regional treasury.

Therefore, e-audit will be considered as an important tool in supporting auditor works [15].

3. Research Methods

This research uses questionnaires given to the BPK auditors of the four regional offices ; namely Jakarta , West Java, Central Java, and East Java. The research combines the effectiveness measurement scales derived from the several research [16, 17]. The results of the questionnaire were then processed to produce an e-audit effectiveness level. The measurement of the effectiveness in this research is as follows [18, 19]:

$$Effectiveness = \frac{Actual\ score}{Predicted\ Score} \times 100\%$$

The score that is converted through the standard effectiveness measure to obtain the achievement level of effectiveness, as follows:

TABLE 1: The Effectiveness ratio measurement.

Effectiveness Ratio	Level
Below 40%	Very Ineffective
40%-59.9%	Ineffective
60%-79.9%	Effective
Above 79.99%	Very Effective

4. Results And Discussion

4.1. Descriptive Analysis

The results of descriptive analysis of the research shown in Table 2 :

TABLE 2: Descriptive analysis.

Measure	Item	Frequency	(%)
Gender	Male	151	67.1
	Female	74	32.9
Age	26-30	10	4.4
	31-35	70	31.1
	36-40	68	30.2
	41-45	47	20.9
	46 and above	30	13.3
Education	Bachelor	123	54.7
	Master	101	44.9
	Doctoral	1	0.4
Audit Board Regional Offices	Center/Secretariat General	44	19.6
	East Java Regional	85	37.8
	Central Java Regional	50	22.2
	West Java Regional	46	20,4

The results of descriptive analysis tells the numbers of auditors as respondents mostly from BPK of East java. Additionally, numbers of male (67.1%), age 31 to 35 (31.1%) and the majority of respondents hold Bachelor degree (54.7%).

4.2. Effectiveness Ratio of E-Audit Implementation

The assessments using the effectiveness ratio shown in the table as follows:

Based on the test results, the effectiveness of e-audit implemetation in table 3, the total average of the effectiveness of e-audit implementation is 74%. However, the effectiveness score by region varies. A research by Dharmawati et al (2019) on the effectiveness of e-audit suggested that e-audit has been very effective (88.23%) applied by BPK of Southeast Sulawesi Province

The various results of the effectiveness ratio indicates the implementation of effective e-audit has not been optimal in some regions.

TABLE 3: E-Audit effectiveness ratio.

EFFECTIVENESS RATIO	Number Respondents	of Percentage(%)
BPK Jakarta (Central)		
Very ineffective	0	0%
Ineffective	1	2%
Effective	38	86%
Very Effective	5	11%
Total Respondents	44	100%
BPK WEST JAVA		
Very Ineffective	0	0%
Ineffective	0	0%
Effective	39	85%
Very Effective	7	15%
Total Respondents	46	100%
BPK EAST JAVA		
Very Ineffective	0	0%
Ineffective	3	4%
Effective	72	85%
Very Effective	10	12%
Total Respondents	85	100%
BPK CENTRAL JAVA		
Very Ineffective	0	0%
Ineffective	1	2%
Effective	34	68%
Very Effective	15	30%
Total Respondents	50	100%
TOTAL		
Very ineffective	0	0%
Ineffective	5	2%
Effective	183	81%
Very Effective	37	16%
Total Respondents	225	100%
AVERAGE RATIO	74% (EFFECTIVE)	

5. Conclusions And Recommendations

The research results shows that there are various levels of effectiveness of e-audit implementation at BPK in four regional offices indicating the need to improve the socialization of the use and the implementation of e-audit in order to support state financial examination. Future researche is expected to be able to examine the factors

that influence the differences in the effectiveness level of e- audit implementation at BPK. More extensive examinations of the types of e-audit systems used by BPK will increase the understanding of the research results.

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