The Competency of an Accountant Influencing the Artificial Intelligence Operation and Efficiency in, Bangkok Area

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Abstract: *The objective of this research is to investigate the demographic characteristics, competence, artificial intelligence, and work performance of accountants working in establishments registered as a juristic person in Bangkok. A questionnaire was used as a research instrument for data collection. The sample consisted of 400 accountants working in establishments registered as a juristic person in Bangkok. The collected data were then analyzed using statistics including percentage, mean, standard deviation, t-test statistics, One-Way ANOVA and multiple regression analysis.*

The results of the research found that the respondents had a high level of opinion regarding the overall competencies of accountants and the core competencies. Line competency and personal performance All are at a good level. As for artificial intelligence of accountants as a whole and in terms of rational thinking and rational action. All are at a good level. and the overall performance of accountants is at a good level. The results of the study of the research hypothesis found that the three competencies of accountants are core competencies, line competencies. and personal performance Influence on artificial intelligence of accountants In terms of design and use Organizational work processes Information technology Information security Adaptation aspect and accounting professional ethics at a good level

Keywords*: Accountant, Artificial Intelligence*

1. Introduction

Artificial Intelligence (AI) is a group of computer technologies and techniques that rely on machine learning. Data processing and machine understanding models The objective is to create the ability to solve problems and perform various tasks automatically. Artificial intelligence can work like humans in many areas, such as object detection. Classification of data for prediction and decision making natural language understanding and deep learning Artificial intelligence is used in many industrial fields such as communications, medicine, and financial services. and accounting and industrial groups (Lucci, et al 2022)
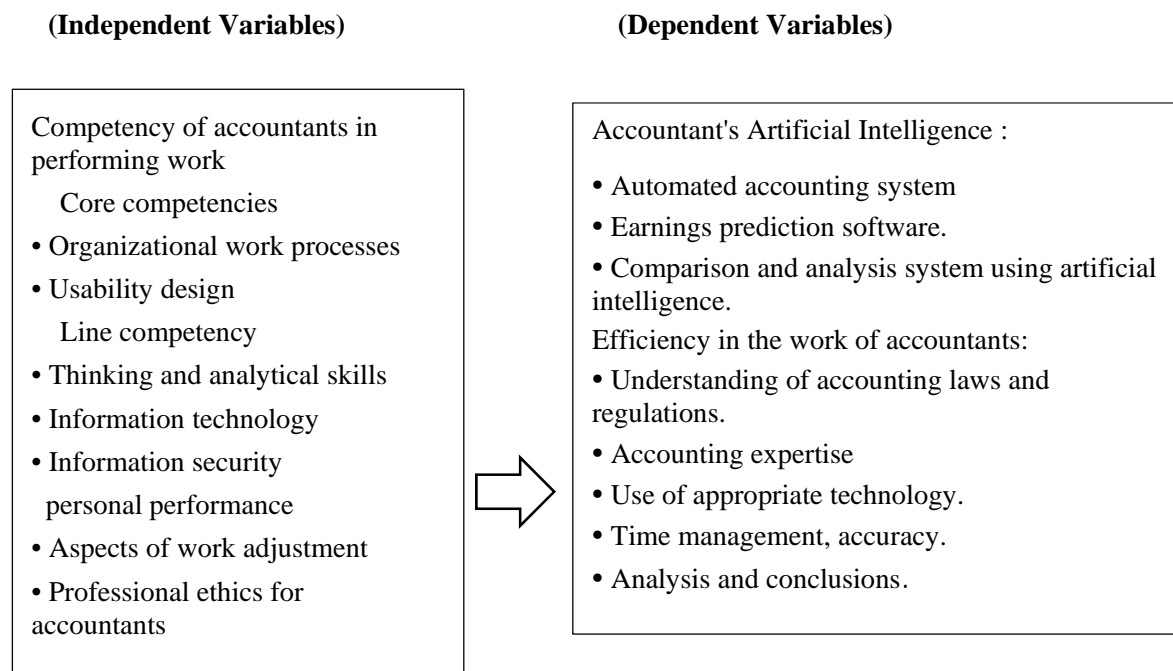
In the work of accountants, the use of artificial intelligence has begun to play a role in the accounting profession. (Emetaram &Uchime, 2021) As a result, the competency of accountants and their efficiency in performing work. Technological advancements and innovations have played an important role for accountants. To increase the competitiveness of today's leading business organizations, customer, competitor, or company information is important to business. Therefore, it is necessary for management to use technology to manage big data (Big data). Increase processing potential High accuracy Develop information in order to use it as the organization desires through the operation of the computer system.that can be learned by oneself This causes the need for personnel in many positions to decrease. When there is a decrease in personnel, the organization

must develop and increase the skills and abilities of existing employees in order to be more effective in responding to organizational and technological changes. (Hasan, 2021)

From the reasons mentioned above The researcher is interested in studying Accountant competencies influencing artificial intelligence and work efficiency In order to bring the results from this study Let's develop the competencies of accountants to be ready to work with technology that is constantly changing. This is so that accountants can understand and learn to adapt, develop themselves, and be able to work in the profession. To survive without replacing the work of machines or artificial intelligence Research objectives To study the competencies of accountants that affect artificial intelligence in accounting work. To study the competencies of accountants that affect work efficiency.(Naqvi,2020)

2. Research Conceptual Framework

The researcher has established a conceptual framework for research on the competencies of accountants that influence Artificial intelligence and operational efficiency The details are as follows:

(Independent Variables)   **(Dependent Variables)**

Competency of accountants in performing work
    Core competencies
• Organizational work processes
• Usability design
    Line competency
• Thinking and analytical skills
• Information technology
• Information security
  personal performance
• Aspects of work adjustment
• Professional ethics for accountants

Accountant's Artificial Intelligence :

• Automated accounting system
• Earnings prediction software.
• Comparison and analysis system using artificial intelligence.
Efficiency in the work of accountants:
• Understanding of accounting laws and regulations.
• Accounting expertise
• Use of appropriate technology.
• Time management, accuracy.
• Analysis and conclusions.

Research hypothesis

H 1. Competencies of accountants in performing their jobs include core competencies, line competencies, personal competencies. Influence of artificial intelligence on the work of accountants in Bangkok province

H 2. Competencies of accountants in performing their jobs include core competencies, line competencies, personal competencies. It influences the work efficiency of accountants in Bangkok province.

H.3 Competencies of accountants in performing their jobs include core competencies, line competencies, personal competencies. Influence of artificial intelligence on accountants' work performance and efficiency. In the work of accountants in Bangkok province

Reterature Review

The research study on Accountant competencies (Quattrone, 2009) Influencing artificial intelligence and work efficiency. (Wooldridge, 2018) The researcher has researched concepts, theories, and reviewed various literature.related to guide the study as follows Concepts and theories regarding the competency of accountants in their work. (Rufino, et al 2017) Concepts and theories about artificial intelligence for accountants Concepts

and theories about accounting and accountants Concepts and theories regarding work efficiency. Concepts and theories regarding demographics.

Research methodology

This research is a study on "Competencies of accountants that influence artificial intelligence and work efficiency. in Bangkok Province" has the first objective to study the competencies of accountants that affect artificial intelligence and the efficiency in accounting work of accounting professionals. in Bangkok province The researcher conducted quantitative research using a questionnaire. (Questionnaire) to collect data and then take the results from the questionnaire and process them with the statistical package (SPSS) to analyze and find conclusions.

Population and sample used in the study

The sample group used in this research is an accountant who works in an establishment Address in the form of a legal entity In Bangkok Because the researcher does not know the exact population.Therefore, the sample size was calculated using the formula. In cases where the population is not known, use the formula of Kanlaya Wanichbancha (2003, page 14) By setting a confidence level of 95% and a sample error of 5%, the sample size is equal to 380 people. and calculate an additional 5% equal to 20 people, totaling the sample to 400 people Use the Purposive Sampling method by distributing online questionnaires until the required number is reached.

3. Research results

Presentation of research results on Accountant competencies influencing artificial intelligence and work efficiency in Bangkok province This time, a quantitative research study was used. (Quantitative Study) In the form of survey research (Survey Research) and one-shot case study using questionnaires. (Questionnaire) It is a tool for collecting information from Accountants working in the workplace Address in the form of a legal entity In Bangkok, 400 samples The obtained data was then used to check the completeness and accuracy of the questionnaire. Then the questionnaire was coded (Coding) according to statistical research methods. and carry out computer processing Using a statistical package The results from the data collection were then used to analyze the results of the study. The details are as follows:

Results of the analysis of demographic characteristics of the sample.

From collecting data according to the sampling procedure in this research study. Consists of data analysis according to demographic characteristics including: 1. Gender 2. Age 3. Status 4. Highest level of education 5. Work experience 6. Responsibilities7. Monthly income The data are presented as numbers and percentages of the sample as shown in Table 4 as follows.

Shows the number and percentage of the sample by gender.

sex		percentage
Meal	97	24.25
Female	303	75.75
Total	400	100

The results of the analysis of accountants' competencies that influence artificial intelligence and work efficiency in Bangkok Province Using the multiple regression analysis method.

variable	Competency of accountants in performing their jobs		T	p-value	Collinearity Statistics	
	B	S.E.			Tolerance	VIF
(Constant)	0.506	0.146	3.452	0.001	-	-
Competency of accountants						
(A)	0.122	0.035	3.448	0.001*	0.461	2.170
(B)	0.075	0.034	2.180	0.030*	0.560	1.786
(C)	-0.018	0.036	-0.504	0.614	0.522	1.915
(D)	0.145	0.037	3.885	0.000*	0.556	1.798
(E)	0.157	0.034	4.578	0.000*	0.546	1.830
(F)	0.182	0.036	5.115	0.000*	0.585	1.710
(G)	0.219	0.034	6.395	0.000*	0.576	1.736

R = 0.796 SE = 0.15905 R^2 = 0.634 Adjusted R^2 = 0.628

The analysis results found that Variables that can predict the performance of accountants that influence artificial intelligence and work efficiency in Bangkok Province (H) is Information Technology (D) Information security (E) Work adaptation(F) Professional ethics for accountants (G) Organizational work processes (A) and functional design (B) These variables can predict the performance of accountants that influence artificial intelligence and their efficiency in work. Bangkok Province (H) Got 6.28 percent (Adjusted R2 = 0.628) with details as follows.

Information technology (D) is a factor affecting accountants' competency that influences artificial intelligence and work efficiency in Bangkok Province with B = 0.145, p-value = 0.000, which is less than 0.05, so it can be concluded that information technology It has a positive impact on artificial intelligence and operational efficiency in Bangkok. data security (E)) is a factor affecting the competency of accountants that influences artificial intelligence and work efficiency in Bangkok Province with B value = 0.157 p-value = 0.000 which is less than 0.05, so it can be concluded that data security It has a positive impact on influencing artificial intelligence and operational efficiency. in Bangkok province

Work adaptability (F) is a factor affecting accountants' performance that influences artificial intelligence and work efficiency in Bangkok Province with B = 0.182, p-value = 0.000, which is less than 0.05, so it can be concluded that adjustment to work

It has a positive impact on influencing artificial intelligence and operational efficiency. in Bangkok province Professional ethics for accountants (G)) It is a factor that affects the performance of accountants that influences artificial intelligence and the efficiency of work in Bangkok Provincewith B = 0.219, p-value = 0.000, which is less than 0.05, so it can be concluded that Professional ethics for accountants.

It has a positive impact on influencing artificial intelligence and operational efficiency. in Bangkok province

Organizational work processes (A) are factors affecting accountants' competency that influence artificial intelligence and work efficiency in Bangkok Province with B = 0.122, p-value = 0.001, which is less than 0.05, so it can be concluded that organizational work process It has a positive impact on influencing artificial intelligence and operational efficiency. in Bangkok province. Usability design (B) is a factor affecting accountants' competency that influences artificial intelligence and operational efficiency in Bangkok Province with B = 0.122, p-value = 0.001, which is less than 0.05, so it can be concluded that usability design It has a positive impact on influencing artificial intelligence and operational efficiency. in Bangkok province

4. Summary of research results and recommendations

Research on Competencies of accountants that influence Artificial intelligence and operational efficiency in Bangkok province Aim of the research In this research, the research objectives were as follows: To study the competencies of accountants that affect artificial intelligence in accounting work. To study the competencies of accountants that affect work efficiency. To study performance of accountants that affect artificial intelligence in accounting work and efficiency in work

Research hypothesis

Hypothesis 1: Competencies of accountants in performing their jobs include core competencies, line competencies, and personal competencies.

Influence of artificial intelligence on the work of accountants in Bangkok province

Hypothesis 2: Competencies of accountants in their work include core competencies, line competencies, and personal competencies.

It influences the work efficiency of accountants in Bangkok.

Hypothesis 3: To study the competencies of accountants that affect artificial intelligence in accounting work and their work efficiency.

Accountant in Bangkok Province

Research limitations

From the study of accountants' competencies that influence artificial intelligence and work efficiency. in Bangkok province There are limitations in this research. is the sample group in that research A study was conducted on a specific group of accountants who work in establishments that are in the form of legal entities. Only in Bangkok province Therefore, it does not reflect the overall picture at the central region. Due to limited time for research, however The research results can be studied further to serve as guidelines for further research in other sample groups.

Suggestions for next study

This research is a study. The performance of accountants that influences artificial intelligence and the efficiency of work of accountants in corporate enterprises. Bangkok area Additional information should be studied in other areas, such as in the metropolitan area, northern area, central area, etc. This research is a study.Qualifications of accountants working in establishments that are in the form of legal entities. You should study the competency data of accountants working in the establishment. Small to medium sizeRead More To use the information obtained as a guideline for developing the work performance of accountants to be more efficient in their work.

Factors that influence other aspects of work efficiency should be studied, such as work motivation. Influence on work performance Quality of life at work Accountant's potential etc. Should increase research in the form of qualitative (Qualitative Research) in order to receive information about problems and suggestions. In the use of artificial intelligence by accountants that influences the efficiency of their work. There should be a study on The performance of accountants that influences artificial intelligence and the work efficiency of accountants every year In order to study the level of performance in work. Artificial Intelligence Usage and Work Efficiency To get accurate research results and learned about the performance of accountants that may change each year Other data collection methods should be used, including: such as interviews to bring information to use in developing the competency of accountants in further work.

5. References

[1]   Emetaram, E., & Uchime, H. N. (2021). Impact of artificial intelligence (AI) on accountancy Profession.Journal of Accounting and Financial Management, 7(2), 15-25.

[2]   Hasan, A. R. (2021). Artificial Intelligence (AI) in accounting & auditing: A Literature review. Open Journal of Business and Management, 10(1), 440-465.
https://doi.org/10.4236/ojbm.2022.101026

[3]   Lucci, S., Kopec, D., & Musa, S. M. (2022). Artificial intelligence in the 21st century. Mercury learning and information.
https://doi.org/10.1515/9781683922520

[4]   Naqvi, A. (2020). Artificial intelligence for audit, forensic accounting, and valuation: a strategic perspective. John Wiley & Sons.
https://doi.org/10.1002/9781119601906

[5]   Quattrone, P. (2009). Books to be practiced: Memory, the power of the visual, and the success of accounting. Accounting, Organizations and Society, 34(1), 85-118.
https://doi.org/10.1016/j.aos.2008.03.001

[6]   Rufino, H., Payabyab, R. G., & Lim, G. T. (2017). Competency requirements for professional accountants: Basis for accounting curriculum enhancement. Review of Integrative Business and Economics Research, 7.
https://doi.org/10.2139/ssrn.3172508

[7]   Wooldridge, M. (2018). Artificial Intelligence: Everything you need to know about the coming AI. A Ladybird Expert Book (Vol. 27). Penguin UK.