Malaysian Journal of Social Sciences and Humanities (MJSSH) (e-ISSN : 2504-8562)
2024, Volume 9, Issue 10, e003029
DOI: https://doi.org/10.47405/mjssh.v9i10.3029

REVIEW ARTICLE

Accountant in the Industry 4.0 Era: The Need for Multidisciplinary Skills

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KEYWORDS:
Industry 4.0
Future of accountant
Accountant new roles
Multidisciplinary skills

CITATION:
Fatin Adilah Razali, Noor Lela Ahmad, & Nor Sa'adah Jamaluddin. (2024). Accountant in the Industry 4.0 Era: The Need for Multidisciplinary Skills. *Malaysian Journal of Social Sciences and Humanities (MJSSH), 9*(10), e003029. https://doi.org/10.47405/mjssh.v9i10.3029

ABSTRACT

Industry 4.0 impacts are severe to accounting field and its profession. The advent of Industry 4.0 technologies is revolutionizing the profession to another level. The automation of manual routine task, the emergence of data analytics, the application of blockchain technologies, the globalization and reforms in regulatory frameworks are reshaping accountants' roles and direction under this new era. It forced accountants to diversify their knowledge beyond the field of accounting. Accountants are required to be an expert in various discipline and in different functions. In order to be cross-functional experts, accountants are demanded to acquire new skills that that were not previously required. For that reason, this study set to explore the new cross-disciplinary skills required for accountants in the era of Industry 4.0, which has been discussed and discovered from past literatures. At the same time, an analysis of transformation in accounting field driven by Industry 4.0 technologies is also included. This study is beneficial in providing meaningful insights on the impact of Industry 4.0 towards the accounting profession and preparing future accountants for the unexpected future. With this, it will help ensure future accountants are multidisciplinary experts and would remain current with industry trends.

Contribution/Originality: This study documents the expansion of skills for an accountant under the new era of Industrial Revolution. This paper captures the skills that are new for an accountant that will supports their new roles and functions in the accounting field. This paper provides a foundation for accountant to become cross-functional experts in the industry.

1. Introduction

A modernized accounting is expected in the era of Industry 4.0. It replaced the conventional accounting that are characterized heavily by manual works, standardized practices, high regulatory adherence and compliance, labour intensive processes, minimal technology intervention and periodical reporting. Inclusion and adoption of Industry 4.0 technologies in accounting field like artificial intelligence (AI), analytics-based financial services, cyber security, blockchain technologies, Internet of Things (IoT) and many more are set to change the current accounting practices. These are the key technologies in accounting that will restructure the accounting functions entirely (Malaysian Institute of Accountant, 2020). Not only that, by the year 2024, accounting will revolve around these Industry 4.0 cutting edge technologies (O'Connell, Carter, De Lange, & Hancock, 2015).

This article will discover the transformation in accountant's roles which was caused by the Industry 4.0 advanced technologies. The changes in accountant's roles will bring new lights to the new skills and knowledge required by accountants to embrace the impact of Industry 4.0. The first part of this article will discuss the expansion of accounting field and the shift in accountant's roles and practices. Following it will be a discussion on the multidisciplinary and cross-functional skills that are deemed essential to accommodate the new roles of accountants in this new era. This discussion is important in providing insights to accounting education on the strategies needed to facilitate development of various new skills to the field. The findings from this study will help accounting educators to reformulate their strategies and action plan to produce highly qualified accountants for Industry 4.0 in the near future.

2. Methodology

In order to explore the change in accounting profession and the cross-functional skills and expertise needed for the new roles created under the realm of Industry 4.0, a comprehensive literature review was conducted. The literature review process started with the search of predefined keyword and phrases related to the topic of the study in the selected academic databases (Semantic Scholar, Google Scholar, ScienceDirect and ResearchGate). Criteria for inclusion were set to select only relevant studies to be included in the later analysis. The selected literature was then organized and categorized according to different sub-topic to facilitate a structured analysis.

3. Findings

3..1. Transformations in the Accounting Practices and Profession

3.1.1. Automation of Accounting Routine Tasks

An accountant whose traditional role as a score keeper that solely measure the financial performance of the business is no longer relevant in the current dynamic business environment and recent industrial era. The technological disruption caused by Industry 4.0 entails new roles and functions of an accountant. Various kind of technologies were adopted to facilitate digitization and automation of accounting task and works. Such conversion is possible as most accounting tasks and processes are repetitive in nature (Zheng, 2019), embedded with basic arithmetic processing (Wilson & Sangster, 1992) and are heavily bounded with standards and principles in accounting (Antoney &

Augusthy, 2019). This natures makes it easier to be automated with a pre-programed instructions via computer technologies (Akhter & Sultana, 2018).

Through automation, manually time consuming accounting jobs and processes will be shortened (Drum & Pulvermacher, 2016). The time reduction is estimated to be up to 65% to 75% of manual accounting work if it were replaced with automation according to Gotthardt, Koivulaakso, Paksoy, Saramo, Martikainen and Lehner (2020). Improvement in accounting working processes are highly anticipated with its promising agenda in cost reduction and productivity increment (Lee & Tajudeen, 2020). Intervention from accountants are minimised in routine tasks hence reducing chances for human error and mistakes (Ghasemi, Shafeiepour, Aslani, & Barvayeh, 2011).

As a result, an accountant is unburdened with mundane basic accounting operation. Instead, the time and efforts are redirected towards high valued tasks and strategic activities. According to Andreassen (2020), due to the widespread of automation in accounting field, accountants will adopt new roles that are more specialised and narrowed. Accountants will have more time to focus on analysing activities (Bhimani & Willcocks, 2014; Lupaşc, Lupaşc, & Zamfir, 2012). The data generated by the automated computerised system can be easily retrieved, and will be used in the data analysis activities which can later be used in making strategic decision for the organizations (Kotb, Abdel-Kader, Allam, Halabi, & Franklin, 2019). Certainly, an accountant's judgement is needed in making decisions since this activity requires human involvement and cannot be replaced by machine and robot (Kokina & Blanchette, 2019). The shift from operational roles towards critical analyst roles within the organization are recognizable and becoming highly regarded in the current digital age.

3.1.2. Real-Time Financial Reporting

Traditionally, accounting practices primarily focuses on reporting historical past performance which became the reason for the adoption of a periodical reporting. The delay in reporting was mainly contributed by the manual processes and time is needed for consolidating all the data (Chukwuani & Egiyi, 2020). According to Kipilimba (2024), this method of reporting undermine the efficiency and accuracy of financial and accounting data management. It is disconnected from real-time data. Without real-time data, both reporting and decision-making activities are susceptible to delays.

As we are moving towards digitalized world of accounting, real-time data integration has become central in managing financial information globally. The inclusion of real-time data had resulted a dynamic improvement in financial reporting aspects where a prompt, actual, relevant and efficient financial information can be gathered and disseminated easily. Not only that, the impact of real-time reporting is significant in decision making aspect as well. A positive impact can be seen where with real-time financial data updates, organizations are able to reflect efficiently towards market changes, maximize resource usage and allocation and make strategic decision for business that are supported by current data (Kipilimba, 2024).

The increase of financial data availability in real-time introduced a new concept of accounting that is known as continuous accounting (Smith, 2018). This new concept of accounting enables accountants to take a new strategic role in the organization. With a handful of updated financial information in hand, they are able to assist the organization in making informed decision through provision of insights into financial performance of

the business. In fact, accountants are valued as more than just a decision makers, they are more of a business partner in the context of continuous accounting (Winoto, Meiryani, & Reyhan, 2023).

3.1.3. Advanced Data Analytics

In traditional accounting, financial data analysis revolves around simple analysis like basic financial ratios and trends. The work of an accountant is heavily driven by data due to the technologies inclusion under the era of Industry 4.0. With the immense data availability and complexity in the technology disruptive business environment, data has become a competitive asset for the organization. The existence of real-time data requires advanced ways in processing it.

Besides, adoption of advanced data analytics tools is highly likely to be adopted in many large and private organizations (Haller & Siedschlag, 2011). The same view was found among accountants and auditors in the study of Chu and Yong (2021). There are high chances for data analytics adoption and usage in performing their tasks and providing actionable insights to their clients. A technology driven approach in analysing big and complex data become the preferred way in modernized accounting under the era of Industry 4.0.

In the accounting sphere, advanced data analytics allows accountants to discover patterns, trends and insights from the big data through a structured data analysis (Aziz, 2023). One of the notable advance data analytics technologies is Big Data Analytics (BDA). According to Kaya and Akbulut (2018), the main functions of BDA revolved around management of large and complex data sets that include collecting, organizing and analysing tasks. Predictive analysis can be easily conducted to identify trends and patterns in the business process. Any risks and anomalies that are not normally apparent to human can be easily extracted and filtered via this advanced technologies (Chu & Yong, 2021). It should be noted that, the higher involvement of data in the work processes, the higher governance roles hold by the accountant (Coyne, Coyne, & Walker, 2018). Accountant's involvement with large data posits the need to better oversight and accountability over it as to avoid any issues of data manipulation and misuse.

3.1.4. Integration with Other Business Functions

The adoption of Industry 4.0 key technologies in the business organization is said to optimize its entire value chain better than before (Bücker, Hermann, Pentek, & Otto, 2016; Deloitte, 2017). Interconnection between different functions across the value chain within and outside the organization are accelerated with the touch of Industry 4.0 technologies. The isolation in accounting works is a known reality for accounting in the past (Gustafsson & Jerkinger, 2021; Marriott & Marriott, 2003). However, this reality is about to change under the digitalized accounting world. With the use of AI-based digital technologies, an increase in networking both within and outside business organization are inevitable (Leitner-Hanetseder, Lehner, Eisl, & Forstenlechner, 2021; Marrone & Hazelton, 2019). Both Putri and Dharma (2016) and Daff and Jack (2018) concurred on the existence of wide intra-organizational network in accountants' work which requires them to team up with cross-functional teams and experts.

For instance, in monitoring expenditure, an accountant will have to work with procurement department (Pan, Seow, Goh, & Lee, 2019). Data sharing with

manufacturing department is also one of the cross-functional collaboration to help forecast and identify the cost and profit for each manufactured products and activities (Wadan, Teuteberg, Bensberg, & Buscher, 2019). Another example is during departmental performance evaluation. Accountants will have to communicate with engineers and machine experts in order to track the operational and financial performance, redefining performance metric and evaluation system of particular process in the operational line (Gonçalves, da Silva, & Ferreira, 2022). Interaction with human resource personnel is also needed to work on payroll and compensation for the employees as well as ensuring the hired employees are given sufficient exposure and training to work with AI-based technologies employed by the organization (Leitner-Hanetseder et al., 2021; Liu, 2022).

Cross-functional collaboration signify the upgrade in an accountant's roles as a key collaborator and communicator across the business units (Kastberg & Siverbo, 2016). Through integrated accounting system and big data, every unit in the business will have prompt access to updated information which allows them to coordinate their effort, align their strategies and ultimately increase transparency through elimination of redundancy in the work process (Liu, 2022). The accountant is increasingly involved in wide areas throughout the organizational structure. This involvement allows accountants to operate as business advisors providing consulting services in area related to financial and non-financial matters (Gustafsson & Jerkinger, 2021; Jackson, Michelson, & Munir, 2022). Contribution of accountants in the business governance and strategic direction are greatly emphasized through active participation in decision making processes (Coman, Ionescu, Duică, Coman, Uzlau, Stanescu, & State, 2022).

3.2. The Increasing Need for Multidisciplinary Skills

In order for accountants to stay pertinent and valued in the disruptive era of fourth industrial revolutions, it is crucial for them to be proactive in upskilling and broadening their knowledge in new areas and disciplines. Accountants in Industry 4.0 era will engage more in new and emerging disciplines within the industry. Their participation in newly discovered areas will help them deal with and address modern business challenges. Due to this transformation, accountants will have to equip themselves with new skills that were not previously necessary. The evolvement of the accounting landscape in the era of Industry 4.0 demands for skills improvement that goes beyond the accounting discipline. Possession of a diverse set of cross-functional and multidisciplinary skills is important to help enforce accountants' new roles under this digital era. Table 1 below presents the list of key multidisciplinary skills needed by accountants that were suggested by authors from prior literatures extracted (2017 to 2024). There are various skills that are non-accounting related and a detail explanation and discussion is presented afterwards.

Table 1: Multidisciplinary skills needed by accountants proposed by prior literatures.

Multidisciplinary skills	References
Innovation and creativity skills	Abu Asabeh, Alzboon, Alkhalaileh, Alshurafat and Al Amosh (2023); Heang, Ching, Mee and Huei (2019); Huyen and Anh (2023); Karsten, Steenekamp and Van der Merwe (2020)
Technology-related skills	Abdullah, Aziz, Wan, Razak, San, Saidi, Hussin and Tumiran (2023); Ahmad, Ismail, Yusuf, Ahmad and Ridzuan (2022); Alaqrabawi and Alshurafat (2021);

	Chu and Yong (2021); Chukwuani and Egiyi (2020); Coman et al. (2022); Cunha, Martins, Carvalho, and Carmo, (2022); Fišerová (2022); Gonçalves et al. (2022); Huyen and Anh (2023); Ismail, Ahmad and Ahmi (2020); Jackson et al. (2022); Junger da Silva, Tommasetti, Zaidan Gomes and da Silva Macedo (2021); Kipilimba (2024); Kwarteng and Mensah (2022); Pan et al. (2019); Perera and Undukoda (2020); Umezulike and Nweke (2023); Wadan et al. (2019)
Business Intelligence (BI) and Visualization	Chu and Yong (2021); Renaldo (2022); Severini, Pretaroli, Socci, Zotti and Infantino (2020)
Data Management and Analytics skills	Chu and Yong (2021); Chukwuani and Egiyi (2020); Coman et al. (2022); Fišerová (2022); Pan et al. (2019); Severini et al. (2020); Wadan et al. (2019); Alaqrabawi and Alshurafat (2021)
Strategic Management and Business Acumen	Chukwuani and Egiyi (2020); Coman et al. (2022); Daff and Jack (2018); Saxunova (2017); Smith (2018)
Legal and Regulatory Knowledge	Awang, Taib, Shuhidan, Rashid and Hasan (2021); Coman et al. (2022); Fišerová (2022); Kipilimba (2024)

3.2.1. Innovation and Creativity Skills

Innovation and creativity skills are not confined into a single discipline. They are recognized as key competencies that are fundamental in several fields and disciplines which includes accounting. In modern day accounting, these skills are an added value to accountants. Furthermore, the automation in accounting field is forcing accountants to be creative and innovative in finding the best solutions for the benefit of business growth and success. Accountants are required to foster a creative way of thinking in solving non-standards problems in business environment. Non-standard problems require non-standard and unique solutions. Instead of relying on methodical ways in solving this kind of problem, accountants are expected to think outside the box and finding creative solutions with the help of technological application (Carraro, Bruxel, Momo, & Pinheiro, 2024). In the current digital age, each possibility and challenges that have arisen require innovative initiatives that are compatible with new processes and technologies in the business environment (Yasinska, 2021).

Tenyukh, Pelekh and Khocha (2022) pointed out the usage of various key technologies in accounting processes like advanced data analytics and visualisation tools that will help provides accountant with deeper insights in drafting innovative strategies and offering creative solutions. Not only that, Mohamad, Abdurrahman and Keong (2020) also explains that the adoption of blockchain technology in accounting will further help accountants in leveraging the real-time data in making innovative and informed business decisions. A dynamic approach in solving problems and making strategic decisions are eased since accountants are offered with real-time data and advanced technologies. Reliance on conventional and methodical ways in solving complex problems in this digital era will hinder the business progress and competitiveness entirely. Hence, to adapt with changes in the current complex business world, accountants must be able to show a creative side and able to produce innovative solutions for the business.

3.2.2. Technology and Information Technology (IT) Management

Accountant engagement in technology and IT management are growing with the inclusion of technologies in accounting field. Among the key Industry 4.0 technologies that are majorly adopted in accounting field are Robotic Process Automation (RPA), Artificial Intelligence (AI), Blockchain and Big Data Analysis (Gnatiuk, Shkromyda, & Shkromyda, 2023). These technologies adoption is said to help improve the accounting process in terms of efficiency and accuracy. Besides, accountants are described by Byrne and Pierce (2007) and Rieg (2018) as digital technical specialists due to their new specialized roles in combining their expertise in systems and information with digital technologies. This explains that accountants should embrace the technologies and enhance their capabilities in using them. Without a doubt, accountants' involvement in technology and IT management are becoming more visible.

Accountants should acquire skills that will allow them to leverage and control the technologies without problem. As reported in the study of Güney (2014), technological skills are fundamental to support the digitization and automation of accounting. Absence of technology-related skills will hamper the business movement and development in the era of digital transformation (Gustafsson & Jerkinger, 2021; Tussibayeva, Sagindykova, & Amanova, 2023). Employers in the labour market believe that accountants who are well-equipped with technology related skills will help improve the organization's competitive advantage and at the same time facilitate effective communication within the organization and improve information trustworthiness (Jackson et al., 2022). Businesses especially small and medium sized enterprises (SME) will most likely face difficulty in adopting and integrating new advanced accounting software and technologies if their accountants do not know how to use it (Oduro, 2020; Thottoli, 2021).

Consequently, accountants have to hone skills in managing and using digital technologies more than before. Basic knowledge in using accounting software is not sufficient. Tussibayeva et al. (2023) proposed that accountants' knowledge and skills in using accounting software should extend beyond the basic application. Their knowledge should also include understanding of advance automated systems and proficiency in programming. Furthermore, protection and security over information produced by these technologies are now part of accountants' responsibility. Tiron-Tudor (2023) had mentioned cybersecurity awareness as part of accountants' digital competencies in the era of Industry 4.0. The rationale for this is accountants should know how to protect sensitive information from the cyberattack threats that might jeopardize the business organization performance. Accountants in the era Industry 4.0 are expected to be capable of solving issues arising from the digital technologies (Huyen & Anh, 2023). Accountants' proficiency in technology and their skills must be kept aligned with latest digital trends and continuously updated (Fogarty, 2018; Pincus, Stout, Sorensen, Stocks, & Lawson, 2017).

3.2.3. Business Intelligence (BI) and Visualization

In the current global era, businesses are operating in a data-rich environment. The business world is flooded with various types of data which includes historical, current, raw, structured and unstructured data. Data information is treated as business intangible assets and intellectual property that will drive business success (Smith, 2018). In order to help business carry out a structured and systematic analysis, Business Intelligence (BI) and Visualization are the tools and techniques created to help manage current and

past data and transforming it into useful information (Chandra, 2018). Adoption of BI and visualization in business operations is often associated with the aim to provide support in decision-making and performance improvement processes (Daneshvar Kakhki & Palvia, 2016).

To link it to accounting, BI is used by accountants to analyse financial data and evaluate business performances (Renaldo, 2022). The adoption of BI in the business setting has been proven to bring positive impact to the company's value (Renaldo & Putri, 2023). As the financial advisors of the companies, accountants are advised to embrace these technologies in bringing out their best functions. Chu and Yong (2021) explains that BI offers a great solution to accountants in handling large volumes of real-time data which consist of past and present data from all business units and lines. It helps summarize the data in aggregate manner which facilitates in conducting predictive analysis. From the information extracted, accountants will be able to find hidden trends and patterns while utilizing the available data presented and summarized in a systematic manner. Hence, accountants' literacy and skills in using BI tools is much needed as they are a growing interest from the business organizations in adopting this solution into practice. This is a new area that requires accountant intervention and proficiency.

3.2.4. Data Management and Analytics

In a data driven-world accelerated by Industry 4.0 technologies, accountants are swimming in the sea of data. Accountants are tangled up in other disciplines known as information management. Huyen and Anh (2023) concluded that there will be an increase in accountants' responsibility in data management activity. From data acquisition to analysis and interpretation, these functions are accelerated by digital transformations in the accounting field (Moll & Yigitbasioglu, 2019). There is high anticipation from employers towards accountants' ability in manipulating the big data (Brink & Stoel, 2019). Efficient utilization of data will improve accountant efficiency in producing accurate and meaningful reporting (Davern, Weisner, & Fraser, 2019), providing informed business decision (Kaya & Akbulut, 2018) and optimizing business processes (Sun, Sun, & Strang, 2018). The valuable insights derived from the comprehensive data analysis will significantly attract investors and improve capital market efficiency (Winoto et al., 2023).

Furthermore, accountant support in data analytics and management are crucial to help organizations thrive and adapt to the shift in the market and finding new opportunities (Aziz, 2023). Accountants who are skilled with data management will empower their advisory roles to a new level (Younis, 2020). Due to accountants' significant involvement in data management and analytics, accounting educations are highly encouraged to embed the topics related to data management and analysis in their curricular as to enhance future accountant competency in these important areas (Janvrin & Watson, 2017). Furthermore, specialization in data analytics in accounting field will become norm in the near future (Chu & Yong, 2021). Accountants will gain recognition as data experts if they possess skills and knowledge in data management and analytics.

3.2.5. Strategic Management and Business Acumen

Business administration and management is one of the common disciplines that have connection in accounting field. Under the new business model in the realm of Industry 4.0, accountant roles have broadened into strategic business functions. This has been

widely discussed in prior literature. Andreassen (2020), Burns and Baldvinsdottir (2005), Rouwelaar, Bots and De Loo (2018), Smith (2020), Järvenpää (2007), Wadan et al. (2019), and Goretzki and Messner (2019) had reported in their studies that the shift in accountant roles whereby business-oriented partner roles will emerge. These new roles elucidate heavier responsibilities among future accountants through involvement in more managerial tasks.

With such expectation, they are required to contribute more actively in business operations and strategic planning activities. For instance, accountants' strategic advises in financial aspects are important to help business in making valuable and impactful economic decision (Burns & Baldvinsdottir, 2005). From business operational aspects, with the command of advanced accounting system and applications in the business environment, the new role as business controller will come forth. According to Hyvonen, Järvinen and Pellinen (2008), accountants have control and ownership over profitability management that is central to business success. Hence, making them as one of the key controllers in the organization who participate in making operational and strategic business for the organization. Their collaboration with other business units also allows them to provide comprehensive views and insights that will bring benefit to the business (Karlsson, Hersinger, & Kurkkio, 2019). Their new roles are empowered mostly by the changes in accounting practices in the age of Industry 4.0. As a result, accountants should develop skills that will enhance their new roles in this new area.

3.2.6. Legal and Regulatory Knowledge

Compliance and governance are one of the important aspects in accounting. Knowledge on legal and regulatory framework is fundamental for accountants. Generally, accountants are trained to comply with the relevant standards in their works. From compliance to rigid accounting standards (Lohapan, 2021; Ong & Djajadikerta, 2019) towards provision and management of information that will be used in legal actions against the organization (Chen, Yan Huang, Chiu, & Pai, 2012). Accountants will work with many contractual agreements and ensuring compliance with relevant regulatory framework. Accountants' job are to ensure compliance and adherence towards relevant laws and regulations and specific financial standards never cease from their portfolio. As expressed by Lazanis (2020), compliance services offered by an accountant is far from over especially in the era of digitalization where new forms of regulations will emerge and any delinquency will attract public concern and attention.

Nevertheless, the existing legal framework in the business world are affected due the technological disruptions. The existing legal framework is deemed to be inadequate in coping with changing condition under the digitalized business environment and industry (Gromova, Koneva, & Titova, 2022). In accounting practices, reformation in legal and regulatory framework is crucial to help enhance its efficiency and effectiveness in the digital landscape. According to Hushko, Kulishov, Izmaylov and Subačienė (2019), significant changes in regulations especially in accounting standards are needed to facilitate standardization and comparability of digital accounting systems across multiple jurisdictions. Besides that, in tax related matters, digitalization in business operation and tax administration entails reformation in current legal systems and frameworks in taxation (Junquera-Varela, Lucas-Mas, Krsul, Calderon Yksic, & Arce Rodriguez, 2022). The rise of new business practices like e-commerce and cross-border transactions; data management practices and more streamlined and automated compliance processes

necessitate refinement and revision towards current existing tax laws to ensure these changes are being addressed adequately.

Undeniably, the increase in regulations in the age of digitalization under Industry 4.0 is one of the driving factors for change in the accounting profession (Islam, 2017; Raporu, 2016; Ștefana, Trașcă, Sahliana, Mataca, & Florinaa, 2022; Terblanche & De Clercq, 2021). Accountants have to be attentive and responsive towards the legal and regulatory changes (Stancheva-Todorova, 2019). Their attention and actions should be parallel with the new forms of regulations revolved around their work. Hence, accountant skills in ethical and legal actions are much needed to strengthen their capacity and credibility as compliance service provider under this new era (Awang et al., 2021).

4. Conclusion and Recommendation

Industry 4.0 is the new era where accountants are moving distant from numbers and figures. Accountant are migrating towards data capitalizer and strategic advisor in decision making activities. The recognition of the new roles is driven mostly by the digitalization and application of technologies in accounting work and processes. Taking into consideration the transformation and evolvement in accounting field, accountants must be open to change. Accountants must be willing to upgrade their knowledge and equip themselves with skills beyond technical accounting discipline. Accountants with a broad-based knowledge in several disciplines are much needed in today's context. From the above analysis, it can be concluded that future accountants in the age of Industry 4.0 will delve into new areas and fields that were previously unrelated and insignificant. Their exploration into new areas will allow them to capture new skills that are never needed before. With this in mind, a winning formula and outstanding strategies should be adopted by accounting education in nurturing desirable accountants for industry 4.0. The accounting curriculum should be designed with exposure to other disciplines and new relevant skills. Accounting education openness to other disciplines are highly encouraged through active collaboration and discussion. Production of versatile accountants with diverse expertise and equipped with cross-functional skills can be easily achieved. This will create new image for accountants in the era of Industry 4.0.

Ethics Approval and Consent to Participate

Not applicable

Acknowledgement

It takes immense pleasure to acknowledge the support and participation of many people who have helped to make this research a success.

Funding

This study received no funding.

Conflict of Interests

The authors reported no conflicts of interest for this work and declare that there is no potential conflict of interest with respect to the research, authorship, or publication of this article.

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