

Accountant in The Eye of Accounting Graduates: Fallacy vs Reality

Fatin Adilah Razali^{1*}, Syed Ismail Syed Mohamad², Rohaila binti Yusof³

¹Faculty of Management and Economics, Universiti Pendidikan Sultan Idris, 35900 Tanjung Malim, Perak, Malaysia.

Email: p202022001178@siswa.upsi.edu.my

²Faculty of Management and Economics, Universiti Pendidikan Sultan Idris, 35900 Tanjung Malim, Perak, Malaysia.

Email: syed.ismail@fpe.upsi.edu.my

³Faculty of Management and Economics, Universiti Pendidikan Sultan Idris, 35900 Tanjung Malim, Perak, Malaysia.

Email: rohaila@fpe.upsi.edu.my

ABSTRACT

CORRESPONDING

AUTHOR (*):

Fatin Adilah Razali

(p202022001178@siswa.upsi.edu.my)

KEYWORDS:

Stereotype

Ideal accounting graduates

Employer's expectation

Employability

CITATION:

Fatin Adilah Razali, Syed Ismail Syed Mohamad, & Rohaila Yusof. (2024).

Accountant in The Eye of Accounting Graduates: Fallacy vs Reality. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 9(8), e002917.

<https://doi.org/10.47405/mjssh.v9i8.2917>

Common stereotypes of the accounting profession as dull, monotonous and revolved around spreadsheets are somewhat misleading. Accountants are often mistaken as profit-seekers and are socially awkward. These misconceptions may create unfavourable impression towards the profession and at the same time diminish the interest to be one particularly, by accounting graduates. They might believe these as true as it has been culturally ingrained in the society for a long time. Accounting graduates expect to be accounting practitioners once they graduated. Hence, they might create their own preconceptions of the profession based on the years spent learning and obtaining knowledge in the accounting field. Employers may insist on hiring an ideal accounting graduates as to help the business grow and expand further. Hence, this study aims to review the literature on the perception of accounting graduates on their idea and opinion about the accounting profession. At the same time, analysis of literature that look deeper at the expectation set by employers before hiring accounting graduates is also included. This study is beneficial to help accounting graduates gain insights into the reality of the profession and understand the expectation being set to be an excellent accountant in the industry.

Contribution/Originality: This study document the typical fallacies in accounting profession and its image. This paper depicts the true reality of the profession and debunk the existing stereotype that had long exist in the accounting field. This paper also provides future graduates with better insights of the accounting career path.

1. Introduction

It is apparent that most accounting graduates are hired as accountants or hold accounting-related roles across various industries. Before setting their foot in the

industry, the graduates might have envisioned what it would be like to be holding those positions and roles. They have their own views and expectations about working in the field as an accountant even before they graduate from the university. The picture they have in mind might be dissimilar with the reality. To be an accounting practitioner in the industry, it is not as simple you imagine. It requires the right knowledge and skills, determination and attitude to be an excellent accountant who can adapt and survive in the dynamic industry. The nature of work and the workplace that accounting graduates are entering are evolving and there is an increase in complexity. In fact, major influences like technological advancement, globalisation of business and economy as well as financial crisis put pressure to various business sectors in the industry (Abdalla, 2023). The landscape of the labour market for accounting graduates is changing.

This article will discover the misconceptions on accounting profession as assumed by accounting graduates. The misconceptions or fallacies on the profession are understandable as their view is limited and they were given minimum exposure on a real working environment. Influence from surroundings and deeply ingrained stereotypes in the profession could lead to such perceptions. As a result, they may be unable to grasp the full idea of the profession. The first part of this article will discuss common misconceptions among accounting graduates and its reality on the true nature of being accountants in the industry. Following it will be a discussion on an ideal future accountant for the industry and current labour market. This will provide the view of the profession that reflects the new change in the industry and labour market. The findings from this study will help future accounting graduates to embrace their future with confidence and overcoming hurdles with valuable sources of information about their profession.

2. Methodology

In order to draw significant insights on the preconceptions of accounting graduates towards the accounting profession and the ideal accounting graduates for the profession, this study used a thorough literature review from past literature. In order to reflect the current situation in the labour market, the literatures ranging from the most recent decade (2015 to 2023) were used to draw on the concept of ideal accounting graduates demanded by the employers in the industry. The literature search begins with the topic focus and followed by finding relevant journal articles from electronic databases (ResearchGate, ScienceDirect, Google Scholar). Once the articles were retrieved, a detail analysis is conducted, and the literature were categorised according to the focus of the study and presented in the following section.

3. Fallacy vs Reality

3.1. Accountants Are Number Crunchers

The accountant's image as a 'bean counter' and 'scorekeeper' has been deeply rooted over the past decade and it continues until today (Dibabe, Wubie, & Wondmagegn, 2015). Common perceptions among graduates about the profession is that accountants are someone who are good with numbers and quantitatively proficient (McDowall & Jackling, 2010). The so called "number crunchers" requires huge involvement in financial management and performance reporting activities. Numbers, calculations and financial data analysis are among the common stereotype about this profession (Karlsson & Noela, 2022). Accountants are primarily involved with technical and

operational works such as financial recording and transactions processing that are highly rule-based (Oades, 2008) which leads to the negative perception on the accounting profession. The graduates highly believe that due to the nature of work accountants are dealing with, accountants are burdened with highly routine task, given excessive workload and often isolated (Jessica, Alimbudiono, & Pudjolaksono, 2019; Karlsson & Noela, 2022; McDowall & Jackling, 2010; Sayin, Öztürkçü Akçay, & Sevimli Örgün, 2022).

In reality, the fundamental duties of an accountant are not limited to financial related matters only. It is more than just numbers and figures. Accountants are also responsible for analytical roles, strategic planning activities, acting as business advisor through provision of financial insights to the organisations, while ensuring adherence towards standards and regulations (Karlsson & Noela, 2022). In fact, there are various studies conducted to show the change in accounting profession in recent years. International Federation of Accountants (2019) strongly supports the change in accounting profession and the nature of work in the accounting field as a response to significant change in trends in the business segment and industry. The new era of the fourth industrial revolution and technological involvement brought by it into the business segment and industry is forcing the profession to transform into 'knowledge' worker moving away from the traditional role of bookkeeper. Accountants are no longer tied to traditional "compliance" work and are expected to look beyond numbers (Howieson, 2003; Raporu, 2016). Accountants are expected to adopt a wider role involving analytical and advisory roles as well as engagement in client relations activity (Ismail, Ahmad, & Ahmi, 2020). Shifting to strategic partners of an organisation, accountants will become more involved in decision-making than before (Abd Razak, Noor, & Jusoh, 2021). The traditional and routine calculation and technical operation work will be handled by the updated technology. With technological intervention, accountants could focus more on strategic perspectives which brings more value to the organisation as a whole (Ştefana, Traşcăa, Sahliana, Mataca, & Florinaa, 2022). The accountants' role are now reengineered towards human resources and value creations (Mujiono, 2021; O'Connell, Carter, De Lange, & Hancock, 2015). With the growing expectation and dynamic change in the industry and business landscape, accountants have bigger roles, responsibilities and exposure to new areas to be discovered. Accountants are now ranked up from number crunchers to a trusted storyteller for the organisation (Mujiono, 2021). This will definitely increase the value of the accountants in the eye of the stakeholders.

3.2. Accountants Work in Isolation

There is a view among accounting graduates on the involvement and interaction of accountants in the works setting. Most graduates believe that accountants often work independently as they are mandated with recordkeeping and reporting tasks (Uyar, Güngörmüs, & Kuzey, 2011; Zakaria, Wan Fauzi, & Hasan, 2012). This nature of work of an accountant perceived by graduates do not require much human interaction. Accountants work are often isolated and requires them to work individually (Marriott & Marriott, 2003). As proven in the study by McDowall and Jackling (2010); Wessels and Steenkamp (2009), graduates' perception of solitude towards the profession are high. Some might have said that accountants are suitable for introvert individuals as they prefer to work alone rather than to be in a team (Chacko, 1991; Holt, Burke-Smalley, & Jones, 2017; Law & Yuen, 2012). They believe that by working alone with minimal interaction, communication and teamwork skills become less important. As proven in prior studies, due to this perception, accounting graduates tend to underestimate the importance of interaction and working as a team (de Lange, O'Connell, Tharapos,

Beatson, & Oosthuizen, 2022; Dolce, Emanuel, Cisi, & Ghislieri, 2020; Jackling & De Lange, 2009; Mladenovic, 2000; Phan, Yapa, & Nguyen, 2020; Sayin et al., 2022).

Accountants are not only tied with recordkeeping and reporting task, but they are also responsible to facilitate business in making strategic planning and decision. They are the facilitator and advisor for the business to provide insights in both financial and non-financial matters. Hence, the ability to be a team player is a requisite (Jones & Abraham, 2007). This profession is driven by people and human interaction is a must to facilitate the smooth transition of information within the organisation. According to Putri and Dharma (2016), working as an accountant provides opportunity for the graduates to interact, collaborate and team up with experts in various field. More and more employers in the industry prioritise graduates with the ability to work in a team, interact and communicate effectively (Bunney & Therry, 2010; Ebaid, 2021; Ghani, Rappa, & Gunardi, 2018; Ismail et al., 2020; Ngoo, Tiong, & Pok, 2015; Tan & Fawzi, 2017; Warwick & Howard, 2015). Besides, the complexity and dynamic transformation of accountant roles over time necessitates the need to frequently participate in business management activities. There will be a dispersion of roles from operational towards strategist, navigator and control roles (Rieg, 2018). Frequent interaction with people outside the business is part of the new role of accountants. They are expected to have high engagement with clients and build a strong relationship with them (Daff, 2021). Effective communication is needed to maintain good client relations. Accountants must have the capability to convey complex financial information to stakeholders and clients in a manner that they can easily accept and comprehend. Thus, it can be concluded that accountants do not work in isolation. Their involvements are wider not only within the business but outside the business as well.

3.3. Accountants Are Technically Adept

International Education Standard 2 (IES2) issued by the International Accounting Education Standards Board further explain the need of having technical competencies and skills before entering the accounting profession. The graduates must be technically competent in performing task in these areas; financial accounting and reporting, management accounting, finance and financial management, taxation, audit and assurance, governance, risk management and internal control, business law and regulations, business and organisational environment, economics, and business strategy and management. Technical adept under the context of this study are proficiency in accounting principles and practices (Rebele & Pierre, 2019). Traditionally, for an accountant to be technically adept, one should be able to identify and recognise potential errors in accounting, comprehend accounting equations, capable of handling bookkeeping and prepare financial related report (Altarawneh, 2016). As reported by Jackling and De Lange (2009), there is a need for accounting graduates to acquire technical skills in accounting that is the ability to master accounting related skills known as 'accounting problem analysis' and 'key accounting skills'. In reality, accounting technical operation takes up almost 75% of accountants work and attention (Bakulina, Kalinina, Luchkova, Pikushina, & Gracheva, 2020). Hence, it is essential for the graduates to be well-versed in accounting's technical operation matters.

The technical skills are crucial as it portrays the capability of the graduates to handle technical accounting operation as needed. It is part of the toolbox of an accountant. Due to this belief, accounting graduates opted to focus more on developing and acquiring technical skills. They strongly believe that by possessing these skills, it will elevate their

employability (Ho, 2015). According to Abdalla (2023), accounting technical skills are considered as crucial and is deemed as one of the requisites before entering the job market. Possessing these skills will help them fulfil the employers and industry demand and standards. In fact, these skills are teachable. Technical skills can be easily included in the syllabus and embedded in classroom activities (Heang, Ching, Mee, & Huei, 2019; Kwarteng & Mensah, 2022). Not only that these skills are teachable but it is also being overemphasised by the accounting education as reported by Tsiligiris and Bowyer (2021). As a result, graduates have more exposure on technical skills and less exposure on other important skills like soft skills. Eventually, graduates underestimate the need to have other skills to become a qualified accountant (Dolce et al., 2020; Kavanagh & Drennan, 2008).

Unfortunately, relying on technical skills alone is not sufficient. Technical skills do not provide assurance for success in both job searching and future career growth as an accountant (Ebaid, 2021; Tan & Fawzi, 2017). To be an accountant, the graduates will need more than just technical skills. Atanasovski and Trpeska (2018) in their study suggest that a wide range of soft and technical skills are needed to facilitate successful entrance to the accounting profession. In the candidate's selection process, graduates who possess both technical and soft skills will outshine the most. Soft skills itself is a distinguishing quality emphasised by employers (Jackling & De Lange, 2009). Soft skills function as tools or mechanisms to support, and enhance the existing technical skills (Low, Botes, De La Rue, & Allen, 2016). It is said that, technical skills are compatible for traditional accountants while with the additional soft skills, it will help accountant to perform beyond the traditional role (Jones & Abraham, 2007). Particularly, under the current digital era, future accountants are expected to act beyond the traditional accounting service delivery (de Lange et al., 2022). Employers continuously seek for graduates who can act and perform beyond the traditional role of an accountant (Ngoo et al., 2015). They are no longer a mere bookkeeper or a backroom number cruncher (Tan & Fawzi, 2017). Future accountants are expected to expand from performing quantitative task behind the door towards client-engaging role making strategic business decision. For this reason, overemphasis and sole reliance on technical skills will not accommodate the dynamic changes in the industry and job market.

3.4. Accounting Professions Are for High Academic Achievers

Accounting graduates who spend their years in the university tend to focus more on academic success. They highly believe that excellent academic performance is the main factor for securing a job as an accountant (Benligiray & Ahmet, 2017). Graduates believe that employers are hiring graduates with outstanding academic performance (Ebaid, 2021). As a result, more attention was given in attaining accounting knowledge as much as possible before graduating. They still believe that accountants are only responsible in handling financial related matters of the organisation. As proven in the study conducted by Aryanti and Adhariani (2020), accounting graduates are focused on gaining full understanding on highly relevant accounting courses like financial accounting, financial reporting and financial statement analysis. According to them, by mastering these courses, they will have high chances to be employed. Supported by Nugra, Maldonado and Cuesta (2018), accounting graduates career path is significantly related to the their performance in academic they major in the university. Graduates who major in accounting and perform outstandingly, is highly likely to seek for a job in accounting related field as they are confident with their accounting knowledge in performing accounting related work. Besides that, accounting graduates truly believe that to be an

accountant, high academic achievement, high concentration and fluent in accounting knowledge are the utmost priority (Jessica et al., 2019). In fact, past studies have successfully proven the impact and influence of academic achievement towards graduates' chances to be employed (Bartolj & Polanec, 2021; Manjunath, 2021; Pinto & Ramalheira, 2017; Tentama & Abdillah, 2019).

Undeniably, employers do emphasis on good academic performance before offering job positions to selected candidates (Cheng, Kang, Roebuck, & Simnett, 2009). Not only that, the academic grades should be really high to give good impression to recruiters (Manjunath, 2021). However, the influence of academic performance during the recruitment process is minimal. Academic performance is only crucial in the early stage of the recruitment process; the screening for candidates for initial interview process (Ming Chia, 2005). This is to ensure the selected candidates are well-versed in accounting knowledge and able to comprehend the financial related matters of the organisation. Sole reliance on academic performance and reputation in hiring the candidates is not sufficient and reliable (Abdullah, Alsagoff, Ramlan, & Sabran, 2014; Castillo, 2014; Norhayati, Khadijah, Nor, Salwa, & Intan, 2020) as it does not necessarily guarantee employment by looking at academic achievement only. In reality, academic performance and reputation is not the main factor for employment (Finch, Hamilton, Baldwin, & Zehner, 2013; Velasco, 2012) but rather holds the least influence upon hiring decision. The fact that having good grades increases the chances for employment is valid and may influence the hiring decision but will not guarantee for job employment as many other factors will be taken into consideration.

4. The Ideal Candidates for the Accounting Profession

The preconceptions of the accounting profession above represents the stereotypes that had long exist in the accounting field. The image of an accountant is affected by this idea and understanding. Graduates might believe this image to be true until they become one. Hence, it is important to educate them with facts and correct interpretations of this profession. Employers' opinion matters too since they are the one who will work with accountants. From the recruiting process until full participation in client related activities and strategic decision making, employers are fully aware of what is needed to be an accountant who is reliable and a useful contributor for the organisation. For that reason, this section will discuss the findings from past literatures on the specific requirement emphasised by the employer for accounting graduates to be an excellent accountant in the field. As can be seen in Table 1, these are among the expectations and requirements demanded by employers towards accounting graduates over the past decade. There are various criteria set by employers as these was made based on their observation and experience working with accountants over the years. In addition, the changes of business environment were taken into consideration as to accommodate the current situation.

Table 1: Employers' demand and expectation towards accounting graduates

Author	Sample	Finding
Ngoo et al. (2015)	56 employers from various firms (Accounting firms, Audit firms, Taxation firms) and other	Employers are looking for accounting candidates who can lead and be independent. At the same time, graduates must be someone who is articulate, ethical and virtuous, flexible, socially responsible and an independent learner. The reason to have these criteria is that the accountants are prone to be

Ali, Kamarudin, Suriani, Saad and Afandi (2016)	organisations who employ accounting degree holders. 95 employers located in Kuala Lumpur, Melaka, Kedah and Penang.	involved in management activities. These criteria will become an added value to the graduates once they hold the position as an accountant. In this study, in terms of knowledge that were highly valued by the employers are taxation. Employers view that accountants should be capable to assist the organisation in handling tax related matters. Besides, they prefer someone who is a fast learner, good writer, and wise in making decision to be an accountant of their organisation.
Low et al. (2016)	Key accounting employers in Hamilton and Auckland.	Non-technical skills like interpersonal abilities, communication, teamwork, problem-solving, and emotional intelligence are highly valued by the employers. According to the employers in this study, the acquisition of technical skills among accounting graduates will further help the candidates to make a successful entrance to the profession and acculturate with the organisational environment and its culture. Nevertheless, a sound understanding and knowledge of fundamental technical accounting skills are still important as it is extremely useful for accountants in performing their duty.
Lim, Cham, Lee and Ramalingam (2019)	50 employers in the accounting sector located in Malaysia.	In order to success in securing employment in accounting-related entry-level positions, employers in this study prioritise the need to have strong knowledge and understanding in accounting and auditing standards and reporting, as well as understanding in professional conduct as an accountant. Other than that, employers highly prefer graduates who possess generic skills consisting of team work skill, stress management skill, and problem-solving skill. Finally, employers are also looking for candidates with excellent personal qualities. The candidates must be someone who is responsible, trustworthy and reliable.
Ghani and Muhammad (2019)	Interviews with two accounting practitioners.	Emphasis on technologies used among accounting graduates are the main finding from this study. The accounting graduates will face significant changes in the fundamental task in accounting especially activities related to financial information. Hence, accounting graduates must be able to familiarise themselves with the current and new technologies as to help them survive and succeed in this career.
Aryanti and Adhariani (2020)	Employers in Jakarta, Indonesia.	Employers in this study collectively agreed that they prefer graduates who possess high work ethic, able to work in a team and wise in managing time. This is due to accountants working in an environment that requires human interactions and engagement and at the same time are able to meet the deadline for each task assigned. They also expect that accountants have basic literacy in financial and computer areas. These are the prerequisite to be in the profession.
Ismail et al. (2020)	20 employers from audit firms located in Klang Valley, Malaysia.	The employers in the study were more concerned on adaptability of the graduates under the recent industrial revolution. To be an accountant under the new era of revolutions, knowledge and skills in

Surianti (2020)	Employers from manufacturing companies, plantations and banks.	information technology are of utmost importance. As technology changes, they are expected to be informed and adapt with the changes. Nevertheless, at the point of entry to the audit firm, the candidates should possess interpersonal skills which includes communication, teamwork and personal skills. According to them, these skills will facilitate the new hire to adapt and adjust with the working environment fast without problem.
Al-Hattami (2021)	Practitioners from various organisations and industries in Yemen.	From the employers' view, the current situations in the business environment has caused a shift in the roles and skills of an accountant. The candidates should be equipped with knowledge of future technologies that deals with the new industrial revolution. Accounting graduates must be exposed with the technologies like block chain, big data, artificial intelligence and cloud computing and learn it from the university.
Abdalla (2023)	150 employers from public sector institutions in Libya.	The current job market in Yemen demands for candidates who are proficient in information technologies. It includes accounting profession as well. Due to that situation, employers are focusing on hiring accounting graduates who are IT-literate both in theory and practical. The profession revolves around technologies and they must be familiarised with the software and applications used for accounting tasks.
		In Libya's job market, most employers agrees on the importance of having strong basic skills in accounting technical area (financial accounting, internal auditing, reporting, analytical, compliance, taxation and budgeting) computerised accounting and other general skills such as communication, teamwork, and decision-making for accounting graduates in Libya. These skills are essential to guarantee the success of the accounting graduates in the Libyan job market.

With the current changes in the business sectors and industries, the view and opinion from the employers are crucial to help graduates in the future. The requirement set by the employers will change over time to align with current situations and conditions. The recent change is due to the adoption of technologies brought by the new industrial revolutions. Technological involvement is inevitable. Most of the studies mentioned above prioritise the need to be attentive and vigilant with the changes in the job market, business environment and the profession itself. An analysis conducted by Department of Statistics of Malaysia (DOSM) suggested the skills and knowledge essential for future accountant under the technology and digital era. The future and current accountant and accounting graduates will have to expand their view to wider perspectives which includes awareness and knowledge on digital transformation, environmental, social, and governance (ESG), climate change, business sustainability, agility, adaptability, and proficiency in emerging technologies such as artificial intelligence, data science, cybersecurity, cloud computing, and blockchain (Abdullah, Aziz, Wan, Razak, San, Saidi, Hussin, & Tumiran, 2023). Accountants should be fluent in other disciplines and are able to work across disciplines (Kavanagh & Drennan, 2008). Information and knowledge

related to digital technologies, globalisation and evolving regulation must be deeply ingrained within the students as these are what were expected from them in the future once they hold the position as an accountant (Ştefana et al., 2022). With this, accountants will effectively carry their duty as the right hand of the organisation, becoming an integrated problem solver and internal consultant with the interdisciplinary knowledge they have.

An ideal accounting graduates for the profession does not necessarily requires high intelligence and academically successful candidates. A well-rounded candidate that are proficient in professional knowledge, equipped with both technical and soft skills and well-versed in technologies are necessary to guarantee graduates' success in the accounting profession (Bressler & Pence, 2019; Kruskopf, Lobbas, Meinander, Söderling, Martikainen, & Lehner, 2020; Li, 2020). Employers are not willing to suffer from the risk of choosing the wrong candidates who fail to meet their expectation and incapable of bringing value to the organisation. Choosing the right, qualified and suitable candidates to be part of the organisation will definitely bring benefit to the organisation in terms of growth, sustainability and at the same time increasing the value of the organisation (Maali & Al-Attar, 2020). This is an investment employer willing to spend on (O'Connell et al., 2015). The preconceptions of the profession created by accounting graduates can be rectified through correct information and resources. It is very important to educate accounting graduates and provide them with sufficient exposure as to help them understand what are expected from them and what are waiting for them in the labour market once they graduate. They should be able to imagine and work towards achieving the ideal image of an accountant before entering the profession.

5. A Call for Multistakeholder Collaboration

Most importantly, accounting graduates produced by the higher educational institutions (HEI) should be compatible with growing demands from employers in the labour market. Especially in the era of fourth industrial revolution, a new concept of employment will emerge. The labour markets under fourth industrial revolution will require qualified human resources with new characteristics that are different from previous generations produced by HEI (Omar & Hasbolah, 2018). Undeniably, the hiring requirement will change as the landscape of labour market changes (Tanius & Susah, 2013). A report produced by Association of Chartered Certified Accountants in 2024 indicates the need to expand and optimise the range of knowledge and skills for future accountants. Accountants in the fourth industrial era are portrayed as someone who are proficient in interdisciplinary knowledge and have diversified new skills (Stancheva-Todorova, 2019). Without these, their survival and relevancy in the labour market will be at threat.

In the job market environment for accounting graduates, the responsible stakeholders are none other than HEI, employers, academic regulators and the accounting graduates themselves. Various suggestions were proposed and initiated by scholars who investigate employability of accounting graduates in the job market. The recommendation and suggestion proposed involved participation by various stakeholders and are summarised in Table 2. The suggestions were based on the idea to bridge the gap that exists between the supply and demand for accounting graduates in the job market. Often, the duties are incumbent upon HEI and accounting education to produce qualified candidates for the profession (Engel, 2019; Lawson et al., 2014). The educational arena is the best platform to provide the base training for future accounting

practitioners to embrace the digital economy (Abd Razak et al., 2021). Clearly, with provision of quality education that addresses important issues in the accounting profession will help produce competent graduates that are compatible with the contemporary accounting industry.

Strong support from other stakeholders are also important to help HEI and accounting education to accommodate the supply of qualified accountant. Stancheva-Todorova (2019) for instance, strongly supports the joint effort between HEI with professional accountancy organisations. Professional accountancy organisations should be the resources and information provider for accounting education especially on data related to market sentiment, learning resources, provision of workshops and many more. Not only that, through collaboration, the support will also help address the skill deficiency problem among the graduates. This is a shared responsibility between HEI and employers in the industry (Chaffer & Webb, 2017; O'Connell et al., 2015). Employers should work together with HEI to align the curriculum design with the requirement of employers in the labour market. Constant collaboration and communication between these two parties are needed to gather and seek useful feedback. This engagement will help accounting education curriculum to reflect the current industry's needs and demands (Chaplin, 2017). This is a continuous process and requires constant involvement and efforts from all relevant parties.

Table 2: Suggestions to improve the employability of accounting graduates

Authors	Suggestion	
Mohd Hanefah and Ismail (2003)	Academic institutions	Inclusion of professional skills and technological skills in the accounting curriculum.
Luo, Meng and Cai (2018)	Employers	Employers are advised to provide a series of training that involves the introduction and use of new applications and system in the business. A detailed explanation should be given on information security as well.
	Government	The government or authority should create a supportive environmental condition for the accounting field that optimise the development of artificial intelligence. A comprehensive policies and regulations should be in place to encourage the adoption and application of AI in the industry especially accounting.
	Academic institution	It is advisable for the academic institutions and accounting education to improve the quality of instructors and facilitators. The instructors must be someone who are informed and up-to-date with current changes and trends in the technologies which might include regulations and standards in accounting.
Stancheva-Todorova (2019)	Academic institutions	Suggestion for undergraduate and postgraduate programmes in accounting to emphasise on technological content and encourage to expand beyond the discipline via training. This will help produce graduates with interdisciplinary expertise.
Ong and Djajadikerta (2019)	Academic institution	There should be an adoption of technologies in accounting education as to stay current with the trend and changes in the profession. Teaching and learning should be exposed with the new objectives

Phan et al. (2020)	Employers	and directions that stresses on functions and purpose of technologies in accounting. Hiring fresh graduates who are avid learners to gain as much knowledge and skills as possible through training before stepping into their roles as an accountant.
	Academic institutions	To reinvent the accounting curriculum that reflects the current market demand and redesigning delivery methods to facilitate skill building and knowledge transfer.
	Academic regulators	Creating new strategies to encourage or establish effective learning environment for students.
Surianti (2020)	Academic institutions	Accounting education must reinvent their curriculum by introducing Accounting 4.0 education that are characterised by Industry 4.0 technologies. The new curriculum will help produce Accountant 4.0 that are compatible with the fourth industrial revolution.
Kruskopf et al. (2020)	Academic institution	Accounting education and courses offered by the universities should focus on the inclusion of IT related topic. This is to help graduates be aware and familiarise themselves with emerging technologies that is part of the accounting field. This is to give them a glimpse of the technologies and systems used in the field and provide them with the first-hand knowledge and a sense of familiarity once they enter the field. They will know what to expect from them and be ready to face future challenges.
	Employer	Employers are encouraged to continuously support human capital development through provision of in-house training within the organisation. This effort is valuable to facilitate growth for both employee and the organisation to face the digital future.
Supriadi, Rahardjo and Suprihandari (2020)	Academic institutions and government	A change in curriculum is needed to reflect the changes in digital connectivity that took place in the industry. Among issues or content to be included in the curriculum are application and management of big data, coding system and real-time accounting.

6. Conclusion and Recommendation

Accounting graduates as the rightful candidates for the accounting profession, must be able to recognise and understand the requirement to be in the profession. Reliance on common stereotype and hearsay is unwise as this will further dampen their motivation and interest in choosing to be an accountant as their career. Now and then, updated information about the profession and its current situation must be conveyed and delivered to students. With this, graduates will know what to expect and geared up to fulfil the expectation. Support from academic institutions are crucial. Various efforts and initiatives should be in place to ensure their graduates are up to the quality demanded by employers and the industry. Not only that, constant involvement and collaboration with employers will further upgrade the quality of education provided to the graduates through sharing of feedback and expertise. A multitude of research was undertaken previously to identify the requirement and demand from employers. Future research may look deeper into collaboration between accounting education and employers in the

industry. This may become a blueprint or model for other fields in the educational sphere in the future.

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.

References

- Abd Razak, S. N. A., Noor, W. N. B. W. M., & Jusoh, Y. H. M. (2021). Embracing Digital Economy: Drivers, Barriers and Factors Affecting Digital Transformation of Accounting Professionals. *International Journal of Advanced Research in Economics and Finance*, 3(3), 63-71.
- Abdalla, R. (2023). The important accounting graduates skills for the Libyan job market: perceptions of academics and professionals. *Journal of Management and Business Education*, 6(3), 305-329.
- Abdullah, A., Aziz, A., Wan, N. Z. N., Razak, S., San, S., Saidi, N., Hussin, S. N. A., & Tumiran, S. D. (2023). The Employability Skills for Accounting Graduates in Digital Era. *Education*, 5(17), 220-227.
- Abdullah, Z., Alsagoff, S. A., Ramlan, M. F., & Sabran, M. S. (2014). Measuring student performance, student satisfaction and its impact on graduate employability. *International Journal of Academic Research in Business and Social Sciences*, 4(4), 108-124.
- Al-Hattami, H. M. (2021). University Accounting Curriculum, IT, and Job Market Demands: Evidence From Yemen. *Sage Open*, 11(2), 21582440211007111. <https://doi.org/10.1177/21582440211007111>
- Ali, I. M., Kamarudin, K., Suriani, N. A., Saad, N. Z., & Afandi, Z. A. M. (2016). Perception of employers and educators in accounting education. *Procedia Economics and Finance*, 35, 54-63.
- Altarawneh, G. (2016). An empirical evaluation of accounting graduates' employability skills from Jordanian employers' perspective. *International Business Research*, 9(1), 55-65.
- Aryanti, C., & Adhariani, D. (2020). Students' perceptions and expectation gap on the skills and knowledge of accounting graduates. *The Journal of Asian Finance, Economics and Business*, 7(9), 649-657.
- Atanasovski, A., & Trpeska, M. (2018). Accounting students' and employers' perceptions on employability skills in the SEE country. *European Financial and Accounting Journal*, 3, 55-71.

- Bakulina, G., Kalinina, G., Luchkova, I., Pikushina, M., & Gracheva, A. (2020). Transformation of the accountancy profession during digitalization of agriculture. *BIO Web Conf.*, 17, 00188. <https://doi.org/10.1051/bioconf/20201700188>
- Bartolj, T., & Polanec, S. (2021). An empirical analysis of the effects of student work and academic performance on the probability of employment. *Economic and Business Review*, 23(1), 26-39.
- Benligiray, S., & Ahmet, O. (2017). Analysis of performance factors for accounting and finance related business courses in a distance education environment. *Turkish Online Journal of Distance Education*, 18(3), 16-46.
- Bressler, L., & Pence, D. (2019). Skills needed by new accounting graduates in a rapidly changing technological environment. *Journal of Organizational Psychology*, 19(2).
- Bunney, D., & Therry, L. (2010). Employability skills in the Master of Professional Accounting: One school's journey. *eCULTURE*, 3(1), 32-46.
- Castillo, R. C. (2014). Employability skills of graduating business and accounting students of Batangas State University. *International Journal of Sciences: Basic and Applied Research*, 13(1), 303-315.
- Chacko, H. E. (1991). Can You Pick Out the Accountant? Students' Interests and Career Choices. *Journal of Education for Business*, 66(3), 151-154. <https://doi.org/10.1080/08832323.1991.10117460>
- Chaffer, C., & Webb, J. (2017). An evaluation of competency development in accounting trainees. *Accounting Education*, 26(5-6), 431-458.
- Chaplin, S. (2017). Accounting education and the prerequisite skills of accounting graduates: are accounting firms' moving the boundaries? *Australian Accounting Review*, 27(1), 61-70.
- Cheng, M., Kang, H., Roebuck, P., & Simnett, R. (2009). The employment landscape for accounting graduates and work experience relevance. *Australian Accounting Review*, 19(4), 342-351.
- Daff, L. (2021). Employers' perspectives of accounting graduates and their world of work: software use and ICT competencies. *Accounting Education*, 30(5), 495-524. <https://doi.org/10.1080/09639284.2021.1935282>
- de Lange, P., O'Connell, B. T., Tharapos, M., Beatson, N., & Oosthuizen, H. (2022). Accounting graduate employability: employer perspectives on skills and attributes of international graduates. *Accounting Education*, 1-29. <https://doi.org/10.1080/09639284.2022.2059383>
- Dibabe, T. M., Wubie, A. W., & Wondmagegn, G. A. (2015). Factors that affect students' career choice in accounting: A case of Bahir Dar University students. *Research Journal of Finance and Accounting*, 6(5), 146-153.
- Dolce, V., Emanuel, F., Cisi, M., & Ghislieri, C. (2020). The soft skills of accounting graduates: Perceptions versus expectations. *Accounting Education*, 29(1), 57-76.
- Ebaid, I. E.-S. (2021). Employers' Perceptions of Generic Employability Skills of Accounting Graduates: Evidence From Saudi Arabia. *Journal of Management and Business Education*, 4(2), 136-149. <https://doi.org/10.35564/jmbe.2021.0008>
- Engel, C. J. (2019). The acceptability of online degrees in accounting: A literature review. *Global Journal of Business Pedagogy*, 3(1), 10-27.
- Finch, D. J., Hamilton, L. K., Baldwin, R., & Zehner, M. (2013). An exploratory study of factors affecting undergraduate employability. *Education + Training*, 55(7), 681-704. <https://doi.org/10.1108/ET-07-2012-0077>
- Ghani, E. K., & Muhammad, K. (2019). Industry 4.0: Employers' Expectations of Accounting Graduates and Its Implications on Teaching and Learning Practices. *International Journal of Education and Practice*, 7(1), 19-29.

- Ghani, E. K., Rappa, R., & Gunardi, A. (2018). Employers' Perceived Accounting Graduates' Soft Skills. *Academy of Accounting and Financial Studies Journal*, 22(5), 1-11.
- Heang, L. T., Ching, L. C., Mee, L. Y., & Huei, C. T. (2019). University education and employment challenges: An evaluation of fresh accounting graduates in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 9(9), 1061-1076.
- Ho, H.-F. (2015). Matching University Graduates' Competences with Employers' Needs in Taiwan. *International Education Studies*, 8(4), 122-133.
- Holt, T., Burke-Smalley, L. A., & Jones, C. (2017). An empirical investigation of student career interests in auditing using the big five model of personality. In *Advances in accounting education: Teaching and curriculum innovations* (pp. 1-31). Emerald Publishing Limited.
- Howieson, B. (2003). Accounting practice in the new millennium: is accounting education ready to meet the challenge? *The British Accounting Review*, 35(2), 69-103.
- International Federation of Accountants. (2019). *Future-Fit Accountants: Roles for the Next Decade*. IFAC.
- Ismail, Z., Ahmad, A. S., & Ahmi, A. (2020). Perceived employability skills of accounting graduates: The insights from employers. *Elementary Education Online*, 19(4), 36-41.
- Jackling, B., & De Lange, P. (2009). Do Accounting Graduates' Skills Meet The Expectations of Employers? A Matter of Convergence or Divergence. *Accounting Education*, 18(4-5), 369-385. <https://doi.org/10.1080/09639280902719341>
- Jessica, A., Alimbudiono, R. S., & Pudjolaksono, E. (2019). The Role of Accounting Knowledge in Defining The Career of A Public Accountant.
- Jones, G., & Abraham, A. (2007). Education implications of the changing role of accountants: Perceptions of practitioners, academics and students.
- Karlsson, P., & Noela, M. (2022). Beliefs influencing students' career choices in Sweden and reasons for not choosing the accounting profession. *Journal of Accounting Education*, 58, 100756.
- Kavanagh, M. H., & Drennan, L. (2008). What skills and attributes does an accounting graduate need? Evidence from student perceptions and employer expectations. *Accounting & Finance*, 48(2), 279-300. <https://doi.org/https://doi.org/10.1111/j.1467-629X.2007.00245.x>
- Kruskopf, S., Lobbas, C., Meinander, H., Söderling, K., Martikainen, M., & Lehner, O. (2020). Digital accounting and the human factor: theory and practice. *ACRN Journal of Finance and Risk Perspectives*, 9(1), 78-89.
- Kwarteng, J. T., & Mensah, E. K. (2022). Employability of accounting graduates: analysis of skills sets. *Heliyon*, 8(7).
- Law, P., & Yuen, D. (2012). A multilevel study of students' motivations of studying accounting: Implications for employers. *Education+ Training*, 54(1), 50-64.
- Lawson, R. A., Blocher, E. J., Brewer, P. C., Cokins, G., Sorensen, J. E., Stout, D. E., Sundem, G. L., Wolcott, S. K., & Wouters, M. J. F. (2014). Focusing Accounting Curricula on Students' Long-Run Careers: Recommendations for an Integrated Competency-Based Framework for Accounting Education. *Issues in Accounting Education*, 29(2), 295-317. <https://doi.org/10.2308/iace-50673>
- Li, L. (2020). Education supply chain in the era of Industry 4.0. *Systems Research and Behavioral Science*, 37(4), 579-592. <https://doi.org/https://doi.org/10.1002/sres.2702>

- Lim, Y. M., Cham, T. H., Lee, T. H., & Ramalingam, T. (2019). Employer-employee perceptual differences in job competency: A study of generic skills, knowledge required, and personal qualities for accounting-related entry-level job positions. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 9(4), 73-83.
- Low, M., Botes, V., De La Rue, D., & Allen, J. (2016). Accounting employers' expectations-the ideal accounting graduates. *e-Journal of Business Education and Scholarship Teaching*, 10(1), 36-58.
- Luo, J., Meng, Q., & Cai, Y. (2018). Analysis of the impact of artificial intelligence application on the development of accounting industry. *Open Journal of Business and Management*, 6(4), 850-856.
- Maali, B., & Al-Attar, A. M. (2020). Accounting curricula in universities and market needs: The Jordanian case. *Sage Open*, 10(1), 2158244019899463.
- Manjunath, D. (2021). The Impact of Academic Performance on Employability–A Study. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 18(10), 508-517.
- Marriott, P., & Marriott, N. (2003). Are we turning them on? A longitudinal study of undergraduate accounting students' attitudes towards accounting as a profession. *Accounting Education*, 12(2), 113-133.
- McDowall, T., & Jackling, B. (2010). Attitudes towards the accounting profession: an Australian perspective. *Asian Review of Accounting*, 18(1), 30-49.
- Ming Chia, Y. (2005). Job offers of multi-national accounting firms: the effects of emotional intelligence, extra-curricular activities, and academic performance. *Accounting Education*, 14(1), 75-93. <https://doi.org/10.1080/0693928042000229707>
- Mladenovic, R. (2000). An investigation into ways of challenging introductory accounting students' negative perceptions of accounting. *Accounting Education*, 9(2), 135-155.
- Mohd Hanefah, M., & Ismail, S. (2003). The skills necessary for work place: Accounting graduates' perceptions. *Journal of Financial Reporting and Accounting*, 1(1), 67-79.
- Mujiono, M. N. (2021). The shifting role of accountants in the era of digital disruption. *International Journal of Multidisciplinary: Applied Business and Education Research*, 2(11), 1259-1274.
- Ngoo, Y. T., Tiong, K. M., & Pok, W. F. (2015). Bridging the gap of perceived skills between employers and accounting graduates in Malaysia. *American Journal of Economics*, 5(2), 98-104.
- Norhayati, A., Khadijah, I., Nor, A., Salwa, Y., & Intan, B. (2020). Graduate employability among low academic achievers. *The New Educational Review*, 62(4), 46-56.
- Nugra, I. B., Maldonado, D., & Cuesta, F. (2018). Perception and Causality of Academic Performance and Professional Exercise of Graduates in Accounting and Auditing. *Open Science Journal*, 3(4).
- O'Connell, B., Carter, A. J., De Lange, P., & Hancock, P. (2015). Shaping the future of accounting in business education in Australia. *Melbourne, Australia; CPA*, 1-121.
- Oades, C. (2008). Information management challenges for the professional accountant in business. *Business information review*, 25(3), 160-164.
- Omar, S. A., & Hasbolah, F. (2018). Awareness and perception of accounting students towards industrial revolution 4.0. *5th International Conference on Accounting Studies (ICAS 2018), Penang, Malaysia*.
- Ong, T., & Djajadikerta, H. G. (2019). Adoption of emerging technology to incorporate business research skills in teaching accounting theory. *Journal of Education for Business*, 94(7), 480-489.

- Phan, D., Yapa, P., & Nguyen, H. T. (2020). Accounting graduate readiness for work: a case study of South East Asia. *Education + Training*, 63(3), 392-416. <https://doi.org/10.1108/ET-02-2019-0036>
- Pinto, L. H., & Ramalheira, D. C. (2017). Perceived employability of business graduates: The effect of academic performance and extracurricular activities. *Journal of Vocational Behavior*, 99, 165-178.
- Putri, E., & Dharma, A. B. (2016). Faktor-faktor yang mempengaruhi pemilihan karir mahasiswa akuntansi sebagai akuntan publik (Studi pada mahasiswa akuntansi di perguruan tinggi Surakarta). *Seminar Nasional dan The 3rd Call for Syariah Paper Seminar Nasional 3*, 634 - 640.
- Raporu, A. (2016). Professional accountants–the future: Drivers of change and future skills. (Çevrimiçi <https://www.accaglobal.com/content/dam/members-beta/docs/ea-patf-drivers-of-change-and-future-skills.pdf>, Issue. ACCA.
- Rebele, J. E., & Pierre, E. K. S. (2019). A commentary on learning objectives for accounting education programs: The importance of soft skills and technical knowledge. *Journal of Accounting Education*, 48, 71-79.
- Rieg, R. (2018). Tasks, interaction and role perception of management accountants: evidence from Germany. *Journal of Management Control*, 29(2), 183-220.
- Sayın, H., Öztürkçü Akçay, A., & Sevimli Örgün, G. (2022). An Examination of The Factors Affecting Intention to Not Prefer an Accounting Profession from The Perspective of Theory of Reasoned Action: A Research on University Students. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi*, 19, 989-1009. <https://doi.org/10.33437/ksusbd.1127821>
- Stancheva-Todorova, E. (2019). are accounting educators ready to embrace the challenges of industry 4.0. *Industry 4.0*, 4(6), 309-312.
- Ştefana, G. M., Traşcăa, D. L., Sahliana, D. N., Mataca, L., & Florinaa, P. A. (2022). The Current State of Romanian Universities Towards Emerging Industry 4.0. *Accounting and Management Information Systems AMIS 2022*, 7.
- Supriadi, I., Rahardjo, K. A., & Suprihandari, M. D. (2020). Expectations and standards for accounting professions and implications in the learning pattern in Industrial 4.0. *Illomata International Journal of Tax and Accounting*, 1(2), 66-73.
- Surianti, M. (2020). Development of Accounting curriculum model based on industrial revolution approach. *Development*, 11(2).
- Tan, L. M., & Fawzi, L. (2017). Employability skills required of accountants. *SHS Web of Conferences*, 34, 1-18.
- Tanius, E., & Susah, S. (2013). Employability skill readiness among business students. *International Journal of Science and Research (IJSR)*, 4(8), 511-516.
- Tentama, F., & Abdillah, M. H. (2019). Student Employability Examined from Academic Achievement and Self-Concept. *International journal of evaluation and research in education*, 8(2), 243-248.
- Tsiligiris, V., & Bowyer, D. (2021). Exploring the impact of 4IR on skills and personal qualities for future accountants: a proposed conceptual framework for university accounting education. *Accounting Education*, 30(6), 621-649.
- Uyar, A., Güngörmüs, A. H., & Kuzey, C. (2011). Factors Affecting Students' Career Choice in Accounting: The Case of a Turkish University. *American Journal of Business Education*, 4(10), 29-38.
- Velasco, M. S. (2012). More than just good grades: candidates' perceptions about the skills and attributes employers seek in new graduates. *Journal of Business Economics and Management*, 13(3), 499-517.

- Warwick, J., & Howard, A. (2015). A note on structuring employability skills for accounting students. *International Journal of Academic Research in Business and Social Sciences*, 5(10), 165-174.
- Wessels, P. L., & Steenkamp, L. P. (2009). An investigation into students' perceptions of accountants. *Meditari Accountancy Research*, 17(1), 117-132. <https://doi.org/10.1108/10222529200900008>
- Zakaria, M., Wan Fauzi, W. N. A., & Hasan, S. J. (2012). Accounting as a choice of academic program. *Journal of Academic Minds*, 6(1), 1-20.