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# Analysis of Business Process Management Principles in Performing Remote Audit at the Audit Board of the Republic of Indonesia

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#### **ABSTRACT**

The Audit Board of the Republic of Indonesia must quickly adapt to its duties in the COVID-19 pandemic era. BPK forced all work to be done remotely. This study aims to analyze the application of Business Process Management Principles (BPM) in conducting remote audits at BPK following the COVID-19 pandemic. This study applies the descriptive qualitative with study literature and Likert survey on seven representative offices of BPK. The analytical tool used is BPM Principles with pattern matching. The results show that BPM principles in the remote audit have accomplished various implementation qualities. The result is divided into two types: principles that have worked properly and principles that have not maximally worked. The appropriately worked principles are context awareness, enablement, holism, continuity, institutionalization, purpose, and technology appropriation. The BPM principles that have been implemented but not maximized are the principle of involvement, the principle of joint understanding, and the principle of simplicity. Remote audits can only be conducted smoothly if all principles are implemented accordingly.

#### **KEYWORDS**:

Business process management, remote audit, BPK

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### INTRODUCTION

The COVID-19 pandemic has emerged worldwide, spreading in Indonesia in early March 2020. The pandemic has become an uncertainty that affects all aspects of life, including the economy, education, health, and social activities (Sari, Widyastuti, & Indarso, 2022). No one knows how long the COVID-19 pandemic will end, but we hope everything will return to normal soon. The public and private sectors are ready to work from home (WFH), ensuring information technology protocols and strategies for the virtualization era.

All sectors are preparing to go digital. Physical contact was so limited at the time that the digital transformation intensified. The crisis caused by the COVID-19 pandemic ushered people into the VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) era and digital economy (Zahrawati, Shanti, Utami, Khumaedi, & Suhartini, 2021). Nevertheless, regarding audit functions, 58% of Chief Audit Executives' teams work remotely during the pandemic (Internal Audit Foundation, 2021). Auditors are one of the key services in providing financial reporting audit services. (Sari et al., 2022). The purpose of an audit is to ensure that the financial statements are free of material misstatements (IAPI, 2015).

The Audit Board of the Republic of Indonesia (BPK) is the external auditor entrusted with auditing the government's financial statements. BPK is ready to face uncertainty, given that information technology has developed in recent years, such as Enterprise Resource Planning (ERP), to support the integration of planning and management to produce information for decision-making, big data infrastructure, and other support systems (BPK, 2021). The COVID-19 pandemic is like a catalyst in the massive application of information technology, notably supported

by Secretary General Regulation Number 22 of 2020 concerning Procedures for State Financial Audits in Emergencies. However, the economic turmoil occurred due to market uncertainty, resulting in financial distress (KMPG, 2020). Financial difficulties are not only felt by BPK but also by other state institutions due to the limitations of budget policies by the Government of Indonesia. This is the impact of the extreme decline in state income as a result of the domino effect of the COVID-19 pandemic.

BPK has been mandated to audit the management and responsibility of state finances per Article 23E of the 1945 Constitution (UUD 1945), stating that BPK is an institution established under the constitution assigned to conduct the audits of the management and responsibilities of state finances freely and independently. In early March 2020, the Institute of Internal Auditors (IIA) published a paper on remote auditing. Remote auditing is an approach in which auditors use technology to perform audits without the need to go to the auditee's office (IIA, 2021). Remote or long-distance audits are implemented at BPK by considering auditors' and auditees' health and safety factors. Remote auditing is expected to be implemented soon since BPK has the supported technology, even though it is imperfect. The technology intrinsic to BPK can accommodate remote audits performed in the headquarter and its representative office. However, conducting audits in the regions faces other constraints due to the need for more infrastructure to support the connectivity.

The remote audit is a new approach and massively implemented during the pandemic. The Guidelines for Auditing Management Systems have introduced remote auditing to assist the implementation of audits constrained by security reasons or other obstacles (ISO, 2018). Previous research related to remote auditing was conducted from various

perspectives, including from Sookhak, Talebian, Ahmed, Gani, and Khan (2014); Zahrawati et al. (2021); Wardani and Nugraheni (2021); Willy (2021); Santoso (2020); Butarbutar and Pesak (2021); Farcane et al. (2022). BPK has conducted a study on remote audits, followed by a review by the Research and Development Division. The remote audit requires auditors to be competent to gain stakeholders' trust, act proficiently in information technology systems to understand risk and control the information technology environment and analyze big data to cover a broader range (Zahrawati et al., 2021).

The audit of the Central Government Financial Statements Keuangan (Laporan Pemerintah Pusat, LKPP) for the 2019 fiscal year was the first remote audit ever performed (Zahrawati et al., 2021). The audit period of government financial statements is usually divided into two stages, namely (i) interim audit and (ii) detailed audit. However, the implementation time depends on each policymaker. Therefore when the COVID-19 pandemic started in Indonesia, the positions of the central government financial report audit team and regional government financial report audit team differed. All teams in the field should postpone the field audit. There were challenges, especially for the team that reviewed local government financial reports, due to the need for more infrastructure, such as connectivity. The remote audit is also the solution to budget cuts. According to funding sources, expenditures paid for the audit of the BPK are the burden of the State Budget (Anggaran Penerimaan dan Belanja Negara, APBN). Budget pressure due to the COVID-19 pandemic has resulted in spending cuts across all state budget users, including BPK. By carrying out remote audits, travel expenses for audits can be reduced, and as a result, remote audits could reduce the burden on the state budget.

Remote audit increases the use of existing technology to strengthen documentation and reporting (Internal Audit Foundation, 2021). However, when the audit is conducted, it is necessary to ensure that the disclosure of financial statements is adequate in terms of facts and events after the reporting date that can support the audit opinion and produce appropriate audit evidence to maintain audit quality (Sari et al., 2022). Audit quality can be affected by the COVID-19 pandemic (Saleem, 2021). Auditors must be able to carry out alternative procedures in gathering audit evidence, assessing the risk of material misstatement, re-managing the process, and modifying alternative audit procedures (Sari et al., 2022).

Live observation cannot be replaced (Internal Audit Fondation, 2021). The problem of communication is identified as an issue in remote audits. Remote audits create a distance between the auditor and the auditee. Lack of personal touch may cause the opportunity for fraud to occur (Internal Audit Foundation, 2021). There is a risk of falsification of documents sent by the auditee as audit evidence (Achmad, 2020 in Sari et al., 2022). Documents received digitally in the form of scanned documents are not electronic but physical documents submitted electronically. Such physical document has weak evidentiary power (Yurisprudensi Mahkamah Agung Number 3609 Pdt/1985 in BPK, 2021). Visual observations cannot be as accurate and precise as conventional audits, as there are opportunities to manipulate the location and quantity of work (Sari et al., 2022).

Auditors encounter many challenges in the process of auditing pieces of evidence. During the pandemic, there are limitations in obtaining audit evidence (Ismanidar, Maksum, Gultom, and Meutia, 2022). The auditor must ensure the reliability of the evidence. In addition, there are issues of securi-

ty, confidentiality, and storage. Therefore, auditors must be able to prepare themselves to face such difficulties (BPK, 2021). Auditors must ensure the protection of confidential data. Moreover, migration to electronic data requires a server and storage. Another challenge is the expertise in using remote audit media from both the auditor's and auditee's sides (BPK, 2021). However, this challenge does not mean that remote auditing is a limitation.

Remote audit guidelines have supported the implementation of remote auditing at BPK. Sixteen legal bases support the preparation of these guidelines. The remote audit guide is described in the software hierarchy at BPK (BPK, 2021). BPK identified several risk areas in remote audits. It takes preparation to run a good remote audit, cost, time, and human resources (BPK, 2021). After two years of performing remote auditing, conventional auditing is implemented again since the severity of the COVID-19 pandemic has decreased. Vaccination rates began to increase in the third year of the COVID-19 pandemic. This shows that remote auditing at BPK is only an effort to deal with uncertainty during the pandemic. It is undeniable that carrying out remote audits, especially in the regions, is a method BPK is unprepared to pursue. In light of this current situation, how is remote audit using Business Process Management (BPM) principles applied in practice?

This study will discuss how to analyze the implementation of remote audits. The analysis tool employs BPM principles with pattern matching. BPM has become one of the most widely used approaches to designing modern organizations and information systems. However, the adoption and use of BPM remain fragmented, and there is little agreement concerning the right scoping of BPM (Vom-Brocke & Rosemann, 2020). BPM is not the same as a technology tool or initiative for business processes (Jeston, 2018).

BPM is about managing end-to-end business processes now and into the future to ensure that they are always relevant to the business (Jeston, 2018).

BPM solutions will facilitate organizations in modeling business processes, automating business processes, monitoring business processes, and making it easier to improve performance through process improvement (Jeston, 2018). The focus on critical processes is too limited, and identified critical success factors do not adequately reflect the basic principles of good BPM (Vom-Brocke et al., 2014). Critical success factors for BPM in general (Buh, Kovačič, & Štemberger, 2015), and more specifically in the public sector of the developing country context (Syed, Bandara, French, & Stewart, 2018), have pointed to top management support and leadership as crucial elements for success (Syed, French, Bandara, & Stewart, 2017). There remains a dearth of research to explain the phenomenon of leadership in BPM initiatives (Devika, Sharifah, & Syed, 2016). The ten principles of BPM are context awareness, enablement, continuity, holism, institutionalization, involvement, joint understanding, purpose, simplicity, and technology appropriation principle (Vom-Brocke et al., 2014). An explanation of each principle is presented in Table 1.

This study posits that BPK is ready to implement remote audits in this context. In order to decide which is the best process audit, a proxy for quality was considered in implementing the principles of BPM. This study aims to contribute to the existing literature on remote audits. First, it provided the difference between remote audits and conventional audits. Thus, this study's findings could identify the difference between remote and conventional audits, particularly in BPK. Second, this study's findings could provide valuable information to evaluate the readiness of BPK to implement remote audits.

Table 1. BPM Principles

| Variables                             | Indicators   |
|---------------------------------------|--|
| Principle of context-awareness        | Understand the context and implement the context in the process of the business process          |
| Principle of enablement               | Using internal resource, have to develop employee capacity                                       |
| Principle of continuity               | Implementation of continuous improvement from the perspective of both the auditor and the entity |
| Principle of holism                   | The processes are interrelated   |
| Principle of institutionalization     | There is an organizational structure in audit process  |
| Principle of involvement              | Stakeholder involvement  |
| Principle of joint understanding      | Prevention asymmetric information  |
| Principle of purpose                  | The audit process is carried out with detailed objectives to achieve those objectives            |
| Principle of simplicity               | Can achieve economic, efficiency and effectiveness in audit process                              |
| Principle of technology appropriation | Specific use of technology   |

# **RESEARCH METHOD**

This study shows the implementation of BPM principles as a theoretical framework and its application empirically based on total data collection. This study uses a descriptive qualitative design with a case study approach. It refers to the systematic and precise description of a problem as an area of research. Furthermore, it helps the decisionlong-distance making between and conventional or hybrid audits. Thus, the study is suitable for using the decision scenario case to address the problem: What is the best method between conventional. remote, or hybrid audit for BPK to implement in the short run?

The data has been collected through a perception survey and literature review. The survey was conducted on seven representative units in BPK. The data identified seven representative offices comprised of West Papua, South Sulawesi, West Sulawesi, Central Java, North Kalimantan, Papua, and State Finance Audit Unit III. Respondents consist of four classes: assistant auditor, junior auditor, senior auditor, and Deputy Director of the Audit Unit. The survey uses a Likert Scale. The scale used is a Likert Scale of 1-5, with gradations from Strongly Agree (Sangat Setuju, SS), Agree (Setuju, S), Doubtful (Ragu-ragu, RG), Disagree (Tidak Setuju, TS), and Strongly Disagree (Sangat Tidak Setuju, STS). Previous literature has used different proxies to analyze remote audit implementations. This section describes the case in BPK for applying the best audit methods in the short term. Data analysis was performed using pattern matching.

## RESULT AND DISCUSSION

A remote audit is a new approach that uses remote auditing technology and techniques that have existed for several years (Willy, 2021). Jarvis (2020) explains that remote audit, also known as virtual auditing, is a method of conducting remote audits using electronic media such as video conference, telephone, and email to obtain audit evidence as is done during an audit at the audit location. Remote auditing is where an auditor uses technology to perform an audit without visiting the auditee (IIA, 2020).

Remote auditing is defined as the process by which auditors couple information and communication technology (ICT) with data analytics to assess and report on the accuracy of financial data and internal controls, gather electronic evidence, and interact with the auditee, independent of the physical location of the auditor (Teeter et al., 2010). Remote auditing refers to using technology to gather information, interview auditees, and other audit procedures when face-to-face methods cannot be performed (IIA, 2020 in Ismanidar et al., 2022). Auditors need to prepare remote audits that are closely related to the use of information technology (Wardani & Nugraheni, 2021). Remote audits can be achieved with the help of digitization (Santoso, 2020).

IIA (2021) states that remote audit is challenging and requires careful planning, from the document inspection process, physical field examination, and interviews to the closing meetings. The work efficiency of auditors in remote audits is influenced significantly by the digitalization degree of audit activities (Farcane et al., 2022). In the Cambridge dictionary, conventional means traditional, following the usual practices of the past. The conventional audit is conducted at the entity's location or on-site (BPK, 2021). The difference between remote and conventional audits lies in the use of technology and is carried out remotely.

Before carrying out a remote audit, several aspects need to be considered, such as creating programs that enhance employee competencies, building application systems for internal and external parties, and support. The remote audit is new, so it is necessary to increase the competence of employees involved in the long-term audit. Capacity building is delivered through education, seminars, focus group discussions, or workshops. These programs have been carried out by BPK and have played a positive role in building employee perceptions of understanding the concept of the remote audit. In addition, build-

ing a system that could help carry out Remote Audits is necessary. BPK already has a desktop and web-based internal Audit Application System (Sistem Aplikasi Pemeriksaan, SiAP). Through SiAP, it is possible to carry out remote audits that assist auditors in documenting audit evidence and quality control in stages. BPK has designed a security system through a proxy, access authorization, and several virus-protect devices.

There are similarities between remote audits and conventional audits. Both types of audits undergo three stages: planning, implementing, and reporting. However, the implementation of each step differs. Planning in remote audit has been more complicated as the decision of whether a remote audit can be carried out occurs at this stage. The complexity of planning requires greater costs, time, and money, especially in the audit office, which has just started to carry out remote audits (BPK, 2021). Several factors must be considered in the planning stage, such as assessing the feasibility and risks of remote audits, facilities, and infrastructure, gathering evidence, appointing liaisons and conducting trials.

At the implementation stage, conventional audits are carried out by being physically present at the site of the audited party. However, remote audits are done through desk audits and performed remotely using online tools. The audit activity carried out is entry meetings, implementation of the audit program, and exit meetings. All these stages can be replaced by technology. In a remote audit, entry meetings and implementation of the audit program can be held remotely via video conferencing. Whether the selected audit technique can be carried out via long-distance video conference should be noted.

An audit technique that cannot be carried out during a remote audit is an audit technique for physical testing evidence (Pusdiklatwas BPKP, 2009). Alternative procedures or additional procedures can be carried out for this particular technique. For audit techniques that can be conducted with modifications, this suggests that the technique can be implemented but needs to be adjusted, such as digitization. These audit techniques are audit techniques for documentary evidence and those that can be exercised without modification of procedures, namely audit techniques for analytical evidence.

At the reporting stage, the activity carried out is almost the same as during the conventional audit, except that the meeting to discuss findings is conducted using video conference media. At this stage, the auditor discloses the possible impact of procedures that cannot be carried out during a remote audit.

After a series of audit processes, the auditor will monitor the recommendations in the Audit Report. This process has migrated from what was previously carried out conventionally to digitization. Follow-up monitoring is performed with the help of the Follow-up Monitoring Information System (Sistem Informasi Pemantauan Tindak Lanjut, SIPTL). SIPTL is an online platform that assists in the monitoring of the follow-

up by the entity.

Implementing remote audits in BPK has its strengths and weaknesses. According to the perception survey, it was discovered that auditors involved in remote audits prefer to carry out conventional audits. Respondents answered that 45.5% disagreed and strongly disagreed, and 54.5% responded with doubtful questions about the ease of remote audits.

# Principle of Context-Awareness in Remote Audit

Implementing BPM in numerous entities requires a practice of the identical method. Without awareness, the implementation can fail (Nordiawan & Hertianti, 2022). Auditors should understand the difference between remote audits and conventional processes. The perception survey results in Table 2 show that 91% of respondents agree and strongly agree, while the remaining 9% answered doubtful.

#### **Principle of Enablement in Remote Audit**

The principle of enablement focuses on the need to develop individual and organization-

Table 2. The Survey's Result

| BPM Principle   | Strongly<br>Agree | Agree | Doubtful | Disagree | Strongly<br>Disagree |
|---|-------------------|-------|----------|----------|----------------------|
| Context Awareness   | 45%               | 46%   | 9%       |          |                      |
| Enablement-Training   | 27%               | 46%   | 18%      |          | 9%                   |
| Enablement- Workshop/FGD/Seminar                              | 27%               | 55%   |          | 18%      |                      |
| Continuity  |                   | 9%    | 27%      | 37%      | 27%                  |
| Holism-Planning Stage   |                   | 27%   | 27%      | 37%      | 9%                   |
| Holism-Implementation Stage                                   |                   | 9%    | 27%      | 37%      | 27%                  |
| Holism-Reporting Stage  |                   | 27%   | 55%      | 9%       | 9%                   |
| Involvement- Feedback from Auditee and Collecting Action Plan | 10%               | 10%   | 40%      | 30%      | 10%                  |
| Involvement- Monitoring Follow up                             |                   | 20%   | 50%      | 20%      | 10%                  |
| Joint Understanding-Communication                             |                   | 10%   | 50%      | 20%      | 20%                  |

al BPM capabilities (Vom-Brocke & Rosemann, 2020). Remote Audits are carried out with a team structure consisting of BPK employees. Before implementing the remote audit, BPK developed individual capabilities through training, workshops, and focus group discussions. Respondents' perceptions showed that 73% of the respondents attended the preparation training for long-distance audits. Related to the context awareness principle, the output of preparation training can be achieved because the survey perception shows that respondents can fully understand the difference between remote audit and conventional.

According to the survey perception, it has concluded that 73% of the total respondents agreed and strongly agreed with preparation training before carrying out remote audits. In addition, 82% of respondents agreed and strongly agreed with implementing the workshop/focus group discussions. Furthermore, to maintain the quality of output and capabilities, a team system was formed to implement quality assurance and quality control, which are carried out to obtain quality in stages (BPK, 2021).

# **Principle of Continuity in Remote Audit**

The principle of continuity suggests that BPM requires continuous improvement. Building a long-term period-orientated technique to BPM and a sustainable attitude is vital to enforcing the continuity principle (Nordiawan & Hertianti, 2022). BPK always updates the implementation of remote audits from several instruments, and BPK updates the application, which is the responsibility of the Information Technology (IT) bureau. BPK strengthens legal aspects through the Planning, Evaluation, and Development Directorate. The remote audit guide is the first step of evidence of applying the principle of continuity and continuous improvement.

The perception survey shows that employees involved in remote audits do not agree to continue the remote audit. The implementation of remote audits is met with resistance from the employees (Setiawan, 2016). This is in line with the perception survey results, which show the auditor's difficulties in dealing with the entity during the implementation of remote audits.

### **Principle of Holism in Remote Audit**

BPK designed a comprehensive remote audit from planning, implementing, and reporting (BPK, 2021). BPM should not be interpreted solely as a modeling process but as a holistic approach that includes strategic, methodological, and technical aspects (Nordiawan & Hertianti, 2022). Regarding the BPM cycle by Szelagowski (2018), remote is referred to in the model illustrated in Figure 1.

Remote audits facilitate auditing, especially during access restrictions, such as during the COVID-19 pandemic. The remote audit design is regulated in the 2015 Audit Management Guidelines and the 2021 Remote Audit Guidelines, with implementation adjusted to existing conditions. BPK has a working group that is ratified by a decree of the head of BPK in charge of discussing which accommodates audit performance data. The information must be monitored by the control system on an ongoing basis and analyzed and used to support workers on an ongoing basis automatically. Performance information is stored in the SiAP. Through the information technology bureau, analysis of performance data is monitored in the system. The IT bureau could perform feature fixes in the system. The execution and monitoring stage uses storage assistance in the form of big data (still needs to be refined).

According to the perception survey, respondents did not find it easy to carry out remote audits in planning (46%) and implementa-

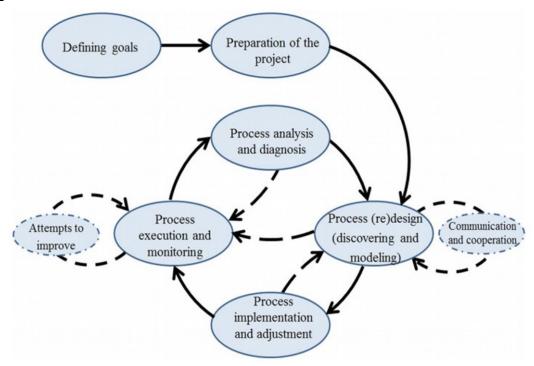


Figure 1. Life Cycle of BPM Source: Szelagowski (2018)

tion (64%). However, the finding shows a different light for the reporting stage. It has been discovered in the perception survey that 27% (higher than the unease perception—18%) of respondents find it easy if the reporting stage is carried out remotely. Boohoene and Williams (2012) in Lumbantoruan, Tewal, and Lumintang (2021) state that resistance is an obstacle in organizations because it avoids change and interferes with the success of change implementation—the resistance, especially at the planning and implementation stages.

# Principle of Institutionalization in Remote Audit

Entrenched habits and adverse circumstances prompt silo behavior in many organizations, preventing horizontal process thinking and acting. The principle of institutionalization calls for embedding BPM in the organizational structure (Vom-Brocke et al., 2014). This principle emphasizes governance and sharing roles in formal organizational structures. The principle of institutionalization hopes that implementing BPM may be connected to spe-

cific capabilities in organizational structure. Even on a vast scale, a separate structure, including BPM divisions or workplaces, may be formed (Nordiawan & Hertianti, 2022).

As a small division, the fiscal sustainability review team has an organizational structure. The team consists of team members, a team leader, a supervisor, a deputy auditor in charge, and an auditor in charge. To prevent BPM from being only an ad hoc responsibility, the position of process owners with actual responsibility, accountability, and authority is pivotal (Power, 2011). Every member of the team has their responsibility and authority. The auditor in charge is responsible for overseeing all activities conducted by team members. The supervisor and deputy auditor in charge is responsible for quality control of the audit result before being approved by the auditor in charge. The supervisor monitors the audit program and gives some advice to the team. The team leader will monitor every work of the team members.

#### **Principle of Involvement in Remote Audit**

The principle of involvement emphasizes that all stakeholder groups affected by BPM should be involved. Studies find that organizations mostly resist stakeholder involvement (Vom-Brocke & Rosemann, 2020). BPK accommodates the involvement of stakeholders starting from the planning, implementation, and reporting stages, and this involvement is shifted from direct to remote at the planning, implementation, and reporting stages. However, respondents' perceptions show that it takes work to apply this principle remotely. Auditors find it difficult to request data remotely, so cooperation from the auditee is needed in carrying out remote audits (BPK, 2021).

The respondent's perception of the convenience of getting feedback from the auditee, collecting action plans, and monitoring follow-up during the remote audit is only 20% (agree and strongly agree). In addition to cooperation, platform and ICT support is important in achieving involvement principle in the remote audit. The request for an action plan for a commitment to follow up on BPK's findings has a perception that tends to lead to the negative side. According to the perception survey, requesting an action plan and monitoring follow-up directly is easier than conducting it remotely.

Organizations can create meaning and a shared understanding across all stakeholders business process modeling languages (Vom-Brocke & Rosemann, 2020). Another strategy is establishing provisions, explaining the sequence of procedures, and using flowcharts (Nordiawan & Hertianti, 2022). Concerning the involvement principle, one of the factors did not achieve the principle of involvement because the two parties did not reach a mutual understanding. Only 10% of respondents agree with easy communication with the entity. Communication is one of the supporting elements to achieve mutual understanding. This

perception could not be concluded that the auditor needs a better perception of the remote audit process. This indicates the threat which faces the respondents.

# Principle of Mutual Understanding in Remote Audit

Organizations can create meaning and a shared understanding across all stakeholders process business modeling languages (Vom-Brocke & Rosemann, 2020). Another strategy is establishing provisions, explaining the sequence of procedures, and using flowcharts (Nordiawan & Hertianti, 2022). Concerning the involvement principle, one of the factors did not achieve the principle of involvement because the two parties did not reach a mutual understanding. Only 10% of respondents agree with easy communication with the entity. Communication is one of the supporting elements to achieve mutual understanding. This perception could not be concluded that the auditor needs a better perception of the remote audit process. This indicates the threat which faces the respondents.

Communication carried out on the entity could be assisted by explaining the sequence of procedures or using flowcharts or other tools that are most effective for the entity. Good communication can encourage a more effective and efficient audit process, especially those requiring entity involvement. BPK realizes a risk of communication needing to be established effectively during entry meetings, interviews, and exit meetings (BPK, 2021). BPK stated that to assess this risk by profiling the entity's key personnel. Such things could be mitigated by conducting informal online communication.

#### **Principle of Purpose in Remote Audit**

The principle of purpose is essential because it focuses on creating business and organizational system transparency, which helps to develop and improve the value that can generate within the organization. In practice, a common pitfall of BPM activities is overdoing some of the tasks and forgetting the true purpose of the activity (Vom-Brocke et al., 2014).

The strategic objectives regulated the audit according to the 2020 BPK decree Number 3 on the 2020-2024 Strategic Planning (known as Renstra 2020-2024). According to Renstra, BPK has a mission to become a trusted audit institution in realizing the quality and valuable state financial governance in achieving state goals. BPK's strategic goal is to improve state finances' quality and valuable governance.

BPK has compiled 17 legal bases to support the implementation of remote audits. The details of the seventeen software include Law Number 15 of 2004 concerning Audit of State Finance Management and Responsibility; Law Number 15 of 2006 concerning the Supreme Audit Agency; BPK Regulation Number 1 of 2017 concerning State Financial Audit Standards; BPK Decision Number 4/ K/I-XIII.2/7/2014 concerning Financial Audit Implementation Guidelines; BPK Decision Number 5/K/I-XIII.2/10/2015 concerning Audit Management Guidelines; BPK Decree Number 4/K/I-XIII.2/5/2020 concerning Technical Guidelines for Financial Audits in Emergency Periods; BPK Decision Number 6/K/I-XIII.2/6/2020 concerning Six Pillars of Quality Control Standards for the Supreme Audit Agency; Regulation of the Secretary General Number 22 of 2020 concerning Methods for Auditing State Finances in Emergencies; Directorate of Research and Development Number P-001.0/XII.3.3/2020 concerning Guidelines for Performance Audit in Emergency Periods; and the Directorate of Research and Development Number P-001.0/XII.3.4/2020 concerning Guidelines for Compliance Audit Related to Handling COVID-19 in an Emergency Period.

#### **Principle of Simplicity in Remote Audit**

Focus on simple solutions means balancing between input and output so that more efficient and effective processes. There are two ways to a simple process: eliminating specific procedures and costly documents (Nordiawan & Hertianti, 2022). The practice of remote audits adds procedures and due diligence, also another procedure that is deemed necessary for remote audits is digitization, both for auditors and auditees.

The resulting inputs and outputs must be carried out effectively and efficiently (Vom-Brocke et al., 2014). If we look at the perception survey results, it cannot be said that the remote audit carried out by the BPK is running efficiently and holistically. Even though technology has supported this business process, in practice, the respondents felt the benefits of technology less than they should have.

Based on the perception survey results, respondents show consistency and can be peroxide to BPM principles. The principles that have yet to be maximized include continuity, involvement, and mutual understanding. These three principles are interrelated with the principle of simplicity. The involvement principle was not achieved due to the communication problems between the auditee and the auditor. The problems could be asymmetric information or technical problem. Communication is fundamental to achieving the principle of mutual understanding. The factor that causes delays in communication and involvement of entities is a business process that is more complex than the results of the survey perception.

BPK must focus on addressing its communication problem. First, communication in re-

mote audits should be established under guidance. Second, the auditor should have been trained prior to performing audit work. Moreover, both parties must maintain the confidentiality of the audit. A major deterrent to effective audit communication is the existence of an essentially one-way communication channel. Given that intended receivers are remote and widely dispersed, the auditor's report is mainly impersonal, and there is little opportunity for direct feedback from receivers. Furthermore, unlike face-to-face communications, the auditee cannot reply to the report and ask questions regarding misunderstandings.

#### **Principle of Technology Appropriation**

According to the survey result, the dominant application used for Remote Audits is through Zoom application. Meanwhile, the internal application developed by BPK, known as SiAP, is used in second place. According to respondents' perception, it is said that to support Remote Audits, the main application is video conferencing.

Countless information technology solutions can compel the business process' performance to run efficiently and effectively (Nordiawan & Hertianti, 2022). In this study, it is known that the use and procurement of technology have increased compared to the pre-pandemic period. It can be seen that the contradiction between technology appropriation increases, but simplicity is low. This implies that the application of technology is not directly burdened with ease. The goal of the ten principles has yet to be achieved. No clause states that the only factor that encourages convenience is technology. Therefore, that does not mean the only cause of inconvenience is not achieving technological goals. It could also be due to other factors (external factors such as the entity's competence), as indicated by the explanation of the previous principle.

# CONCLUSION

Remote audit creates a more efficient and effective audit process during the pandemic. Given the preceding, BPK has to ensure the validity of evidence, security data and processes, opportunity cost, and development cost. However, performing the remote audit is a start to joint society 5.0. Moreover, BPK needs more infrastructure, confidentiality issues, and entity commitment. BPM principles in remote audits have accomplished various implementation qualities. The result is divided into two types: principles that have been operating accordingly and principles that have not been optimal.

The BPM principles that have worked accordingly are context awareness, enablement, holism, continuity, institutionalization, purpose, and technology appropriation principles. The context awareness principle works well because respondents can understand the context of a long-distance audit. The enablement principle is implemented well because BPK empowers its employees to audit. There are efforts to build and strengthen capacity through learning, training, workshop, and focus group discussions with instructors. The principle of holism works well because the review process is comprehensively based on the BPM lifecycle. The principle of institutionalization has been implemented well because the review team structure is clear. The principle of continuity has been implemented internally BPK carries out continuous improvement through ICT and legal aspects. The purpose of remote audit supports the organization's goal, and therefore the principle of purpose has been achieved. In the process review, BPK uses technology to create a simple, efficient, and effective process.

The BPM principles implemented but could be more optimal are involvement, joint understanding, and simplicity. The involvement principle has yet to be optimal as the entity's involvement still faces several obstacles, and this also impacts the application of the joint understanding principle. There needs to be more communication which leads to poor implementation of remote audits and, therefore, the inability to apply the simplicity principle and run an audit effectively and efficiently.

The findings of this study indicate that BPM in the remote audit by BPK is not fully implemented as it should be. This study's findings would be relevant to policy recommendations, establish good communication with the auditee, and set regulations and training for auditors in place. This study has limitations whereby data was collected from seven representative offices and were not considered, which might affect the basis for generalization. Additionally, this study was cross-sectional. Sekaran and Bougie (2013) asserted that a shortcoming of cross-sectional study is the inability to prove cause and effect association among variables.

In order to address the shortcomings, this study recommends that future studies should be conducted on collecting data over a long period and longitudinal to have sufficient time to gather data. Future studies should also investigate the nature of the relationship in more detail, considering the cause-and-effect relationship.

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Vol. 9, No. 1, 2023: 71-85

