Association of MBAs

Business Graduates Association

BUSINESS SCHOOL LEADERS RESEARCH:
THE FUTURE OF TECHNOLOGY IN MANAGEMENT EDUCATION

Introducing AMBA & BGA's research on technology in management education

The Business School leaders research series is a synthesis of the views and experiences of decision makers on pertinent issues in management education. This report is the first in a three-part series looking into key themes affecting Business Schools.

Part one of the suite of research explores the application of technology. Future technology is a theme that is often thought provoking, due to its potential to change how people live their lives and how businesses meet the challenges presented by the markets in which they operate.

At the start of 2020, new technology has seldom been more important. Technology is a centrepiece of the evolving world in which we live, now widely known as the fourth Industrial Revolution. Indeed, the World Economic Forum states: 'Extraordinary technological advances commensurate with those as the first, second and third industrial revolutions…[will] force us to rethink how countries develop, how organisations create value and even what it means to be human.'

This seismic shift in how business and society may operate raises opportunities and threats alike for Business Schools. It is therefore timely to explore how Business School leaders are viewing the impact of technology and how their institutions are aligning themselves to this new digital world.

Our research into technology offers real insight into the minds of these leaders and how Schools are incorporating innovations into their teaching and operational practices. We also hope it provokes further discussion on the application of technology within Schools.

The research covers developing technological concepts, such as AI and big data, which have increasingly been adopted and adapted by multinational corporations to enhance the ways in which they can provide services to their clients and customers.

The research finds that while Business School leaders widely believe that these technologies are important, there is less confidence that their Schools are ready to utilise them, and there is perhaps potential for more clarity around how new technical capabilities can best be applied to learning and in the operations of management education providers.

Still, Business School leaders generally recognise how vital technological opportunities are to the sector, which should serve them well in their endeavour to best apply them.

We know that AMBA & BGA Schools have proven to adapt and grow as the world around them changes. Indeed, in the face of global economic and geopolitical uncertainty, AMBA-accredited Business Schools grew their applications and enrolments substantially between 2017 and 2018 (by 9% and 10%, respectively).

We hope that this report provides AMBA & BGA's network with an opportunity to reflect on the breadth of new technology available to their industry, and how they can apply it to their Business School's plans and strategies.

We would like to thank our report sponsor, Instructure, the developer of Canvas, for their support, along with the 358 individuals who took the time and effort to complete the survey.

Will Dawes
Research and Insight Manager
AMBA & BGA

From our sponsor

Lifelong learning is recognised as a necessity for today's rapidly changing business world today. The need to gain new skills constantly and adapt and adjust to changes means access to learning opportunities and experiences have never been so important.

Technology, as an enabler, is no longer a luxury but a necessity to teach new skills to more people and ever more frequently.

The Future of Technology in Management Education report for AMBA & BGA looks into the use of technology in Business Schools – exploring how digital tools are being harnessed to help institutions deliver a student-centric, flexible and impactful learning experience.

The report shows that Business School leaders are currently preparing for impending change. More than three quarters (77%) of leaders believe that it is likely that the fundamentals of the MBA will change in the next 10 years, a figure which includes the two in five (40%) who think that it is very likely.

This report considers the types of technology making the most impact for Business Schools, and helping address the structural changes they report.

Big data is perceived to be the most crucial tool for educators today – with 95% of Business School leaders stating that it is either 'very' or 'fairly' important. At Instructure, we firmly agree with this sentiment. Used in the correct way, data can help educators understand students' learning behaviours, which courses are being consumed and where students are excelling or struggling. Harnessing data allows teachers to personalise learning journeys and demonstrate added value.

However, the report also shows that there is significant work to be done. Leaders do not always believe that their graduates are as equipped for working for technology led companies as they could be – just one in six (16%) leaders are very confident that their school's MBA curricula meet the needs of the biggest tech employers (e.g. Apple, Google and Tesla) – a figure which clearly demonstrates room for improvement.

Furthermore, while half (50%) agree that 'my Business School is well prepared to embrace the opportunities of the fourth industrial revolution', just 13% strongly agree that they're well prepared to make the most of the benefits technology offers.

We know the theory – that technology can power a collaborative, self-directed learning environment in which students are able to develop new skills, apply knowledge and get better feedback - but more needs to be done to equip Business Schools with understanding about how technology can make a difference at a practical level. Reports like this are an important step towards this goal, exploring how the industry is responding to the opportunities digital technology is offering and demonstrating how and why technology should be used in post-graduate education.

Methodology

AMBA & BGA contacted Business School leaders from within its accredited School network, inviting them to participate in an online survey between 14 August and 30 September 2019. This document is the first in a three-part series of reports that seeks to understand how Business Schools are planning for the future.

This report summarises the perceptions of the introduction of technology among 358 of the leading Business School professionals globally.

The Business School leaders invited to participate in the study included deans, assistant deans and senior managers in the fields of programme delivery, careers and alumni services. The questionnaire included sections on perceptions of technology, how technology is being delivered within Business Schools currently, and what Schools are doing to prepare for the future, among other topics centred on emerging technology.

Participants were encouraged to complete the survey in full, but in some instances they did not do so.

Where a survey participant has not completed the entire survey, their partial responses have been included. In total there were 222 full participants and 136 partial participants In instances when figures do not sum to 100% or to a combined sum, this is due to rounding.

'In total there were 222 full participants and 136 partial participants'

Profile of participating Business School leaders

The participating Business School leaders work at institutions that serve a range of cohort sizes. Leaders most frequently work for Schools which have between 1,001 and 3,000 students (31%), while almost three in 10 (28%) are from larger Schools which have more than 3,001 students. More than a quarter (27%) work at smaller Schools that have between one and 500 students. Approximately one in seven leaders (14%) are from Schools that teach between 501 to 1,000 students.

The regional composition of participants broadly matches the composition of AMBA & BGA Schools. More than two in five Business School leaders (46%) are based in Europe, approximately one in six (16%) are based in the UK, and a little more than one in ten (12%) are based in Latin America. Meanwhile, 7% are based Africa, 6% in China (including Hong Kong, China) 5% in Asia and the Middle East (excluding China and India), 4% in India, 3% in North America and the Caribbean and 1% in Oceania.

'The survey results reflect the range of views and experiences of leaders within AMBA & BGA Schools'

This geographical profile indicates that the survey results reflect the range of views and experiences of leaders within AMBA & BGA Schools.

Perceived changes to the MBA in the next 10 years

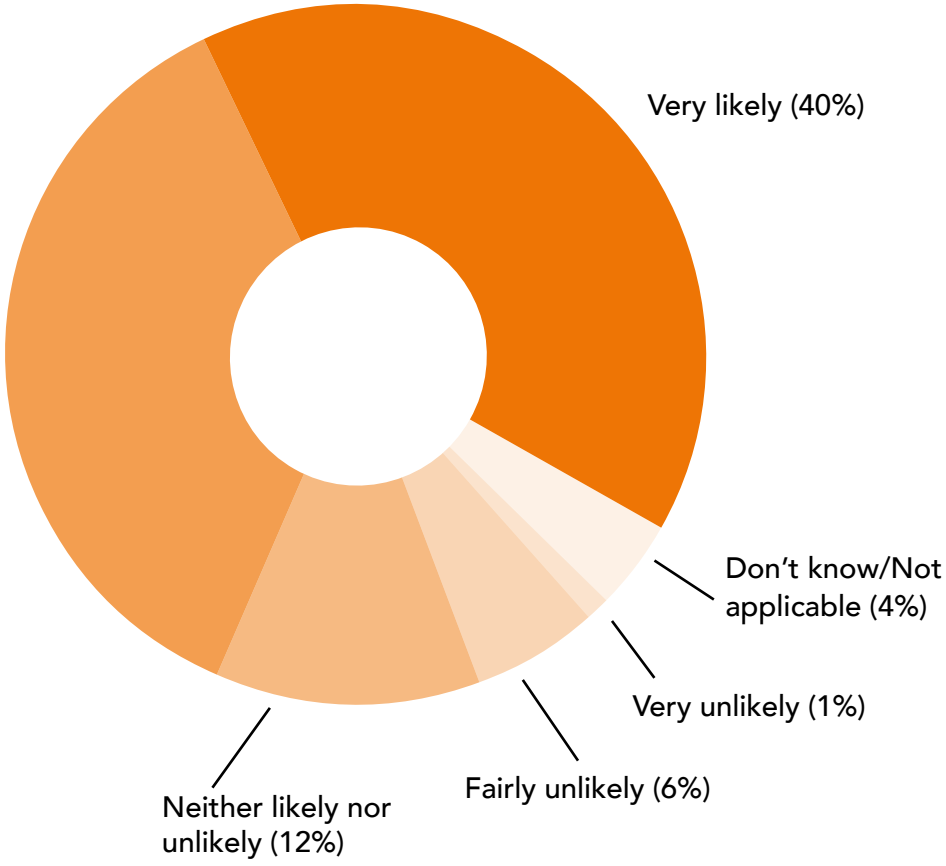
When contextualising the introduction of new technology into Business Schools, it is perhaps useful to explore overall perceptions towards future changes in programme delivery. Leaders were asked how likely, or unlikely, they think it is that the fundamentals of the MBA are likely to change within the next 10 years. More than three quarters (77%) think that it is likely, which includes two in five (40%) who think that it is very likely.

Small proportions are neutral or disagree that the fundamentals of the MBA are likely to change. One in 10 (12%) say that it is neither likely nor unlikely, 6% think it is fairly unlikely and less than 1% believe it is very unlikely.

Some of those who think that the fundamentals of the MBA are likely to change in the next decade directly cited technological innovations, both in terms of the provisions Schools will need to take to adapt to new ways in which companies operate and how Schools deliver their programmes.

Figure 1: Perceived likelihood of fundamentals of the MBA changing in the next decade

How likely or unlikely is it that the fundamentals of an MBA will change in the next 10 years? (230 participants answering)



Leaders were also asked whether they agree or disagree that the delivery or content of their MBA programme could be improved. Two thirds (67%) agree that this could be improved, although more than half (53%) 'tend to agree', suggesting that among those who think their programmes could improve, most recognise some scope for improvement rather than a substantial need for it.

Slightly more than half (54%) agree that 'my Business School's campus is being run as efficiently as it could be'. Conversely, a quarter (25%) disagree with this statement.

Collectively, thes findings from these lines of enquiry suggest that leaders believe that MBA delivery methods will move forward and while this does not explicitly identify how this might happen, it is clear leaders believe that core elements of MBA provision will change in the next decade.

The importance of different technologies

This section describes how important Business School leaders regard various pieces of technology when thinking about how they could be introduced into the teaching of MBA programmes within the next five years. Each of the technologies in question is deemed to be important for teaching in the future.

Big data is perceived to be the most important of these technologies with 95% of Business School leaders stating that it is either 'very' or 'fairly' important (64% saying it is 'very important'). This is closely followed by experiential learning (94%), digitisation (93%) and AI (86%). Data visualisation is considered to be important by more than four in five leaders (83%), followed by automation (79%), virtual reality (63%) and augmented reality (60%).

Preparation of Business Schools to embrace technology

There are mixed levels of confidence about how prepared Business Schools are to embrace various technological developments. Figure 2 (overleaf) highlights perceptions about how prepared leaders believe their Business Schools are to embrace these technological concepts into the teaching of their MBA programmes. Leaders are less likely to say that their Schools are either 'very' or 'fairly' well prepared to embrace each of these technologies than they are to say that each is important, although the pattern of feeling prepared often mirrors perceptions of importance. Schools are most prepared to embrace experiential learning (83%), closely followed by digitisation (75%) and big data (75%). Perceived preparation is lower for other technologies (58% for data visualisation and 51% for AI). When asked about the introduction of automation perceptions are equally split, with almost half (47%) saying that they are prepared and not prepared (the remainder are unsure).

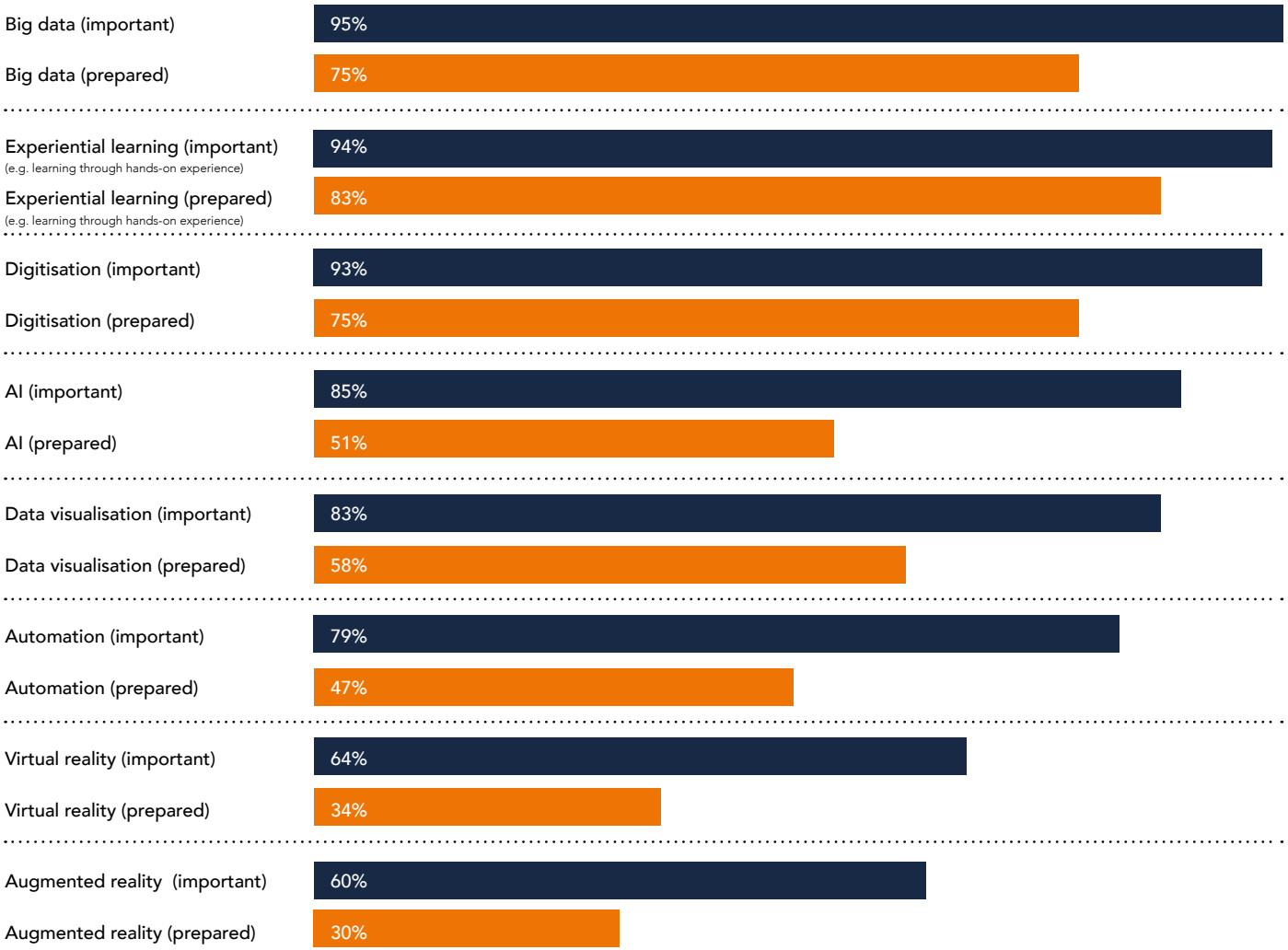
Meanwhile, for some technologies leaders are more likely to say that they are not prepared than prepared to embrace the technology. For example, approximately three in five say that their School is unprepared to take up for augmented reality (63%) and virtual reality (60%).

'Big data and digitisation-driven changes will occur. I can see many more companies using big data and digital technology, including robots'

'The increasing changes in technology will impact modes of delivery, curricula and work readiness.'

Figure 2: Perceived importance and preparedness to embrace various technologies in Business Schools in the next decade

How important do you consider the following technology and how prepared do you think your Business School is to embrace these concepts in the teaching of MBA programmes? (241 participants answering)



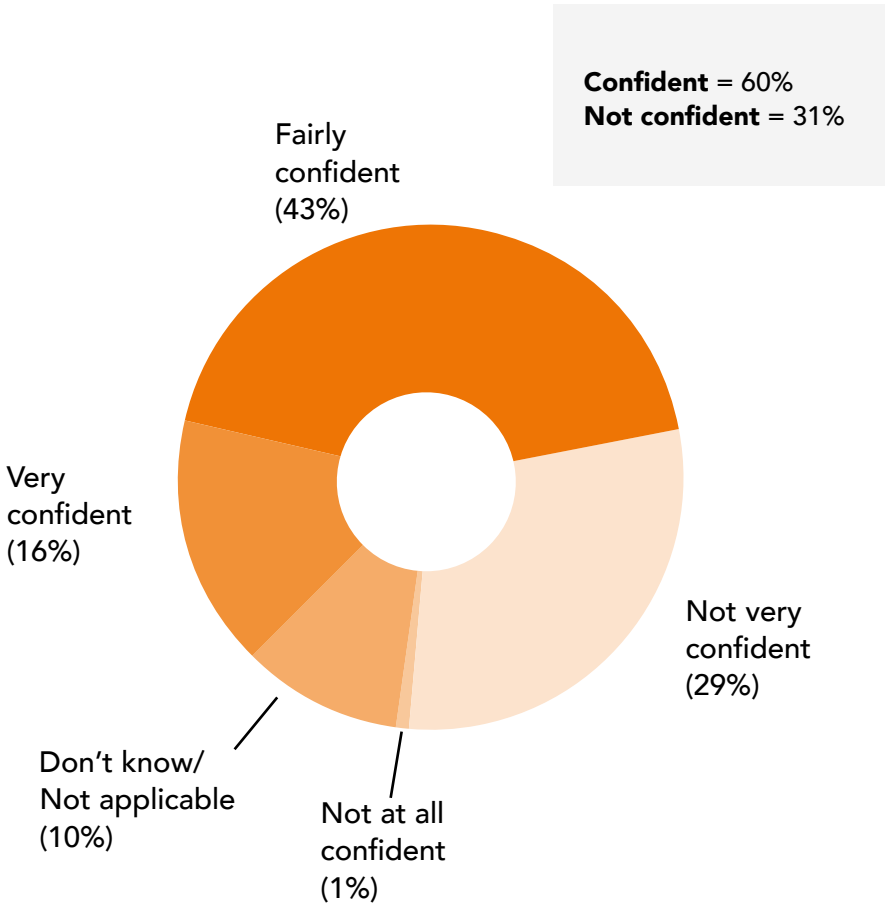
Do MBAs meet the needs of the biggest tech employers?

There are mixed levels of confidence in MBA curricula meeting the needs of the biggest tech employers (e.g. Apple, Google and Tesla). Approximately one in six (16%) leaders are very confident, a figure which rises to three in five (60%) when the figure is combined with those that are fairly confident. Three in 10 (29%) are not very confident and 1% are not at all confident. It is also notable that one in 10 (10%) indicated that they 'don't know' suggesting that there is some lack of awareness about how MBA programmes can support technology focused employers. Figure 3 (overleaf) shows these results in full.

'MBA offerings will be more technology driven'

Figure 3: Confidence in MBAs meeting the needs of the biggest tech employers

How confident or not are you that your MBA curriculum meets the needs of the biggest tech employers? (240 participants answering)



It could be argued that some of these technologies not only offer an opportunity to be integrated into the provision of teaching at Business Schools, but also have the potential to be further applied in how Schools operate. It is therefore worthwhile to explore how leaders perceive the performance of their Business School on a range of different measures. It may also highlight opportunities where technology might be able to enhance delivery.

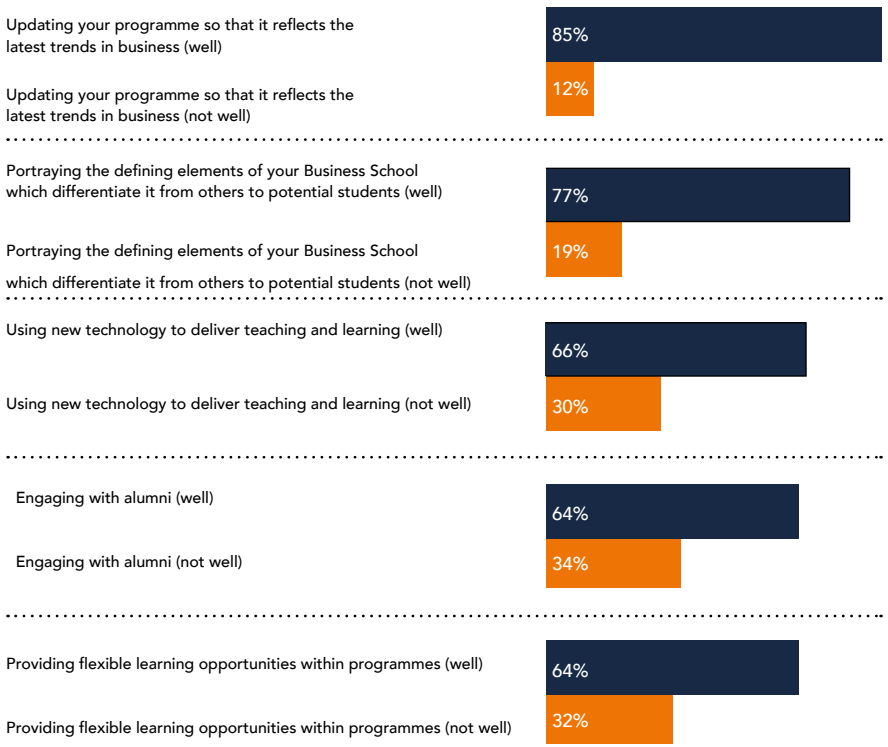
Across a range of Business School features, just a small number of leaders state that their School was not doing very well but, equally, very high levels of performance were also not regularly cited. The highest -ated aspects are 'updating your programme so that it reflects the latest trends in business' and 'portraying the defining elements of your Business School which differentiate it from others to potential students' (32% and 25% respectively believe their School is doing 'very well' in these areas and 85% and 77%, either 'very' or 'fairly' well). Figure 4 outlines the proportion of leaders who believe their institution is currently doing well across a range of areas.

Potential opportunities, specifically in relation to technology, may rest in areas which Schools are considered to not be performing well.

Areas of delivery, in which substantial proportions of leaders do not believe their School is doing well, include 'engaging with alumni' (34%), 'providing flexible learning opportunities within programmes' (32%), and 'using new technology to deliver teaching and learning' (30%).

Figure 4: Rating the aspects of Business School delivery where technology may be able to play a role in the future

How well do you believe your Business School is doing at delivering each of the following? (239 participants answering)



The statement most directly related to technological opportunities, 'using new technology to deliver teaching and learning', is worth exploring in more detail. Business School leaders who are more likely to say that they are doing well at integrating new technology into teaching and learning include:

- Those who are confident that their Business School will grow in the next three years (70% vs. 60% who are not confident).
- Those that work at larger Business Schools with more than 3,001 students (75% vs. 67% overall).

However, there are low levels of agreement when it comes to the integration of digitalisation into Business School. Just three in 10 (30%) agree that 'my Business School's campus' operations are fully digitally integrated'. Conversely, two in five (40%) disagree.

Similar levels of agreement exist when presented with the statement, 'decisions at my Business School are primarily informed by data'. Slightly more than two fifths (43%) agree and just 6% strongly agree. A quarter (25%) disagree. This potentially indicates that data can play a greater role in Business School delivery, especially given the fact that 45% of leaders surveyed consider big data to be important in running Schools.

Perceptions around how well Schools are incorporating technology

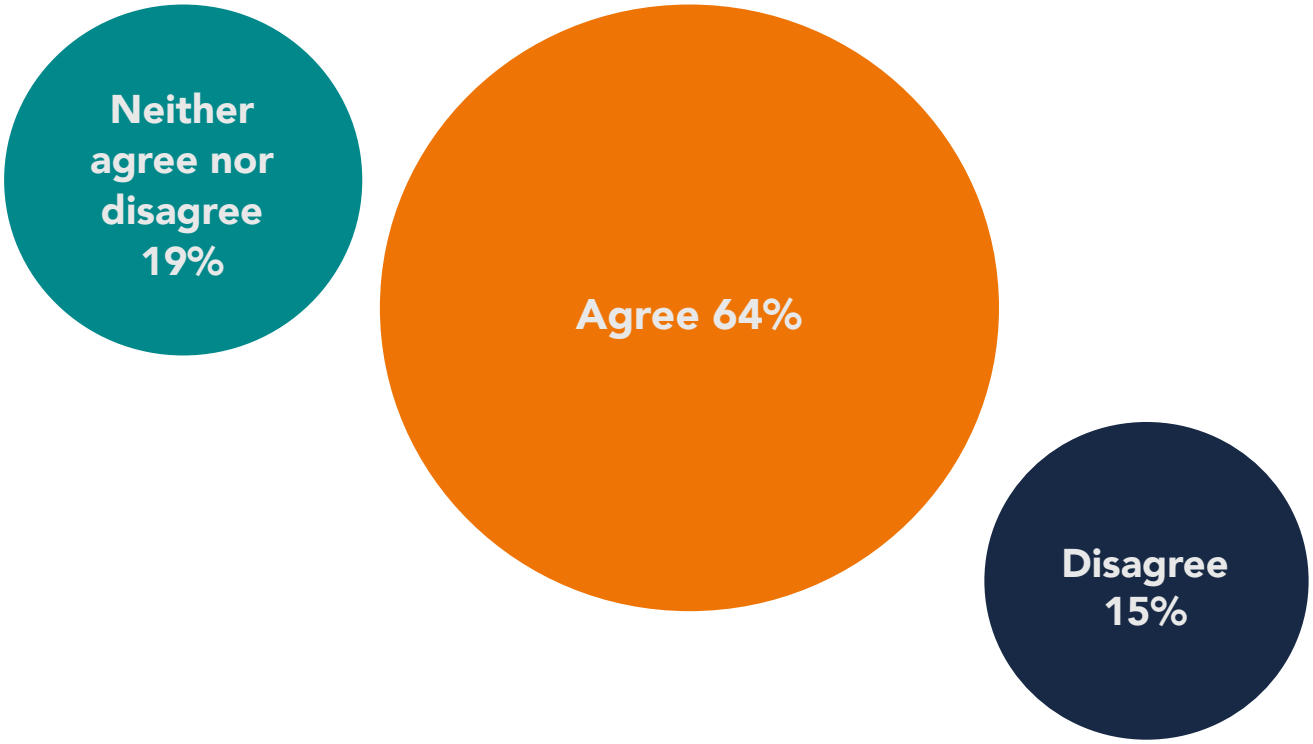
Leaders were asked to say whether they agree or disagree with a range of statements related to the implementation of technology.

Results are mixed, with substantial proportions of leaders strongly agreeing that their School leads in innovative technology, while others are less certain or disagree that their School is incorporating technology.

For example, a quarter (25%) strongly agree that 'my Business School has used new innovative ways of delivering programmes in the past year', while two fifths (40%) tend to agree and one in five (19%) neither agree nor disagree. Overall, almost two thirds (64%) agree and slightly more than one in seven (15%) disagree.

Figure 5: Agreement on own Business School using innovative ways of delivering programmes in the past year

To what extent do you agree or disagree, if at all, with the following statement…my Business School has used new innovative ways of delivering programmes in the past year? (224 participants answering, but excluding 'don't know' responses)



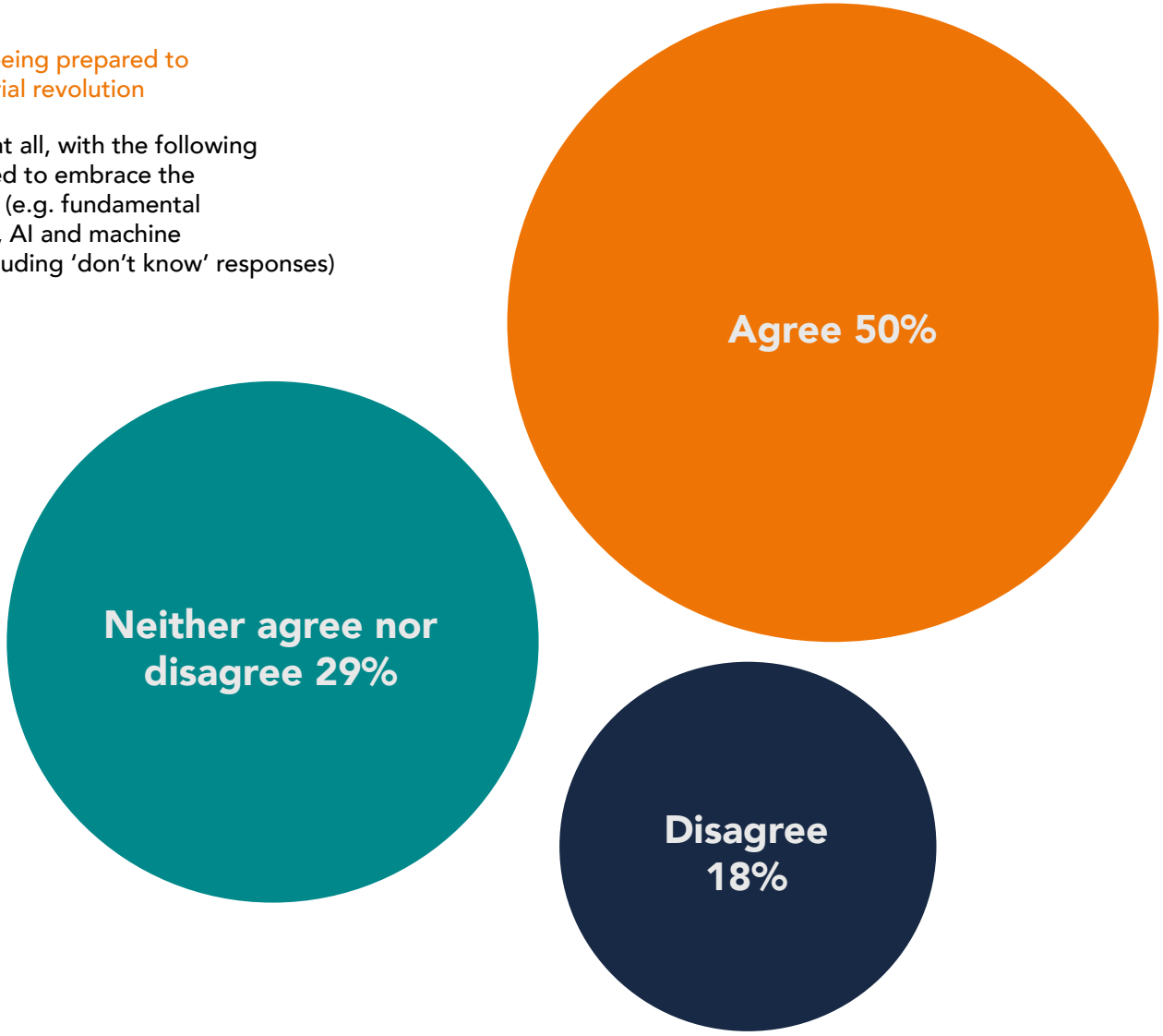
However, when looking to the future, there is mixed optimism concerning how prepared Schools are to incorporate new technology. Half (50%) agree that 'my Business School is well prepared to embrace the opportunities of the fourth industrial revolution', but just 13% strongly agree.

Three in 10 (29%) neither agree nor disagree, which may suggest that there is some uncertainty about what impact technology may have on Business Schools in the next industrial age. This uncertainty could be helped by further discussion on how Schools can position themselves for the opportunities technology may offer.

Some leaders commented spontaneously about the introduction of more technology in their Business Schools when asked about how their institution could be improved. Comments typically focused on how they should be including more content on new technology in their curricula.

Figure 6: Agreement on own Business School being prepared to embrace the opportunities of the fourth industrial revolution

To what extent to do you agree or disagree, if at all, with the following statement… my Business School is well prepared to embrace the opportunities of the fourth industrial revolution (e.g. fundamental technological developments in digital economy, AI and machine learning)? (224 participants answering, and excluding 'don't know' responses)



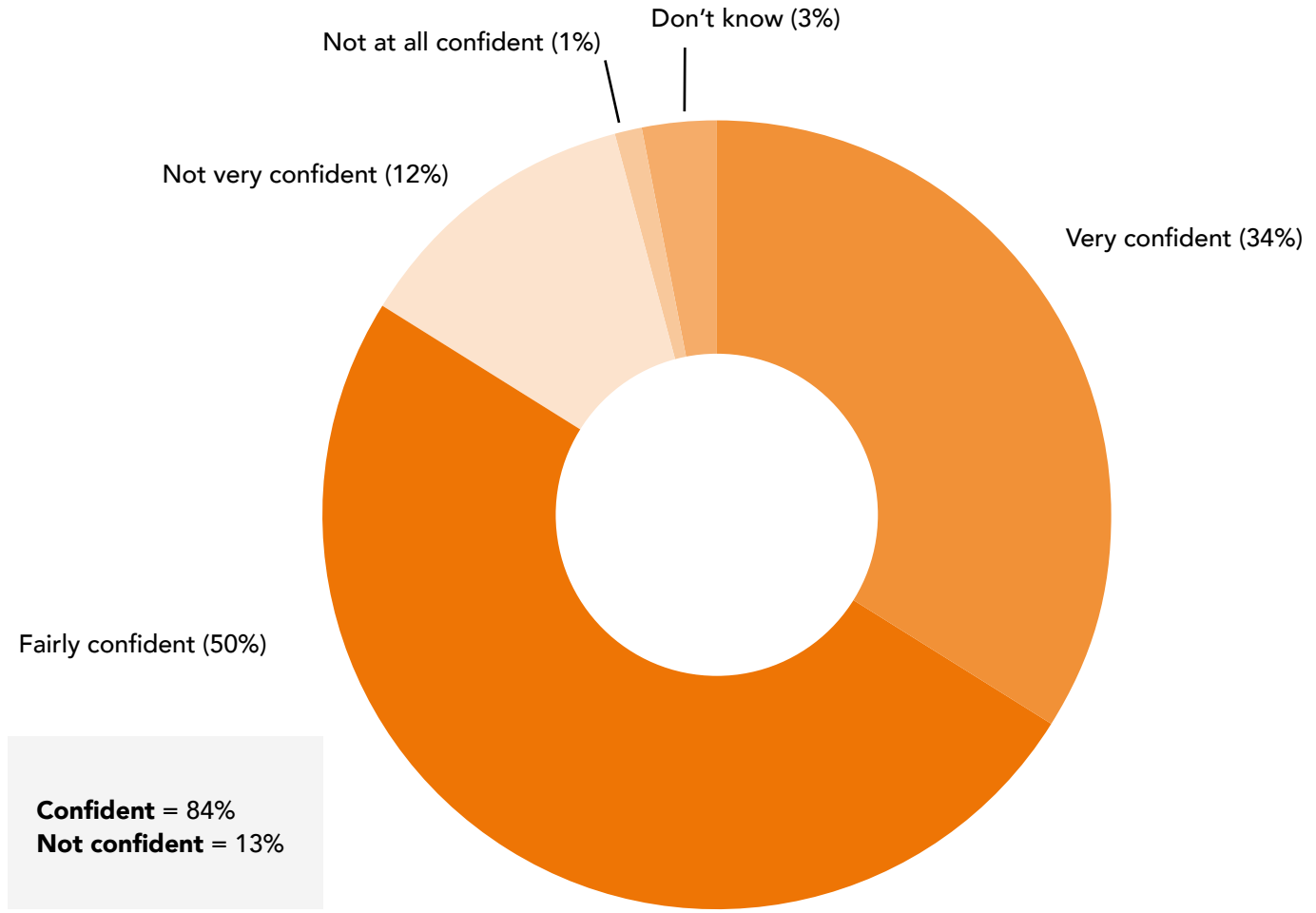
Expectations about future Business School growth

This report illuminates both the gaps and opportunities presented to Business Schools when it comes to technology and how they can use it to enrich their Schools and the students they teach. Yet some of these opportunities, or areas in which Schools could improve their incorporation of technology, should not override the overall optimism of the sector and belief in its capacity to grow. Indeed, 84% of leaders believe that their Business School will grow in capacity in the next three years.

More than a third of leaders (34%) are 'very confident' of growth. On the other hand, just one in eight (13%) are not confident. This indicates that Schools have optimism in the growth prospects of management education. This perhaps presents opportunities for leaders to invest further in suitable technological opportunities which enhance the delivery capability of their Schools.

Figure 7: Confidence in the capacity of Business School growth in the next three years

How confident or not are you that your Business School will grow in capacity in the next three years? (222 participants answering)



Confident = 84%
Not confident = 13%

How levels of optimism impact on attitudes towards technology

Leaders who are optimistic about the future of Business Schools within their country are more likely to also be open to embrace new technology, while those who are not optimistic are less likely. This finding is perhaps a function of confidence in the sector's future and the extent to which they can invest, or believe in the impact of technology.

Those who are optimistic are more likely to feel that their Business School is prepared to introduce both experiential learning and data visualisation and (85% and 60% respectively vs. 40% and 20% of those who are not optimistic).

Optimistic leaders are also more likely to be confident that their MBA curriculum meets the needs of the biggest tech employers (60% vs. 20% who are not optimistic).

However, it should be noted that there are no differences when it comes to the perceived importance of technologies, suggesting that these leaders are not constrained by their belief in technology, but rather in their capacity to implement technology.

Regional variation in attitudes to technology

Leaders in India are particularly confident that their Schools are successful in delivering technological change. They are more likely to strongly agree that their Business School has developed new and innovative ways of delivering programmes (63% vs. 25% of leaders worldwide). They are also more likely to agree that their Business School is fully prepared for opportunities that the fourth industrial revolution will offer (63% vs. 35% overall). Other regions where leaders are more likely to agree that their Business School is fully prepared for opportunities of the fourth industrial revolution include China including Hong Kong, China (71%) and Africa (50%).

It is important to note that leaders from no single region held significantly negative perceptions of technology delivery. However, leaders from North America and the Caribbean and Europe (excluding UK) are more likely to think that their Business School is not doing well at 'using new technology to deliver teaching and learning' (50% and 37% respectively vs. 32% overall.)

The findings may be borne from a greater belief in the potential or threshold for Business Schools to integrate technology, adequately.

Conclusions

This report demonstrates that technology is firmly in the consciousness of the vast majority of senior individuals running Business Schools. Leaders are broadly optimistic about the future of the sector and appear to view new technology as an important factor in their collective vision.

It is also clear that some Schools do not necessarily believe that they are as advanced in their journey to introduce new technology into their institutions as they could be – particularly in North America and the Caribbean and Europe (excluding the UK) – but also when it comes to the use of specific types of technology.

Yet it is also clear that Schools are gearing themselves up to introduce new technological concepts and see the opportunities that this presents.

Given the changes that leaders are anticipating in the delivery of MBAs, technology seems likely to be crucial in guiding the trajectory of MBA delivery over the next decade.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