
ACCA
Innovation in public finance
Think Ahead

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- enabling the public, practitioners and policy makers to realise change
- influencing key institutions and organizations
- demonstrating practical, scalable solutions.

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The RSA insights in this report are taken from recent work looking at innovation and entrepreneurialism in the public sector available at **www.thersa.org.uk/**

Innovation in public finance

About this report

This report is framed by the Innovation Compass. The compass provides a framework for the report's aims of investigating the prevalence and types of innovation currently taking place in public finance, and providing a lens for thinking about how innovation needs to change to meet government's current challenges.

The survey underpinning this report revealed that innovation is as common in the public sector as in the private sector, and that most of this innovation is currently incremental in nature. When asked what type of innovation is required to meet government's current challenges, finance professionals felt that there needs to be more radical forms of innovation. The report concludes with a series of recommendations on how to nurture innovation in the public sector.

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Foreword

From the rubble of post-war Britain, William Beveridge – an economist and social reformer – announced that now was the 'time for revolution, not for patching' in how the government interacted with its citizens. He proposed a new framework, what we now call the welfare state, and the results of this new approach were transformative.

Governments around the world face a dizzying array of challenges, from declining public trust to technological disruption, that require innovative responses. To address these challenges, public finance professionals agree that we need to move from incremental to more radical innovation – resulting in full system changes that fundamentally rework how we deliver public services. This report makes the case for more radical innovation in public finance, while demonstrating that the finance function must play a central role in completing this journey.

We also see that one of the key methods of achieving radical change is through connection. Radical ideas will often come from the periphery or through engaging the broader stakeholders involved in a programme or service. It is through the *power of connections* that new ideas can translate into concrete actions that will achieve change in the public sector finance function.

Helen Brand OBE
Chief Executive, ACCA

If this report achieved nothing else, it would perform an important service in correcting the lazy assumption that the public sector is averse to innovation. Instead, the substantial body of research collected from ACCA members and other sources shows that public service professionals, such as those working in finance, take the pursuit of innovation to be an integral part of the role.

But in the face of demanding and often disgruntled citizens, new economic, social and environmental challenges and accelerating technological change will this incremental, largely managerially-mandated, model of innovation be sufficient? The answer from the report's authors and those they have consulted, is a resounding 'no'.

Incremental innovation must be accompanied by more radical forms. Equally, more change must come from front line and citizen initiative not simply rely on top-down demands. For this to happen we will need to create new collaborations and perhaps also think differently about leadership.

There are two different public sector renewal paradigms in play right now. The first focuses on politics and democracy and looks for ways to reform and renew the legitimacy of collective action and decision-making. The second focuses on services. The aim here is a more effective, entrepreneurial, agile state.

Both are vital dimensions of radical reform. Yet the folks driving these two types of strategy too rarely engage with each other. The former community is fond of concepts, questions and deliberations, the latter tend to stick to products, solutions and data. But the problem is deeper than a failure to join up these two groups.

The future is unpredictable. Leaders – whether of nations or cities – need to be able to experiment and adapt. At the RSA we advocate 'thinking like a system and acting like an entrepreneur'. Change can come from anywhere in a system, but transformation means the ability continuously to experiment and adapt.

To have a chance of building and maintaining momentum, public institutions need not only to be renewing their legitimacy and their operating methods but seeing how advances in one domain make possible, indeed demand, advances in the other.

This says something crucial about leadership. Dynamic change on this scale is risky. Leadership that relies on a predetermined plan, much less fixed outputs, simply will not deliver. We need leaders whose understanding of our challenges and whose determination to make a difference is such that they will openly embark on a journey without knowing where it will end. Any leader who claims to be doing this without often feeling disorientated and vulnerable is deluding themselves. Ultimately, however, as many of those who responded to the ACCA's survey recognised, aiming for transformation may be less risky than hoping it can be avoided.

Matthew Taylor
Chief Executive, RSA

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Executive summary

DEFINING PUBLIC SECTOR INNOVATION

Innovation and the public sector are often seen as antithetical. The public sector is frequently characterised as a creaking bureaucracy, unable to keep up with the changing times; a place where little to no innovation takes place. The results from the ACCA 2019 global member survey demonstrate a markedly different reality in public sector finance.

For clarity, the report defined 'innovation' in the public sector context as a change or initiative that:

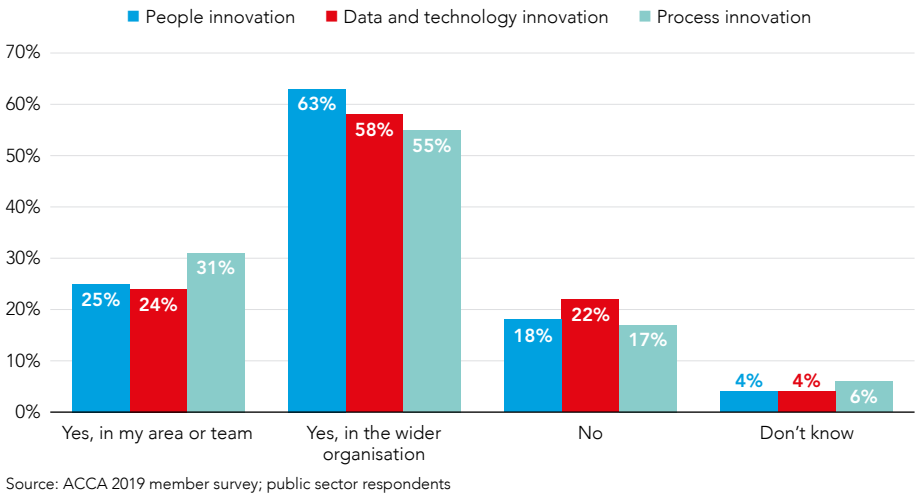
- was **new** to the context
- had been **implemented**, and
- sought to **improve public value**.

Given this definition, ACCA members were asked whether different types of innovation had occurred in their team or wider organisation within the previous 12 months.

The level of innovation was measured across three sub-types: people-based, data and technology, and process innovation. People-based innovations included changes that affect the provision of human resources (eg a new performance-based pay arrangement), as well as government efforts to enhance human capital in the economy. Data and technological innovation included the application of emerging technology (eg artificial intelligence or distributed ledger technology), as well as the use of technologies such as cloud computing or software-as-a-service. Finally, process innovation included changes that result in an improvement to the efficiency of the services undertaken by the organisation (eg improving a patient management system in a hospital).

In aggregate, across the three sub-types of innovation, 91% of public sector respondents reported some kind of innovation occurring in their organisation. There was no statistical difference compared to responses from the private sector – where 90% of respondents cited at least one type of innovation occurring within their organisation during the previous 12 months. The results also show that the majority of innovation taking place in public finance is part of wider organisational change, not restricted to the team or functional area. This suggests that the relatively new role of 'finance business partner' could be critical in connecting front-line services and the finance function, in order to innovate successfully.

FIGURE ES1: Current levels of innovation in public sector finance



Source: ACCA 2019 member survey; public sector respondents

It is the combined result of comparatively minor changes to existing systems in the pursuit of improved value that makes up the majority of innovation today. This could be described as the 'magnitude' of change.

INCREMENTAL AND RADICAL INNOVATION

Evidence from the 2019 global member survey suggests that a considerable volume of innovation is occurring in both the public and private sector. What can explain this?

The high prevalence of innovations across the public and private sector can be explained by the dominance of *incremental* innovation over radical or transformative innovation. In public discourse, examples of innovation often focus on radical changes to sectors or the adoption of new technologies that alter the way we work and interact. In truth, most innovations – whether related to the finance function or not – do not attract media attention. It is the combined result of comparatively minor changes to existing systems in the pursuit of improved value that makes up the majority of innovation today. This could be described as the 'magnitude' of change.

In comparison, *radical* – or even transformative – innovation is change that fundamentally reorganises how value is created in an organisation. Organisations that implement radical innovation can see significant improvement in their performance and will often change the systems and processes by which they create value for their customers or citizens.

Another key variable for understanding innovation in the public sector is the degree to which innovation is 'top-down' and led by an organisation's management (ie *directed innovation*) or occurs through the initiative of employees as 'bottom-up', grassroot-level change (ie *undirected innovation*). These phenomena could be described as the 'origins' of particular innovations.

THE INNOVATION COMPASS

Together these two variables, directed/undirected and incremental/radical, comprise the *Innovation Compass*. The compass provides a framework for the report's aims of:

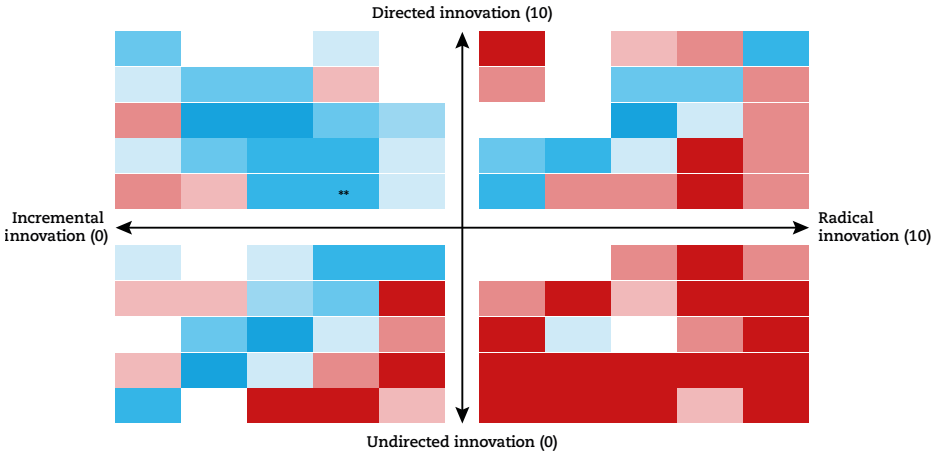
- investigating what kind innovation is currently taking place in public finance
- setting out a method for categorising innovation case studies (see Chapter 4), and
- providing a way of thinking about how innovation needs to change to meet our current challenges.

The results for all respondents who had seen the adoption of an innovation in their organisation within the previous 12 months can be seen in Figure ES2. Areas in blue represent clusters with the largest number of responses, while the areas in red had the fewest responses. The mean score across this global sample fell into the directed, incremental quadrant (4,6)[1] – with a substantial majority of respondents (67%) stating that the current innovation taking place in their

67%

of all survey respondents stated that the current innovation taking place in their organisation was incremental

FIGURE ES2: The Innovation Compass – global, public sector results, current environment



Source: ACCA 2019 member survey; public sector respondents
** = mean score

1 The first number refers to the mean position on the x-axis, the second number refers to the mean position on the y-axis. A score of 1 would be on the far left (incremental) or bottom (undirected) of the figure and a score of 10 would be on the far right (radical) or top (directed) of the figure.

Public finance professionals believe that governments need to shift from the current dominance of incremental to more radical forms of innovation.

organisation was incremental. Similarly, about two-thirds of respondents reported that innovation was typically directed in nature (ie led by management).

CHALLENGES FACING THE PUBLIC SECTOR AND THE 'PREFERRED FUTURE'

The challenges facing the public sector are considerable. Budget reductions and talent shortages are driving reactive innovation – while citizens' expectations, falling public trust, and technological disruption are altering the environment in which governments are struggling to offer quality public services.

Respondents to the global member survey were asked: in order to respond appropriately to the challenges facing the public sector, what kind of innovation should your organisation be undertaking? A clear message arose in response: in order to meet the complex challenges facing the public sector, public finance professionals believe that governments need to shift from the current dominance of incremental to more radical forms of innovation.

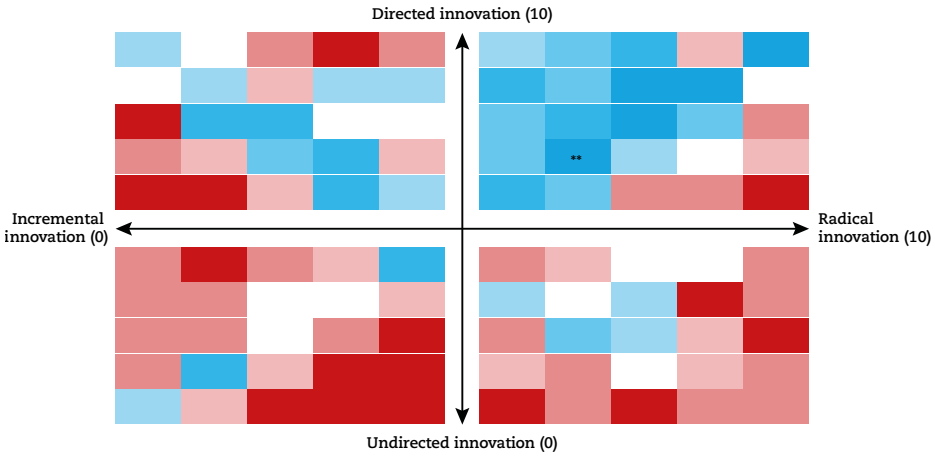
In this 'preferred future' (ie one with the type of innovation that respondents believed was required to meet governments' challenges), a majority of public sector finance respondents (60%) selected options in the directed-radical innovation quadrant – with an overall mean score of 7,7 (compared with 4,6 in the current state – compare Figures ES2 and ES3).

The preference for more directed innovation can be understood in the context of the unique challenges that the public sector faces in achieving innovation. The need to maintain a stable environment, the first-mover disadvantage, and barriers to diffusion (see sections 5,1, 5.2 and 5.3) all contribute to the need for top-level direction in the implementation of radical innovation. At the same time, the results still exhibited clusters of other 'preferred futures'. For example, the lighter areas in Figure ES3 within the radical–undirected quadrant represent a cluster of respondents who are still looking for radical, system-changing innovation, but believe that this would be achieved best through grassroot, employee-led initiatives. For a more detailed understanding of the Innovation Compass, see the case studies in Chapter 4 that collectively cover each quadrant.

60%

of public sector finance respondents selected options in the directed-radical innovation quadrant

FIGURE ES3: The Innovation Compass – global, public sector results, preferred future



Source: ACCA 2019 member survey; public sector respondents
** = mean score

Identifying problems, generating ideas and developing proposals are all part of a collaborative, cross-functional process for creating new innovations that meet the objectives of a public organisation.

INNOVATION AND THE PROFESSIONAL ACCOUNTANT

The finance function has a critical role to play in achieving this transition to more radical forms of innovation. To make this case, Figure ES4 presents the innovation life cycle, developed by the OECD's Observatory of Public Sector Innovation. The figure maps the corresponding role for the finance function at every stage of the innovation lifecycle.

Identifying problems, generating ideas and developing proposals are all part of a collaborative, cross-functional process for creating new innovations that meet the objectives of a public organisation. The finance function is well placed to take a central role in this process, being the group that will work across a variety of organisational functions. In the development of business cases, the finance function acts as the 'gatekeeper', often assessing which cases should be adopted or referred to senior management.

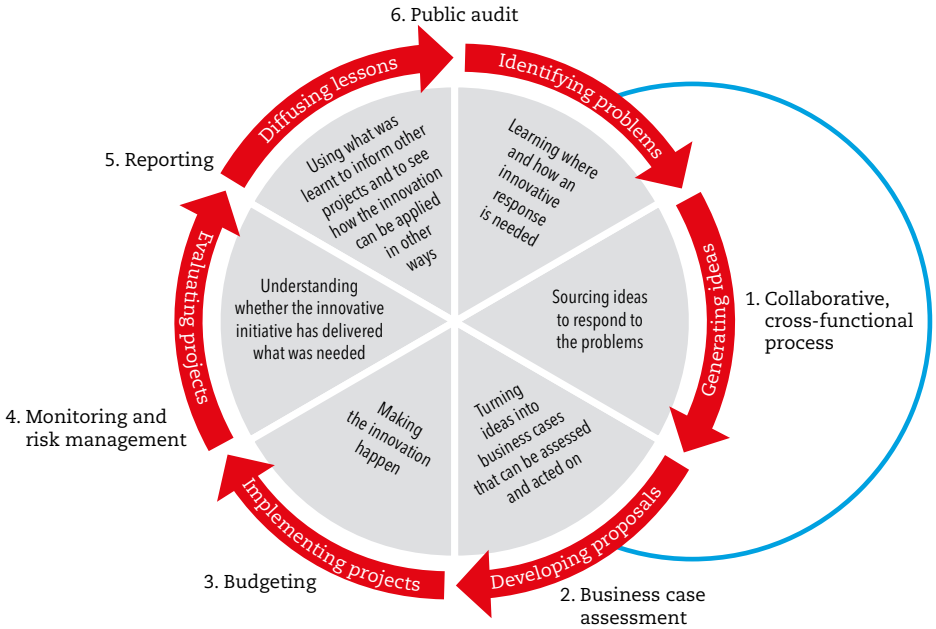
Equally, the budgeting process itself is led by public sector finance professionals, who will need to align specific innovative pilots or initiatives with the organisation's broader objectives and purpose. Through the implementation and evaluation stage, the finance function will often be charged with monitoring the projects that are under way.

Once the cycle is complete, organisations will be required to report on the outcomes of their work, for example in an organisation's annual report and accounts – another critical area for finance. Finally, public audit plays a role in identifying problems with existing government initiatives and diffusing the lessons learned: for example, through performance audits. At this point, the cycle repeats and a cross-functional process is needed – considering how best to address the problems identified through the previous innovation cycle and other issues that are raised in the course of pursuing the organisation's objectives.

SUCCESS THROUGH COLLABORATION – LEARNING FROM THE RADICAL INNOVATORS

ACCA's 2019 global member survey gave a clear message: meeting the complex challenges of today requires the public finance function to move from incremental to more radical forms of innovation. Given the challenges unique to the public sector in achieving this goal, what lessons can be learned from those currently undertaking radical innovation in their organisation? To answer this question, a new category was created that isolated the perspectives of public sector respondents who said that they

FIGURE ES4: OECD, Observatory of Public Sector Innovation, Innovation Lifecycle



55%

of finance professionals were working jointly with other teams to achieve innovation in the public sector

currently undertake radical innovation in their organisation. Analysing this category identified collaboration as an important enabler of innovation. Almost half (45%) of public sector radical innovators ranked 'collaborative teams and strong team working' in their top three factors for supporting innovation in the organisation.

Completing the journey to more radical forms of innovation can require input from a broader set of stakeholders. The research explored the extent to which public sector organisations relied on external assistance in the development and implementation of innovative initiatives. The analysis shows that radical innovators in the public sector are more likely to rely on external support in the development and implementation of their innovations.

Finally, in the vein of collaboration, the research shows that a majority (55%) of finance professionals were working jointly with other teams to achieve innovation in the public sector – with the figure rising to 62% when the sample is limited to radical innovators in the public sector. Therefore, collaboration across teams was more common than having the finance function lead on innovation or in it playing a small part in innovation.

In short, collaboration is a necessary condition for innovation to flourish in an organisation. Those undertaking radical innovation cited 'collaborative teams and strong teamworking' as essential features for supporting innovation, were more likely to look outside their organisation for assistance in the development and implementation of innovative initiatives, and were more likely to work with other teams.

KEY FINDINGS AND RECOMMENDATIONS

Following from the above analyses, the report sets out a series of key findings and a final section on recommendations (see Chapter 7). Table ES1 summarises the three key findings and supporting recommendations.

TABLE ES1: Top three key findings and recommendations

KEY FINDINGS	RECOMMENDATIONS
1. Public finance professionals believe that governments need to shift from the current dominance of incremental innovation to more radical forms of innovation.	Policymakers and public sector leaders should share a vision and strategic direction enabling staff to understand how the organisation can proactively address the complex challenges it faces (see Chapter 3).
2. The finance function has a critical role to play in the wider public sector innovation process.	Public finance professionals should apply the concepts of integrated thinking and value creation through multiple capitals to help in the construction and assessment of business cases for innovation.
3. It is through the *power of connections* that public finance functions will be able to realise fully the desired shift to more radical forms of innovation.	Public finance professionals should work with finance business partners to connect across the organisation and help shape a culture of innovation.

Challenges requiring innovation in the public sector

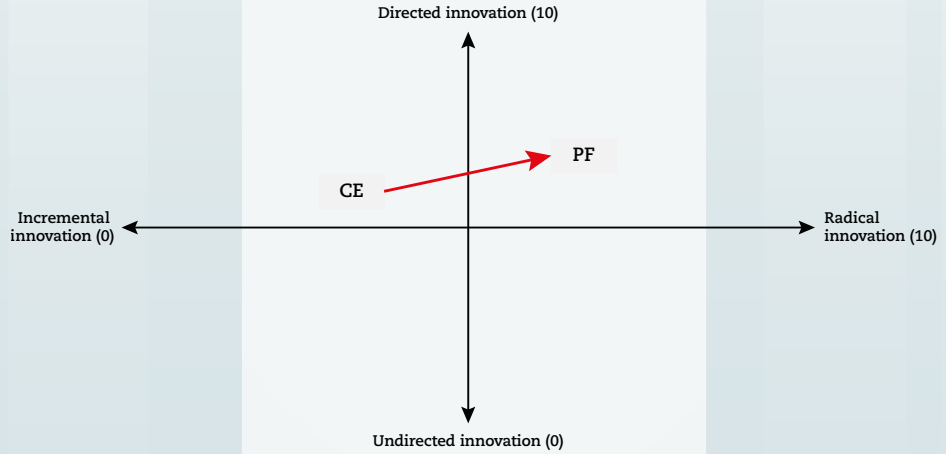
REACTIVE INNOVATION CHALLENGES

- Skills and talent shortages (**60%**)
- Budget reductions (**58%**)
- Regulatory compliance (**48%**)

PROACTIVE INNOVATION CHALLENGES

- Technological disruption (**42%**)
- Public trust (**40%**)
- Citizen expectations (**39%**)

THE INNOVATION COMPASS: CURRENT ENVIRONMENT AND PREFERRED FUTURE



CE = mean score for the 'current environment', global public sector results
PF = mean score for 'preferred future', global public sector results

Introduction

Innovation is an important facet of any organisation's long-term sustainability. There are inherent, often undervalued, risks in maintaining the status quo and not embracing a mindset of continuous improvement and change. Given this innovation imperative, this project sought to answer three questions.

- How prevalent is innovation in public finance today?
- What kind of innovation is required to meet the challenges faced by the public sector?
- What change is required to transition to the kind of public finance management we will need in the future?

Measuring the prevalence of innovation required a consistent definition of innovation within the public sector. The literature consistently defines innovation as something that is new in a given context, has been implemented, and sought to improve public value (see Chapter 1). In light of this definition, the analysis produces a clear message: meeting the complex challenges of today requires the public finance function to move from incremental to more radical forms of innovation (see Chapter 4).

The case studies in this report set out a variety of approaches being undertaken by financial professionals around the world to address the innovation imperative. Initiatives from Pakistan, New Zealand, and the UK – to name a few – highlight the breadth of work currently under way to transform the delivery of public services and improve public value.

Achieving this transition requires that the finance function takes an active role in shaping the innovation process in the public sector – from the formulation of ideas to implementation and evaluation. It also requires that public finance professionals engage with a broader network of experts and colleagues, to shape the future of public sector organisations collectively. The challenges facing the public sector are such that the innovation imperative is becoming evermore pressing. It will take the collective effort of professionals across the public sector, through collaboration and connection, to achieve the transformation required to meet these challenges.

Research methodology

Four distinct research methods were employed to inform the report's findings and recommendations. First, ACCA undertook a global online survey of its membership in July 2019. Second, ACCA hosted a novel form of qualitative data collection to inform the research: an online panel discussion of 89 ACCA members from across 32 countries. The final two methods, a broad-based literature review and semi-structured interviews with public finance professionals, were used to inform the report's findings and to produce the case studies of innovative practice that are set out in Chapter 4.

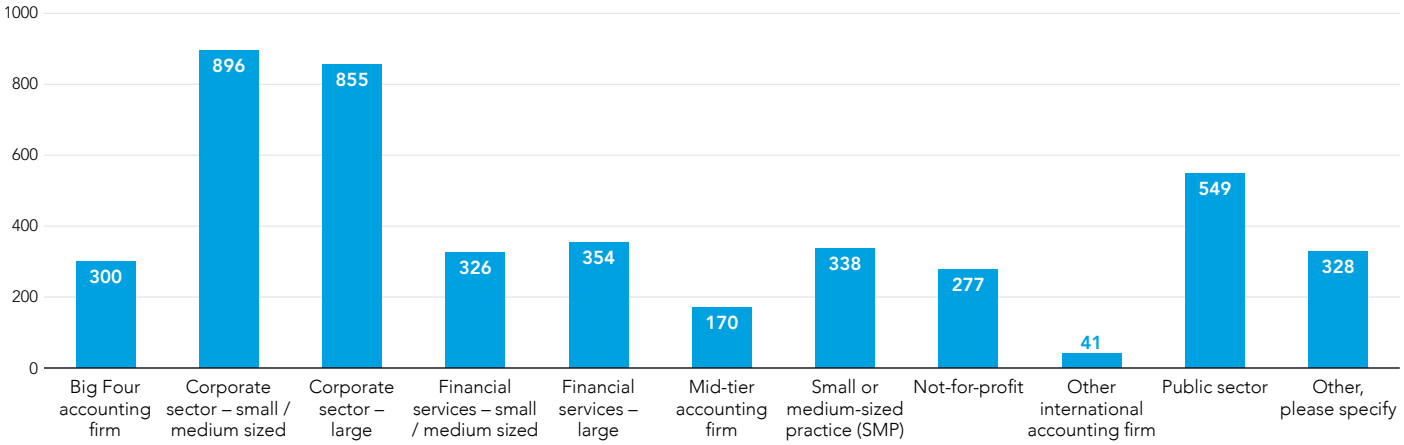
ACCA GLOBAL MEMBER SURVEY

The global online survey covered a random sample of ACCA's membership. This survey used the perspectives of finance professionals to assess the current prevalence of innovation, the challenges facing the public sector, and how finance professionals interact with others to achieve innovation. The survey was conducted over two weeks in July 2019.

The total number of survey respondents was 4,436, across 142 countries.

Geographic splits in the survey data typically present output by world region.[2] Every world region supplied at least 100 responses except for Central and South America, which is excluded from any figure showing results by world region. Within the global sample, there

FIGURE RM1: Sector breakdown of ACCA member survey



Source: ACCA 2019 member survey; all respondents; n: 4,436

2 See Appendix A for the list of countries included in each world region.

Every world region supplied at least 100 responses except for Central and South America, which is excluded from any figure showing results by world region. Within the global sample, there were 549 public sector responses.

were 549 public sector responses. References in the report to 'private sector' respondents included those working in any size of accountancy firm, the corporate sector, and financial services – but excluded not-for-profit and public sector respondents, and those selecting 'Other' as their category (7%).

The member survey split respondents into 'innovators' and 'non-innovators' – where the innovators had seen at least one type of innovation (people, data and technology, or process innovation) being implemented in their organisation within the previous 12 months. Ninety per cent of respondents fell into the innovator category. The report also references respondents who currently undertake radical innovation in their organisation. This group is made of respondents that selected 8 or higher on a scale of 10 – where '1' represented entirely incremental innovation adopted in the organisation and '10' represented entirely radical innovation. On this basis there were 466 respondents among those surveyed whose organisations fell into the category of 'radical innovators'. See Chapters 1 and 2 for detailed descriptions of incremental and radical innovation.

ONLINE PANEL DISCUSSION

ACCA hosted an online panel discussion of 89 ACCA members from across 32 countries to collect qualitative insights for the research. All the participants in the panel worked in the public sector and had seen at least one innovation implemented in their organisation within the previous 12 months. The sample included participants from Europe, Africa, Asia, the Middle East, North America, the Caribbean, Oceania, and South America. This diverse group participated in a five-day, online, moderated discussion to explore further the types of innovation that had been adopted in their organisations and the role of the finance function in supporting the adoption and diffusion of innovative practices.

LITERATURE REVIEW AND EXPERT INTERVIEWS

A detailed review of specialised literature on innovation and the public sector was conducted. This review demonstrated the consistent approach taken in defining innovation in a public sector context, as well as providing additional material for the case studies of public finance innovation. The References section includes the full list of cited literature for the report.

Expert interviews were also conducted to support the production of the report's case studies and explore the role that each individual played, as a finance professional, in adopting the specific innovation across the public sector organisation concerned.

1. What does innovation mean in public sector finance?

Innovation is vital for the public sector as it seeks to respond to the core question of how to do more with less. Across the world, reducing budgets are coinciding with rising expectations. The levels of technological adoption and service experienced in any one aspect of our lives are expected to be found everywhere, yet the public sector – despite its spending power – has limited resources to invest in radical innovation. And so what of the finance function?

Clearly, levels of spend are significant and the role of finance professionals is central to efforts to meet governance and accountability measures. Nonetheless, action must extend beyond this. In this chapter we explore what we mean by innovation in the public sector and why it is important.

1.1 INNOVATION IN PUBLIC SECTOR FINANCE

Though there is no agreed academic definition of 'innovation', it is generally accepted that an innovation is something that is both new and relevant – a fresh idea that works in practice. More specifically, a working definition provided by Goller and Bessant (2017) is that innovation is 'the process of creating value from ideas', noting this can be economic or social value. In public sector terms, *creating public value* is often defined as 'producing what is either valued by the public, is good for the public, including adding to the public sphere, or both, as assessed against various public value criteria' (Bryson et al. 2014). Indeed, the National Endowment for Science, Technology and the Arts (NESTA) defines public sector innovation as 'creating, developing and implementing practical ideas that achieve a public benefit' (NESTA 2014). This is a definition supported by the OECD's Observatory of Public Sector Innovation (OPSI), which describes innovation as 'the process of implementing novel approaches to achieve impact' (OPSI Staff 2018). We see, then, that innovation involves the development of ideas that 'have to be at least in part new…they have to be implemented, taken up and used…and they have to be useful' (NESTA 2014). Combined, these provide us with a definition that encompasses something new, implemented and creating value. There are two further aspects that aid our understanding of an innovation: the magnitude and origin of change.

The magnitude of change determines where an innovation fits on a spectrum from the incremental to the radical. Incremental innovation is a process of exploiting what we already know (eg implementing robotic process automation in the UK Home Office; see Chapter 4, Case study 1), whereas radical innovation requires dealing with the unknown (eg piloting universal basic income; see Chapter 4, Case study 4). As the saying goes, there is only so much you can do to improve on a candle: there is no set of iterative continuous improvements that will result in a lightbulb. To arrive at the lightbulb requires radical innovation.

The origin of change determines how the innovation is itself implemented. Directed, or top-down initiatives use 'command and control' and hierarchical approaches to deploying and diffusing an innovation, often behind a clear imperative or galvanising mission (eg outcomes-based budgeting in Baltimore; see Chapter 4, Case study 3) (OPSI nd). Such innovations require the backing and ongoing support of the political and managerial leaders within the organisation. In contrast emergent, or bottom-up innovations respond to changes in the operating environment as sensed by front-line staff and those close

Respondents in both private and public sectors were equally clear about the innovation imperative for their organisation's future success. Indeed, the figure was slightly higher for public sector respondents (Figure 1.1).

to service provision. Many solutions to problems arise when such staff are liberated to respond to the conditions they face (eg 'Buurtzorg'; see Chapter 4, Case study 6).

To assess the nature of different innovations that meet this definition, we have brought together the notions of origin and magnitude of change and presented them on a conceptual 'innovation compass', which we present in more detail in Chapter 4.[3]

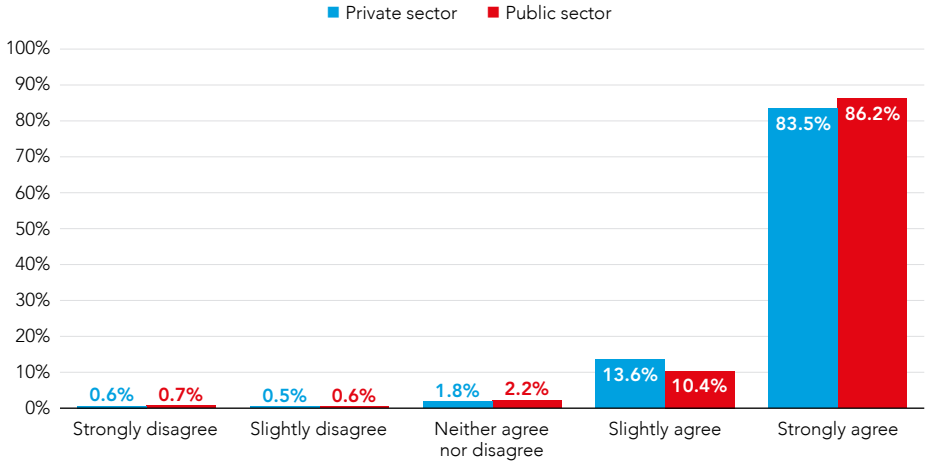
1.2 WHY INNOVATION IN PUBLIC FINANCE MATTERS

As Chapter 3 explores, a range of forces drive change in the public sphere. Individually and collectively these require responses that have innovation at their heart. Here, the pressures to innovate clearly differ from those in the private sector. Whereas the profit motive and pressure of market competition drive firms to innovate, governments and the public sector need instead to find new and imaginative ways of meeting the ever increasing, varied and complex needs and expectations of citizens within the constraints of reducing budgets. In turn, public servants operate in a complex system characterised by political and probity imperatives. Efforts to introduce quasi-markets, targets, competition and choice as proxies for market-driven efficiencies have met with varying degrees of success, and over time the 'new public management (NPM)' paradigm has been found wanting (see section 4.4). It is clear that this reductionist drive for efficiency does not inevitably lead to effective public services. Innovation remains the primary means through which service quality and public value can be achieved within this context.

ACCA's research has reinforced this analysis. Respondents in both private and public sectors were equally clear about the innovation imperative for their organisation's future success. Indeed, the figure was slightly higher for public sector respondents (Figure 1.1). The potential gains of new ways of doing things are significant given the spending power of governments, ranging across the OECD from over 57% of gross domestic product (GDP) in Finland to 25.2% in Chile in 2015, or from US$5065 per capita in Mexico to US$42,600 in Luxembourg. The second highest, Norway, spent US$30,115 per capita and the OECD average was US$18,258 in 2015) (OECD 2018). In the UK, this amounted to £821bn of public spending in the year to March 2019 (Chantrill nd).

ACCA members participating in the online panel discussion similarly viewed innovation in the public sector as an imperative. For example, a senior manager working in Pakistan wrote that 'innovation is a must in the public sector, in order to bring the entire structure of the public sector together and at rapid pace, to make information and utilization of resources more effective and efficient'.

FIGURE 1.1: To what extent do you agree or disagree that innovation is important to your organisation's success?



Source: ACCA 2019 member survey; public and private sector respondents; n: 4,157

3 In doing so we also draw upon work by the OECD's Observatory of Public Sector Innovation (OPSI).

ACCA's research shows that, at its best, the role of finance is an enabler of innovation – not only in government, but also through government.

1.3 HOW THE PUBLIC SECTOR CAN DRIVE INNOVATION

The Royal Society of Arts (RSA) has highlighted the distinction between 'innovation in government' and 'innovation through government' (Conway et al 2018). Innovation in government focuses on how effectively the public sector works, transforming public administration and creating process improvements, cultural shifts and new ways of doing things. These are what Clayton Christensen (2018) would term 'sustaining innovations' – innovations that enable or improve existing services or systems, often driven by the 'intrapreneur', the bold (or frustrated) practitioner who drives improvement from the inside. 'Innovation in government' could be described as 'disruptive' where it introduces new ways of designing and delivering services – bringing users into the process of service design and the creation of digital marketplace platforms.

The role of government is not just to provide services, but also to solve public problems in areas such as health, education, inequality, employment and housing. Public actors, from city mayors to central government departments, are facing unprecedented challenges and fiscal pressures and their institutions are unable to address them at the rate at which they arise. Nevertheless, governments do have 'catalytic purchasing power' (Conway et al 2018). New practices emerging around the world are shifting the way that public sector spending power is used to create innovation *through* government. Governments are stimulating private sector innovation that is tackling social challenges in new ways, creating markets for 'tech for good' and scaling up methods that work.

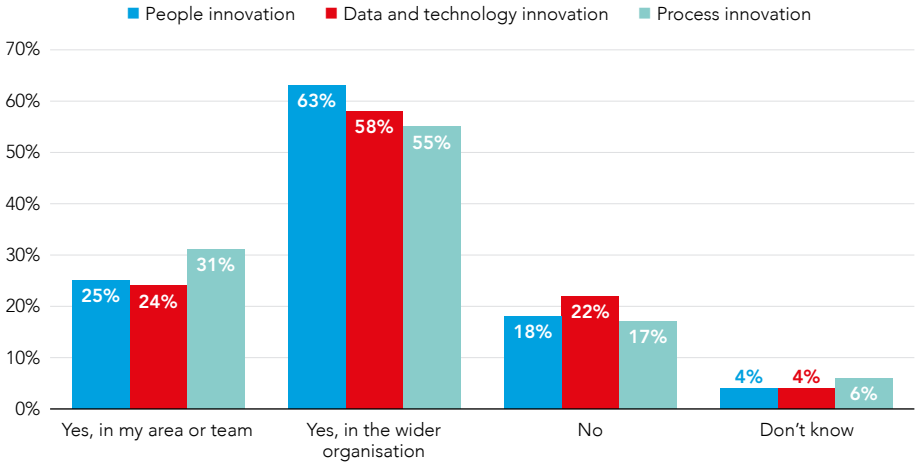
ACCA's research shows that, at its best, the role of finance is an enabler of innovation – not only in government, but also *through* government. The more obvious role is the former – supporting colleagues to create process improvements within the sector, achieving more value with fewer resources. The more impactful role is often the latter – helping to develop new ways of using public funding and investment to stimulate enterprise. Yet in many ways this remains the harder route. The notion of relying on economic assessments of value and risk prior to implementing an innovation that has, by definition, unknown or at best uncertain likelihood of success remains the public sector innovators' dilemma (Christiansen 2016). Both approaches require deep collaborative working to overcome resistance to change and ensure that the barriers to innovation are reduced, as discussed further in Chapter 5. At the heart of these efforts to support innovation and improve public services lies the finance profession. Chapter 2 will look at the prevalence of innovation in the public sector and how finance professionals are currently undertaking innovation in their organisations.

2. The current state of innovation in public sector finance

Innovation and the public sector are often seen as antithetical. The public sector is frequently characterised as a creaking bureaucracy, unable to keep up with the changing times; a place where little to no innovation takes place. The results from the ACCA 2019 global member survey demonstrate a markedly different reality in public sector finance.

ACCA members were asked whether different types of innovation have occurred in their team or wider organisation within the previous 12 months. The definition of innovation given to respondents corresponded with the definition derived from the literature review and discussed in Chapter 1 – where the initiative had to have been new to the organisation, implemented, and intended to improve public value.

FIGURE 2.1: Current levels of innovation in public sector finance



Source: ACCA 2019 member survey; public sector respondents; n: 549

The level of innovation was measured across three sub-types: people-based, data and technology, and process innovation (Figure 2.1). People-based innovations included changes that affect the provision of human resources (eg a new performance-based pay arrangement), as well as government efforts to enhance human capital in the economy. Data and technological innovation included the application of emerging technology (eg artificial intelligence or distributed ledger technology), as well as the use of technologies such as cloud computing or software-as-a-service. Finally, process innovation included changes resulting in an improvement to the efficiency of the services undertaken by the organisation (eg improving a patient-management system in a hospital).

The results show that the majority of innovation taking place in public finance is part of wider organisational change, not restricted to the team or functional area. This fits with the feedback given by public finance professionals in the online discussion panel. For example, an auditor from Nigeria stated that the 'finance

91%

of public sector respondents had seen some kind of innovation occurring in their organisation in the last 12 months

department are at the centre of the project to automate the revenue collection process. So in addition to owning the project, they have the responsibility of ensuring that adequate finances are available to complete the project'. In this example, the finance function acts as a lynchpin for wider innovation taking place across the organisation – for project delivery, but also in allocating and overseeing the finances attributed to the project.

KEY FINDING: most public sector innovation occurs in the wider organisation and is not isolated to a single area or team.

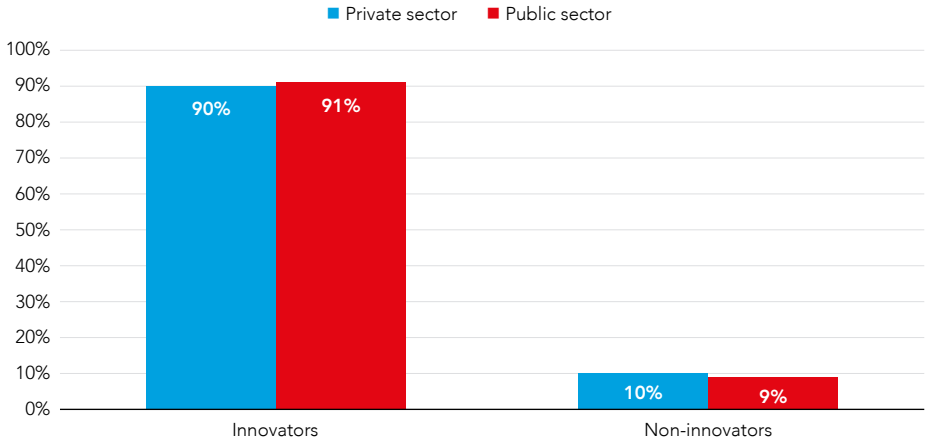
In aggregate, across the three sub-types of innovation, 91% of public sector respondents had seen some kind of innovation occurring in their organisation. There was no statistical difference from private sector respondents – where 90% cited at least one type of innovation occurring within their organisation within the previous 12 months. At the same time, the overall private sector result masks variation by sub-sector. For example, 95% of respondents from the Big Four accountancy firms had seen at least one innovation implemented in the previous 12 months, but this dropped to 84% of small or medium-sized practices.

2.1 WHY IS THERE SO MUCH INNOVATION?

Evidence from the ACCA 2019 global member survey suggests that considerable innovation is occurring in both the public and private sectors. What can explain such a high-level of innovative activity? In addition, these results seem contrary to research by Nicholas Bloom and others from Stanford University, which suggests that the time and effort required to achieve innovative breakthroughs has grown (Bloom et al. 2019).

The high prevalence of innovations across the public and private sector can be explained by the dominance of *incremental* innovation over radical or transformative innovation. In public discourse, examples of innovation often focus on radical changes to sectors or the adoption of new technologies that alter the way we work and interact. In truth, most innovations – whether related to the finance function or not – do not attract media attention. The combined result of comparatively minor changes to existing systems in the pursuit of improved value makes up the majority of innovation today. One UK participant in the global online panel discussion set out the case for incremental innovation: 'The public sector needs to innovate to become as

FIGURE 2.2: Innovative organisations vs non-innovators, by sector



Source: ACCA 2019 member survey; public and private sector respondents; n: 4,157

Organisations that implement radical innovation can see significant improvement in their performance and will frequently change the systems and processes by which they create value for their customers or citizens.

close to self-sustaining as possible and to be more cost effective. So any systems and processes which reduce back office costs are explored. The benefits can be seen in the cost savings'. This focus on achieving efficiencies or cost saving through existing systems and processes is a hallmark of incremental innovation.

In comparison, *radical* – or even transformative – innovation fundamentally changes how value is created in an organisation. Earlier research by ACCA has explored the 'business models of the future' that are creating new systems of value creation, which could be described as forms of radical innovation (ACCA 2017; 2018a). Organisations that implement radical innovation can see significant improvement in their performance and will frequently change the systems and processes by which they create value for their customers or citizens. Radical innovation can also initiate fundamental changes to the distribution of rights and responsibilities among the public, managers and professionals (Mulgan and Albury 2003).

Another key variable for understanding innovation in the public sector is the degree to which innovation is top-down and led by an organisation's management (ie *directed innovation*) or bottom-up, grassroot-level change occurring through the initiative of employees (ie *undirected innovation*). These phenomena could be described as the 'origins' of particular innovations.

Box 2.1: Smart cities and undirected innovation

One of the trends identified in ACCA's report, *Smart Cities, Simpler Cities*, is that many examples of the 'smart city' are citizen led (ACCA 2016a). This has parallels to undirected, grassroot-originated, innovation. The report sets out that:

> *Citizens are increasingly using technology in their own ways to add value to their city environment, rather than waiting for anyone to tell them what to do. An example is the citizen response during the devastating floods in Chennai (India) during November and December 2015. Through an organic process of continual addition and updating – effectively a crowd-sourcing exercise – a comprehensive database was developed in a relatively short period of time that could inform those whose houses were flooded about the contact details of others in their area who could provide a temporary shelter. This database evolved from a sharable spreadsheet to a website and could be used by government agencies trying to track and direct relief efforts where most needed.*

This example offers insights into how undirected innovation can organically develop, particularly where technology has enabled a democratisation of public services. ■

Interestingly, these findings – that current finance innovation is primarily incremental and directed – were consistent across the representative world regions (see Appendix B).

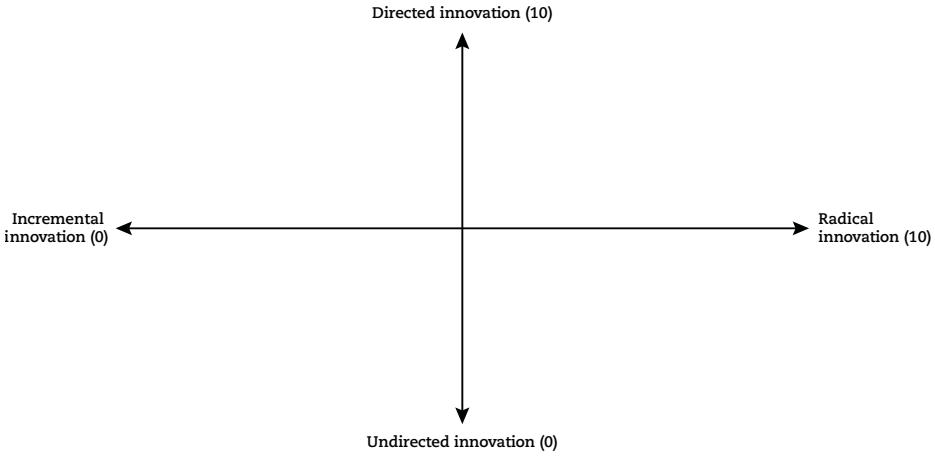
2.2 THE INNOVATION COMPASS

Together these two variables, directed/undirected and incremental/radical, comprise the *Innovation Compass*. The compass provides a framework for the report's aims of:

- investigating what kind innovation is currently taking place in public finance
- setting out a method for categorising innovation case studies (see Chapter 4), and
- providing a way of thinking about how innovation needs to change to meet our current challenges.

The results for all respondents that had an innovation adopted in their organisation within the previous 12 months can be seen in Figure 2.4. Areas in blue represent clusters of the largest number of responses and the areas in red represent those with the fewest responses. The mean score across this global sample fell into the directed, incremental quadrant – with a substantial majority of respondents (67%) stating that the current innovation taking place in their organisation is incremental. Similarly, about two-thirds of respondents reported that innovation in their organisation was typically directed in nature (ie led by management). Interestingly, these findings – that current finance innovation is primarily incremental and directed – were consistent across the representative world regions (see Appendix B for a breakdown of the global results of the Innovation Compass by world region).

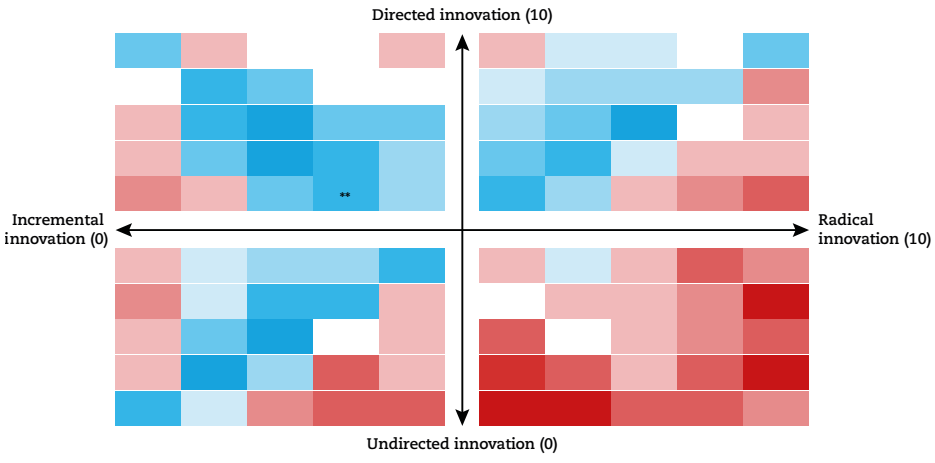
FIGURE 2.3: The Innovation Compass



67%

of all survey respondents stated that the current innovation taking place in their organisation was incremental

FIGURE 2.4: The Innovation Compass – global, all-sector results, current environment



Source: ACCA 2019 member survey; all respondents; n: 3,569
** = mean score

The analysis demonstrated that fewer than 5% of respondents had experienced innovation that was undirected and radical in nature.

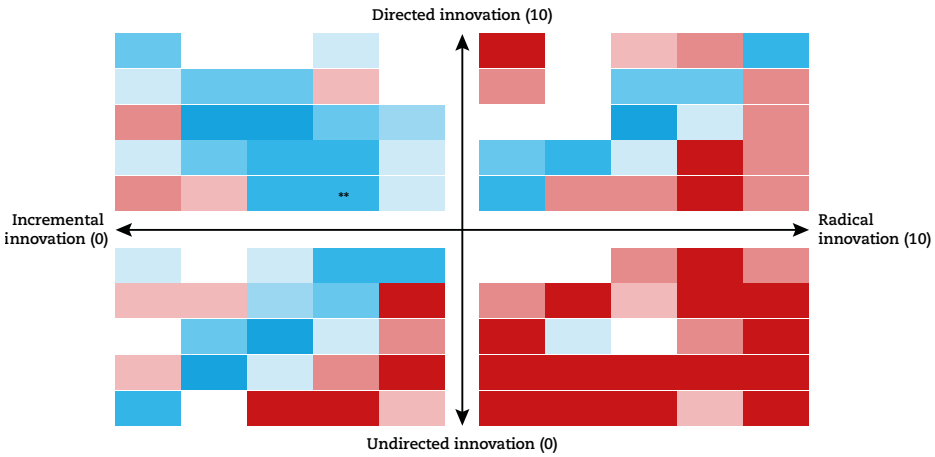
The results from public sector respondents were broadly comparable to the global, all-sector results. The largest proportion of public sector respondents similarly fell into the incremental-directed quadrant (40%) and, overall, a majority of innovations were seen as currently incremental. This cluster of responses in the incremental-directed quadrant also contain the overall mean score for the global public sector (4,6), represented by the two asterisks in Figure 2.5. The analysis demonstrated that fewer than 5% of respondents had experienced innovation that was undirected and radical in nature. At the same time, the evidence did not suggest that the type of innovation was homogeneous across the global public sector. Instead, there are additional clusters of activity in the incremental-undirected quadrant, where about 30% of respondents placed their organisation's innovations, and a smaller cluster in the radical-directed quadrant, with 28% of respondents placing their organisations within this cluster.

KEY FINDING: Most innovation taking place in public sector finance is incremental in nature and directed by senior management, though other clusters of innovation types exist.

28%

of public sector respondents placed their organisation's innovations in the radical-directed quadrant

FIGURE 2.5: The Innovation Compass – global, public sector results, current environment



Source: ACCA 2019 member survey; public sector respondents; n: 432
** = mean score

3. Forces driving finance innovation in the public sector

3.1 A PROACTIVE OR REACTIVE PUBLIC SECTOR

The rapid rate of change, globally, across social, political, economic and technological dimensions is accelerating the need for innovation in the public sector. New technologies provide a hotbed for implementing innovation, increased globalisation gives an opportunity for reflection on relationships and legal frameworks, and population movement and demographic changes mean that the public sector has to be mindful of changing citizen needs and expectations.

This proves a complex challenge for public services: firstly, there is a demand to get the basics right and to work efficiently and effectively, but beyond this there is pressure to modernise and adapt to a changing global environment.

Innovation can be sought for improving service delivery, enacting political will, or increasing accountability. Particularly in the public sector – though not exclusively – organisational limitations such as a lack of funds, political will or necessary skills, and the organisation's accountability for public funds will make it more difficult to address the impact of technological disruption and changing citizen expectations proactively. Clearly, there is broad fertile ground across these areas for applying innovative initiatives to improve value.

Within this context, the public sector has the opportunity to work proactively or reactively. How public sector organisations act will be related to the resources at the disposal of each organisation, the political will to make change and the current state of innovation. For example, with respect to artificial intelligence, public sector professionals and departments may choose to invest in developing their own innovative in-house tools and skills, or they may simply react to wider changes happening in the private sector and digitise services only when it has become the standard way for citizens to engage with suppliers in general.

3.2 MACRO-LEVEL MOTIVATIONS FOR CHANGE

In *Leading Public Sector Innovation: Co-creating for a Better Society,* Christian Bason (2010) argues that technology is just one example of eight 'major driving forces' to which the public sector will need to respond: globalisation, 24-hour media, technology, demographic change, shocks (ie unexpected disruptive events) and the climate crisis, as well as factors that are fundamental to the definition of the public sector, such as productivity imperatives and citizen expectations.

These factors provide the opportunity for both proactive innovation – where the public sector can be ahead of events, anticipate future demands for its services and improve its existing offer by its own volition – and reactive innovation, where the public sector must adapt as the need for change becomes more pressing, if it is to continue to fulfil its function. As the framework in Table 3.1 shows, a single challenge might provide opportunities for the public sector to innovate both proactively and reactively.

As the framework in Table 3.1 shows, a single challenge might provide opportunities for the public sector to innovate both proactively and reactively.

TABLE 3.1: Motivations for reactive or proactive innovation

	REACTIVE	PROACTIVE
PRODUCTIVITY IMPERATIVE	■ Plugging holes ■ Responding to human error ■ Responding to budget reductions	■ Creating time and budget efficiencies ■ Regulatory compliance
CITIZEN EXPECTATION	■ Responding to scandal or corruption ■ Adopting a 'test and learn' approach to service delivery	■ Improving accountability and transparency ■ Improving ease of use/access of services ■ Increasing public trust
GLOBALISATION	■ Responding to legal changes ■ Withstanding increasing competition	■ Forging international relationships with public and private sector institutions
MEDIA	■ Responding to negative press	■ Fostering transparency
TECHNOLOGY	■ Adapting to private sector innovations ■ Adopting digital solutions on the basis of public preference ■ Embracing technological disruption ■ Responding to cybersecurity breaches	■ Developing public-sector-specific solutions ■ Encouraging the use of new technology ■ Adopting preventative measures for cybersecurity
DEMOGRAPHIC CHANGE	■ Reacting to skills, talent and personnel shortages ■ Rationing public services following increased demand	■ Encouraging diversity among public sector professionals ■ Developing a culture of life-long learning ■ Redesigning systems to address demographic change
SHOCKS	■ Motivated by political will/ change in leadership	■ Building resilience
CLIMATE CRISIS	■ Responding to impact of climate crisis	■ Embedding sustainable solutions

60%

of public sector respondents cited skills and talent shortages as the main challenge for their organisation

3.3 UNDERSTANDING THE INNOVATION FRAMEWORK FOR FINANCE

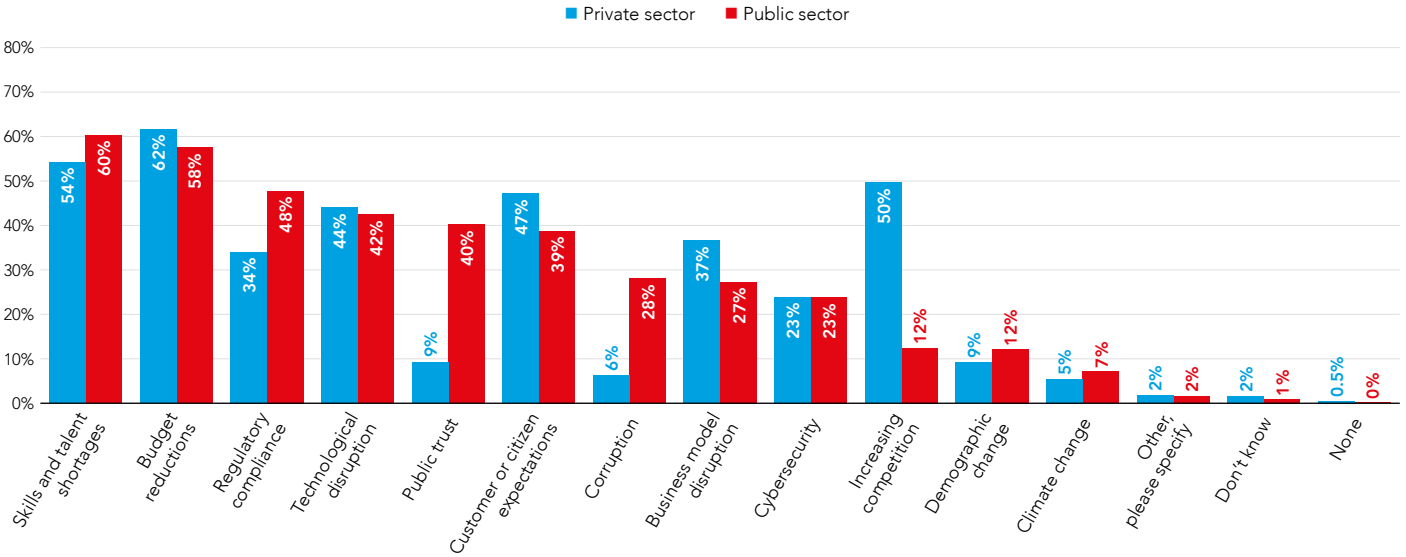
The finance function plays a pivotal role in the fiscal health of the public sector as well as facing scrutiny from the public as the gatekeeper of budgets. One respondent from Sierra Leone commented that finance departments must innovate in the 21st century context, writing that 'innovation in finance is a very important matter in [the] dynamic global environment of our times'.

Across public sector respondents taking part in the ACCA 2019 survey, three challenges (in addition to compliance with regulatory standards, an act of 'getting the basics right') were consistently cited as requiring innovation (see Figure 3.1): the impact of budget reductions, skills shortages in the organisation, and responding to technological disruption. These trends align with Bason's framework for innovation, which cites productivity imperatives, demographic change and technology as comparable factors.

Indeed, each motivation in the framework above (see Table 3.1) can be applied to the finance function, and in many instances the business case for an innovation will be a result of a number of these factors.

Take, for example, the case for an innovative software package that automates administrative finance tasks – something that the online panel of ACCA members would suggest is a common innovation in the public sector. In this example, the finance department leads the introduction of the innovation. Automation will be a response to productivity pressures and the need to save money – perhaps even in response to a 'leaky' system where money is unaccounted for – but it may also be motivated by the increasing use of sophisticated technology by the public. As this one example illustrates, the range of impact possible from innovation in finance is broad.

FIGURE 3.1: What are the main challenges for your organisation that require innovation?



Source: ACCA 2019 member survey; public and private sector respondents; n: 4,159

The successful implementation of an innovation in finance will support not only the quality of the outputs of this task, but also public confidence in the ability of the public sector.

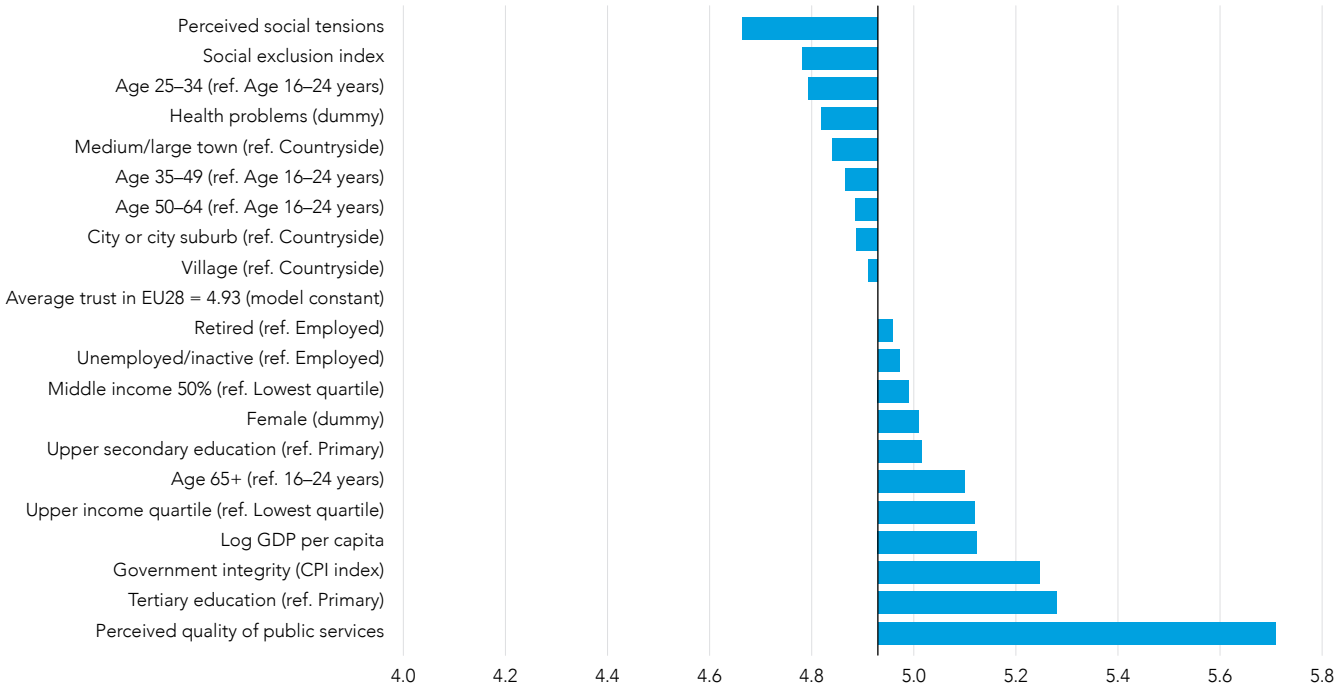
The successful implementation of an innovation in finance will support not only the quality of the outputs of this task, but also public confidence in the ability of the public sector. Research from Eurofound (2018) suggests that the biggest driver of the public's trust in institutions is the perceived quality of public services. In this way, an innovation that improves quality, efficiency or productivity of services may have an added effect on the ability of the public sector to meet citizen expectations and improve trust.

The data also reflects the unique nature of the public sector with respect to the need to innovate, as discussed in Chapter 1 of this report. Forty per cent of public sector respondents said that public trust was a challenge that required innovation, compared with fewer than 10% of private sector respondents.

This highlights an important dimension of the accountability required in the public sector for its innovation, and the need to work to the standards expected by the public, who are susceptible to changing forces from technology and globalisation. Though presented as a challenge by respondents, these competitive forces can also spur innovation and allow for better diffusion of innovation in the private sector. One panel respondent from Ghana noted that there is a need for innovation in finance to support the changing public sector at large, noting that 'a lot of reforms are ongoing in the public sector where I work, and this has brought about more financial innovation especially in IT infrastructure and adoption of accounting standards'.

Collectively, these forces are driving change and innovation in the public sector. But what kinds of innovation will be required in the future to address these complex challenges? Chapter 4 sets out this 'preferred future' for public finance and offers seven case studies, covering each quadrant of the Innovation Compass, to give a better understanding of the different types of innovation.

FIGURE 3.2: Eurofound analysis showing the effects of individual-level and macro-level variables on trust in institutions



Notes: Bar values show predicted institutional trust, fixing all other independent variables at their means. For continuous variables (eg quality of public services), the difference of the predicted value and the EU average of trust shows the change in trust in institutions when the variable is increased by one standard deviation. For dummy or categorical variables (these have a reference category identified in parentheses), the difference shows how trust by a given category of people differs from the reference category. Only those factors are displayed whose effect on overall trust is statistically significant; for a full set of variables examined, see Table A2 in the Annex. Effects of independent variables were estimated using random intercept models on pooled data from EQLS 2007, 2011 and 2016. N=87,075. Full details of the estimation can be seen in Table A2 in the Annex.

Source: Authors' calculations based on EQLS

4. Finance innovation in the future

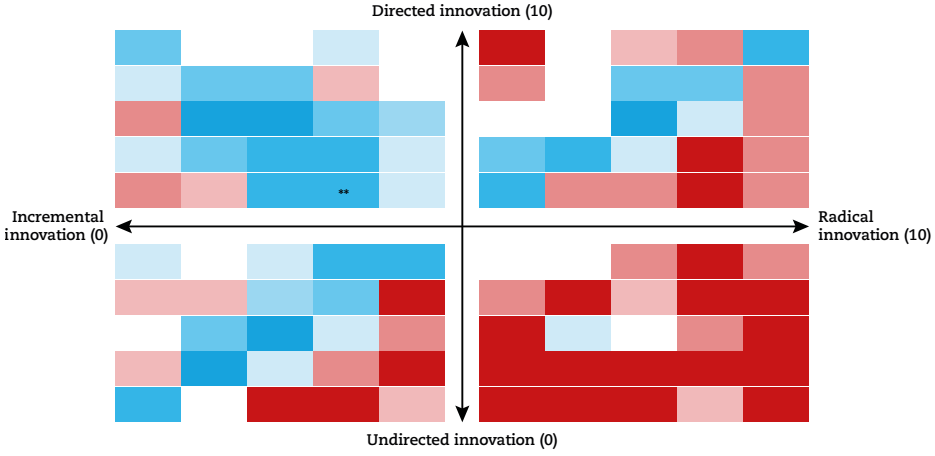
4.1 THE PREFERRED FUTURE FOR PUBLIC FINANCE INNOVATION

The challenges facing the public sector are considerable. Budget reductions and talent shortages are driving reactive innovation – while citizen expectations, falling public trust, and technological disruption are altering the environment in which governments are struggling to offer quality public services.

The current state of public finance innovation was set out in Chapter 2. It shows that most innovation in the public sector is currently incremental in nature and directed by senior management, though other clusters of innovation types exist (see Figure 4.1; reproduced from Chapter 2, Figure 2.5). As a follow-on question, respondents to the global member survey were asked: in order to best respond to the challenges identified in Chapter 3, what kind of innovation should your organisation be undertaking? A clear message arose from this analysis; in order to meet the complex challenges facing the public sector, public finance professionals believe that governments need to shift from the current dominance of incremental innovation to more radical forms.

In this 'preferred future' (ie the type of innovation respondents believed was required to meet governments' challenges), a majority of public finance respondents (60%) selected options in the directed-radical innovation quadrant. Including the radical-undirected quadrant, the results show that 79% of public sector respondents believed that addressing the complex challenges faced by government would require some form of radical innovation. This is a fundamental shift away from the current model of innovation in government, which is dominated by incremental-directed change. This shift was equally prevalent in the all-sector results. Chapter 2 (Figure 2.4) showed that 67% of global, all-sector respondents reported that most innovation within their organisation was incremental; this fell to 22% when considering the all-sector preferred

FIGURE 4.1: The Innovation Compass – global, public sector results, current environment



Source: ACCA 2019 member survey; public sector respondents; n: 432
** = mean score

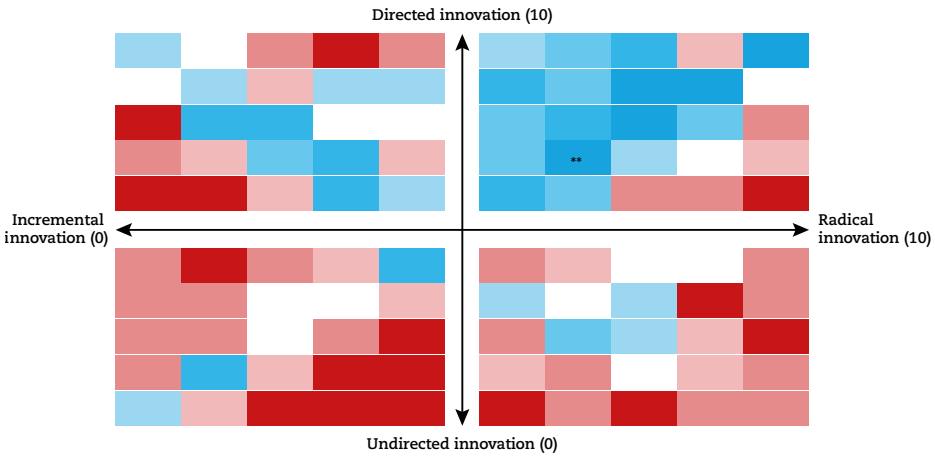
This preferred shift towards radical innovation can be observed, to varying degrees, across all the representative world regions (see Appendix B).

future. Instead, analysis of the full global sample similarly shows that there is a need to transition towards radical innovation (78%) in order to meet contemporary challenges.

Looking at the mean score for each question, Figure 4.2 shows that the mean score for public sector respondents in the current environment lay in the incremental-directed quadrant (4,6). When public finance professionals were asked about their 'preferred future', the mean score shifts to the right into the radical-directed quadrant (7,7). A summary of these results is displayed in Figure 4.3. In overall mean score, this is a substantial change towards radical innovation, with a small increase in the preference for more directed innovation as well. This preferred shift towards radical innovation can be observed, to varying degrees, across all the representative world regions (see Appendix B for the full breakdown of the Innovation Compass results by world region).

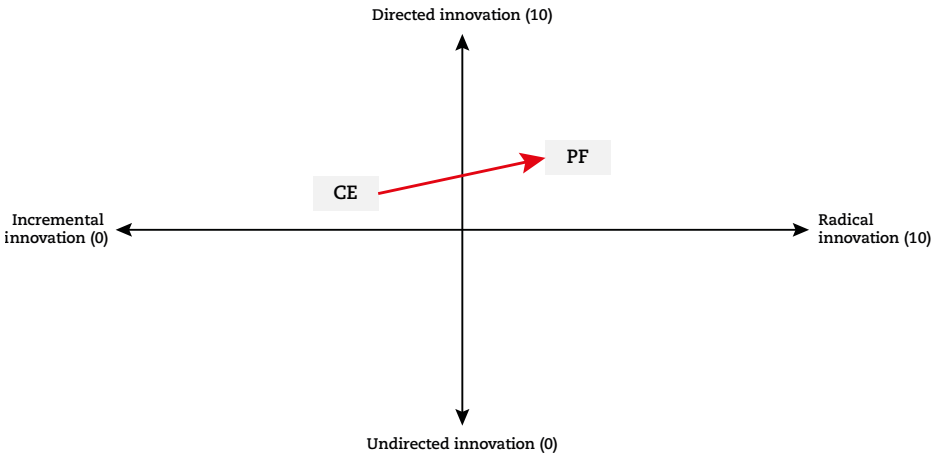
KEY FINDING: Public finance professionals believe that governments need to transition from incremental to more radical forms of innovation, in order to meet the complex challenges facing the public sector.

FIGURE 4.2: The Innovation Compass – global, public sector results, preferred future



Source: ACCA 2019 member survey; public sector respondents; n: 468[4]
** = mean score

FIGURE 4.3: The Innovation Compass – global, public sector results, mean scores for current environment and preferred future



CE = mean score for the 'current environment', global public sector results
PF = mean score for 'preferred future', global public sector results

4 Questions were not mandatory in the global member survey. Therefore, cross-tabulations between questions can produce different samples – such as the 432 responses to questions 6a and 6b, compared with 468 responses to questions 8a and 8b.

Although the prevalence of innovation can be debated, the comparison of the 'current state' and the 'preferred future' addresses some of the subjective drawbacks inherit in innovation measurement.

4.2 LIMITATIONS IN MEASURING INNOVATION IN THE PUBLIC SECTOR

The literature acknowledges that the measurement of innovation in the public sector is a difficult task. The subjective nature of survey responses can produce confounding results, where individuals have different views on what qualifies as innovation (OECD/Eurostat 2018). The task of measuring innovation is further complicated by the lack of a market mechanism. The Oslo Manual for collecting, reporting and using data on innovation notes that 'without data on the cost or price paid for government services, outcome measurement has relied on subjective, self-reported measures, such as an increase in efficiency or improved user satisfaction' and that 'It is also difficult to provide aggregated economic outcome measures (financial measures of cost savings or benefits) or external validity measures for outcomes' (OECD/Eurostat 2018).

Uniquely, the mean scores shown in the Innovation Compass (Figure 4.3) provide a like-for-like comparison of respondents' subjective views – addressing some the challenges identified in the literature. Although the prevalence of innovation can be debated, the comparison of the 'current state' and the 'preferred future' addresses some of the subjective drawbacks inherit in innovation measurement.

4.3 WHAT DO WE MEAN BY RADICAL INNOVATION?

Given the desire for more radical innovation in public finance, it is important to understand what is meant by 'radical innovation'. As demonstrated in Chapter 1, the definition of innovation within the context of the public sector is quite consistent in the literature. The change or initiative should:

- be implemented
- be new to the context, and
- sought to improve public value.

For comparing 'incremental' to 'radical' innovation, respondents to the survey were told that incremental innovation included 'small-scale change of existing systems' and that radical innovation included 'large-scale change of systems'. Therefore, radical innovation is made up of major changes that fundamentally alter how value is created in an organisation. These changes will often be intended to alter the systems and processes by which value is created by that organisation. Radical innovation can also result in fundamental changes to the distribution of rights and responsibilities among the public, politicians, managers and professionals.

Professor Kamarck, of the Harvard Kennedy School of Government, offers a helpful distinction in her work, which adds clarity to the comparison of incremental and radical innovation. She considers the 20th century to have been a 'bureaucratic century' in relation to the structure of the public sector and argues that a number of new options are now open to policymakers in the 21st century (Kamarck 2007).

The first option is what Kamarck calls the 'reinvented government', which is largely a continuation of the current bureaucratic models and processes, but infused with incremental innovation achieved through the adoption of best practices from other sectors (eg performance management techniques) or the effective implementation of new technologies (eg robotic process automation) to support existing government activities and processes. This option for policymakers would be dominated by incremental forms of innovation.

The second option is 'government by network'. In this model, the government creates a network that performs the traditional functions of the public sector. This network can be made up of private companies providing public services on contract, third-sector organisations with a public-interest remit, or loose combinations of individual citizens. The extensive use of procurement and 'contracting out' of public services would fall into this option, as would crowdfunding for local infrastructure (ACCA/CPA 2019). Depending on the nature of these new networks, the changes could be seen as either incremental or more radical forms of innovation.

These types of innovation would create new systems for meeting public needs and could be seen as more radical forms of innovation – though radical innovation is broader than the creation of new markets.

Finally, the 'government by market' option relies on the state's ability to create markets where none existed before – particularly with the intention of achieving public goals. For example, this could include the creation of a new market in order to reduce carbon emissions. These types of innovation would create new systems for meeting public needs and could be seen as more radical forms of innovation – though radical innovation is broader than the creation of new markets.

In summary, Table 4.1 sets out the features of radical innovation, by defining both 'radical' and 'innovation'.

4.4 RADICAL INNOVATION AS A CHALLENGE TO NEW PUBLIC MANAGEMENT?

The ideas of New Public Management (NPM) have dominated public administration, policymaking and public finance for the last three decades. Its origin is rooted in public-choice theory[5] and, broadly, advocates the supremacy of the market and the application of business practices in the public sector (Gruening 2001). Policies and approaches such as performance metrics, privatisation, and 'citizens as customers' can be attributed to NPM. Both 'reinvented government' and 'government by market' contain elements of the NPM school; the former suggests that the public sector should draw best practices from the private sector in the provision of public services and the latter notes that the public sector can harness its power as a 'market creator' to achieve public goals.

Of course, many of the aspirations of NPM are laudable – including improving public financial management by moving to full accrual accounting in the public sector and the development of a public sector balance sheet to maximise the value of assets and manage the cost of liabilities. At the same time, the contention of the Centre for Public Impact, a foundation of the Boston Consulting Group, is that today's challenges are often too complex in nature to be solved by the 'command and control' public management techniques that are characteristic of NPM. Performance metrics are often gamed and public sector workers do not have the flexibility to exercise professional judgement in systems dominated by metrics and inspection regimes (Centre for Public Impact 2019).

Many are now arguing for a government based on relationships. For example, Hilary Cottam, a social innovator and entrepreneur, sets out a series of six principles that govern her approach to radically reforming public services. The third of these principles is that we need to focus, 'above all, on relationships'. This involves moving away from the current transactional culture found in many public services towards a new model where individuals' capabilities are developed (instead of their needs being managed) on a foundation of strong relationships with family, friends and communities (Cottam 2018). The Centre for Public Impact's publication *The Shared Power Principle* (2019) similarly argues that governments must prioritise relationships

TABLE 4.1: Features of radical innovation

RADICAL	INNOVATION
■ Large-scale changes to systems ■ Fundamental reorganisation of the ways value are created in an organisation ■ Substantial reallocation of power between public managers, professionals, the public, and politicians.	The change or initiative must be: ■ new to the context ■ implemented, and ■ intended to improve public value.

5 Public choice theory was pioneered by James Buchanan, a Nobel prize-winning economist, and asserts that politicians and public servants are prone to self-interested action and not primarily led by a sense of broader public duty (Buchanan and Tullock 1962).

Though public finance professionals are calling for more radical innovation, there is clearly still a need for a variety of responses to address the complex problems facing governments.

in order to collaborate in addressing the complex challenges facing the public sector, while building a culture of trust.

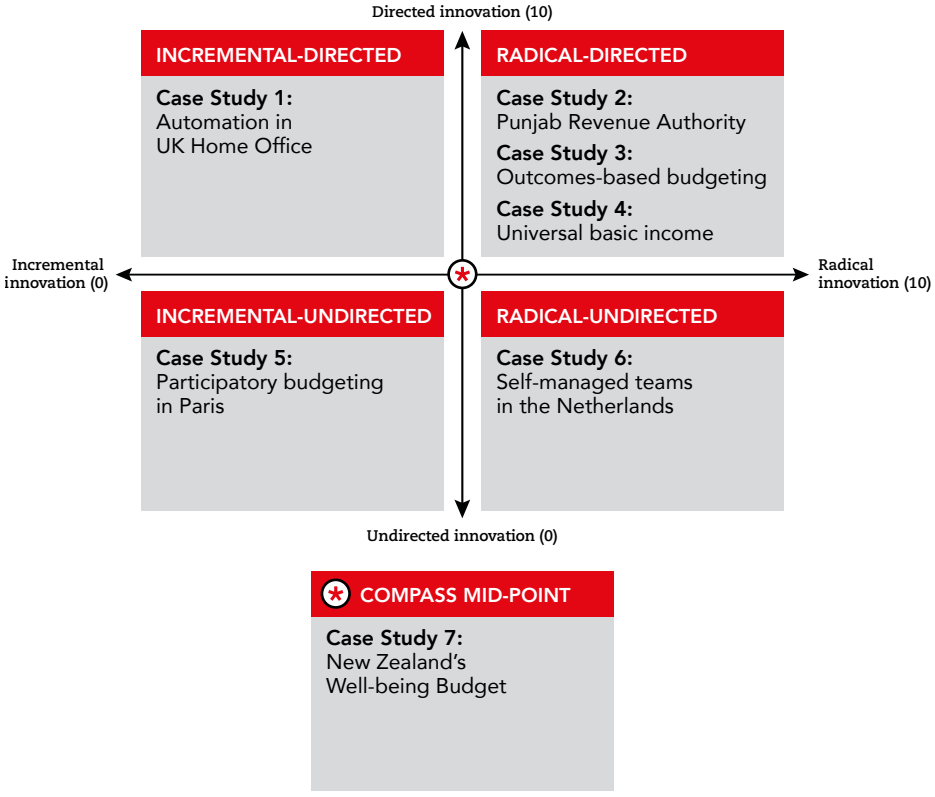
Another approach to moving from incremental to radical innovation, focusing particularly on the public finance function, argues for the need to transition from simply 'managing public money' to 'ensuring that public money achieves [intended] outcomes'. A good example of this can be found in the UK Government Finance Function's vision: putting 'finance at the heart of decision making. Driving the agenda, not just keeping score' (Government Finance Function 2019). A key facet of supporting decision making is demonstrating that public money is achieving a measurable outcome. Clearly, this is a more difficult standard for the finance function, with many attempts at innovation in this area, such as outcome-based budgeting (see Case study 3 below).

CASE EXAMPLES OF EMERGING PRACTICE IN PUBLIC SECTOR INNOVATION

Though public finance professionals are calling for more radical innovation, there is clearly still a need for a variety of responses to address the complex problems facing governments. For example, radical innovation is not possible without 'getting the basics right' – such as, paying staff on time and accurately reporting the financial position of public entities.

Therefore, to allow a better understanding of each of the quadrants of the Innovation Compass, a series of case studies are presented below relative to their compass position. At least one case study is presented for each quadrant and there are three studies included for the radical-directed quadrant, as this type of innovation was the 'preferred future' most commonly selected by public sector finance professionals.

FIGURE 4.4: The Innovation Compass – case studies by quadrant



Case study 1: Automation in the UK Home Office

INCREMENTAL, DIRECTED

SUMMARY

The UK Home Office finance department had been using the same Enterprise Resource Planning (ERP) software since the early 2000s, creating a pressing need for a modernisation and a new system that would allow the department to embrace wider technological advancements.

The new software package – Oracle Fusion – increased the department's automation capabilities, including the automation of a number of reporting and processing tasks. This implementation of robotic process automation (ACCA/CA ANZ/KPMG 2018) – which has data manipulation capabilities but does not perform analysis or cognitive tasks – is estimated to have reduced the staff time taken for some tasks from over two days to just half a day.

DRIVERS

✓ Productivity imperative
✓ Technology

POSITION ON THE INNOVATION COMPASS

This innovation represents a common current position on the Innovation Compass, occupying the incremental and directed quadrant. It is also an example of the public sector adopting technology developed in the private sector to meet public sector needs.

Here an incremental approach has value in rolling out change successfully; first in getting colleagues used to the new software, then providing new training and tools over an implementation period before finally aiming to roll out the functionality to other departments such as human resources (HR) and payroll teams.

LOOKING TO THE FUTURE

Rolling out this new software to other departments allowed the finance team to explore a 'test and learn' approach. Because the finance department was the first to embark on this innovation, staff members involved in the innovation were supported throughout the transition by senior staff in their team. In future, the system will undergo quarterly updates to ensure that, unlike under the previous system, the software remains relevant to a changing external and internal context. ■

Case study 2: Making the Punjab Revenue Authority 'smart'

RADICAL, DIRECTED

SUMMARY

In 2010, the Pakistani government devolved certain taxation setting and collection powers to the provincial level. In this process, the Punjab Revenue Authority (PRA) was established as a body to manage taxation of the sales of services. Since then, the PRA has taken a proactive approach to improving efficiency, placing importance on plugging leakages in the system and becoming a 'smart', automated organisation.

Some of the innovations under way include a real-time sales monitor for restaurants, which links up to point-of-sale software to track invoices and expected tax returns, and the 'Blue Sky Thinking' initiative, which uses drone technology to validate the number of patrons at events. These are just two aspects of a wider programme of reform that seeks to change where the organisation places value.

In order to mitigate concerns from taxpayers who now interact with different public-facing systems and who may be reluctant about the increased scrutiny, the innovation process has been supported by a programme of information and awareness. This included the establishment of a provincial Tax Day in 2016 and an agenda of education in schools.

DRIVERS

- ✓ Productivity imperative
- ✓ Citizen expectation
- ✓ Technology
- ✓ Demographic change

POSITION ON THE INNOVATION COMPASS

The PRA and the Punjab government have embarked on a collection of incremental innovations which, in combination, make for a radical change in their approach to tax collection and audit. With directed leadership from central and provincial leadership, here the financial department itself is playing a leading role for a number of technological innovations.

LOOKING TO THE FUTURE

In the long term it is hoped that these automations and technological advancements will allow for the creation of a single point of access for the taxation system in the Punjab province. This 'one-stop shop' would improve taxpayers' compliance burden and minimise the opportunity for human error. For this to happen, the current programme of innovations to embed technology within a culture of tax paying is essential. ■

Case study 3: Outcomes-based budgeting in Baltimore

RADICAL, DIRECTED

SUMMARY

Baltimore's local economy – and tax revenue capability – has been adversely impacted in recent years by deindustrialisation, accelerated by the 2008 financial crash. The system of allocating budgets on a traditional, departmental basis became too rigid to enable the changes needed across the public sector and so an innovative outcomes-based budgeting process was implemented.

In practice, this innovation meant that rather than allocating budgets to departments and agencies, they were allocated to outcomes that spanned the public sector. This transformative work means that public money is spent in the most efficient way to meet the needs of the city, and renews transparency in public spending.

To allow for a seamless embedding of this new way of working, projects were opened up to all departments, which could bid for the work competitively. For example, as part of the move to outcomes-based budgeting, a pest-control service was shifted from the Health Department to the alley and street cleaning function of Baltimore Public Works, which worked on the ground and knew the practical measures needed (Jachimowicz et al. 2018).

DRIVERS

- ✓ Productivity imperative
- ✓ Demographic change
- ✓ Shock

POSITION ON THE INNOVATION COMPASS

Though a relatively nuanced change in how the budgetary function of the city works, the city-wide nature of the innovation has made for a radical impact on the provision of public services. The innovation has had knock-on effects on how funding is allocated and, crucially, reframes what the city places value on and where its priorities lie. This is a fundamental pillar of radical innovation in this report.

While the motivation for the innovation was directed by leadership and supported by relevant authorities such as the mayoral office, the arrangement of the new budgeting agenda gives scope for undirected ownership of budgets and projects.

LOOKING TO THE FUTURE

The structural change offers the opportunity for evaluating the impact of funding decisions against the outcomes for those using the services. This framing provides scope for testing and learning what works in the local area and creating a financial model with benefits that residents can see. Baltimore's move to outcomes-based budgeting has also inspired other local authorities across the US and acts as a blueprint for how finance professionals can work beyond the status quo and imagine a new future. ■

Case study 4: Universal basic income in Finland

RADICAL, DIRECTED

SUMMARY

In 2016, a radical experiment was conducted in Finland to explore what a new welfare state could look like. Unconditional monthly payments were given to 2,000 unemployed adult residents, representing a move away from the existing welfare benefits, which would reduce if a claimant found work or had another source of income.

While the introduction of a universal basic income was fundamentally a welfare policy reform, it did require innovations from supporting finance functions to make it a reality. The experiment, which lasted two years, required a net investment in the system as payments were never reduced in the way that a traditional welfare system would operate. In total, €20m was reserved for the project, covering the universal payments of around €560 a month per participating resident.

The Ministry of Finance was one of three departments responsible for rolling out this basic income and had a facilitatory role in the experiment.

DRIVERS

- ✓ Productivity imperative
- ✓ Citizen expectation
- ✓ Media
- ✓ Demographic change

POSITION ON THE INNOVATION COMPASS

The concept of a universal basic income is a radical departure from the welfare systems across much of the developed world. The experiment conducted in Finland sought to re-assess the value we place on factors such as employment and job hunting within the benefits system and replaced conditionality with universality. By its nature, this reform had to be directed and required interdepartmental collaboration to realise the model.

LOOKING TO THE FUTURE

Although the experiment was successful in improving the well-being of participants, it did not have any significant impact on the employment status of recipients of the payments. The Finnish government has not committed to any further experimentation with a basic income, though it does regularly explore new initiatives within the welfare state. This creates a financial capacity within the public sector, which needs to be flexible to meet changing situations. ■

Case study 5: Participatory budgeting in Paris

INCREMENTAL, UNDIRECTED

SUMMARY

In 2014, Paris responded to a potential crisis in the democratic participation and satisfaction of its residents by embarking on a five-year participatory budgeting programme that firmly placed citizens at the centre of decision making. A total of €500m was allocated across the five-year period, representing around 5% of the city's total investment budget and the biggest participatory budget globally.

Citizens were encouraged to submit proposals for funding that contributed to either the whole city or their local areas, supported by workshops with professional and political representatives. Ideas are then filtered for viability before going through a Commission of citizens, elected representatives and interest groups, before finally being offered to a public vote.

At its core, this is a democratic reform that is enacted through the finance function of the city administration. Here, the finance department has a crucial role in letting go of some decision-making powers while remaining vigilant about the feasibility of investment submissions.

DRIVERS

- ✓ Productivity imperative
- ✓ Citizen expectation
- ✓ Media
- ✓ Technology
- ✓ Demographic change

POSITION ON THE INNOVATION COMPASS

Proposals for funding need to be actionable within the existing infrastructure of the city, meaning that the allocated funding supports a collection of incremental changes rather than any one radical change. Nonetheless, by engaging with citizens throughout the entire process, Paris has established an undirected budgetary management process, constrained only by the necessary practicalities.

Hence the initiative occupies a less populated quadrant of the Innovation Compass: 'incremental and undirected'. Though this is a quadrant of the compass less preferred by ACCA members surveyed, this case study highlights the need for innovation of this kind in situations related to public trust.

LOOKING TO THE FUTURE

Paris is just one example in a global suite of case studies on participatory budgeting. Columbia, Portugal, New York and Barcelona are just a few of the nations and localities embarking on similar programmes. Paris is one of many that have engaged with technological solutions to increase participation in the submission and voting stages of the initiative, an approach that could provide greater opportunities for further rolling out of such projects. ■

Case study 6: Self-managed teams in the Netherlands

RADICAL, UNDIRECTED

SUMMARY

A grassroots innovation in the delivery of community care in the Netherlands shows how important the role of the public entrepreneur is in the face of pressures on public sector budgets. After becoming frustrated about how community care was being provided in the Netherlands – a direct result of NPM, which promoted target-driven provision of support to those in need – care professionals sought to make change.

The Buurtzorg model – which translates as 'neighbourhood care' – was designed to place the needs of the individual at the forefront of decisions about community care. In this way, this initiative is an interesting example of how to innovate within financial constraints, as opposed to traditional responses such as tightening programme eligibility or income-testing benefits.

Rather than independently resourcing staff and sending them to homes with little continuity, local teams set up self-management arrangements to work as a dynamically resourced group. Supporting this move was the development of an IT system that took administrative tasks away from the nurses and front-line staff.

DRIVERS

✓ Productivity imperative
✓ Citizen expectation

POSITION ON THE INNOVATION COMPASS

The self-managed team movement is radical in how it reassigns power within the provision of essential services. This radical nature is intrinsically linked with the undirected nature of the innovation, at odds with the, typically, directed nature of public management.

LOOKING TO THE FUTURE

The development of self-managed teams started with just one small team of four, and now spans over 10,000 staff in more than 1,000 teams. Just 50 staff are in the administrative team, and an overhead rate of just 8% has meant that this model is financially sustainable. Clearly, the expertise of the financial professionals involved in Buurtzorg is essential to enacting the innovation. The success of Buurtzorg in the Netherlands has inspired others to move to a devolved management of teams, including an exploration of applying the model to UK healthcare (Martin 2018). ■

Case study 7: Well-being over wealth in New Zealand

COMPASS MID-POINT

SUMMARY

Despite growth in a traditional sense – namely improvements in GDP – the benefits of New Zealand's economy were not being evenly distributed across the population. Improvements in broad-based living standards were not increasing at the rate that was needed and elevated rates of mental health issues, domestic violence and homelessness were persisting or increasing, notwithstanding economic improvements at a national scale.

Following decades of research into well-being in New Zealand and more widely across OECD nations, the coalition government in New Zealand made a radical change away from traditional budgeting to well-being-based budgets.

The first of its kind, the national budget now requires consideration of a number of key well-being measures, which are to be iteratively adjusted in line with national needs. Priorities include reducing child poverty rates, improving mental health outcomes and making sustainable investment in infrastructure.

The national Treasury continued to develop underpinnings of the initiative and has a vital role to play in the fiscal management of the programme. A 'prudent' approach to financial management is to be taken, to ensure sustainability, to manage a surplus and to ensure sound fiscal management within a progressive taxation system.

DRIVERS

- ✓ Productivity imperative
- ✓ Citizen expectation
- ✓ Demographic change
- ✓ Climate crisis

POSITION ON THE INNOVATION COMPASS

The initiative could be considered to sit above the Innovation Compass given the breadth of its potential. Though radical in its vision, and in the range of departments and individuals it affects, the approach is purposefully adaptive and measures will be taken across specific areas incrementally to ensure durable long-term outcomes.

The initiative is also directed – with leadership from the coalition government and Prime Minister Jacinda Ardern – but the enactment of individual programmes and budget responsibility will come from the individual departments.

LOOKING TO THE FUTURE

This budgetary review, by design, focuses on achieving sustainable growth in the long term. There is an acknowledgement that the desired outcomes will take time and require an iterative approach to setting priorities and budgets. As this is the first budget of its kind at a national scale, over the coming years there will be an exciting opportunity for other countries to apply some of the learnings to their national budgets. ■

5. Completing the journey to radical innovation in public finance

Governments seek stability, wherever possible minimising social and economic volatility and uncertainty. Risks are identified and managed. Predictability is valued. This is not the mindset of an innovator or entrepreneur. How can public sector employees – whether in front-line, managerial or back-office functions – develop and test new practices and ways of working to help address some of the challenging issues that we face?

5.1 THE PUBLIC SECTOR INNOVATOR'S DOUBLE-BIND: MAINTAINING STABILITY WHILE INNOVATING

The biggest challenge in innovation is not usually in generating ideas, but in successfully bringing them to fruition, thereby creating public value. The subsequent challenges in so doing are many and varied, but all are fundamentally related to the notion that any innovation is by definition challenging the status quo, and is therefore going to lead to varying degrees of disruption and risk. Generating public value through innovation is therefore particularly complex and challenging for governments, as the OECD summarises:

> *'innovation runs contrary to the perceived role of bureaucratic organisations. Innovation is new, unknown and risky; by contrast governments have a statutory duty, democratic responsibility and political mandate to deliver public services in consistent and equal ways. Managing these tensions can be complicated for governments, where the risk of innovating appears far greater than the risk of maintaining the status quo'.* (OECD 2017)

Making decisions under conditions of uncertainty can have unpredictable impacts. Will costs rise? Will any budget escalations be funded? How will the public messages be managed? How should corruption and nepotism be avoided? What if the idea does not work as planned or is an abject failure? Are our processes fit for purpose? What is the distributional impact on people? Who is accountable? How might success or failure affect our reputation? The list is long and varied.

Those seeking to act innovatively in the public sector are aware of these problems. In particular, they see the inherent tensions between making a case for, and facilitating, change while simultaneously making a case for, and maintaining, stability. This is the double bind of the public sector innovator.

5.2 FIRST MOVER DISADVANTAGE

The advantages for a private sector company to be the first entrant into a new market include the ability to set industry standards, establish the brand before competition arises and build consumer recognition and loyalty. Of course, this advantage is not guaranteed and later market entrants are able to amend, adapt and improve the original idea, avoiding mistakes already made, and do not have to make the case for the idea in the first place – Google and Starbucks are examples of this. In the public sector, the first-mover advantages do not apply, not only owing to the lack of traditional market mechanisms and pressures, but also because of the twin challenges of managing risk effectively while scaling-up innovative practices.

The risks inherent in new initiatives mean that political and managerial leadership of a single public entity will often be anxious about the possibility that high-profile failures will occur on their watch. But where innovations succeed and scale, there can be system-wide benefits for the public sector. This mismatch of organisational-specific risk and system benefit is an important challenge for governments to consider in their transition to radical innovation.

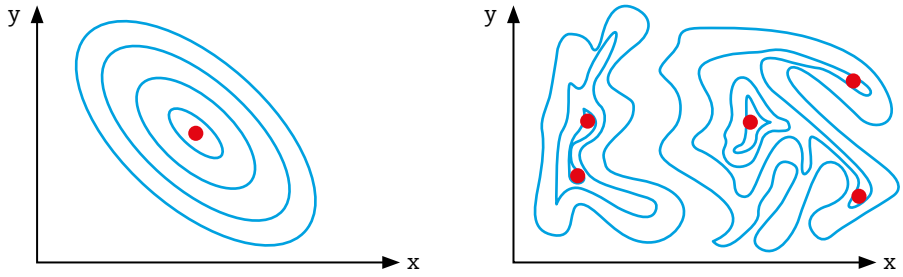
The CPI distinction is one of a 'smooth' or 'rugged' policy surface – where a smooth surface has a single, globally consistent best approach and the rough surface has multiple optimal coordinates and is characteristic of a complex policy landscape.

5.3 THE CHALLENGE OF DIFFUSION

The final disadvantage is the challenge of diffusion and the need to spread innovation effectively. Even if there is a demonstrable intervention that works in one context, there are no guarantees that it will work in another. Not only do the social, economic, technological and political contexts vary significantly by place, but they mean that the act of translating an innovation from one context – a town, a school, a system – into another in itself requires innovation. The global director of the Boston Consulting Group's Centre for Public Impact (CPI), Danny Buerkli (2019), offers a helpful approach for understanding this phenomenon: 'the policy response surface'. The ultimate intention in policymaking is to change the world in a purposeful way, from its current state to a more desirable state. Any single policy area – such as public pension provision – can have many variables that result in an enormous number of combinations (eg the value of pension provided, frequency of payments, conditionality of payments, contributions required to be eligible). The CPI distinction is one of a 'smooth' or 'rugged' policy surface – where a smooth surface has a single, globally consistent best approach and the rough surface has multiple optimal coordinates and is characteristic of a complex policy landscape.

In addition to the context-specific nature of policy interventions, the competitive forces in the private sector that drive change and

FIGURE 5.1: Smooth and rugged policy surfaces in a simple, two-variable policy



Source: Buerkli 2019

Box 5.1: The Public Entrepreneur as a navigator of change

'The story of innovation', Hana Schank notes, 'is typically told as one of rule breakers, stay-up-all-nighters, people who are sharper and shinier than everyone else – whiz kids. But in reality, innovation, particularly in government, rarely relies upon a whiz kid. The real change makers aren't 24-year-old male engineers parachuted in from Silicon Valley, but often a diverse range of people who have worked in or around government for years, who are invested in their communities, or who simply like intractable problems' (Schank 2018).

RSA research summarises the evolution of the term 'entrepreneur' in a public sector context. A 1980 definition of the term stated that the public entrepreneur was an internal champion of change: 'assuming responsibility for a venture – in this case a particular project, program, or policy. In assuming such responsibility, the entrepreneur becomes the venture's chief advocate and activist. He or she organizes support for the venture, manages the venture through the legislative maze, and assumes the political risks of being associated with the venture should it fail' (Conway et al 2018). In her PhD thesis on public entrepreneurship, Nobel Prize-winning economist Elinor Ostrom advocated that, 'in such an institutional setting there should be opportunities for persons to engage in public entrepreneurship by organizing new enterprise to secure appropriate forms of community action in providing common goods and services' (Ostrom 1965).

A current framework put forward by the RSA has more of a 'new power' flavour (Heimans, and Timms 2018), emulating something of the private sector archetype of the start-up founder who knows how to hustle, move fast and win over audiences. The entrepreneur's skillset enables them to develop a richer understanding of the problem in all its complexity, with the entrepreneurial mindset to tackle it. The RSA's report, Move Fast and Fix Things, identified public entrepreneurs as those working more flexibly, responsively and openly to create outcomes that citizens value (Conway et al. 2018). These individuals know how to develop a rich understanding of public issues in all their complexity and bring the entrepreneurial mindset to tackle them. In doing so they act as brokers, collaborators, re-framers of problems, identifiers of ideas, champions of what works, challengers of the status quo, and navigators of barriers to change. ■

The preference for more directed innovation in the 'preferred future' can be understood in the context of the unique challenges that the public sector faces in achieving radical innovation.

widespread adoption of new products – in a 'keep up or perish' environment – clearly do not apply to the public sector. The forces of creative destruction, which will often eliminate non-productive, stagnant firms and reward successful innovators, are not active in most public sector environments. Therefore, other methods of diffusion – that account for smooth or rugged policy surface for a particular problem – need to be incorporated into public innovation methods.

These challenges are crucial impediments to the diffusion of ideas across the public sector and one of the reasons why the UK government's 'What works centres', while offering excellent resources of evidence-led practice, have still failed to produce the widespread adoption of innovations.[6] There are no guarantees that what works in one context will translate to – or even be relevant for – another. The World Health Organisation notes the challenges with scaling any potential innovation involve navigating a set of complex relationships and tasks:

> *'Scaling up often involves an institution-building task that requires a variety of special technical, managerial, human resource, leadership and financial inputs as well as longer timeframes than typical project cycles'.*
> (WHO 2009)

Therefore, the public sector faces a unique set of challenges in moving to more radical forms of innovation, including maintaining a stable environment, addressing the first-mover disadvantage, and overcoming the barriers to diffusing successful innovation in the public sector.

The preference for more directed innovation in the 'preferred future' can be understood in the context of the unique challenges that the public sector faces in achieving radical innovation. The need to maintain a stable environment, the first-mover disadvantage, and barriers to diffusion can all be partly mitigated by top-level direction in the implementation of radical innovation. The diffusion of successful innovations can be coordinated by senior leaders with oversight of the entire public sector. Such leaders can provide a vision that will combine maintaining a stable environment for the provision of public services with nurturing an environment that allows, and learns from, failure. Finally, the mismatch between organisational risk and system reward (first mover disadvantage) is also partly mitigated by action by government leaders – where organisational risk can be managed in the context of the potential system-wide benefits.

5.4 CHARACTERISTICS OF CURRENT RADICAL INNOVATORS IN PUBLIC FINANCE

The ACCA 2019 global member survey gave a clear message: meeting the complex challenges of today requires the public finance function to move from incremental to radical forms of innovation. This finding was consistent across the public and private sector, and all those world regions with a representative sample. Given the challenges unique to the public sector in achieving this goal, what lessons can be learned from those *currently* undertaking radical innovation in their organisation? To answer this question, a new category was created that isolated the perspectives of public sector respondents who reported that they currently undertake radical innovation in their organisation (ie those who responded to the global member survey with a score of 8 or above, where entirely radical innovation was 10).

FIGURE 5.2: Public-sector-specific challenges for radical innovation

6 The centres have tended to focus on building the evidence base as opposed to supporting its widespread mainstream adoption (Gough et al. 2018).

68%

of respondents ranked direction and vision from senior management, as the best support to innovation in their organisation

The survey asked all respondents to rank what they considered would best support innovation in their organisation. The results in Table 5.1 show the responses from those working in the public sector who had seen a radical innovation implemented in their organisation within the previous12 months.

Direction and vision from senior management attracted the largest response from the public sector radical innovators, with 68% of respondents ranking it in their top three. The right direction and vision from senior management can allow for a number of other factors that support innovation to fall into place. For example, formal training (40%) and additional funding (32%) are more likely available to organisations that have buy-in from senior management.

Collaboration was also identified as an important enabler of innovation. Almost half (45%) of public sector radical innovators cited collaborative teams and strong team working in their top three essential factors for supporting innovation in the organisation. The third most common response was the need to encourage creativity. The freedom to develop and share new ideas is critical in the innovation process and understandably radical innovators saw this as a priority.

KEY FINDING: Radical innovators in the public sector argued that innovation was best supported through effective direction from senior management, the existence of collaborative teams, and the encouragement of creativity in the organisation.

FIGURE 5.3: Current radical innovators in the public sector

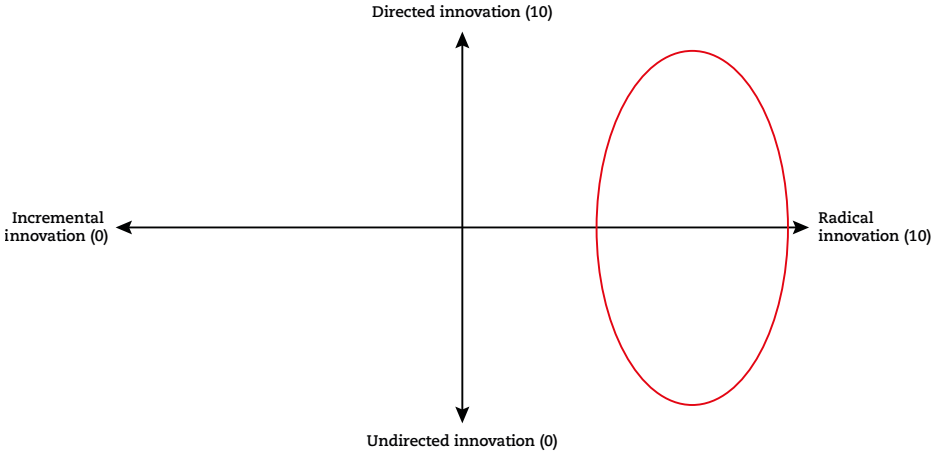


TABLE 5.1: Public sector radical innovators: what would support innovation most effectively in your organisation?

	% RANKING IN TOP 3
Direction and vision from senior management	68%
Collaborative teams (strong team working)	45%
Encouraging creativity	43%
Formal training	40%
Recognition / reward for innovative ideas	37%
Additional funding	32%
Willingness to take risks	15%
Increasing diversity of the team (eg gender, age, ethnicity)	15%
Additional time	4%

Source: ACCA 2019 member survey; public sector radical innovators; n: 75
Note: The options 'Other', 'Don't know' and 'None' were removed from the table, as 1% or fewer selected these options.

49%

of radical innovators had relied on external support for the development of their innovations

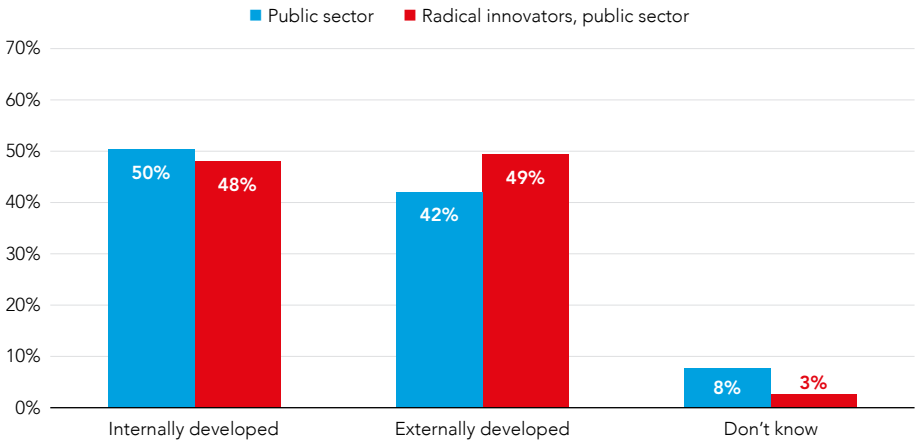
5.5 THE DEVELOPMENT AND IMPLEMENTATION OF INNOVATION IN PUBLIC FINANCE

Completing the journey to more radical forms of innovation can require input from a broader set of stakeholders. The development and implementation of innovations in the public sector can also be limited by shortages of personnel or expertise. The ACCA 2019 global member survey explored the extent to which public sector organisations relied on external assistance in the development and implementation of innovative initiatives.

Figures 5.4 and 5.5 compare the results from all public sector innovators and those who specifically undertook radical forms of innovation in the previous 12 months. The development of an innovation would include the idea generation, producing a business case, and planning. The results for the development of innovation were quite evenly split. Just over half of all the public sector innovators had developed their innovations internally, whereas this was the case for 48% of the radical innovators in that sector. Nearly half of the radical innovators (49%) had relied on external support for the development of their innovations, compared with only 42% of the broader group of all public sector innovators.

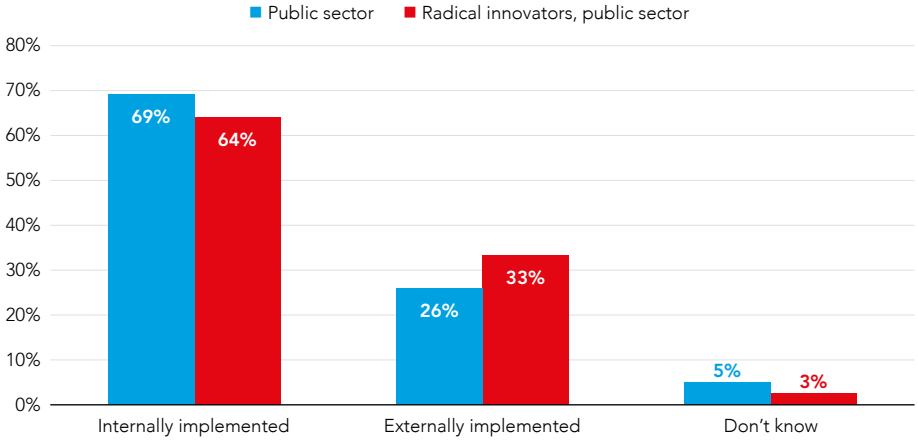
Respondents were also asked whether their innovations from the previous 12 months had been implemented internally or externally.

FIGURE 5.4: Were most innovations in your organisation in the last 12 months **developed** internally or externally?



Source: ACCA 2019 member survey; public sector respondents; n: 498

FIGURE 5.5: Were most innovations in your organisation in the last 12 months **implemented** internally or externally?



Source: ACCA 2019 member survey; public sector respondents; n: 498

Most respondents cited innovation occurring in their organisation but the real system-changing innovations, the ones that provide significant boosts to public value, need to be capable of diffusion and scaling up.

A majority of respondents stated that the innovations occurring in their public sector organisations had been implemented internally. This was the case among all public sector innovators and among the sub-sample undertaking radical innovation in that sector. At the same time, the radical innovators were more likely to have relied on external support in the implementation of the initiative (33%) than were the broader public sector sample (26%).

KEY FINDING: Radical innovators in the public sector were more likely to rely on external support in the development and implementation of their innovations.

5.6 MAPPING OUT THE JOURNEY TO RADICAL INNOVATION IN THE PUBLIC SECTOR

Most respondents cited innovation occurring in their organisation but the real system-changing innovations, the ones that provide significant boosts to public value, need to be capable of diffusion and scaling up. As David Albury (2005) recognises, there are big returns to be gained from innovation across whole systems, providing the largest boost in overall productivity growth. Yet the rewards for any individual unit or organisation – such as a school or hospital – are much lower. Indeed, there is likely to be significant risk associated with any innovation, making it more rational to focus on adopting the ideas developed by others. A range of tools and methods that de-risk innovation have been developed as a response to the need for governments to provide stable and predictable environments. These include the following examples.

- *Regulatory sandboxes*, ie legal frameworks within which innovators can trial new products, services and business models without some of the usual rules applying (Ofgem 2018).
- *User-centred design*, ie approaches that seek to design services in collaboration with the citizens who are likely to receive those services (Moilanen 2019). This is the opposite of more traditional 'top down' initiatives in which the government determines what services to provide and how they are delivered (see summary in Cottam 2018).
- New approaches to commissioning in uncertainty – when the commissioner cannot have perfect market knowledge – include models such as *GovTech Catalyst* in the UK (Government Digital Service 2019). This approach enables R&D investment in early stage ideas through a staged process of investment, support and exploration. The *CivTech®* version developed by the Scottish government drives innovation across the public sector (see CivTech n.d. for more information); its director, Alexander Holt (2018), states that the core function is 'to help people buy what they don't know exists'.
- Social and government *innovation labs* (see eg OPSI 2017) are multidisciplinary groups developing, testing, prototyping, and refining interventions to tackle complex societal challenges (Hassan 2014). The emerging practice of *experimentation and prototyping* in the public sector is an attempt to find what works on a small scale and reduce risk, before scaling the idea across the sector (see eg NESTA 2011).
- The role philanthropic organisations, such as the Gates Foundation or Bloomberg Philanthropy, can play in strengthening public sector innovation 'simply by providing risk capital to fund activities with risk profiles that wouldn't be politically acceptable to the wider public' (Bason 2010).

These are just some of the mechanisms through which those trying to innovate in the public sector are also experimenting with the means of doing so. In this wider public sector, innovation is fundamentally concerned with distributing and accounting for risk and reward. Public sector finance professionals are central to these efforts.

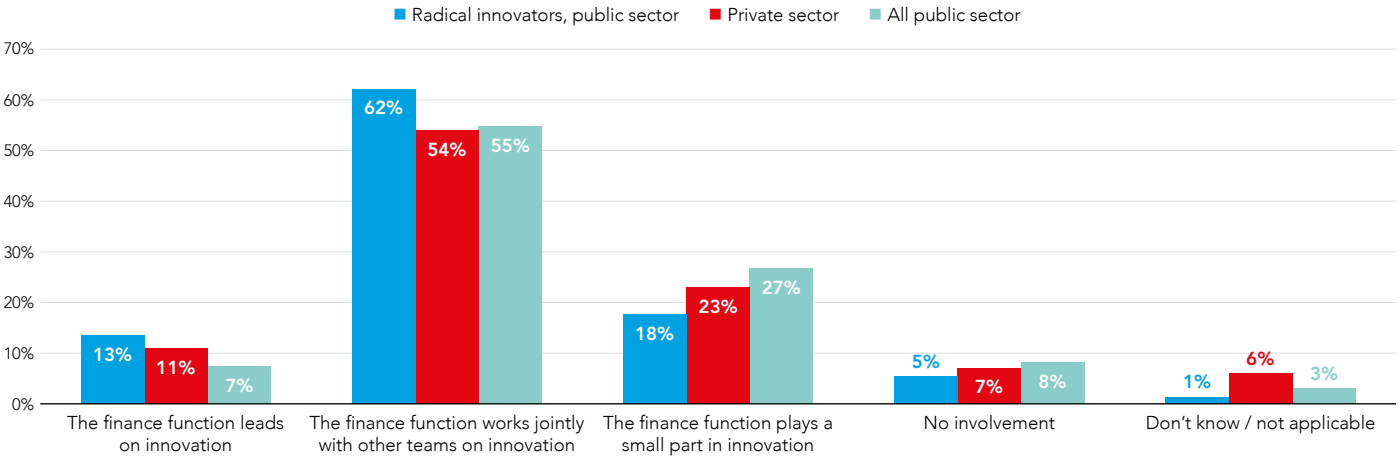
6. Innovation and the professional accountant

Innovation is seen as critical for the success and sustainability of public sector organisations, but there is currently insufficient research demonstrating the importance of professional accountants in achieving successful innovation.

As one public sector chief financial officer (CFO) from Tanzania explained in ACCA's online discussion, the 'finance department is central in innovation. Therefore, it is paramount [for finance] to get involved [in the innovation process] so that the aim of innovation can be attained… The finance team can also collaborate and team up with innovative units to see them succeeding by providing timely financial resources, as well as timely and accurate information'. The global member survey further substantiated this view. Nearly 9 in 10 public sector respondents (89%) reported that the organisation's finance function was involved in the innovations that had taken place in the previous 12 months. This figure rises to over 93% when the sample is limited to those currently undertaking radical innovation in the public sector.

KEY FINDING: Almost 9 in 10 public finance professionals reported that the finance function was involved in the innovations that took place in their organisation over the previous 12 months.

FIGURE 6.1: How involved is the finance function in the innovation taking place in your organisation?



Source: ACCA 2019 member survey; public and private sector innovators; n: 3,665

55%

of finance professionals were working jointly with other teams to achieve innovation in the public sector

6.1 HOW INVOLVED ARE PROFESSIONAL ACCOUNTANTS IN PUBLIC SECTOR INNOVATION?

More granularly, the results showed that in the public sector a majority (55%) of finance professionals worked jointly with other teams to achieve innovation – with the figure rising to 62% when the sample is limited to radical innovators in the public sector.

KEY FINDING: **Public sector organisations that have undertaken radical innovation are more likely to be working jointly with other teams in achieving innovation.**

Private sector respondents were statistically more likely to report that the finance function leads on innovation in their company (11%), compared to 7% of public sector respondents. Those undertaking radical innovation in the public sector had the largest proportion stating that the finance function leads on innovation in their organisation (14%). This suggests that broader public sector entities could increase their rate of radical innovation by bringing the finance function to the forefront of their work on innovation.

6.2 THE ROLE OF FINANCE IN THE WIDER PUBLIC SECTOR INNOVATION PROCESS

The finance function has a critical role to play in the wider public sector innovative process. To make this case, Figure 6.2 presents the Innovation Lifecycle, developed by the OECD's Observatory of Public Sector Innovation (OPSI). The lifecycle includes the identification of problems and generation of ideas, through to evaluation and diffusion of lessons learned. As Figure 6.2 demonstrates, there is a critical role for the finance function at every stage of the innovation life cycle. Participants in the ACCA members' online panel discussion echoed this view. For example, a senior public sector manager in Tanzania noted that 'the finance department need to collaborate and team up with innovative units to help them succeed by releasing [funds] in a timely fashion… as well as compiling timely and accurate financial reports'. There are a range of critical areas in the public sector innovation process that require the intervention of the finance function.

Identifying problems, generating ideas, and developing proposals are all part of a collaborative, cross-functional process for creating new innovations that meet the objectives of a public sector organisation. The finance function is well placed to take a central role in this process, being the group that works across a variety of organisational functions. In the development of business cases, the finance function acts as the 'gatekeeper', often assessing which cases should be adopted or referred to senior management.

Equally, the budgeting process itself is led by public sector finance professionals, who will need to align specific innovative pilots or initiatives to the organisation's broader objectives and purpose. Through the implementation and evaluation stage, the finance function will often be charged with monitoring the projects that are already under way.

Once the cycle is complete, organisations will be required to report on the outcomes of their work, for example in an organisation's annual report and accounts – another critical area for finance. Finally, public sector audit plays a role in identifying problems in existing government initiatives and diffusing the lessons learned: for example, through performance audits. At this point, the cycle repeats and a cross-functional process is needed – considering the best way of addressing the problems identified through the previous innovation cycle and other issues that are raised in the course of pursuing the organisation's objectives.

The following sections will offer additional insight into the six areas identified in the Innovation Lifecycle where the finance function plays a critical role.

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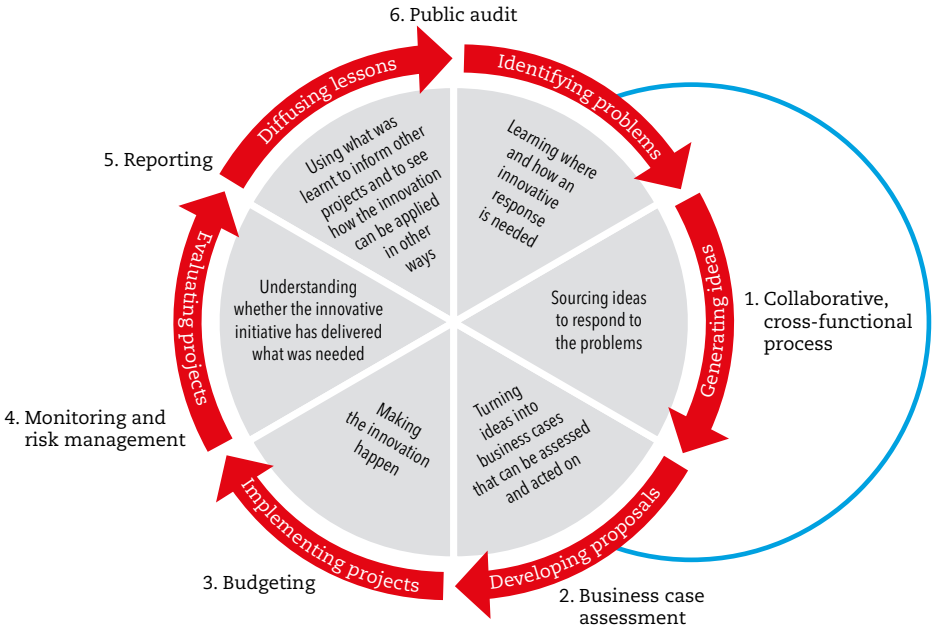
FIGURE 6.2: OECD, Observatory of Public Sector Innovation, Innovation Lifecycle



1. Collaborative, cross-functional idea generation and development

The identification of problems, generation of ideas, and development of proposals will most effectively occur as cross-functional and collaborative processes. The finance team should play an important role in identifying problems in the current system or model, as well as working with colleagues to propose ideas and jointly develop possible solutions to problems. The finance function, being tasked with monitoring the effectiveness of existing projects, is well-placed to identify problems and lessons learned from existing projects. Those survey respondents undertaking radical innovation in the public sector reported that having collaborative teams was the second most important factor in supporting innovation in their organisation. The participatory budgeting case example from Paris, France (Chapter 4, Case study 5) showcased an initiative where public finance professionals are required to act outside their regular professional duties – engaging with a broad range of citizens and other stakeholders in sourcing concepts for public spending.

2. Business case assessment

The finance professional will often act as the gatekeeper, recommending to senior management which initiatives should move beyond the proposal stage. Many of the ideas generated with colleagues or through public consultation will be difficult to implement, too risky, or even entirely unworkable. Therefore, professional accountants are well placed to provide organisations with the selection tools and frameworks that they need to decide which ideas have sufficient merit to test or implement.

Areas for accountants to consider in assessing the business case could include, whether there is:

- a well-formulated problem
- sufficient probability of success (balancing the potential benefits of incremental change against those of more risky radical innovations)
- a clear plan for developing the idea
- a method for managing the risks that could arise from the project, and
- a means of measuring the potential benefits against the costs.[7]

7 Text adapted from Mulgan and Albury 2003.

The budget process in the public sector is often more complicated than its private sector equivalent, since the objectives of a public organisation can be varied and difficult to measure.

Many business case assessments will consider the immediate financial implications of a proposed initiative. For example, a public sector CFO in Tanzania wrote that: 'I am looking to see the impact on [the] bottom line, the benefits in such an innovation (eg such as shortening the budget process) and how innovation [can] impact the whole organization.' A number of participants in the online panel discussion took this fairly traditional view in assessing business cases.

Of course, finance professionals will also need to be strategic in their assessment of business cases, particularly since more radical innovation will probably present higher risk than less extreme measures but have the potential for greater benefit. Therefore, radical innovation will require professional accountants to move beyond a traditional 'bottom line' approach. A participant in the online panel discussion, a senior manager from Lesotho, described this need well by stating that: '[the] focus must not necessarily lie in costs. Value added must be determined… Impact can be quantified in a number of ways, not just using budget predictions. Has time taken to conclude a task been reduced? Has it reduced red tape? Is the process more transparent?'. These broader questions, which explore the possible outcomes beyond the financial, will become increasingly important if public sector organisations are to be successful in adopting more radical forms of innovation.

The concept of value creation through multiple capitals, introduced through the International Integrated Reporting Framework (<IR> Framework), could help to build business cases for innovation (IIRC 2013). The <IR> Framework is based on the idea that an organisation's ability to create value beyond the short term depends upon more than financial resources: the resources needed include human capital, intellectual capital, natural capital, stakeholder relationships, processes and infrastructure. Similarly, the impact of an organisation's activities also goes well beyond flows of money. In a public sector context, an innovative project to increase operational efficiency would reduce financial costs, but could also affect human capital (through freeing up staff time for other tasks), enhance intellectual capital (by sharing the knowledge and experience gained from the process), and also affect stakeholder relationships (through improved or reduced social service). All these impacts need to be considered when assessing business cases.

In building and assessing business cases, it is also important to consider the value created over a sufficiently long time frame. Some projects might generate greater financial savings in the short term, but these benefits could be offset by negative impacts in the longer term. The finance team, with their responsibility for risk management, should be able to determine the most appropriate time frame that business cases need to cover.

3. Budgeting

The annual budget process is a core function for finance professionals in the public sector. The budget is traditionally a tool for distributing the available resources across the sector in order to carry out a government's agenda effectively and efficiently. The budget document itself is also an important connection point between the government and its key stakeholders, where the government's strategies and objectives are often announced and aligned with the resources made available to achieve these objectives. This requires public finance professionals to engage in significant consultation with a broad range of stakeholders (eg service users, organisations affected by regulatory change).

The budget process in the public sector is often more complicated than its private sector equivalent, since the objectives of a public organisation can be varied and difficult to measure. For example, a local medical clinic will seek to achieve a variety of objectives, such as: assessing and referring patients, vaccinating patients, offering information on local health services, and providing advice to support disease prevention. One participant of the online discussion panel from Zimbabwe echoed this view by noting that: 'it is still a challenge to prioritise public funds towards financial innovation ahead of social services'. In addition to the multitude of objectives and competition for resources, the varied and unpredictable demand for public services can further exacerbate the challenges faced by public sector finance professionals.

In this challenging environment, finance professionals need to consider how the budgeting process can best support innovation. Innovative initiatives will need

Professional accountants with oversight of risk management in their organisation should also consider the risks inherent in legacy thinking and inaction, which can often be harder to assess – particularly in a public sector setting.

to be mapped to broader organisational objectives in the budget process. As part of the online ACCA members' panel discussion, a senior accountant in Kenya noted that: 'the finance function [must] see the value [in innovation], hence the finance function has to learn to be more strategic in outlook and learn to see the bigger picture'.

At the same time, getting the basics right in the budgeting and management of public money is critical for successfully fostering innovative initiatives. For example, finance professionals will also lead on the preparation of internal, detailed, project-specific budgets. This business management practice would detail, on a month-by-month or quarter-by-quarter basis, where revenues and costs fall. This budget is important, among other things, for cash management – ensuring that the project will have enough cash reserves in each period to cover the anticipated costs. A public sector accountant in Nigeria noted that: 'the challenge most institutions face is that there is the possibility that funds from the financial department are not released on time'. Without public sector finance professionals completing their work in an effective and efficient manner, innovative initiatives in the public sector can stall owing to a lack of funds.

4. Monitoring and risk management

Effective monitoring by professional accountants will be critical during the implementation and evaluation phases of the innovation lifecycle. One participant from the online discussion, a public sector accountant from the UK, noted that: 'In order to quantify the impacts of innovation, public service organisations first need to identify where innovation can improve outcomes. Measuring the benefits will depend on the type of improvement being monitored'. Making the case for innovation, particularly more radical forms of innovation in the public sector, will require the effective measurement of the impact of each one. Achieving this will support the evaluation of the project, but can also reassure stakeholders (eg users of a changing service) that the correct risk-management tools are in place to safeguard public value and reduce risk to tolerable levels.

Professional accountants with oversight of risk management in their organisation should also consider the risks inherent in legacy thinking and inaction, which can often be harder to assess – particularly in a public sector setting. Overall, embedding innovation in a public sector organisation will require a change in mindset for the execution of monitoring and oversight. More radical forms of innovation will require professional accountants to identify and assess a broader range of risks – as well as plan for potential risk treatments that could operate outside the traditional public service delivery model. It will require accountants to think creatively about the possible scenarios that could arise through the adoption of more radical innovation, and then acting with intelligence and vision to plan for these varied scenarios.

The balanced scorecard has been widely embraced in the private sector as a tool for monitoring performance against strategy, by evaluating not only the financial performance but also the impacts on stakeholders, internal processes, and wider organisational capacity. As mentioned above, the integrated reporting 'capitals' model serves as a reminder that human capital, knowledge, processes, infrastructure and natural resources are all core resources over which the finance function, and senior management, must exercise stewardship. Therefore, the outcomes in relation to these capitals, and risks arising for each of them, also need to be monitored.

5. Reporting

New initiatives will also need to be reported in the annual reports and accounts of public entities. To improve public trust, the reporting of public entities needs to tell the story of how the entity concerned is adapting to the future – helping to address the issues highlighted in Chapter 3 for the twin challenges of falling public trust and rising citizen expectations. At the same time, the narrative in the annual report and accounts must be fair, balanced and understandable for the users (eg politicians, media) (ACCA 2018b). For example, the performance information presented in the annual report and accounts, and accompanying narrative, should detail the innovative projects undertaken by the entity within the previous reporting period and how they relate to the broader strategic purpose of the organisation. This will be particularly

The finance function also contributes to the innovation lifecycle through public audit, which supports the diffusion of lessons learned and the identification of problems that require innovation.

important in the case of radical innovation, where system-changing initiatives will probably entail a higher degree of risk and new processes could cause disruption for citizens. In this case, the annual report also provides an opportunity for public sector leaders to explain why radical innovation is right for the organisation, while also setting out how the risks are being assessed and managed.

The reporting of intangibles[8] represents another important area for professional accountants supporting innovation in their organisations. The five most valuable companies in the world had a market capitalisation of £3.5 trillion in 2018, but together maintained balance sheets with combined tangible assets of only £172bn (HM Treasury 2018). Therefore, intangible assets represented nearly 95% of their value. The public sector will contain significant depth of expertise and knowledge assets, which can often be underreported. Professional accountants, and particularly preparers of public accounts, should turn their attention to how best to report on the value derived from innovative activities. This could be through a balance sheet asset or, alternatively, through narrative reporting on the value of innovation.

Finally, innovation can occur in the reporting process itself. For example, the first case study in Chapter 4 of this report highlights the efforts by the UK Home Office to automate certain recurring reporting functions. This reduced the time take for some tasks from over two days to just half a day of staff time – time that can be repurposed to higher-value-added activities. Another example from the ACCA online discussion panel came from a member in Barbados, who described an innovation that 'involves [the] harmonisation of reporting systems, [where] enhanced skill sets [are] being applied in the reporting processes and strict guidelines and deadlines set for reporting'. The ACCA global member survey demonstrated that most innovation occurs across multiple functions in an organisation. At the same time, innovation of the finance function can create new opportunities for efficiency, while also releasing time for professional accountants to complete higher-value-added activities.

6. Public audit

The finance function also contributes to the innovation lifecycle through public audit, which supports the diffusion of lessons learned and the identification of problems that require innovation. One of the public-sector-specific challenges identified in Chapter 5 was the lower rate of diffusion of innovative practices than seen in the private sector (where market forces can spur broader adoption). Supreme audit institutions are well placed for sharing good practices across the sector and spurring innovation where problems have been identified – for example, through the performance audit of a particular programme. A participant in the online panel discussion from the United Arab Emirates noted that: 'The spending of public money should take account of weightings and the 3 E's… spending should be economical to make sure it should lead to efficiency and effectiveness'. Applying this 'value for money' principle – of economy, efficiency, effectiveness – can support a robust assessment of a particular innovative project and contribute to senior management's decisions on whether to continue the initiative.

Technology also has the potential to affect the public audit process significantly – with advanced technologies such as artificial intelligence and machine learning creating opportunities for public auditors to move from audit as a reactive or backward-looking exercise, to a constant analysis of real-time information, leading to forward-looking insights. There are also real potential from the application of distributed ledgers in the public sector – where a key feature of distributed ledger technology is immutability (ie the historical record cannot be changed, only corrected with a balancing entry).[9]

Finally, the identification of problems by supreme audit institutions should contribute to renewed collaborative debate across the relevant actors in the public sector about how to best to respond to problems raised by a public audit report. This OECD innovation lifecycle (Figure 6.2) then repeats and will again be reinforced by a variety of contributions, from business case assessment to public audit, by the finance function.

8 ACCA has published a report, *The Capitalisation Debate* (Mazzi et al. 2019), which contributes to the wider debate on intangibles by exploring the extent to which companies using IFRS recognise development costs as assets.

9 ACCA's report on Audit and Technology explores these opportunities in more detail (ACCA and CA ANZ 2019).

In additional to technical and ethical competencies, the required quotients include experiential learning, intelligence, creativity, digital capabilities, vision and the emotional quotient.

6.2 FUTURE SKILLS FOR THE INNOVATIVE ACCOUNTANT

ACCA's professional quotients, the skills identified for future success in the changing world of accountancy, remain equally relevant when considering what skills will be needed in the future by professional accountants to support innovation fully in their organisations, while contributing to the transition in the public sector from incremental to more radical forms of innovation.

The skills ACCA has identified for future success were introduced in *Professional Accountants – the Future: Drivers of Change and Future Skills* (ACCA 2016b). The headline finding from that report was that while technical capabilities remain a core requirement, the professional accountant of the future will increasingly need to adopt a wider set of capabilities. In the course of the work, ethics was also identified as a core feature of the future accountant and placed alongside technical competency at the centre of what the report characterised as the 'professional quotients' for accountants.

In additional to technical and ethical competencies, the required quotients include experiential learning, intelligence, creativity, digital capabilities, vision and the emotional quotient (see Table 6.1 for a description of each quotient).

This quotients framework represents ACCA's view on the skills that the accountant of the future will need to succeed in a rapidly changing environment (Figure 6.3). As such, it has been foundational, setting the groundwork for further research completed by ACCA. Later reports explore the ethics quotient (Vaidyanathan 2017) and the emotional quotient (ACCA 2018c).

TABLE 6.1: Descriptions of ACCA's professional quotients

PROFESSIONAL QUOTIENT	DESCRIPTION
Technical and ethical competencies (TEQ)	The skills and abilities to perform activities consistently to a defined standard while maintaining the highest standards of integrity, independence and scepticism.
Intelligence (IQ)	The ability to acquire and use knowledge: thinking, reasoning and solving problems.
Creativity (CQ)	The ability to use existing knowledge in a new situation, to make connections, explore potential outcomes, and generate new ideas.
Digital quotient (DQ)	The awareness and application of existing and emerging digital technologies, capabilities, practices, strategies and culture.
Emotional intelligence (EQ)	The ability to identify your own emotions and those of others, harness and apply them to tasks, and regulate and manage them.
Vision (VQ)	The ability to anticipate future trends accurately by extrapolating existing trends and facts, and filling the gaps by thinking innovatively.
Experience (XQ)	The ability and skills to understand customer expectations, meet desired outcomes and create value.

Though all the quotients will be required collectively for professional accountants to maximise their contributions to the innovation process in the public sector, the creative quotient (CQ) and vision quotient (VQ) are particularly worthy of note.

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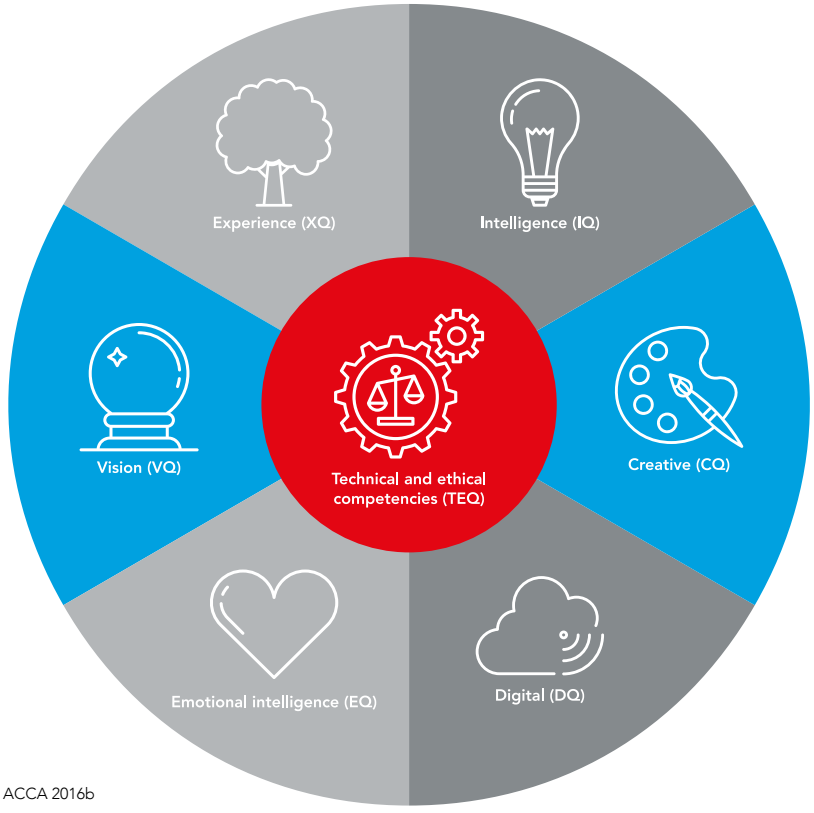
VQ is described as 'the ability to anticipate future trends accurately by extrapolating existing trends and facts, and filling the gaps by thinking innovatively'. A well-developed VQ would allow a professional to identify the emerging challenges for their organisation and to generate innovative solutions that can help address these challenges. As shown in Chapter 5, radical innovators in the public sector have reported that 'direction and vision from senior management' was the most important way of supporting innovation in their organisations. Senior finance leaders, and those who aspire to such a role, will need to develop this quotient if they are going to facilitate a transition from incremental innovation to more radical innovation. Achieving this shift to radical, but also more directed, innovation will require public sector finance professionals to develop their VQ and connect the potential of individual innovation initiatives to broader strategic goals for the organisation.

CQ is described as 'the ability to use existing knowledge in a new situation, to make connections, explore potential outcomes, and generate new ideas.' Chapter 5 showed that public sector respondents who undertook radical innovations ranked 'encouraging creativity' in the top three for supporting innovation in their organisation. Creativity will also be essential for accountants collaborating across the functions of their organisation on the identification of problems, generation of ideas, and development of proposals. Together, well-developed VQ and CQ will enable finance professionals to make a substantial contribution to the innovation life cycle of their organisation, as well as shaping their organisation's means of creating public value in the future.

FIGURE 6.3: ACCA's professional quotients – a spotlight on vision and creativity



Source: ACCA 2016b

7. Recommendations for a more innovative public sector

As this report has explored, there is an important role for finance professionals to play as both innovators and facilitators of innovation. What is clear – from the survey and the online discussion panel – is that there is a demand for more radical innovation in public services across the globe.

To shift the needle on the innovation compass towards more radical innovation, organisations need to build three foundations. These foundations are the development of a culture that provides leadership on innovation and fosters radical change, the creation of a supporting network of skills development to translate culture into results, and the provision of tools with which innovators can create a dynamic public sector.

7.1 CULTURE SETTING

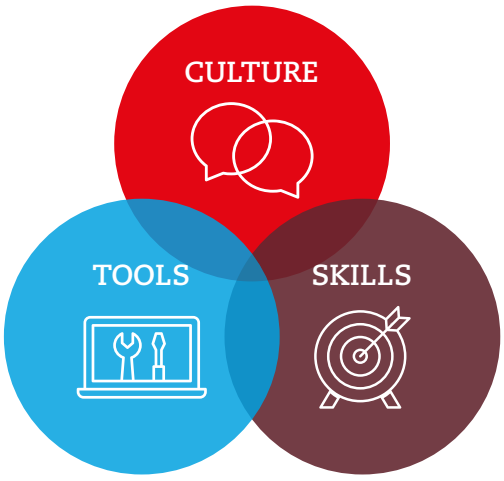
The desire of ACCA members to move to a more radical, more directed innovation space will be made a reality only if there is a culture of supported innovation within public sector organisations. **Therefore, policymakers and public sector leaders should:**

1. draw from users and external stakeholders to collect and understand transformative ideas for public services,
2. foster a climate of psychological safety[10] in your organisation, where individuals feel that they can speak truthfully and take appropriate risks without fear of reprisal,
3. share a vision and strategic direction enabling staff to understand how the organisation can proactively address the complex challenges it faces (see Chapter 3), and
4. win over sceptical staff by measuring the outcomes of innovation pilots and involving them in initiatives, where possible.

Public sector finance professionals should:

5. embrace diverse experiences in their work and be bold in sharing new ideas with colleagues and superiors,
6. work with finance business partners to connect across the organisation and help shape a culture of innovation.

FIGURE 7.1: Radical innovation in public finance through the right culture, tools and skills



10 Google undertook a two-year study on what drives team performance in the company and found that psychological safety (ie feeling safe to take risks and be vulnerable) is the most important factor in creating a successful team. See Harvard Business Review's High-performing teams need psychological safety (2017) for more information.

The final stage in bringing innovation – particularly radical, directed innovation – into the mainstream is to provide innovators, and potential innovators, with the tools and resources needed to make their vision a reality.

7.2 TOOLS FOR INNOVATION

The final stage in bringing innovation – particularly radical, directed innovation – into the mainstream is to provide innovators, and potential innovators, with the tools and resources needed to make their vision a reality.

Policymakers and public sector leaders should:

7. consider how tools such as prototyping and regulatory sandboxes (see section 5.6) can support innovation, while also managing risk and offering citizens a stable policy environment,
8. use experimentation and pilots, such as the universal basic income pilot in Finland (see Chapter 4, case study 4), to understand the impact of innovative initiatives before scaling up,
9. apply approaches such as outcomes-based budgeting (see Chapter 4, case study 3) in order to redesign public service delivery and create competition within the public sector,
10. consider creating innovation budgets as a means of supporting proactive innovation in the face of complex challenges,
11. reallocate some of the time made available through the automation of repetitive tasks for staff to focus on creative reflection and collaboration.

Public sector finance professionals should:

12. apply the concepts of integrated thinking and value creation through multiple capitals to help in the construction and assessment of business cases for innovation,
13. develop risk-management frameworks that also identify the reputational risks that arise from a lack of innovation and maintaining the status quo,
14. apply CPI's 'policy surfaces' concept (see Chapter 5, Figure 5.1) to understand which innovations are suitable for cross-organisation adoption and which are context-specific,
15. bring rigour and discipline to the experimentation process, for example, by establishing metrics of success and monitoring these during an innovation pilot.

7.3 SKILLS FOR THE FUTURE INNOVATOR

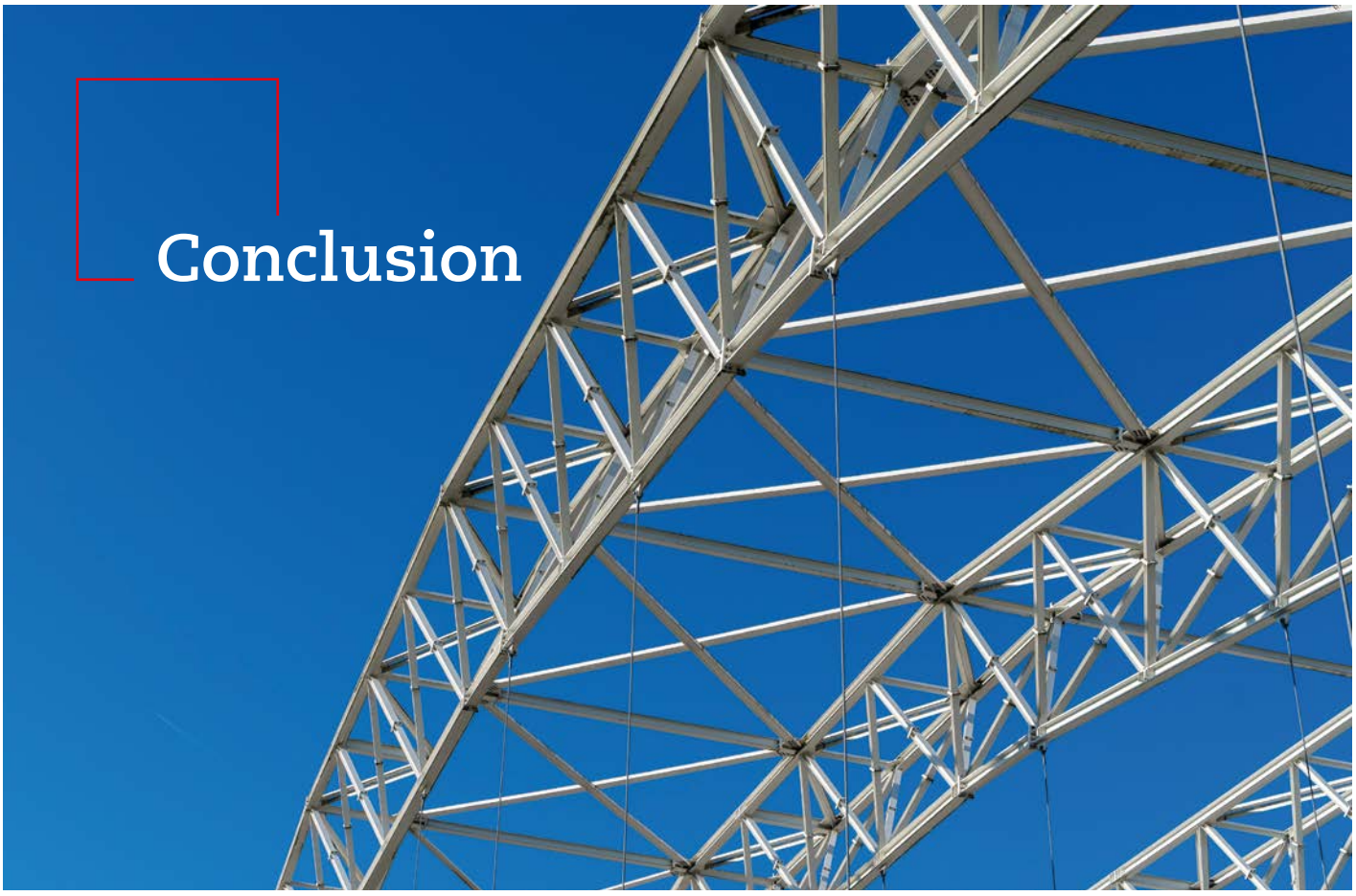
The ACCA 2019 survey shows that skills and talent shortages are the second biggest challenge facing the public sector – after budget reductions. If the public sector is to be sustainable, skills that foster innovation in the face of global and national challenges should be nurtured.

Policymakers and public sector leaders should:

16. consider implementing learning and development modules that will develop finance professionals' vision and creativity quotients,
17. develop system-thinking skills in their organisation, in order to support effective radical innovation of whole systems,
18. support external secondments to broaden the experiences and perspectives of staff,
19. review the pipeline of new staff skills and training to ensure that the organisation is fit for the future.

Public sector finance professionals should:

20. reinforce their ethical competencies, particularly when considering the distributional impacts of innovation experiments or system-wide changes,
21. become public entrepreneurs by embracing opportunities to work more flexibly, responsively and openly to create outcomes that citizens value,
22. seek to develop competencies that supplement the core technical and ethical skills of the professional accountant – including the digital, creative and vision quotients.



Conclusion

The challenges facing the public sector are intensifying in the face of political upheaval, climate crises, and technological disruption and globalisation, and new approaches are required to address them. The sector as a whole, including finance teams, is actively innovating in ways that vary in both magnitude (whether incremental or radical) and origin (undirected or directed) – following the dimensions of the 'innovation compass' presented in this report.

Further, this research shows the ambition of the finance profession is to achieve more radical and directed innovation. Of course, more radical innovations need to be sensitive to context, as former Mayor of New York City, Michael Bloomberg, explains: 'in medicine, or in science, [if] you go down a path and it turns out to be a dead end, you really made a contribution, because we know we don't have to go down that path again. In the press, they call it failure. And so people are unwilling to innovate, unwilling to take risks in government…' (Bennet 2012). In this light, it can be easy to see why survey respondents most commonly reported that current innovations in their organisation were incremental; the public sector faces a unique set of accountability and probity challenges when embarking on radical innovation.

In their insightful book, *Dancing at the Edge*, Graham Leicester and Maureen O'Hara (2012) reflect that in making change 'it will continue to fall to people to turn insight into action and to work within existing entrenched systems to shift them in a more hopeful direction'. In doing so, we need to get smarter about the systems and structures that support innovation and those that can help realise its potential. To enact this, finance professionals must be able to design systems that can handle the resource implications of innovation, while at the same time planning for the transition to new systems and services (Leicester 2016).

This report's recommendations reinforce this need for the tools, skills and culture within the public sector that are necessary to nurture innovation. This should not be considered the domain of any one professional discipline or personality trait – we have seen that this is not just a matter for entrepreneurs and 'rule-breakers'. Instead, having a team of people with a diverse range of perspectives and skills is crucial to meeting the challenges of implementing more radical innovations. This is the wider innovation ecosystem, the web of connections, skills, information, perspectives and insights. This is where public finance professionals must come in as key enablers and supporters of change. This is a step on the journey to more radical forms of innovation – a step that the profession not only wants to take but, in many areas, is already starting to take.

Appendix A: World regions

AFRICA (55)
Algeria
Angola
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Central African Republic
Congo, Dem Rep of
Congo, People's Rep of
Djibouti
Eritrea
Ethiopia
Gabon
Gambia
Ghana
Guinea
Ivory Coast
Kenya
Lesotho
Liberia
Libya
Madagascar
Malawi
Mali
Mauritania
Mauritius
Mayotte
Morocco
Mozambique
Namibia
Niger
Nigeria
Reunion
Rwanda
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
St Helena
Sudan
Swaziland
Tanzania
Togo
Tunisia
Uganda
Zambia
Zimbabwe
Chad
Comoros
Equatorial Guinea
Guinea-Bissau
Sao Tome & Principe

ASIA-PACIFIC (37)
Australia
Brunei
Cambodia
China, Mainland
Christmas Island
Christmas Island Pac
East Timor
Fiji
Hong Kong SAR
Indonesia
Japan
Kiribati, Republic of
Korea (DPR)
Korea, Republic of South Korea
Lao – PDR
Macau
Malaysia
Marshall Islands
Micronesia
Mongolia
Myanmar
New Zealand
Papua New Guinea
Philippines
Samoa US
Western Samoa
Singapore
Solomon Islands
Taiwan
Thailand
Tuvalu
Vanuatu
Vietnam
Yap
Cook Islands
Nauru
New Caledonia

WESTERN EUROPE (33)
Andorra
Austria
Belgium
BFPO
Canary Is.
Channel Islands
Cyprus
Denmark
Finland
France
Germany
Gibraltar
Greece
Iceland
Ireland (Republic of)
Isle of Man
Italy
Luxembourg
Malta
Monaco
Netherlands
Norway
Portugal
Spain
Sweden
Switzerland
Turkey
UK – England
UK – Northern Ireland
UK – Scotland
UK – Wales
San Marino
Vatican City State

CARIBBEAN (28)

Antigua & Barbuda
Bahamas
Barbados
Bermuda
Bonaire
Cayman Islands
Cuba
Curacao
Dominica
Dominican Republic
Grenada
Guyana
Jamaica
Martinique
Montserrat
Netherlands Antilles
Puerto Rico
St Kitts & Nevis
St Lucia
St Vincent
Trinidad & Tobago
Turks & Caicos
Virgin Islands (UK)
Virgin Islands (USA)
West Indies
Guadeloupe
Haiti
St Eustatius

CENTRAL AND EASTERN EUROPE (24)

Albania
Armenia
Belarus
Bosnia-Herzegovina
Bulgaria
Croatia
Czech Republic
Estonia
Georgia
Hungary
Kosovo, Republic of
Latvia
Liechtenstein
Lithuania
Macedonia
Moldova
Slovakia
Poland
Romania
Russia
Serbia & Montenegro
Slovenia
Ukraine
Montenegro

CENTRAL AND SOUTH AMERICA (19)

Argentina
Belize
Brazil
Chile
Colombia
Costa Rica
Ecuador
Falklands
Honduras
Nicaragua
Panama
Paraguay
Peru
Suriname
Uruguay
Venezuela
Bolivia
El Salvador
Guatemala

MIDDLE EAST (15)

Bahrain
Egypt
Iran
Iraq
Israel
Jordan
Kuwait
Lebanon
Oman
Palestine
Qatar
Saudi Arabia
Syria
United Arab Emirates
Yemen

SOUTH ASIA (14)

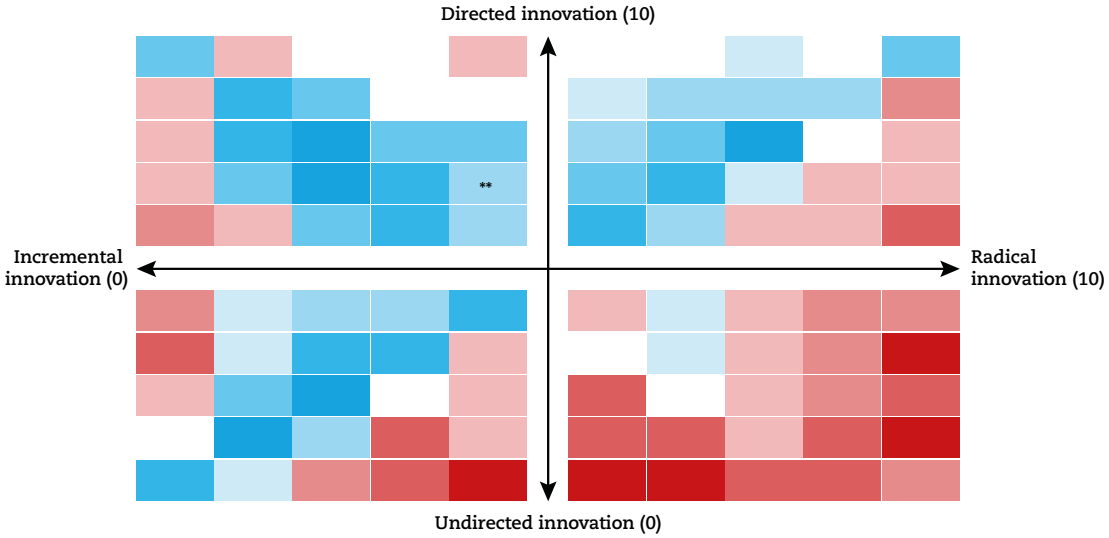
Afghanistan
Azerbaijan
Bangladesh
Bhutan
India
Kazakhstan
Kyrgyzstan
Maldives
Nepal
Pakistan
Sri Lanka
Tajikistan
Turkmenistan
Uzbekistan

NORTH AMERICA (4)

Mexico
Canada
USA
St Pierre & Miquelon

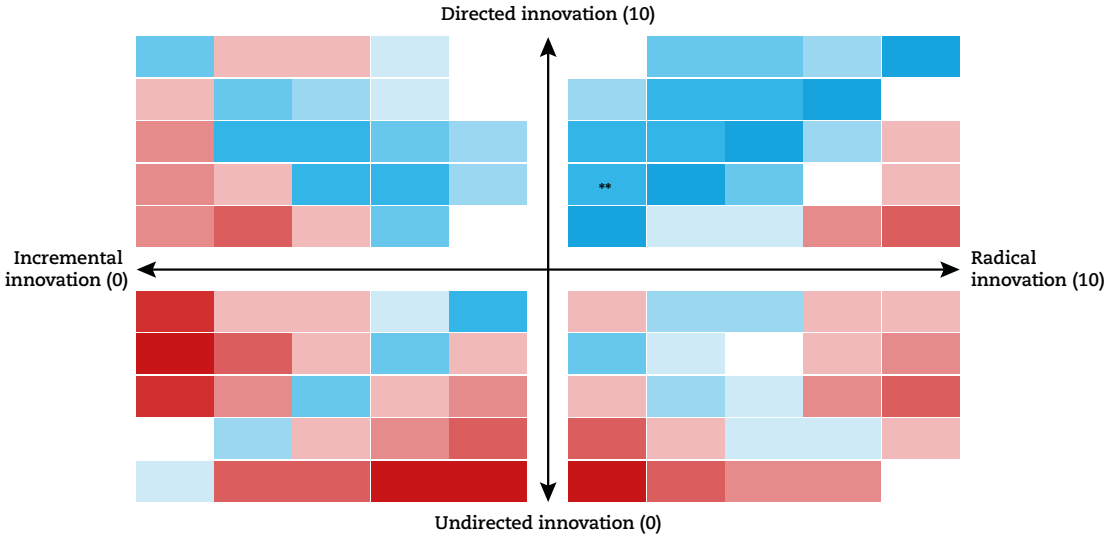
Appendix B: Innovation Compass by world region and sector

FIGURE B.1: The Innovation Compass – global, private sector results – current environment



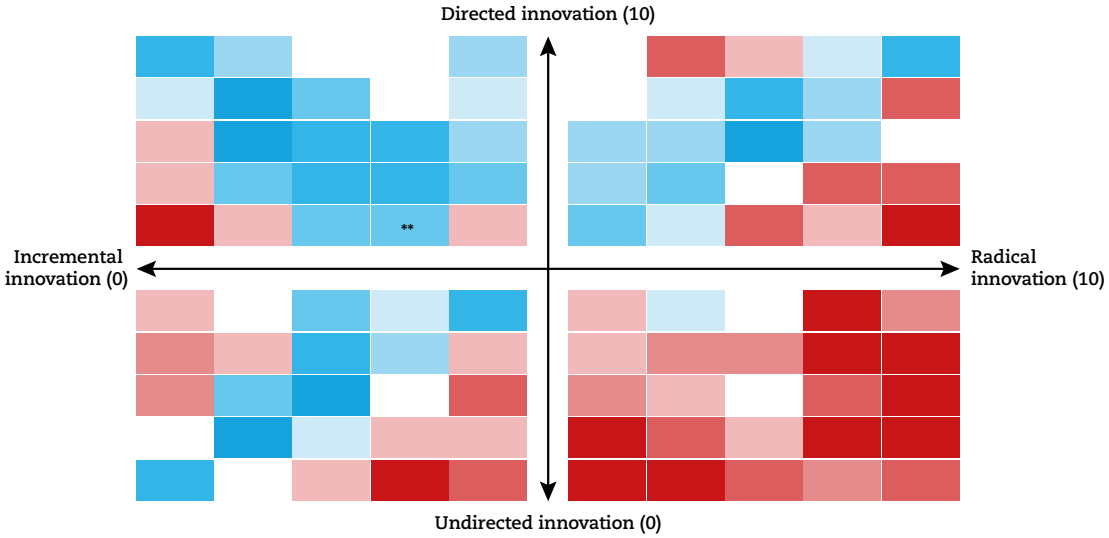
Source: ACCA 2019 member survey; private sector respondents; n: 2,907
** = mean score

FIGURE B.2: The Innovation Compass – global, private sector results – preferred future



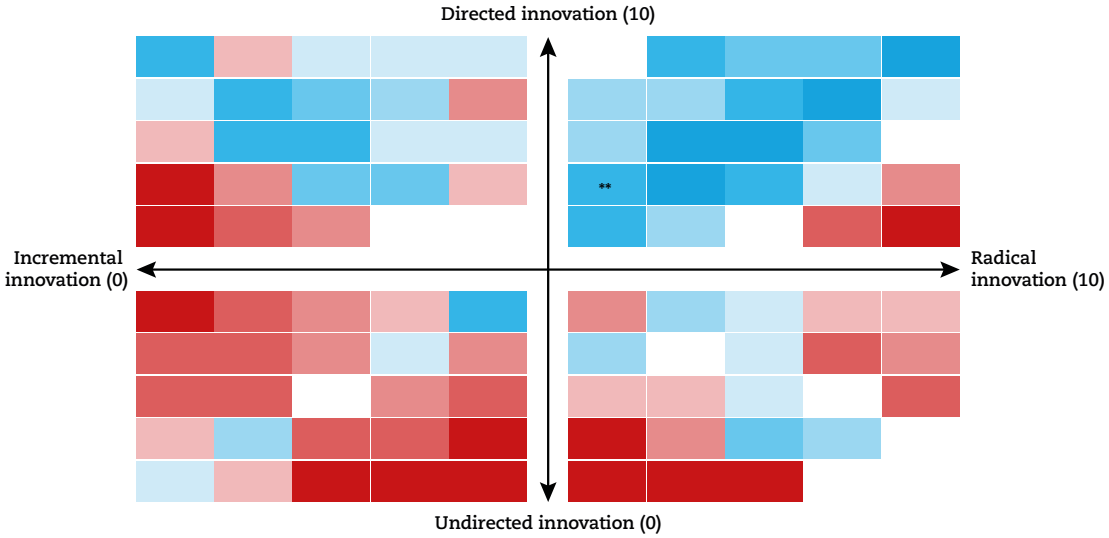
Source: ACCA 2019 member survey; private sector respondents; n: 3,074
** = mean score

FIGURE B.3: The Innovation Compass – Africa, all results – current environment



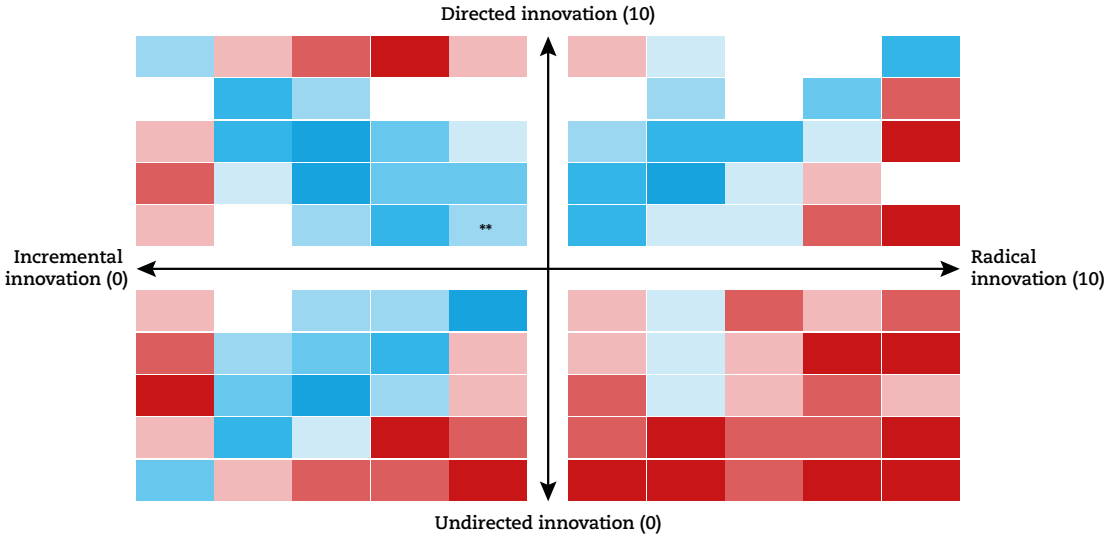
Source: ACCA 2019 member survey; Africa respondents; n: 850
** = mean score

FIGURE B.4: The Innovation Compass – Africa, all results – preferred environment



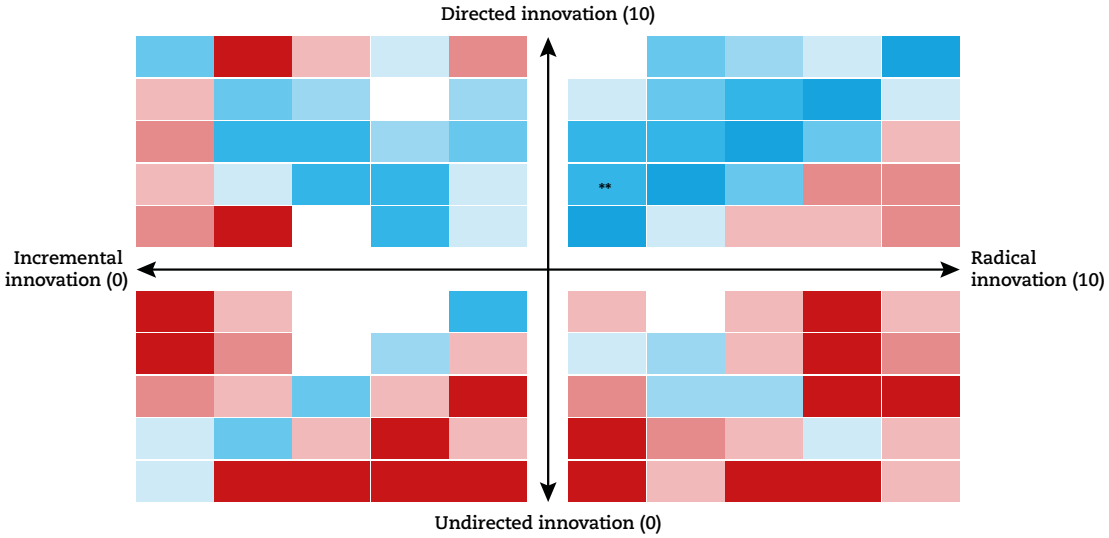
Source: ACCA 2019 member survey; Africa respondents; n: 892
** = mean score

FIGURE B.5: The Innovation Compass – Asia Pacific, all results – current environment



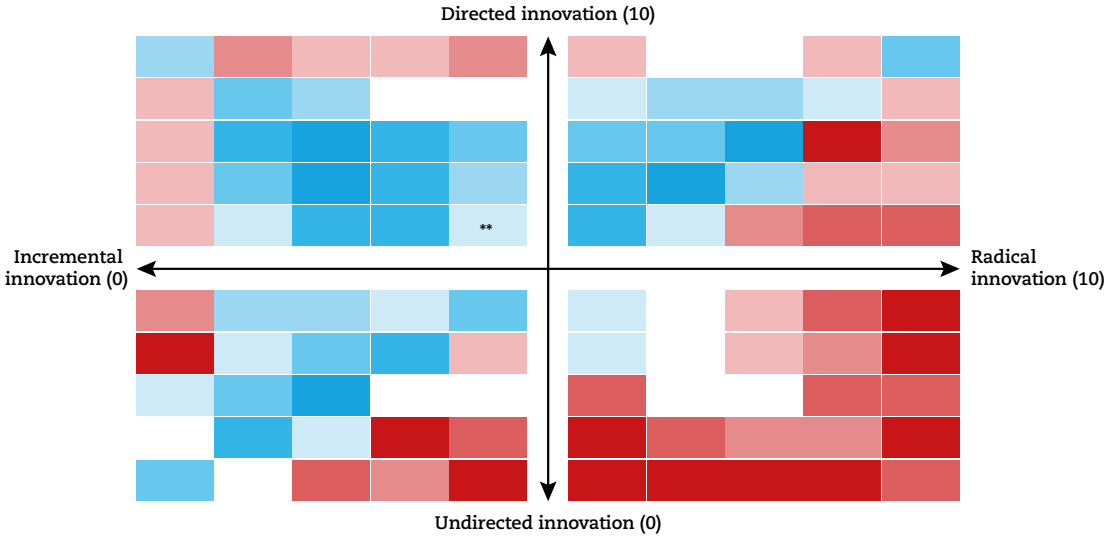
Source: ACCA 2019 member survey; Asia Pacific respondents; n: 766
** = mean score

FIGURE B.6: The Innovation Compass – Asia Pacific, all results – preferred environment



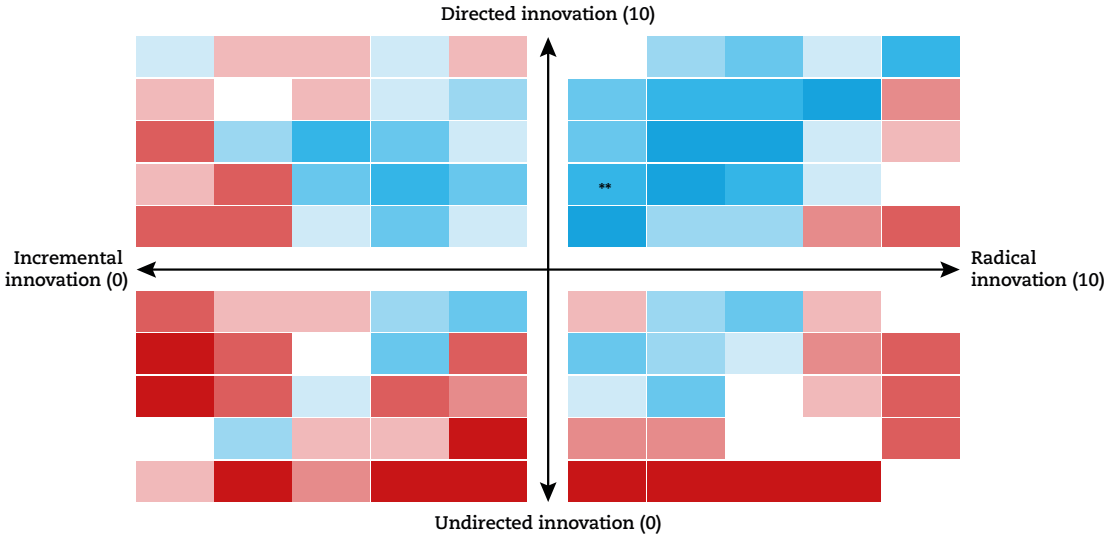
Source: ACCA 2019 member survey; Asia Pacific respondents; n: 823
** = mean score

FIGURE B.7: The Innovation Compass – Europe, all results – current environment



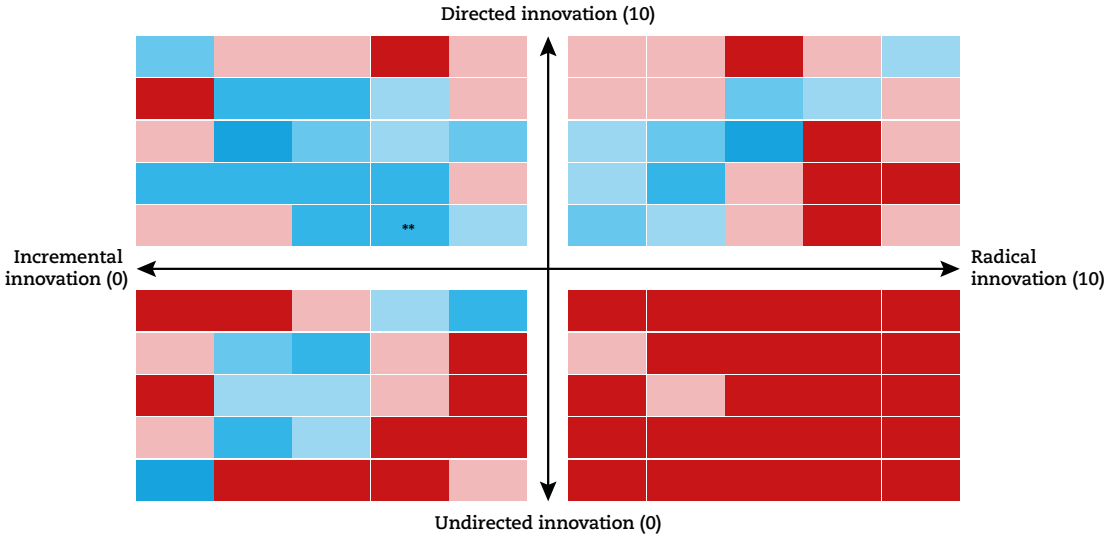
Source: ACCA 2019 member survey; Europe respondents; n: 1,041
** = mean score

FIGURE B.8: The Innovation Compass – Europe, all results – preferred environment



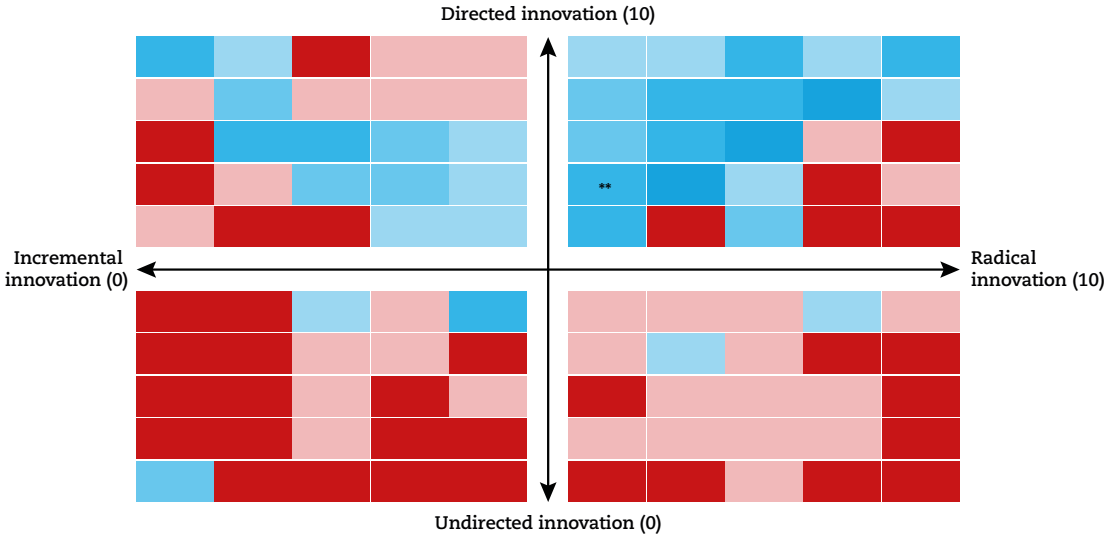
Source: ACCA 2019 member survey; Europe respondents; n: 1,096
** = mean score

FIGURE B.9: The Innovation Compass – Caribbean, all results – current environment



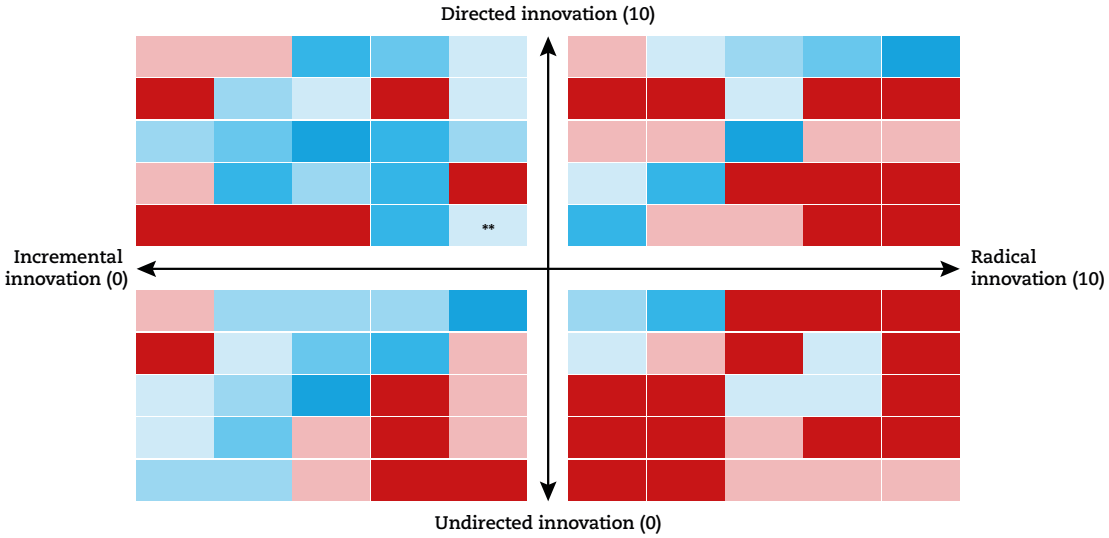
Source: ACCA 2019 member survey; Caribbean respondents; n: 187
** = mean score

FIGURE B.10: The Innovation Compass – Caribbean, all results – preferred environment



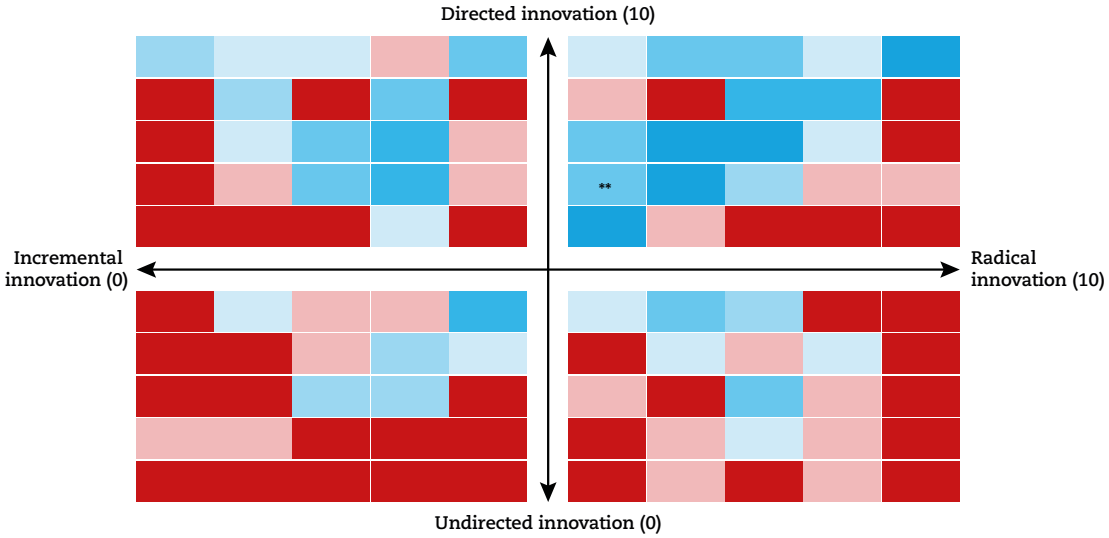
Source: ACCA 2019 member survey; Caribbean respondents; n: 205
** = mean score

FIGURE B.11: The Innovation Compass – Middle East, all results – current environment



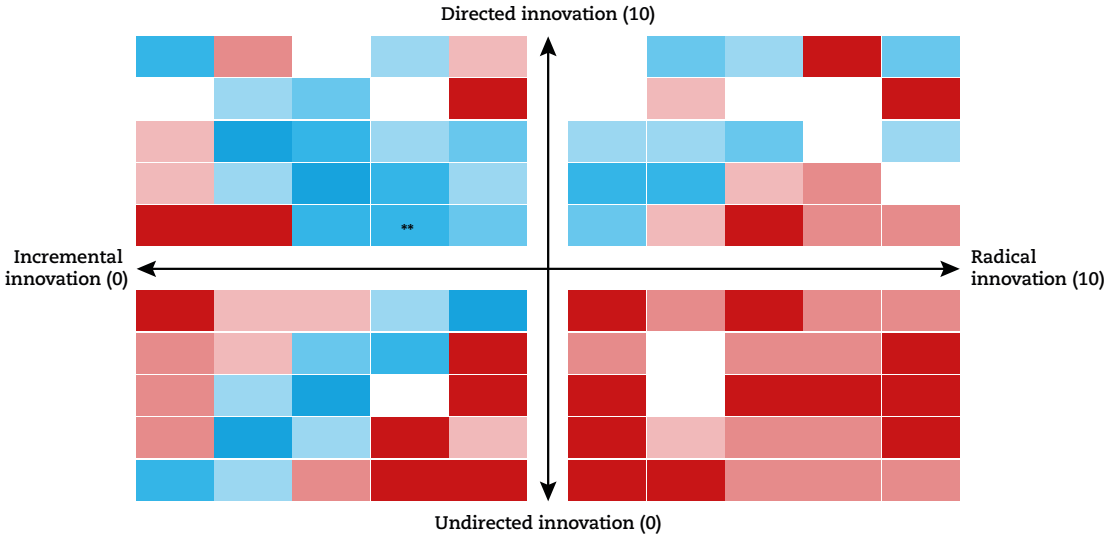
Source: ACCA 2019 member survey; Middle East respondents; n: 200
** = mean score

FIGURE B.12: The Innovation Compass – Middle East, all results – preferred environment



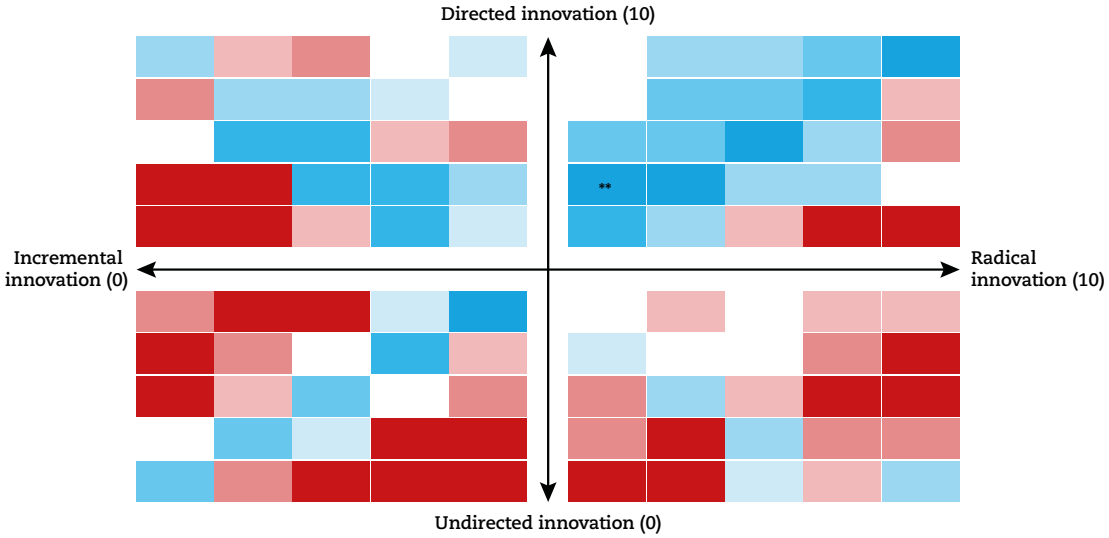
Source: ACCA 2019 member survey; Middle East respondents; n: 213
** = mean score

FIGURE B.13: The Innovation Compass – South Asia, all results – current environment



Source: ACCA 2019 member survey; South Asia respondents; n: 416
** = mean score

FIGURE B.14: The Innovation Compass – South Asia, all results – preferred environment



Source: ACCA 2019 member survey; South Asia respondents; n: 442
** = mean score

Appendix C: Case study acknowledgements

We would like to extend our thanks to the following interviewees who kindly provided content for the case studies.

Javed Ahmed is the chairman of the Punjab Revenue Authority and has oversight of the technological innovations across the organisation.

Jos de Blok is the founder of Buurtzorg Netherland, a new model of patient-centred care. Jos was the recipient of the RSA Albert Medal in 2014 for his work: https://www.thersa.org/discover/videos/event-videos/2014/11/Jos-de-Blok-on-Organizational-Structures.

Liz de Freitas was, at the time of interview, the group financial controller at the UK Home Office. She was the organisation's lead for implementing automation, and specifically Oracle Fusion systems.

Andrew Kleine is the former budget director for Baltimore, Maryland US and author of *City on the Line: How Baltimore Transformed Its Budget to Beat the Great Recession and Deliver Outcomes* (RL Publishing 2018).

Tim Ng is the chief economic adviser to the New Zealand government and is responsible for ensuring that the treasury's advice on raising living standards is supported by sound economic theory and practice.

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