

The Internal Audit Role in Fraud Detection and Prevention

Fury Khristianty Fitriyah^a, Zaldy Adrianto^b, Cahya Irawady^c, ^{a,b,c}Faculty of Economics and Business, Universitas Padjadjaran, Indonesia,

The objective of this research is to produce a policy and model for Internal Auditors in Universities to conduct their role, especially detecting and preventing fraud by implementing technology-based audits based on the Technology Acceptance Model (TAM) model within the Public Universities in Java island, Indonesia. The specific target to be achieved in this research is to obtain empirical evidence about the key factors of the success of internal auditors in Public Universities to adopt technology-based audit techniques based on the TAM model. Factors that can be identified from this TAM model will be implemented as strategy design for the implementation of technology-based audit techniques for detecting fraud by the internal auditors in public Universities in Indonesia. The research paradigm that will be used in this research is a qualitative method, a method that investigates a social phenomenon and human problem. In this approach, the researcher makes a complex picture, examines words, detailed reports from the respondents' views, and conducts a study of natural situations. While the qualitative research procedures used will produce descriptive data in the form of written and oral words from people and observed behaviour.

Key words: *Fraud Detection, Internal Audit, Internal Control, technology-based audit, Technology Acceptance Model.*

Introduction

University is an educational institution with the task of implementing three national objectives (Tridharma) which consist of: providing higher education, conducting research, and implementing community service. University should be able to act as an institution that produces qualified human resources in order to be able to actively participate in national development activities and have high competitiveness in global competition. Therefore, the University should be managed based on the principles of accountability, transparency, non-profit, quality assurance, and effectiveness and efficiency.



In the context of strengthening the governance and accountability of tertiary institutions, the Ministry of National Education (Kemendiknas) requires the establishment of an Internal audit office (SPI) at the tertiary level. The internal audit office's responsibilities are auditing, reviewing, evaluation, monitoring, and other supervision tasks aimed at controlling activities, securing assets, producing reliable financial reports, increasing operational effectiveness and efficiency, and early detection of deviations and non-compliance of the regulation. According to Amin Widjaja Tunggal (2012: 65), internal audit plays an important role in monitoring activities to ensure the effectiveness of anti-fraud programs and implemented control activities.

The Indonesian Corruption Watch (ICW) Public Service Monitoring Division reported that for 2005 - 2016, there were 425 cases of fraud in the education sector with indications of state losses reaching Rp. 1.3 trillion and fraud in Higher Education totalling 9 cases with state losses incurred reaching more than Rp. 57 billion (ICW 2013). Some examples of fraud phenomena in the university sector are: 1) the rector of Public University in Purwokerto was found guilty by the court for corruption (detik.com), 2) fraud was found in the construction of laboratory building in University in Malang, East Java (Tribunnews), and 3) the library construction fraud in one University in Jakarta (Kompas).

A key element in recent professional development in increasing the fraud detection requirements in the financial statement audit has been significantly heightened requirements to assess the controls on journal entries (Debreceny and Gray 2010). Data mining and data analytics can be implemented to reduce the risk of internal fraud (Jans, Lybaert et al. 2010) (Jans 2013, Dilla and Raschke 2015, Li, Dai et al. 2018) (PWC 2012) (Kogan, Alles et al. 2014).

Literature Review

Anthony and Govindarajan (2001) state that Internal Auditing is a staff activity intended to ensure that information is reported accurately in accordance with prescribed rules. This is so that fraud and misappropriation of assets is kept to a minimum and in some cases, to suggest ways to improving the organisation, efficiency and effectiveness.

In the current era, the development of the internal auditor profession is very rapid, the internal auditor has been recognised as part of corporate governance that can help management improve company performance, especially in terms of control. There has been a change in outlook on the role of the internal auditor profession from the old paradigm which is still oriented towards the watchdog towards a new paradigm that emphasises the role of a consultant and catalyst (EY 2018).

The watchdog's role includes inspection, observation, calculation and checking activities aimed at ensuring compliance / compliance with regulations, regulations or policies that have been set, the internal auditor's role as a consultant is expected to provide benefits in the form of advice in managing organisational resources so as to assist the management. The role of internal auditors as a catalyst is related to quality assurance so that internal auditor is expected to guide management in recognising risks that threaten the achievement of organisational goals (EY 2018).

Given the important role of fraud supervision, internal auditing is the only work unit that is most appropriate to do so. Therefore, the role of internal auditor is very important in fraud prevention. Internal auditors help management prevent fraud by testing and evaluating the reliability and effectiveness of controls, along with the potential risk of fraud in various segments.

The Technology Acceptance Model (TAM) was introduced by Davis in 1986 which is one of the adaptation theories of Theory of Reasoned Action (TRA) proposed by Ajzen and Fishbein in 1980. In the TRA it is explained that a behavior is carried out because individuals have the will or intention to carry out activities of their own will (Ajzen and Fishbein 1980). TAM aims to explain and estimate user acceptance of an information system. TAM uses TRA because it is used as a basis for knowing the relationship between perceived usefulness and perceived ease of use to the interests of IT users (Information Technology) (Davis 1985). TAM is a theory that explains the perception of technology users. The user's perception will have an influence on the interest in using IT. In the TAM model, the level of acceptance of IT use is determined by six constructs, namely, external variables, perceived ease of use, perceived usefulness, attitude toward using, behavioral intention to use, and actual system usage. The following figure 1 shows the TAM model introduced by Davis (1985):

Figure 1. TAM Model (Davis 1985)

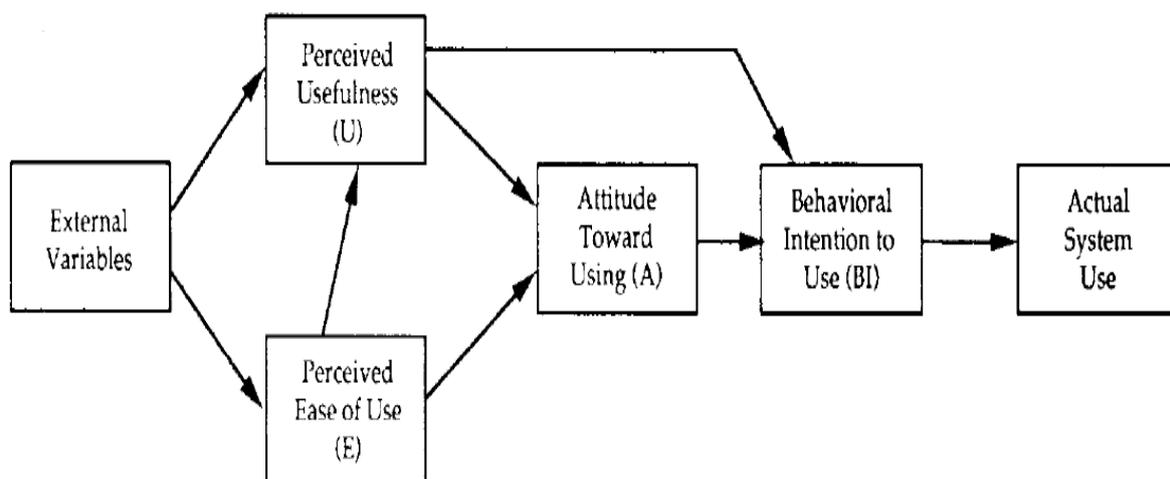


Figure 1 above shows the relationship between constructs in the TAM model. The external variable construct is considered to have a direct influence on the construct of perceived ease of use and perceived usefulness (Davis, Bagozzi et al. 1989). The perceived ease of use construct is influenced by external variables related to the characteristics of a system that can increase the interest of IT users. Basically, the construct of perceived ease of use and the construct of perceived usefulness both have an influence on the construct of attitude toward using. The perceived usefulness construct will influence the construct of behavioral intention to use (Davis 1989). In addition, behavioral intention to use will also be influenced by the construct of attitude toward using and at the same time will affect the construct of actual system usage (Greenfield and Rohde 2009).

E-audit is also known as continuous audit, because the data is in digital form, then the audit process can be carried out continuously and in real time (Alles, Kogan, & Vasarhelyi, 2013; Early, 2015; Henderson, Davis, & Lapke, 2013). Whereas (Nograsedk, 2011), believes that e-audit is a medium that allows auditors and auditors to be connected through information technology. E-audit is the process of using a computer to automate and simplify the audit process. In addition, e-audit is an effective audit tool to detect financial errors. By implementing CAATs using audit software, the auditor will then be able to test whether there are problems in the data. Millions of files can be checked and collected data can be identified (Stoel, Havelka et al. 2012).

Acceptance of an internal auditor on e-audit is important for increasing the ability of an internal auditor to detect fraud in an organisation, this is due to the increasing capability of information technology in improving good governance (Debreceeny & Gray, 2010; Dilla & Raschke, 2015; Jans, Lybaert, & Vanhoof, 2010; Yükcü & Gönen, 2012) (Henderson, Davis et al. 2013).

Jones and Bates (1990) state that fraud is embezzlement which includes various frauds, including intentional deceit, account falsification of accounts, corrupt practices, embezzlement or corruption and so on. The classification of fraud according to the ACFE (The Association of Certified Fraud Examiners) is divided into three forms, namely Asset Misappropriation (misuse of assets), Corruption (corruption), and Fraudulent Financial Statements (fraudulent financial statements). Three conditions that cause a person to commit fraud are commonly referred to as a fraud triangle (Fraud Triangle) according to Arens et al (2014: 355-357), namely Pressure, Opportunity, and Rationalisation.

Data Collection

In this study the data collection methods that used are interviews and observation. According to Uma Sekaran (2009), the determination of informants in qualitative research serves to

obtain maximum information. The maximum information can be achieved if the researcher is right in taking information to the informant. Criteria that must be considered in determining the informant to obtain maximum information is the informant is the key informant (key informant) of the research object. In determining informants, this study uses a purposive sampling technique that is determining informants with certain criteria that know and understand the duties and responsibilities and what has been done by PTN internal auditors in Indonesia. From this description, the informants chosen in this study were internal auditors at Public service Body University in Java island, Indonesia. The Universities are:

1. Politeknik Negeri Malang
2. Universitas Negeri Malang
3. Universitas Brawijaya
4. Universitas Sebelas Maret Surakarta
5. Universitas Negeri Yogyakarta
6. Universitas Jenderal Soedirman
7. Universitas Negeri Semarang
8. Universitas Sultan Ageng Tirtayasa
9. Universitas Negeri Jakarta
10. Universitas Terbuka
11. Universitas Surabaya

According to Sekaran (2013) the population refers to a group of individuals, events, or certain things that want to be investigated. The population of this research is the Internal Auditor of State Universities Public Service Agencies throughout Java Island. The sample is a subgroup of the population consisting of members who have been selected from that population (Sekaran, 2013). This research is a collective case study in BLU state universities throughout Java. The sample in this study was eleven Internal Supervisory Units at PTN BLU in Java.

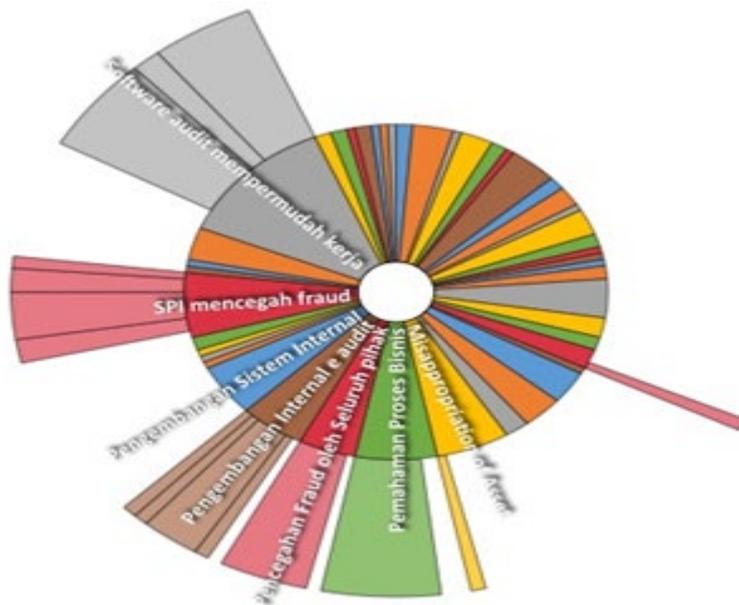
Data Analysis

Data analysis is performed using the inductive model of Miles and Huberman (1984), which will reveal that the activities in qualitative data analysis are carried out interactively and last until the data is saturated. The technique used by using triangulation techniques, namely:

1. Triangulation of methods is done by comparing information or data in different ways. In qualitative research researchers used interview, observation, and survey methods. To obtain reliable, truthful information and a complete picture of certain information, researchers can use interview and observation or observation methods to check the truth. In addition, researchers can also use different informants to check the truth of the information. Triangulation of this stage is done if the data or information obtained from the research subject or informant is in doubt.

of the transcription it can be concluded that internal auditors believe that the audit software could facilitate them to conduct an audit efficiently, as can be seen in figure 3. Additionally, the implementation of audit software in the internal audit engagement does not mean it will be easier for an internal auditor to detect fraud. As one informant's opinion is that fraud is always conducted in silent ways, therefore internal auditor required specific skills and adequate training in order to be able to detect fraud in the organisations.

Figure 3. Topics that are discussed by the informants



Misappropriation of assets is the most common fraud case that happened in the universities, because most universities lack adequate procedures to protect their assets. Inadequate recording processes and control procedures to maintain asset security, lead to the fraud perpetrator misusing the assets mainly from the office inventory of movable assets.

Conclusion

The internal auditor at university has an important role in detecting and preventing fraud. They can be the consultant for the management to prepare the internal control system and procedure that can be implemented in the organisation. Their acceptance of the technology could facilitate conducting the audit process more efficiently and help auditors provide audit results faster. Their ability to understand the business process can support management to create the adequate procedure in detecting fraud, especially the misappropriation of assets as the most common type of fraud occurring at university.



REFERENCES

- Amin Widjaja Tunggal, 2012, Audit kecurangan dan akuntansi forensik,. Harvarindo, Jakarta
- Anthony, R. N. 1., & Govindarajan, V. (2001). *Management control systems* / Robert N. Anthony, Vijay Govindarajan. 10th ed. Boston: McGraw Hill/Irwin.
- Alles, M. G., Kogan, A., & Vasarhelyi, M. A. (2013). Collaborative design research: Lessons from continuous auditing. *International Journal of Accounting Information Systems*, 14(2), 104-112. doi:10.1016/j.accinf.2011.06.004
- Arens, A.A.; Elder, R.J.: and Beasley, M.S. 2014. *Auditing and Assurance Services*. New York: Perason.
- Ajzen, I. and M. Fishbein (1980). "Understanding attitudes and predicting social behaviour."
- Davis, F. D. (1985). *Technology Acceptance Model for empirically Testing New end-user Information Systems*. Sloan School of Management, Massachusetts Institute Of Technology. Ph.D in Management.
- Davis, F. D. (1989). "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology." *MIS quarterly* 13(3): 319.
- Davis, F. D., et al. (1989). "User Acceptance of Computer Technology: A Comparison of two theoretical Models." *Management Science* 35(8): 982.
- Debreceeny, R. S. and G. L. Gray (2010). "Data Mining Journal Entries for Fraud Detection: An Exploratory Study." *International Journal of Accounting Information Systems* 11: 157-181.
- Dilla, W. N. and R. L. Raschke (2015). "Data visualization for fraud detection: Practice implications and a call for future research." *International Journal of Accounting Information Systems* 16: 1-22.
- EY (2018). *Integrity in the spotlight: The Future of Compliance*. Global Fraud Survey, Ernst & Young. 15th.
- Greenfield, G. and F. Rohde (2009). "Technology acceptance: Not all organisations or workers may be the same." *International Journal of Accounting Information Systems* 10(4): 263-272.
- Henderson, D. L., et al. (2013). "The Effect of Internal Auditors' Information Technology Knowledge on Integrated Internal Audits." *International Business Research* 6(4).



- Jans, M., et al. (2010). "Internal fraud risk reduction: Results of a data mining case study." *International Journal of Accounting Information Systems* 11(1): 17-41.
- Jans, M. A., Michael ; Vasarhelyi, Miklos (2013). "The Case for Process Mining in Auditing: Sources of value Added and areas of Application." *International Journal of Accounting Information Systems* 14: 1-20.
- Kogan, A., et al. (2014). "Design and Evaluation of a Continuous Data Level Auditing System." *AUDITING: A Journal of Practice & Theory* 33(4): 221-245.
- Li, H., et al. (2018). "Understanding usage and value of audit analytics for internal auditors: An organizational approach." *International Journal of Accounting Information Systems* 28: 59-76.
- PWC (2012) Data Analytics: How data analytics can help internal auditor better understand risk.
- Stoel, D., et al. (2012). "An analysis of attributes that impact information technology audit quality: A study of IT and financial audit practitioners." *International Journal of Accounting Information Systems* 13(1): 60-79.
- Yükçü, S., & Gönen, S. (2012). Fraud auditing in electronic accounting practices. *African Journal of Business Management*, 6(4), 1222.