

Think Ahead

ACCA

Professional accountants – the future:

50 drivers of change in the public sector

About ACCA

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

ACCA has **188,000** members and **480,000** students in **178** countries – **64,000** currently working within the public sector. ACCA supports all its members and students to develop successful careers in accounting and business, with the skills required by employers. ACCA works through a network of **100** offices and centres and more than **7,110** Approved Employers worldwide, who provide high standards of employee 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.

Founded in 1904, ACCA has consistently held unique core values: opportunity, diversity, innovation, integrity and accountability. It believes that accountants bring value to economies in all stages of development and seeks to develop capacity in the profession and encourage the adoption of global standards. ACCA's core values are aligned to the needs of employers in all sectors and it ensures that, through its range of qualifications, it prepares accountants for business. ACCA seeks to open up the profession to people of all backgrounds and remove artificial barriers, innovating its qualifications and delivery to meet the diverse needs of trainee professionals and their employers.

In June 2016 ACCA formed a strategic alliance with Chartered Accountants Australia and New Zealand (CA ANZ). The alliance represents the voice of 788,000 members and future professional accountants around the world, who share the commitment to uphold the highest ethical, professional and technical standards.

More information is available at: www.accaglobal.com



Part of our ground-breaking *Professional accountants – the future* series, this is the first report to focus exclusively on identifying the 50 drivers of change that are expected to have an impact on the public sector and the likely timing of these, and assess how professional accountants will need to continue to play a pivotal role in the decade ahead.



The global public sector landscape is changing. The public professional accountant has the opportunity and responsibility for making sure that scarce public funds are used well to provide value-for-money public services that meet citizens' needs.

In this *Professional accountants – the future: 50 drivers of change in the public sector* report, ACCA identifies the main drivers for change that will affect the global public sector landscape, and assesses the likely timing of the changes. In this, ACCA was supported by public sector leaders and managers, public professional accountants and academics across the globe. A global survey was complemented by 'deep dive' roundtables held in 11 countries, from the US in the west to China in the east. ACCA thanks everyone involved for their invaluable insights and contributions. This has helped to identify the top three drivers across each of eight categories (economy; politics and law; society; business of government; science and technology; environment, energy and resources; the practice of accounting; and the accountancy profession).

There are several factors driving change: some of these, such as an ageing population, will affect the level and type of public services needed in the future, while others, such as the amount of economic growth, will influence the level of funds available for public sector spending. Other factors will change the very nature of public services, particularly technological advances (such as digital facilities). The blurring of the boundaries between the public and private sector in providing public services, through outsourcing or Public Private Partnerships (PPPs), will increasingly feature.

The public sector finance function will need to adapt to these prevailing winds of change. Professional accountants will need to hone their technical and specialist skills, as well as developing new attributes, to be ready to embrace new challenges and make the most of new opportunities.

It is an exciting time to be a professional accountant in the public sector. It is a huge opportunity to help shape the public services of the future, achieving value for money and long-term sustainability.

Stephen Emasu

Chair of ACCA's Global Forum
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Contents

Executive summary	8
Introduction	15
1. Drivers of change	19
The economy	21
Politics and law	23
Society	25
Business of government	28
Science and technology	30
Environment, energy and resources	33
The practice of accounting	35
The accountancy profession in the public sector	38
2. The finance function and the professional accountant in the public sector	41
Skills	43
3. Summary	47
Annex 1: top fifty drivers for change definitions	48
References	52

The public sector is as complex as it is diverse and it is not the same in any two countries. What is considered to be part of the public sector often varies from one country to another.

The global public sector is changing. The public sector landscape will continually be reshaped by a combination of demographic changes, the need for better infrastructure and continuous concerns over sustainability and consumption. These challenges are also heightened by advances in technology and by economic and political uncertainty. In a shifting social and economic environment, all these factors will have serious implications for public sector organisations and their finance professionals.

The public sector is as complex as it is diverse and it is not the same in any two countries. What is considered to be part of the public sector often varies from one country to another. For example, in some countries, such as the UK and Scandinavian countries, healthcare is deemed to be a public sector function, while in some others it is a hybrid between the public and private sectors.

For professional accountants there is a twofold challenge. First, they need to understand the key forces shaping the future and how these could affect public sector organisations and the country they serve. Secondly, they need to provide support and influence financial decisions that will ensure that public funds are deployed most cost-effectively and efficiently, not just at present but also in the future.

To help professional accountants and leaders in the public sector prepare for an uncertain tomorrow, ACCA undertook a

global study to explore which emerging drivers of change could have the biggest impact and to highlight the skills that will be required over the period to 2026.

This study draws on a survey of ACCA's Global forum for the public sector, a group of senior public sector leaders, commentators and academics drawn from across the world, ACCA members, and members of other professional accountancy bodies working in the public sector, coupled with a series of roundtable events and high-level interviews with key public sector figures.

DRIVERS OF CHANGE

There are many drivers influencing change. Some of these changes are caused by the increasing and ageing population, which will generate a need for better infrastructure and enhanced public services. Other drivers are linked to the availability of public services and the opportunity, created by advances in technology, to transform public services to be more citizen-focused. Collectively, they are making the public sector environment fluid and forcing it to evolve.

The 50 drivers of change are ranked on Table 1 and the top three drivers are identified for each of the eight domains of relevance – the economy; politics and law; society and demographics; business; science and technology; environment, energy and resources; the practice of accounting; and the accountancy profession.

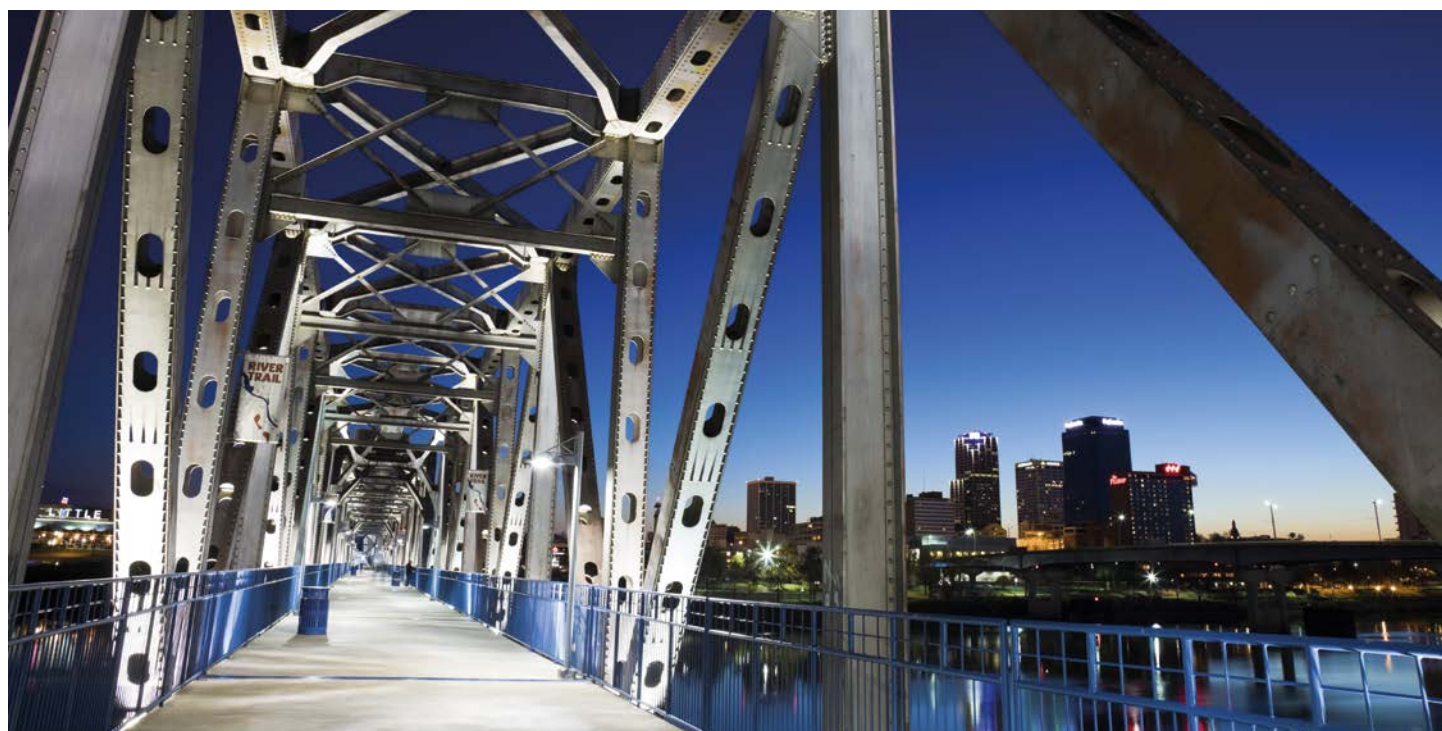


Table 1: Ranking of the 50 drivers of change for the public sector

RANK	DRIVER	CATEGORY
1	The level of economic growth	Economy
2	Quality and availability of the global talent pool	Business of government
3	Business leaders' responsiveness to change and disruption	Business of government
4	Use of Public Private Partnerships (PPPs)	Business of government
5	Big data: the development and exploitation of large organisational databases, data mining and predictive analytics	Science and technology
6	Non-financial information and integrated reporting	The accountancy profession
7	Stability of the global economic infrastructure	Economy
8	Cybersecurity challenges for government	Science and technology
9	Stability of national revenue bases	Economy
10	Spread of diversity in society and the workplace	Society
11	Workforce age structure	Society
12	Experimentation with and adoption of new business models	Business of government
13	Balance between external financial accounting and internal managerial accounting	The accountancy profession
14	Clarity in financial reporting and defining the audit function	The accountancy profession
15	Competition for limited natural resources	Environment, energy and resources
16	Defining the scope of the accountant's role	The accountancy profession
17	Speed and duration of business cycles	Business of government
18	The digitisation of work	Science and technology
19	Accounting skills capacity in transitional economies	The accountancy profession
20	Flexibility, suitability and cost of accountancy training	The accountancy profession
21	Global climate change	Environment, energy and resources
22	Governance and provision of outsourced public services	Politics and law
23	Extent of foreign direct investment in developed and developing economies	Business of government
24	Level of international political volatility	Politics and law
25	Scale and distribution of global population growth	Society
26	Focus of global governance institutions	Politics and law
27	Level of entrepreneurial skills in the accountancy profession	The accountancy profession
28	Public perception and attractiveness of the accountancy profession	The accountancy profession
29	Manageability of national and international debt	Economy
30	Societal expectations and definitions of accounting	The accountancy profession
31	Scale of take-up in alternative energy by organisations	Environment, energy and resources
32	Rate of democratic transition	Politics and law
33	New industries and production models	Science and technology
34	Carbon tax and other environmental market mechanisms	Environment, energy and resources
35	Adoption of integrated systems thinking to manage business complexity	Business of government
36	Evolution of corporate governance regulation and practice	Business of government
37	Size and complexity of the CFOs remit	The accountancy profession
38	Broadening measurement of public sector value and progress	Economy
39	Cost and ease of access to higher education	Society
40	The workplace expectations of Generation Y, Z and beyond	Society
41	Opportunities arising from adoption of global regulation	The accountancy profession
42	Consideration of alternative economic perspectives	Economy
43	Enterprise risk management capability	Business of government
44	Level of investment required to maintain national physical infrastructure	Economy
45	Scope and diversity of expectations of external stakeholders	Business of government
46	Adoption of globally accepted accounting standards	The accountancy profession
47	Total scale and distribution of global inequality and unmet needs	Economy
48	Crowdsourced funding for innovation: the consumer as investor	Business of government
49	Pressure to manage reputation as part of business strategy	Business of government
50	Advances in genetic science, impact of nanotechnology advances and robotic science across business sectors	Science and technology

One of the challenges for outsourcing public services is ensuring that there are suitable and adequate governance arrangements for contracts and contract management.

1. Economic changes

The amount of economic growth was ranked as the top driver for the public sector. The stability of the global economic infrastructure and national revenue bases were also identified. This is unsurprising, as it is essential for government to have and maintain economic growth and economic infrastructures and national revenue bases to enable it to plan for and manage public services effectively.

To plan and operate effectively in the short term and build the infrastructure required in the long term, a clear understanding of both the long-term needs of citizens and the opportunities afforded by technological innovation is essential.

2. Politics and law

The public sector operates in a political sphere and it is intrinsically influenced by politics.

Increasingly, public services and their support services are being outsourced. One of the challenges for outsourcing public services is ensuring that there are suitable and adequate governance arrangements for contracts and contract management.

In addition, the continuous volatility of international politics is a driver of change, as are the roles of global institutions, such as the World Bank, World Trade Organization (WTO) and the United Nations (UN), and the ways in which they respond to the nature of global change.

In some cases, political volatility hinders a country from achieving its development objectives. For extreme cases, political events will introduce difficult social choices for public sector organisations, making fair and objective decisions even more crucial and difficult.

3. Societal changes

The spread of diversity in society and the workplace, whether through increased female participation in the workforce or the rapidly ageing population and financial pressures making people work on into their late 60s, 70s or 80s (particularly in Western countries), and the resulting implications for workforce age structure, were highlighted as the top two drivers in the Society category.

Respondents also emphasised expectations of the scale and distribution of global population growth as a critical social driver for the public sector. The challenges of managing and addressing the needs and expectations of a multicultural, global and age-diverse workforce and the wider population will become ever more complex.

This fundamental shift, on one hand, will require governments to ensure that they have the appropriate infrastructure and workforce in place to manage the competing needs of several generations of a diverse and growing population. Meanwhile, on the other hand, public sector organisations will need to find ways of attracting and retaining talent from a diverse workforce.

4. Business of government

Factors that affect the ways in which government organisations conduct their business take the second, third and fourth rankings among the critical drivers of change. The global talent pool is singled out as the second most critical driver for the public sector in the coming years, with a clear emphasis on the role of public sector leaders' attitudes to change and the level of business complexity, followed by the use of public private partnerships (PPPs).

The roles of, and relationships between, governments and the private sector are also developing, with the increased use of PPPs. Across the globe, the public sector will be expanding its commercial relationships with the private sector. Adequate governance arrangements in these commercial agreements will be paramount for maintaining control and accountability for the use of public funds. The finance professional in central, federal, state and local government will need a blend of commercial acumen and entrepreneurial skill to be able to manage these relationships effectively and explore innovative ways of obtaining better value for money in public services.

PPPs are not the only way to achieve this; wider options will develop as new business models (such as crowdsourcing) emerge.

The need to sustain rising populations and fuel economic growth must be balanced against the planet's finite resources.

5. Digital technology

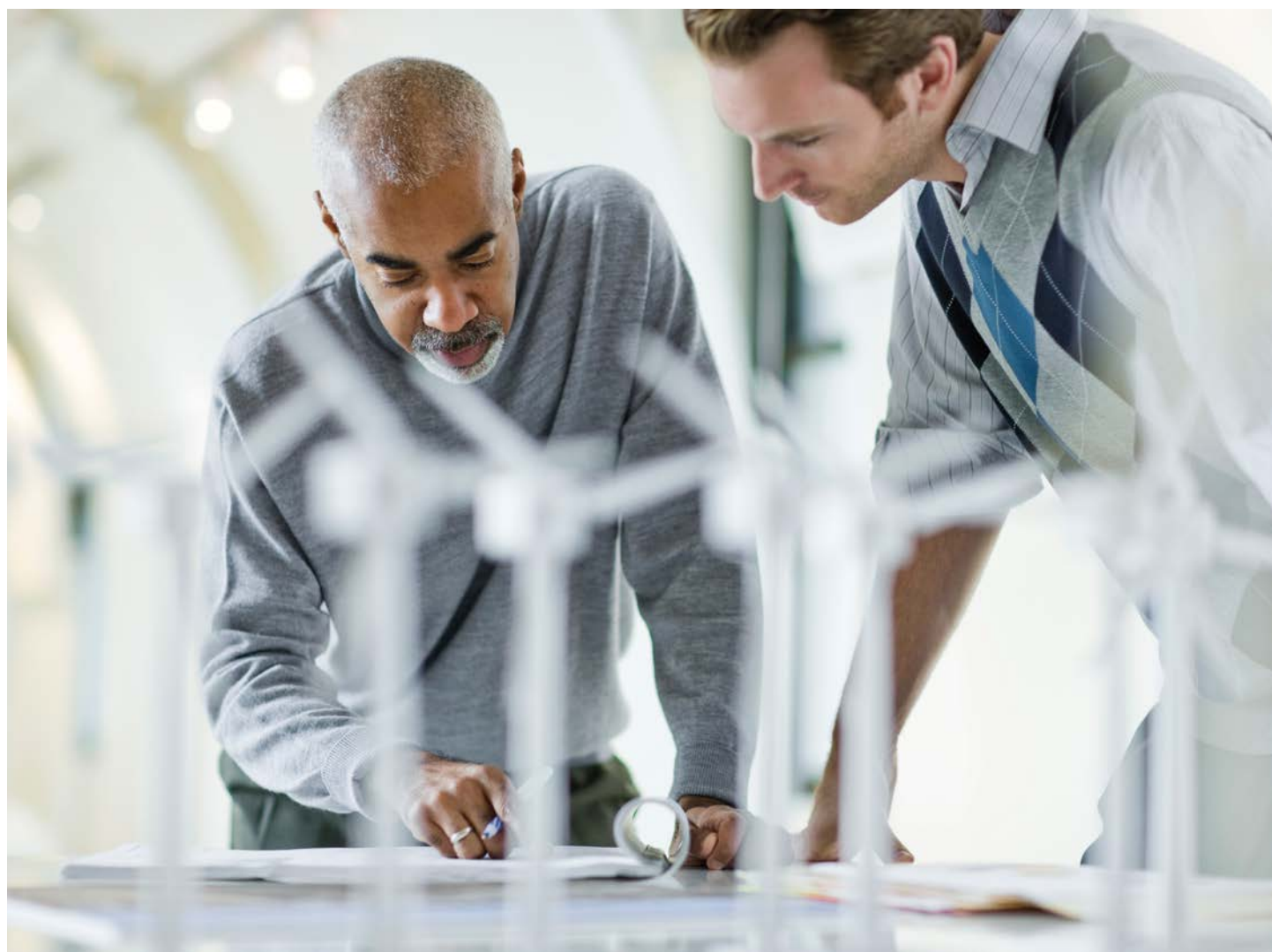
Technological advances offer huge opportunities for government. Big data analytics allow governments to map demographic changes, allowing better preparation for the services required in the future. Predictive analytics is increasingly used to influence behaviour, both to prevent problems and to anticipate change. With the vast volume and variety of data that governments hold and the speed with which it accumulates, they will need to ensure that they have adequate measures in place to deal with the increasingly sophisticated and unrelenting nature of cyber attacks. At the same time, digital advances also present opportunities for governments to design services that are citizen-focused. Both cybersecurity and the digital services will require significant investment and a rethink of the traditional functions of government departments, which will need to come together and assess how public services are provided in a more holistic and technology-enabled way.

6. Environmental

The need to sustain rising populations and fuel economic growth must be balanced against the planet's finite resources. There are two impacts that the public sector needs to consider.

First, it will need to consider the impact of increased population and economic growth on the environment and the citizen, and to put mitigations in place. Environmental concerns will also mean that budgeting and accounting within the public sector will increasingly have to take into account factors linked to natural capital.

Second, the public sector will need to consider the environmental impact of public services. This may involve factoring extra costs into government budgets for new areas, such as stronger flood defence mechanisms and research into the impact of rises in temperature on a country's eco-systems.



A constant challenge for accountants is striking the right balance between external financial reporting requirements and internal managerial accounting. Both are expected to become more demanding and complex over time.

At the same time, governments worldwide are grappling with the potential of renewable sources of energy and have been exploring the potential of diversifying away from heavy reliance on fossil fuels. This is a complicated area for governments and one that requires an integrated approach involving engagement between government and industry and between governments around the world.

7. Practice of accounting

Financial reporting in the public sector varies globally. Some countries meet global standards of advanced financial reporting while others are grappling with reporting the cash position (cash accounting). High-quality financial reporting is a prerequisite to building and maintaining trust and ensuring that limited funds are used economically, efficiently and effectively.

There has been growing realisation that traditional financial reporting provides insufficient information for decision-making. Integrated reporting (<IR>) goes further than assessing the financial resources previously captured on the balance sheet to include other resources that are less easy to measure, such as human, natural and intellectual capitals, which have a bearing on the value of an organisation. As a result of these considerations, <IR> is being championed by many accountancy bodies and public bodies as the way forward.

A constant challenge for accountants is striking the right balance between external financial reporting requirements and internal management accounting. Both are expected to become more demanding and complex over time. Respondents often cited the level of complexity and expense (especially in countries where there are constant challenges with capacity and capability in this area) as a big challenge, and questions were raised as to the value of the information used.

As the practice of public sector accounting evolves, both financial reporting and audit will have a crucial role in providing greater accountability to the citizen: the preparation of the accounts is enhanced by having an independent audit review conducted on them.

8. The accountancy profession in the public sector

The adoption of either International Financial Reporting Standards (IFRS) or International Public Sector Accounting Standards (IPSAS) by countries is an important step in demonstrating transparency to citizens and other stakeholders.

Accounting skills, however, vary from country to country, particularly in the public sector. To implement IFRSs or IPSASs (either cash or accruals), the public sector requires finance people of the right calibre with professional accountancy training (or to build the capacity and capability to develop them) and an understanding of the public sector landscape and how government operates.

There is an overwhelming case that the public sector will require more accountants, but they will now be required to fulfil the growing need for accountability and transparency, as well as providing better financial insights to help public sector organisations meet future needs that will emanate as a consequence of lower economic growth, continued commercialisation of public services (through the use of PPPs or public finance initiatives (PFIs)) and population growth.

With these changes in mind, public sector accountants are being asked to take on a broader strategic and entrepreneurial role – as they are now becoming the bridge between the public and private sectors.

The professional accountant will need to demonstrate good judgement in the analysis and interpretation of data (both financial and non-financial) and to convert this into meaningful insights for the organisation.

IMPACT ON THE PUBLIC SECTOR

Collectively all the above drivers will have a profound and lasting impact on the public sector in the future. How the public sector plans for and responds to the changes will be of great importance to the sector itself, but even more important to the citizens to whom the sector is ultimately responsible.



Lean, agile and more responsive public services

The public sector will become leaner as it innovates and embraces the benefits of digital technologies. New technology will replace low value-added activity, allowing finance professionals to focus on areas that will provide more value, such as drawing insights from better and more timely analysis and interpretation of data.

The public sector finance function will need to be agile and more responsive to external drivers of change, but this must not be to the detriment of long-term public service provision.

A holistic public sector, focusing on the needs of the citizen

The public sector will need to refocus on the outcome of services to citizens rather than the role of individual departments. For some countries, there is growing concern as to the long-term sustainability of funding services for an ageing population. Frequently, responsibility for individual services, such as health and

social care, is divided between specific organisations that deal separately with issues that should be tackled jointly. Public services must evolve to be more integrated and focused on the needs of the citizen, to allow improved services to be supplied more economically.

FUTURE SKILLS

To be fully effective now and in the future, the professional accountant working in this sector will need to develop the following skills.

Strong technical skills

Strong technical accounting skills will remain the foundation for professional accountants. These range from technical financial reporting to forecasting, budgeting and planning, including scenario planning and operations management, to drive enhanced performance management.

All professional accountants need the ability to understand and apply financial reporting standards in the preparation of financial statements, and/or to think laterally and apply accounting principles to practical issues.

This is important for the professional accountant responsible for the development and implementation of new financial reporting frameworks, this will require complex valuations and estimates. As many countries that are in the process of implementing cash- or accruals-based financial reporting standards, this knowledge and expertise are highly valued.

Professional judgement

The professional accountant will need to demonstrate good judgement in the analysis and interpretation of data (both financial and non-financial) and to convert this into meaningful insights for the organisation. In a public sector context this is even more of a challenge than elsewhere, as it is not easy to assess the impact of government spending in a linear or strictly numerical way. In the private sector, success can be measured in growth and profit; the public sector, on the other hand, must also balance considerations of social value and public interest when evaluating success. This will require intelligence and creativity, using previous experience in a fluid environment.

The ability to explain complex financial issues clearly and concisely is an increasingly important skill – the professional accountant will need to embrace modern media to present complex information in an engaging and compelling way.

Communication

Traditionally, professional accountants have not always been seen as good communicators. The ability to explain complex financial issues clearly and concisely is an increasingly important skill – the professional accountant will need to embrace modern media to present complex information in an engaging and compelling way.

In addition, professional accountants will need to ‘find their voice’ and question processes or procedures where there is an opportunity to make improvements. This may go beyond their traditional functions but, as the public sector increasingly operates in a commercial and business-like manner, the professional accountant will need to develop a solid understanding of how financial decisions interrelate with strategic and operational priorities.

Leadership and management

Good leadership skills, such as influencing, persuading, and building networks, are required now and in the future, along with characteristics such as emotional intelligence and self-awareness.

The professional accountant is part of a team and the importance of good and effective team-working must not be underestimated. To become an effective ‘business partner’, the professional accountant will need to build trust among, and influence and persuade, a range of stakeholders. This skill to influence and persuade is developed over time and the ability to engage with others through networks will be critical to the inclusion of professional accountants in the strategic decision-making process.

Vision

The professional accountant of the future will need to be able to see interconnections and explain the big picture. As government becomes more interconnected and commercial, it will require and value professional accountants who bring with them not only strong negotiating skills but also a holistic and forward-looking approach.

ROLES FOR PUBLIC SECTOR PROFESSIONAL ACCOUNTANTS

Professional accountants in the public sector need to ensure that they are aware of the factors that are driving changes in the sector and have the skills to be able to rise to the challenges and/or maximise how they use opportunities.

The changing economic environment, political landscape, and societal changes, such as the increasing and ageing population, all affect the public sector and, inevitably, the level and type of public services required. The public sector professional accountant will need to be aware of macro issues and be able to consider these when giving finance advice.

Public services are changing through increased collaboration with the private sector and digital advances. These create an opportunity for rethinking existing public service models, but it comes with associated risks, for example more private sector involvement will require improved public service delivery standards, while the digitisation will call for greater protection from cyber threats.

Professional accountants in the public sector have a unique opportunity to serve the communities in which they live and make a tangible difference to people’s lives through better public financial management to provide: schools, roads, hospitals, transport links, and public services: education, welfare support and health care support. Arguably, there are not many other areas that provide the diversity of challenge found in the public sector. To perform their roles well, public sector professional accountants need to be able to navigate the present and prepare for the future to ensure that the best value is obtained from public funds. Public services need to be effective now and sustainable in the long term.

There is a paradigm shift and the resulting rebalancing will cause some turbulence as a new economic model evolves.

'Change is the only constant in life.'

[Heraclitus, pre-Socratic Greek philosopher](#)

Looking back and reflecting over the last 10 years, it is clear that the scale and pace of change have increased. Few foresaw the global sovereign debt crisis following the global financial crisis and the shock has been profound. Eight years after the momentous events that started with the collapse of Lehman Brothers, causing the demise of several other financial institutions, the aftershocks are still being experienced today.

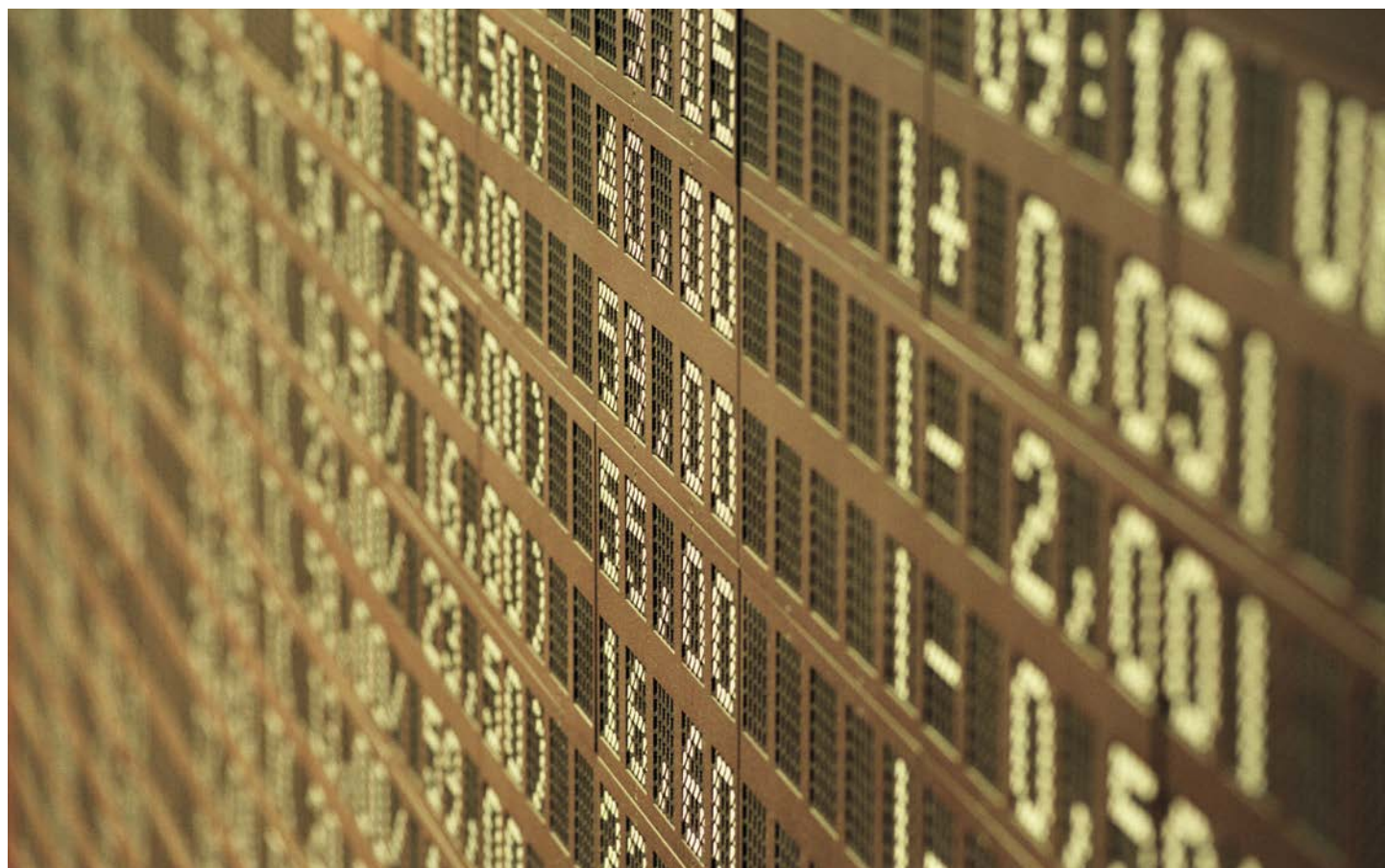
GLOBAL GROWTH RATES

The rise of new global economic powers has changed the balance of the global economic powers. Both India and China have enjoyed growth rates envied by other nations, where growth has been low, stalled or even declined. India has grown by 7.1% and China by 6.7% compared with 2.9% in the US and 2.1% in the UK. According to the International Monetary Fund (IMF), global growth is forecast to be 3.1% for 2016 and 3.4% in 2017 (IMF 2016).

The reduction in growth and/or the lack of it is causing governments real problems. Growth increases confidence and therefore investment, increasing employment, raising consumer spending and so increasing tax revenue for governments. In other words, growth drives more growth. It also allows governments to invest in the public sector and/or reduce the tax burden for future years. The impact of low or no growth – or worse, recession – will have a huge impact on the public sector, because the funds available to spend will be reduced owing to lower tax income, while there will be increased demand for public services to support the unemployed, such as benefit payments, welfare and healthcare costs.

'There is a paradigm shift and the resulting rebalancing will cause some turbulence as a new economic model evolves.'

[Professor Malcolm Prowle, Professor of Performance Management, University of Gloucestershire Business School](#)



In every country inequality exists and the gap between rich and poor is widening and this intensifies the strain on public services. Arguably, it is fuelling discontent with, and dislike of, the current system, which the evidence indicates favours the few, not the many.

50%

more natural resources are extracted
and used today than only 30 years ago

ISING DEMANDS FOR TRANSPARENCY

Simultaneously with the problems of low or no growth, the increasing information available at people's fingertips through the media and the internet has given rise to louder calls to action for governments to provide greater transparency and show what is happening to public funds (whether those from the taxpayer or those given by donor agencies). Some countries have improved disclosure through better financial reporting and a shift to accrual accounting. Nonetheless, there is more to do. Transparency International's annual global corruption index is shining a light on this issue. It states: 'Corruption corrodes the fabric of society. It undermines people's trust in political and economic systems, institutions and leaders. It can cost people their freedom, health, money – and sometimes their lives.' (Transparency International 2016).

'Trust is at the heart of the contract between the citizen and the state and is a prerequisite that legitimises a government's right to tax.'

Dato' Mohammad Faiz Azmi,
President/Chairman, MIA/ PwC Malaysia

GLOBAL POPULATION KEEPS ON GROWING

The United Nations (UN) estimates that the current global population is over 7.4bn and is forecast to be 8.5bn by 2030, 9.7bn by 2050 and 11.2bn by 2100 (UN Department for Social and Economic Affairs 2015).

These headline figures take account of the increasing birth rate (Africa will have the highest population growth and half of the world's population growth between 2015 and 2050), as well as the increase in the ageing population, particularly those over the age of 75 (defined as over 50 in emerging economies).

Significant advances in modern medicine and technology are helping people to live longer. It is reported that the number of people over 60 will double by 2050 and triple by 2100 (UN Department for Social and Economic Affairs 2015). These increases in both total population and the average age of that population are having and will continue to have a global impact.

A growing global population requires more resources, food and fuel. People today extract and use around 50% more natural resources than only 30 years ago and people in rich countries each consume up to 10 times more natural resources than those in the poorest countries (Friends of the Earth 2009).

MORE LIGHT ON SOCIAL INEQUALITY

There has been an intensifying focus on the levels of social inequality, following a consistent rise in the share of global wealth acquired by the wealthiest people. According to Inequality.org's *Global Wealth Report 2015*, it reports that nearly three-quarters of the world's adults own under \$10,000 in wealth (Credit Suisse 2015). The world's wealthiest individuals, those with over \$100,000 in assets, total only 8.1% of the global population but own 84.6% of global wealth.

In every country inequality exists and the gap between rich and poor is widening and this intensifies the strain on public services. Arguably, it is fuelling discontent with, and dislike of, the current system, which the evidence indicates favours the few, not the many.

ADVANCES IN SCIENCE AND TECHNOLOGY

The digitisation of everyday life and business has led to a focus on the growth of personal technology 'ecosystems' enabled by ease of access to the internet and social media. For organisations, the impact of cloud computing, cybersecurity, big data and the value of data mining are all emphasised as drivers of change in the public sector.

Advances in this area offer new ways to achieve better and faster outcomes, and there are many opportunities for governments to harness the advantages that new technology and scientific advancements offer. This will change how governments work and drive the need for new skills. Take, for example, Estonia's e-Estonia initiative, a government programme to facilitate continuous interaction with Estonian citizens and make 99% of all state services accessible online (e-Governance Academy Foundation 2016).

'Technology has levelled the playing field.'

Datum Nur Jazlan, Minister of State for
Home Affairs Malaysia, formerly PAC
Chair and current ACCA Council member

What constitutes the public sector, and the relationship between the state and its citizen in each country is unique to that country.

THE PUBLIC SECTOR IS UNIQUE AND COMPLEX

The global public sector landscape is complex. What constitutes the public sector, and the relationship between the state and its citizen in each country is unique to that country. In addition, the varying degrees of political, environmental, economic, social, legal and technological factors in each jurisdiction create a diverse public sector landscape across the globe. Nonetheless, the core element that remains is that the public sector uniquely embodies the relationship between the state and the citizen. All jurisdictions must aim to serve their citizens as effectively as possible by providing the public services that these citizens need and achieving value for money.

In the private sector, the citizen chooses whether to engage but in the public sector the relationship is not voluntary; under force of law we all have to pay taxes.

Fayez Choudhury, Chief Executive Officer, International Federation of Accountants

All these changes will inevitably affect the public sector in the short, medium and long term. Identifying the drivers that will have the most effect will make it possible to decide how public sector organisations and finance professionals must respond to change, overcome potential barriers to success and create the greatest possible value from the many opportunities that will exist.

THE APPROACH

To identify and explore the main drivers of change that will have the most impact on the public sector, ACCA has engaged with professional accountants and senior figures and experts working in the public sector.

The research findings presented in this report are based on over 1,000 online survey responses to identify the drivers of change. The respondents were senior executives, ACCA members and members of other professional accountancy bodies working in public sector organisations during the months of May to August 2016.

Participants were asked to rank the top drivers of change across eight categories in order of importance and their views as to the likely timing of the impact of each.

The eight categories are:

1. the economy
2. politics and law
3. society
4. the business of government
5. science and technology
6. energy, environment and resources
7. the practice of accounting, and
8. the accountancy profession.

The online survey was complemented with 12 roundtables held in 11 countries (in alphabetical order, below) around the globe, during the months of May to September. Over 300 participants attended the roundtables and one-to-one interviews with senior leaders have been conducted to shape the insights in this report.

- China
- Ireland
- Kenya
- UK
- Malaysia
- Nigeria
- Pakistan
- Singapore
- South Africa
- US
- Zimbabwe.

Roundtable respondents were asked to consider what the public sector of the future would look like in their country, given the agreed selection of the top drivers. They were then asked to consider the skills that public sector professional accountants would need, in this future landscape, to support the business of government fully and add value in a changing world.

When viewed collectively, the set of 50 drivers explored in this report present fundamental challenges for public sector organisations and their finance teams.

REPORT STRUCTURE

Chapter 1 introduces the ranking of the 50 drivers of change. It then investigates the top three drivers for each of the eight categories and presents the insights from both the survey and the roundtables. In addition, it identifies the drivers that are expected to have an impact on the public sector in the next five years and beyond.

Chapter 2 probes deeper and assesses the impact of the drivers on the future public sector landscape. It also examines the priorities that will emerge as public sector organisations and finance professionals seek to move from insight to action.

When viewed collectively, the set of 50 drivers explored in this report present fundamental challenges for public sector organisations and their finance teams. These challenges encompass every dimension of public sector organisations

from governance and strategy through to operations and talent development.

This is the first report to focus exclusively on identifying the key factors that will change in the public sector and the likely timing of these, and to assess how they will shape the future.

A PLATFORM FOR ENGAGEMENT

The aim for this global project is to provide a platform for engagement between public sector organisations, professional accountants and the wider community of stakeholders. No future-oriented work of this type can ever hope to be definitive, but this report provides an important input into the development of future public sector strategy. It provides accountancy professionals, and the organisations in which they work, with a framework for preparing for, adapting to and influencing change.



Governments have a crucial role in seeking to understand what will drive change and assessing the potential impact that global changes will have in a local context.

The scale and pace of change are accelerating as never before: a changing economic landscape coupled with low growth is becoming the norm, along with a low level of public trust in government; huge technological changes that present both opportunities with big data and predictive analytics and an increasing number of cyber threats; the changing demographics of a growing and ageing population; and global climate change.

Governments have a crucial role in seeking to understand what will drive change and assessing the potential impact that global changes will have in a local context. Having the foresight to anticipate how the changes will affect a country will help its government to prepare most effectively for the future landscape.

50 DRIVERS OF CHANGE

Through the various stages of this research a total of 50 drivers of change were identified. These are described in full in Appendix 1.

Public sector leaders and professional accountants were surveyed and selected the top three drivers for change for each of the eight themes for change, ranking these in order of priority and when they are likely to impact.

Table 1.1 shows the top 50 drivers ranked based on the analysis of the survey according to their expected impact on the public sector in the years to 2026.



Table 1.1: Ranking of the 50 drivers of change for the public sector

RANK	DRIVER	CATEGORY
1	The level of economic growth	Economy
2	Quality and availability of the global talent pool	Business of government
3	Business leaders' responsiveness to change and disruption	Business of government
4	Use of Public Private Partnerships (PPPs)	Business of government
5	Big data: the development and exploitation of large organisational databases, data mining and predictive analytics	Science and technology
6	Non-financial information and integrated reporting	The accountancy profession
7	Stability of the global economic infrastructure	Economy
8	Cybersecurity challenges for government	Science and technology
9	Stability of national revenue bases	Economy
10	Spread of diversity in society and the workplace	Society
11	Workforce age structure	Society
12	Experimentation with and adoption of new business models	Business of government
13	Balance between external financial accounting and internal managerial accounting	The accountancy profession
14	Clarity in financial reporting and defining the audit function	The accountancy profession
15	Competition for limited natural resources	Environment, energy and resources
16	Defining the scope of the accountant's role	The accountancy profession
17	Speed and duration of business cycles	Business of government
18	The digitisation of work	Science and technology
19	Accounting skills capacity in transitional economies	The accountancy profession
20	Flexibility, suitability and cost of accountancy training	The accountancy profession
21	Global climate change	Environment, energy and resources
22	Governance and provision of outsourced public services	Politics and law
23	Extent of foreign direct investment in developed and developing economies	Business of government
24	Level of international political volatility	Politics and law
25	Scale and distribution of global population growth	Society
26	Focus of global governance institutions	Politics and law
27	Level of entrepreneurial skills in the accountancy profession	The accountancy profession
28	Public perception and attractiveness of the accountancy profession	The accountancy profession
29	Manageability of national and international debt	Economy
30	Societal expectations and definitions of accounting	The accountancy profession
31	Scale of take-up in alternative energy by organisations	Environment, energy and resources
32	Rate of democratic transition	Politics and law
33	New industries and production models	Science and technology
34	Carbon tax and other environmental market mechanisms	Environment, energy and resources
35	Adoption of integrated systems thinking to manage business complexity	Business of government
36	Evolution of corporate governance regulation and practice	Business of government
37	Size and complexity of the CFOs remit	The accountancy profession
38	Broadening measurement of public sector value and progress	Economy
39	Cost and ease of access to higher education	Society
40	The workplace expectations of Generation Y, Z and beyond	Society
41	Opportunities arising from adoption of global regulation	The accountancy profession
42	Consideration of alternative economic perspectives	Economy
43	Enterprise risk management capability	Business of government
44	Level of investment required to maintain national physical infrastructure	Economy
45	Scope and diversity of expectations of external stakeholders	Business of government
46	Adoption of globally accepted accounting standards	The accountancy profession
47	Total scale and distribution of global inequality and unmet needs	Economy
48	Crowdsourced funding for innovation: the consumer as investor	Business of government
49	Pressure to manage reputation as part of business strategy	Business of government
50	Advances in genetic science, impact of nanotechnology advances and robotic science across business sectors	Science and technology

Economic growth links directly to a country's productivity and its ability to create jobs within the economy.

1.1 THE ECONOMY

Unsurprisingly, much of current thinking about the future of the global economy over the period 2017–26 has been influenced by the fallout from the 2008 global financial crisis. At the same time, thinking is also being shaped and influenced by continued economic uncertainty fuelled by high levels of sovereign debt.



This set of drivers explores the fallout from the global financial crisis and its long-term impact. They encompass prospects for growth, the sustainability of debt and overall effectiveness of the global economic infrastructure.

The level of economic growth

Growth expectations influence business confidence, consumer spending, government planning and budgeting, and management of the micro and macro economy. Economic growth has a multiplier effect on government revenue.

Most public sector leaders and managers have been accustomed to a period of strong economic growth, but growth is now

slowing. Economic growth profiles vary across countries, with some in emerging markets enjoying relatively higher growth rates than previously, while many developed economies face longer-term trends of lower growth. There is a real question mark as to whether the world is entering a new phase where low growth will become the norm. In an environment of low interest rates and relatively poor wage growth, public bodies need to be particularly conscious both of ensuring the long-term sustainability of service provision and of the problem of raising funds to pay for it.

Economic growth links directly to a country's productivity and its ability to create jobs within the economy. Therefore, a visionary policy that lays emphasis on skills within the workforce, and in particular the 'future-proofing' of these skills, will have an advantage in ensuring sustainable economic growth. Understanding the macro-profile of the economy and deciding what changes are needed must underlie important policy decisions. For example, China has for some time recognised that excessive dependence on manufacturing is not sustainable and it has worked to expand the services sector within its economy.

'The level of economic growth is very important to [the] Malaysia perspective; yes, I agree [it should be the top driver of change in the economy theme].'
Dr Yacob bin Mustafa, Pengarah, Bahagian Perkhidmatan Operasi Pusat dan Agensi, Accountant General Department

Because the level of economic growth is used globally as a key measure of a nation's health and prosperity, it was expected to rate as a significant driver of change, and was indeed rated top overall. It was rated so among all participants, regardless of level of seniority and number of years since they qualified, or whether or not they were members of a professional accountancy organisation or were professionally qualified.

Economy: Top three drivers

TOP THREE DRIVERS	OVERALL RANK	IMPACT
The level of economic growth	1	< by 2021
Stability of the global economic infrastructure	7	< by 2021
Stability of national revenue bases	9	< by 2021

Shocks to the global economic infrastructure will have a profound impact on government, affecting its ability both to manage the effects in the wider environment and to provide public services.

50%

of respondents in Western Europe rated the stability of national revenue basis as a highly important driver

There are, however, some surprising regional differences: Western Europe and Asia Pacific rated this issue particularly highly, followed by Africa and South Asia but only just over half the respondents (51%) in North America rated this as the most important driver in the Economy category.

Stability of the global economic infrastructure

The global economy, trade and financial flows are dependent on a complex infrastructure that comprises a range of key agreements, standards, systems, checks, balances and governance frameworks.

Shocks to the global economic infrastructure will have a will have a profound impact on government, affecting its ability both to manage the effects in the wider environment and to provide public services.

Clear strains are already evident in the global financial system. For example, the sovereign debt challenges facing many European nations are putting pressure on the current operating models of both the European Monetary Union and the wider European Union. Concerns are such that many commentators are openly questioning the long-term future.

As a result of these pressures, much of the global governance infrastructure and its supporting systems and processes may need to be redefined or completely transformed. This will require strong intergovernmental and multilateral cooperation among countries in order to establish a sustainable set of interconnected systems that can support the global economy over the period to 2026 and on to 2036 (ACCA 2012).

Respondents in North America rated this most highly (56%) followed by those in Asia Pacific (53%) and then Africa. Those in Western Europe gave this a lower rating than respondents in any other region, at only 35%.

Stability of national revenue bases

Stable national revenue bases are considered a prerequisite for the economic well-being of countries, as this stability affects governments' ability to provide public services. Generally, government revenues are derived from direct taxes paid by households (mainly personal income tax) and corporations; and indirect taxes, social contributions and revenues from state-owned assets and enterprises.

Shocks to, and fluctuations in, government income flows have a significant impact on a government's ability to plan effectively and

ensure the provision of public services. While in the short term the impact can be managed through increased borrowing, this is unsustainable in the long term. The UK, for instance, has its highest level of peacetime debt and, despite a period of cuts to public spending ('austerity'), the government is still continuing to borrow substantial sums to fund public service commitments. This is adding to public sector debt. Longer-term servicing of the debt will require significant funds, which may be made more difficult given that the UK has lost its triple A rating (Financial Times 2016). This is also reducing inter-generational equity as the current working generation will be the first generation since the Second World War to contribute more to public spending than it receives in support from government.

The recent crash in oil prices has been very detrimental to countries reliant on oil revenues as a main source of income. This has been important in, for instance, Nigeria, where government income from crude oil makes up a significant proportion of total income. This has highlighted the fragility of local economies that are reliant on one source of income, and has therefore emphasised the need to diversify. The Kingdom of Saudi Arabia took the decision recently to sell government bonds for the first time, in an effort to broaden national revenue bases.

The ability to plan is compromised when there is a lack of certainty about cash flows. Achieving value for money and effective public financial management will be key in such an uncertain situation.

'During the past few years, China's rapid progress in international trade has led to the rise of customs revenue, which has made [an] outstanding contribution to the state revenue. With a global economic slowdown, the Customs is committed to simplifying clearance procedures, enhancing supervision effectiveness and ensuring the stability of national revenue.'

A representative from China Customs, China roundtable participant

Western European respondents gave this driver the highest rating among respondents from all the regions (50%), followed by those from Asia Pacific (44%), Africa (41%), North America (37%) and South Asia, which gave it the lowest rating, at 33%.

The public sector is evolving to deliver services in the most effective way within the constraints of available public finances.

1.2 POLITICS AND LAW

From the public sector and accountancy perspectives, the challenge of governance and quality assurance of public sector outsourcing is of critical importance in the short term. Over 70% of survey and roundtable participants identified the continuous volatility of global politics as a driver of change. A similar number agreed that global institutions such as the World Bank, World Trade Organization (WTO) and UN could influence the emerging new world order and its response to the pace of global change.

Governance and delivery of outsourced public services

The public sector is evolving to deliver services in the most effective way within the constraints of available public finances. In making this value-for-money judgement, a holistic assessment is required that takes account of the longer-term costs and benefits as well as the related risks. To achieve value for money, governments do not necessarily need to manage all services in-house.

‘Governance is a key issue that needs to be addressed with regard to outsourcing public services.’

Bukkie Adewuyi, Director, Advisory Integrated Technology and Governance Solutions

Outsourcing is increasingly being used, particularly in the UK, for support services. One of the challenges in outsourcing public services is ensuring that there are suitable and adequate governance arrangements for contracts and contract management. Unfortunately, there have been many cases, globally, of failure. For example, in the UK the Ministry of Justice re-tendered its electronic monitoring contracts with private contractors G4S and Serco, after

the National Audit Office found examples of disputed billing practices (NAO 2015).

This driver was ranked most highly by respondents from Western Europe (90%) and North America (84%) in particular, followed by those in Africa (77%).

Level of international political volatility

The level of political volatility caused by uprisings or the actions of hostile nations and terrorists groups can pose a threat to both the physical and economic integrity of a state. No part of the globe is untouched by unrest and modern-day terrorism is taking this across international borders.

Governments around the world are experiencing challenges to previously established notions of globalisation and free trade – these are being replaced, in some cases, with more protectionist agendas that emphasise the country first rather than inter-connectedness in a globalised world.

Whatever the merits or demerits of these developments, public sector professionals around the world need to be sensitive to them and to understand the bigger picture that is driving them. This is because these risks can often create disruption to the status quo in ways for which adequate planning might be lacking – for instance, some events may have low probability, but tremendously high impact should they materialise.

Trust in government is fundamental and public sector accounting professionals will be one of the key pillars in maintaining that trust within the wider public. This trust stretches across multiple dimensions, such as the integrity of the government's finances, the checks and balances in place, and methods of ensuring transparency. Professional accountants are generally viewed as the ethical conscience of organisations and as a result they carry a particular responsibility for ensuring that trust in government organisations is maintained at all times.

Politics and law: top three drivers

TOP THREE DRIVERS	OVERALL RANK	IMPACT
Governance and delivery of outsourced public services	22	< by 2021
Level of international political volatility	24	< by 2021
Focus of global governance institutions	26	< by 2021

This political volatility is a constant challenge that will have a huge influence on countries' ability to achieve their development objectives.

'The challenge is to build trust – but how?'

US roundtable participant

Political volatility should not become a shield behind which various other agendas are pursued. This political volatility is a constant challenge that will have a huge influence on countries' ability to achieve their development objectives. The effect will naturally be more pronounced in some countries than others, with innocent citizens of states in flux paying the price for the actions of their governments. These types of situation will introduce difficult social choices for those running the public sector (for example, those providing services in areas with weak law and order) and they will have to make fair and objective decisions.

This issue was rated most highly by respondents from North America (82%) and Asia Pacific (81%).

Focus of global governance institutions

During the first half of the 20th century, a network of governance institutions operating at the international level largely took shape for regulating economic, political and social dynamics and fostering international collaboration. Questions are now being raised about how well these

institutions can govern and steer the emerging world order and respond to the pace of global change. Institutions such as the World Bank, IMF, WTO and the UN could face intensifying pressure to adapt their structures to the changing world.

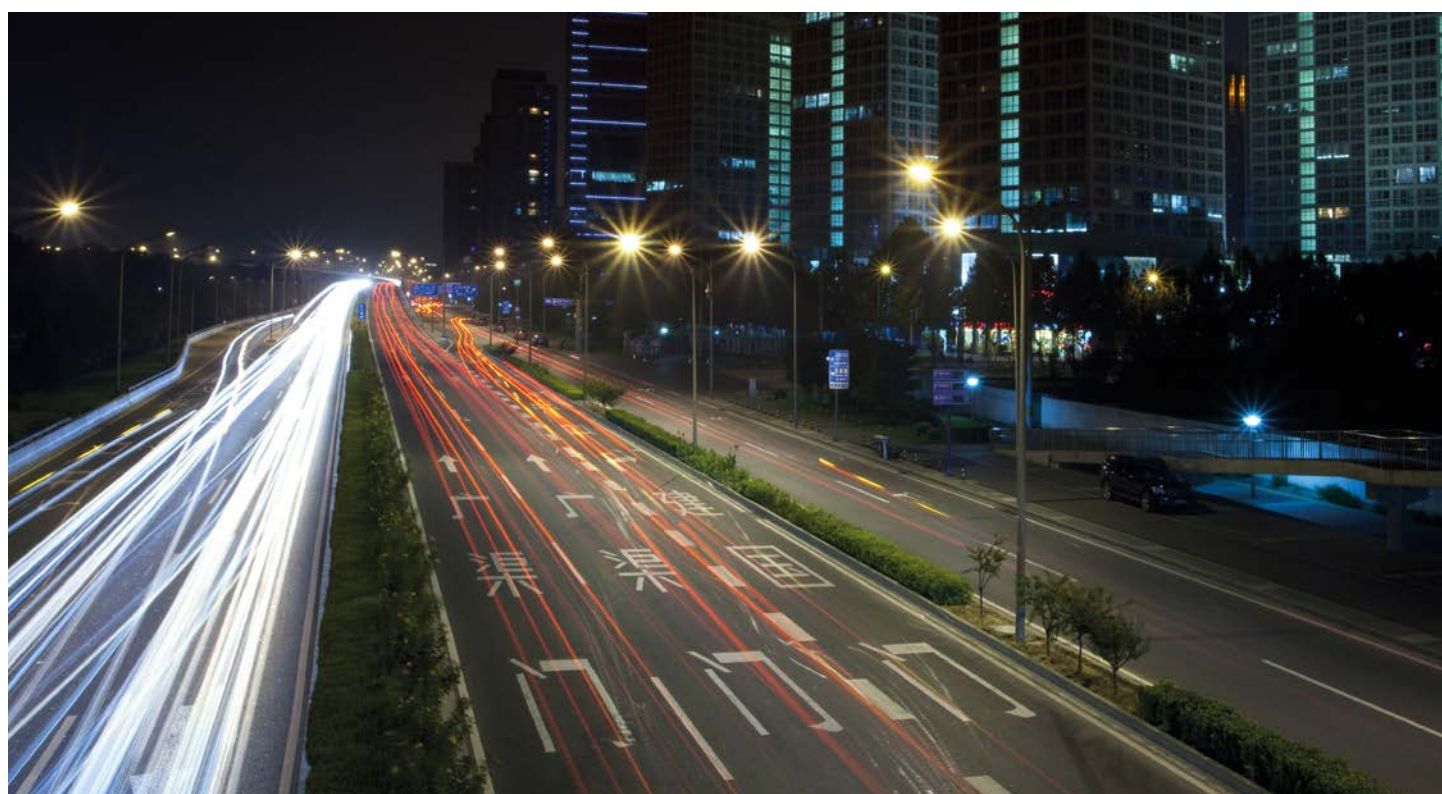
Global institutions are evolving at a relatively slow pace in response to a changing global landscape, in which there are more diverse centres of political and economic power and influence than ever before. The G20 grouping has become an increasingly prominent forum for bringing together leading developed and developing nations. China and India, both driving global economic growth, are among this cluster of nations. There is, however, still a belief among developing nations, in particular, that they need a stronger voice.

There is concern in some quarters that there could be a dilution of value and influence of the Western nations as developing economies seek to pursue their own agendas in newer regional groupings, such as the ASEAN (Association of South East Asian Nations) community. This will require public sector organisations to collaborate effectively on a regional level.

Respondents in North America (80%), Asia Pacific (78%) and South Asia (79%) all ranked this issue higher than those in other regions across the globe.

82%

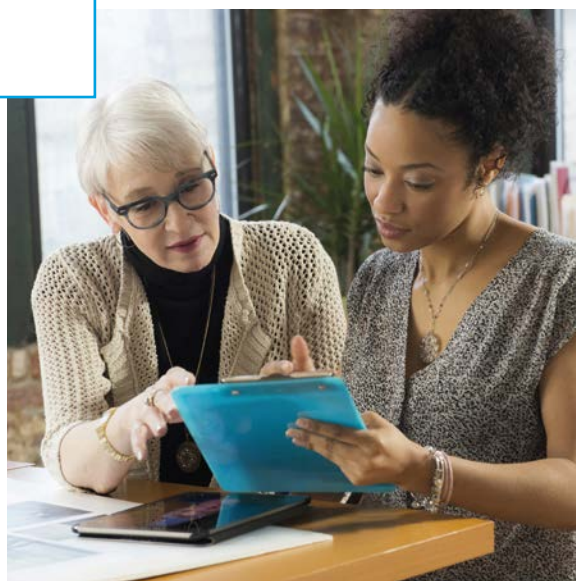
of respondents in North America rated the level of international political volatility as a highly important driver



The challenges of managing and addressing the needs and expectations of a multicultural, global and age-diverse workforce and the wider population will become increasingly complex.

1.3 SOCIETY

The spread of diversity in society and the workplace, whether it be increased female participation in the workforce or the rapidly ageing population and financial pressures making people work on into their late-60s, 70s or 80s (particularly in Western countries), and the resulting implications for workforce age structure, were highlighted as the top two drivers under the 'society' category of drivers.



Expectations of the scale and distribution of global population growth is also emphasised as a critical social driver for the public sector. The challenges of managing and addressing the needs and expectations of a multicultural, global and age-diverse workforce and the wider population will become increasingly complex.

Spread of diversity in society and the workplace

There is a relationship between the economic impact of migration and social cohesion. The International Organization for Migration (2016) reports that the number of international migrants worldwide – people residing in a country other than their country of birth – was the highest ever

recorded in 2015, at 244 million (an increase from 232 million in 2013). Despite this increase, global migration remains about 3% of the total global population, ie very low. Recent UN data forecasts that migration will rise to between 375 million and 578 million by 2050 (UN 2016).

A nation's migration policies will have a direct impact on the level of cultural diversity. As mature economies attract talent from across the globe this will increase cultural diversity. This immigration could be necessary for maintaining or bolstering economic growth in the face of decreasing birth rates and an increasing number of state pensioners.

At the same time, the whole world population is ageing. It is expected that by 2050, 28% of the European Union's population will have reached retirement age, assuming the retirement age remains at present levels (Bershidsky 2016). This is compounded by the dependency ratio. Taking the EU again as an example, the dependency ratio of over-65s to the economically active 15–64 age group will increase from 28% in 2015 to 50% by 2060 (European Union 2015). Thus, for the EU to maintain current productivity levels, the population needs to grow by an extra 42 million people by 2020, and 257 million by 2060 (Bershidsky 2016). To some extent, migration could help address this issue but this will place pressures on those countries losing their workforce to work elsewhere.

A significant proportion of Western countries' incoming labour force is likely to be drawn from emerging economies, where there is typically a younger and mobile demographic. For example it is estimated that nearly half (46%) of India's current 1.3 billion people are under the age of 25 (Goldman Sachs 2015).

As a result, governments may have to reassess their migration policies to support economic growth and ensure that businesses have the talent to compete in a global economy.

Society: top three drivers

TOP THREE DRIVERS	OVERALL RANK	IMPACT
Spread of diversity in society and the workplace	10	< by 2021
Workforce age structure	11	< by 2026
Scale and distribution of global population growth	25	< by 2021

Achieving inter-generational equity, fair outcomes across the age spectrum, is increasingly essential for ensuring economic productivity as well as social cohesion.

73%

of respondents in Africa rated the spread of diversity in society and the workplace as a highly important driver

The role of women in the workplace has yet to meet its full potential. This is still a challenge, as highlighted in recent research from the World Economic Forum (WEF), which found, extrapolating from current data, that it will be 118 years before women have the same career prospects as men (WEF 2015).

‘Earlier we saw generation X and Y impacting the working cultures. They were eager for out of the box solutions & new technologies. Now we have the Z generation, which fully understand what they are up for and against, less motivated by money but very particular on trust relationships at work place and expect bosses to be open and honest to lead.

Likewise, we have seen public sector entities impacted with female CEO appointed. A behavioral impact is seen with female workforce feeling a direct connect with a CEO who better understand them prompting more productivity and initiatives, which is core to a public sector entity.’

Salman Amin, Executive Director, NEPRA

A changing global demographic will change the workplace regardless of industry or sector. This, however, has an additional complexity in the public sector, where there is a demand for employees who reflect the changing face of the public they serve. This diversity will be a critical aspect of how public sector organisations will need to operate in the future.

Respondents in North America, Asia and Africa rated this very highly (77%, 76% and 73% respectively), with only those in Western Europe (59%) rating this slightly lower than other regions.

Workforce age structure

Global demographic changes will have a significant impact on the workplace. An ageing population that may not want, or cannot afford, retirement will continue to work. At the same time, the needs of younger generations will generate different pressures on, and tensions in, the workplace. Achieving inter-generational equity, fair outcomes across the age spectrum, is increasingly essential for ensuring economic productivity as well as social cohesion.

Generations that are ‘born digital’ grow up immersed in technology and are likely to have different perspectives on work, the workplace and, according to recent research, work–life balance. This could potentially widen the gap between the expectations of existing employees and those of future generations coming into the workplace. Modes of communication, organisational hierarchies and, indeed, the nature of work itself may need to evolve in order both to get the best out of emerging young talent and to ensure that there are meaningful careers for all.

‘If we look at the bigger picture of the whole nation, unbalanced amassing of labour and resources will increase and bring about profound impacts.’

You Baojian, The first affiliated hospital, Xi’an Jiao Tong University

ACCA’s *Generation Next* report (ACCA 2016b) suggests that the younger generation (under the age of 36) of incumbent professional accountants are well equipped to deal with changes that are driven by technology and globalisation. They also bring with them a global outlook, aspire to work outside their home country and may work outside the accountancy profession.

Key challenges for the public sector have been identified.

- Over three-quarters (76%) of finance professionals aged 36 or under working in the public sector said that their next move would be outside the sector, while only 14% of those outside the sector wanted to move into it.
- 65% of finance professionals aged 36 or under want to leave the public sector in the next two years. This is slightly lower compared to all sectors (70%).
- Over two-thirds (67%) of the 19,000 survey respondents, including 2,000 from the public sector, had a clear desire to secure promotion rather than a sideways move. Organisational cultural challenges and barriers however, were rated as being the highest barrier to progression in the public sector (37%) compared to all other sectors.

These findings raise questions for employers to consider, in particular for talent attraction and retention strategies. Also, if the younger

The scale and distribution of population growth affects the infrastructure and facility needs, as well as education needs.

generation is prepared to move sector frequently, does it become more difficult to build specialised knowledge? Will sectors lose tacit knowledge?

There are slight regional differences for this driver. Respondents in Western Europe rated this the highest (82%), followed by Asia Pacific (67%), South Asia (63%), Africa (60%). North America rated this the lowest (only 52%).



Scale and distribution of global population growth

The high rates of global population growth and how it is distributed will influence the public sector and place an increasing strain on public finances.

Many emerging markets (such as India) have been referred to as having a 'demographic dividend', ie a large share of the population is in the younger working age group (under 24). Nonetheless, it is important to recognise that an increase in the average age of populations is not necessarily occurring only in Western countries: Japan has had an ageing population for many decades now. Emerging markets do not all have younger-than-average populations, with China being an example of a country where increasing prosperity and the one child policy are among factors contributing to an increasingly ageing demographic profile.

It is also pertinent to understanding government priorities around the world that major centres of future population growth

are expected to be in Africa (particularly sub-Saharan region) and in Asia. This will inevitably place pressures on these governments to manage resources across an expanding population base. A big part the ability to do this is developing an appreciation of future needs, and planning and developing policies that will withstand the test of time. This is particularly important where large-scale infrastructure investments are involved and inaccurate forecasting can result in the need for expensive upgrades.

The scale and distribution of population growth affects the infrastructure and facility needs, as well as education needs. With a larger youthful population there is a greater need for education.

It will also be very important for technology to be effectively leveraged, as much as possible. The key value proposition of technology is its ability to reduce the costs of scaling up, so in a fast-expanding population technology must be used as much as it can. In certain emerging markets, India for example, some local governments are increasingly exploring the role of 'e-services' in a range of areas such as paying bills, answering routine queries, and providing access to data about ownership or transactions. This helps governments tremendously in using scarce and stretched resources to manage the needs of the citizens. Artificial intelligence will increasingly have an impact on public services. One UK local authority has implemented artificial intelligence to make it easier for residents to locate information and complete standard applications, as well as simplify some of the council's internal processes.

Population growth was ranked exactly at the middle of the list of 50 drivers, at number 25, suggesting that respondents are very aware of it. Some other drivers in this category (ie relating to society), such as diversity in the workplace, scored higher, which might reflect the fact that demographics can be a macro-level, country-level issue that may seem less immediately relevant than what is happening in the workplace.

Among all the respondents, those in South Asia rated this most highly (71%) followed by those in North America, while just over half (54%) of those in Africa selected this, giving it the lowest ranking.

The public sector is often unable to compete with the private sector for talent so fails to attract and retain the people it needs to help modernise public services.

49%

of respondents in Asia Pacific rated the quality and availability of the global talent pool as a highly important driver

1.4 BUSINESS OF GOVERNMENT

The three drivers that relate to the ways in which government organisations conduct their business take the second, third and fourth ranks among the critical drivers. Respondents considered the global talent pool to be the second most critical driver for the public sector for the period 2017–21 and there was also a clear emphasis on the critical role of public sector leaders' attitudes to change and the level of business complexity, followed by the use of PPPs.

Quality and availability of the global talent pool

This is a global issue across all sectors. The public sector is often unable to compete with the private sector for talent so fails to attract and retain the people it needs to help modernise public services.

'Government employees have historically been paid less than the market rate of similar positions in private sectors. There has been a shift in this approach and in certain public sector organizations salaries are now benchmarked to market rates. This is expected to attract better talent to the public sector, which will then improve the overall work quality.'

Sayyid Mansoor Hasan FCMA, ACIS, Accredited Mediator, Certified Lead Assessor

Also, as emerging economies offer significant opportunities, they are actively reaching out to their diasporas to go back and use their talent at home. For instance, over 2010–15 the number of Chinese student returnees hit a record level: 2.2 million had returned in 2015. In 2010, fewer than one in three returned but by 2015 this had increased to almost 80% of all students studying abroad (ICEF Monitor 2016). This may not seem like a large percentage (of the total Chinese population), but these

are the brightest and best so a higher proportion returning will mean more talent too is returning to China.

Attracting people with the right gifts and skills is a long-term challenge for the public sector and sustained efforts will be required to close the 'talent gap'.

Respondents in Asia Pacific region ranked this most highly (49%) followed by those in South Asia (44%), North America (41%) and Africa (36%), but those in Western Europe rated this at only 26%. This is probably explained by Western Europe's ability to attract talent from other regions, creating an imbalance.

Business leaders' responsiveness to change and disruption

This area is frequently cited as the 'elephant in the room' – an obvious requirement for leaders today of which many are well aware, yet a requirement that many find notoriously hard to satisfy in practice.

The complexity of government, and the short timelines in which changes happen mean that mistakes can be expensive and, in the worst cases, damage reputations and a country's standing. A key issue is technology, which is rapidly changing business practices and, as a corollary, organisational structures and operating models. This is only one part of the changes taking place. There are other factors, such as government policy and the impact of greater or reduced international trade or changes in availability of skills. It may also be linked to a complete redefinition of what society expects from the public sector. For example, in a 'sharing economy' where many transactions are made peer-to-peer, there is much more of an expectation for public sector organisations to be partners that enable societal needs as they evolve – rather than a traditional 'business-customer' relationship where feedback on customer needs may be much slower.

Business of government: top three drivers

TOP THREE DRIVERS	OVERALL RANK	IMPACT
Quality and availability of the global talent pool	2	< by 2021
Business leaders' responsiveness to change and disruption	3	< by 2021
Use of Public Private Partnerships (PPPs)	4	< by 2021

Organisations are generally defined by the qualities of their leaders and this was reflected in the views of the survey respondents.

Enabling and managing change is a skill in its own right. For many leaders it is a skill that they have to learn with a dedicated focus, as they may have reached leadership positions by managing an organisational unit or developing policy – which are very different skills to those needed for handling the disruption associated with change. Leaders tend to cite two factors when highlighting successful case studies in change management:

1. a clear business case for why the change is needed, and how success from this effort will be defined and measured
2. an effective communication strategy that ensures that key messages are cascaded to affected stakeholders during what is often a stressful period of change.

Organisations are generally defined by the qualities of their leaders and this was reflected in the views of the survey respondents. This driver was rated very highly and was third in ranking out of the available 50 drivers. This is also a reflection of the fact that, despite the impact of technology, it is an enabler rather than a solution in its own right, and ultimately people and their ability to lead will always be the key to unlocking organisational value.

‘Building the state requires innovative business leaders.’

Tsakani Ratsela, Deputy Auditor General, Auditor General South Africa (AGSA)

Respondents in North America and South Asia both rated this equally highly (43%) followed by Africa (38%), whereas those in Western Europe (35%) and Asia Pacific (34%) ranked this lower, although the range was not as marked as it has been for some other drivers/categories

Use of Public Private Partnerships (PPPs)

Governments around the world have recognised that there can be some practical constraints for them in scaling up public services to the level that their citizens require. One solution to this has been the idea of PPPs. The underlying idea is for relevant parties to be assigned those responsibilities and risks that they are best placed to absorb.

For public services, such programmes can extend from full in-house provision to fully delivered by the private sector. This can range from collaboration to integration, outsourcing and PPPs or Public Finance Initiatives (PFIs). Each of these provides a credible option to deliver public services.

PPPs and PFIs are used extensively across the UK and France but less so in other European countries. Elsewhere, India has experimented extensively with the PPP environment with several hundred PPPs for major infrastructure development projects. However, this is dwarfed by China which has recorded over 7,000 PPP projects (World Finance 2016), on the PPP Comprehensive Information Platform in China, with a total investment value of CNY 8.3trn (\$1.3trn). These PPPs range from energy all the way to tourism.

Naturally like most ideas, PPPs also carry risks and things can go badly wrong if not executed properly. There is often an imbalance in the level of skills between the private sector organisations that have experts with delivery experience and government. This imbalance means that at the time of agreeing contractual terms governments are sometimes unable to negotiate a deal that is in the best possible interests of their citizens. Furthermore, these contracts can often cover several decades (for example in respect of complex infrastructure projects), which means that the public interest might be compromised over a significant period of time due to contracts that are long-term and difficult or expensive to unwind.

PPPs were ranked fourth among the available 50 drivers of change, suggesting that respondents viewed this as a key driver of change. It is instructive that the future role of government was seen so firmly as one that operates in partnership with the private sector in meeting citizen needs.

South Asia (45%) ranked this the highest of all global regions closely followed by Africa (42%), Asia Pacific (35%), Western Europe (28%). North America ranked this the lowest (24%). This may be a surprise to many, especially given the high prevalence of PPPs in Western Europe.

One of the areas where the public sector around the world is experimenting with data is the creation of Smart Cities.

1.5 SCIENCE AND TECHNOLOGY

This section explores key science and technology developments that could have a major bearing on the public sector and their finance teams. Advances in science and technology lie at the heart of many of the developments that will shape the public sector landscape over the next decade as they offer the potential for disruptive innovation in literally every aspect of human life, society and work.

Big data: the development and exploitation of large organisational databases, data mining and predictive analytics

An important reason for this is the pervasive effect of technology which is changing the skills and activities required from professional accountants. Nowhere is this more evident than in the area of big data. With the vast volume and variety of data that governments hold and the speed with which it accumulates, they will need to have adequate measures in place to process and unlock insights.

In most economies the government is one of the largest (if not the largest) repository of data on a wide range of stakeholders ranging from citizens, businesses and government departments. The use of big data is likely to increase, and the attitude to it is also likely to evolve. This evolution is likely to be from a mainly process and compliance management approach (data has to be stored safely, retrieved when needed and processed in accordance with organisation needs) to a strategic value creation approach (data as an asset that reveals something about the current and future performance of the organisation, and influences strategic decision making). This forward-looking ‘predictive’ characteristic depends on the availability of much more data than ever before and sophisticated mining techniques to draw inferences from it.

‘There is currently a drive to develop and exploit databases (use of big data) through the development of e-governance revolving around SAP. Hospitals are now ‘online’ to district level. Extra budgetary funds are, however, required for this.’

Zimbabwe roundtable participant

One of the areas where the public sector around the world is experimenting with data is the creation of Smart Cities. The idea in many of these cities is to use technology and data to create a dynamic interconnected system of public services within the city that is more efficient and resilient. Smart sensors, for example, could be used to understand traffic congestion patterns and find cause-effect relationships between location, day of the week and time of day, and the likelihood of accidents. This data can then be shared with hospitals in the city and mapped against spikes in incidence of patients arising from traffic casualties. This helps at a preventative level (identifying and correcting high-risk traffic zones) and remedial level (hospitals are better prepared and able to foresee periods of higher likelihood for accidents on the roads). This technology and predictive analytics is already being used by Transport for London.

For this to occur data must first be tracked and made available, and secondly freed from siloes so that different public services can benefit from the insights gathered by each other.

For accountants working in the public sector, data analytics has the potential to be a key driver of change both in how their organisations operate and in how they themselves operate within those organisations.

This was the second most frequently cited category as a driver of change cited by almost 80% of respondents and is expected to be a key driver looking ahead. This was consistently rated highly by all the global regions, ranging between 82% to 77%.

80%
of all respondents rated Big Data as a key driver looking ahead

Science and technology: top three drivers

TOP THREE DRIVERS	OVERALL RANK	IMPACT
Big data: the development and exploitation of large organisational databases, data mining and predictive analytics	5	< by 2021
Cybersecurity challenges for government	8	< by 2021
The digitisation of work	18	< by 2021

Those who run public services will inevitably have to factor in these risks and proceed with due caution when considering adoption of new technologies.

Cybersecurity challenges for government

Cybersecurity risks are the great new threat of the digital age. All the benefits from technology and data are predicated on the idea that data is secure and can only be accessed by authorised individuals. The reality is that for every layer of protection that is devised, there are dedicated hackers devising ingenious new schemes to circumvent the protection. Indeed, it has been predicted (Juniper 2015) that the rapid digitisation of consumers' lives and enterprise records will increase the cost of data breaches in the private sector to \$2.1 trillion globally by 2019, almost four times the estimated cost of breaches in 2015.

The scale of the issue may be even greater, as research by the World Economic Forum (2016) has highlighted that a lot of cyber espionage may not be detected.

As mentioned within the big data section above, governments tend to be among the biggest repositories of data. So, while this presents opportunities (as does analytics) it also means that governments have the most to lose from a breach of their systems. So the open, connected world brings with it the risks of a lawless state

where rogue entities could electronically disrupt or undermine government systems and processes – and harm citizens.

Those who run public services will inevitably have to factor in these risks and proceed with due caution when considering the adoption of new technologies. Cost effectiveness will also be an important factor, as it is impossible to create a system that offers full protection from cyber-attacks. Therefore it is vital to understand, or develop a view about, what is an acceptable loss, and what is an acceptable price to pay to guarantee a given level of protection from cyber risks. Importantly, the costs of maintaining that level of protection, once the system has been set up, must be calculated.

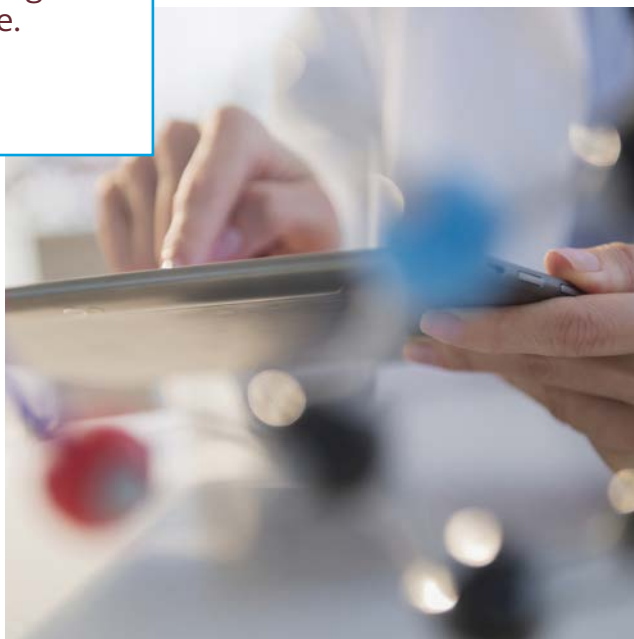
There was general consensus across the global regions that this would be the eighth most important driver over 2017–21, and it ranked particularly highly in Europe (76%) and South Asia (75%), where three quarters of respondents rated this as a key driver of change, closely followed by those in North America (70%) Asia Pacific (65%) and finally Africa (64%).



Governments are recognising that, in a digital world, there are cost savings to be made from more effective processes and greater transparency, provided that the correct safeguards can be put in place.

The digitisation of work

Many organisations are adopting the mantra of 'digital by default'. What this refers to is the new reality that adopting digital working practices is not so much a question of 'if' it will happen, but more one of 'how soon' it can be made to happen. Indeed, the premise behind 'digital by default' is to move away from the need to migrate work practices to digital-friendly



budgets can access advanced software through a subscription model with regular payments, rather than making expensive capital investment 'up front'.

Governments are recognising that, in a digital world, there are cost savings to be made from more effective processes and greater transparency, provided that the correct safeguards can be put in place, such as encrypted access to information. Digitisation also increases the ability to enable collaboration between countries and sharing of important information. All these aspects point to the potential for a significant increase in efficiency with the help of digital tools – which is beneficial, given the constantly increasing pressures on limited government resources.

'This is one step further from the paperless custom clearance and our future development. I believe the electronic, paperless and automatic direction is our future direction of development and I feel we have done much and will keep on doing more cutting-edge work.'

A representative from China Customs, China roundtable participant

ways – instead, where possible, the emphasis is on embedding digital practices into the ways of working from inception. Clearly, this is a process in progress, and one that is already happening to differing levels, depending on the country and industry involved.

Digitisation brings a variety of benefits, from fast, secure transfer of information to greater connectivity, which enables sharing of ideas and best practice. Importantly, many technology solutions have proved to be affordable – and the nature of technology means that over time, as they mature and user adoption increases (along with the attendant network-effect benefits) the cost per user falls. Some areas, such as cloud computing, have become indispensable tools in allowing large-scale collection and retrieval of data for organisations. Furthermore, the 'Software as a Service' (SaaS) model means that many smaller organisations with smaller

Digitisation of work ranked 18th in the list of drivers and was behind a couple of other drivers in the category of Science and Technology, such as cybersecurity and big data. Digitisation is now a reality for many countries, and this may be why it is seen as less of a driver for future change than the other areas in this category, which are possibly less familiar and less well understood. In any event, digitisation is increasingly becoming a non-negotiable 'must-have' – the fact that society uses digital tools to an ever greater extent is bound to spill over into the workplace, which after all is a reflection of the wider society within which it operates.

Respondents in Western Europe rated this very highly compared with those in some other regions (79%), closely followed by those Africa (67%), then North America (55%), but only half rated this as important in Asia (Asia Pacific and South Asia.)

Until the connection between resource consumption and economic growth is seriously challenged, global demand for scarce commodities such as oil and rare earth metals is likely to increase.

86%

of respondents in North America
rated the competition for limited natural
resources as a highly important driver

1.6 ENVIRONMENT, ENERGY AND
RESOURCES

Concerns over the sustainability of current patterns of consumption loom large, and the public sector has highlighted the issues of the competition for natural resources and climate change. In addition, expectations about public sector organisations’ green practices have also been identified as a driver.

Competition for limited natural
resources

The need to sustain rising populations and fuel economic growth is set against recognition that the planet has finite resources. Until the connection between resource consumption and economic growth is seriously challenged, global demand for scarce commodities such as oil and rare earth metals is likely to increase. It is also worth noting that competition takes many forms over and above a straight price competition. The emergence of shale gas, for example, has arguably tilted the competitive advantage towards the US, and suggests the possibility of reducing the historical dependence on imports from oil-rich nations.

Natural resource management is a complex task and any change in global demand and supply equations has an immediate impact on government revenues. For countries rich in natural resources (eg oil-exporting nations) revenue from natural resources is often the biggest source of income. The fall in oil prices has therefore hit many producers hard, and exposed the over-reliance of their government finances on a single source of income. This over-reliance, in addition to the immediate drop in revenue inflows for government expenditure, can expose several areas of collateral damage. These may include reduced foreign currency to fund imports (in itself a reflection of some economies’ lack of sufficient domestic production and heavy reliance on imports to meet demand),

inability to service debts (and potentially worsen sovereign credit rating) and lack of fiscal prudence in maintaining sufficient savings and investment in the good years to weather the difficult times.

All the above issues speak directly to the role of finance and accounting professionals working within the public sector, who have a key role in ensuring the financial viability of governments around the world. The decisive impact that good or poor financial management can have in this area is reflected in the large number of respondents identifying this area as a significant driver of change, when looking ahead. Also, the geopolitical nature of natural resources means that the public sector, unlike commercial businesses, will always be at the heart of any changes that are driven by the evolution of natural resource management globally.

This driver was consistently ranked very highly across the globe, with little variation between respondents ranking it most highly North America (86%), and those giving it the lowest ranking Western Europe (79%).

Global climate change

While there are always those who challenge the notion of climate change, consensus opinion among a wide range of sources is that human activity is having an impact on long-term climate patterns. This includes a trajectory of increasing temperatures around the world (NASA research suggests that 2015 was the hottest year since records began in 1880) (NASA 2016), as well as greater unpredictability and ‘extreme weather events’, such as droughts, flooding, hurricanes and typhoons.

There is a twofold impact to consider for the public sector.

Firstly, it will need to consider what the impact is on the environment and the citizen, and to put mitigations in place.

Environment, energy and resources: top three drivers

TOP THREE DRIVERS	OVERALL RANK	IMPACT
Competition for limited natural resources	15	< by 2021
Global climate change	21	< by 2026
Scale of take-up in alternative energy by organisations	31	< by 2021

Governments around the world have been grappling with the potential of renewable sources of energy and have been exploring the potential of diversifying away from heavy reliance on fossil fuels, as far as possible.

These mitigations can take various forms. One approach is that of education aimed at citizens: for example, awareness building about the harmful effects of the high pollution levels in the environment. The other more policy-level agenda is for countries around the world to work together to arrive at common agreed principles that will tackle the issue in the long term (such as the Paris Agreement).



Secondly, the public sector will need to consider the environmental impact of public services. This may involve factoring extra costs into government budgets for new areas such as stronger flood defence mechanisms and research into the impact of rises in temperature on a country's eco-systems. It will also mean that budgeting and accounting within the public sector will increasingly have to take into account factors linked to natural capital, and emerging approaches that recognise forests and other environmental assets as part of the capital of a country. Such approaches will be essential in the future as getting maximum value from the finite resources on Earth in a sustainable way becomes more and more essential.

Respondents in North America rated this most highly (82%), followed by Asia Pacific (79%), Africa (78%), South Asia (75%) and Europe (69%).

Scale of take-up in alternative energy by business

Governments around the world have been grappling with the potential of renewable sources of energy and have been exploring the potential of diversifying away from heavy reliance on fossil fuels, as far as possible. This is a complicated area for governments and requires a holistic approach that combines engagement between government and industry, and between governments around the world.

In recent years there has been some encouragement, with a greater realisation among many governments about the importance and potential of alternative fuels. The International Energy Agency (IEA) suggests that both a strong level of backing at a policy level by various governments (such as the US, China and India) combined with a long-term trend for cost reductions for energy sources such as solar power could be helpful factors. Indeed, it is becoming increasingly common for households in some countries to install solar panels with the benefit of government tax credits and other incentives to reduce the burden of the upfront cost – which demonstrates how government policy can combine with private sector innovation to create cheaper long-term fuel supplies for consumers.

Given geo-political pressures on traditional fuels, alternative sources are seen as an important way of broadening access to energy. Indeed, renewables have surpassed coal in 2015 to become the largest source of installed power capacity in the world (IEA 2016).

Accounting and finance professionals within government cannot be oblivious to these long-term trends and will need to prepare themselves. It came in 31st of the 50 drivers, which reflects the greater awareness of the role of energy that has arisen through sustainability-related reporting, and the range of initiatives in which accountants are being involved that try to attach a value to the natural capital and energy-generating assets that countries possess.

Respondents in North America rated this most highly among those from all global regions (80%), followed by those in Western Europe (73%), Africa (70%) and Asia Pacific (64%), with those in South Asia rating this lowest (61%).

If government is to ensure good public financial management, it needs to know the assets it holds and the level of current and, even more importantly, future liabilities.

1.7 THE PRACTICE OF ACCOUNTING

Both operational and strategic drivers are explored in this category. The changing scope, scale and complexity of senior finance roles are examined, particularly in relation to growth in demand for non-financial and integrated reporting, which are explored along with the operational considerations, such as audit's role, managing internal audit, and balancing managerial and financial accounting.

Non-financial information and integrated reporting

Public sector financial reporting varies globally. Some countries have advanced financial reporting requirements while others are grappling with reporting the cash position (cash accounting) and still others have no consistent standards in place. Section 2 emphasises the importance of high-quality financial reporting is an important prerequisite for building and maintaining trust and ensuring that limited taxpayer or donor funds are used economically, efficiently and effectively. If government is to ensure good public financial management, it needs to know the assets it holds and the level of current and, even more importantly, future liabilities.

In spite of this, there has been growing realisation that traditional financial reporting provides insufficient information for decision-making. The integrated reporting (<IR>) movement, advocated by the International Integrated Reporting Council (IIRC), goes further than the financial resources captured on the balance sheet to include other resources that are less easy to measure, such as human, natural and intellectual capital, which have a bearing on the value of an organisation. As a result of these considerations, <IR> is being championed by many as the way forward.

Integrated reporting represents a logical progression in the goal of reporting. Cash-based systems provide a very simplistic view of events: that is, they show the money spent. The push to accruals enhances this by recognising costs as their associated benefits are being consumed, including assets held and, importantly for

government, the level of liabilities. Once this data is available, organisations can have an informed discussion on whether resources are being used effectively. Once there is trend data, wider questions about what is happening to the level of liabilities can be examined and explored. In the UK, the government consolidated accounts show a significant increase in the level of net liabilities, increasing from £1.2 trillion in 2009/10 to £2.1 trillion in 2014/15. A major component of the rise is the public sector pension liability. As a consequence, the civil service pension scheme has been reformed.

<IR> takes this to the next level and moves beyond operational linkages to a more holistic strategic link, where the reporting tool becomes an integral part of understanding the wider organisational strategy and future direction of developments. It has added a new dimension for reporting and non-financial information was consistently selected as the key driver of change in the practice of accounting category. Different regions will have different selections depending on the level of financial accounting maturity. Therefore it was not surprising that this was seen as a bigger driver in Western Europe than other regions.

The ultimate goal for <IR> is to communicate an organisation's performance in the widest sense in a clear and relatively succinct way. This places demands on the professional accountant to understand the 'bigger picture' of government objectives and strategy, and demonstrate how government uses resources to achieve its aims and measure the impact of its activities. Underlying <IR> is the idea that different types of resources are interdependent: there may well be trade-offs between one resource and another (for example, economising on staff costs may require an increased investment in other resources, such as in new technology), and between short-term and longer-term objectives (for example, a short-term cost saving in one department may mean an increase in longer-term costs overall). In this way, <IR> may be valuable in helping to develop a more sustainable approach to managing public resources.

Practice of accounting: top three drivers

TOP THREE DRIVERS	OVERALL RANK	IMPACT
Non-financial information and integrated reporting	6	< by 2021
Balance between external financial accounting and internal managerial accounting	13	< by 2026
Clarity in financial reporting and defining the audit function	14	< by 2021

A constant challenge for accountants is striking the right balance between external financial reporting requirements and internal managerial accounting. Both are expected to become more demanding and complex over time.

Balance between external financial accounting and internal management accounting

In traditional accounting roles there has always been a clear distinction between financial and management accounting. Financial reporting has an important role in providing external accountability.



In a public sector context this is even more important because the financial statements provide transparency on spending public funds. As for financial reporting in other sectors, the criticism is that the financial statements are backward looking in nature, reporting only what has already happened, and are not accessible or easy to understand by users. Management accounting is important in helping to provide information to ensure that the right decisions are taken in any given context. Management accounting and good management information are not as well developed in some parts of the public sector across the globe as they are in other sectors.

A constant challenge for accountants is striking the right balance between external financial reporting requirements and internal managerial accounting. Both are expected to become more demanding and complex over time. The levels of complexity and expense (especially in countries that have constant challenges with capacity and capability in this area) were often cited by respondents as a big challenge and questions were raised as to

the value of the information. For example, in some local (municipal) governments in South Africa as much as 20% of the total budget was spent on procuring external support to ensure that the financial statements would fully meet the IPSAS financial reporting requirements. The question was raised as to whether this was the best use of limited public funds.

‘In South Africa 800 million rand was spent in one year to support compliance with global financial reports and we have to be clear on the benefits.’

Cobie Van Antwerpen, Director – Public Sector, Grant Thornton

Furthermore, as demands grow for a more integrated and holistic approach to external accounting, professional accountants in the public sector will need to ensure that they develop the skills and capabilities to ensure that they are fully adept at interpreting data so that they add value regardless of whether they are preparing the financial statements or the monthly management accounts.

Government needs accountants and auditors who can go beyond number crunching, and look into making value judgements from the figures.

Clarity in financial reporting and defining the audit function

The goal of financial reporting is to present the users of the accounts with a clear picture of an organisation's financial health. It is important to remember that the financial statements serve a specific function; in the private sector this includes providing clarity for investors and shareholders. In the public sector context there is the added complexity of managing the needs of the many and varied stakeholders and users of accounts. The primary stakeholder is Parliament and is the ultimate shareholder to which government must provide accountability.

There is a wealth of information in public financial statements, especially where these have gone through the rigour of an independent audit process. Nonetheless, the lack of use of the financial statements is a challenge and part of the responsibility of governments is to make the information more accessible.

Government needs accountants and auditors who can go beyond bean counting and number crunching, and look into making value judgements from the figures.

The New Zealand Treasury is an example of how the application of Whole of Government Accounts has made information more accessible to New Zealanders. It clearly signposts major items of government spending, such as education, health, and defence. This approach empowers the citizen to understand what is happening and becomes an important tool in the provision of accountability.

‘In the future [accountants] will need a different skills set, perhaps thinking beyond the balance sheet.’

US roundtable participant

The audit function has a crucial role to play in all sectors. In the public sector the audit function is the foundation of good public sector governance.

There are a variety of public sector audit activities and reporting relationships in different jurisdictions and in different forms of government. The key theme, however, is that public sector audit activities must be organised appropriately to enable public sector entities to fulfil their duty to be accountable and transparent to the public while achieving their objectives effectively, efficiently, economically, and ethically (IIA 2012).

Public sector audit activities include:

- An independent opinion on the financial statements and may review and, where appropriate, report on aspects of the arrangements set in place by the audited body to ensure the proper conduct of its financial affairs and to manage its performance and use of resources.
- Corporate governance: similar to the external audit function in the private sector, public sector auditors are often required to review and report on the corporate governance statements that public sector bodies are required to include with their financial statements.

In addition the public sector audit can include an assessment of:

- **Regularity:** public sector auditors express an opinion on whether transactions included in the financial statements conform, where appropriate, with the legislation that authorises them; and have been applied in accordance with Parliament's intentions and conforms to governing authorities. For example, in the UK the Comptroller and Auditor General provides Parliament with an explicit, separate, opinion on the regularity of transactions included in the financial statements of central government bodies (FRC 2010).
- **Economy, efficiency and effectiveness:** The nature of the auditor's responsibilities varies between different parts of the public sector. In the US the Government Accountability Office (GAO) supports congressional oversight to determine whether federal funds are being spent efficiently and effectively.
- **Standards of financial conduct:** Public sector auditors are required to review and, where appropriate, to report, on issues relating to standards of financial conduct in public bodies and aspects of the arrangements set in place by the audited body to ensure the proper conduct of its financial affairs.

Auditors should provide unbiased, objective assessments of whether public resources are managed responsibly and effectively to achieve intended results. Therefore auditors help public sector organisations achieve accountability and integrity, improve operations, and inspire confidence among citizens and stakeholders.

Therefore, the independent auditor's opinion enhances the user's confidence that the financial statements present a true and fair view. Furthermore, during the audit, areas of weaknesses in the entity's internal control system can be identified and communicated to management.

Having the relevant information is the foundation, but professional accountants in the public sector will need additional skills and qualities as their role evolves.

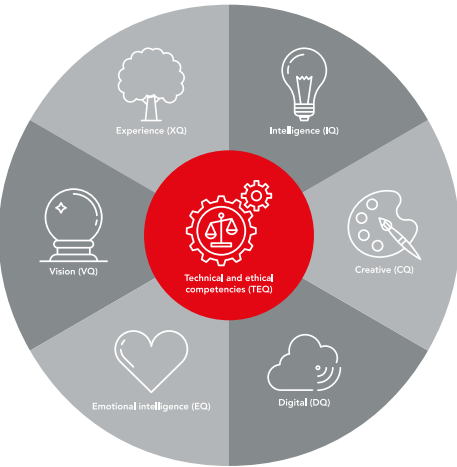
1.8 THE ACCOUNTANCY PROFESSION IN THE PUBLIC SECTOR

In the wake of the financial crisis, public expectations of the public sector and the profession, its attractiveness and definitions of its role are central to many of the drivers emphasised. Importance is also placed on building capacity in transitional economies, and the flexibility and suitability of accountancy training. Particular attention is given to developing entrepreneurial skills and business awareness.

The adoption of either IFRSs or IPSASs by countries is an important step, demonstrating they too have the same high financial reporting expectations imposed on the private sector. It also benefits the country by demonstrating transparency to external donor agencies (which are also required to demonstrate value for money for the limited funds they provide to emerging economies).

Accounting skills vary, however, and particularly in the public sector. To implement IFRSs or IPSASs (either cash or accruals) successfully, the public sector needs to have people of the right calibre with professional accountancy training (or to build the capacity and capability to develop them) and an understanding of the public sector landscape and how government works.

Figure 1: Professional quotients for success



Accounting skills capacity in transitional economies

In a world where the citizen feels disempowered, distrust in governments is seen as an increasing global risk (WEF 2016) and it is imperative that governments do all they can to build trust and engage with the populations they serve. To build trust and provide greater accountability and transparency in government spending, many countries are embracing international financial reporting standards (IFRSs) or International Public Sector Accounting Standards (IPSASs.)

This is the first important step on the journey to better public financial management. Having the relevant information is the foundation, but professional accountants in the public sector will need additional skills and qualities and, as their role evolves, these other skills will become more important. *Professional accountant – the future* (ACCA 2016a) identifies seven quotients that the finance professional of the future needs, and these qualities are required regardless of sector. These seven quotients include: technical and ethical competencies, creativity, digital, intelligence, experience, vision and emotional intelligence. There is a need for professional accountants who are not just record-keepers of past performance, but also influencers of future performance. This requires a much more rounded approach that creates leaders who can manage ambiguity and demonstrate a holistic and ethical approach, so that the particular challenges facing the public sector can be managed in a way that creates social benefits efficiently and effectively.

Accountancy profession in the public sector: top three drivers

TOP THREE DRIVERS	OVERALL RANK	IMPACT
Accounting skills capacity in transitional economies	19	< by 2021
Flexibility, suitability and cost of accountancy training	20	< by 2021
Level of entrepreneurial skills in the accountancy profession	27	< by 2021

The next generation of professional accountants will want new and different training and development options that, as far as possible, meet their desired training style.

71%

of respondents in South Asia rated the flexibility, suitability and cost of accountancy training as a highly important driver

Understanding and interpreting the numbers is a skill required in all sectors, but the public sector has an added layer of complexity requiring greater creativity and intelligence to address ambiguity in measuring policy outcomes (and determining where best to spend limited public funds).

There are major issues in attracting and retaining professional accountants in the public sector, as highlighted in other reports, such as by Confederation of Asia Pacific Accountants (CAPA 2016), which include:

- the pay gap (level of remuneration is often considerably less in the public sector than in the private sector)
- the image of the public sector as dull, with poor working conditions, and at worst, involving concerns of corruption and discrimination
- unclear career paths, lack of career planning or personal development, and slow advancement

‘The culture of civil servants needs to evolve to be: more responsive to value for money, focus on delivering more for less, to embrace a private sector ethos, change public financial management to accompany these needs.’

Roberto Tarello, practice manager, Governance Global practice, World Bank Group

Given this context, it is not surprising that respondents based in Asia and Africa rated this as a significant driver of change, at 73% and 69%, respectively. There is recognition of this issue as more and more countries in these regions are either in the process of implementing accruals, or are contemplating implementation.

Flexibility, suitability and cost of accountancy training

There is an overwhelming case that the public sector will require more accountants. They will be required to fulfil the growing need to provide greater accountability and transparency, as well as better financial insight, to help public sector organisations to meet future changes, such as the impact of lower economic growth or the commercialisation of public services through the use of PPPs or PFIs.

The profession must demonstrate its ability to operate in a state of continuous evolution by training and developing finance professionals to ‘future proof’ the public sector.

‘It is important to invest in training and nurturing students but payback can take three to five years. The challenge in the public sector is to retain these people once they are qualified.’

Ted Stehney, Retired Assistant Inspector General, US General Services Administration

Although the next generation of professional accountants are tech savvy it is interesting to note that, according to the *Generation Next* report findings, students prefer classroom training rather than distance learning or on line learning. As an employer, the public sector will need to provide more on the job training and greater individual support through mentoring and coaching while they are completing a professional accountancy qualification.

The need for the necessary skills will have a significant impact, not only on the formal curricula, but also on the development of the ‘mindset’ and worldview of those coming through accountancy training courses.

‘All these things are changing; the academician also has to change because you have to start from the root... and... collaboration is also very important. So you have to work backwards and see how it should start and make sure it starts on the right footing.’

Malaysia roundtable participant

The increasing professionalisation of the public sector will require a broad range of skills. Training and development strategies will need to address gaps in capability. Public sector professional accountants will need to ensure that they too maintain their continuous professional development so that they are able to support their organisation fully. This responsibility lies with both the organisation and the finance professional, to ensure they have the right skills to help shape the public sector of the future.

Public sector finance leaders are increasingly being asked to play a more commercially focused role and encourage an entrepreneurial mindset across the organisation.

Respondents in South Asia rated this most highly (71%), followed by those in North America (65%), Asia Pacific (63%) and Africa (62%), while those in Western Europe gave this the lowest rating (60%).

Level of entrepreneurial skills in the accountancy profession

Entrepreneurial skills in the public sector are increasingly required. This need is driven by greater commercialisation and the need to explore opportunities to collaborate with the private sector or find alternative funding sources or evaluate business processes to make improvements.

Public sector accountants are being asked to take on a broader strategic and entrepreneurial role. For example, when negotiating large procurement contracts, accountants will need to have the necessary skills to lead these discussions confidently with private sector organisations that have an entrepreneurial culture where the primary focus is profitability and adding to the bottom line. Unfortunately, there are examples where the public sector has come out second when negotiating contracts with the private sector, that have ultimately proved poor value for money. When such contracts are negotiated well, it can be positive for both parties.

This is a step change of the traditional role of the accountant, who is now becoming the bridge between the public and private sectors. Accountants will need to develop and build commercial acumen within both public and private spheres. This new approach and innovative thinking are required to deal effectively with the opportunities and challenges of working in the new environment.

‘Innovation and productivity must come from inner desire, an entrepreneurial attitude.’

Singapore roundtable participant

Public sector finance leaders are increasingly being asked to play a more commercially focused role and encourage an entrepreneurial mindset across the organisation. A greater emphasis on entrepreneurial skills such as business leadership, communication and negotiation should continue to be integrated into accountancy training and continuous professional development.

Respondents in South Asia (67%) rated this most highly, followed by those in Africa (60%), Asia Pacific (58%) and Western Europe (55%), while those in North America gave this the lowest rating (53%).



2. The finance function and the professional accountant in the public sector

In a constantly evolving global landscape, the public sector finance function will need to play a pivotal role. It must lead the public sector in managing challenges – both current and those on the horizon.

In a constantly evolving global landscape, the public sector finance function will need to play a pivotal role. It must lead the public sector in managing challenges – both current and those on the horizon. These challenges could be internal to the organisation or linked to external factors, for example the global economy. This is by no means an easy task and political considerations add further complexity to it.

And while managing these challenges, the finance function will also be experiencing changes of its own.

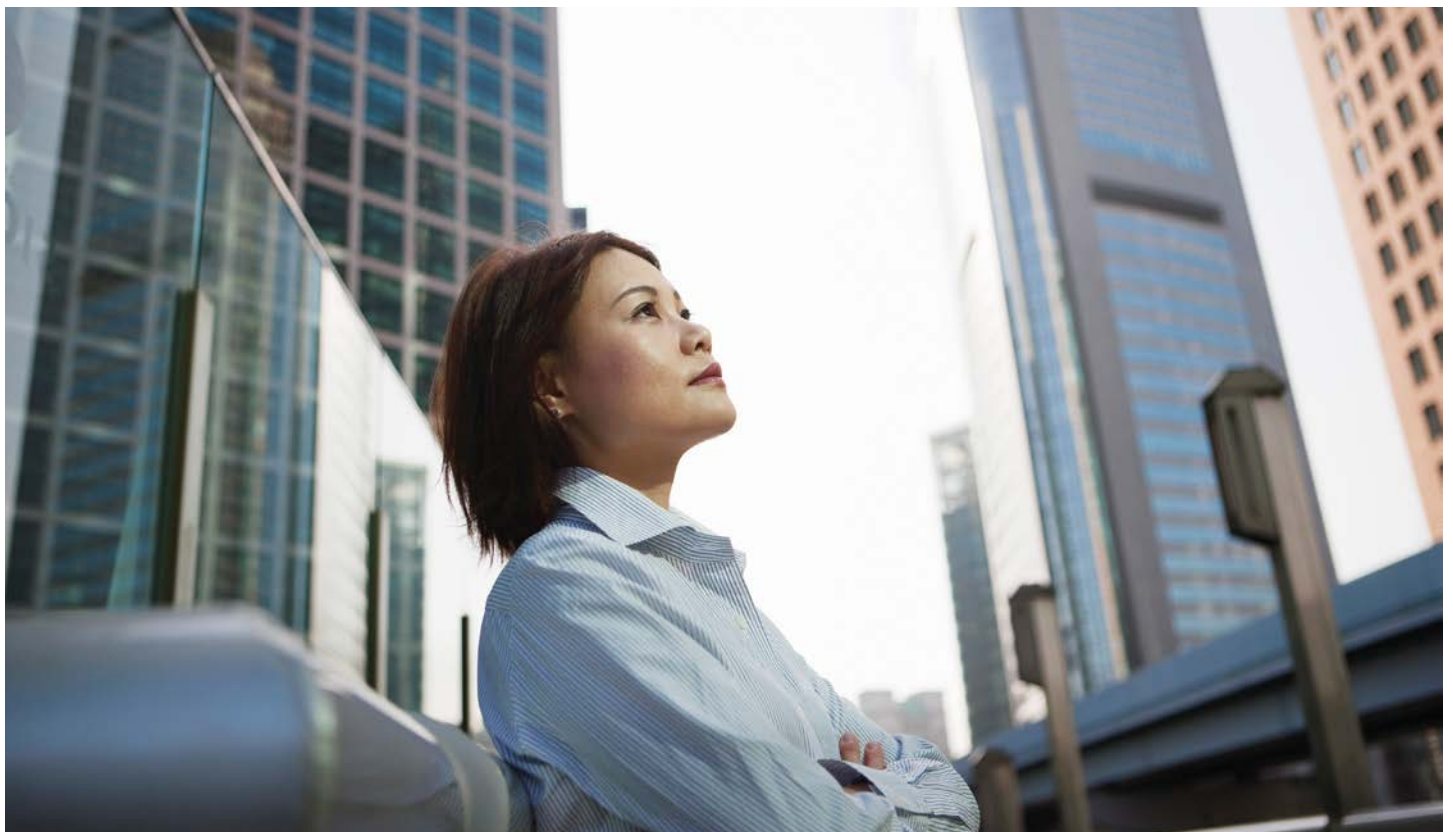
- **Technology** will replace manual work for routine low-value activity and give the finance function more time for interpretation and trend analysis. Finance professionals will need to identify scenarios and make recommendations about future courses of action.
- **Smaller finance function:** the level of economic growth, which respondents ranked as the top driver of change, will continue to affect the public sector. In many parts of the world, public sector spending has been reducing, resulting in lower staff numbers, including for the finance function.

- **Greater commercial focus:** increasing collaboration between the public and private sectors (whether through outsourcing or PPPs) will require governments to be more commercial in their outlook and approach. The finance function will be at the heart of this.

‘Some governments are privatising or decentralising [their] departments and/or function. In some cases, projects are being executed through public private partnerships and in some other cases governments are converting departments into companies...This shift in [the] management style of the public sector organisation will prove a major driver of change.’

[Amir Nadeem, KPMG Taseer Hadi & Co Chartered Accountants](#)

- **Quality and quantity of information:** the citizen is becoming more demanding of the availability and standard of public services. There is also a greater demand to understand how public funds are used. This is a key area where finance professionals can add value. The rise of non-financial information reporting and adoption of



‘The accountant needs to understand the business itself and the current dynamic of the business.’
Malaysian roundtable

<IR> will provide a fuller understanding of the relationships between inputs (ie a broader measure than taxpayer money, such as human capital) and outputs (eg number of schools) and outcomes (eg levels of literacy).

- **Greater agility:** in an ever-changing and often ambiguous environment, the public sector and finance function will need to become more agile. This is not easy given legacy government structures and bureaucracy.
- **Visionary, more responsive and less reactionary:** the unique lens that a deep understanding of the organisation provides, through visibility of the funds flow, gives finance professionals a big advantage over other professionals working in the public sector. This, together with the breadth of training required to become a qualified professional accountant, makes them ideally suited to stepping outside the narrow ‘number-crunching’ sometimes associated with the finance function. This is necessary because active risk management and broader understanding of the link between financial data and operational performance will be increasingly required.
- **Innovative and creative thinking:** the finance function will need to be more innovative in its approach to managing public services. In many countries there is a levelling off, or even a reduction, in public funding, which may have followed a period of continuous increases in public service funding. Operating in a period of reducing public spending will need innovative and creative thinking to maintain services. The typical approach of efficiencies via budget cuts to non-front-line activities is not enough. New disruptive thinking is required that allows for modern service models that are scalable, while placing the needs of citizens at the core.
- **Achieving a balance between the short term and the long term:** the finance professional can provide information to help decision-makers gain a sense of perspective. This protects against knee-jerk reactions and ensures that energy is devoted not just to fire-fighting immediate problems; but also to issues of long term importance, even if their impacts may not be immediately felt.

- **Attracting and retaining talent** is a challenge in all sectors. There are additional challenges for the public sector in many parts of the world, where remuneration is typically lower than in the private sector, and where there might be inefficient or bureaucratic procedures. Some countries are recognising and addressing this.

‘Government employees have historically been paid less than the market rate [for] similar positions in private sectors. There has been a shift in this approach and salaries are now [being] benchmarked to market rates. This is expected to attract better talent to the public sector, which will then improve the overall work quality.’

Sayyid Mansoob Hasan FCMA, ACIS,
Accredited Mediator, Certified Lead
Assessor

It is for the wider public sector to promote the value of a fulfilling and enriching career in public services to attract talented individuals and professionals, and this was mentioned at several roundtables.

- **Maintain core ethical values:** ethics lies at the heart of the profession, defining the behaviour and values expected of the professional accountant now and in the future. As circumstances evolve, having a strong moral compass to guide the organisation through different scenarios will be increasingly important. Behaving ethically requires more than just training; it must be embedded in the mindset and culture. Culture could be defined as ‘the way we do things here’ (CIPFA 2016); and it is notoriously difficult to change.

Some of the changes will be difficult and necessitate difficult conversations, but the ethical finance professional will need to both support and challenge where necessary, as a ‘business partner’ to the organisation.

Therefore, the finance function in the public sector will become leaner but more focused, providing high-value insights based on a broad array of data. It will need to be responsive to short-term pressures while focusing on long-term strategic value. It needs a forward-looking learning culture, remaining up to date with professional accountancy best practice, as well as embracing insights obtained across regions and sectors (like commercial skills from the private sector).

The professional accountant must excel not only on the reporting of where public funds have been spent, but also on planning the use of these funds economically, efficiently and effectively.

SKILLS

The skills required in the new public sector environment are explored further in this section.

Strong technical skills

Strong technical accounting skills will remain the foundation for the professional accountant. These include technical financial reporting, forecasting, operations management, budgeting and planning, scenario planning and performance management.

All professional accountants need the ability to apply financial reporting standards to the preparation of statements. They also need to think laterally and apply (accounting) principles to practical issues, such as identifying where and how to obtain the information required for compliance with financial reporting standards. This is an important skill that will be needed for evaluating the impact of changes or the adoption of new standards. It is also very important for the development and implementation of new financial reporting frameworks such as the International Financial Reporting Standards (IFRSs) or International Public Sector Accounting Standards (IPSASs), or local variations of these. As so many countries are in the process of implementing cash-based or accruals-based financial reporting standards, this knowledge and expertise is highly sought after.

The professional accountant must excel not only on the reporting of where public funds have been spent, but also on planning the use of these funds economically, efficiently and effectively. Budgeting in the public sector varies according to the local governance and accountability frameworks to which the finance function must adhere. For example, in the UK, HM Treasury sets out the rules for using the different allocations or 'pots' of government money in the Consolidated Budgeting Guidance. This is updated annually. Proper budgeting and budget monitoring in individual public sector organisations is critical for ensuring that public funds are spent on the intended areas, ie those for which there is statutory authority.

Another technical skill that is often considered to be lacking in the public sector is accurate forecasting. The ability to

develop a range of forecasts for government spending that are responsive to an ever-changing landscape is an important skill. Professional accountants will need good scenario planning skills to enable them to assess all options accurately and ensure that the associated costs are properly estimated.

The ability to make sense of complex situations and the tools needed in a given situation will always be valued. For example, in operations management, the finance professional should be responsible for analysing how processes can be changed to make improvements. Working closely with operations management colleagues is an opportunity to develop and use the finance professional's greater commercial skills to ensure that operations are optimised to produce the highest possible return on investment.

Increasingly, qualitative skills (financial maths) are required. The professional accountant will need to be a good financial analyst.

'The finance professional will need to be digitally competent and agile to change as the world of work changes.'

Singapore roundtable participant

With increasing automation and more sophisticated information technology (IT) and enterprise resource planning (ERP) systems, the more mundane reconciliation activities between off-line data and that held on the general ledger (GL) will reduce. This will allow the professional accountant to focus on higher-value-added activity. This includes analysing variances between budgets and actual costs, understanding cost drivers, and identifying patterns in expenditure. The accountant's intelligence and creativity quotients (Figure 1) would then be called upon to determine remedial action, advise on policy options and optimise business management functions (eg using costing tools such as activity-based costing).

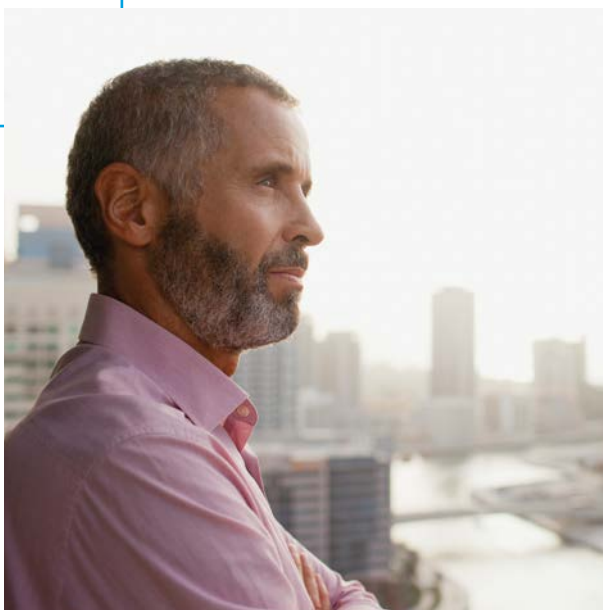
Therefore, the professional accountant will always need to continue to hone the foundational skills that were initially acquired when completing a rounded professional qualification.

‘The public sector accountant needs to make it a strong relevant brand that goes beyond the traditional perception of an accountant.’

Shekh Motin, Director of specialised service finance, NHS England

Professional judgement

The professional accountant will need to demonstrate good judgement in the analysis and interpretation of data (both financial and non-financial) and to convert this into meaningful insights for the organisation. In a public sector context, this is even more of a challenge because it is not easy to assess the impact of government spending in a linear or strictly numeric way. In the private sector, success



can be measured as growth and profit; the public sector, on the other hand, must also balance considerations of social value and public interest when evaluating success. This will require intelligence and creativity, using previous experience in an ambiguous and fluid environment.

Professional accountants need confidence in their skill and ability to filter the ‘noise’ and use professional judgement to identify and extract useful information from data. Professional accountancy training provides these skills but they will need continuous development to keep pace with a changing public sector environment.

The professional accountant will need to keep up to date on latest developments in the public sector and other sectors, as well as innovations in the finance profession, to make full use of the opportunity created by disruptive technologies such as digital.

Communication skills

Traditionally, professional accountants have not always been seen as good communicators. The ability to explain complex financial issues clearly and concisely is an increasingly important skill. In a time-poor environment, where social media encourages key messages to be included in infographics, the professional accountant will need to embrace modern media to present complex information in an engaging and compelling way.

‘The accountant must not just be the preparer of financial statements, much more important is their proactive communication within the organisation, on how to use the information to understand the business and to facilitate decision-making’

Janet Perry, Director of Operational Finance, Barts Health NHS Trust

‘Perceptions of the profession need to be corrected.’

Nigeria roundtable participant

Public sector professionals, such as policymakers, economists and statisticians will value better insights from professional accountants to help them make better decisions. A mature assessment of the key issues facing the organisation presented in a clear and concise manner will have more impact than using all the data available – but how often is this done?

As stated above, automation will make data analysis easier, therefore the ability to understand what the numbers are saying, and to explain this in a way that relates to the needs of the audience is vital. There is much research into this area of improving communication skills, considering the needs of the audience, and the sensory receptors they favour (visual, auditory or kinaesthetic, and others). An awareness in these methods should be used to optimise the effectiveness of conversations.

The professional accountant is part of a team and the importance of good and effective team-working must not be underestimated.

‘What is the story you want to tell behind the numbers? [You] need to speak in a language that connects with the board and other stakeholders.’

Singapore roundtable participant

This is not easy and requires greater self-awareness alongside a focus on the target audience. Emotional intelligence is important for connecting with key stakeholders throughout the organisation.

Public sector professional accountants will need to ‘find their voice’ and question processes or procedures where there is an opportunity to make improvements. This may be beyond their traditional functions but, as the public sector increasingly operates in a commercial and business-like manner, the professional accountant will need to develop a solid understanding of how financial decisions are interrelated with strategic and operational priorities.

This may cause some tensions but public sector professional accountants must stay true to their core ethical values. In a highly political environment it is important that public spending decisions are made on the basis of a full analysis of financial and non-financial information and executed in an objective, fact-based manner.

The public professional accountant also needs to work well with other public sector professionals such as policymakers, economists, statisticians and front-line personnel. This will have a synergistic benefit across the sector. Effective communication and sharing of relevant information are key to developing this dynamic, two-way relationship.

Leadership skills

Good leadership skills such as influencing, persuading, building networks, and attributes such as emotional intelligence and self-awareness are cornerstones of effective leadership.

‘We need finance managers to drive public services; municipalities shouldn’t be run by MBAs.’

South Africa roundtable participant

The professional accountant is part of a team and the importance of good and effective team-working must not be underestimated. To become an effective ‘business partner’, the professional accountant will need to influence and persuade a range of stakeholders – an ability that is developed over time. Engaging with others through networks will be critical to the inclusion of professional accountants in the strategic decision-making process. Otherwise, there is a risk that the accountant will be viewed as merely a provider of information.

Trust has to be earned and public sector professional accountants can demonstrate their value to the decision-making process by developing a deep understanding of operations and the environment within which their colleagues function. With this insight, the accountant can step into their colleagues’ shoes and develop considered options for their stakeholders. To achieve this takes time and effort. Continuing professional curiosity and a willingness to learn are all important, along with the ability to make links between the present and experience gained elsewhere.

There is also the issue of ‘cognitive dissonance’, where they find that their own beliefs or values are challenged by their workplace. They must work in a political environment where they may not all share the same political beliefs. These beliefs might not chime with those enshrined in officially promulgated public sector values (such as the Civil Service Code in the UK). Professional accountants will, in any case, need to abide by their own professional (accountancy organisations’) code, which is derived from the IFAC code.

In short, the professional accountant of the future will need to acquire leadership skills, which does not happen overnight. It requires an investment of time, energy and commitment to continuous learning.

Vision

The successful professional accountant of the future will need to be able to see interconnections and explain the big picture. Having a professional accountancy qualification provides a unique means of navigating complex data sets and turning the information derived into insights that can drive the organisation forwards. In the

As government becomes more commercial, skills used in the private sector will become equally relevant to the public sector.

UK for example more than half of FTSE 100 chief executives have a background in finance and accountancy or financial services and 23% are qualified accountants (Robert Half 2016). Nonetheless, in the public sector there is still quite a way to go to reach parity with the private sector. For instance, it was only relatively recently that the UK central government finance director needed to be professionally qualified and sit on the executive decision-making board. Yet, the UK is in fact one of the more progressive countries globally for public financial reporting and public financial management.

As government becomes more commercial, skills used in the private sector will become equally relevant to the public sector. The increasing prevalence of PPPs and PFIs, as seen in Asia, and large commercial contracts with private sector firms require the public professional accountant to use the same skills as the private sector partners with whom they must negotiate to obtain the best-value public services.

‘The professional qualification provides assurance that we can provide considered [financial] advice based on professional understanding and expertise, making us qualified to... support decision-making.’

**Stephen Fitzgerald, Director,
Tamar Consulting**

This section has examined the future public sector finance function using the insights gained from the survey: finance will need to innovate and step up to the challenges ahead. To do so effectively, the public professional accountant will need a different set of skills to ensure that they are part of the future and are able to participate fully and lead the public sector of tomorrow.

The government has a part to play in helping to develop the public finance function, but finance professionals also need to equip themselves with the right skills.

Government and public sector leaders’ roles

To ensure that the public sector professional accountant is able to support the sector properly, the government has an important role to play by emphasising the following criteria.

1. **‘Policy not politics’:** recognising the need to focus on the long-term rather than short-term or populist electioneering. The negative impact of the latter places an additional burden on future generations.
 2. **Acknowledging importance of finance:** recognising the need for an effective, competent and capable finance function, and the value that it can bring.
 3. **Making the public sector an employer of choice:** governments must recognise the need to attract and retain the right talent. *The Global Talent Competitive Index* report (INSEAD 2016) makes many recommendations, including the following.
 - Consider changing management practices to attract talent. In the global race for talent, it is those organisations that have professional management practices exemplified by appointing on merit rather than, for example, on kinship that will attract the best people.
 - Focus on employee development: this is particularly true for the millennial generation.
- These factors will be crucial, and governments must consider how to:
- make public sector pay as attractive as possible (eg performance-based pay in some job categories)
 - create value propositions to compensate for lower salaries, eg learning environment, culture of ethical service delivery, and pride in serving country.

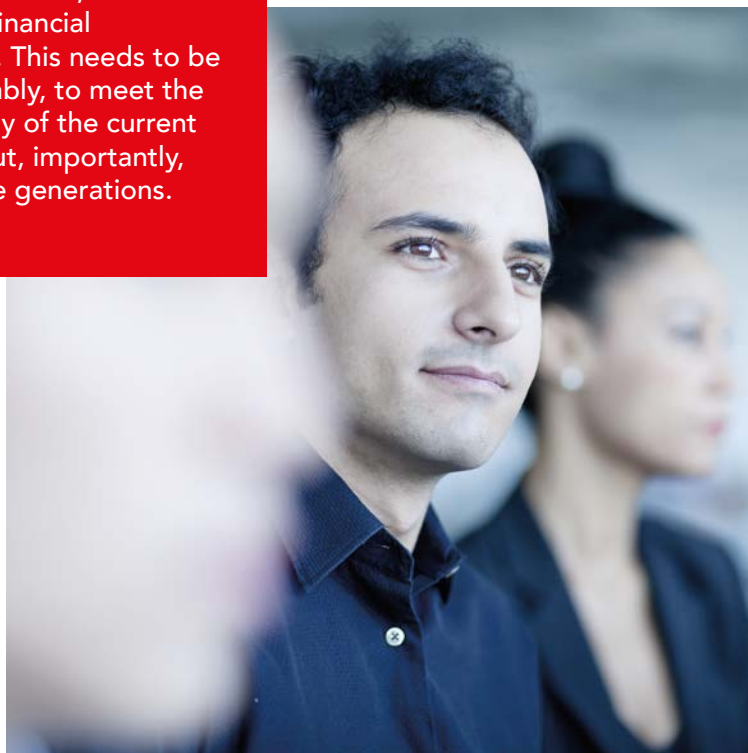
For example, Malaysia has, as part of the government (finance) professionalisation agenda, made significant steps through legislation to recognise the professional qualification so as to attract professionals from outside the public sector, who can develop career paths to the highest levels in government.

‘It is important to develop in-house capacity and capability and to do this we need recognition of the professional qualification.’

**Datuk Wan Selamah Wan Sulaiman,
retired Accountant General Malaysia**

The public sector needs professional accountants now, more than ever, to improve public services to meet the needs of the citizen, and ensure good public financial management. This needs to be done sustainably, to meet the needs not only of the current generation but, importantly, also for future generations.

Professional accountants in the public sector need to ensure that they are fully aware of the factors that are driving changes in the sector and that they have the skills to be able to rise to the challenges and/or maximise opportunities.



The changing economic environment, political landscape, and societal norms (such as growing and ageing population) all affect the public sector and, inevitably, the level of public services required.

Public service channels are also changing, through increased collaboration with the private sector and use of digital media. While these create an opportunity to rethink existing service models, the risks associated must be managed. For example, there is the threat of breaches to cybersecurity and the risk that public services will not meet the appropriate standards.

Such risks will need careful management to ensure that public funds are used effectively, efficiently and economically. The practice of accounting and the accountancy profession is also changing and this will have an effect on the professional accountant. The professional accountant must continue to meet professional development requirements so as to remain up to date with current practices and respond to future changes,

such as integrated reporting. In parallel with individual efforts, employers and professional accountancy bodies must also provide the infrastructure to support development and training.

To be fully effective, public sector professional accountants will need to develop new skills. The foundation will be good professional skills with a strong ethical core. They must exercise care and judgement, fully considering all aspects of the relevant information, and apply their professional skills and business knowledge via an understanding of their operating environment.

They will need to have excellent communication skills, sifting the 'golden nuggets' from masses of data and present this in a clear, concise way that connects with their audience. Proper planning and preparation for these meetings will be crucial to achieving the desired outcomes. They will need to demonstrate leadership and management skills – learning to operate within a wider team of professionals, each with unique core skills, and provide leadership in often challenging circumstances. In summary, the public professional accountant of the future will need great vision to be able to support the organisation fully today and steer it through the changing landscape that lies ahead.

Professional accountants in the public sector have a unique opportunity to serve the communities in which they live and make a tangible difference to people's lives through better financial management to provide the infrastructure (schools, roads, hospitals, transport etc), and public services (education, welfare support, health care etc).

Arguably, there are not many other areas that provide the diversity of challenge and fulfilment found in the public sector. To perform their roles well, public sector professional accountants need to be able to navigate all the drivers of change to ensure that the best value is obtained for public funds. The public sector needs professional accountants now, more than ever, to improve public services to meet the needs of the citizen, and ensure good public financial management. This needs to be done sustainably, to meet the needs not only of the current generation but, importantly, also for future generations.

ECONOMY

1. Stability of the global economic infrastructure

The global economy, trade and financial flows are dependent on a complex underpinning infrastructure that comprises a range of key agreements, standards, systems, checks, balances and governance frameworks.

2. The level of economic growth

Growth expectations influence business confidence, consumer spending, government planning and budgeting, and management of the micro and macro economy.

3. Consideration of alternative economic perspectives

The financial crisis has offered a chance for nations to explore new economic perspectives and models traditionally neglected by mainstream economic thought. A serious examination of these perspectives could help reformulate the global economic system along more environmentally sustainable and equitable lines.

4. Total scale and distribution of global inequality and unmet needs

Higher income inequality, (as noted by OECD) within countries correlates with higher unemployment, higher crime rates, lower average health, weaker property rights, limited access to public services, lower social mobility, more social unrest, and less trust within and across the society, leading to more fragile democracies. This presents huge challenges for public sector and how it develops policies to meet these challenges.

5. Broadening measurement of public sector value and progress

How we assess value, progress and performance for government is expanding rapidly to take account of non-financial measures of development encompassing everything from innovation to happiness.

6. Stability of national revenue bases

The stability of national revenue bases is considered a prerequisite for the economic well-being of countries as it affects governments' ability to provide public services. Generally, government revenues are derived from direct taxes paid by households (mainly personal income tax) and corporations; and indirect taxes, social contributions and revenues from state owned assets and enterprises.

7. Manageability of national and international debt

The manageability of national and international debt is important for macroeconomic stability, business confidence and future economic development prospects. Levels of public debt also have important ramifications for citizen well-being, unemployment levels and the provision of social welfare services. Globally, the economic outlook is increasingly influenced by the views of policymakers, central bankers and financial institutions on the sustainability of sovereign debt.

8. Level of investment required to maintain national physical infrastructure

Physical infrastructure forms the economic backbone of all economies. The quality and resilience of a national infrastructure has a direct influence on the growth, competitiveness and attractiveness to inward investment of a nation's economy. The standard of economic infrastructure, encompassing water, waste, transport, energy and communications, affects the quality of life for citizens as well as the ability to meet objectives and commitments regarding sustainability and reducing carbon emissions.

POLITICS AND LAW

9. Focus of global governance institutions

A network of governance institutions such as the World Bank, IMF, World Trade Organization (WTO) and the UN could face intensifying pressure to adapt their structures to the reality of the changing world. There is, however, still a belief among developing nations – such as the G77 grouping – in particular that they need a stronger voice in the wider set of global governance institutions.

10. Rate of democratic transition

The rate of democratic transition is changing the global landscape. Political changes may open up the economy, attract foreign investment, create business opportunities and drive the growth of domestic segments but swift changes in power can be violent and disruptive – creating political and economic instability.

11. Level of international political volatility

The level of political volatility caused by popular uprisings or the actions of hostile nations and terrorists groups can pose a threat to both the physical and economic integrity of a state. Such fluctuations can affect inward investment and spending in a country thus seriously affecting the state's economic performance, and reduce confidence of global financial markets.

12. Governance and delivery of outsourced public services

The way in which public services are managed, funded, supplied and consumed is changing fundamentally, in line with the financial struggles that nations face. In order to meet higher demands with smaller public funds, it is likely that 21st century public services will look radically different in the future and from what was seen in the 20th century.

Public sector provision is increasingly moving to the private sector raising questions around governance and risk.

SOCIETY

13. Scale and distribution of global population growth

A number of key trends are shaping the world's demographic landscape. The global population is expected to continue to grow at least until 2050, forecast to reach 9.3 billion. At the same time, overall fertility levels are declining. These global trends mask marked differences at the national and regional levels. There are numerous cultural, social and economic factors that both affect and are affected by global demography.

Rapidly growing populations also present economic and capacity-building challenges for governments seeking to provide public services.

14. Spread of diversity in society and the workplace

Greater mobility across the globe has a great impact on the level of diversity. Cultural diversity and Increasing levels of female participation in the workforce is seen as both an important social goal and a vital way of maximising the use of available talent to maintain or bolster economic development.

15. Workforce age structure

A downward trend in global fertility coupled with an ageing society means that each future generation could be smaller than the previous one. Although the global population is still growing the average age is also rising.

With the abolishment of the default retirement age and workers staying in senior positions longer, organisations have to factor in increased salary and healthcare costs. As existing retirees re-enter the workforce owing to a combination of low pensions and removed barriers, organisations will have to consider how to attract, retain and integrate older talent.

16. The workplace expectations of Generation Y, Z and beyond

One of the biggest challenges faced by organisations today is how to understand and respond to the expectations of generations coming into the workplace.

17. Cost and ease of access to higher education

The economics of education is changing as public budgets shrink and institutions have to compete for funds, raise fees and cut unprofitable courses. Rising cost of higher education has important ancillary impacts for the level of personal debt for students and their equality of opportunity.

Online channels for delivering education are also changing the nature and delivery of professional development. The uptake of online learning may increase in emerging economies.

BUSINESS

18. Use of Public Private Partnerships (PPPs)

Governments have been and are increasingly looking to partner with private sector to help fund large scale public infrastructure programmes. This has led to significant growth in the adoption of PPP/PFI initiatives. However the perception that any risk of failure lies with public sector and reward is with the private sector.

19. Business leader responsiveness to change and disruption

Momentous economic and social forces are currently reshaping the world. At the same time, disruptive advancements – often enabled by technology – are affecting everything from industry structures, through societal governance to the nature of human interaction. The ability of organisations to adapt to new challenges and opportunities created by change and transformation is becoming a key determinant of success or failure in a turbulent operating environment.

20. Quality and availability of the global talent pool

Access to talent at all levels is consistently identified as a critical future success factor for all organisations. The challenge of securing a suitable flow of talent is increasingly becoming a top priority for leaders who are finding growth and development ambitions hampered by talent shortages. The quality of education itself seems to be a critical talent issue.

21. Extent of foreign direct investment in developed and developing economies

Foreign direct investment (FDI) flows are an important source of investment and economic growth for many countries. In an uncertain and highly competitive global economy, ensuring that a destination is seen as a safe location for FDI is becoming an increasing priority for many countries and their governments.

22. Speed and duration of business cycles

As technologies such as the internet compress time and distance, organisations are under pressure to adapt their structures, processes and systems on an almost continuous basis. As a result, there is a growing emphasis on the need for speed, flexibility, adaptability and responsiveness. These in turn demand rapid decision making and shortening cycles for execution of change. Public sector organisations will need to factor this in policy development and implementation.

23. Experimentation with and adoption of new business models

In an uncertain economic climate, the pace of introduction of new business models could accelerate. These new models have the potential to disrupt and reinvent industries. As pressure on public finances increase the need to develop new models of financing and alternative revenue and pricing models.

24. Crowd sourced funding for innovation: the consumer as investor

The internet has facilitated the emergence of new finance models that allow organisations to fund product development and service delivery in advance via crowdsourcing using online platforms. The public sector needs to be able to respond to such rapid changes.

25. Adoption of integrated systems thinking to manage business complexity

The perceived shortening of business cycles is creating major challenges in terms of how we design, manage and change highly complex, globally interconnected and rapidly evolving businesses. While the timescales for action are shortening, the perceived complexity of the task of making change happen is growing.

26. Enterprise risk management capability

There is growing concern and increasing uncertainty over the nature and scale of risks to which organisations are – or could be – exposed. At the same time, new risks and sources or concepts of risk, such as resource wars, are emerging. The ability to effectively manage this is increasingly important.

27. Evolution of corporate governance regulation and practice

Traditional structures of corporate governance stem from legislation, regulation and institutional best practices. They are intended to oversee the conduct of business and the management of relationships among and between internal and external stakeholders. These governance rules should improve accountability, reduce corruption and avoid conflicts of interest. A general push for greater transparency for public spends has driven increased expectations for accountability and demonstration of robust risk-management policies.

28. Scope and diversity of expectations of external stakeholders

The range of stakeholders for public sector organisations and the breadth of their concerns and expectations are increasing in the wake of a period of enormous economic turbulence and systematic failures. As a result, regulatory, transparency, ethical and performance demands of this growing range of external stakeholders are expanding for the organisation, the finance function and the accountancy profession.

29. Pressure to manage reputation as part of business strategy

The public sector has always had challenge of corporate reputation management which has been compounded by the instantaneous nature of the internet and social media in particular. The challenge is to manage long term government priorities whilst managing short term 'shocks'.

SCIENCE AND TECHNOLOGY

30. The digitisation of work

Increasing digitisation is transforming the nature of work and working practices in almost every sector. It is reasonable to assume that task automation will extend to ever-more knowledge-intensive, analytical and judgement-based work activities over the next decade and beyond.

31. Cyber security challenges for government

The increased reliance on computers in our daily lives and digitisation of financial services has opened up individuals and organisations to threats from cyberspace. Threats and attacks are typically conducted by groups and individuals who hack systems to attain both ideological and financial goals.

32. Big data: the development and exploitation of large organisational databases, data mining and predictive analytics

There is a growing interest in how organisations can exploit 'big data' – the large and growing databases of customer and transactional information being generated through daily activities. The challenge is to create new toolsets that enable the management and manipulation of these large datasets and to generate powerful predictive insights about future customer behaviour. As governments are usually the largest collector of data, increasing use of data mining and predictive analytics should help to spot possible future opportunities, shocks, issues and challenges.

33. New industries and production models

Advances in science and technology are yielding radical new industrial processes that could be the basis of major industries of the future. In many cases, these industries are also introducing new business models and distribution approaches.

34. Advances in genetic science, Impact of nanotechnology advances and robotic science across business sectors

Advances in science have revolutionised humankind's understanding and control over the natural world. Opportunities are being created through nanotechnology and rapid progress in robotic science has led to the development of sophisticated machines that perform a wide range of industrial and domestic tasks. In medicine, a major field of study is the development of miniature robots that can be ingested and then repair damaged cells and organs in the body. This places great pressure on governments to ensure there is regulatory rigour to address ethical concerns raised and simultaneously explore opportunities to manage better healthcare provision.

ENVIRONMENT, ENERGY AND RESOURCES

35. Global climate change and

There is increasingly widespread agreement that the planet faces a real and growing risk from dangerous climate change and their impacts are unpredictable. New environmental risks – such as hereto unforeseen extreme weather events place significant pressure on public funds to manage the aftermath and develop robust preventative measures such as effective flood defences.

36. Competition for limited natural resources

Increasing demand for finite resources places pressures on governments to promote ethical resource consumption and maintain economic growth.

37. Carbon tax and other environmental market mechanisms

There is a growing move by governments to use taxation and market mechanisms to encourage more environmentally sound behaviour and provide the funds to finance environmental protection and clean-up costs.

38. Scale of take-up in alternative energy by business

Governments are evaluating and encouraging the greater use of alternative energy sources as one route to reducing dependency on carbon-based fuels. Increase of alternative forms of green energy, such as solar, wind and bio-gas, has given organisations a wider range of options for fulfilling their energy needs.

THE PRACTICE OF ACCOUNTING

39. Defining the scope of the accountant's role

Definitions of the accountant's role vary around the world. Common features include maintaining a record of an organisation's assets, transactions and financial activities, carrying out audits and ensuring compliance with financial and tax regulations.

The evolution towards becoming a more strategic partner within a business or as an external supplier may allow accounting to become a more integrated part of organisations.

40. Size and complexity of the CFO's remit

Organisations face a series of threats including macro-economic instability, consumer uncertainty, market volatility and increasing administrative complexity. At the same time, rising energy prices and a reconfiguration of the global landscape towards the emerging economies also present prominent and persistent challenges. As such, the role of the CFO is changing rapidly in line with constantly evolving expectations, demands and operating contexts.

41. Non-financial information and integrated reporting

The challenge of providing a total picture of organisational health is driving the move to communicate both financial and non-financial performance data in an integrated reporting format. Non-financial information is increasingly recognised to be as important as financial information as a driver of business value and risk. In response to demands for a holistic picture of organisational health, the model of integrated reporting is increasingly being adopted.

42. Clarity in financial reporting and defining the audit function

The goal of financial reporting is to present shareholders and regulators with a clear picture of an organisation's financial health.

The role of the audit function is to ensure that the accounts have been prepared in accordance with the regulatory framework, verify that the underlying procedures are robust and that the organisation's financial position has been clearly represented

43. Balance between external financial accounting and internal managerial accounting

A constant challenge for accountants is striking the right balance between external financial reporting requirements and internal managerial accounting. Both are expected to become more demanding and complex over time. Furthermore, as demands grow for a more integrated and holistic approach to external accounting, so the distinction between the two may reduce.

44. Opportunities arising from adoption of global regulation

As business globalises beyond traditional boundaries and more economies open up to adopt global practices and norms, the need for global regulation increases. Both opportunities and challenges arise from the implementation of global regulatory systems.

There are a number of significant factors for governments, firms and accountancy practitioners trying to implement global regulations. These include the rate of change, the distance between practitioners and those defining and implementing legislation, the operational context, and the complexity of regulations required to deal with the range of issues.

45. Adoption of globally accepted accounting standards

The introduction and global adoption of international accounting standards is seen by many as a desirable but unachievable goal. Others argue it is an essential prerequisite of true globalisation. In accountancy, steps towards global norms have been achieved with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and International Public Sector Accounting Standards (IPSASs) that are being aligned to IFRSs to ensure greater comparability between public and private sector financial reporting.

THE ACCOUNTANCY PROFESSION

46. Societal expectations and definitions of accounting

One of the big long-term questions for the profession is the extent to which the definition of what accounting is, and what it entails, may change over the next decade or more. The evolving scope and nature of accounting and the role of the accountant are being shaped by changes in multiple influencing factors. These include how the global economy is regulated, political motivations, disruptive technology developments and evolving business expectations.

47. Flexibility, suitability and cost of accountancy training

In a changing world, the spotlight inevitably falls on the capability of the education system to respond to the continuously evolving training needs of businesses and the professions. Economic changes, new business models and evolving regulatory demands will continue to create new and additional strategic, accounting, compliance and reporting requirements. The profession must demonstrate its ability to operate in a state of 'continuous evolution'.

48. Accounting skills capacity in transitional economies

Many developing economies are now producing significant numbers of well-trained professional accountants. Others, however, may have to undergo a fundamental transformation of their accountancy education system. Such a transformation process would include bolstering higher education course design and teaching methods.

49. Level of entrepreneurial skills in the accountancy profession

CFOs are increasingly expected to adopt a broader strategic and entrepreneurial role across the organisation. A greater emphasis on basic entrepreneurial skills such as business leadership, creativity, team-building, communication, negotiation and sales literacy could be integrated into accountancy training and continuous professional development.

50. Public perception and attractiveness of the accountancy profession

The public standing of and trust in accountants are critical to the effective functioning and attractiveness of the accountancy profession. Any issues could hamper the ability to recruit and retain top talent to the profession. Another key consideration for would-be entrants is the level of remuneration a big issue for the public sector where salary tends to be lower.

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