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## Assessing the internal auditors' readiness for digital transformation

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**Abstract:** The purpose of this study is to investigate the factors that affect the internal auditors' readiness for ongoing digital transformation. The questionnaire was designed and distributed to a total of 350 internal auditors who are the member of the Institute of Internal Auditors of Thailand (IIAT). Using multiple regression analysis, the findings indicate that factors relating to know-how including IT-based knowledge, cognition, and competency positively influence the internal auditors' readiness for digital transformation. A positive attitude and a willingness to accept change on the part of internal auditors are also essential factors affecting their readiness. Moreover, support from organisations, including professional organisations, are key factors creating a positive working environment to drive the competency of the internal auditors to adapt themselves to cope with the advancement of technology.

**Keywords:** digital transformation; information technology; internal auditors; readiness; Thailand.

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## 1 Introduction

Businesses are embracing digital transformation as per the fact that the digital technologies allow businesses to increase their operational effectiveness, meet the changing market requirements, gain a competitive edge, and successfully achieve their businesses' goals. Digital transformation refers to a process of integrating technological advances into areas of business functioning, creating significant changes in business models or business processes, and ultimately revolutionising the way business operates (Banerjee, 2020; Hess et al., 2016; Wischnevsky and Damanpour, 2006).

The implementation of digital tools in the process of digital transformation provides significant benefits to the companies. For instance, many companies use robotic process automation (RPA) to transform existing business processes toward automated machines and services. When all processes, activities, transactions, and tasks are combined in one system, it accelerates the speed of business operations, increasing productivity and enhancing accuracy (Ustundag and Cevikcan, 2017). Moreover, a global company like McDonald's uses artificial intelligence (AI) for offering real-time personalised menus in its drive-thru ordering systems. Such AI-powered technology enables McDonald's to better serve customer needs and enhance customer satisfaction. Again, Nike brings up customer experiences through its applications by adding an advanced algorithm to its business process in order to reward loyalty members. Also, IKEA launched IKEA home smart by incorporating digital technologies into their products. It also cooperates with Apple to offer the IKEA products that can be used with or controlled by Apple's devices (Coke, 2020). On top of that, Moderna, Inc. is using the cloud computing platform to support its clinical lab and pharmaceutical manufacturing process, allowing the company to develop its innovative products faster and at lower cost (Clifford, 2020).

Although companies worldwide have enthusiastically embraced digital technology investment, the digital transformation of business creates some challenges. First of all, companies have to constantly and quickly adapt themselves to new systems as outdated automatic operating systems easily crash, forcing the core processes of companies to be shut down immediately (Digital Adoption Team, 2019). Similarly, to work remotely, employees must connect a virtual private network (VPN) to log into the companies' private system. If the VPN server is overloaded or the VPN software is outdated, work will not be completed effectively. Apart from that, cyber-attacks are increasingly common in this digital era. Without a strong data protection system installed, information security risks arise (Lois et al., 2020). Besides, as companies progressively transform their operations to be automatic systems, Delgado (2018) found that 10% of workers are unconfident and nervous in updating their technology skills and knowledge, and indeed one in every ten companies reduces their workforce due to technology replacement. This leads to more feelings of upheaval and uncertainty, and fosters employees' fear of losing their jobs (Mitrofanova, 2019). As a result, to overcome these challenges, companies have to steadily update and maintain their technological systems. They have to consistently implement workforce training and development programs regarding technological advances (Lois et al., 2020). Otherwise, they will no longer be successful.

Moreover, the digital transformation is inevitably changing the role of internal auditors and disrupts their internal audit-related activities. Simply put, as data access for auditing has changed from hard copies to soft files, traditional auditing procedures and techniques have to be modified to cope with the changes in the new business systems. For instance, Starbucks is using AI to accelerate its growth and improve customer

relationships. Its internal audit team are required to use Alteryx to perform the data visualisation and product analytics. The team has also used Arbutus software in audit analytics and the management solution process. Other programs used in the internal audit function are SQL and Python (Christensen, 2020). Hence, to meet future work challenges, the internal auditors have to transform themselves to be agile employees and have to be ready for any changing circumstances. Internal auditors should be equipped with auditing knowledge and competency regarding digital technology as a basic need (Salehi et al., 2010). Additionally, as internal auditors help the management improve the company's operation, evaluate company's risks and controls, and ensure compliance with any relevant laws and regulations, they have to get support from the organisation in order to prepare themselves to manage the rapid changes in the business environment.

As a consequence, with the technology challenges facing by internal auditors, this study aims to determine key factors that affect internal auditors' readiness for digital transformation. In past years, limited research has shed light on this issue. Previous studies heavily emphasised the context of accounting professionals, consisting of accountants and certified public accountants (CPA). There is still a lack of evidence regarding the situation of internal auditors. To identify the significant factors, descriptive analysis, comparison analysis using t-test and analysis of variance (ANOVA), as well as multiple regression analysis were employed. The data were collected from 350 internal auditors in Thailand with various genders, ages, education levels, experiences, and salaries. Despite this Thailand orientation, the significance of internal auditing in global organisations gives this study globally relevance.

Results from this study significantly contribute to the current understanding of the relevant factors that affect internal auditors' readiness for digital transformation. Understanding these factors will enable internal auditors to perform their internal audit tasks in the digitisation of business processes more effectively. Likewise, chief audit executives (CAEs) can apply the results from this study to assist their internal auditors in terms of digital audit support and competency development. The management of a company and its audit committee can also use the results to foster good corporate governance with a positive working environment and subsidise necessary recourses to the internal audit team when required. Besides, professional organisations can realise what they have missed and provide excellent support in elevating the internal audit profession and its role within the organisation.

The rest of the paper is organised as follows. Section 2 describes the related literature and the testable hypothesis. Section 3 explains the data and methodology. Section 4 provides the empirical results and discussion of them. Lastly, Section 5 concludes.

## **2 Related literature and hypothesis development**

### *2.1 The internal auditors' readiness*

Generally, the primary role of internal auditors is to provide assurance and consulting services for both internal and external stakeholders. The board of directors, the audit committee, and management expect that the internal audit department will ensure that internal control of the company is efficient and effective. Moreover, the management team expect that the internal audit department will reduce the amount of work that needs to be done, bring innovation to the company, and suggest best practice. On the other

hand, suppliers and customers tend to expect that internal auditors will help them ensure that their information is accurate, reliable, and secured. In this regard, effective auditing processes are required to increase the reliability of internal auditors.

One of the major impacts of the digital transformation on organisations is that internal auditors have to change their assurance services from manual practices to automated practices as they have to handle many new challenges, including big data management, the integration of new technologies into the systems, and the new technology-related regulations and requirements. According to the 2017 international standards for the professional practice of internal auditing, internal auditors should have the knowledge and skills regarding information technology risks and controls, technology-based audit techniques, and other data analysis techniques in order to perform in assigned engagement more effectively. Moreover, in terms of governance, internal auditors should assist the company to evaluate its IT risks and provide the recommendations for appropriate risk management and controls in order to ensure that the current business activities associated with information and technology are aligned with the company's overall strategies and objectives (The Institute of Internal Auditors, 2017). Hence, digital transformation requires internal auditors to be well-informed at all times and be prepared for any changes that may affect their future audit work. Readiness is indeed the essence for modern internal auditors.

In this paper, readiness refers to the stage of full preparation to physical and mental, competency and the intellectual components for accomplishing effective action (Stevenson, 2010). As a result, the internal auditor's readiness for digital transformation is measured in terms of three perspectives. The first measurement is of their competency in internal auditing. Internal auditors must have the knowledge, skills, and other competencies needed to perform auditing effectively. In situations of digital transformation, the ability to perform auditing through the appropriate technological tools is an important variable to measure their readiness. The next measurement is their knowledge of IT-related regulations and requirements. In order to evaluate the accuracy of controls and monitor the business processes, including those complied from the requests of regulators, internal auditors have to understand the relevant laws and related regulations of digital tools (Ganesan et al., 2017, 2018; Obert and Munyunguma, 2014). The last measurement is of their IT competencies. Internal auditors who have IT competencies as a foundation should be agile and be ready for changes in business models when organisations adopt advances in technology (The Institute of Internal Auditors, 2020b).

## *2.2 Factors affecting the readiness for digital transformation*

Several researchers have investigated various factors that contribute to the readiness for digital transformation. In this study, these factors are grouped into demographics, know-how, emotion, and environmental factors as in the following.

### *2.2.1 Demographics*

Demographics are defined by gender, age, education, experience, and salary in this study. Mgbame et al. (2012) found that gender influences both decision-making and audit quality. Male auditors are more risk taking and able to solve problems better than females. In terms of age, Griffeth et al. (2000) showed that older workers are able to do a

higher quality job; however, they lack flexibility and resist new technologies. Therefore, this leads companies to recruit new, younger people in order to bring in new knowledge, which in turns, results in the removal of the old employees. This finding also aligns with the opinion of Sereerat (1995), who stated that organisations with young personnel can produce new initiatives. In particular, young employees having originality and daring to challenges are likely to bring something new to the organisation. Regarding education, Ocak and Kurt (2019) found that educational level is the relevant factor in the auditing competency of auditors who work for listed firms in Turkey. Hence, it is probable that the education level affects the internal auditors' readiness for digital transformation. With respect to working experience, Mortell (2016) found that the in-house and outsourced internal auditors contribute to different aspects of company's controlling process because of their differing experiences. The more experience the internal auditors have, the more effective they are in providing business advice by adapting the necessary strategies to furnish new services to customers or auditees. Lastly, in terms of salary, different salary rates can reflect the work efficiency, competency, knowledge, and level of curiosity of the employees in the organisation (Wonganutarot, 2005). A young workforce has an ability to learn new technology better than people who have been employed for a longer time. Because of this, many organisations are willing to deliver higher salaries to people who have skills and the needed knowledge for working in the digital transformation era than the ones who do not. In other word, a person who has high salary is more likely to be one who has a readiness for digital transformation. In summary, such demographic information is one of essential factors affecting the readiness of internal auditors for digital transformation. The following hypothesis is formulated:

H1 Demographics, including gender, age, education, experience, and salary, affect the internal auditors' readiness for digital transformation.

### 2.2.2 *Know-how*

Whatever role is played by readiness, know-how is an essential factor because internal auditors should have competency to apply digital technology to their internal audit work. Fundamentally, know-how related to the digital transformation includes the following. Firstly, IT-based knowledge is a key awareness which internal auditors should have in order to conduct the assigned engagement successfully and accurately. Referring to the challenges of internal auditors in digital transformation, when the organisation set new technologies, the internal auditors must face the risk evaluation process (Dzuranin and Malaescu, 2016). Therefore, the technical knowledge and skill to perform such tasks is necessary.

Moreover, when a company decides to implement digital transformation into business processes, the first thing internal auditors must do is to study and understand new business risks that may arise from the transformation. They should know how those transformation risks affect the achievement of the organisation's strategies and objectives. Moreover, internal auditors should continue studying and try to understand more about regulations and requirements related to digital tools in order to assess the accuracy of the control process and to ensure that business activities follow the relevant regulations as specified by the regulators (Ganesan et al., 2017, 2018; Obert and Munyunguma, 2014). Thus, the cognition, a cognitive process that is involved in learning and using basic knowledge to perform auditing tasks, is another factor affecting the

readiness by which internal auditors should understand what digital transformation is and how it affects internal auditors (Davenport and Raphael, 2017).

Furthermore, internal auditors should possess a fundamental understanding about technology and be able to cope with technological advancement in order to effectively provide assurance and consulting services to clients or auditees. The audit professions should look for a way to create a visual perspective on how to use big data and analytical systems to improve the audit process and try to gain skillsets and competencies. Tang and Karim (2017) indicated that the audit profession has to update their knowledge of big data in business practices. Moreover, Lamboglia et al. (2021) highlighted that the use of software tools is one of three concerns in audit engagements with technology. This finding indicates that IT competency is now one of the requirements in the audit profession. However, Brock and Wangenheim (2019) revealed that most employees, who work in the implementation of digital transformation, lack the necessary technology-related knowledge and skills. On top of that, the European Court of Auditors (2020) noted that the accounting profession still uses old-fashioned standards and assurances that are in conflict with the digital changes in the world. Hence, competency is one of the key factors affecting readiness. Based on previous findings, the following hypothesis is developed:

H2 Know-how, including IT-based knowledge, cognition, and competency, affects the internal auditors' readiness for digital transformation.

### 2.2.3 *Emotion*

Emotion refers to emotional stability and a willingness to learn (Downing and Thackey, 1971). For this study, emotion is therefore measured in terms of attitude and willingness. Regarding attitude, Ganesan et al. (2017), Obert and Munyunguma (2014) noted that the attitude of company's employees influences their work performance dramatically. If employees have a negative attitude to the organisation, the firm is unable to transform its business successfully. For this reason, internal auditors need to adopt a new mindset by refocusing on processes, rethinking about resources, and repositioning firms in order to prepare for and utilise the opportunities that come with agility and innovation. Additionally, as the implementation of new technologies leads to new risks, those involved in the process of implementation should have a willingness to take new risks in order to move forward and gain more competitive advantages. Hence, in this digital transformation era, internal auditors should have mental readiness, possess a positive attitude, and be willing to adapt themselves to new environments. They should be able to accept and manage the new risks which occur. The following hypothesis is then developed:

H3 Emotion, including attitude and willingness, affects the internal auditors' readiness for digital transformation.

### 2.2.4 *Environment*

Support from individuals or institutions involved in the work of internal auditors affect the readiness of internal auditors for digital transformation. Ganesan et al. (2017), Obert and Munyunguma (2014) stated that the organisation is an important factor energising the internal auditors to transform themselves to meet the new challenges. Top management,

including the board of directors, senior management, and audit committees, serve important functions in the organisation. They are the people who favourably drive the business transformation. A clear vision or policy regarding digital transformation builds trust and creates an effective working environment that enables internal auditors to perform engagements to their best. Specifically, the audit committee, a sub-committee of the board of directors, plays a big role in enhancing the corporate governance practices in a company (Grange et al., 2021). The audit committee therefore should support internal auditors with regard to necessary knowledge and adequate training on new processes and approaches. As training is a crucial development tool used to improve the internal audit performance, it should be given a high priority in the organisation's budget.

In particular, the CAE, who provides advice to the board of directors and its audit committee, is also an important person in helping internal auditors become ready for digital transformation. Internal auditors should not only have a background in accounting, but also have a technological background. Hence, an effective CAE should have a clear vision or policy regarding digital transformation in its audit function, support a new technology to be implemented in the auditing process, and finally support internal auditors to develop new skills through the training in order to enhance skills in data analysis by using innovative technology.

In Thailand, three major professional organisations are associated with internal auditors. Firstly, the Institute of Internal Auditors of Thailand (IIAT) is an institute which is responsible for regulating the internal audit profession and organising the examination for internal audit certification, namely that of Certified Internal Auditor (CIA). Secondly, the Thailand Federation of Accounting Professions (TFAC) is an organisation that focuses on Thai accounting standards which are indirectly related to internal auditing. The TFAC provides training about internal auditing. Finally, the Information Systems Audit and Control Association (ISACA) is a global organisation that provides IT professionals with knowledge, credentials, training and community standards in auditing, governance, risk, security, and emerging technologies. Certification as a Certified Information System Auditor (CISA) can be achieved through ISACA, providing a great opportunity for internal auditors to obtain certification of their attained IT skills. Therefore, support from these organisations in the matter of useful training, new technology systems, and funding can inspire the internal auditors, enhance their knowledge, skill, and competency, and ultimately make them ready for digital transformation. The following hypothesis is formulated:

H4 The environment, including company organisation, the CAE, and professional organisations affects the internal auditors' readiness for digital transformation.

### **3 Research methodology**

#### *3.1 Measures*

The questionnaire employed in this study was divided into three parts (see Appendix). The first part included questions regarding demographic information about the respondents including gender, age, education, experience, and salary. The second part included questions to measure factors that affect readiness for digital transformation. The scale items were measured using a five-point Likert scale with 1 corresponding to



‘strongly disagree’ and 5 to ‘strongly agree’. The last part included questions to measure the internal auditors’ readiness for digital transformation in which the scale items were a five-point Likert scale with 1 corresponding to ‘strongly unready’ and 5 to ‘strongly ready’. To verify its reliability, the questionnaire was initially distributed to a sample group of 50 internal auditors and Cronbach’s alpha analysis test was employed. Table 1 represents the satisfactory results of the reliability test in which the Cronbach’s alpha coefficients of survey variables were far above 0.70.

**Table 1** Cronbach’s alpha reliability coefficients

<i>Variables</i>	<i>No. of questions</i>	<i>Cronbach’s coefficients</i>
Know-how	9	0.838
Emotion	6	0.867
Environment	11	0.911
Internal auditing readiness	3	0.934
Law and related regulation readiness	3	0.933
Technological readiness	3	0.858

### 3.2 Data collection and analysis

As of 31 May 2020, there were 3,352 internal auditors who are members of the Institute of Internal Auditors of Thailand (The Institute of Internal Auditors, 2020a). The questionnaire was distributed online to those internal auditors living in Thailand using the simple random sampling method. A total of 350 questionnaires were completely answered and were employed for data analysis (Krejcie and Morgan, 1970). Descriptive analysis, comparison analysis using t-test and ANOVA, and regression analysis were conducted in which the following the multiple regression model was employed to verify the factors affecting readiness of internal auditors for digital transformation.

$$Readiness_i = \beta_0 + \beta_1 Demo_i + \beta_2 KnowHow_i + \beta_3 Emot_i + \beta_4 Envi_i + \varepsilon_i$$

where *Readiness* was measured by the survey response scales in terms of the competency in internal auditing, IT-related regulations and requirements, and IT competencies. *Demo* was a dummy variable and referred to the demographics of respondents including gender, age, education, experience, and salary. *KnowHow* referred to the know-how of respondents in terms of IT-based knowledge, cognition of applying digital technologies to the internal audit process, and competency relating to digital transformation and implementation. *Emot* was the emotion of respondents indicating the attitude for adaption and willingness for acceptance. *Envi* referred to the environment that consists of the support of the company, the CAE and professional organisations. *KnowHow*, *Emot*, and *Envi* were measured by the survey response scales.

## 4 Results and discussion

### 4.1 Respondents’ profile

Table 2 displays the frequencies and percentage of each demographic variable. The respondents consisted of 164 male internal auditors (46.9%) and 186 female internal

auditors (53.1%). Most respondents were 31–35 years old (26.9%), had earned a master's degree (55.1%), had work experiences in the internal audit function for over 15 years (30.6%) and had salaries at the range of 25,001 Baht to 55,000 Baht per month (37.7%).

**Table 2** Demographic profile of 350 respondents

<i>Demographic variables</i>	<i>Frequency</i>	<i>Percent</i>
Gender		
Man	164	46.9
Woman	186	53.1
Age		
20–25 years	50	14.3
26–30 years	58	16.6
31–35 years	94	26.9
36–40 years	62	17.7
Over 40 years	86	24.6
Education		
Undergraduate	157	44.9
Graduate	193	55.1
Experience		
0–5 years	85	24.3
6–10 years	87	24.9
11–15 years	71	20.3
Over 15 years	107	30.6
Monthly salary		
Less than ฿ 25,000	59	16.9
฿ 25,001–฿ 55,000	132	37.7
฿ 55,001–฿ 85,000	75	21.4
Over ฿ 85,000	84	24.0
Total (n)	350	100.0

#### 4.2 *The readiness level of internal auditors for digital transformation*

The average and standard deviations of the Thai internal auditors' readiness for digital transformation are presented in Table 3. The results revealed that all respondents were highly prepared for digital transformation. Considering all of the aspects of readiness, internal auditors were mostly ready in the professional practices of internal auditing ( $Y_1$ ), following by law and related regulations ( $Y_2$ ). However, internal auditors in Thailand were not really ready for technological advancement ( $Y_3$ ) as its readiness level rated at only the moderate level.

**Table 3** Readiness level of internal auditors to digital transformation

Variables	Mean (std. deviation)							
	IAAs' readiness for the digital transformation ( $Y_{dt}$ )	Level	Internal auditing readiness ( $Y_i$ )	Level	Law and related regulation readiness ( $Y_r$ )	Level	Technological readiness ( $Y_t$ )	Level
Gender								
Man	3.855 (1.007)	High	4.169 (1.079)	High	3.947 (1.119)	High	3.449 (1.072)	High
Woman	3.931 (0.594)	High	4.400 (0.673)	Very High	4.113 (0.777)	High	3.280 (0.929)	Moderate
Age								
20–25 years	3.182 (1.236)	Moderate	3.433 (1.282)	High	3.207 (1.323)	Moderate	2.907 (1.471)	Moderate
26–30 years	4.082 (0.549)	High	4.512 (0.628)	Very High	4.201 (0.689)	High	3.535 (0.883)	High
31–35 years	4.104 (0.558)	High	4.528 (0.560)	Very High	4.223 (0.769)	Very High	3.560 (0.817)	High
36–40 years	3.988 (0.658)	High	4.436 (0.731)	Very High	4.194 (0.755)	High	3.333 (0.895)	Moderate
Over 40 years	3.889 (0.779)	High	4.279 (0.888)	Very High	4.085 (0.936)	High	3.302 (0.920)	Moderate
Education								
Undergraduate	3.728 (0.956)	High	4.161 (1.042)	High	3.885 (1.097)	High	3.136 (1.091)	Moderate
Graduate	4.032 (0.648)	High	4.397 (0.735)	Ver High	4.157 (0.804)	High	3.541 (0.882)	High
Experience								
0–5 years	3.529 (1.106)	High	3.824 (1.175)	High	3.573 (1.196)	High	3.192 (1.312)	Moderate
6–10 years	4.109 (0.518)	High	4.571 (0.575)	Very High	4.230 (0.665)	Very High	3.525 (0.802)	High
11–15 years	4.067 (0.713)	High	4.446 (0.706)	Very High	4.230 (0.890)	Very High	3.526 (0.946)	High
Over 15 years	3.898 (0.703)	High	4.333 (0.822)	Very High	4.115 (0.866)	High	3.246 (0.863)	Moderate
Monthly salary								
Less than ฿ 25,000	3.313 (1.228)	Moderate	3.593 (1.298)	High	3.322 (1.310)	Moderate	3.023 (1.418)	Moderate
฿ 25,001–฿ 55,000	4.013 (0.584)	High	4.432 (0.620)	Very High	4.136 (0.784)	High	3.470 (0.904)	High
฿ 55,001–฿ 85,000	4.079 (0.623)	High	4.547 (0.664)	Very High	4.316 (0.682)	Very High	3.373 (0.920)	Moderate
Over ฿ 85,000	3.956 (0.742)	High	4.333 (0.857)	Very High	4.127 (0.890)	High	3.309 (0.810)	Moderate
Total (n = 350)	3.895 (0.814)	High	4.291 (0.893)	Very High	4.035 (0.957)	High	3.359 (1.001)	Moderate

When comparing the internal auditors' readiness level between two groups, the results from an independent-samples t-test showed that there was no statistically significant difference in the mean scores for males and females [ $t(348) = -0.868, p = 0.386$ ]. By contrast, for educational level, a statistically significant difference in mean scores was found [ $t(348) = -3.534, p = 0.000$ ], revealing that internal auditors with graduate degrees are more ready for digital transformation than those having only undergraduate degrees. In addition, as determined by one-way ANOVA, the groupings by age [ $F(44,305) = 3.467, p = 0.000$ ], experience [ $F(44,305) = 2.726, p = 0.000$ ], and salary [ $F(44,305) = 2.726, p = 0.000$ ] had statistically significant differences from each other. These indicate that those young internal auditors whose age was below 25 years, and who had only an undergraduate education level, work experience of less than five years in internal audit function, and a monthly salary below 25,000 Baht had the lowest readiness level for digital transformation in every aspect: internal auditing, law and related regulations, and technology. This may imply that they may lack experience and have only limited knowledge and skills in the internal audit function compared to other groups.

Nonetheless, when examining only technological readiness ( $Y_3$ ) in different age groups, Table 3 reveals a noteworthy result in that the internal auditors aged 26–35 years (generation Y or Millennials) were better prepared to improve themselves in technology than other generations. Such a finding is supported by the study of Tran and Nguyen (2021) in which generation Y is a more likely group to adopt technology with functional practices than generation X and Z. For those who are in the age group older than 41 years old (generation X), the result for this study is not surprising as their readiness for technology is lower than of those of the generation Y group. However, it is surprising that those who were in the age group of 20–25 years old (the young generation, Z) had the lowest degree of technology readiness. We had expected that they would have the highest level of technology readiness, comparing to others, but they did not. The reason behind this surprising finding might be that they are newly graduated and have less experience in using technology for internal auditing compared to others. As a result, this study suggests that technology-related knowledge and skills should be heavily promoted to generations X and Z. However, for generation Y, the technology related knowledge and skills should also be promoted to reskill, upskill, and enhances their technology advancements so that they can further become the key personnel to train and support other internal auditors in the organisation.

#### 4.3 *The agreement level of internal auditors regarding factors affecting their readiness*

Table 4 displays the average values and standard deviations of the agreement level in terms of factors affecting readiness for each dimension. The agreement level is classified from very low to very high. According to the results shown in Table 4, regarding know-how, internal auditors strongly agree that IT-based knowledge, relating to the infrastructure and information system in their organisation, is a fundamental knowledge that internal auditors should know in order to perform their auditing work well. In addition, internal auditors are more likely to improve their knowledge by participating in training as they recognise that working in internal auditing is not an obstacle to technological learning. Cognition is also rated with a high agreement level, as internal auditors tend to understand the meaning of digital transformation and its impacts on the internal auditing which they can transmit to colleagues. However, the agreement level for

competency was only at a moderate level. This implies that until recently whilst Thai internal auditors have applied their IT knowledge in their internal audit work, they have been unable to provide practical advice on how to bring digital technologies to develop or improve the organisation processes.

**Table 4** Agreement level of factors affecting the readiness of internal auditors

<i>Variables</i>	<i>Sub-variable</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Agreement level</i>
Know-how	IT-based knowledge	3.521	0.935	High
	Cognition	3.629	0.879	High
	Competency	2.923	0.883	Moderate
Emotion	Attitude	4.100	0.872	High
	Willingness	3.793	0.883	High
Environment	Organisation	3.719	0.935	High
	Chief audit executive	3.770	1.061	High
	Professional organisation	3.220	0.865	Moderate

With respect to emotion, internal auditors agree at a high level that attitude and willingness are important factors as shown in Table 4. These results indicate that the internal auditors have a positive attitude for adapting to digital transformation. They believe that digital technology is not difficult to learn and apply to the internal audit work. Furthermore, the internal auditors are willing to adapt themselves to the business transformation by participating in training or learning new audit tools.

As to environmental variable, reported by Table 4, internal auditors strongly agree that organisations should have a clear vision or policies on digital transformation and listen to the internal auditors' advice and suggestion regarding the development of digital systems. They should get their employees familiar with digital transformation by providing consistent training and a sufficient budget and manpower in order to support the internal audit department. From the perspective of a supervisor of internal audit functioning, the positive role of the CAE toward digital transformation is also essential. The results indicate that the CAE is seen as a key person who drives internal audit staffs in the same direction as the organisation's goals. The CAE brings new technologies into internal audit functioning. By contrast, internal auditors rate the role of the professional organisations associated with internal auditing function at only a moderate level. The internal auditors agree that the training about auditing technology provided by the professional organisations is not enough. More support from the professional organisations regarding new technology implemented in the auditing process is required. In addition, funds or scholarships from professional organisations needs to be increasingly encouraged to assist universities, organisations and even companies in developing their audit tools to meet the changing auditing environment.

#### *4.4 Multiple regression results*

The multiple regression assumptions were tested before running the multiple regression analysis. The histogram of the regression standardised residuals, the normal P-P plot, and the scatterplot indicates that the data are normally distributed (see Figure 1). The statistical results from the Variance Inflation Factor (VIF) are below 10 (see Table 5),

indicating the severity of multicollinearity does not exist. Consequently, a multiple regression analysis was conducted in this study. The results of multiple regressions present in Table 5 in which the internal auditors' readiness for digital transformation is a dependent variable.

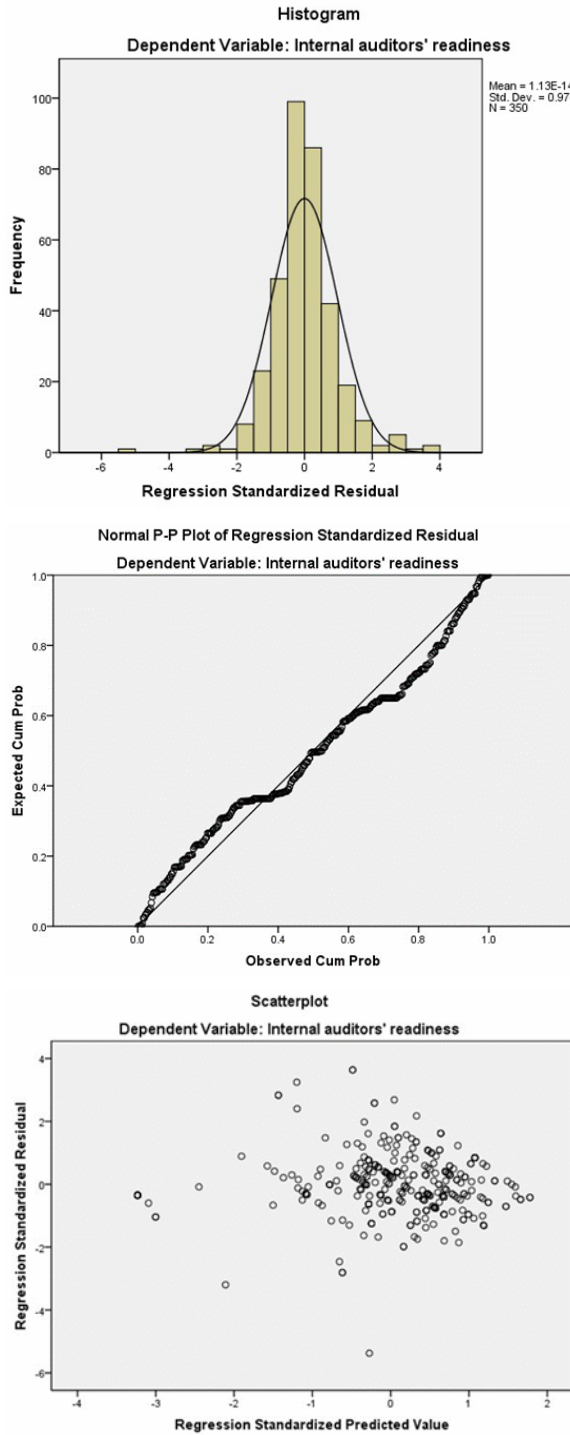
As shown in Table 5, the know-how variables including IT-based knowledge, cognition, and competency significantly affect the internal auditors' readiness for the digital transformation at the 5% significance level. A positive coefficient indicates that the higher the know-how, the higher the readiness for digital transformation, supported by the studies of Barrow and Millburn (1990), Downing and Thackey (1971), Jimmieson et al. (2004), Kallas (2019). Therefore, to enhance their readiness, internal auditors should understand clearly the digital transformation environment. They should seek to improve their IT knowledge and skills in order to perform their audit engagements in the digital environment effectively.

**Table 5** Multiple regression results

<i>Categories</i>	<i>Independent variables</i>	<i>Standardised coefficients</i>	<i>VIF</i>
Demographics	DGender (female)	0.006	1.266
	DAge1 (26–30 y)	0.000	3.888
	DAge2 (31–35 y)	–0.022	7.974
	DAge3 (36–40 y)	–0.027	6.847
	DAge4 (41 y up)	–0.135	9.949
	DEdu (graduate)	–0.031	1.395
	DExp1 (6–10 y)	–0.005	3.893
	DExp2 (11–15 y)	0.046	4.555
	DExp3 (15 y up)	0.103	8.195
	DSal1 (25 k–55 k)	0.061	5.798
	DSal2 (55 k–85 k)	0.066	5.162
	DSal3 (85 k up)	0.018	5.752
Know-how	IT-based knowledge	0.141*	2.884
	Cognition	0.093*	2.145
	Competency	0.085*	1.855
Emotion	Attitude	0.313**	3.794
	Willingness	0.147*	3.104
Environment	Organisation	0.210**	3.713
	chief audit executive	0.022	3.302
	professional organisation	0.108*	1.514
$R^2$		0.773	

Note: \* $p < 0.05$ , \*\* $p < 0.001$ .

**Figure 1** Testing the regression assumptions using the histogram, normal P-P plot, the scatterplot of the residuals (see online version for colours)



In the matter of the emotion variables, Table 5 displays that attitude and willingness are positively related to the readiness of internal auditors regarding the digital transformation at the 5% significance level. These results suggest that attitude and willingness enhance the readiness for digital transformation and influences work performance dramatically. The rationale behind these findings is that with a good attitude and willingness, the possibility of adaptation to any change in any circumstance increases (Ganesan et al., 2017; Obert and Munyunguma, 2014).

For the environmental variables, Table 5 shows that only organisation and professional organisation positively affect the readiness of internal auditors for digital transformations at the 5% significance level. The greater the support from the company and professional organisations, the higher readiness is. Support from the company is crucial as this leads the internal auditors to adapt themselves to digital advancement (Ganesan et al., 2017; Obert and Munyunguma, 2014). Normally, the company is the employer of the internal audit team. Thus, it should play a big role in supporting the internal audit team in various approaches, for instance, providing employee training, sufficient IT infrastructures and manpower, or being attentive to the internal auditors' recommendations. With this support, the internal audit team is able to efficiently monitor the company's corporate governance in relationship to its digital needs. As to professional organisations, these can help internal auditors improve their internal auditing competencies so that internal auditors feel more comfortable when dealing with the digital environment (Tang and Karim, 2017). Professional organisations may provide internal auditors with various types of training to improve their IT knowledges and may suggest the relevant audit tools to be implemented. Moreover, in the future, more and more businesses will increasingly change their processes to be more automated. Hence, professional organisation should update the internal auditing practices to be consistent with the changing business environment.

Finally, the regression results indicate that all demographic variables and the CAE function insignificantly affect the internal auditors' readiness for digital transformation at the 5% significance level. This implies the absence of any direct relationship between demographic factors and the CAE function the readiness of internal auditors in Thailand.

## **5 Conclusions**

Technology is significantly important in this digital era. Developments in technology lead to a change in the business environment and ultimately change internal auditing practices. The internal auditors, providing audit assurance and consulting services to businesses, are then required to adapt themselves to be ready for work in the world of digital transformation. Hence, the primary objective of this study is to assess the factors that affect the internal auditors' readiness for digital transformation. The results from descriptive and comparative analysis show that internal auditors are more likely to be ready for digital transformation in terms of internal auditing practices, followed by law and relevant regulations, and technology. It also suggests that the technology-related knowledge and skills should be promoted to reskill, upskill, and enhances internal auditors' technological advancements. Furthermore, the results from the multiple regression analysis indicate that know-how, including IT-based knowledge, cognition of applying digital technologies with the internal audit process, and competency in digital transformation and implementation are significant factors that make internal auditors



ready to adapt themselves to overcome digital challenges. The internal auditors' attitude towards adaptation in the digital age and their willingness to accept digital transformation are also essential factors in enhancing their readiness. In addition, the support of companies together with the participation of professional organisations (regulators) are key drivers in providing infrastructures and building an environment to help internal auditors perform effective internal auditing work in the digital environment.

Therefore, from a practical point of view, as companies are moving towards digitalisation, internal auditors need to stay informed of this ever-changing technology. They have to continuously take courses in technical areas like data analytics, cybersecurity, data privacy, blockchain, and risk management to gain new knowledge and skills for self-improvement. Workshops, seminars, or online courses can also help them keep up with the new technological trends. Again, support from companies is crucial. The companies have to establish a strategic vision and clear policies for the achievement of digital transformation. They should communicate their formal digital transformation plan to the internal audit team, allowing the CAEs and internal auditors to deliver stronger support and more valuable insights on the business governance, risk management, and internal control processes in the digital age. Furthermore, companies have to provide adequate budgets for personal development training and encourage current employees to expand their skills and expertise in these areas of digitalisation. In particular, more training or scholarships should be provided for young internal auditors aged below 25 years and above 35 years so that they will have more knowledge and will be more ready for digital transformation. This can also reduce internal auditors' fears of losing their jobs and increase their willingness to accept digital transformation. Last but not least, professional organisations have to provide excellent support to internal auditors in order to fill the gaps between technology and assurance. For instance, professional organisations have to offer training courses and education conferences on relevant technological advances. They should support the development of new digital tools for the auditing process by providing funds to universities and companies to develop automated audit tools and techniques. Importantly, professional organisations have to establish regulations, standards and frameworks in accordance with the latest risks and compliance updates, and consistently promote the value of internal auditing to companies. These actions will increase the awareness of internal auditors and enhance their readiness for digital transformation.

Nonetheless, limitations of this study should be noted. Firstly, this study focuses on key factors concerning personnel development toward digital transformation, rather than applicable tools in the digital era. Future research will examine key factors affecting the practical use of technical audit tools such as data analytics or RPA in audit work. Moreover, future research may investigate the readiness of internal auditors and outsourced internal auditors separately. The different perspectives of in-house and outsourced internal auditors may yield new findings. Additionally, intention and motivation are found to affect one's readiness (Jimmieson et al., 2004, Kallas, 2019). Intention is likely to reflect the motivation underlying behaviors (Ajzen, 1991). Hence, testing the direct and indirect effects of these two variables would be of value for further study. Last but not least, future research may include firm-specific variables, such as size, growth, and industry in the regression analysis as the effect between the companies and the internal auditors' readiness may be mediating by these firm-specific factors.

## References

- Ajzen, I. (1991) 'The theory of planned behavior', *Organizational Behavior and Human Decision Processes*, Vol. 50, No. 2, pp.179–211.
- Banerjee, P. (2020) 'Digital transformation: opportunities to create new business models', *Siliconindia* [online] <https://www.siliconindia.com/viewpoint/cxoinsights/digital-transformation-opportunities-to-create-new-business-models-nwid-10666.html> (accessed 14 January 2021).
- Barrow, R. and Milburn, G. (1990) *A Critical Dictionary of Educational Concepts: An Appraisal of Selected Ideas and Issues in Educational Theory and Practice*, 2nd ed., Harvester Wheatsheaf, New York.
- Brock, J. and Wangenheim, F.V. (2019) 'Demystifying AI: what digital transformation leaders can teach you about realistic artificial intelligence', *California Management Review*, Vol. 61, No. 4, pp.110–134.
- Christensen, B. (2020) 'The future auditors has arrived', *Internal Auditing Around the World* [online] <https://www.protiviti.com/sites/default/files/internal-auditing-around-the-world-vol16-protiviti.pdf> (accessed 20 February 2021).
- Clifford, T. (2020) *How Moderna is using Amazon Cloud to Produce Personalized Cancer Vaccines* [online] <https://www.cnbc.com/2020/01/15/how-moderna-uses-amazon-cloud-to-produce-a-new-class-of-medicines.html> (accessed 20 March 2021).
- Coke, R. (2020) '3 multi-billion pound companies doing digital transformation right'. *CEO Today* [online] <https://www.ceotodaymagazine.com/2020/03/3-multi-billion-pound-companies-doing-digital-transformation-right> (accessed 20 January 2021).
- Davenport, T.H. and Raphael, J. (2017) *Creating a Cognitive Audit* [online] <https://www2.deloitte.com/us/en/pages/audit/articles/cognitive-technologies-and-audit-process.html> (accessed 15 November 2020).
- Delgado, M. (2018) 'How future technology impacts employees', *Clutch Report* [online] <https://clutch.co/hr/resources/how-future-technology-impacts-employees> (accessed 1 October 2020).
- Digital Adoption Team (2019) *Digital Transformation and Business Process Outsourcing: Pros and Cons* [online] <https://www.digital-adoption.com/digital-transformation-and-business-process-outsourcing> (accessed 15 November 2020).
- Downing, J. and Thackrey, D. (1971) *Reading Readiness*, University of London Press, New York.
- Dzurainin, A.C. and Malaescu, I (2016) 'The current state and future direction of IT audit: challenges and opportunities', *Journal of Information Systems*, Vol. 30, No. 1, pp.7–20.
- European Court of Auditors (2020) 'Big data & digital audit', *ECA Journal 1/2020* [online] [https://www.eca.europa.eu/Lists/ECADocuments/JOURNAL20\\_01/JOURNAL20\\_01.pdf](https://www.eca.europa.eu/Lists/ECADocuments/JOURNAL20_01/JOURNAL20_01.pdf) (accessed 5 January 2021).
- Ganesan, Y., Hwa, Y.W., Jaaffar, A.H. and Hashim, F. (2017) 'Corporate governance and sustainability reporting practices: the moderating role of internal audit function', *Global Business and Management Research: An International Journal*, Vol. 9, No. 4, pp.159–179.
- Ganesan, Y., Kanthan, G., Mushtaq, M. and Yeap, J. (2018) 'The moderating role of internal audit function on the relationship between board of director characteristics and business performance in Malaysia', *Global Business and Management Research: An International Journal*, Vol. 10, No. 1, pp.356–378.
- Grange, M.L., Ackers, B. and Odendaal, E. (2021) 'The impact of the characteristics of audit committee members on audit committee effectiveness', *Global Business and Economics Review*, Vol. 24, No. 4, pp.409–434.
- Griffith, R.W., Hom, P.W. and Gaertner, S. (2000) 'A meta-analysis of antecedents and correlates of employee turnover: update, moderator tests and research implications for the next millennium', *Journal of Management*, Vol. 26, No. 3, pp.463–488.

- Hess, T., Matt, C., Benlian, A. and Wiesböck, F. (2016) 'Options for formulating a digital transformation strategy', *MIS Quarterly Executive*, Vol. 15, No. 2, pp.123–139.
- Jimmieson, N., Peach, M. and White, K. (2004) 'Employee readiness for change: utilizing the theory of planned behavior to inform change management', *Academy of Management Annual Meeting Proceedings*, Vol. 2004, No. 1, pp.1–6.
- Kallas, E. (2019) 'Environment-readiness entrepreneurship intention model: the case of Estonians and the Russian-speaking minority in Estonia', *SAGE Open*, Vol. 9, No. 1, pp.1–15.
- Krejcie, R.V. and Morgan, D.W. (1970) 'Determining sample size for research activities' *Educational and Psychological Measurement*, Vol. 30, No. 3, pp.607–610.
- Lamboglia, R., Lavorato, D., Scornavacca, E. and Za, S. (2021) 'Exploring the relationship between audit and technology. A bibliometric analysis', *Meditari Accountancy Research*, Vol. 29, No. 5, pp.1233–1260.
- Lois, P., Drogalas, G., Karagiorgos, A. and Tsikalakis, K. (2020) 'Internal audits in the digital era: opportunities risks and challenges', *EuroMed Journal of Business*, Vol. 15, No. 2, pp.205–217.
- Mgbame, C.O., Eragbhe, E. and Osazuwa, N.P. (2012) 'Audit partner tenure and audit quality: an empirical analysis', *European Journal of Business and Management*, Vol. 4, No. 7, pp.154–162.
- Mitrofanova, E. (2019) 'Opportunities, problems and limitations of digital transformation of HR management', *GCPMED 2018: Proceedings of International Scientific Conference Global Challenges and Prospects of the Modern Economic Development*, pp.1717–1727.
- Mortell, C. (2016) 'Outsource vs. insource in internal audit: what's the right approach?', *KPMG Insight* [online] <https://home.kpmg/au/en/home/insights/2016/09/internal-audit-outsourcing-vs-insourcing.html> (accessed 1 October 2020).
- Obert, S. and Munyunguma, I. (2014) 'Internal audit perceptions and their impact on performance of the internal audit function', *IOSR Journal of Business and Management*, Vol. 16, No. 5, pp.81–85.
- Ocak, M. and Kurt, E.S. (2019) 'Does auditor education affect audit opinion an empirical study of Turkish listed firms', *Global Business and Economics Review*, Vol. 21, No. 5, pp.646–665.
- Salehi, M., Rostami, V. and Mogadam, A. (2010) 'Usefulness of accounting information system in emerging economy: empirical evidence of Iran', *International Journal of Economics and Finance*, Vol. 2, No. 2, pp.186–195.
- Sereerat, S. (1995) *Theory of Demographics*, Education Development, Bangkok.
- Stevenson, A. (2010) *Oxford Dictionary of English*, Oxford University Press, New York.
- Tang, J. and Karim, K. (2017) 'Big data in business analytics: implications for the audit profession', *The CPA Journal* [online] <https://www.cpajournal.com/2017/06/26/big-data-business-analytics-implications-audit-profession> (accessed 15 November 2020).
- The Institute of Internal Auditors (2017) *The International Standards for the Professional Practice of Internal Auditing (Standards)* [online] <https://na.theiia.org/standards-guidance/public%20documents/ippf-standards-2017.pdf> (accessed 3 December 2020).
- The Institute of Internal Auditors (2020a) *Board of Directors Meeting Minutes on 25 June 2020* [online] <http://www.theiia.or.th/upload/3712/11HKZf2CmX.pdf> (accessed 1 October 2020).
- The Institute of Internal Auditors (2020b) *Global Technology Audit Guide: IT Essentials for Internal Auditors* [online] <https://global.theiia.org/standards-guidance/recommended-guidance/practice-guides/Pages/GTAG-IT-Essentials-for-Internal-Auditors.aspx> (accessed 9 January 2021).
- Tran, K. and Nguyen, T. (2021) 'Preliminary research on the social attitudes toward the AI's involved Christian education in Vietnam: promoting AI technology for religious education', *Religions*, Vol. 12, No. 3, pp.208–220.
- Ustundag, A. and Cevikcan, E. (2017) *Industry 4.0: Managing the Digital Transformation*, Springer, Cham, Switzerland.

Wischnevsky, J.D. and Damanpour, F. (2006) 'Organizational transformation and performance: an examination of three perspectives', *Journal of Managerial Issues*, Vol. 18, No. 1, pp.104–128.

Wonganutarot, P. (2005) *Educational Psychology*, Bangkok Media Center, Bangkok.

## Appendix

### Questionnaire instrument

#### Part 1: Demographic information.

Please mark ✓ into your answer box □.

Gender	<input type="checkbox"/> Male	
	<input type="checkbox"/> Female	
Age	<input type="checkbox"/> 20–25 years	<input type="checkbox"/> 36–40 years
	<input type="checkbox"/> 26–30 years	<input type="checkbox"/> More than 41 years
	<input type="checkbox"/> 31–35 years	
Education	<input type="checkbox"/> Diploma or lower	<input type="checkbox"/> Graduate
	<input type="checkbox"/> Undergraduate	<input type="checkbox"/> PhD
Working experience	<input type="checkbox"/> 0–5 years	<input type="checkbox"/> 11–15 years
	<input type="checkbox"/> 6–10 years	<input type="checkbox"/> More than 15 years
Monthly salary	<input type="checkbox"/> Less than ฿ 25,000	<input type="checkbox"/> ฿ 55,001–฿ 85,000
	<input type="checkbox"/> ฿ 25,001–฿ 55,000	<input type="checkbox"/> More than ฿ 85,000

#### Part 2: Factors that affect the readiness of internal auditors for digital transformation.

Please express the agreement level of relevant factors using the five-point scale with 1 corresponding to 'strongly disagree' and 5 to 'strongly agree'.

#### 1 Know-how

##### IT-based knowledge

- You have knowledge about infrastructure, internet, user devices, and digital technology (e.g., the company's information system).
- You develop your knowledge in applying digital technologies with internal audit function (e.g., training and seminars).
- Your roles and responsibilities are not a limitation for digital technology learning.

##### Cognition of applying digital technologies to internal audit process.

- You understand that digital transformation impacts on business processes.
- You understand that results from applying digital technologies with the business processes impact internal auditing.
- You understand digital transformation enough to transfer knowledge and capabilities to colleagues.

Competency relating to digital transformation and implementation.

- You are able to transfer knowledge about digital technologies to others such as a lecturer.
- You have competency to use the digital technologies for collecting data systematically, searching through digital tools, and analysing in order to determine high risk controls and improve business processes.
- You have the ability to use your own IT knowledge to make recommendations in organizational or business processes.

## 2 Emotion

Attitude for adaption

- You have a good perspective towards digital transformation.
- You can understand new ideas easily.
- You think that implementing digital transformation is necessary to your organization and your internal audit function.

Willingness for acceptance

- You are willing to participate the implementation of digital transformation.
- You try to participate in training or seminars about digital technologies.
- You are willing to use new technology within organization processes.

## 3 Environment

Participation of your organization

- Your organization has a clear vision or policy to implement digital transformation.
- Your organization supports its internal audit department to obtain sufficient and reliable information to effectively perform the engagement.
- Your organization attend to reasons and suggestions from internal auditors about implementing digital technology into the processes of organization efficiently.
- Your organization supports training of auditing technology to internal auditors.
- Your organization provides sufficient budgets and resources for digital transformation in auditing.

Participation of the chief account executive (CAE)

- Your CAE has a clear vision or policy to implement digital transformation.
- Your CAE supports training in auditing technology to internal auditors.
- Your CAE supports a new technology to implement auditing process so that internal auditors perform in a more convenient, rapid, and effective way.

Participation of professional organization (related to internal auditor)

- Professional organizations support training about auditing technology for internal auditors sufficiently and appropriately.
- Professional organizations support new technology to implement the auditing process sufficiently and appropriately.

- Professional organizations provide funds or scholarships to develop audit tools in the digital age for university/ organization/ company sufficiently and appropriately.

*Part 3:* The readiness of the internal auditors for digital transformation.

Please express your readiness level for digital transformation by using the five-point scale with 1 corresponding to 'strongly disagree' and 5 to 'strongly agree'.

1 Internal auditing

- You are ready to perform auditing with integrity, objectivity, competence, and confidentiality according to internal auditor's code of ethics.
- You are ready to continuously acquire additional professional knowledge and expertise in order to develop your knowledge and capacity to be up to date.
- You are ready to apply digital technology to the audit assurance and consulting services in order to comply with internal audit standards.

2 Law and related regulations

- You are ready to be competent in performing engagement in accordance with internal audit standards.
- You are ready to study and revise your company's rules in accordance with laws and regulations.
- You are ready to study laws related the digital technology.

3 Technology

- You are ready to use the information technology system.
- You are ready to use digital technology in auditing.
- You are ready to transfer your knowledge of digital technology for auditing to others.

-Thank you for your cooperation-