





About ACCA

ACCA (the Association of Chartered Certified Accountants) is the global body for professional accountants, offering businessrelevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management.

ACCA supports its **219,000** members and **527,000** students (including affiliates) in **179** countries, helping them to develop successful careers in accounting and business, with the skills required by employers. ACCA works through a network of **110** offices and centres and **7,571** Approved Employers worldwide, and **328** approved learning providers who provide high standards of learning and development.

Through its public interest remit, ACCA promotes appropriate regulation of accounting and conducts relevant research to ensure accountancy continues to grow in reputation and influence.

ACCA has introduced major innovations to its flagship qualification to ensure its members and future members continue to be the most valued, up to date and sought-after accountancy professionals globally.

Founded in 1904, ACCA has consistently held unique core values: opportunity, diversity, innovation, integrity and accountability.

More information is here: www.accaglobal.com

About Singapore Accountancy Commission

The Singapore Accountancy Commission (SAC) spearheads the development of the Singapore accountancy sector with the vision of developing Singapore into a leading global accountancy hub.

SAC is working to achieve this by deepening the skills of the accountancy talent pool; developing the industry to capture growth opportunities; and creating a hub and exchange by building Singapore into a centre for thought leadership. SAC is a statutory body under the Ministry of Finance.

For more information, please visit: www.sac.gov.sg

Professional Services Progression Pathways

Facilitating Business Diversification and Technology Adoption for SMPs (Small and Medium Accounting Practices)

About this report

The report looks at findings derived from recent surveys relating to both the supply and demand of professional services in Singapore. When juxtaposed, the surveys provide some clarity on the current situation of how the supply of specific professional services is matching up against demand from clients, both MNCs and SMEs; and the implications on the possible approaches for SMPs to seize opportunities to diversify and innovate their business models, which are aligned with market demand, higher productivity and long-term growth.

To ease the transition from current services to more innovative future services, this report recommends step-by-step progression pathways to guide SMPs to gradually develop into highly diversified digital firms with higher levels of productivity; that represent best practice.

The report is accompanied by a Quick Guide to Digitalisation and Business Diversification for SMPs (Small and Medium Accounting Practices), which provides information on specific illustrative progression pathways and resources that are available to SMPs.



Foreword by Jenny Gu President, ACCA



Jenny Gu President, ACCA

Professional accountants in SMPs are known to be trusted advisors to SMEs1. In this role, they can help initiate and facilitate a whole host of positive outcomes for SMEs, including advising on digital solutions, business model innovation and internationalisation. This is true not only in normal times but more crucially in crisis conditions. With the world undergoing the COVID-19 pandemic, new professional services and advice in a range of areas (including business continuity planning, remote work practices, assessing for impairments to assets) will be required. The demand for professional services from businesses worldwide is growing intensely. The need for external advice becomes urgent as more businesses, including SMEs, undergo digital transformations and are eager to re-invent their business models. External advice, in the form of professional business and advisory services, has often been used to give businesses a competitive advantage.

As noted in the ACCA's report *Scale-Up Success*², launched last year, a business that prioritises building a strong network of advisers and professionals can increase the possibility of introductions to prospective customers, suppliers and new talent. SMEs can therefore gain benefits, such as improved access to business intelligence and technological know-how by using external professional advisory services. Accessing appropriate advice can therefore make a crucial difference

to whether an SME achieves its growth ambitions. For SMPs to attract and harness the growing demand from SMEs for these professional services, it would be necessary for SMPs to diversify their practices and widen their spectrum of professional services provided. Yet the developmental pathway for SMPs is not straight-forward; challenges arise; from identifying the right skill-sets and attracting the right talent, to addressing rising operating costs.

This report, a collaboration between SAC and ACCA, provides some solutions. It looks at findings derived from recent surveys relating to both the supply³ and demand⁴ of professional services in Singapore; conducted by SAC and ACCA (and supported by SAC), respectively. When juxtaposed, the surveys provide some clarity on the current situation of how the supply of specific professional services is matching up against demand from clients, both MNCs and SMEs; and the implications on the possible approaches for SMPs to seize these opportunities to diversify and innovate their business models. To ease the transition from the current to more innovative services, this report, accompanied by the Quick Guide, has identified possible step-by-step progression pathways to guide SMPs to gradually develop into highly diversified digital firms with higher levels of productivity, which represent best practice.

Jenny GuPresident, ACCA

¹ Centre for Financial Reporting Reform, World Bank Group, Small and Medium Practices: The Trusted Advisors of SMEs, 2017.

² ACCA, Scale Up Success, What do SMEs need to supercharge their growth, 2019.

³ SAC, AEcensus 2016/17 – The National Census for Accounting Entities, 2018.

⁴ ACCA, supported by SAC, Market Demand for Professional (Business and Advisory) Services, 2018.

Foreword by Mr Evan Law

Chief Executive, Singapore Accountancy Commission (SAC)



Evan LawChief Executive, SAC

The world is seeing an unprecedented slowdown in economic growth due to the Covid-19 Pandemic. Before we were struck by this pandemic, Southeast Asia was seeing good economic growth, a bright spot on the global level. The region was forecast to grow by 4.5% in 2020⁵, and its digital economy was expected to grow to USD \$300 billion by 2025 from \$100 billion in 2019⁶. However, as we now face an uncertain economic outlook, SMPs need to rethink their strategies for growth to be ready when the global economy recovers.

In 2018, the Singapore Accountancy Commission (SAC) partnered the Association of Chartered Certified Accountants (ACCA) to conduct a regional study on market demand for professional and business advisory services in ASEAN and China, including Singapore. The report found that demand for advisory services was growing fast in all countries as clients urgently needed advice on how to shape business strategies for growth. Businesses were increasingly looking at areas such as technology adoption, mergers and acquisitions, and business model innovation as key priorities for growth. As such, they were seeking nonregulatory services such as risk advisory, and IT solution business services to transform their businesses.

AE Census 2018, the national accountancy census conducted by SAC, also indicated a rising demand for non-traditional services. Revenue for non-audit services grew 9.2%, surpassing audit revenue at 6.3%. The 2016/17 census showed that Singapore's Accounting Entities which adopted technology reported improvements in time savings of about 28%; cost savings of about 14%; revenue increase of about 8%; and improvement in controls and risk management of about 16%.

To tap on this growing market demand for non-regulatory services in the region, we found that Small and Medium-sized Practices (SMPs) need to diversify their business offerings beyond traditional services such as tax compliance, audit and assurance; and adopt technology to improve productivity to enhance their competitiveness.

This SAC-ACCA study provides a framework and possible pathways for SMPs in Singapore and the region to develop into highly-diversified digital firms with the ability to offer new value propositions.

When the world economy recovers, SMPs which transform their business models early will be in a good position for sustainable growth.

Evan LawChief Executive, SAC

⁵ Oxford Economics, 'South-east Asia GDP growth to slow to 4.5% this year', 2019 https://www.straitstimes.com/business/economy/south-east-asia-gdp-growth-to-slow-to-45-this-year-oxford-economics, accessed 10 February 2020.

⁶ Temasek Holdings and Google, e-Conomy SEA 2019, 2019, accessed 10 February 2020.

Contents

Methodology & Definitions

Executive summary	8
1. Background of study	11
2. Insights from SMP practitioners' roundtable discussion	13
3. Framework and progression pathways for SMPs	16
3.1 Framework	16
3.2 Professional services progression pathways	19
Conclusion	23
Acknowledgements & Contacts	24
Annex	25
Annex 1 – Service lines and categories (covered in survey)	25
Annex 2 – Digital technologies cited in the report	26
Tables	
Table 1: Top 10 Professional Services Demanded and Supplied	11
Table 2: SMP Personas	18
Figures	
	4=
Figure 1: Progression Pathways Framework	17
Figure 2: Components of implementation roadmap	19

Methodology

The findings of this study were based on a combination of analysis drawn from: (1) the extended findings from two surveys, previously conducted by ACCA (and supported by SAC) and SAC respectively; (2) inputs obtained from a roundtable discussion; and (3) nine in-depth interviews with professionals and key decision-makers of professional services in Singapore. References were also made to past studies and other materials available in the public domain to provide a comprehensive picture of the market.

The roundtable discussion was conducted with the participation of 13 executives and professionals, who are involved in the supply side of professional business and advisory services. Participants in the roundtable were asked to share their opinions regarding the possible pathways for SMPs to progress up the value chain to more innovative services.

The in-depth face-to-face interviews were designed to gather further comments on each of the specific pathways that might be relevant to interviewees.

A list of the participants of the roundtable and in-depth interviews is available in Section 5 – Acknowledgements.

Definitions

In this report, unless the context otherwise requires, the following terms shall have the meanings set out below.

"ACCA"	Association of Chartered Certified Accountants
"ACRA"	Accounting and Corporate Regulatory Authority
"AE" or "AEs"	Accounting Entity(ies): An Accounting Corporation, Accounting Firm, or Accounting Limited Liability Partnership, approved under the Accountants Act (Chapter 2).
"AI"	Artificial intelligence
"ASE" or "ASEs"	Accounting Services Entity(ies): An entity that does not provide audit and assurance services that are regulated by ACRA, but provide non-audit related accounting services such as basic accounting services, tax preparations and corporate advisory services.
"ASEAN"	Association of Southeast Asian Nations
"Big 4"	The four major accounting firms, namely Deloitte, Ernst & Young, KPMG and PricewaterhouseCoopers
"CEO" or "CEOs"	Chief Executive Officer(s)
"CFE"	Committee on the Future Economy
"CFO" or "CFOs"	Chief Financial Officer(s)
"CPA"	Certified Public Accountants
"DTACT"	Digital Transformation for Accountancy
"HR"	Human Resource
"loT"	Internet of things
"IT"	Information Technology
"ITM"	Industry Transformation Map
"M&A"	Mergers and acquisitions
"MOM"	Ministry of Manpower
"MNC" or "MNCs"	Multinational corporation(s)
"non-regulated service lines"	refers to largely non-regulated service lines
"PDPA"	Personal Data Protection Act
"Professional services"	The term used encompasses professional business and advisory services
"ROI"	Return on investment
"RPA"	Robotic process automation
"regulated service lines"	refers to largely regulated service lines
"SAC"	Singapore Accountancy Commission
"SME" or "SMEs"	Small and medium enterprise(s), enterprises with revenue of less than SGD100 million
"SMP" or "SMPs"	Small and medium accounting practice(s)
"WSG"	Workforce Singapore



INTRODUCTION

As an economic hub, Singapore, not only attracts professional services but also increasingly provides these services to the region and the world at large. The CFE (Committee on the Future Economy) report recommends that professional services providers build expertise to participate in the region's growth, as well as facilitate the expansion of Singapore-based companies into the region⁷. While some SMP have expanded operations and activities regionally, many are finding it difficult to extend beyond Singapore. A study⁸ by the SAC, with research partner ACCA and supporting partner IE (International Enterprise) Singapore, concludes that regionalisation efforts are more successful for multidisciplinary practices. The key to internationalisation and regionalisation for SMPs therefore points to business diversification, facilitated by technology adoption. Yet, some SMPs (as shown by interviews conducted for this study) are unwilling to invest due to the uncertainty in demand for specific professional services.

DEMAND AND SUPPLY OF PROFESSIONAL SERVICES

In 2018 ACCA, supported by SAC, recognised this concern and embarked on a study and survey to gauge the demand for specific professional services. The report entitled Market Demand for Professional (Business and Advisory) Services⁹, examined market demand for professional services in Singapore, the ASEAN region and China over 3 years to the end of 2020. It highlighted the most demanded professional services by corporates and provides advice on how consultancies, including SMPs, can enhance their service delivery. It also provided feedback to businesses on areas where other businesses, including their competitors, are leveraging on external advice to give them a competitive edge.

Based on the survey, it was observed that enterprise demand for professional services is growing beyond compliance and regulatory requirements, in view of the dynamic business environment that is changing constantly due to (among other drivers) regulatory updates, digital transformation, and globalisation. In the context of globalisation, businesses worldwide are increasingly engaged in operations in multiple geographies, and SMPs should not be an exception. In addition, agility is crucial as it allows greater flexibility and responsiveness, leading to improved SMPs' efficiency and resilience.

Conversely with the "market demand survey" discussed above, SAC conducts the "AEcensus" annually. The AEcensus is the national census on the accountancy sector to gather insights that will help the sector in its strategies to innovate and grow. Amongst other data, it provides the revenue derived by AEs (Accounting Entities) annually from specific professional services. In other words, it provides data on the supply of professional services by AEs, including SMPs.

⁷ CFE (Committee on the Future Economy), Pioneers of the Next Generation, February 2017.

⁸ SAC (with research partner, ACCA), AE (Accounting Entities) Regionalisation Survey 2016, 2017.

⁹ ACCA, supported by SAC, Market Demand for Professional (Business and Advisory) Services, 2018.

This study aims to present implications on the possible approaches for SMPs to meet these changing demands and move up the value chain via two key pathways – business diversification and technology adoption.

PROFESSIONAL SERVICES PROGRESSION PATHWAYS

These surveys, conducted by ACCA and SAC, when juxtaposed in this study, have provided some insights on the current situation of how supply is matching up against demand of professional services in Singapore. Through this analysis, the study found specific highly demanded professional services that were in short supply. For example, it was observed that the demand for professional IT related advisory services, from a business perspective, was high. This is not surprising as more businesses are adopting technology to transform their businesses as indicated by the sharp rise in revenue from IT advisory services. This doubled from \$35.8 million in 2016 to \$81.6 million in 2017. The Big 4 and large SMPs expect demand for IT advisory services to grow further in 2019¹⁰. Using these findings, this study aims to present implications on the possible approaches for SMPs to meet these changing demands and move up the value chain via two key pathways – business diversification and technology adoption.

In this report, a framework with a matrix, comprising of basically two progression pathways, towards technology adoption and diversification of services, were developed by ACCA and SAC. Using this framework, 4 "personas" or profiles of SMPs were identified, as follows: those with low diversification and low technology adoption; low diversification and high technology adoption; high diversification and low technology adoption; and finally, high diversification and high technology adoption.

Based on this framework and personas, detailed "progression pathways" were validated. This formed the basis of the recommendation made in this study, for SMPs to make incremental changes for their transformation, from a number of different starting points, based on their personas. These progression pathways are discussed in more detail in the *Quick Guide* that accompanies this report, which provides guidance on how SMPs can achieve business diversification and digital maturity. The roadmap to technology adoption for SMPs has been discussed in

ACCA's report entitled the *Passionate Practitioner*¹¹, which recommends a 3-steps process to consider the following: strategy and plan, capability development and maintain and grow. The progression pathways, discussed in more detail in Section 3 of this report, is an integral part of capability development.

KEY FINDINGS

The key findings of this study are as follows:

- Digitalisation should precede any diversification of services as there is evidence that SMPs that diversify without undergoing digitalisation may suffer from lower productivity¹².
- 2. Extending and diversifying services beyond regulatory compliance is essential for SMPs to stay relevant in the future economy. The majority of SMPs currently provide mainly traditional compliance-based services; such as audit, tax compliance and corporate secretarial services¹³. However, as the economy transforms rapidly, SMPs should keep pace by offering a wider spectrum of advisory-based services which clients are increasingly demanding, to minimise their own business risks.
- 3. A pro-active approach, in anticipation of changing market demands will ensure a more sustainable practice for SMPs. In growing their service offerings, SMPs often choose a reactive approach, only responding to changes when there are significant enquiries from clients on new services. However, going forward, a greater responsiveness to market demand, ahead of changes taking place, will become necessary.
- 4. SMPs should evaluate internal skills and competencies, training programmes and expertise available; as well as continuously developing their own local and international networks through alliances to reach out to talent and relevant expertise. Various assistance schemes and subsidised training programmes are increasingly becoming available that SMPs can take advantage of, to upskill and reskill. Details can be found in the Quick Guide accompanying this report.

¹⁰ SAC, AEcensus 2018 – The National Census for Accounting Entities, 2019.

¹¹ ACCA, The Passionate Practitioner, 2019.

¹² SAC, AEcensus 2018 – The National Census for Accounting Entities, 2019.

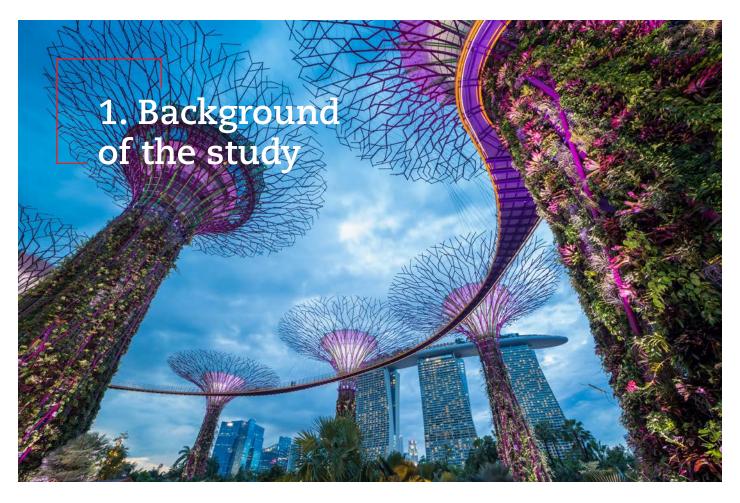
¹³ SAC, AEcensus 2016/17 – The National Census for Accounting Entities, 2018.

SMPs should seize the current opportunities to transform their practices, using business diversification and technology adoption as key guiding strategic objectives.

- 5. SMPs can progress more effectively by moving incrementally towards a greater diversification of services; as illustrated in this report (see Section 3: Framework and Progression Pathways for SMPs) and the accompany Quick Guide, that builds incrementally on their knowledge and skills. This will capitalise on their existing strengths as they move forward towards best practice, while targeting those pathways that will lead to productivity enhancements. For example, the skills-sets associated with performing a statutory audit provide a good foundation to develop adjacent competencies such as the ability to evaluate internal controls in a systematic manner and make risk assessments. These skillsets could then be further enhanced to provide a highly demanded cutting-edge service, using control and data (risk) analytics.
- 6. From the sectorial perspective, there are specific progression pathways towards best practice and higher productivity relevant to SMP subpopulations. These pathways relevant to "personas" which characterise these SMP sub-populations, are discussed in more detail in Section 3 of this report.

CONCLUSION

With rapid globalisation and pervasive automation of businesses, SMPs in the professional services sector are wellpoised to evolve into next generation digital firms. This study provides a practical guide to identify pathways that SMPs can use to transition from today's traditional compliance-based services to the innovative services of the future, many of which have been identified in the CFE report¹⁴, as well as the general literature. SMPs should seize the current opportunities to transform their practices, using business diversification and technology adoption as key guiding strategic objectives.



This report is a sequel to Market Demand for Professional Business and Advisory Services¹⁵, a research study conducted by ACCA and supported by SAC, published in May 2018 (the Market Demand report).

The research examined professional services most demanded by corporates in the next three years across countries in Asia, particularly Singapore, China and the ASEAN region, and highlighted key areas of improvement for SMPs to enhance, in terms of service offerings and delivery. Respondents to the research survey represented both small and big enterprises across a variety of industries and sectors. Majority of the respondents (64.7%) were holding positions of CEO, General Manager or Managing Director, CFO, Finance Manager, and Accounting Manager.

Correspondingly, on the supply side of professional services, SAC, with the support of ACRA, MOM and WSG, conducted another survey from 31 August to 1 October 2018, entitled AEcensus 2018, which targeted AEs and ASEs practising in Singapore. This survey was aimed at understanding the growth in revenue, productivity and jobs, as well as key insights into the development of the accounting sector. The survey received responses from 167 AEs and 21 ASEs, including the Big 4.

Findings from the two surveys, when reviewed together, provided some clarity on the current situation of how supply is matching up against demand, and implications on the possible approaches

for SMPs to address the demand-supply gaps. The *Market Demand* report and the AEcensus 2018 revealed the services most demanded and supplied in Singapore, as summarised in the table below.

TABLE 1: Top 10 Professional Services Demanded and Supplied

TOP 10 SERVICE LINES DEMANDED	TOP 10 SERVICE LINES SUPPLIED
#1 Statutory audit	#1 Statutory audit
#2 IT solution business	#2 Corporate tax
#3 International tax advisory	#3 Statutory financial reporting/compilation
#4 Compliance in corporate and personal tax	#4 Book-keeping
#5 Debt and capital advisory	#5 Corporate secretarial and legal services
#6 Corporate secretarial and legal services	#6 Other assurance
#7 Technology consulting	#7 Personal income tax
#8 Data analytics	#8 Compliance in GST
#9 Other assurance	#9 Payroll
#10 Accounting advisory	#10 Insolvency services

Notes

Ranking of the service lines most in demand is based on the approximate budgeted expenditure on each service line over the next three years by the business or corporate (i.e. the potential client of an SMP). A list of the service lines under review is provided in Annex 1. Ranking of the service lines most in supply is based on the number of AEs providing the services, based on SAC's AEcensus 2018 – The National Census for Accounting Entities.

Source: ACCA, SAC

The growing demand for advisory services will likely push SMPs to upgrade themselves, to be able to deliver services that are relevant to their clients' changing business needs.

As a whole, the top enterprise demand for professional services comprises mainly non-regulated service lines. Besides IT solution business, the top 10 service lines in high demand in the next three years for Singapore include six other nonregulated service lines, namely International tax advisory, Debt and capital advisory, Technology consulting, Data analytics, Other assurance, and Accounting advisory. The three regulated service lines in the top 10 professional services in demand are Statutory audit, Compliance in corporate and personal tax, and Corporate secretarial and legal services. Overall, advisory services and technology-related services dominated the demand side of the list. In contrast, the supply side did not reflect IT-related services amongst the top 10. Majority of the top supplied service lines pertained to traditional professional services.

The Market Demand report highlighted that while traditional service categories like Audit and assurance and Tax advisory & compliance will continue to account for a substantial proportion of corporate budgets for professional services, IT advisory is the non-regulated service category most in demand across the surveyed countries and region. Similarly, data collected from the AEcensus 2018 showed that Audit and assurance remained the primary source of revenue for AEs other than the Big 4. It was noted, however, that revenue generated from non-audit services recorded higher growth than revenues from audit services¹⁶.

Within the IT advisory category, IT solution business is the service line that companies plan to spend the most on. This could be attributed to the fact that "Increase in higher value-add work through automation" was most commonly perceived as a driver of growth for surveyed companies. Businesses have to change and update constantly in this age of technology advancement. This has resulted in emerging problems associated with technology applications, and existing issues evolving into new forms. It is, therefore, inevitable for SMPs to adapt to the changing business environment, embrace the trends, customise solutions further, and expand their skill sets beyond the traditional knowledge, so as to meet corporate needs.

The AEcensus 2018 revealed that while the Big 4 are offering a more comprehensive range of services, SMPs usually do not have the resources or expertise to provide all service offerings. SMPs typically supply a high volume of regulated compliance-based services such as statutory audit, corporate tax and statutory financial reporting and compilation and several common non-regulated service lines like bookkeeping, other assurance and payroll. However, in terms of service lines that often require knowledge beyond accounting and/ or advisory offerings outside the local context, SMPs seem to be less active, and therefore, have difficulty in catering to new and emerging issues faced by their clients. As such, there is an urgent need for SMPs to strengthen their offerings beyond compliance requirements due to the changing business environment.

Extended findings from the Market Demand report have shown that the demand for these services could be correlated, whereby a client's need for one service denotes a significant likelihood that this client will require some other certain services. For example, clients requiring assistance for Strategy formulation and implementation also tend to seek help regarding HR compliance, Business model innovation, Process improvement, Succession planning, Corporate restructuring, Technology risk advisory, Internal audit, and Reorganisation.

The correlation amongst the service lines suggests a much wider requirement for non-regulated services, and those SMPs that are able to extend their range of service offerings are likely to experience better revenue growth. The growing demand for advisory services will likely push SMPs to upgrade themselves, to be able to deliver services that are relevant to their clients' changing business needs. Early planning to migrate and transform skills to include business and advisory services would be crucial to the sustainability of SMPs.



In reviewing the potential gaps between the demand and supply of professional services, ACCA and SAC conducted a roundtable discussion, with the participation of 13 senior executives from various SMPs.

Participants were asked to share their opinions regarding the possible pathways for SMPs in Singapore to re-skill and up-skill themselves in addressing the unmet demands identified in the Market Demand report and the AEcensus 2018. Through this session, the discussion provided further depth on the background of drivers to the supply of professional services and highlighted potential issues that SMPs could face in their developments. In addition, the roundtable discussion raised feedback on how SMPs could be assisted to develop a talent base that can provide professional services most in demand by the market. ACCA and SAC also acquired valuable input for establishing specific steps for SMPs to progress from their status quo to best practice. This chapter summarises the key points of discussion presented at this roundtable.

DEMAND IS THE MAIN "PUSH FACTOR" DRIVER FOR SUPPLY

The roundtable discussion revealed that SMPs often choose a reactive approach, rather than a proactive one, in growing their offerings. Instead of taking the initiative to upgrade their in-house capabilities to embrace future possible new needs, some SMPs have the tendency to only respond to changes when there are significant enquiries from their clients on services that are not yet in their portfolios. Often, SMPs are concerned with whether such new service offerings are sustainable, and if clients are prepared to pay for services that they have requested for. The motivation to extend into a new service offering creates a dilemma for many SMPs; as it is not clear whether they should invest and build capabilities to provide a new service first or to wait for clients to demand for that service. The discussions also highlighted that SMPs might not even notice the incremental changes to certain trends that are happening gradually and could be unaware of the potential market size of the new service offering, causing an apprehension to progress forward.

COLLABORATION

A possible approach in addressing the dilemma is to consider working with a likely partner that is already in the space of the new service offering, with good fundamentals or reputation, and share a similar culture. Partnering is the first step to open access into the new service offering, a way forward to achieve the end goal without having to change the corporate structure of the firm.

SMPs can work collaboratively to tackle issues that require more resources than their available individual capacity and capability. For this to occur it is important that SMPs build trust in their practices, as one of the challenges to overcome relates to liability and confidentiality issues that arise when collaborating. In certain cases, SMPs would hesitate to seek help from another SMP, particularly for regulated services, since it would be difficult to determine who would bear which part of the liability concerning the provided services. SMPs can address this challenge by clear communications and a systematic review of complementary strengths of the teams that will be

The push for diversification amongst SMPs is necessary for long term sustainable business growth of the firms, and the sector as a whole.

engaged on the specific project. For ensuring quality of service, SMPs also need to be cautious in selecting who to collaborate with, in order to avoid putting their own business at peril. Furthermore, involving external SMPs entails sharing sensitive information such as client details or network contacts, amongst others, which SMPs would not be willing to share with outsiders. In this regard, SMPs must ensure observance with professional accountants' confidentiality rules; as well as personal data protection regulations.

KEY FACTORS TO ADDRESS WHEN CONSIDERING DIVERSIFICATION

The drive to push SMPs towards business and advisory services has been an on-going effort by governments and professional bodies globally. The push for diversification amongst SMPs is necessary for long term sustainable business growth of the firms, and the sector as a whole.

Participants at the roundtable were in agreement that diversification of services is an area where SMPs "have a choice". Diversification is possible when SMPs have the capability and capacity to invest in developing new businesses. Transformative change takes time and firms might not see benefits immediately, so it is best that SMPs view spending on implementing these changes as investment rather than expenditure.

However, rather than waiting for new demand to come, SMPs should be proactive and embark on building skills ahead of anticipated trends. A leading SMP who shared its success story in growing its international tax advisory team said that it started from a strong belief amongst the partners that there is a need to have such a team, and they grew this division gradually, while keeping an eye on core "bread and butter" divisions. Diversification, however, is challenging in practice, especially in the context of SMPs. It was emphasised during the roundtable discussion that for

diversification to take place, there is a need for SMPs and clients alike to have "a mindset change" that SMPs, especially small and medium ones, can do more than traditional audit and assurance tasks.

The roundtable discussion pointed out that one of the main hurdles encountered at the initial stages of diversification is how to secure and retain capable personnel, as "not everyone is willing to join an SMP". In starting a new service offering, a senior executive is required for client servicing, growing the pipeline and delivering the solution(s). The professional is expected to not only be technically competent, but also be able to analyse and present financial standing and solutions for the organisation. Not only are candidates with specialised knowledge and experience rare, many of them are from the Big 4 AEs. Such candidates may be generally difficult for SMPs to attract, as they may prefer working in MNCs.

SMPs intending to diversify will be faced with numerous risks as well as the uncertainty that the fields they are expanding into will be successful. To help these practices in Singapore to move forward with diversification, several incentives are available in the forms of tax waivers, grants, and funding for capability development courses, to name a few. Although these forms of support may be helpful, there remain areas where assistance is still lacking or not motivating enough. For instance, it is perceived that current tax incentives sometimes do not have the desired impact.

Participants felt that, considering the resources required to diversify, digitalise and train their staff, more support can be provided. Furthermore, SMPs could use some assistance in helping them gain more information on the marketplace, so that they can establish a better understanding of the trends in demand and be more committed to diversifying.

As businesses increasingly leverage on technological innovations to move up the value chain, accountancy professionals also need to transform themselves to respond to their clients' needs.

DELIBERATIONS REGARDING TECHNOLOGY ADOPTION

New technologies such as AI, blockchain, and cloud computing, amongst others, provide new ways of narrowing the trust gaps in business dealings. The Market Demand research found that 90.4% of respondents in the ASEAN region perceived that they are not yet at a high level of automation, and 28.8% of these respondents are either largely manual or not very technologically mature. In Singapore, according to the report, the technological maturity within the services segment (as defined in the report) appears to be higher than those in the production segment; with 80.4% of respondents in the former, and 69.2% of respondents in the latter being at a medium-to-advanced level of automation. As such, technology adoption is an expected trend for SMPs to be mindful of. However, during the roundtable discussion, justifications to the ROI (Return on Investment) for technology adoption remain a challenge. While the adoption of technology allows SMPs to become more proficient and productive, such adoption is necessary to "stay in the game", but does not generate additional revenue, as clients' expectations commensurate with the increased proficiency. Revenue generation only commences when SMPs "have the volume to cover".

The AEcensus 2016/17 found that in 2016, the median spending on technology adoption amongst AEs was SGD10,000. Larger AEs spent more on technology adoption than smaller ones did. AEs that introduced technology into their processes recorded improvements in time savings, cost savings, control and risk management, as well as some revenue increment (8%). Perceived high cost, lack of knowledge to select the appropriate software, and not seeing the need for change were amongst the reasons for AEs with low adoption of technology.

This also aligns with another concern raised during the roundtable discussion; it was pointed out that the limited number of software available for SMPs in the Singapore market puts a limit on the extent to which SMPs can adopt new technologies in doing business.

Digital disruption is forcing SMPs to adapt to changes and keep up with new trends. As businesses increasingly leverage on technological innovations to move up the value chain, accountancy professionals also need to transform themselves to respond to their clients' needs. Industry 4.0, IoT, and blockchain are amongst the most mentioned key trends by businesses in this digital era. Technology adoption is relevant from the perspectives of both SMPs and their clients. It was mentioned during the roundtable discussion that SMPs are being forced to introduce more automation, as their customers are increasingly digitising their processes. SMPs that do not embrace technology would not be able to keep up with their clients' emerging needs in the new context.

Growing intense competition in the marketplace is also pushing SMPs to innovate themselves. Technology adoption amongst SMPs is often regarded to be a "must have" to cope with disruptions such as regulatory changes and growing compliance requirements taking place within the industry; and to improve productivity. However, technology adoption also comes with a set of challenges, amongst which include the high cost of technology implementation, lack of training on the proper use of technology, the reluctance and complacency of clients in the adoption of technology, and concerns over security and PDPA (Personal Data Protection Act) matters. As raised by a roundtable participant, SMPs are not transforming themselves fast enough digitally.



Following the roundtable discussion conducted on 15 January 2019, participants generally agreed that the forward direction for SMPs to progress should involve the diversification of services and technology adoption.

To assist SMPs in their development, ACCA and SAC jointly came up with a framework and some pathways for SMPs to progressively and incrementally develop skills and knowledge in providing specific professional services that are currently in short supply, but with high demand. Examples of such services include technology consulting and advisory, international tax advisory, and debt and capital advisory in relation to restructuring and insolvency work.

3.1 FRAMEWORK

To better understand the profiles of the current population of SMPs, the data from the AEcensus¹⁷ report was analysed. It was natural to classify SMPs into those which had a high level of technology adoption and digital proficiency; and those that were not. Furthermore, it was also easy to distinguish the majority of SMPs who were providing traditional compliance-based regulated services from those that were more diversified and providing more innovative services that were generally advisory in nature. Using these 2 dimensions of "technology

adoption" and "service diversification", a matrix of 4 profiles or personas were charted, as discussed below.

To progress, SMPs can consider growth in the form of technology adoption and/or diversification of services. Technology adoption generally refers to the move from manual work to the utilisation of sophisticated technologies. SMPs can start with the take-up of basic accounting software such as, MYOB, SAGE 300 or Xero; before adopting or embedding more complex technologies such as robotic process automation (RPA), data analytics and AI to offer higher value, insights-driven services.

Digitally transformed SMPs will be more ready and inclined to provide technologically oriented digital service offerings. Diversification of services can be defined as improving service offerings and exploring new growth markets. Highly diversified SMPs tend to provide advisory services, while those that are not highly diversified do not provide any significant level of advisory services.

Re-skilling and up-skilling, internationalisation, productivity improvements, and innovation are some ways to keep up with the times and satisfy the demand in a variety of areas.

To facilitate a systematic migration from current services to more innovative services of the future, a framework of "personas" and "pathways" was developed as part of this research study, based on the two dimensions of technology adoption and diversification of services; as shown in Figure 1, below.

Personas

The framework above classifies SMPs into four personas, depending on their existing level of technology adoption and diversification, as discussed below.

SMPs can use this framework by first identifying their personas and then looking at the broad pathways that apply to them. After which they can explore more detailed and specific progression pathways, which are discussed in the subsequent sections.

These persona categories can be flexible. In some cases, it may not be appropriate to restrict an SMP to a single persona as different departments in an SMP may exhibit characteristics of different personas.

There are 2 broad pathways in the Framework that will ensure a steady rise in productivity and revenue growth. Productivity is defined as revenue, divided by the number of employees. Research¹⁸ and further analysis, show that productivity levels are different for the different personas. Many SMPs may strive to reach Persona 4, which has the highest productivity level. However, SMPs that want to specialise and serve a niche market may set Persona 2 as their goal, although these have historically seen lower productivity levels, relative to Persona 4.

Those in persona 2 and 4 tend to have higher productivity or generate higher revenue per headcount while those in persona 3 generally report lower revenue per employee. As such this report will focus on the pathways for those in persona 1 to progress to persona 2; and persona 3 to persona 4 (digitalisation) and for persona 2 to persona 4 (diversification). The AEcensus 2016/17,

*High diversification – providing 1 or more advisory services

Singapore's national accountancy census conducted by SAC, showed that SMPs that adopted technology indicated significant improvements with time savings of around 28%, cost savings of 14% and 8% increase in revenue¹⁹. SMPs are therefore encouraged to proceed with digitalisation, before they embark on service diversification. In fact, digitalisation will allow SMPs to automate mundane tasks, freeing up time to explore new service lines.

These persona categories can be flexible. In some cases, it may not be appropriate to restrict an SMP to a single persona as different departments in an SMP may exhibit characteristics of different personas. For example, digitalisation may not be firm-wide but may occur in specific departments and not in others. Regardless of the persona an SMP identifies with, and its eventual goal, this framework could be helpful in offering guidance on potential progression pathways.

FIGURE 1: Progression Pathways Framework **Diversification of Services** Persona 2 Persona 4 Highly digitalised Highly digitalised Lowly diversified Highly diversified *Technology Adoption* Pure Audit SMP \$81,700 Advisory SMP \$98,900 Traditional SMP \$84,600 Persona 1 Persona 3 Lowly digitalised Highly diversified Pure Audit SMP \$59,900 Advisory SMP \$65,000 Traditional SMP \$71,200 Digitalisation **Progression Pathways:** Diversification Source: ACCA, SAC Productivity (as represented by Revenue per Employee)20 *High technology adoption – adoption of 5 or more solutions

¹⁸ SAC, AEcensus 2018 - The National Census for Accounting Entities, 2019. 19 SAC, AEcensus 2018 - The National Census for Accounting Entities, 2019.

²⁰ Productivity figures are from SAC, AEcensus 2018 - The National Census for Accounting Entities, 2019.

SMPs generally agreed that technology adoption and service diversification is the way forward for them.

Persona 1 (Low-Tech and Low Diversification)

Persona 1 SMPs have low levels of technology adoption and diversification and make up the bulk of SMPs in Singapore. Such SMPs usually provide only traditional compliance-based services, such as audit services and/ or bookkeeping services mainly for regulated reporting and filings; mainly to SMEs. These SMPs are also usually not technology savvy; operating mostly manually or with the help of basic software like Microsoft Excel.

Persona 2 (High-Tech and Low Diversification)

On the other hand, Persona 2 SMPs, while still not very diversified, have high levels of technology adoption. Such SMPs could be growing with the aid of technology before diversifying and could be specialists in a certain field. SMPs that fall under Persona 2 would generally have harnessed cloud technology (like Xero), more advanced accounting software with analytical tools, and other technological solutions such as mobile payment and e-signature platforms.

Persona 3 (Low-Tech and High Diversification)

Persona 3 SMPs are those with low levels of technology adoption, but high levels of diversification. Typically, Persona 3 SMPs have a large variety of advisory-based service offerings but may not have incorporated much technology into their operations yet. Besides essential services like bookkeeping, statutory audit, payroll and corporate secretarial services, these SMPs would have ventured into the provision of other advisory related services such as process improvement,

sustainability reporting, international tax advisory, or M&A due diligence, just to name a few.

Persona 4 (High-Tech and High Diversification)

Lastly, Persona 4 SMPs are those with high levels of technology adoption and are very diversified. Such SMPs are firms, usually with regional presence. Persona 4 SMPs may provide (traditional) professional services using a digital platform or framework, and also, professional advisory services which may include IT business solutions, technology consulting and technology risk advisory, amongst others.

Pathways

According to this framework, there are three viable pathways, from I to III, towards greater technology adoption and service diversification; as shown in Table 2, below. Details of the progression pathways are expanded, below, in Section 3.2 Illustrative Professional Services Progression Pathways.

Validation of framework

To validate this framework, face-to-face interviews were conducted with nine SMPs, both large and small, in meeting with the different personas identified in Table 2 below. SMPs generally agreed that technology adoption and service diversification is the way forward for them. Technology adoption was cited to improve productivity, efficiency, and reduce friction between the SMP and its clients, which could previously be caused by missing documents or missed deadlines. Diversification, on the other hand, allows SMPs to expand their clientele base and serve a larger market, generating revenue growth.

TABLE 2: SMP Personas

(BROAD)	MIGRATION		
PATHWAY	FROM	то	
I DIGITALISATION	Persona 1 (Low Technology Adoption, Low Diversification)	Persona 2 (High Technology Adoption, Low Diversification)	
	Persona 3 (Low Technology Adoption, High Diversification)	Persona 4 (High Technology Adoption, High Diversification)	
II DIVERSIFICATION	Persona 2 (High Technology Adoption, Low Diversification)	Persona 4 (High Technology Adoption, High Diversification)	

Source: ACCA, SAC

Work out when you are going to start, and the pace at which you are going to transition both clients and staff to the new way of working.

In reviewing each pathway, affirmation was first obtained on the current services offered by the SMP to identify the relevant persona fit. Each of the relevant pathways was reviewed, row by row, to ascertain the accuracy and possibility of progression. These SMPs also assisted in validating other pathways that they are not currently on, based on their past experiences. The validated pathways are detailed in the Section below.

3.2 PROFESSIONAL SERVICES PROGRESSION PATHWAYS

The illustrative professional services progression pathways, in the Quick Guide accompanying this report, provide a less onerous way for SMPs to develop skillsets and resources, moving away from their current traditional compliance-based services to innovative services which are highly demanded by their prospective clients (as identified in Table 1, above, and the high growth areas identified in the CFE report²¹), while improving productivity levels.

Pathway I: Digitalisation

Accountants need to bear in mind that their clients' businesses are also being disrupted, and that by digitalising accounting they have put themselves at the heart of that.²²

The implementation road map for digitalisation, derived from the lessons gathered from the current adopters, consists of a three-step process; as shown in Figure 2 below.

Strategise and Plan

Assess the current client base:

What software, if any, are they using now - both for accounting and in other areas of their business? Will they welcome the

move – or resist it? On what markets do you currently focus - is your practice geographically based or do you focus on industries or sectors? Do your customers fall into a size range?

Assess the future client base: How much of your digital practice will come from transitioning existing clients and how much from new business? Where will growth come from: will it be like-for-like or will you develop vertical specialisations or move beyond your current geographical range? What will be your future market differentiator?

Decide what to do with legacy customers: Will you gradually wind them down, encourage them to move elsewhere, or charge them fees that reflect their true cost to the business?

Timing: Work out when you are going to start, and the pace at which you are going to transition both clients and staff to the new way of working. Funding and investment. Assess the probable impacts, positive and negative, on revenues and resources during the transition, and when you will start to see a payback. Do you need to set aside specific funding for the project? Several countries, such as Australia, offer grants to support the digitalisation.

Assess staff skills: Everyone will need training, but some may be more 'digital ready' than others. If setting up a separate team, look at the balance of experience within it, and staff's ability to communicate with and support clients.

Seek support from peers: The digital accounting community is tightly knit and highly communicative. There are a plethora of roadshows and conferences

FIGURE 2: Components of implementation roadmap







Source: ACCA, The Passionate Practitioner, 2019

²¹ CFE (Committee on the Future Economy), Pioneers of the Next Generation, February 2017.

²² ACCA, The Passionate Practitioner, 2019.

Accountants will play a key role in streamlining those processes, linking systems and helping them introduce new apps and functionality.

and many of these have been captured and put on the Web. Many accountants are happy to discuss their experiences, and some are even moving into paid consultancy to help others digitalise.

Cyber risk management: Cyber security is an absolute priority for accountancy firms, none of which would have made the journey had their concerns not been adequately addressed. It is a risk that cannot be ignored, however just because the software and data is resident in the cloud.

Develop Capacity

Try the software: Most suppliers will offer the opportunity to test their products. Take advantage of this to investigate the features and see if you can persuade your clients to do the same. Select a software platform. This should be primarily driven by the characteristics and needs of the client base, and then the best fit for the practice. Decide early on whether you need or want to support more than one platform. Because clients will be using the software, this is not a purely technical decision: ease-of-use and even aesthetic appeal come into play. Decide on pricing models. The move to digital pretty much entails a shift to a subscription model, paid monthly, and tiered according to customer size and needs or through hybrid pricing models.

While firms have a 'shop-window' of three or four service bands, it is possible to create bespoke packages based on clients' requirements. As the advisory side of the business develops, firms will need to decide what advice will be 'given away' as part of the package and what will evolve into separately chargeable products and services. Appoint a 'digital champion' to lead the project or team. This does not have to be a senior partner but does need to be someone with the full authority of the practice leadership to drive the project.

Communicate: Make sure that staff and customers are fully informed of what is going to happen and kept updated on progress. Use social media and tools such as SurveyMonkey for surveys, Zoom, Loom, and Slack for communications, and MailChimp for newsletters, to make sure that communication is two-way, and that people can share their concerns and experiences and support each other.

Skill development and learning programmes: Ensure that staff and clients are fully trained and certified to use the new systems as effectively and efficiently as possible. Consider the interpersonal skills needed to operate in the new business model.

Evolve and grow

Specialise: Digitalisation offers a renewed opportunity to evaluate and segment your client base, building 'app stacks' that suit particular types of client and vertical sector.

Keep evolving: The core of a digital accountancy practice is the accounting platform, plus apps such as Receipt Bank and Hubdoc to handle transaction entry and document management. But this should just be the beginning of a wider move to automate and integrate more and more of the practice and your clients' businesses. Use data. Think about how the increased amounts of data and access to data can be used to benefit both your clients' businesses and your own.

Add new service lines: Create new offerings for your clients – financial and non-financial – using the time freed by digitalisation. Establish yourself as a key adviser, enabler of growth and driver of business performance.

Keep abreast of the digital world:

Digitalisation is not a 'fit and forget' exercise: the software is continually evolving and expanding its capabilities, both internally and through evolving ecosystems of apps. Either set aside time to do this or consider employing dedicated resources. Be prepared for the evolution of the market to be regularly disrupted by waves of innovation that may prompt a complete rethink of your digital strategy.

Become a digital enabler for your clients: Accountants need to bear in mind that their clients' businesses are also being disrupted, and that by digitalising accounting they have put themselves at the heart of that. Clients will need support to move to the new system, but the ramifications will spread far beyond that and begin to affect all the processes in their business. Accountants will play a key role in streamlining those processes, linking systems and helping them introduce new apps and functionality.

Please see the Quick Guide that accompanies this report for specific illustrative progression pathways for digitalisation.

The IDP works as a guide for local SMPs in the Accountancy industry to digitalise their businesses, plug skills gaps and participate in industry pilot projects.

Assistance Schemes and **Subsidised Training Programmes** for Digitalisation

The Singapore government's IDP (Industry Digital Plan)²³ was launched in 2019. The IDP works as a guide for local SMPs in the Accountancy industry to digitalise their businesses, plug skills gaps and participate in industry pilot projects. Aligned to the ITM and Accountancy Roadmap launched in 2018, the Accountancy IDP is part of the SMEs Go Digital Programme.

An SMP Centre²⁴ and an Accounting Technology & Innovation Centre (AccTech Centre) were also launched to support SMPs' digital development. The SMP Centre is a dedicated, one-stop platform of information, tools and services that help SMPs to build productive and competitive businesses. It will assist SMPs to assess their digital readiness, adopt digital solutions, enroll for training programmes and co-create with others digital innovations. SMPs can consult the SMP Centre to diagnose their business models and also provide expert advice on adopting digital solutions in their operations, while SMPs looking at solutions relating to AI (artificial intelligence) will be able to contact the AccTech Centre to co-create potential solutions.

ACCA's AccXelerator programme²⁵ for SMPs was launched in Singapore this year. It is targeted at SMPs to provide skillsets and information about digital solutions; with a view to regionalisation/ internationalisation. It is supported by a mentorship programme and a community of SMPs who have gone through similar journeys. The programme covers capability development, regionalisation/ internationalisation and then sharing innovations with other SMPs.

Assistance is also available via the DTACT (Digital Transformation for Accountancy) Programme. Funded by Enterprise Singapore and administered by SAC, the programme provides funding assistance for eligible SMPs in adopting certain baseline technologies. With a total budget of up to SGD2.4 million, the support covers up to 70% of the qualifying costs incurred for solutions in the first year of adoption, with the total grant amount capped at SGD30,000²⁶. The solutions under DTACT have also been preapproved by the Info-communications Media Development Authority (IMDA)²⁷.

²³ Accountancy Industry Digital Plan (IDP).

²⁴ SMP centre.

²⁵ ACCA Accelerator Programme.

²⁶ SAC, Digital Transformation for Accountancy [DTACT] programme https://www.sac.gov.sg/corporate-support/digital-transformation-accountancy-dtact-programme, accessed 30 January 2019.

 $Singapore\ Business\ Review,\ '\$30,000\ grant\ launched\ for\ small\ accounting\ firms',\ 1\ June\ 2018\ < https://sbr.com.sg/professional-serviceslegal/more-news/30000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000-grant-launched-small-accounting-news/3000$ firms>, accessed 14 February 2019

As a first step, pure audit firms are encouraged to diversify to digitalised traditional firms that provide a basic mix of services, that includes statutory audit, corporate secretarial and tax services.

Pathway II (Diversification)

This broad pathway emphasises the diversification of services. As a first step, pure audit firms are encouraged to diversify to digitalised traditional firms that provide a basic mix of services, that includes statutory audit, corporate secretarial and tax services (see Pathway I, above). To further improve productivity, these firms are encouraged to expand their range of services further.

In order to do this efficiently, and with less disruption to operations, diversification can be managed as an incremental process, taking into account what an SMP already does well and evolving new service lines from that, as follows:

STEP 3.1	Identify which Services are in Demand
STEP 3.2	"Unpack" your Current Service and identify your Strengths, based on your Component Services
STEP 3.3	Link it with the Services in Demand
STEP 3.4	Identify which of these Services are expected to raise Productivity Levels
STEP 3.5	Identify your Target Service.
STEP 3.6	Review your Current and Target Service to generate a connecting Progression Pathway.
STEP 3.7	Execute according to the Pathway identified.

Please see the Quick Guide that accompanies this report for specific illustrative progression pathways for diversification.



Acknowledgements

We would like to thank the following participants in the roundtable discussion and in-depth interviews for sharing their insights and providing valuable feedback:

Gajendran Vyapuri, Assurance Partner - Professional Practice Director, EY LLP, ACCA PF

EH Luar, Founder and Director, EH Luar & Co, ACCA PF

Kevin Fitzgerald, Regional Director, Asia, Xero, Asia, ACCA PF

Mun Siong Yoong, Partner/Leader, Deal Advisory, Baker Tilly

Evelyn Lim, Partner, Tax, BDO LLP

Frankie Chia, Managing Partner, ILP, BDO LLP

Titus Kuan, Director, Director, Assurance and Technical, Nexia TS

Magdalene Ang, Partner, R Chan & Associates - KSI

Helmi Talib, Managing Partner, Helmi Talib & Co

Lee Eng Kian, Head of Audit and Assurance, PKF Singapore

Ryan Piper, Director of Strategy, Baker Tilly International

Lai Keng Wei, Partner, Audit, Mazars

Sarjit Singh, Executive Director, Business Advisory: Risk and Governance, Ardent

ACCA PF: ACCA Singapore's Practitioners Forum Sub-Committee

We appreciate the assistance given by the team at Converging Knowledge for writing the initial draft of this report.

Annex

ANNEX 1 – SERVICE LINES AND CATEGORIES (COVERED IN SURVEY²⁹)

NO.	SERVICE LINE	CATEGORY	ТҮРЕ
1	Statutory audit	Audit and Assurance	Largely regulated
2	Accounting advisory	Audit and Assurance	Largely non-regulated
3	Other assurance	Audit and Assurance	Largely non-regulated
4	Bookkeeping	Corporate Support Services	Largely non-regulated
5	Corporate secretarial and legal services	Corporate Support Services	Largely regulated
6	Outsourcing of accounting/finance personnel	Corporate Support Services	Largely non-regulated
7	Payroll	Corporate Support Services	Largely non-regulated
8	Statutory financial reporting/compilation	Corporate Support Services	Largely regulated
9	Fund administration	Corporate Support Services	Largely regulated
10	Compliance in corporate and personal tax	Tax Advisory & Compliance	Largely regulated
11	International tax advisory	Tax Advisory & Compliance	Largely non-regulated
12	Compliance in GST/VAT compilation and advisory	Tax Advisory & Compliance	Largely regulated
13	Risk advisory	Risk Management & Governance	Largely non-regulated
14	Corporate governance advisory	Risk Management & Governance	Largely regulated
15	Fraud and forensic services	Risk Management & Governance	Largely non-regulated
16	Internal audit	Risk Management & Governance	Largely non-regulated
17	Business valuation	Corporate Finance & Deal Advisory	Largely non-regulated
18	Financial modelling	Corporate Finance & Deal Advisory	Largely non-regulated
19	Debt and capital advisory	Corporate Finance & Deal Advisory	Largely non-regulated
20	IPOs & capital markets activity	Corporate Finance & Deal Advisory	Largely non-regulated
21	M&A due diligence	Corporate Finance & Deal Advisory	Largely non-regulated
22	Strategy formulation & implementation	Corporate Finance & Deal Advisory	Largely non-regulated
23	Capital/Debt restructuring (capital advisory, judicial management, scheme of arrangement)	Corporate Finance & Deal Advisory	Largely non-regulated
24	Business strategy and plans	Corporate Finance & Deal Advisory	Largely non-regulated
25	IT solution business	IT Advisory	Largely non-regulated
26	Technology risk advisory	IT Advisory	Largely non-regulated
27	Technology consulting	IT Advisory	Largely non-regulated
28	Data analytics	IT Advisory	Largely non-regulated
29	IT forensic	IT Advisory	Largely non-regulated
30	Corporate restructuring (operational restructuring)	Restructuring & Insolvency	Largely non-regulated
31	Insolvency services (liquidation and receiverships)	Restructuring & Insolvency	Largely regulated
32	Litigation support & expert witness services	Restructuring & Insolvency	Largely non-regulated
33	Process improvement	Other Advisory Services	Largely non-regulated
34	Sustainability & CSR reporting	Other Advisory Services	Largely regulated
35	HR compliance	Other Advisory Services	Largely non-regulated
36	Succession planning/business transfer	Other Advisory Services	Largely non-regulated
37	Regionalisation	Other Advisory Services	Largely non-regulated
38	Islamic banking advisory and compliance	Other Advisory Services	Largely regulated
39	Business model innovation	Other Advisory Services	Largely non-regulated

ANNEX 2 – DIGITAL TECHNOLOGIES CITED IN THE REPORT

The following table provides a list of digital technologies that can be provided as part of professional services; and that were cited in the report.

DIGITAL TECHNOLOGY	DESCRIPTION
Al (Artificial Intelligence)	Al is the theory and development of computer systems able to perform tasks normally requiring human intelligence; such as visual perception, speech recognition, decision-making, and translation between languages ³⁰ .
Analytics	Analytics is the systematic computational analysis of data or statistics, usually using digital tools and techniques. It involves the discovery, interpretation, and communication of meaningful patterns in data; and the process of applying those patterns towards effective decision making ³¹ .
	Control Analytics: The use of analytics for the purpose of analysing, managing and monitoring internal controls in an organisation. Risk Analytics: The use of analytics for the purpose of risk analysis and management in an organisation.
RPA (Robotic Process Automation)	RPA is the use of software with AI capabilities to handle high-volume, repeatable and rules-based tasks that previously required humans to perform. These tasks can include queries, calculations and maintenance of records and transactions. RPA technology consists of software robots or "bots" that can mimic a human worker. RPA bots can log into applications, enter data, calculate and complete tasks and then log out ³² .

³⁰ English Oxford Living Dictionary, retrieved on 2 May 2019.

³¹ Adapted from Wikipedia, retrieved on 2 May 2019.

³² Adapted from Whatls.com, retrieved on 2 May 2019.

CONTACTS

Germin Ong

Head, Strategy & Planning, SAC Germin_ONG@sac.gov.sg

Lee Mei Jie

Senior Manager, Strategy & Planning, SAC Lee_mei_jie@sac.gov.sg

Joseph Alfred

Head of Policy and Technical, ACCA joseph.alfred@accaglobal.com

Singapore Accountancy Commission

10 Anson Road #05-18 International Plaza, Singapore 079903

www.sac.gov.sg

ACCA Singapore

1 Raffles Quay #22-10A South Tower, One Raffles Quay Singapore 048583

www.accaglobal.com © SAC, ACCA, FEBRUARY 2020