

## Knowledge Sharing, Work Ethics and Auditors' Innovation Capability: A Conceptual Framework

Hafizah Abd-Mutalib<sup>1\*</sup>, Che Zuriana Muhammad Jamil<sup>2</sup>,  
Magnaz Lestira Oktaroza<sup>3</sup> and Mey Maemunah<sup>4</sup>

<sup>1,2</sup>Tunku Puteri Intan Safinaz School of Accountancy, Universiti Utara Malaysia, Malaysia,

<sup>3,4</sup>Fakultas Ekonomi dan Bisnis, Universitas Islam Bandung, Indonesia

**Abstract:** This paper presents a conceptual analysis of auditors' innovation capability. The primary objective is to look at the role of knowledge sharing behavior and work ethics in shaping auditors' innovation capability. With the development of technology enveloping business firms, transactions and documentations have now become more efficient, thus prompting auditors to become more innovative in conducting audit. Knowledge sharing, which is divided into knowledge collecting and knowledge donating, is the act of exchanging information between individuals in organizations, while work ethics refer to a set of beliefs and attitudes reflecting the fundamental value of work of an individual. This paper proposes that knowledge sharing behavior and work ethics of auditors may enhance their capability in innovating their audit work, thus benefiting the users of financial statements.

**Key words:** *Innovation capabilities, knowledge sharing, work ethics*

### INTRODUCTION

To remain competitive, business firms nowadays are urged to give extra concern on innovation. As the competition becomes intense and global, business firms need to come up with new ideas which do not only focusing on the introduction of new product, but also in new ways on how business activities and processes are to be carried out. In other words, innovation should not be left out from firms' strategic initiatives, as innovation enables firms to accomplish specific objectives and solving business problems [1], while taking advantage of new opportunities and facing challenges in the changing marketplace and structures [2].

Innovation does not only affect businesses in manufacturing industries, but service industries as well. Firms giving professional services, such as the audit firms also need to keep up with continuous innovation to face the evolving business environment which has changed the way businesses are conducted. The Industrial Revolution 4.0 (IR4.0) for instance, has enabled businesses nowadays to perform activities more efficiently than before. By incorporating the elements of IR4.0 which stresses on the Internet of Things (IoT), business firms may utilize smart manufacturing, cloud computing, big data and artificial intelligence (to name a few), thus able to respond efficiently to the needs of their internal environment and supply chain. These unprecedented changes however, have given impact to the way audits are being carried out by the external auditors. For instance, cloud computing leads to less physical documents usage, while big data enables business firms to store large amount of data in the data warehouse. As such, the auditors, being the person external to the organization, may need to creatively

develop audit trail in the vast volume of data and paperless environment, which is totally different from the audit work conducted previously [3-5]. In other words, auditors are now urged to be more creative and innovative in conducting the audit. By incorporating innovation in audit work, new kinds of insights will be generated, more data sets may be examined, therefore, will increase the value of the audit performed and will bring audit quality to a new level [5]. At the same time, the auditors may continue providing a valuable and relevant service to the investors, creditors and other users of financial statements [3].

The above justifications explain that auditors need to be innovative in conducting audit. Being innovative in performing audit may lead to higher quality of information provided to stakeholders [5], while preserving the relevancy and reliability of the profession itself [3]. Furthermore, auditors may also eliminate the number of tedious and labor-intensive manually processes which are traditionally associated with an audit [3], such as incorporating artificial intelligence, workflow automation and data analytics in the audit process [5].

Despite the advantage of innovating the audit process as discussed above, limited evidence has been found on auditor's innovation capability. Past research have focused on their technology adoption [6-8]. However, the results show that the adoption towards technology among auditors is only at low to moderate level [6, 7], and only practiced in large firms but not in small firms [8]. These situations have prompted the question on whether auditors are capable in innovating their audit considering the fact that they are somehow reluctant to change their way of doing things by

neglecting technology. In other words, there is a doubt that auditors put high effort to innovate their audit work.

This paper also discusses on the role of knowledge sharing and work ethics and how these two factors may have positive impact on auditors' innovation capability. By utilizing the Resource Based View, which posits that firms that successfully manage their internal resources and capabilities will have competitive advantage and superior performance [9], this study believes that good practice of knowledge sharing and work ethics among the auditors will lead to the auditor' performance in term of their innovation capability.

This research contributes to a number of significance. Firstly, limited evidence has been found on the impact of knowledge sharing and ethical behavior in the context of the auditors. As audit is faced with urgency to evolve in responding the technological advances [3], auditors are now responsible to be innovative, thus lead to more relevant and reliable information for the usage of financial information users. Secondly, as the technology advancement following the IR4.0 has taken place, it is interesting to know the extent of innovation capability held by the auditors in coping with the technological changes. This study has its own limitation, as it only incorporates knowledge sharing and ethical behavior in assessing the innovation capability of the auditors.

The rest of this paper is organized as follows. In the next section, the study presents the review of the related literature, which analyze past research on the importance of innovation to audit followed by literature on innovation capability. This is continued by the literature on knowledge sharing, work ethics and their impact on innovation capabilities. The paper also discusses RBV and ends with the conclusion.

## **LITERATURE REVIEW**

### ***Innovation and its importance in audit***

Innovation is an area which is receiving a great deal of attention in the current fast-changing business environment. Business firms recently have realized that in order for them to achieve competitive advantage, innovation should not be left out from their strategic initiatives. Firms need to innovate as a response to the changes in customers' expectations, to take advantage of new opportunities and to face challenges in the changing marketplace and structures [2].

In a simple definition, innovation refers to the generation of new idea or knowledge and its implementation into a new product, process or service [10, 11]. This new generation of idea and its implementation will usually give impact in solving business problems, or used as a set of tools that are designed to accomplish specific objectives [1].

Innovation can be group into several categories. There are paradigm innovation, product innovation, process innovation and position innovation [12, 13]. Product innovation concerns on the changes in the products or services which an organization offers, while process innovation refers to changes in the way which products and services are created or delivered. Meanwhile, position innovation denotes the changes in the context in which products and services are introduced, while paradigm innovation focuses on changes in the underlying

mental models which frame what the organization does [2, 13].

The types of innovation discussed above denote that innovation does not only mean for something tangible such as innovation in producing new products, but also involve the intangibles such as the innovation in services given to the customers or the processes in daily activities. As such, business firms in the service industry are also encouraged to be creative in innovating their processes and services, thus increasing efficiency and effectiveness, while adding value to the services given. Among the business firms that deal in giving services to its clients is the audit service firms, and innovation is crucial in this type of industry due to the following reasons.

Firstly, the objective of financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity [14]. In order for the financial information to be useful, such information should be timely, and free from material errors, omissions and fraud [15]. In bridging the information gap between the management and its stakeholders, external auditor plays a significant role in taking the responsibility for obtaining reasonable assurance that the financial statements taken as a whole are free from material misstatement, whether caused by fraud or error [15]. Furthermore, the rapidly advancing technology and real-time economy have prompted the financial information to be available in periodic intervals, and not just based on historical data [3]. Therefore, to remain a valuable and relevant service to the investors, creditors and other users of financial statements, auditing needs to find ways to evolve [3]. In other words, audit firms need to be innovative in finding ways to come up with new processes, methods and solutions for them to remain relevant.

Secondly, the business world itself is changing in accordance with the changes in technology and global development. The evolution of accounting softwares and the more recent development of Industrial Revolution 4.0 (IR4.0) such as the artificial intelligence, cloud computing and big data has completely transformed business firms' accounting systems [16]. More companies are now become paperless as a respond for environmental sustainability commitment, while having data warehouse to accommodate their massive amount of data. These situations have prompt the auditors to innovate their audit method by having the ability to audit in the paperless environment [3] and having the ability to mine the data from data warehouse [5]. The advances in accounting information systems has given the assurance of keeping pace with the real time information, however, prompt the question on the capability of the auditors in innovating their audit methods to achieve relevant and reliability in the audit process itself and also real time assurance.

Thirdly, the audit work itself in past was associated with a lot of paper consumption [4]. In these days however, innovation has enabled audit to evolve in the areas such as artificial intelligence, workflow automation, and data analytics, thus eliminating part of the tedious and labor-intensive manual processes associated with traditional audit [5]. Innovation has enabled auditors to deliver powerful insights that simply weren't possible

before, which can enhance audit quality and deliver higher value for audit stakeholders [5]. For instance, artificial intelligence enables a system to read and understand key concepts in electronic documents and machine learning through natural language processing (NLP). This allows a system to improve itself without being reprogrammed [5]. Furthermore, workflow automation enables auditors to do significantly more analysis in less time, thus allowing auditors to spend more time on tasks that add more value to the audit [5]. Meanwhile, analytics and data visualization enable auditors to uncover valuable insights hidden within large and complex data sets and better inform the risk assessment process [5].

All the justifications above highlighted the impact of technology on the audit process. However, a sophisticated technology is of no use if the auditors themselves do not have the ability to innovate their audit work and process. A senior auditor cum innovation manager in one of the world's leading audit firm mentioned that "The most critical part of an innovation process is to recruit the right person to use the tools and come up with more new ideas" [17]. Therefore, it is crucial for an auditor to be proactive and creative in utilizing the available technology to innovate their audit process. This will in the end support the objective of audit in responding the demand of high quality, relevant, reliable and timely financial statements by the external users.

#### ***Innovation capability***

Due to the importance of innovation in supporting the development of business firms, researchers are prompt to study on innovation capability. Innovation capability is defined as the ability to make major improvements and modifications to existing technologies and to create new technologies [18]. Other studies define innovation capability as the ability of organizations to be creative in their operations, to produce ideas and methods, and ultimately to create and provide new services [19, 20]. Furthermore, innovation capability is not only being researched in organizational context [19-22], but also in the context of team members [23-25] and the context of individual [22, 26].

In the organizational context, Nham, et al. [22] studied the innovation capability among telecommunication companies in Vietnam. The results reveal that the companies have moderate to high level of innovation capability. Similar result was found in Kumar and Che Rose [20] who studied innovation capability in Malaysian public sector organizations. In the context of team, [24] found high level of innovation capability among producer groups in Thailand while Curado, et al. [25] found moderate to high innovation capability among teams in Portugal industries setting. In the individual context of innovation capability, Nham, et al. [22] found that employees in the Vietnam telecommunication firms exhibit moderate to high level of innovation capability.

Innovation capability was found to exhibit positive influence on organizations' competitive advantage [27]. This study, which was conducted in furniture retail industry in one of the provinces in Indonesia, found that the organizations' innovation capability in term of their marketing, processes, products and management has put

the organizations superior compared to their competitors [27]. Another research which has focused on multinational companies suggest that organizations with good environmental innovation has put them in having good environmental performance [28]. This has led to increase in export performance as the companies are now having competitive advantage in term of compliance with international environmental regulation compared to their counterparts [28].

Following the previous studies which focus on innovation capability in the individual context [22, 26], this study is keen to examine the innovation capability among the auditors in public accounting firms. From the literature, it is being observed that the focus on innovation among auditors were not receiving much attention until recently [5, 19, 29, 30], and this is due to the technological advances in global business. Urban [29] stated that businesses are now striving to find opportunities in a world driven by technological transformation, as such, auditors need to continually innovate their audit work to stay ahead of the game. Due to this current business scenario, it is important to research in the area of innovation capability among auditors, however, to date, limited evidence have been found to justify the level of innovation capability among this profession.

Despite the lack of research on innovation capability among auditors, studies on technology adoption by the auditors show increasing trend in this decade, not only in developed countries [6], but also in developing countries such as Malaysia [7] and Indonesia [8]. The studies however, indicate that the technology adoption and the competency of audit staffs are only at a low level [6] to moderate level [7]. Audit firms are found to generally acknowledge the advantages of audit technology [7], however, the implementation and the benefits usually outweigh the costs [6, 7]. Due to this, technology adoption can usually being found in medium to large audit firms, but not in small firms [8]. Furthermore, auditors are found to only use technology if they feel that the usage will increase their performance, lessen their effort and if they are occupied with necessary facilities [31].

These scenarios trigger another question. If the auditors are lack of competency and acceptance towards technology, will they be able to innovate their audit process to face the business challenge in the IR4.0 business world era? Previous findings suggest that innovation capability positively influence performance [32, 33] and competitive advantage [27]. Thus, if the auditor neglects themselves from being innovative in performing their audit task, in long-term, this scenario might affect the performance of the audit firm they are representing and finally will affect the role of auditing itself in giving reasonable assurance on the financial statements to the users.

The purpose of this study is to examine if knowledge sharing behavior and work ethics may enhance auditors' innovation capability. In next section, literature review on these two factors will be discussed. For the purpose of this research, innovation capability of the auditors refers to the ability of the auditors to creatively making modifications to their existing audit methodology and processes for the audit work purpose [18-20]. Auditors crucially need to

have innovation capability in conducting audit to keep pace with the technology development happening in business world while giving relevant and reliable services to the users of financial statements.

### **Knowledge sharing**

Knowledge sharing has been defined in several different but similar ways by different researchers. In general knowledge sharing has been defined as the action of individuals in making knowledge available to others within the organization [34]. Similarly, [35] viewed knowledge sharing as the sharing of organizationally relevant information, ideas, suggestions, and expertise with one another. Along the same [21] and [36] defined knowledge sharing as the behavior of disseminating one's acquired knowledge with other members within one's organization. On the other hand, [37] gave a broader definition of knowledge sharing indicating it as involving activities of transferring or disseminating knowledge from one person, group or organization to another.

In short, all these definitions agree that knowledge sharing is a mechanism to disseminate information and knowledge from one individual, group, or organization to another. Knowledge sharing occurs both at the individual and organizational level. Knowledge sharing can be defined as a social interaction culture, involving the exchange of employee knowledge, experiences, and skills throughout the department or organization. Apparently, knowledge sharing is a pivotal process of enhance innovation through exchange their ideas, opinions and discuss among employees to come out with new ideas. As mentioned by [37], organizational knowledge sharing can be the backbone of organizational learning and bring enormous benefits to an organization.

Based on definition by van Den Hoof and de Ridder [38], knowledge sharing has two facets, which are collecting or receiving, and disseminating or donating, knowledge. They define knowledge donating as a communication based upon an individual's own wish to transfer intellectual capital and knowledge collecting as an attempting to persuade others to share what they know. In addition, a recent study mentioned that knowledge donating and knowledge collecting play an important role in improving individual innovation capability [22]. Organization can implement knowledge sharing behavior as norms or value of the organization and understand the fundamental of knowledge sharing in order to contribute the knowledge sharing practice [39]. Knowledge sharing can lead to innovative behavior where employees can realize, promote and create new knowledge for organization [40].

For the purposes of this paper, knowledge sharing is defined in accordance with [38] which is a process where individuals mutually exchange their implicit (tacit) and explicit knowledge to create new knowledge.

### **Knowledge sharing behavior**

Knowledge sharing behaviour refers to the exchange of information among people, friends, peers, families, communities, or within or between organizations. It can be done through many channels, for instance, through conversations, meetings, learning sessions, workshops, videos and other medium of communication. In addition,

knowledge sharing is considered part of knowledge management and lead to foster knowledge exchange and creation among employees within an organization. Therefore, the process of sharing knowledge will involve two parties, which are carrier and receiver. As mentioned in [22], knowledge donating is the behaviour of transferring personal knowledge to others, while knowledge collecting refers to process of communicating and encouraging others to share their knowledge. These two distinct processes are active processes in the sense that one is either engaged in active communication with others for the purpose of transferring knowledge, or consulting others in order to gain some access to their intellectual capital.

Akram, et al [40] studied the impact of knowledge donating and knowledge collecting on the innovative work behaviour of employees working in telecommunication sector of China. For this purpose, data of 200 employees was collected and analysed found that both knowledge donating and knowledge collecting are positively and significantly affect the innovative work behaviour of the employees. However, knowledge collecting was found as a better contributor in facilitating the employee innovative work behaviour

Many studies [19, 21, 41] showed that knowledge sharing process can improve firm innovation capability. In addition, knowledge sharing behaviour was also found to be predicted by pro-sharing norms, self-efficacy, generalized trust, sense of belonging and pledge of the workforce [23]. Lin, et al [21] examined the influence of individual factors (enjoyment in helping others and knowledge self-efficacy), organizational factors (top management support and organizational rewards) and technology factors (information and communication technology use) on knowledge sharing processes. Knowledge self-efficacy refers to individuals' discernment of their ability to provide knowledge to others and indicates that both enjoyment in helping others and knowledge self-efficacy were strongly associated with employee willingness to share knowledge. This result implies that employees who feel pleasure in sharing knowledge and thus helping others tend to be more motivated to donate and collect knowledge with colleagues. Additionally, a sense of the competence and confidence of employees may be requirement for employees to engage in knowledge sharing.

Additionally, Yesil [19] observed the association between organizational commitments, knowledge sharing and innovation capability in Public organizations in Turkey. The study believes that organizations with good commitment such as high commitment from employees will have strong impact on knowledge sharing among them, and this will highly influence organizations' innovation capability. The results from this study found that commitment is positively impacting knowledge sharing, however, only knowledge donating affect innovation capability, but not knowledge collecting. In addition to that, a study at telecommunication companies in Vietnam found that the relationship between knowledge sharing and firm innovation capability is mediated by the individual innovation capability [37].

### **Knowledge sharing and innovation capability**

Innovation capability is a crucial factor for an organization to be innovative. As such, researchers around the globe have been studying about factors that may enhance innovation capability. Among the factors which are found to be positively influencing innovation capability are knowledge sharing and work ethics. Discussed below are the literature on the relationship between the variables.

Kumar and Che Rose [20], studied innovation capability in a Malaysian public sector organization. The results from this study indicate that knowledge sharing among employees in the organization is positively influencing the organization's innovation capability. Here, it can be observed that sharing genuine knowledge has boosted the organizational capability to perform rigorously against the varying work condition through the collective competencies of individuals' insights.

Lin [21] studied the relationship between knowledge sharing behavior and organizational innovation capability in organizations in Taiwan. This study posits that employees' willingness to donate and collect knowledge will positively influence the organizations' innovation capability. The results have supported the hypothesis, thus justify that knowledge sharing behavior among employees, which is measured by knowledge collecting and knowledge donating, help to enhance organizations' innovation capability. Similar result was found by [23], who studied innovation capability of Research and Development (R&D) teams in Iran. The results found that knowledge collecting and donating positively influencing teams' innovation capability, thus signaling the role played by knowledge sharing behavior in boosting organizations', teams' or individuals' innovation in performing their specific tasks or obligations.

In a more recent study, Yeşil [19] observed the relationship between knowledge sharing and innovation capability in Public organizations in Turkey. The study is similar with Lin [21] and Nham, et al. [22] where knowledge sharing behavior is examined as two different predictors of innovation capability, namely the knowledge collecting and knowledge donating. The study hypothesizes that both predictor will be positively influencing innovation capability, as this hypothesis has been proven in previous studies [21]. However, the result is half contradict with the expectation, where the study only found knowledge donating to affecting innovation capability, but not knowledge collecting. [19] justify that this is due to the different type of organizations, which lead to different results in the association of knowledge collecting and innovation capability. Nham, et al. [22] however, found both knowledge collecting and knowledge donating positively influencing individual innovation capability, thus confirm that knowledge exchange is profound to solve problems creatively in the workplace, because it helps to improve employees' mindset or cognitive capacity.

Despite the above findings on positive relationship between knowledge sharing and innovation capability, insignificant result has been found in a study by Curado, et al. [25]. In this study, knowledge sharing was found to have no impact on innovation capability, most probably

can be explained by the fact that simply sharing knowledge by individuals inside teams or organizations is not sufficient for innovation to occur. The relationship may be strengthened with the presence of dynamic capacity among the individuals that allows teams or organizations to create value and to gain and sustain a competitive advantage through the management of the external knowledge [25, 42].

### **Work ethics**

By general definition, ethic is defined as the manifestation of personally held values [43]. Ethics is also defined as the study of morality and the application of reason which sheds light on rules and principle, which is called ethical theories that ascertains the right and wrong for a situation [44]. Extending the definition of ethic in the work context, work ethic is defined as a set of beliefs and attitudes reflecting the fundamental value of work of an individual [45, 46]. In other words, work ethic is a collection of individual differences related to work behavior [47, 48].

According to Miller and Woehr [48], work ethic is composed of seven sub-components: (a) centrality of work, a belief that work is important in its own right, (b) self-reliance, representing a drive toward independence in task accomplishment, (c) hard work, the belief that an increased level of effort is the key to effective task accomplishment, (d) leisure, a value on downtime/non-work activities, (e) morality/ethics, a proclivity to engage in just/moral behavior, (f) delay of gratification, the capacity to postpone rewards until a later date, and (g) wasted time, a value regarding the productive use of time [48]. This conceptual definition of work ethics has been used largely in Western studies [45-47].

While the definition of work ethic by [48] is considered prominent in Western studies, [49] argued that work ethic may have different meaning in different culture. In countries which practice Islamic beliefs, studies on work ethic have focused on the Islamic work ethic (IWE) [20, 50, 51]. Ali [52] highlights Islamic values such as equality, accountability, consultation, goodness, kindness, trust, honoring promises (commitment), sincerity, justice, hard work, humility, universalism, consensus, self-discipline, persistence and cooperation are duly useful to attain excellence and success for work and human conducts which been enumerated in Al-Quran and Hadith by Prophet Muhammad PBUH.

According to the above arguments, work ethic is defined as the manifestation of individuals towards what is right and wrong or good and bad in their daily work activities. It is about how individuals perceive whether certain values are good or bad to be practiced in their daily events. As work ethic denotes the ability of individuals in separating what is right or wrong, past studies have tested work ethic to a number of positive outcomes. The studies believe and justify that work ethics positively giving impact to on motivation [47], performance [47, 51] and task intensity [45]. Furthermore, work ethic has also been found to positively influencing organizations to be innovative [20], and this is further explained in the next section.

With regard to the auditors, this profession is also subjected to ethical conduct. In maintaining their professional ethics, auditors need to adhere to fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior [53].

Since the current study takes place in Malaysia and Indonesia, countries with Islamic background, therefore, the definition of work ethics is based on previous studies that focus on Islamic countries [20, 52].

#### ***Work ethics and innovation capability***

The role of work ethics in shaping individual or organizational performance has been justified in previous studies. For instance, [47] examined if work ethics among undergraduate students may lead to higher motivation and individual performance. The results indicate that work ethic does have positive influence on both outcomes. Similar findings were found in another research, which was conducted in Malaysian Islamic financial institutions [51]. In this study, the perceived work ethics of the employees in the financial institutions was found to positively lead to their attitude, behavior and performance [51].

Based on the above findings, we may conclude that positive work ethic lead to positive outcomes such as performance [47, 51]. Furthermore, past studies also justify that innovation capability will lead to enhanced performance in organizations [27, 28]. Therefore, this study is keen to examine if work ethic may lead to enhanced auditors' innovation capability.

The association between work ethic and innovation capability has been established before in previous studies [20, 54, 55]. In Javed, et al. [55], work ethic was found to be positively associated with innovative work behavior of the hospitality sector employees in Pakistan. The study justifies that employees with good perception towards ethical conduct at workplace exhibit high level of innovative behavior. In another setting, [54] conducted a study to examine the relationship between work ethic and innovation capability among employees in telecommunication companies of Pakistan. The results from this study found positive and significant relationship between the predictor and the outcome. The findings from this study thus justify the same association found in another research [20], which was conducted in Malaysian public sector organizations. These findings thus justify the important role played by work ethic in catalyzing employees to become more innovative in performing their daily activities.

#### ***Resource-Based View***

The framework of this study is underpinned by the resource-based view (RBV). Resource-based view explains the relationship between organizational resources and capabilities with an organization's competitive advantages and performance [9]. According to RBV, firms that successfully manage their internal resources and capabilities will receive more benefit in term of development, survival, maintaining effectiveness and achieving success [9].

Barney [9] identified and categorized three different resources of an organization, which are the physical

resources, organizational resources and human resources. Meanwhile, [56] has categorized organizations' resources into those which are tangible and intangible. The tangible resources are those of fixed assets, production equipment, inventories and financial resources while the intangible resources are classified as reputation, technology, human resource, employee training, employee loyalty, employee experience and employee commitment. Teece, et al. [57] added several more different types of organizations' resources such as knowledge, media, structure (governance), network, market and institution resources.

Properly managing these resources, whether tangibles or the intangibles, physical, organizational or human, may lead organizations to several benefits. Barney [9] suggest that firms may have the advantage to generate economic benefits by combining and exploiting both tangible and intangible resource, especially when the resources which are valuable, inimitable, rare, non-changeable and can provide organizations with sustainable competitive advantages to help them to compete in competitive environment [9, 58]. The essential argument of RBV is that organizations' resources will influence its performance [59], and organizations with more valuable resources are more likely to sustain a competitive advantage [59].

RBV is used in this study to justify the relationship between knowledge sharing behavior, work ethic and auditors' innovation capability. As auditors themselves are the resources to the firms they are representing, it is believed that positive working practice such as having the initiative to share knowledge and good working ethic will eventually become the valuable resources that lead to the auditors' performance in term of their innovation capability. As such, this study believe that knowledge sharing behavior and work ethics perceived by the auditors will have positive influence on the auditors' innovation capability.

#### **CONCLUSION**

This paper represents an endeavor to see the relationship between knowledge sharing behavior, work ethics and auditors' innovation capabilities. As discussed in the introductory section, knowledge sharing is becoming more critical for organization to promote organizational learning and innovation. Other than that, to remain competitive not only people in the firm are pushed to share knowledge but business firms nowadays are urged to give extra concern innovation. Since auditors are being the person external to the organization, they are now urged to be more creative and innovative in conducting the audit. By incorporating innovation in audit work, new kinds of insights will be generated, more data sets may be examined, therefore, will increase the value of the audit performed and will bring audit quality to a new level. Auditors to be innovative and creative to performing audit work. Consequently, the proposed conceptual framework in this study attempts to highlight the relationship between knowledge sharing behavior, work ethics and auditors' innovation capabilities.

## REFERENCES

- [1] Satell, G., "The For Types of Innovation and the Problems They Solve," in *Harvard Business Review*, ed, 2017.
- [2] Baregheh, A., Rowley, J., and Hemsworth, D., "The Effect of Organisational Size and Age on Position and Paradigm Innovation," *Journal of Small Business and Enterprise Development*, vol. 23, no. 3, pp. 768-789, 2016.
- [3] Lombardi, D. R., Bloch, R., and Vasarhelyi, M. A., "The Current State and Future of the Audit Profession " *Current Issues in Auditing*, vol. 9, no. 1, pp. 10-16, 2015.
- [4] Power, M. K., "Auditing and the production of legitimacy," *Accounting, Organizations and Society*, vol. 28, pp. 379-394, 2003.
- [5] Raphael, J., "Rethinking the Audit," *Journal of Accountancy*, vol. 223, no. 4, pp. 28-32, 2017.
- [6] Ahmi, A. and Kent, S., "The utilisation of generalized audit software (GAS) by external auditors," *Managerial Auditing Journal*, vol. 28, no. 2, pp. 88-113, 2012.
- [7] Rosli, K., Siew, E., and Yeow, P. H. P., "Technological, Organisational and Environmental Aspects of Audit Technology Acceptance," *International Journal of Business and Management*, vol. 11, no. 5, pp. 140-145, 2016.
- [8] Widuri, R., O'Connell, B., and Yapa, P. W. S., "Adopting generalized audit software: an Indonesian perspective," *Managerial Auditing Journal*, vol. 31, no. 8/9, pp. 821-847, 2016.
- [9] Barney, "Firm resources and sustained competitive advantage," *Journal of Management*, vol. 17, no. 1, pp. 99-120, 1991.
- [10] Afuah, A., "Responding To Structural Industry Changes: A Technological Evolution Perspective," *Oxford University Press*, vol. 6, no. 1, pp. 183-202, 1998.
- [11] Urabe, K., *Innovation and Management: International Comparison*. Berlin, New York: Walter De Gruyter, 1988.
- [12] Kogabayev, T. and Maziliauskas, A., "The definition and classification of innovation," *Holistica - Journal of Business and Public Administration*, vol. 8, no. 1, pp. 59-72, 2017.
- [13] Bessant, J., Lamming, R., Noke, H., and Phillips, W., "Managing Innovation Beyond the Steady State," *Technovation*, vol. 25, no. 12, pp. 1366-1376, 2005.
- [14] Malaysian Accounting Standard Board. (2018). *The Conceptual Framework for Financial Reporting*. Available: [www.masb.org.my](http://www.masb.org.my)
- [15] Xagera, L., Malis, S. S., and Noval, A., "The Role and Responsibility of Auditors in Prevention and Detection of Fraudulent Financial Reporting," *Procedia Economics and Finance*, vol. 39, pp. 693-700, 2016.
- [16] Odoh, L. C., Silas, C. E., Ugwuanyi, U. B., and Chukwuani, N. V., "Effect of Artificial Intelligence on the Performance of Accounting Operations among Accounting Firms in South East Nigeria," *Asian Journal of Economics, Business and Accounting*, vol. 7, no. 2, pp. 1-11, 2018.
- [17] Tysiac, K., "How to Enable Audit Innovation," *Journal of Accountancy*, vol. 223, no. 4, pp. 33-35, 2017.
- [18] Wonglimpiyarat, J., "Innovation Index and the Innovative Capacity of Nations," *Future*, vol. 42, no. 3, pp. 247-253, 2010.
- [19] Yeşil, S., "Exploring the links among organisational commitment, knowledge sharing and innovation capability in a public organisation " *European Journal International Management*, vol. 8, no. 5, 2014.
- [20] Kumar, N. and Che Rose, R., "The Impact of Knowledge Sharing and Islamic Work Ethic on Innovation Capability," *Cross Cultural Management*, vol. 19, no. 2, 2012.
- [21] Lin, H. F., "Knowledge Sharing and Firm Innovation Capability: An Empirical Study," *International Journal of Manpower*, vol. 28, no. 3/4, pp. 315-332, 2007.
- [22] Nham, T. P., Nguyen, T. M., Tran, N. H., and Nguyen, H. A., "Knowledge sharing and innovation capability at both individual and organizational levels: An empirical study from Vietnam's telecommunication companies," *Management & Marketing. Challenges for the Knowledge Society*, vol. 15, no. 2, pp. 275-301, 2020.
- [23] Akhavan, P. and Hosseini, S. M., "Social Capital, Knowledge Sharing, and Innovation Capability: An Empirical Study of R&D Teams in Iran," *Technology Analysis & Strategic Management*, pp. 1-18, 2015.
- [24] Pratoom, K. and Savatsomboon, G., "Explaining factors affecting individual innovation: The case of producer group members in Thailand," *Asia Pac J Manag*, vol. 29, pp. 1063-1087, 2012.
- [25] Curado, C., Oliveira, M., Gastaud, A. C., Nodari, M., and Nodari, F., "Teams' innovation: getting there through knowledge sharing and absorptive capacity," *Knowledge Management Research & Practice*, pp. 1-9, 2015.
- [26] Awlawi, H., Sudirman, I., Suryadi, K., and Govindaraju, R., "Knowledge Sharing Behavior, Antecedent and Their Impact on the Individual Innovation Capability," *Journal of Applied Sciences Research*, vol. 5, no. 12, pp. 2238-2246, 2009.
- [27] Puspita, L. E., Christiananta, B., and Ellitan, L., "The effect of strategic orientation, supply chain capability, innovation capability on competitive advantage and performance of furniture retails," *International Journal of Scientific & Technology Research*, vol. 9, no. 3, pp. 4521-4529, 2020.
- [28] Joo, H.-Y., Seo, Y.-W., and Min, H., "Examining the effects of government intervention on the firm's environmental and technological innovation capabilities and export performance," *International Journal of Production Research*, 2018.
- [29] Urban, S., "The Innovative Internal Auditor," *Internal Auditor*, vol. 74, no. 3, 2017.
- [30] Chan, D. Y. and Vasarhelyi, M. A., "Innovation and practice of continuous auditing," *International Journal of Accounting Information Systems*, vol. 12, no. 2, pp. 152-160, 2011.
- [31] Mohamed, I. S., Muhammad Muhayyidin, N. H., and Rozzani, N., "Auditing and Data Analytics Via Computer Assisted Audit Techniques (CAATS): Determinants of Adoption Intention Among Auditors in Malaysia," in *3rd International Conference on Big Data and Internet of Things*, Melbourne, Australia, 2019: Association for Computing Machinery.
- [32] Ferreira, J., Coelho, A., and Moutinho, L., "Dynamic capabilities, creativity and innovation capability and their impact on competitive advantage and firm

- performance: The moderating role of entrepreneurial orientation," *Technovation*, vol. 92-93, 2020.
- [33] Yam, R. C. M., Lo, W., Tang, E. P. Y., and Lau, A. K. W., "Technological Innovation Capabilities and Firm Performance" *World Academy of Science, Engineering and Technology International Journal of Economics and Management Engineering* vol. 4, no. 6, pp. 1056-1064, 2010.
- [34] Ipe, M., "Knowledge sharing in organizations: A conceptual framework," *Human Resource Development Review*, vol. 2, pp. 337-359, 2003.
- [35] Bartol, K. M. and Srivastava, A., "Encouraging knowledge sharing: The role of organizational reward systems," *Journal of Leadership & Organizational Studies*, vol. 9, pp. 64-76, 2002.
- [36] Ryu, S., Ho, S. H., and Han, I., "Knowledge sharing behavior of physicians in hospitals," *Expert Systems with Applications*, vol. 25, pp. 113-122, 2003.
- [37] van Woerkom, M. and Sanders, K., "The Romance of Learning from Disagreement. The Effect of Cohesiveness and Disagreement on Knowledge Sharing Behavior and Individual Performance Within Teams," *Journal in Business and Psychology*, vol. 25, pp. 139-149, 2010.
- [38] van Den Hooff, B. and De Ridder, J. A., "Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC usage on knowledge sharing," *Journal of Knowledge Management*, vol. 8, no. 6, pp. 117-30, 2004.
- [39] Wu, Y. and Zhu, W., "An integrated theoretical model for determinants of knowledge sharing behaviours," *Kybernetes*, vol. 41, no. 10, pp. 1462-1482, 2012.
- [40] Akram, T., Lei, S., Haider, M. J., and Hussain, S. T., "Exploring the Impact of Knowledge Sharing on the Innovative Work Behavior of Employees: A Study in China," *International Business Research*, vol. 11, no. 3, pp. 186-194, 2018.
- [41] Rahab, R. and Sulistyandari, S., "The development of innovation capability of small medium enterprises through knowledge sharing process: An empirical study of Indonesian creative industry," *International Journal of Business and Social Sciences*, vol. 2, no. 21, pp. 112-123, 2011.
- [42] Camison, C. and Fores, B., "Knowledge absorptive capacity: new insights for its conceptualization and measurement," *Journal of Business Research*, vol. 63, no. 7, pp. 707-715, 2010.
- [43] Porter, G., "Work Ethic and Ethical Work: Distortions in the American Dream," *Journal of Business Ethics*, vol. 19, no. 2, pp. 142-165, 2012.
- [44] Abdullah, H. and Valentine, B., "Fundamental and Ethics Theories of Corporate Governance," *Middle Eastern Finance and Economics* vol. 4, no. 88-96, 2009.
- [45] Meriac, J. P., Thomas, A. L. E., and Milunski, M., "Work ethic as a predictor of task persistence and intensity," *Learning and Individual Differences*, vol. 37, pp. 249-254, 2015.
- [46] Meriac, J. P., Woehr, D. J., and Banister, C., "Generational differences in work ethic: An examination of measurement equivalence across three cohorts," *Journal of Business and Psychology*, vol. 25, pp. 315-324, 2010.
- [47] Meriac, J. P., "Examining relationships among work ethic, academic motivation and performance," *Educational Psychology*, vol. 35, no. 5, pp. 523-540, 2014.
- [48] Miller, M. J. and Woehr, D. J., "The Meaning and Measurement of Work Ethic: Construction and Initial Validation of a Multidimensional Inventory," *Journal of Vocational Behavior*, vol. 59, pp. 1-39, 2002.
- [49] Deal, J. J., Altman, D. G., and Rogelberg, S. G., "Millennials at work: What we know and what we need to do (if anything)," *Journal of Business and Psychology*, vol. 25, pp. 191-199, 2010.
- [50] Ali, A. J. and Al-Owaidan, A., "Islamic work ethic: a critical review," *Cross Cultural Management: An International Journal of Accounting Information Systems*, vol. 15, no. 1, pp. 5-19, 2008.
- [51] Mohammad, J., Quoquab, F., Idris, F., Hussin, N., and Wishah, R., "The relationship between Islamic work ethic and workplace outcome: A partial least squares approach," *Personnel Review*, 2018.
- [52] Ali, A. J., *Islamic Perspectives on Management and Organization*. Cheltenham: Edward Elgar, 2005.
- [53] (2018). *By-Laws (on Professional Ethics, Conduct and Practice) of the Malaysian Institute of Accountants*. Available: [https://www.mia.org.my/v2/downloads/handbook/bylaws/2018/10/25/MIA\\_By\\_Laws\\_Revised\\_Jan\\_2011\\_Updated\\_as\\_at\\_25\\_October\\_2018.pdf](https://www.mia.org.my/v2/downloads/handbook/bylaws/2018/10/25/MIA_By_Laws_Revised_Jan_2011_Updated_as_at_25_October_2018.pdf)
- [54] Farrukh, M., Butt, S., and Mansori, S., "Innovation capability: the role of Islamic work ethics," *Journal of Asian Business Strategy*, vol. 5, no. 7, pp. 125-131, 2015.
- [55] Javed, B., Bashir, S., Rawwas, M. Y. A., and Arjoon, S., "Islamic Work Ethic, innovative work behaviour, and adaptive performance: the mediating mechanism and an interacting effect," *Current Issues in Tourism*, vol. 20, no. 6, pp. 647-663, 2016.
- [56] Grant, R. M., "The resource-based theory of competitive advantage: implications for strategy formulation," *Journal of California Management Review*, vol. 33, no. 3, pp. 114-135, 1991.
- [57] Teece, D. J., Pisano, G., and Shuen, A., "Dynamic capabilities and strategic management," *Strategic Management Journal*, pp. 509-533, 1997.
- [58] Barney and Mackey, *Testing resource-based theory (Research methodology in strategy and management)*. Emerald Group Publishing Limited, 2005.
- [59] Liang, T. P., You, J. J., and Liu, C. C., "A resource-based perspective on information technology and firm performance: a meta analysis," *Industrial Management & Data Systems*, vol. 110, no. 8, pp. 1138-1158, 2010.