



Changing competencies and mindsets

Creating a vision for the future
Research emerging themes

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Creating a vision for the future

You can't see the future, but with the right insight you can prepare for it. We've created this briefing paper as part of a year-long, worldwide project to understand the future form and direction of the finance function.

Change is the new norm in many organisations – particularly within the finance function. Yet, because of this rapid evolution, there isn't a composite picture of the finance function of the future. It is this vision that we, at the Association of International Certified Professional Accountants, aim to create.

With 650,000 members and students in 179 countries, we are uniquely well-positioned to work with global stakeholders to investigate, analyse and document how the finance function is changing.

Using interviews, roundtables and surveys, this comprehensive global research project brings together different organisational views – to deliver insight into the process of change and to synthesise a composite picture of the finance function of the future.

Our project aims to answer the following questions for you:

- ▶ How will the future be different for your organisation?
- ▶ What are the drivers of change for your organisation?
- ▶ What are the implications for finance?
- ▶ How should finance prepare for these changes?

To do this, we conducted more than 300 interviews and 50 roundtable discussions on the future of finance and identified several common trends emerging across a range of topics. These trends provided our research team with a series of insights into the finance function of the future and this paper is the fourth of four that explore the key emerging themes from our research. These themes are:

1. The changing role and mandate of finance
2. Changing technology and finance
3. The changing shape of the finance function
4. **Changing competencies and mindsets**

Theme 4:

Changing competencies and mindsets

This briefing paper will:

- ▶ explore how technological automation is shifting the competency skills set required by finance professionals
- ▶ introduce the concept of a growth mindset
- ▶ demonstrate the increasing need for us all to learn and relearn continually, as new technologies replace our timeworn skills and knowledge.

Reading time: 20 minutes.

“Finance people need a mindset that enables them to adapt through continuous learning.”

In one interview (quote above), a banking sector representative explained that, when hiring finance professionals, their organisation looked for “broad capability and a mindset, rather than the ability to use certain tools and techniques”.

They described this mindset as “being able to challenge the status quo, adapt, and make an impact when driving change”. Adopting it enables employees to be more resilient and gain a higher level of emotional intelligence.

Until recently, we have assumed that competencies influence and enable performance. However, throughout our research, many interviewees made reference to ‘the mindset of the management accountant’ when presenting personal views of what makes a good finance professional.

In this and other ways, our research is challenging current competency assumptions. While competencies are still very important for the finance professional, it’s a specific mindset that makes the greatest difference in the working environment.

Technology and intelligence augmentation

Looking to the future, technology is impacting both competencies and mindsets. The use of technology in the finance function is creating a model of ‘intelligence augmentation’, where technology augments human intelligence. In the finance function of the future, the technical capabilities of robotics and algorithms combine with the creativity and empathy of human accountants.

Technology is augmenting finance professionals’ capabilities – making them faster, more efficient and more productive. It’s no longer human versus machine, because new technologies can learn from the accountant and be customised to fit the specific needs of your finance function. Thanks to technology, we now live in a world where answers are cheap, plentiful and instant. However, in this world, the finance professional’s ability to construct a good question becomes paramount. The curiosity of a good question is worth a million good answers. It has the ability to inspire and compel people to think and act.

Dr Kevin Kelly, founding executive editor of ‘Wired’ Magazine, and the futurist advisor on the 2002 Spielberg science fiction film ‘Minority Report’, defines a good question as:

A good question is not concerned with a correct answer.

A good question cannot be answered immediately.

A good question challenges existing answers.

A good question is one to which you want the answer, but had no inkling of your interest before it was asked.

A good question creates new territory of thinking.

A good question reframes its own answers.

A good question is the seed of innovation in science, technology, art, politics and business.

A good question is a probe, a what-if scenario.

A good question skirts on the edge of what’s known and not known, neither silly nor obvious.

A good question cannot be predicted.

A good question will be the sign of an educated mind.

A good question is one that generates other good questions.

A good question may be the last job a machine will learn to do.

A good question is what humans are for.¹

We all need to build time for fluid contemplation and the construction of the good question into our working lives, instead of rushing for the instant answer.

A desire to reduce complexity is motivating interviewees to make further investment in technological solutions. In organisations where mergers and acquisitions have recently taken place, the drive is to harmonise a number of different systems across many sites. In other organisations, the motivation is to ensure information systems talk to each other through automation, so that resource can be freed up. The freed finance resource can then move away from transactional processing (technical and business analytical skills) into the role of finance partner (people and leadership skills), to focus on the values and synergies of business goals.

Haskel and Westlake talk about the importance of ‘systemic innovators’, which allow organisational information flows, and facilitate ‘serendipitous interactions’ across a business:

Such innovators are not inventors of single, isolated inventions. Rather, their role is to coordinate the synergies that successfully bring such an innovation to market.ⁱⁱ

Are these innovators the finance partners of the future? With their end-to-end view of a business, in future will they be found developing and deploying solutions for an organisation? With all these scenarios, the key skills base of finance professionals is moving into the expert, problem-solving arena, and adopting competencies involved in influencing and change management.

The automation paradox

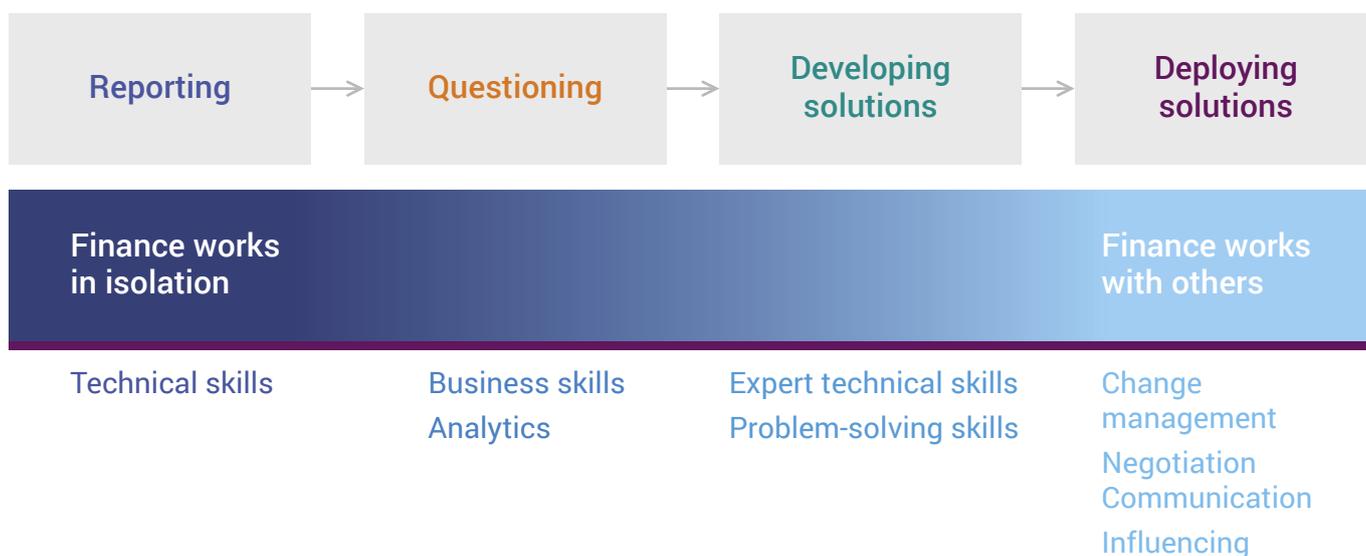
When thinking about the impact that process robotics will have on the finance function, the ‘automation paradox’ needs to be considered. As systems become more automated, humans lose some of their skills within the system. This results in more automation. However, when faced with an unusual situation that requires a switch to manual control, an organisation may no longer have the skills to deal with atypical conditions.ⁱⁱⁱ An example from the world of the stock markets and trading floors is the use of computers and algorithms to increase the speed of decision-making. With automated decision-making between firms, malfunctioning algorithms have created trading flash crashes. The automation paradox is therefore something to be aware of when considering competencies and mindsets of the future.

From knowledge collection to interpretation

The role of the finance professional is shifting from one of knowledge collection and creation, to instead interpreting meaning and curating the information outputs produced by software solutions. As the finance function emerges from working in isolation to collaborating with others in the organisation, this shift will intensify as the required skills change. For the finance professional, the changing role and mandate of finance, the impact of technology and the changing shape of the finance function each have implications for their required skills, competencies and mindsets going forward.

An example of this can be seen in the changing nature of the broad roles within finance, explored in our ‘Emerging theme 1: The changing role and mandate of finance’. Here, the broad roles of the finance function are moving from left to right, beneath the umbrella terms of ‘reporting’, ‘questioning’, ‘developing solutions’ and ‘deploying solutions’.

Figure 1: Competencies and skills under pinning the Broad finance roles



This journey will also impact the skills required of the finance professional, moving them from technical and analytical, to problem-solving and change management skills (Figure 1).

Mindsets and learning

There exists an entire neuroscience research community that's focused on mindsets. This community is studying how brains learn, and trying to understand the possible levels of future intelligence malleability. Results in this field have revealed that the adoption of certain mindsets can drive greater motivation and achievement.

The work of Dr Carol Dweck has defined two mindsets – a fixed mindset and a growth mindset. A fixed mindset is one where intelligence is considered static and 'qualities are carved in stone', which 'creates an urgency to prove yourself over and over'.^{iv} A person with a fixed mindset is likely to avoid challenges, give up easily when faced with obstacles and ignore useful feedback.

A growth mindset, on the other hand, is where 'intelligence can be developed and leads to a desire to learn'.^v It is about 'a zest for teaching and learning, an openness to giving and receiving feedback, and an ability to confront and surmount obstacles'.^{vi}

As technology increasingly disrupts the world in which we work, the ability to continually learn, unlearn and relearn, while operating at speed and scale, is a key challenge for the finance professional. Author Matthew Syed explains:

In a complex world, the only way to learn is from our mistakes, failures and errors – in science, in business, in technology, in politics. It's a process that applies to the evolution of our species, the dynamism of our economies and the growth that we either enjoy or thwart in our own lives.^{vii}

A growth mindset is also linked to our own curiosity and our ability to continue to question long-held assumptions. Thiel, in *Zero to One*, talks about the case for secrets in a world where we believe all the great questions have been solved. For the finance professional, these 'secrets' are the creation and preservation of organisational value. Thiel explains:

The actual truth is that there are many more secrets left to find, but they will yield only to relentless searches. There is more to do in science, medicine, engineering, and in technology of all kinds... But we will never learn any of these secrets unless we demand to know them and force ourselves to look.^{viii}

Learn, unlearn and relearn

Technological advancements are constantly changing the skills and knowledge that organisations value. The skills and knowledge valued today have a rapidly decreasing shelf life. Most are likely to be obsolete within a couple of years – to be replaced by ones that we currently do not see or that simply don't exist yet. This has implications for how the finance professional learns and develops new skills. We will need to become adaptive learners, requiring more frequent skills and knowledge upgrades. Our organisational value moves from 'expertise' to one of 'agility' and continuous reinvention.

The constant need to fail fast and relearn in a complex world, and the frequent upgrade of our skills, plays to the strength of the lifelong learning philosophy of the finance professional. It highlights the ever-growing importance of continuing professional development and education on the quest to finding out what we don't know.

The need for growth mindsets and continued learning was strongly articulated in our interviews. An interviewee from an international bank told us: "Finance people need a mindset that enables them to adapt through continuous learning. They need to learn, unlearn and relearn in a continuous loop." Another individual in the aerospace and automotive sector talked about the finance function having "a business enablement mindset". Here, their primary role is a solutions focus, while ensuring compliance is not compromised. Finally, in a conversation with a banking representative, the finance function mindset was labelled, "techno-functional and techno-commercial". Here, they used a creative and questioning style to understand disruption, in order to help the organisation continually adapt.

Some of the multinational organisations we spoke with have implemented rotation programmes for finance staff. This allows the finance professional to learn and gain skills in different areas of the organisation or on projects that sit outside their accounting roles. It widens their end-to-end business knowledge and gives them the flexibility to work across the organisation, embedding specialist wisdom. One participant described the finance professional's role as "a transformation agent, to steer the organisation through the risks of a digital revolution". In this organisation, the role has become focused on improving shareholder value by building organisational resilience and agility.

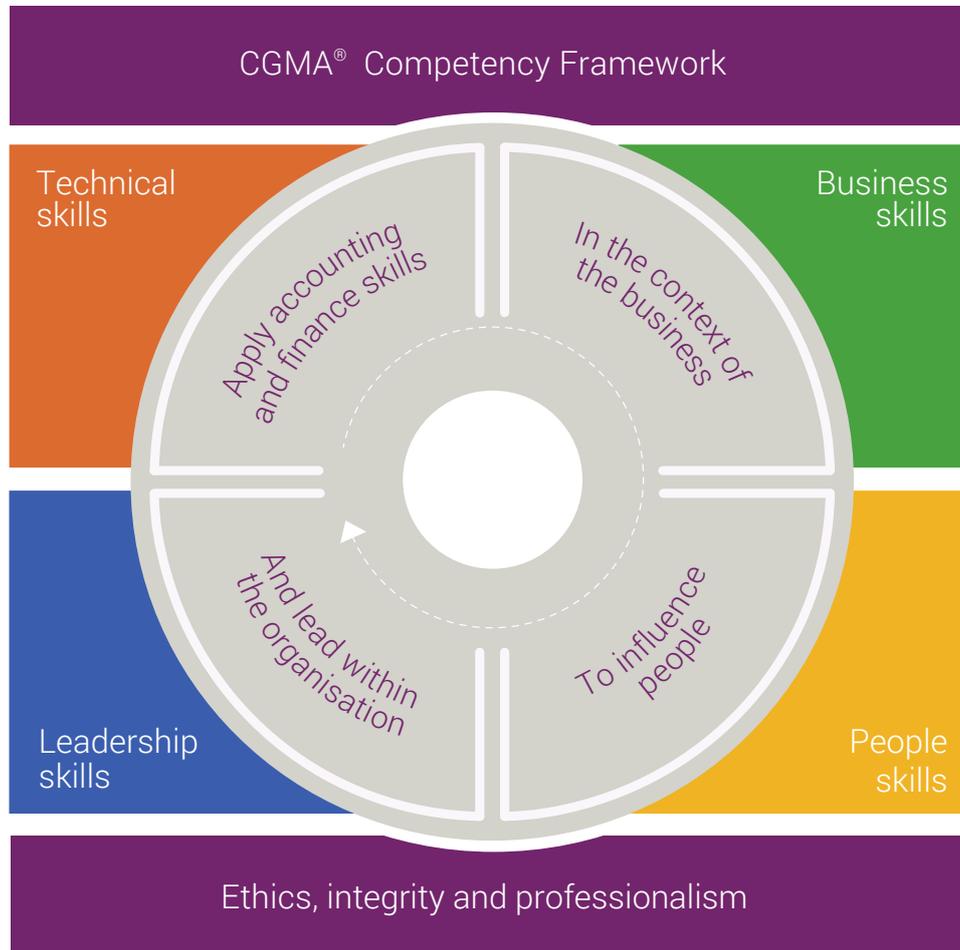
In one interview, an employee at a US multinational technology company described the finance function as "the playground of problems." They explained that it was best to spend time playing with an issue or problem, so as to better understand it. Here the openness to experiment through the curious eyes of a child challenges our pre-learned assumptions and skills to find the most innovative solutions.

Changing competencies and automation

The CGMA competency framework (Figure 2) is based on what organisations expect finance professionals to do. Finance professionals are expected to perform accounting and finance activities within the context of the organisations in which they operate. They are expected to influence the decisions, actions and behaviours of their colleagues within

their organisations and outside it, and to provide leadership at all levels. To do this, they need accounting and finance skills, business acumen, people skills and leadership skills. The framework is underpinned by the need for objectivity, integrity and ethical behaviour, and includes a commitment to continually acquire new skills and knowledge.

Figure 2: The 2015 CGMA Competency Framework

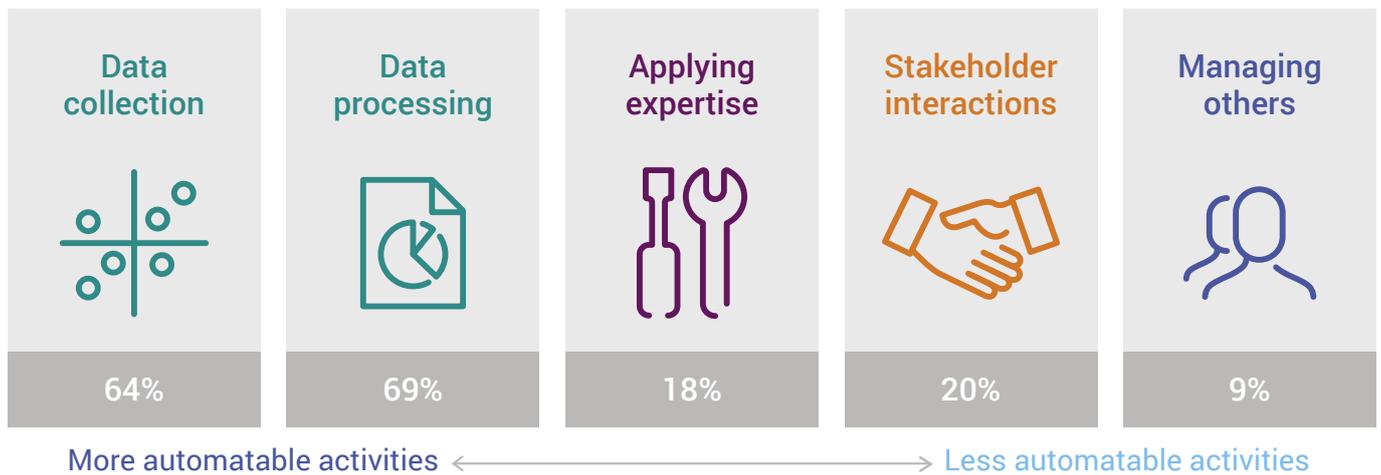


1. Technical skills: guardians of the automated finance process and accounting algorithm

The movement from 'knowledge' to 'meaning' makes the competencies within the technical skills area highly susceptible to automation. A 2017 McKinsey report into where machines could replace humans demonstrates the shift.^{ix} Their research examined groups of occupational activities and ranked them according to their susceptibility to automation. Work activities at risk of automation include

data collection, data processing and predictable physical work. Less automatable activities include managing others, applying expertise, stakeholder interactions and unpredictable physical work. McKinsey's forecast is: 'while few occupations are fully automatable, 60 per cent of all occupations have at least 30 per cent technically automatable activities'.^x

Figure 3: McKinsey's report into the technical potential for automation in the US



Estimates of extent to which different types of roles could be automated; Source: McKinsey

For finance professionals, some of their core accounting and finance skills are at risk of becoming automated (Figure 3) into algorithms and software systems. This means that, rather than being focused at foundational and intermediate proficiency levels, finance professionals of the future will need to concentrate on applying higher-level expertise. They will become the guardians or policemen for the automated finance process and accounting algorithm.

2. Business skills: knowledge of data sources, analytical skills and judgement

Here, business acumen skills are less susceptible to technological automation. The future focus needs to centre on a good knowledge of data sources, analytical skills and judgement. This includes commercial curiosity and an ongoing drive to better understand and learn more about the organisation and its ecosystem.

3. People skills: building empathy and interactions with stakeholders

Management accountants are often deployed to work alongside business unit managers in business value partnering roles, to bring professional rigour to performance management. Recent CGMA research found that the objectivity they bring and the questions they ask can prompt those collaborative conversations needed to generate insights and improve performance.^{xi} However, this collaboration requires business understanding and influencing skills. The future focus needs to be on building empathy and interactions with stakeholders, as these are less susceptible to automation and will drive valuable business insight.

4. Leadership skills: team building, mentoring, driving performance and change management

Leadership skills – which centre on team building, coaching and mentoring, driving performance, change management, and the ability to motivate and inspire – are the least susceptible to automation. This is borne out in the McKinsey research, where ‘managing others’ has a mere nine per cent chance of becoming an automatable activity.

What’s clear is that finance professionals’ core competencies will need to adapt as the intelligence augmentation model embeds into the finance function.^{xii} There also needs to be a shift in mindset. We must all have the curiosity to find out what we don’t know, be able continually to ask the right kind of questions, and actively challenge our own opinions, as we proceed to the future.

The future of finance: join us on our journey

Our briefings on these emerging themes will enable us to discuss a new delivery model for modern finance, with certain key features. Ultimately, all organisations face the same obstacles of building capacity, competence and credibility within their future finance functions.

The difference is that some organisations are innovators on the journey to the future, while others are lagging behind.

With this research, we want to help more organisations to lead from the front.

The keys to transformation

Based on our interviews, it appears that an organisation's top priorities to transform its finance function should be to:

- ▶ make use of the latest technologies to release the full capacity of the finance function
- ▶ widen the remit of finance to cover a broader range of management information, generating new insights and business solutions
- ▶ provide and empower finance professionals with new competencies and growth mindsets to help your organisation create and preserve value.

That's what this project is all about.

So, armed with this briefing, why not start a conversation on the future of finance in your organisation? Read one or all of our briefing papers on emerging themes and share them within your network.

You can then ask yourself:

- ▶ How do the emerging themes resonate in your organisation?
- ▶ Where are you and your organisation on the journey to realising the finance function of the future?
- ▶ How, in the light of these themes, will you reconsider your strategies to meet the future finance function's innovative mandate?

Five things you can do in light of this briefing

1. **Allow yourself to build time into your working life for contemplation and the construction of good questions.** A good question has the ability to inspire people to think and act. When paired with technology, it can lead to disruptive innovation for your organisation.
2. **Consider enhancing your skills around empathy, and social and emotional intelligence.** These skills are currently underused and difficult to replicate in machine learning technologies. What's more, they're increasingly becoming the core skills of the finance professional. In order to advise and influence decision makers and achieve impact, it's important to develop your collaboration and partnering skills.
3. **Encourage yourself to learn from and reward failure.** Failure is a route to innovation and success, so it's useful to develop a habit of observing your assumptions and reviewing them continually. In a world where technology is likely to replace us in the dull, repeatable, tactical tasks, we will be freed up to learn, innovate and play.
4. **Place priority on building your social networks.** These networks can be as important as official hierarchies when influencing decision making, and they are also helpful in challenging long-held assumptions.
5. **To help us develop a knowledge-sharing community, please do get in touch to share your experiences, observations and opinions with me.**

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- xi. CGMA.
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- xii. The impact of this upon an expanding finance function mandate is explored in 'Emerging theme 1: The changing role and mandate of finance', under the 'Broad Finance Roles' section.

Further reading

Books

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