

# MAKING ACCOUNTANCY EDUCATION FIT FOR PURPOSE FOR THE NEW ECONOMY



# EXECUTIVE SUMMARY

- *Accountancy professionals must adapt to the changing business environment, technological advancements, the broadening of the role of accountancy professionals, and the enhancement of their human capital.*
- *To be fit for purpose, accountancy education must include four essential skills and knowledge areas: business and accounting, human skills, IT and digital, and ESG.*
- *More than half of non-tertiary students continue to aspire towards accountancy careers. 55.9% of secondary school students and 60.4% of junior college students are open to pursuing accountancy as a career.*
- *The top factors that attract students to an accountancy career are prestige, the ability to specialise, and job security.*

The accountancy profession is facing one of its most challenging periods as several factors are converging to disrupt it. Technological advancements, the expanding role of accountants, declining student interest in accountancy, and the enhancement of human capital all exert pressure on the profession to reinvent itself.

This study examines trends in the accountancy profession and accountancy education in Singapore to formulate a fit-for-purpose accountancy education for the new economy.

The study has two main conclusions and ten recommendations concerning accountancy education, specifically for professional accountancy organisations (PAOs) and regulators; accountancy schools; and accountancy firms and professionals.

The first conclusion is that amid disruption in the accountancy profession, there are four essential skills and knowledge areas that accountancy professionals must possess for the new economy. It is crucial for accountancy schools to incorporate these skills and knowledge into university-level accountancy education. The four key skills and knowledge areas are:

- 1 Business and accounting
- 2 Human (soft/essential) skills
- 3 IT and digital
- 4 Environmental, Social, and Governance (ESG)

These genres of skills and knowledge are documented in the findings from the accounting literature survey, online survey, and interviews. They will serve as the foundation for evaluating current accountancy education, conducting gap analyses, and developing action plans.

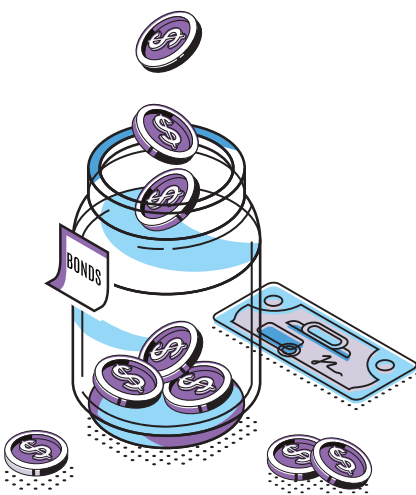
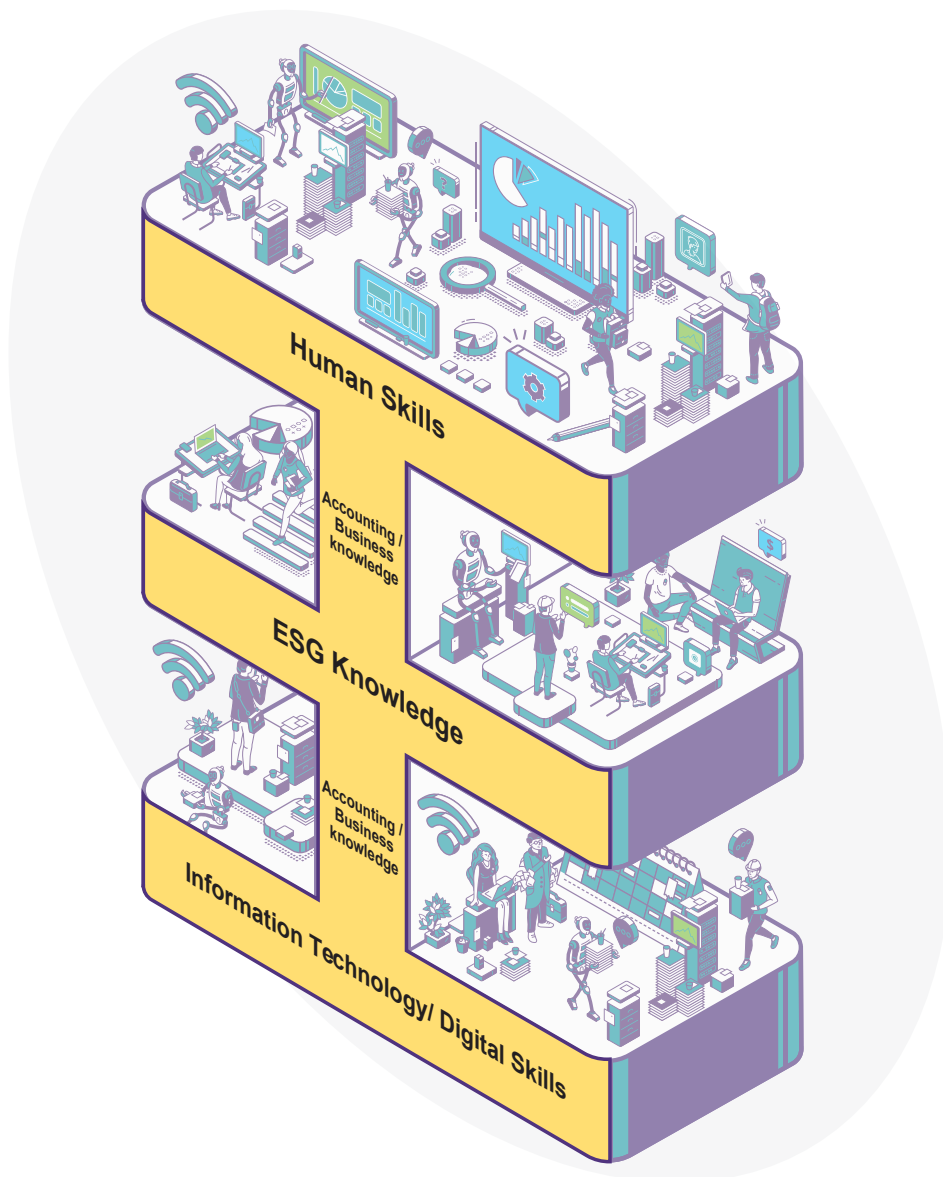


Figure A. below illustrates the ‘王 (Chinese word for “king”)-shaped approach’ to accountancy education, based on the first conclusion.



**Figure A : 王 (King)-shaped approach to accountancy education**

The second conclusion emphasizes the need for collaboration and close cooperation among PAOs, regulators, accountancy schools as well as accountancy firms and professionals. While accountancy schools play a crucial role, they are not solely responsible for delivering quality and relevant education. All the key stakeholders in the accountancy eco-system share the responsibility of shaping the future of accountancy education. Their joint efforts are essential to reinvent the accountancy profession and ensure that accountancy education remains fit for purpose.



Figure B. provides a visual summary of the interrelationship among these stakeholders.



**Figure B : Relationship among the three parties**

Based on the above conclusions, this study presents the following 10 recommendations.

### Recommendations for accountancy schools

#### 1. Incorporate human skills

Accountancy schools should adopt a purposeful approach to imparting human skills

#### 2. Incorporate IT and digital skills

Accountancy schools should help accountancy students acquire knowledge and skills about relevant IT and digital tools.

#### 3. Incorporate ESG skills and knowledge

Accountancy schools should swiftly incorporate ESG content into their accountancy curriculum

#### 4. Process re-engineering for accountancy schools

Accountancy schools should implement an aptitude assessment for admissions, ensure experiential learning, and strengthen engagement with industry to integrate practical skills and evolving technologies into the curriculum. Additionally, schools should continuously review and update their programs, upskill faculty in IT and ESG, and offer Continuing Education and Training (CET) for lifelong learning, maintaining alignment with industry needs.

## Recommendations for PAOs and regulators

### 5. Collaborate with accountancy schools

PAOs and regulators should collaborate with accountancy schools in multiple areas, such as providing timely updates to accountancy curriculum, enhancing internships, and helping students build networks with the accountancy community.

### 6. Encourage research and continuous improvement

PAOs and regulators should support accountancy schools in conducting research that advances the accountancy profession. They should also collaborate on providing lifelong learning opportunities.

## Recommendations for employers

### 7. Enhance and promote the accountancy profession's image

Accountancy practitioners should collaborate on outreach events to promote accountancy careers, provide mentorship, and serve as adjunct educators.

### 8. Enhance internships

Employers should ensure that internships include proper orientation or induction, committed mentors, meaningful and purposeful work, good supervision, feedback, care for the physical and mental well-being of interns and debrief at the end of the internship.

### 9. Promote accountancy professional qualification

Employers should support and promote professional accountancy qualifications by encouraging students or their interns to sign up for student memberships with PAOs or to start acquiring their professional qualifications while schooling or as soon as possible.

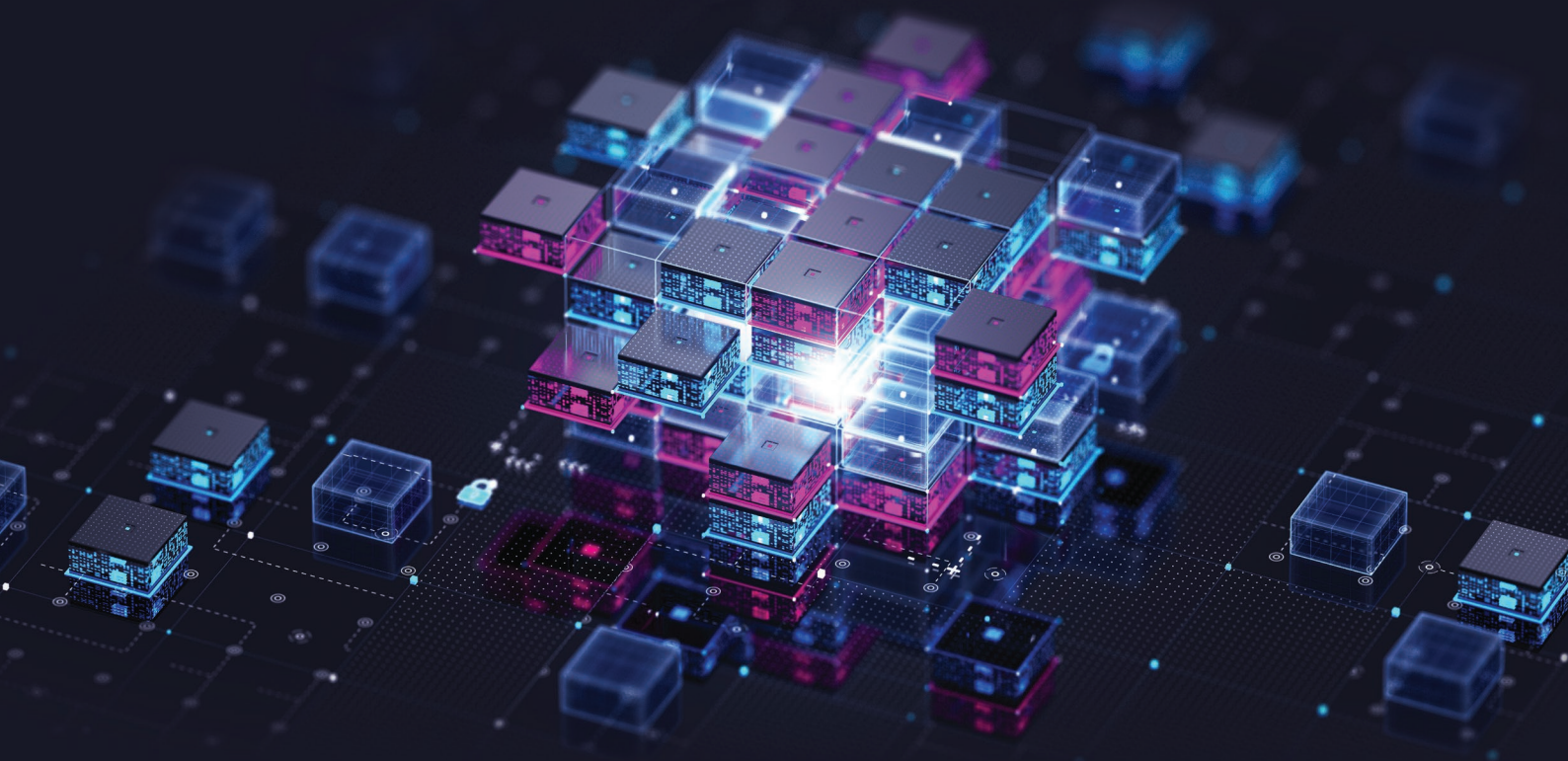
### 10. Promote continuing education and training

Employers should work with accountancy schools to curate continuing education and training programmes for accountancy graduates.

While the recommendations and findings have existed in various forms and articulations, this study brings them together coherently and advances a call for action. The execution of the action plans may determine whether the accountancy profession in Singapore becomes a sunset profession or an invigorated one.

For the full report, [please click here](#).

## Methodology



The study surveyed over 300 articles and studies from PAOs, regulators, practitioners, academics, and consultants. By doing so, it aims to construct an understanding of the challenges facing the accountancy profession and the desirable skill sets for current and future accountants, as well as their roles in the new economy.

An online survey with 2,725 students, 84 parents, 45 practitioners, and 34 school counselors was conducted. The survey covered various areas, including reasons for students' interest or disinterest in enrolling in an accountancy programme, the roles of professional accountants, the future skill set required for professional accountants, perceptions about the accountancy profession, and elements that accountancy education should include to shape future-ready professionals.

To deepen our understanding of the findings from both the accounting literature survey and the online survey, interviews were conducted with 48 practitioners and 17 students. These practitioners included academics, regulators, practitioners, and management representatives from PAOs.

The interviews covered three key areas:

- 1 the current skill needs of accountancy graduates;
- 2 the usefulness of internships; and
- 3 the future development of the accountancy profession.

To the authors' knowledge, this study is the most comprehensive analysis conducted by any PAO on the current and future skill requirements of the accountancy profession and their implications for accountancy education.

# TRENDS IMPACTING THE FUTURE OF ACCOUNTANCY

## Declining enrolment amid increasing opportunities

The accountancy profession needs to reinvent itself. Globally, many countries are facing lower tertiary admission rates. The 2023 Future of Jobs report by the World Economic Forum projects negative growth forecasts for accountants and auditors between 2023 and 2027.<sup>1</sup> This has serious repercussions for the profession. One suggested reason for this downward trend is that accountancy is becoming less attractive to students pursuing tertiary education.

In Singapore, the number of university students enrolled in accountancy programmes has fallen by more than 10% from 2018 to 2023.<sup>2</sup> In response, the Ministry of Finance (MOF) and the Accounting and Corporate Reporting Agency (ACRA) set up an accountancy workforce review committee (AWRC) to address the emerging talent shortage. One of the taskforce's aims is to "dispel the perception that the profession is boring".

The dwindling pipeline of accountancy graduates is exacerbated by an increase in accountancy jobs. Emerging technologies, heightened expectations of accountancy professionals, and an increased focus on areas such as sustainability are creating increased demand for accounting services. This demand is expected to grow in volume and scope, and across different sectors.

## Major trends shaping the future of accountancy

After reviewing more than 300 articles, we identified four major trends that are shaping the future of the profession, as well as the skills and competencies future accountancy professionals need.

We also asked Microsoft Co-Pilot and Adobe AI Assistance how accountancy professionals need to prepare for the future, based on the articles in this study. They surmised that ***"accountancy professionals need to embrace emerging technologies, develop new skills, stay updated with industry trends and technological advancements, and focus on providing value-added services and ethical behaviour. They should also prioritise continuous learning, collaboration, and adaptability to prepare for the future."*** This statement aligns with the findings in our literature review, which shows four major trends driving the future of accountancy.

1. The 2023 Future of Jobs report by the World Economic Forum

2. <https://www.straitstimes.com/business/task-force-set-up-to-persuade-more-to-take-up-accountancy-and-change-boring-tag>

## Changes in the business environment

*The business environment is becoming more VUCA (volatile, uncertain, complex, and ambiguous) and BANI (brittle, anxious, non-linear, and incomprehensible).*

### Which skills and competencies would be required of future accountants?

#### Adaptability

The ability to be agile and capable of adjusting to changes in the changing business environment.

#### Broad understanding of business

As trusted business advisers and strategic partners to management, accountancy professionals will need to be experts in business operations and strategy. At the same time, they will remain as the chief expert in company financials.

#### Ability to respond to dynamic regulatory changes

Accountancy professionals would need to acquire a good understanding of the evolving regulatory regime. This would include understanding present, developing and impending changes to regulations that could affect business operations.

#### Competencies in risk management

In a rapidly changing business environment, the ability to perform risk management will become a crucial competency for accountancy professionals, as all risks ultimately have financial implications.

### How should accountancy professionals navigate this trend?

#### Globalisation and the changing business landscape

Accountancy professionals must adopt a more global perspective on the flow and conduct of transactions, e.g. international transfer pricing.

#### Regulatory Requirements

Accountancy professionals must understand new regulations and adapt to a dynamic and evolving regulatory regime, e.g. the emergence of cryptocurrency or carbon accounting.

#### Stakeholder expectations

Accountancy professionals are expected to be trusted business partners, consultants, and strategic advisers, e.g. the rise of new roles such as the chief financial and sustainability officer.

#### Ethical considerations

Accountancy professionals must uphold a strong ethical stance, as organisations navigate complex and dynamic environments.

As AI is increasingly being adopted for use in accounting and finance functions, accountancy professionals need to consider their ethical usage.



## Technology Advancements

*Key technology advancements will have significant implications for the profession.*

### Which skills and competencies would be required of future accountants?

#### IT and digital skills

It is imperative that future accountancy professionals have IT and digital skills, in both depth and breadth. This is especially vital for them to understand the deployment of AI in the accountancy sector.

#### Ability to manage large financial and non-financial data

Accountancy professionals must be adept at managing data. This includes collecting, storing, processing, visualising, and data analysis (e.g predictive analysis).

They would also need cybersecurity knowledge to manage risks related to data.

### How should accountancy professionals navigate this trend?

#### Advancements in AI

Generative AI and other AI advancements could redefine work. Accountancy professionals must keep abreast of developments in AI.

E.g. Pw noted that their new AI system is behaving like a 25-year tenure partner.

#### Data explosion

Accountancy professionals will have access to large data sets financial and non-financial datasets for decision-making.

E.g. the Monetary Authority of Singapore (MAS) and six banks launched COSMIC, a common data platform for financial institutions to exchange insights on potential financial crime activities.

## Broadening the role of accountancy professionals

*Accountancy professionals are increasingly expected to serve as business partners and advisors, offering guidance that extends beyond their traditional role as financial gatekeepers.*

### Which skills and competencies would be required of future accountants?

#### Advisory skills

Accountancy professionals must hone their advisory skills to effectively convey their views and advice as trusted business advisors and strategists.

#### Analytical skills

Analytical skills are a dominant skill set among accountancy professionals. This must be further enhanced, given the presence of AI, analytics and other IT tools supporting the decision-making processes.

#### Integrated thinking

Accountancy professionals are increasingly involved in preparing integrated reports, where the primary outcome is fostering integrated thinking within companies. They can lead in this area with enhanced integrated skills, which are currently applied in a limited and ad hoc manner. This requires a broad and in-depth understanding of business operations—from operations and sales to marketing and financial results.

#### Strategic thinking

Future accountancy professionals are expected not only to analyse past and present data but also to forecast the future trajectory of the business. This involves envisioning the company's future vision (foretelling) and mission and subsequently formulating strategies and operational plans (forthtelling) to achieve these aspirations.

### How should accountancy professionals navigate this trend?

#### Forward-looking decision-making support

Accountancy professionals must support decision-making using technological advancements.

E.g. advancements in AI could help accountancy professionals with real-time financial predictions and analyses.

#### Provider and verifier of non-financial information

Accountancy professionals are increasingly required to provide non-financial information crucial for decision-making and accountability in sustainability.

The establishment of the International Sustainability Standards Board (ISSB) under the auspices of the International Financial Reporting Standards (IFRS) has placed sustainability within the domain of accountancy professionals, requiring them to recognise, measure, and disclose sustainability issues, e.g. the emerging role of the Chief Financial and Sustainability Officer<sup>3</sup>.

3. <https://www.straitstimes.com/business/companies-markets/enter-the-cfso-as-chief-financial-officers-take-on-sustainability-role>

## Enhancement of Human Capital

*More can be done with less consumption of human capital, making business and production activities more efficient.*

### Which skills and competencies would be required of future accountants?

#### Emotional intelligence

Accountancy professionals will need the ability to connect with stakeholders through emotional intelligence. Negotiating, persuading, and influencing effectively will be significantly enhanced with strong emotional intelligence, which should be inherent to accountancy professionals.

#### Collaboration and communication

Accountancy professionals will need to refine their collaboration, teamwork, and communication skills to engage effectively with diverse groups.

#### Continuous learning

Accountancy professionals must recognise continuous learning empowers them to create and implement new solutions.

#### Creativity, innovation, and critical thinking

Accountancy professionals' creative and critical thinking capabilities will allow them to provide valuable judgments and opinions, crafting innovative solutions that are beyond AI or robotics due to limitations in its training data.

### How should accountancy professionals navigate this trend?

#### Continuous learning and adaptability

The current front-loading education model, which is heavily focused on upfront learning only, must be supplemented with a continuous learning approach. Without this, people will not be able to reach their full potential in a changing world.

E.g. accountancy professionals must upskill and reskill in emerging areas of sustainability, to adapt to the changing business landscape.

#### Greater need for collaboration and communication

Accountancy professionals would take on a more front-office role, where their skills in persuasion would be increasingly sought after.

As business partners and advisors, accountancy professionals would be expected to collaborate and communicate well with both internal and external stakeholders.

## Insights from our research

An online survey was conducted with practitioners, including accountancy practitioners and employers of accountants. The respondents represent accountancy practitioners working in various types of organisations, including private companies, listed companies, government agencies, non-profit organisations, and accounting entities. The respondents held designations such as accountants, senior accountants, CFOs, CEOs, group directors, heads of assurance, and heads of risk.

First, we asked respondents two questions – “Which skill sets are important?” and “Do fresh graduates possess these skills?”. The respondents identified human skills as the key skill set expected of fresh accountancy graduates, surpassing IT and digital skills and ESG knowledge. Respondents observed that fresh accountancy graduates are more prepared in human and digital skills than ESG knowledge. What is noteworthy is that the skills and knowledge of fresh accountancy graduates fall below the respondents' expectations. This suggests significant skill and knowledge gaps among fresh accountancy graduates.

|                                                                                                  | <b>Importance of Skill set</b><br>(Ranging from 1 for “Not important at all” to 5 for “very important”) | <b>Preparedness of fresh graduates</b><br>(Ranging from 1 for “Not prepared at all” to 5 for “very well prepared”) |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Human skills (communication, negotiation, critical thinking, etc.)</b>                        | 4.59                                                                                                    | 3.00                                                                                                               |
| <b>Digital skills (blockchain, AI, robotic process automation, visualisation software, etc.)</b> | 3.92                                                                                                    | 3.03                                                                                                               |
| <b>ESG knowledge (climate change, corporate governance, sustainability reporting, etc)</b>       | 3.68                                                                                                    | 2.84                                                                                                               |

**Table 1: Importance of Skill Sets (Expectation versus Preparedness)**

Next, we explored each of these skill sets in depth to identify the top three skills in each category. As part of the research design to document stakeholders' understanding of the new roles and expectations of accountants and how accountancy schools can incorporate these expectations into their programmes, interviews were conducted with the following groups:

- accountancy professionals;
- accountancy academics; and
- accountancy undergraduates.

All the accountancy academics have also worked as accountancy professionals at some point. Additionally, among the accountancy professionals, three are current presidents of PAOs or their Singapore chapters, and a regulator.



## Human Skills

The top three human skills considered very important by practitioners for fresh accountancy graduates are professional communication, teamwork, and professional scepticism/judgement, in that order. While practitioners perceive fresh accountancy graduates as being more prepared in these three skill sets, their proficiency in these skills still fell short of expectations.

| Human skills                       | Importance of Skill set<br>(Ranging from 1 for "Not important at all" to 5 for "very important") | Preparedness of fresh graduates<br>(Ranging from 1 for "Not prepared at all" to 5 for "very well prepared") |
|------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Professional Communication         | 4.49                                                                                             | 3.24                                                                                                        |
| Teamwork                           | 4.42                                                                                             | 3.64                                                                                                        |
| Professional Scepticism / Judgment | 4.27                                                                                             | 3.18                                                                                                        |

### Our interviewees' insights

#### a. Personal skill: inquisitiveness

Interviewees emphasised that accountants should be more inquisitive, to distinguish themselves from the traditional role of accountants as 'bean counters', who focus solely on providing accurate financial records. Accountants should possess an inquisitive mindset to understand why they are observing or experiencing specific transactions, records, or evidence. Moreover, they should be curious and proactive in developing new solutions and approaches to solve existing challenges and problems. This will also include critical and design thinking.

#### b. Personal skill: ethics, passion and diligence

Interviewees emphasised that the accountancy profession revolves around trust and transparency. Therefore, it is crucial for new accountants to uphold strong ethical values, coupled with a passion for their profession and diligence. Some interviewees likened the role of new accountants to that of doctors and architects, highlighting the importance of their services in safeguarding the well-being of consumers. They noted that without passion for the accountancy profession, new accountants may struggle to invest in the demanding nature of the work, particularly during the initial phases with long hours.

#### c. Technical skill: analytical, logical thinking, and problem-solving skills

Interviewees stressed the critical importance of analytical skills, including logical thinking and problem-solving abilities. They expect accountants to analyse financial data effectively to derive meaningful insights that support decision-making. Interviewees highlighted the importance of creative thinking, pursuing leads, and identifying root causes in problem-solving scenarios. These skills distinguish accountants from a purely mechanical approach to financial and accounting tasks, enabling them to handle ambiguous and novel situations. They also underscored the need for accountants to think independently and function effectively in loosely supervised environments.

#### d. Relational skill: communication and teamwork

A majority of interviewees highlighted the importance of relational skills, particularly communication skills and teamwork. Effective communication is essential as accountants provide trusted financial services, requiring them to assure clients that their financial well-being is managed effectively. Accountants cannot solely rely on the quality of their work; they must also convince clients that their services meet their needs and expectations. Additionally, in a diverse workforce where collaboration across different disciplines is crucial, accountants must demonstrate strong teamwork abilities, as they do not have all the answers and cannot handle complex tasks alone.

## Digital Skills

The top three digital skills mentioned by the respondents align with the findings from the literature review. However, practitioners observed that fresh accountancy graduates fall short of these expectations.

| Digital skills                                     | Importance of Skill set<br>(Ranging from 1 for "Not important at all" to 5 for "very important") | Preparedness of fresh graduates<br>(Ranging from 1 for "Not prepared at all" to 5 for "very well prepared") |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Data Analysis / Big Data                           | 4.13                                                                                             | 3.20                                                                                                        |
| Enterprise Resource Planning<br>(e.g. SAP, Oracle) | 3.82                                                                                             | 2.82                                                                                                        |
| Cybersecurity                                      | 3.80                                                                                             | 2.87                                                                                                        |

### Our interviewees' insights

#### a. Technical skill: financial and accounting knowledge

Interviewees unanimously view technical proficiency as a non-negotiable prerequisite for new accounting graduates, despite the growing importance of digital skills. They must be competent in financial and accounting skills and possess an understanding of how these skills support business operations. Some interviewees emphasised the importance of integrating, comprehending, and applying financial and accounting knowledge within business contexts. They stressed that without this ability, accountants risk being reduced to mere "bean counters", easily replaced by AI or automation. A key expectation is that new graduates must add substantial value to business operations through their financial and accounting expertise, augmented by their digital skills.

#### b. Technical skill: digital skills and proficiency in accounting software

Proficiency in the use of technology such as accounting software was deemed important for accountants. Interviewees acknowledged that it may not be realistic to expect new accountants to have in-depth knowledge of various IT skills or accounting software. However, they must have a broad understanding of IT tools and be capable of deploying basic IT tools. For example, while it may not be necessary for accountants to master tools like Tableau or PowerBI, they should understand how

these tools are used in data analysis and presentation. Moreover, if their roles require using such IT tools, they should learn them through self-study or on-the-job training. Interviewees recognised the challenges posed by the proliferation of IT tools and the dynamic IT landscape, making it difficult to identify essential IT tools. The primary emphasis is on accountants' adaptability in acquiring IT skills as required, though exposure to these tools is essential. Therefore, this technology skill can be framed within the context of a technology-oriented mindset.

**Note:** AI scored 3.38 on the importance of the skill set and 2.76 on preparedness of fresh graduates. This suggests that despite the surge of interest in AI, it is still not a key skill set for employers and fresh graduates are insufficiently prepared for the use of AI in the workplace.

## ESG Skills

The top three ESG knowledge areas in order of importance are corporate governance, sustainability reporting, and corporate social responsibility. The observed preparedness for all ESG knowledge areas was below expectations.

| ESG skills                      | Importance of Skill set<br>(Ranging from 1 for "Not important at all" to 5 for "very important") | Preparedness of fresh graduates<br>(Ranging from 1 for "Not prepared at all" to 5 for "very well prepared") |
|---------------------------------|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Corporate governance            | 4.24                                                                                             | 3.11                                                                                                        |
| Sustainability reporting        | 3.76                                                                                             | 2.91                                                                                                        |
| Corporate social responsibility | 3.62                                                                                             | 3.07                                                                                                        |

### Our interviewees' insights

#### a. Interdisciplinary skill: dealing with sustainability reporting, ESG and climate change

There is a growing expectation for accountants to engage in non-financial matters. For example, sustainability reporting incorporates both financial and non-financial indicators, requiring accountants to produce credible reports. The scope of work for accounting graduates is expanding, which requires them to navigate the interdisciplinary and interconnected nature of business.

Sustainability is becoming increasingly important in business practices. Accountants with knowledge of sustainability can help organisations incorporate ESG factors into their financial reporting and decision-making processes, ensure compliance with ESG reporting requirements and improve their organisation's reputation as a socially responsible entity. Knowledge of ESG and the impact of climate change can enhance the value-added role of accountants as chief measurement officers.



## Additional skills or knowledge

In an open-ended question, practitioners were asked to identify specific skills or knowledge that recent accountancy graduates lack, which they believe should be incorporated into their education. The responses include:

- **Digital skills** – including training in artificial intelligence
- **Analytical skills** – incorporating complex non-linear equations or mathematical problem-solving, game theory or chaos theory, statistical knowledge
- **Behavioural skills** – emotional intelligence, empathy, resilience, office etiquette
- **Business and accounting skills:**
  - ✓ Global economic mindset
  - ✓ Financial modelling, valuation and appraisal, forensic accounting and fraud investigation, insolvency, information systems auditing, etc.
  - ✓ Contract review and drafting
  - ✓ Treasury and corporate finance
  - ✓ Environmental regulations
  - ✓ ESG matters



## How important is internship?

There is unanimous agreement on the importance of internships for the training of an accountant. Internships are an essential component of accounting education. The benefits of internship for accounting students can be broadly categorised into three key groups:

- a. Acquiring real-world skills, knowledge, and experience;**
- a. Enhancing career options; and**
- b. Building of professional network.**

### Acquiring real-world skills, knowledge and experience

a. Internships enable students to apply their classroom knowledge in a real-world context, reinforcing their learning. It helps them grasp the evolving demands of the industry and society by acquiring necessary skills and knowledge. This preparation is crucial for their entry into the workforce, enabling them to meet industry expectations upon graduation. It was also noted that internship eases the learning curve for graduates when they start their jobs.

b. Internships enable students to develop professional skills such as communication, teamwork, and problem-solving through hands-on work with fellow interns, supervisors, or seniors. This complements the competencies gained from working in a real-world environment, fostering holistic development and personal growth beyond theoretical knowledge.

c. Internships facilitate the acquisition of interdisciplinary knowledge and skills, requiring students to collaborate with individuals from other disciplines and acquire interdisciplinary skills in a real-world setting to accomplish tasks. For instance, they may need to acquire proficient data analytics skills. They may also collaborate with computer scientists, lawyers, and other professionals to complement their work. Exposure to accounting software and AI tools during audits helps students bridge the gap between academic knowledge and professional expectations in an interdisciplinary environment.

### **Enhancing career options**

Students who took up internships have a competitive edge in employability and career prospects. Internships allow students to explore various accounting roles. This enhances students' employability by enabling them to articulate their career expectations and fit more effectively when seeking permanent placements. Interestingly, students report that internship helps them better understand their own expectations and needs, as well as those of potential employers.

### **Building of professional networks**

Internships allow students to build their professional networks. It enables them to collaborate with individuals and firms that may potentially employ them in the future. Students may decide to pursue their careers with firms where they had positive internship experiences. This is particularly true in cases where internship programmes offer excellent mentoring or structured experiences that leave a lasting impression on interns.

### **Conditions that facilitate internships**

- a. Internships require proper planning, structure, and coordination from both accountancy schools and firms. There needs to be clear alignment of objectives, expectations, and outcomes of the internship programme.
- b. Having nurturing supervisors or mentors is crucial to ensure interns do not struggle alone and do not form negative impressions of the internship. This may discourage interns from pursuing a career in accounting.
- c. The need for proper debriefing and closure. Feedback from mentors and peers significantly helps interns discover their strengths, weaknesses, and suitability for a career in accounting. This may include interns learning how to log their work during the internship, write reflective reports, and receive feedback from supervisors on their performance. This aligns with the usual processes for assessing full-time staff, providing interns with valuable real-world experience.

In summary, practitioners emphasised the importance of human skills, digital skills, and ESG knowledge for fresh accountancy graduates. However, their experiences with new accountancy graduates suggest that they could be better prepared. Practitioners indicated that while current accountancy education meets their current needs and helps future-proof the profession, there is room for improvement in preparing fresh accountancy graduates for the working world.



## TOWARDS A “Ξ(KING)-SHAPED” ACCOUNTANCY EDUCATION

Accountancy education has always evolved in tandem with industry needs. However, the evolution of accountancy education was slow as the process involved accountancy schools distilling feedback from the accountancy profession, prior to reviewing their curriculum.

Accountancy schools are also governed by a rigorous academic process that makes revision to the accountancy curriculum slow and tedious. The changes were also not uniform as different accountancy schools responded to the market forces with different degrees of urgency. In addition, faculty resources to implement the changes is always a concern.

The development in accountancy education can be explained in Figure 1.

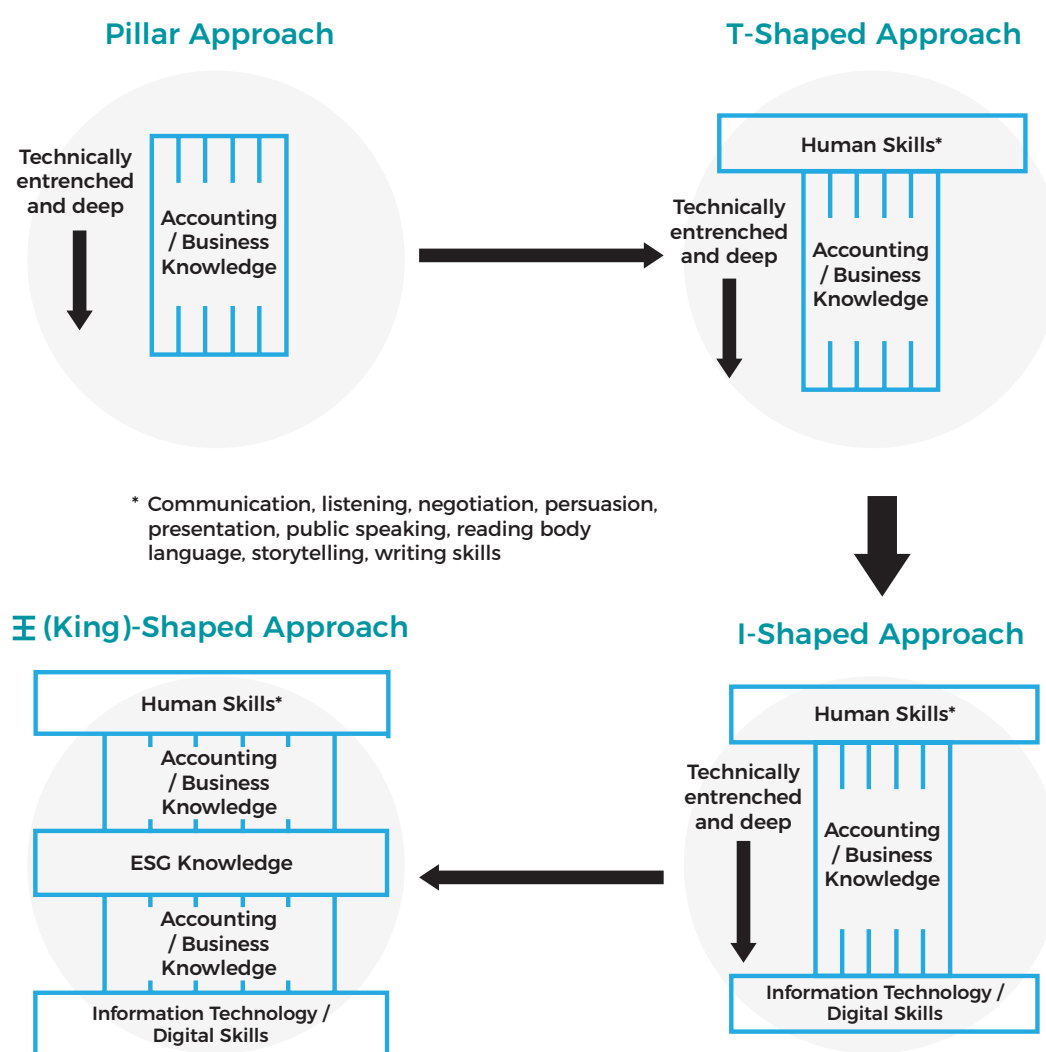


Figure 1: Evolution of accountancy training



Accountancy education began with a “pillar” approach. Accountancy students were taught business and accountancy knowledge in an entrenched and deep manner. This ensured that the students were rigorously and adequately trained in the knowledge and skills of business and accountancy, allowing them to pass the professional examinations and be recognised as professional accountants.

Over time, as accountancy graduates entered the market, there were demands for accountants to have human (soft/essential) skills, much like those provided in a liberal arts education. Consequently, accountancy education was infused with the imparting of human skills, and this is where the “pillar” approach to accountancy education morphed into the “T-shaped” approach. The “T-Shape” is used as human skills are seen as complementary to the technical business and accountancy skills.

Just when accountancy education seemed to align with market expectations, the Fourth Industrial Revolution prompted educators to rethink how to integrate technology and digital skills into the curriculum. This shift was driven by technological disruptions and the demand from employers for graduates to possess these skills.

The inclusion of digital skills into accountancy education is essential to help accountancy graduates keep up with changing societal, workplace and employability trends, giving rise to the “I-shaped” approach. “I-shape” is used as there was an assumption during the Fourth Industrial Revolution that technology would be ubiquitous and permeate every area of life, including work.

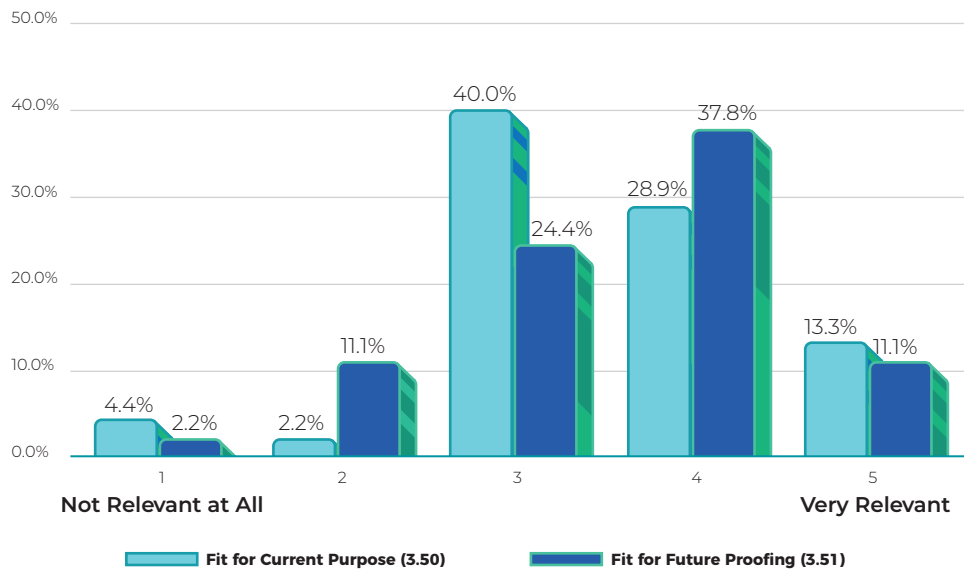
In the past decade, a new trend has emerged. Concerns about limited natural resources and climate change have raised questions about the sustainability of ongoing development. This has led to a new focus in business operations, with sustainability and ESG concerns becoming central issues. The accountancy profession is now deeply involved, as sustainability and financial profitability are interlinked.

The accountancy profession is now a key player in measuring and disclosing sustainability metrics to allow businesses to resolve the circularity between profitability and sustainability. As a result, ESG has been integrated into accountancy education, leading to the “**王**-shaped” approach. The symbol “**王**,” meaning “king” in Chinese, represents this new model. ESG serves as a central element intersecting technical business and accountancy knowledge, given its pervasive impact on all business aspects. Human skills will communicate ESG impacts, while technology will aid in measuring and reporting these effects across the business and accountancy sectors.

In charting the transition of the curriculum from a pillar-shaped model to a **王** (king)-shaped one, it should be noted that although the content of accountancy education has expanded significantly, the duration of an accountancy degree has remained the same. Globally and in Singapore, the duration of an accountancy degree has remained at three to four years.

We asked employers who are accountancy practitioners if they found accountancy education fit for current and future purposes. 40.0% of the respondents are neutral about whether the current accounting education is fit for current purposes, with 42.2% having more than a neutral position. Interestingly, there is a higher percentage (48.9%) of respondents who thought that the current accountancy education is future fit. However, there is also a higher percentage of respondents (13.3% versus 6.6%) who thought that the current accounting education is less than future-fit.

Practitioners generally believe that the current accountancy education in Singapore is fit for purpose for both current and future market needs, as indicated by average scores above 3.0 for both responses. However, these scores hover around 3.5 for both current and future needs, which suggests that more could be done to prepare accountancy graduates.



\*% represents the percentage of respondents choosing the specific score.

**Figure 2 : Relevance of the accountancy education for current needs and future proofing**

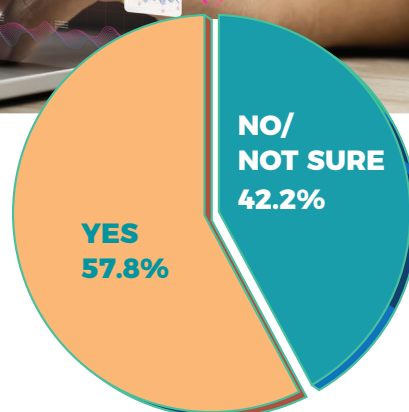
# CHOOSING ACCOUNTANCY AS A CAREER



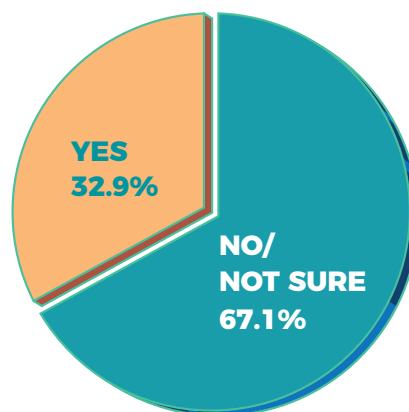
An extensive survey was conducted with stakeholders in the accountancy sector. This includes accountancy practitioners, students (secondary school, junior college, polytechnic, and university), parents, and career counsellors. A total of 2,888 responses were collected, of which 94% were from different categories of students.

## Students' views on an accountancy career

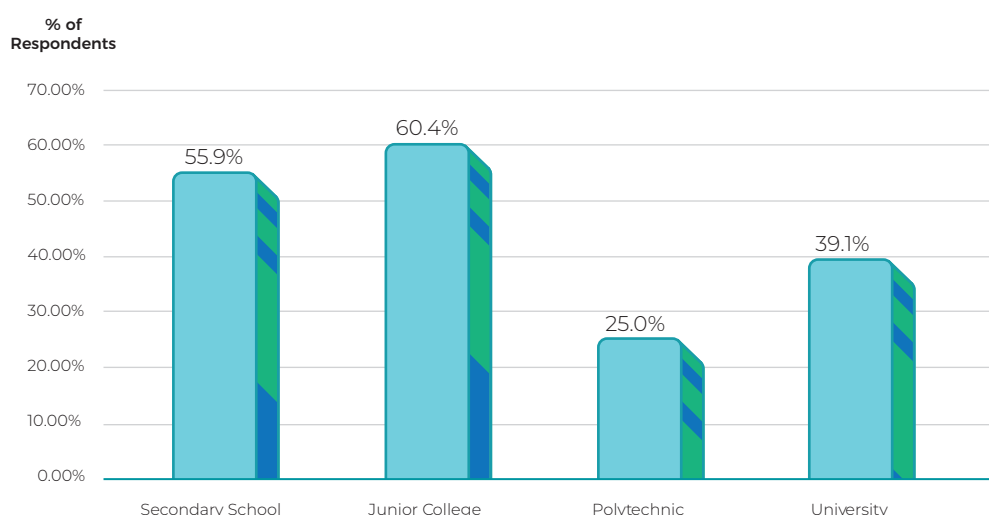
Secondary and junior college students have a much higher intention to pursue an accountancy career, compared to polytechnic and university respondents. One possible reason is that secondary and junior college students are still exploring their career choices, while polytechnic and university students have more or less made up their minds.



**Figure 3 :** Secondary and junior college students intending to pursue accountancy as a career



**Figure 4 :** Polytechnic and university students intending to pursue accountancy as a career



**Figure 5 : Intent to pursue accountancy across different student groups**

This finding suggests that to attract students to the accountancy profession, greater effort needs to be made to reach out to secondary and junior college students. They must be provided with information and guidance so that their openness to the accountancy profession can be converted into actual pursuit.

### Reasons for pursuing an accountancy career

Students surveyed indicated that they chose an accountancy career because of its prestige. This was the top choice for secondary and junior college students, and it ranked second for polytechnic and university students. This highlights the importance of maintaining and communicating the prestige of the accountancy profession. For polytechnic and university respondents, the opportunity for specialisation is another important pull factor.

Interestingly, competitive salary was the least influential pull factor overall and for university students. Secondary students chose broad career opportunities as their least influential pull factor, while junior college students chose transferable skills, and polytechnic students valued global opportunities the least.

### Reasons for not pursuing an accountancy career

There are two myths that dissuade students from pursuing an accountancy career. The first myth is accountancy is boring, monotonous, and back-office work. This is no longer a myth but is the main reason preventing junior college, polytechnic, and university respondents from embarking on an accountancy career. The second myth is that the accountancy professionals may be taken over by AI or robots. This is one of the primary concerns of secondary and junior college students.

Secondary and junior college students who indicated that they are not intending or are unsure about pursuing an accountant career indicated that they want a career that “contributes value and meaning to work”. This suggests that the accountancy profession is not appealing to them from the perspective of “value and meaning”. This perception aligns with one of the recommendations of the AWRC to address manpower challenges faced by the accountancy sector.

People who find purpose and meaning in their work are more likely to be committed to and invested in their work. They will be more willing to go the extra mile and assume more ownership of the tasks that they are entrusted with. But to achieve this, the work that they do has to be fulfilling for them – ideally, it should both provide a source of intellectual stimulation and resonate with their values and beliefs.

(AWRC 2024)

| Rank | Top reasons students want to pursue an accountancy career                                                                                                 | Top reasons students do not want to pursue an accountancy career                                                 |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 1    | <b>Prestige:</b> The accountancy profession is very respectable and prestigious.                                                                          | <b>Monotony:</b> The work of an accountant is monotonous.                                                        |
| 2    | <b>Specialisation:</b> Accountants have the opportunity to specialise in specific areas of accountancy.                                                   | <b>Lack of knowledge:</b> I lack the knowledge or understanding of what an accountant does.                      |
| 3    | <b>Good job security:</b> Accountants are constantly in demand as every organisation needs an accountant to oversee its accounting and finance functions. | <b>Sunset Industry:</b> The accountancy profession is a sunset industry that will be taken over by AI or robots. |
| 4    | <b>Entrepreneurship:</b> Accountants can start their own business or become an entrepreneur as they understand the accounting and finance functions well. | <b>Uninteresting work:</b> Accountancy is not an interesting profession.                                         |
| 5    | <b>Broad career opportunities:</b> There are various career paths that an accountant can pursue.                                                          | <b>Lack of ability:</b> I do not have the aptitude and abilities to be an accountant.                            |
| 6    | <b>Transferable skills:</b> Being an accountant means having the opportunity to work in a variety of different environments and industries.               | <b>Limited career growth:</b> Accountants have limited career growth opportunities.                              |



| Rank | Top reasons students want to pursue an accountancy career                                                                                | Top reasons students do not want to pursue an accountancy career                                        |
|------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| 7    | <b>Global opportunities:</b> Accountants have the opportunity to undertake global assignments and travel regularly as part of their job. | <b>Grades:</b> My grades will not make the cut for an accountancy programme.                            |
| 8    | <b>Competitive salary:</b> The accountancy profession is one of the highly paid professions.                                             | <b>Compensation:</b> An accountant's compensation is not as attractive compared to other professionals. |
| 9    |                                                                                                                                          | <b>Negative view of accountancy:</b> There are negative views associated with accountants.              |

**Table 2 : Reasons for and against pursuing an accountancy career**

### Professional Accountancy Qualification



78.3% of polytechnic and university accountancy students intend to pursue a professional accountancy qualification. Among university accountancy students, 80.1% intend to do so. The primary reason for pursuing a professional accountancy qualification is its perceived global recognition. This aligns with the understanding that in a continually evolving business environment, possessing a globally recognised professional accountancy qualification is essential and advantageous for one's career. It also leads to expectations of higher remuneration.

Among those who do not wish to pursue a professional accountancy qualification, the top concern is that "It is too expensive to enrol in a professional accountancy qualification programme". This is closely followed by the perception that "It takes too long to complete the professional accountancy qualification".



## Perspectives of parents and career counsellors

Besides students' choices, parents are also a significant influence on their choices in tertiary education. Our study sought to identify factors which influenced enrolment choice.

We found the key factor influencing parents towards accountancy is the availability of specialisation. The second factor is the broad career opportunities available in accountancy, providing several career paths that accountants can pursue. This is consistent with the observation that parents' perspectives about the economic opportunities in pursuing a career is a key consideration in their support of their children's choice in tertiary education. We asked the parents if their child had any concerns about the future of accountancy. According to the parents, their child's top concerns were *"negative stereotypes associated with accountants"*, followed by *"an accountant's job is perceived as monotonous"*.

For parents whose child did not enroll in an accountancy programme, their top three reasons, in order of importance, are – *"My child believes that the work of an accountant is monotonous"*, *"my child doubts that he/she has the aptitude and abilities to be an accountant"*, and *"my child lacks the knowledge or understanding of what an accountant does"*.

Career counsellors agreed with parents that specialisation opportunities are the more important pull factor. Additionally, their second pull factor is the ability *"to start their own business or become an entrepreneur as they understand the accountancy and finance function well"*.

Career counsellors also shared the same perception as parents and students that the top reason for not recommending the accountancy profession to students is that the *"work of an accountant is monotonous"*. However, when it comes to compensation, career counsellors hold a very different perception from parents and students. Career counsellors polled rated the statement *"an accountant's compensation is not as attractive as compared to other professionals"* as their third highest reason for not recommending accountancy. This compensation gap will have to be investigated and closed if the accountancy profession wants to rally career counsellors to promote accountancy as a profession.

# DEALING WITH FUTURE DEVELOPMENTS IN THE ACCOUNTANCY PROFESSION

Through interviews with 65 accountancy professionals, academics and undergraduate students, this study deep dived into understanding how universities can better prepare accountancy students in five areas for the future workplace: ethical considerations, advancement in technology, analytical skills, relational skills, and changes in roles and responsibilities of accountants. These areas were chosen because they are identified as key issues impacting accountancy professionals.

### **Ethical considerations**

Interviewees suggested that accountancy schools can better prepare their students for ethical considerations by incorporating ethics courses into the curriculum. Additionally, accountancy schools can engage with professional bodies, industry experts, and regulators to understand their needs and expectations, and adapt the teaching of ethics for their curriculum accordingly.

Emphasis should also be placed on governance frameworks and requirements to help students grasp the legal and regulatory aspects of ethical behaviour in the workplace. This can include familiarising students with ethical codes and standards, with a strong emphasis on professional values and integrity. By exposing students to ethical codes and standards, accountancy schools can foster a culture of ethics and provide guidance on resolving ethical dilemmas.

Classroom teaching can be enhanced by integrating ethics, professionalism, and integrity into learning activities. Practical learning can involve real-life experiences, case studies of ethical dilemmas, role-playing exercises, and inviting guest speakers who have faced such challenges to share their insights. These methods help students develop the skills and mindset necessary to navigate ethical challenges in their careers.

Furthermore, accountancy schools could create opportunities for self-assessment and personal reflection on ethical behaviour. Some interviewees also suggested that accountancy schools invest in developing faculty members to effectively teach ethics. Encouraging students to participate in community projects and interdisciplinary work can broaden their perspective and enhance their understanding of contexts where ethical challenges may arise.

### **Advancements in technology**

Interviewees were also asked how advancements in technology would alter the skill requirements for new accounting graduates in the future. The unequivocal response was that technology will significantly change the skill needs of accounting graduates, requiring them to have a robust understanding of technology and its applications in accounting. Graduates will need to know how to leverage technology in their work, shifting from traditional “number crunchers” to roles focusing on data analysis, storytelling and presenting persuasive reports to various stakeholders.

Future accountancy graduates will need to embrace new technologies such as AI, data analytics, and develop an understanding of programming, using them to optimise accounting processes. This involves not only learning the tools but also grasping the underlying concepts. They must adapt to new technological developments to enhance their analytical and logical problem-solving approaches. Additionally, they will need to utilise technology to visualise, interpret, and analyse data effectively, and communicate their findings clearly. Understanding how technology influences the business environment and collaborating in interdisciplinary teams will also be essential. The ultimate goal is to enable graduates to work more efficiently and effectively, adding value to their organisations through productivity gains, improved decision-making, and enhanced effectiveness.

Some interviewees emphasised that new accountancy graduates will require strong data analytics skills to analyse large datasets and present insights clearly. Proficiency in accounting software, understanding blockchain technology, awareness of cybersecurity principles, and familiarity with automation tools and AI are also deemed imperative. Interviewees advocate for adaptability alongside a commitment to lifelong learning and continuous professional development, to remain competitive in the rapidly evolving technology landscape.



## Analytical skills

According to the interviewees, accountancy schools can better prepare their students through emphasising the importance of analytical skills, including logical thinking and problem-solving abilities. Accountants are now expected to analyse financial data effectively to derive meaningful insights that support decision-making.

Universities need to impart creative thinking, pursuing leads, and identifying root causes in problem-solving scenarios. These skills will enable accountants today to handle ambiguous and novel situations at work, as opposed to having a purely mechanical approach to financial and accounting tasks. In addition, accountants today need to think independently and function effectively in loosely supervised environments.



Accountancy schools should invest in their curriculum to incorporate learning opportunities that equip students with analytical skills, such as case studies with open-ended problem-solving scenarios. By analysing real case scenarios, students can be taught how to think out of the box and offer creative and innovative solutions.

Interestingly, interviewees also stressed the importance of interdisciplinary skills because the scope of work for accountancy graduates is expanding, requiring competence in navigating the interdisciplinary and interconnected nature of the business world. This is especially the case for handling sustainability issues.

## **Relational skills**

Relational skills are crucial for accountancy students to function effectively in the workplace. These skills are essential for building and maintaining relationships with colleagues, clients, and other stakeholders. Accountancy schools can achieve this by incorporating modules or courses that focus on developing communication, teamwork, leadership, and emotional intelligence skills. Additionally, schools can provide opportunities for students to practice these skills through group projects, presentations, internships, case studies, networking events, and mentorship programmes.

Emphasising the importance of lifelong learning, accountancy schools can encourage students to continuously develop their relational skills throughout their careers. Providing opportunities for students to interact with industry professionals and gain real-world experience can also help them develop these skills. For instance, on-site visits can expose students to various work environments and professional practices.

## **Changes in roles and responsibilities of accountants**

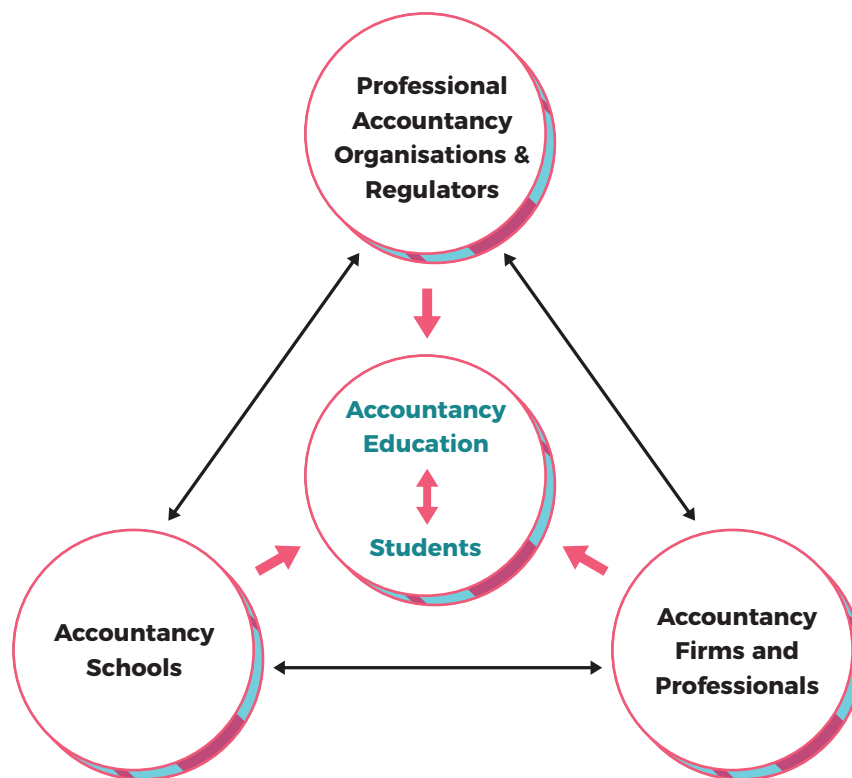
The interviewees were asked how the roles and responsibilities of accountants would change in light of the ongoing disruption of the accountancy profession. The roles and responsibilities of accountants within organisations are evolving due to technological advancements, a shifting business landscape, and changing regulatory environments. As highlighted in the previous section, a critical issue is that technological advancements will necessitate new ways of thinking and acquiring skills to address current challenges. Advancements in technologies such as generative AI, robotic processes, automation, and the broader IT sphere will compel new accountancy graduates to quickly learn and adapt to remain competitive and relevant.

Interviewees expressed the belief that accountants will assume more strategic and advisory roles in decision-making processes. They will become pivotal strategic business partners and advisors, providing insights to stakeholders to navigate their businesses through challenging terrain towards achieving corporate goals. Interestingly, additional roles that accountants may increasingly undertake include technology specialists, data analysts, compliance experts, ethical guardians, change agents, and perpetual learners.

Accountancy schools should enhance their preparation of students for these changes by updating their curriculum to include subjects like data analytics, technology integration, strategic management, and ethics. They should also provide experiential learning opportunities, develop human skills, deliver ethics education, offer professional development resources. In addition, promoting research and emphasising lifelong learning are crucial for equipping the students to adapt to the knowledge industry. These strategies will better equip students to excel in the dynamic and multifaceted field of accountancy.

## RECOMMENDATIONS FOR ACCOUNTANCY STAKEHOLDERS

Emphasising the symbiotic relationship among the PAOs and regulators, accountancy schools, and accountancy practitioners is crucial in the context of accountancy education. The stakeholders must collaborate to determine the quality of accountancy education and the competence of accountancy professionals.



**Figure 6 :** Symbiotic relationships among the key stakeholders

This chapter delves into the gaps in current accountancy education and proposes actions to bridge these gaps. It outlines action plans for PAOs and regulators, accountancy schools, and accountancy practitioners. The roadmaps are designed to address the current gaps and to significantly improve the quality and relevance of accountancy education.



### Recommendations for accountancy schools

The following proposals aim to enhance the accountancy curricula and education within accountancy schools.

#### Recommendation 1 – Incorporate human skills

Table 3 presents a comprehensive list of human skills drawn from accountancy literature, interview feedback, and online survey findings. While accountancy schools have made efforts to incorporate these skills into their curriculum, practitioners and employers suggest that more can be done. However, given the densely packed accountancy curriculum, adding more content would require reallocating critical curriculum resources. Schools may need to adopt a purposeful approach to imparting human skills. For instance, on average, approximately 20% of curriculum time is dedicated to general education. General education aims to cultivate well-rounded, civic-minded students, in line with the propagation of human skills. Educators could allocate curriculum time for human skills by leveraging existing general modules. These modules might cover critical thinking, communication, logical thinking, problem-solving, and other competencies, as indicated in Table 3.

|                          |                         |                                             |
|--------------------------|-------------------------|---------------------------------------------|
| <b>Communication</b>     | <b>Leadership</b>       | <b>Teamwork</b>                             |
| <b>Critical Thinking</b> | <b>Logical Thinking</b> | <b>Time Management</b>                      |
| <b>Design Thinking</b>   | <b>Negotiation</b>      | <b>Professional<br/>Scepticism/Judgment</b> |
| <b>EQ</b>                | <b>Problem Solving</b>  |                                             |

**Table 3 : Selected list of human skills**

Another approach involves getting students to intentionally develop human skills during their internships. Students can reflect on the human skills they have learned or wish to cultivate before starting their internships, ensuring that they acquire these skills as learning outcomes during their internship experience. Lastly, inviting industry speakers to share how these human skills are applied in the working world can emphasise the importance of these skills to students.

A fourth approach is for faculty to incorporate these human skills into their teaching activities and pedagogies. For example, teamwork can be cultivated when students work on group projects, and collaboration skills can be applied in case studies. It is crucial that the teaching of human skills be intentionally included in the accountancy curriculum, rather than relying on a “hopeful” approach, where it is merely assumed that these skills will somehow be taught in an ad hoc manner.

## **Recommendation 2 – Incorporate IT and digital skills**

Regarding the incorporation of IT and digital skills, accountancy schools have made significant efforts to review their curriculum and include IT and digital skills and knowledge. However, a substantial portion of these skills focuses on programming and data analytics. IT and digital skills encompass more than just data analytics; schools must intentionally cover areas such as artificial intelligence, blockchain, big data, cybersecurity, cloud computing, and machine learning. The AFA Research Report 2023 encourages accountancy schools to concentrate on what they term “A<sup>2</sup>B<sup>2</sup>C<sup>2</sup>,” which stands for analytics, artificial intelligence, big data, blockchain, cybersecurity, and cloud computing.

While comprehensive courses for teaching all these IT and digital skills may be impractical, interviewees recommend that students should at least acquire knowledge about the existence, usefulness, and business case for using these IT tools. Importantly, these IT and digital skills should be taught in the context of accountancy rather than in an abstract or conceptual form by the school of computing. Given the significance of technology and the disruption it is causing in the accountancy profession, addressing this need is urgent.

Accountancy schools can accelerate the teaching of IT and digital skills by integrating these tools into existing accountancy courses. For instance, data analytics and AI can enhance auditing courses, forensic accounting, and financial statement analysis. Additionally, inviting practitioners to demonstrate tool usage in classes would create valuable learning moments through practical examples. Another option is organising online training sessions conducted by practitioners, focusing on the practical application and business case for these tools.

Interviewees have noted that during internships, students are often taught how to use IT and digital tools. For example, interns at the Big 4 firms typically undergo a two-week orientation, during which they would be familiarised with the firm’s work processes, culture, and the IT tools used for client services. These experiences are significant learning opportunities. However, students who intern in smaller or less well-funded firms may miss out on such specialised training. To ensure students are technologically equipped, schools might consider maintaining a checklist of essential IT and digital skills before students embark on their professional careers.

## **Recommendation 3 – Incorporate ESG Skills and knowledge**

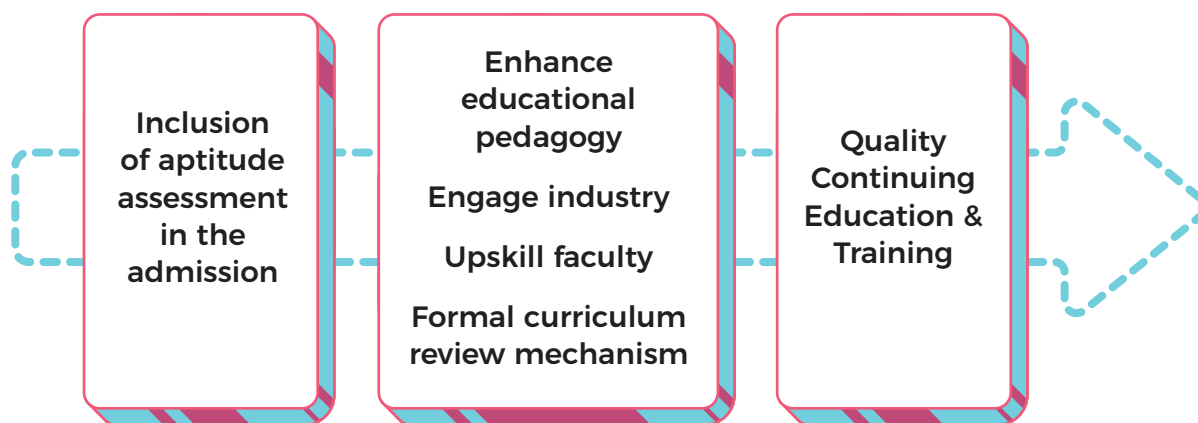
Most accountancy schools are still in the early stages of incorporating ESG skills and knowledge into their programmes, except NTU’s accountancy programme, which focuses on sustainability and analytics. As discussed in Chapters 2 to 4, ESG has become a critical aspect of accountants’ work, now and more so in the future.

Accountancy schools may be lagging behind because the ESG landscape has evolved significantly in recent years, with various frameworks and reporting regimes. The uncertainty surrounding which reporting regime will become dominant further complicates matters. However, the establishment of the ISSB and the release of IFRS S1 and S2 indicate that sustainability and ESG will soon be integral to the accountancy domain.

To address this, accountancy schools must swiftly incorporate essential ESG content into their curriculum. This involves securing subject matter experts in ESG. Given that PhDs in ESG especially in the accounting domain are still emerging, existing faculty members may not possess sufficient specialised expertise. In such cases, schools can collaborate with ESG practitioners to provide classroom training.

Developing a clear ESG teaching strategy and roadmap is crucial to ensure that graduates acquire these vital skills. The urgency stems from the rapid evolution of the ESG landscape, including the potential for limited or even reasonable assurance for sustainability reports in the near future.

#### Recommendation 4 – Process re-engineering in accountancy schools



**Figure 7 : Revamp processes in accountancy schools**

Accountancy schools should incorporate an aptitude assessment into the admission process to ensure that candidates possess the academic capability to complete an accountancy education and have an aptitude for a career in accountancy. The aptitude assessment may evaluate the candidate's attention to detail, numerical aptitude, adaptability, and ethical values, which are essential for accountancy professionals.

Accountancy schools should also re-engineer their educational pedagogy to ensure that the necessary skills and knowledge are imparted experientially, enabling students to apply what they have learned. This should include case studies, value-based learning, hands-on and practical training, especially in IT skills, and experiential learning through internships or collaboration with industry practitioners. Accountancy schools should enhance their engagement with professional accountancy organisations and practitioners. This could involve faculty attachments to the industry, structured internships for students, talent placement, and inviting practitioners to be adjunct or guest lecturers. This is vital for integrating practical accounting applications into the classroom or immersing students in the industry for practical learning. This aligns with the original concept of accountancy education as a skill-based apprenticeship.

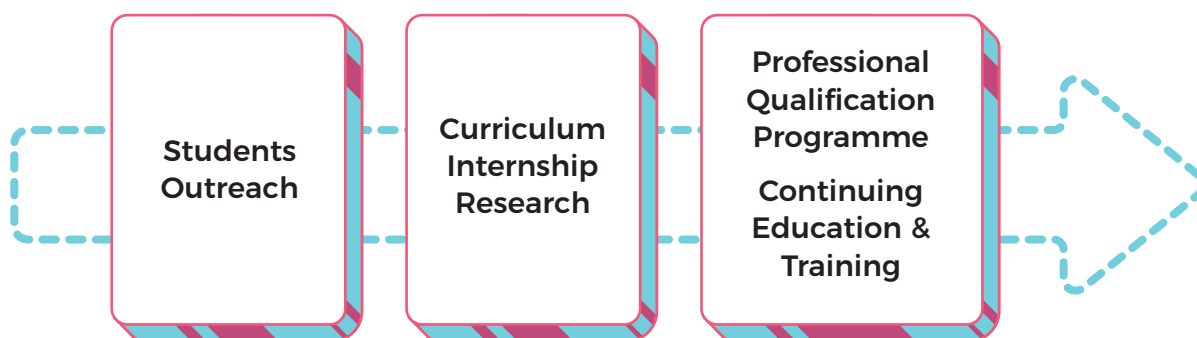
Accountancy schools may also need to upskill their current faculty or recruit new faculty with relevant IT and ESG skills. For example, it may also involve integrating technology into technical accountancy modules like audit, forensic accounting, and internal audit. For human skills, this could include retraining faculty to adopt new educational methodologies essential for incorporating human skills into the teaching of technical business and accountancy knowledge. This involves infusing communication, presentation, negotiation, critical thinking, and professional scepticism into the teaching of technical business and accountancy knowledge. Faculty needs to be equipped with ESG skills and knowledge if they are to lead their students in applying ESG skills and knowledge in the accountancy domain.

Accountancy schools should establish mechanisms for both formal and informal reviews of the accountancy curriculum to ensure it remains fit for purpose, incorporating new knowledge and skills as the accountancy industry evolves. For instance, a formal curriculum overhaul could occur every five years, complemented by an informal annual review to assess the curriculum's relevance. This process should consider what content to add or remove. Without a deliberate and formal review mechanism, there is a risk of continuous content addition without appropriate removal, or worse, ad hoc addition or removal of current content. Moreover, without such a mechanism, accountancy schools may find themselves merely reacting to industry changes rather than proactively positioning accountancy education strategically for the industry. For effective reviews, accountancy schools might need to study or visit other accountancy schools locally or internationally to search for best practices.

Additionally, schools should offer Continuing Education and Training (CET) for their alumni or accountancy professionals, fostering a mindset of lifelong learning. This training should seamlessly integrate with undergraduate pre-employment training (UPET) while providing new skills and knowledge for alumni development. Accountancy schools must work closely with PAOs, regulators, and accountancy practitioners to ensure the relevance and effectiveness of their CET programmes.

## Recommendations for PAOs and Regulators

PAOs and regulators play a crucial role in enhancing the integrity and relevance of the accountancy profession. It is in their interest that accountancy schools produce fit-for-purpose graduates who are relevant and equipped to meet the challenges faced by the accountancy profession. Based on the findings and discussions in the earlier sections, the following are priority action plans for PAOs and regulators.



**Figure 8 : Process re-engineering for PAOs and regulators**

## Recommendation 5 – Collaborate with schools

PAOs and regulators should collaborate closely with schools to engage secondary and junior college students, informing them about the accountancy profession and encouraging them to consider it as a career path. This includes conducting talks at schools and special outreach programmes, which may encompass accountancy interest camps, workshops, or seminars. Additionally, PAOs and regulators need to intensify their engagement with current accountancy students to motivate them to pursue professional accountancy qualifications.

Engagement strategies could involve offering student membership in the PAO at a discounted rate thus providing access to the resources of the PAOs. Furthermore, PAOs may exempt certain students from modules in the foundational or professional programme based on the modules they have completed or permit them to enrol in the professional examination during their final year of study. These measures will expedite the process for accountancy students to obtain their professional accountancy qualification without compromising rigour.

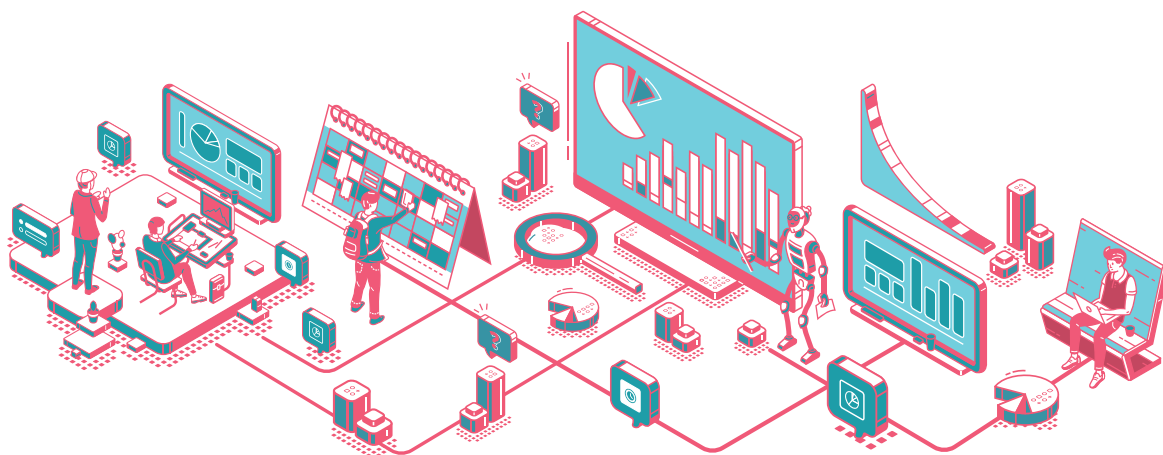
PAOs and regulators should collaborate closely with accountancy schools to provide input into the structure, content, and delivery of the accountancy curriculum. This may involve membership in an accounting industry advisory panel, the formation of an academic forum for Heads or Deans of accountancy schools, and granting observer status to selected Heads or Deans of accountancy schools on the board or governing body of the PAO.

PAOs and regulators should work closely with accountancy schools and employers to facilitate structured internships, as these provide practical training for accountancy graduates and serve as their initial engagement with the profession. Given their significant and deep ties with employers, PAOs can assist accountancy schools in establishing an internship network. PAOs could also accredit structured internships as part of the fulfilment of the required work experience for their professional accountancy qualifications.

## **Recommendation 6 – Encourage research and continuous improvement**

PAOs and regulators can promote support schemes to encourage accountancy schools to conduct research in areas that advance the accountancy profession. The investment by ISCA in research for the accounting industry is a notable example. ISCA set up a Research Network that includes representatives from accountancy schools in Singapore. The Research Network can tap on a Research Fund to propose research projects that could include those furthering accountancy education and practices. ISCA also has a separate initiative for AI. Under their AI for accountancy industry initiative, ISCA has invited accountancy schools to propose AI projects that they can fund, which will further AI in accountancy education and practices. A similar approach could be adopted for ESG initiatives.

PAOs and regulators should collaborate closely with accountancy schools to assess the relevance and effectiveness of professional accountancy qualifications. Concerns have been raised that accountancy schools may be constrained by the stringent requirements of these qualifications. The issue stems from the fact that professional accountancy qualifications are heavily examination-focused and knowledge-based, and the topics covered in the examinations can limit an accountancy school's curriculum through the accreditation process. Moreover, there is a risk that professional accountancy



qualifications may not undergo timely and thorough reviews to ensure their continued effectiveness and relevance. Therefore, PAOs may need to establish a review committee to re-evaluate their professional accountancy programmes, ensuring they remain relevant and fit for purpose.

PAOs and regulators should collaborate with practitioners and accountancy schools to provide lifelong learning opportunities for accountancy professionals, ensuring they remain well-equipped in a dynamic business landscape. They must work closely with accountancy schools to ensure that the learning process is continuous and seamless, bridging the gap between UPET and post-graduation upskilling, i.e., CET. This recognises that the training provided by accountancy schools during UPET is only a part of the overall training process for accountancy professionals. It also suggests that the traditional front-loaded accountancy training conducted by accountancy schools for UPET may no longer be sufficient.

### Recommendations for practitioners/employers

Accountancy practitioners and employers of accountancy graduates are pivotal stakeholders who can significantly influence the quality and relevance of accountancy education at accountancy schools.



**Figure 9 : Process re-engineering for accountancy practitioners/employers**

### Recommendation 7 – Enhance and promote the accountancy profession’s image

Accountancy practitioners can elevate the profession’s appeal by upholding the profession’s brand image. Additionally, by volunteering as mentors to accountancy students, accountancy professionals lend credibility to their professional conduct.

Accountancy practitioners should also collaborate closely with accountancy schools to conduct student outreach events to promote careers in accountancy. This can enhance understanding of the profession and dispel any prejudices or preconceived notions. Promotional activities could include school talks, setting up booths at school fairs, and sponsoring competitions that enhance the profession’s image.

Accountancy practitioners should seek opportunities to be guest lecturers, provide opportunities for field projects, participate in industry advisory boards, sponsor student outreach events, or even be involved in competitions like hackathons. The underlying principle is that accountancy



practitioners should invest in accountancy schools and education, as this yields substantial returns in the form of high-quality accountancy graduates. One benefit from doing so is that the practitioner's firm becomes the preferred employer for graduates, especially when they have had significant exposure to the firm.

### **Recommendation 8 – Enhance accountancy internships**

Accountancy practitioners and employers must pay special attention to student internships. The internship should be seen as part of the formal education process of accountancy education. This would require the internship to be well structured and purposeful.

Practitioners and employees must dedicate resources to create a well-planned internship. This will include proper orientation or induction, availability and commitment of mentors, meaningful and purposeful work, good supervision, opportunity for and follow-up on feedback, care for the physical and mental well-being of the interns and proper closure or debrief at the end of internship. Practitioners should treat the internship as a platform for talent hunting and give the interns reasons why they should commit to the internship firms upon graduation. Accountancy practitioners and employers should work closely with the accountancy schools on internship.

### **Recommendation 9 – Promote accountancy professional qualification**

Accountancy practitioners should support and promote professional accountancy qualifications by encouraging students or their interns to sign up for student memberships with PAOs or to begin pursuing their professional qualifications while still students. For instance, practitioners could offer financial reimbursement schemes, allowing students who start professional accountancy qualification examinations to be reimbursed for the costs once they become employees of the accountancy firms. Accountancy practitioners provide another source of advice for students, complementing the guidance from faculty or career counsellors. This collaboration enhances accountancy education, as students can see that accountancy practitioners are united in promoting and advancing the profession.

### **Recommendation 10 – Promote continuing education and training**

The disruption of the accountancy profession by technology and the inclusion of ESG have impacted accountancy education in Singapore. Schools have stepped up to review their curriculum to address these changes and demands. However, there is room for improvement, particularly in the areas of human skills, technology, and ESG. It is crucial that key stakeholders in the accountancy profession work together symbiotically to advance accountancy education.

Accountancy practitioners should work with accountancy schools to curate continuing education and training programmes and ensure their seamless integration with existing curriculum. This will provide strong integration of skills and knowledge acquisition between schools and the accountancy industry.

| Schools                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | PAOs and Regulators                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Accountancy Professionals/Employers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Incorporate human skills by enhancing the curriculum through internships and closer engagement with employers.</li> <li>• Incorporate IT and digital skills by integrating relevant IT tools into business and accountancy courses.</li> <li>• Accountancy schools to incorporate aptitude assessment into their admission process.</li> <li>• Accountancy schools to enhance their education pedagogy for effective and relevant skill development. This is to ensure the needed skills are taught effectively by faculty and learnt by the students.</li> <li>• Accountancy schools to engage the professional accountancy organisations and practitioners to integrate practical experiences and training into their teaching.</li> <li>• Accountancy schools to continue to invest in the upskilling of their faculty, ensuring they stay updated with the latest skills and knowledge required by the profession.</li> <li>• Accountancy schools to establish formal mechanism for timely review of their accountancy curriculum.</li> <li>• Accountancy schools to curate and offer continuing education and training opportunities for their graduates.</li> </ul> | <ul style="list-style-type: none"> <li>• PAOs and regulators to engage with secondary schools and junior colleges to promote the accountancy profession to their students.</li> <li>• PAOs and regulators to collaborate closely with accountancy schools to influence the accountancy curriculum.</li> <li>• PAOs and regulators to work closely with accountancy schools and practitioners to facilitate structured and intentional internships.</li> <li>• PAOs and regulators to encourage research in areas impacting the accountancy profession.</li> <li>• PAOs and regulators to work closely with accountancy schools to promote the professional accountancy qualification.</li> <li>• PAOs and regulators to collaborate with accountancy schools and practitioners to provide lifelong learning opportunities.</li> </ul> | <ul style="list-style-type: none"> <li>• Accountancy professionals and employers to promote accountancy as a desirable, reputable, and noble profession.</li> <li>• Accountancy professionals and employers to work closely with accountancy schools and engage with students.</li> <li>• Accountancy professionals and employers to participate in accountancy education as subject matter experts.</li> <li>• Accountancy professionals and employers to review their internship programme to align with the learning outcomes of accountancy schools as well as students' needs.</li> <li>• Accountancy professionals and employers to actively promote the professional accountancy qualification.</li> <li>• Accountancy professionals and employers to work with accountancy schools and PAOs and regulators to develop continuing education opportunities.</li> </ul> |

**Table 4 : Summary of recommendations for stakeholders**

## Conclusion

The accountancy profession is navigating one of its most challenging periods, characterised by declining interest from students, disruptions driven by technology and the heightened expectations of accountants. It is also a period which provides significant opportunities for the accountancy profession to re-invent itself. A crucial starting point is the development of an accountancy university education programme that is fit for purpose.

With the concerted efforts of stakeholders in the accountancy eco-system, a collective vision and combined resources, this challenging period can be transformed into a resurgent moment for the accountancy profession.

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**Singapore Management University (SMU)** is internationally recognised for its world-class research and distinguished teaching. Established in 2000, SMU's mission is to generate leading-edge research with global impact and produce broad-based, creative and entrepreneurial leaders for the knowledge-based economy. Home to around 10,000 undergraduates and postgraduates, SMU comprises eight schools: School of Accountancy, Lee Kong Chian School of Business, School of Economics, School of Computer and Information Systems, Yung Pung How School of Law, School of Social Sciences, College of Integrative Studies and College of Graduate Research Studies. SMU offers a wide range of bachelor's, master's and PhD degree programmes in the disciplinary areas associated with the six schools, as well as in interdisciplinary combinations of these areas. For more information, [please click here](#).

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