

AMBA&BGA

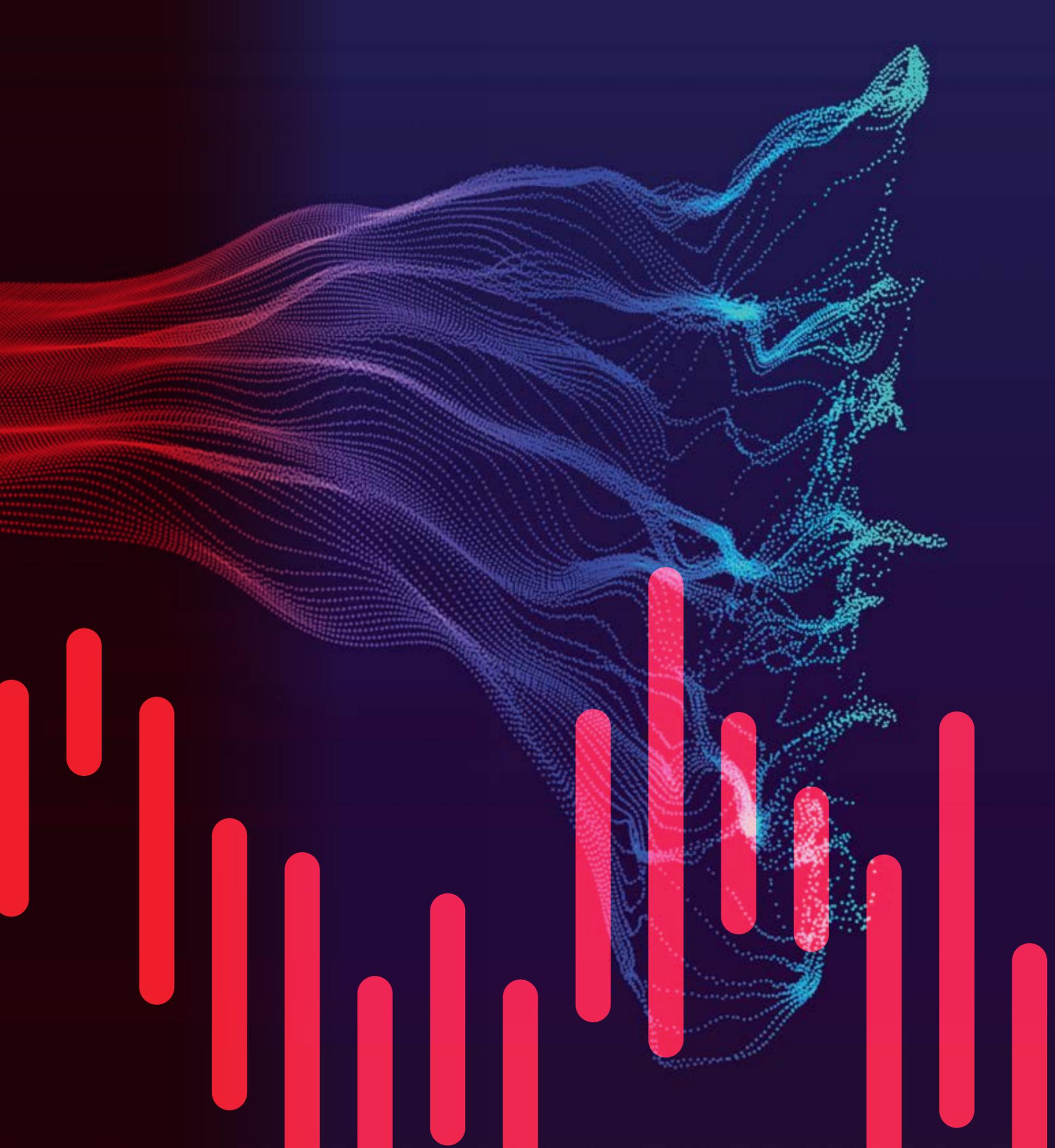
EDUCATION  
TECHNOLOGY  
RESEARCH

2021-22

IN ASSOCIATION WITH BARCO



BARCO



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# INTRODUCTION

## FROM AMBA & BGA

Last year represented a tipping point for education technology (edtech) and was the year Business School leaders crossed the Rubicon into a future that has taken business education into a phase from which it can never return.

This report, based on a survey of 171 Business School leaders worldwide, tells the story of the edtech in 2020 and 2021. In so doing, it reveals how Business Schools turned a crisis into an opportunity.

The headline? Edtech is gaining momentum and shows no signs of slowing down. Three quarters (75%) of the Business School leaders that responded to our survey, said that their Schools are now using virtual classrooms – an increase from 51% last year.

Following a year in which Business Schools were pushed into enhancing their investments in edtech by the Covid-19 pandemic and associated restrictions, 84% of participants to this survey have indicated that they want their Business School to retain the new technology that has been introduced.

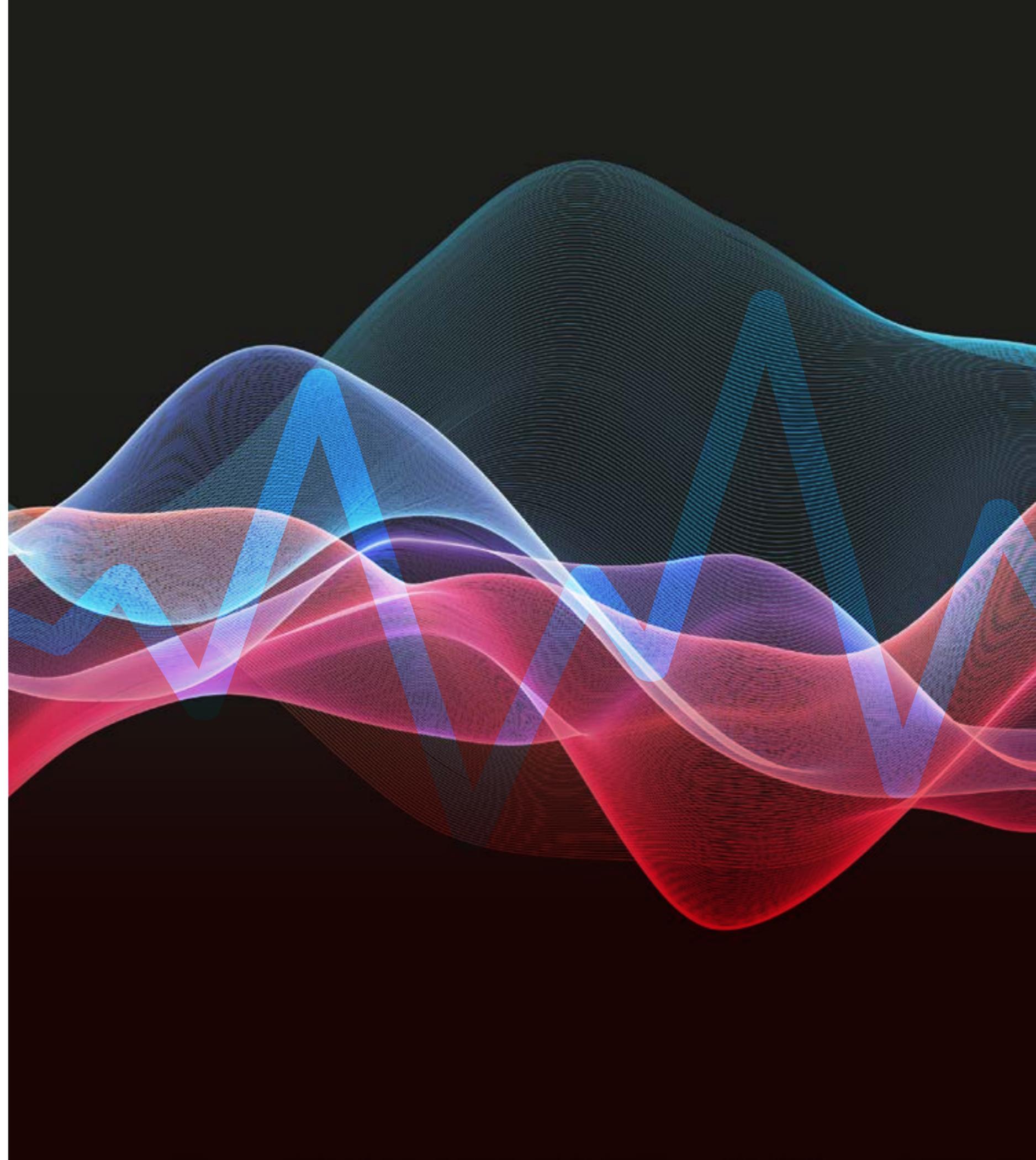
Responding Business School leaders are also keen to keep aspects of faculty teaching online (62%) and students not coming to campus (65%), suggesting that their preference for the future is hybrid or blended models of learning.

Indeed, most Business School leaders believe that the pandemic has triggered major changes to their institution's long-term strategy and 82% are planning to invest further in technology over the coming two years to enable online teaching.

We would like to express our gratitude to our report sponsor, Barco, for their generous support and insight in bringing this project together, along with the 171 individuals who took the time and effort to complete the survey. I would also like to thank Ellen Buchan for analysing the results you're about to read and for putting together the report, as well as Tim Banerjee Dhoul for his editorial finesse.

We hope that this report provides AMBA & BGA's network with a chance to reflect on the breadth of exciting technology that has made business education possible in 2021 and that it provides food for thought for the future, as we move further into a 'new normal' in 2022.

**David Woods-Hale**  
Director of Marketing and Communications  
AMBA & BGA



# INTRODUCTION FROM BARCO

We are living in historic times. After the past two years, we can finally look ahead with optimism and drive to reimagine and recreate business education for the long term; because the digital leap that we took during the pandemic is not only irreversible but is one of many more we will need to take.

As it emerges from this report, an overwhelming majority of Business School leaders have stated that the pandemic triggered major changes to their institution's long-term strategy. They are also planning to keep existing technology and invest in additional digital teaching methods. Likewise, the use of dedicated solutions like virtual classrooms has increased significantly.

To keep the momentum, Schools must continue to transform for the long term – and have strategies driven by pedagogy, supported by strong partnerships, and optimised through data, to offer the digital experiences that will enable the desired outcomes to all their stakeholders and above all, their students.

As this report shows, challenges in online learning delivery persist – particularly in student engagement, curriculum redesign, and identifying knowledge gaps. There are still steps to take to transform learning into a digitalised, interactive, and collaborative experience and taking action is mandatory because the world of business education will not be going back to its pre-pandemic state.

As Business School leaders have correctly identified, one of the key terms in learning will be flexibility. At Barco, we, too, believe the future of education is flexible – untied to a specific place, a particular timing, or a strict format. Flexible business education is vital in an environment that will soon become dominated by digital natives, partial to virtualised, on-demand and interactive learning experiences, and who must be prepared for a hybrid working world.

Adding the imperative of lifelong learning for workforces worldwide and the significant shift in the competitive environment where Business Schools compete globally regardless of location and with multiple actors such as learning- and skill-based platforms, change is compulsory.

Blended and hybrid programmes are the ones that will deliver learning flexibly. Blended learning is an all-encompassing method combining classroom-based, hybrid or remote live sessions with asynchronous, virtual or analogue methods: videos, presentations, books or cheat sheets.

Hybrid learning occurs in real-time in a hybrid classroom. Participants connect virtually or attend the physical classroom according to their individual preferences. Hybrid classrooms are solutions that allow for similar levels of interaction and collaboration in-class and remotely and help bring together a rich mix of local and global perspectives. However, they have yet to be put in place in most institutions.

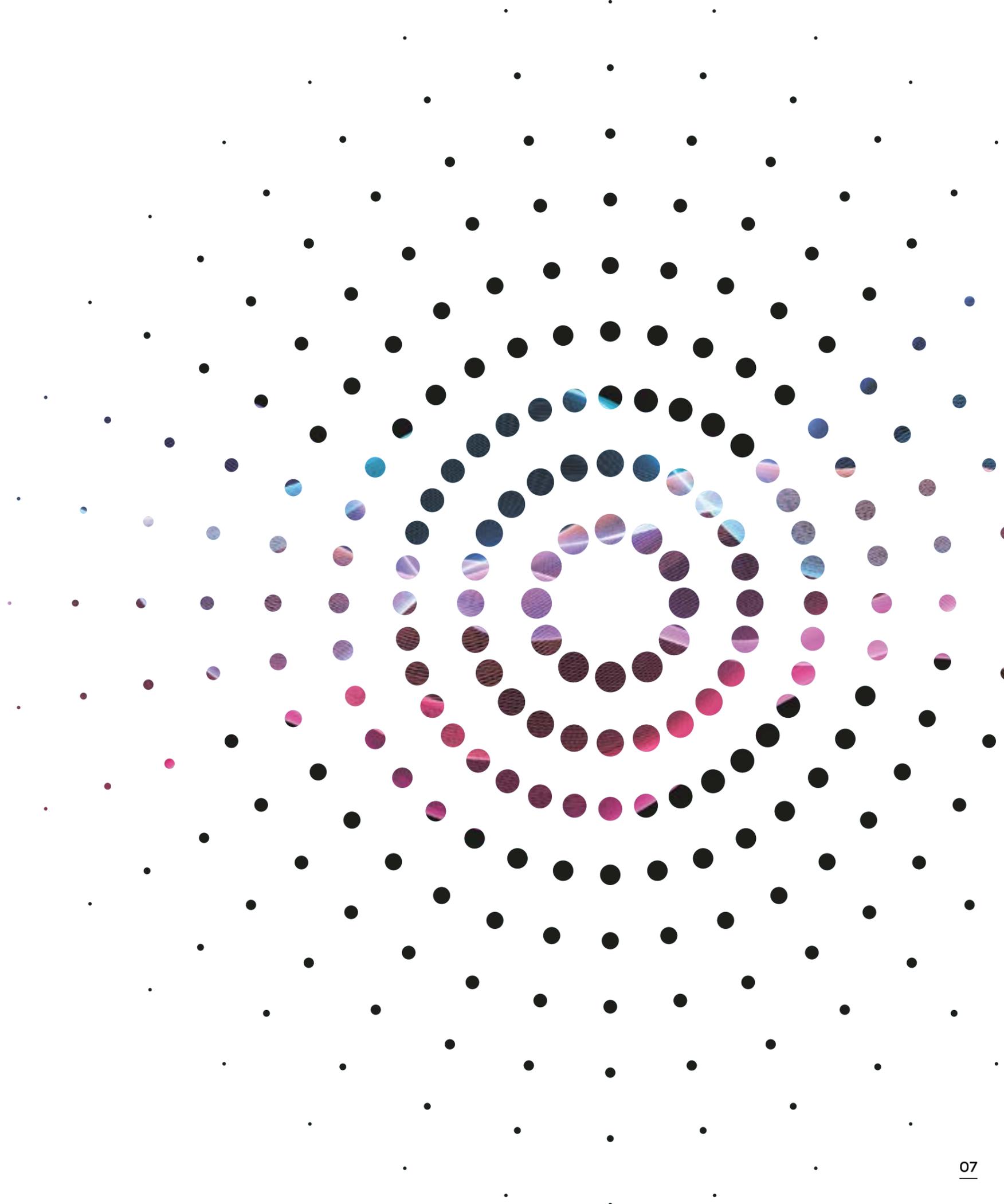
With the right partner and solution, hybrid and blended methods will allow flexible learning and successful outcomes. They will enable institutions to deliver virtually and in-class, engaging and interactive learning experiences that will support instructors convey their knowledge and enable the desired results for the students. They will support Business Schools in monitoring and tracking student progress, giving way to improved learning paths driven by data and optimised according to results.

That is why Business Schools must expand their horizons and source strategic, reliable partners that can support them in the process of transformation and towards achieving this vision. The right partners will have powerful, purpose-built solutions and knowledgeable, pro-active teams, to help institutions deliver these flexible programmes, direly required in the world of business education. Covid-19 challenged the status quo, and we must keep the momentum because Business School leaders have now the unique chance to revolutionise education.

It is time to dare to dream, innovate and push the boundaries of creativity. It is time to devise and optimise new models for cutting-edge business education in an era of technology and continuous disruption while enabling bright learning outcomes for all categories of learners worldwide.

Simone Hammer

Global Marketing Director, Learning and Training Solutions, Barco



# EXECUTIVE SUMMARY

## FORMAT OF TEACHING

- 75% of respondents said their Business School uses a virtual classroom, an increase from 51% last year.
- 25% of responding Business leaders said that their institution is using virtual reality (VR) to teach programmes, while 61% of participants said their School is not using this technology (14% were unsure). The majority (65%) of participants indicate that this technology is being used to teach in a more exciting way.

## SYNCHRONOUS VS. ASYNCHRONOUS LEARNING

- The biggest advantage of both synchronous and asynchronous digital teaching methods is seen by participants to be less travel for students, as cited by 74% of participants.
- 54% expressed their belief that asynchronous digital teaching methods offer a worse experience for learners than classroom teaching. A smaller proportion, of 38%, said they believe synchronous digital teaching methods are inferior to classroom methods, in terms of learning experience.
- Whether online instruction is asynchronous or synchronous, the biggest problem experienced by Business Schools is identifying gaps in students' knowledge (as reported by 69% and 55% of respondents, respectively).
- Lack of student engagement (64%); student connection issues (54%) and adapting programmes to suit online teaching formats (53%) are the

most frequently cited challenges faced by Business School leaders when delivering online education in a synchronous format.

- 93% of respondents said they believe that facilitators/faculty are either 'very satisfied' or 'fairly satisfied' with the current synchronous digital teaching technologies.

## IMPACT OF COVID-19

- 84% of participants said they want their Business School to retain the technology that has been implemented during the pandemic – 16% want to keep aspects of it, but none want this technology discarded altogether.
- Responding Business School leaders are also keen to keep aspects of 'faculty teaching online' (62%) and 'students not coming to campus' (65%), suggesting that their preference for the future is hybrid or blended models of learning.
- 83% of Business School leaders said they believe that the pandemic has triggered major changes to their institution's long-term strategy, while 17% said they believe that it has not.

## INVESTMENTS

- The MBA is the programme which is receiving the most funding for digital teaching methods – 83% of participants said that their Business School is investing a moderate amount or more in this programme in this way.

- Providing 'flexibility in learning' is the most popular purpose of existing investment in relation to online learning technologies, as cited by 77% of Business School leaders.
- 'Flexibility in learning' is also top of Schools' minds when looking ahead to the next two years, for which it is cited as a priority for investment by 67% of respondents. Other top priorities include the enhancement of soft skills (cited by 57%) and student engagement metrics (45%).
- 82% of Business School leaders said their School is planning to invest further in technology over the coming two years to enable online teaching.

# METHODOLOGY AND PARTICIPANT DEMOGRAPHICS

Between 31 May and 19 July 2021, AMBA & BGA circulated an online questionnaire, polling its networks of Business School decisionmakers on trends in education technology and online learning. A total of 171 Business School decisionmakers participated in the quantitative survey.

Throughout the following report, the terms 'participants', 'survey respondents', 'Business School leaders', and 'leaders' are used interchangeably when describing the research sample.

Of those surveyed, 42% represented Business Schools based in Europe (excluding the UK but including Russia); 18% in Latin America; 9% in Africa; 9% in Asia and the Middle East (excluding China and India); 8% in China (including Hong Kong, China); 7% in the UK; 6% in North America and the Caribbean; and 1% in India. There were no respondents from AMBA & BGA Business Schools based in the Oceania region.

More than half of survey participants (53%) classify themselves as deans or directors at Business Schools; 12% work in designing or delivering management programmes at Business Schools; 7% are management academics; 5% work with management students and graduates (for example, careers and alumni staff); 2%

work in a learning technologist or a similar role; and 21% work in another role within a Business School or management education.

More than nine out of 10 (92%) of the participants' Schools provide MBA programmes; 75% provide master's degrees; 70% provide custom executive education programmes; 68% provide open enrolment executive education programmes; 61% provide bachelor's degrees; 59% provide doctorates; 53% provide MSc programmes; and 18% provide MOOCs (massive online open courses).

When asked 'approximately how many students are currently enrolled at your Business School?' the mean figure from participants was 2,925.

Throughout the report, a previous survey will be referenced. This survey of the same name asked a similar group of Business School leaders a series of questions on education technology, with some of the same questions being asked. Where the same questions have been asked, direct comparisons have been drawn between the two reports. The previous year's report draws on the results of a survey to which participants responded between 19 and 30 October 2020. Released in January 2021, this report is available on the AMBA website.

# SECTION 1: FORMAT OF STUDY

To provide context to the educational landscape in which this survey was collected, the participants were first asked about the programmes they provide, including the formats and the technology used by their Business Schools. Here, it is important to note that many Business Schools will still be operating outside their normal teaching practices at the time of writing, due to the effects of the Covid-19 pandemic and the associated restrictions and guidelines that remain in place in many parts of the world.

The results reveal that the largest proportion of courses are being taught online at participants' Business Schools, with 44% being taught online using videoconferencing software and 38% taught with virtual classroom software.

Hybrid learning, in which some students join classes physically while others access the same classes virtually and synchronously, is being used 27% of the time. The current proportion of courses being taught with all students on campus in a physical classroom is also 27%.

Blended learning, involving a mixture of online and classroom-based teaching, accounts for almost a quarter (24%) of all teaching at participants' Business Schools.

## BLENDED LEARNING

Blended learning, involving a mixture of online and classroom-based teaching, accounts for almost a quarter (24%) of all teaching at participants' Business Schools.

The survey then examined the use of blended learning in MBA programmes specifically, with blended learning defined as combining on-campus and online learning, in which the online component must represent at least 35% of the programme.

First, participants were asked if any of the MBA programmes at their Business School applied blended learning, where blended learning was defined as 35% or more of the programme is online, alongside on campus training.

Nearly half (45%) of respondents reported that blended learning is in use in their Business Schools' MBA programmes, while 41% said that it is not, and the remaining 14% were unsure.

Figure 1: Currently, what proportion of your courses are taught in the following ways?

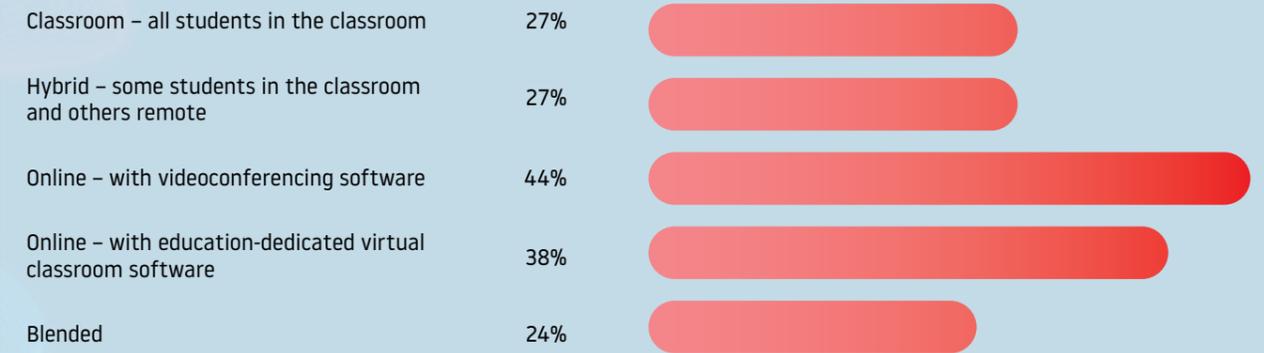
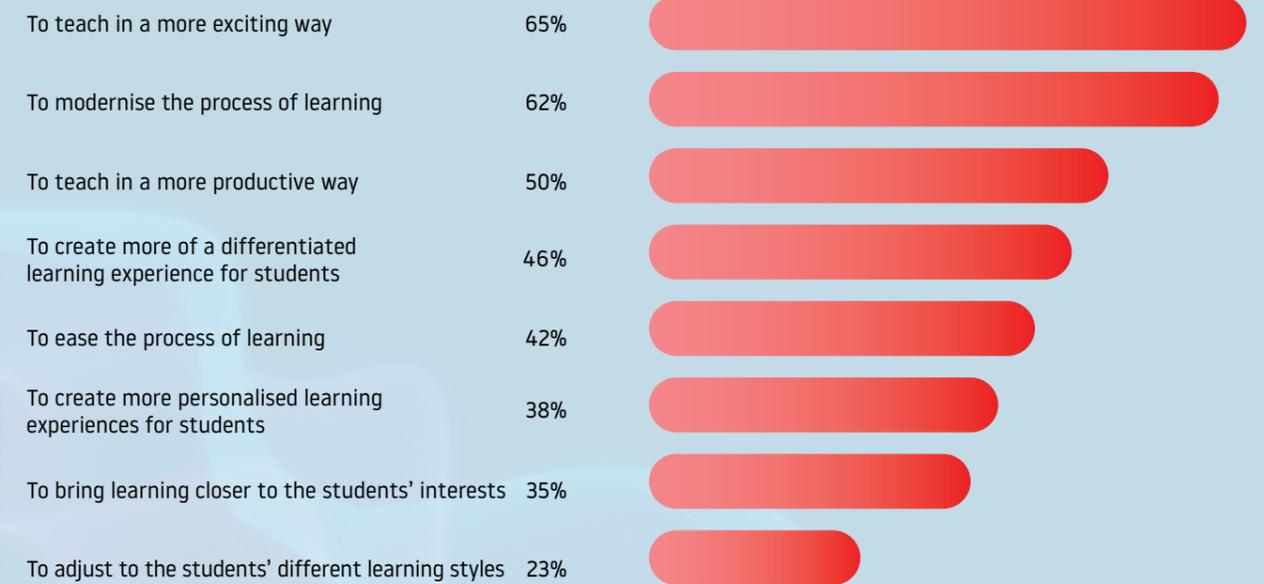


Figure 2: In what way is your School using virtual reality?



An average of 57% of the programme is delivered online, among those who indicated the use of blended learning in their Business Schools' MBA programmes.

### FLIPPED CLASSROOMS

'Flipped classroom' learning is where traditional classroom activities are conducted online, and thinking time, which traditionally takes place away from the classroom, is conducted in the classroom.

Nearly three quarters (72%) of responding Business School leaders said that they believe a flipped classroom model is suitable for MBA programmes, with 33% declaring it to be 'very suitable' and only 8% of the belief that it is either 'fairly unsuitable' or 'very unsuitable'. One tenth (10%) believe it is 'neither suitable nor unsuitable' and the same proportion did not know.

When asked how often their Business School conducted flipped classroom learning as part of an MBA programme, 27% of participants indicated that it is 'always' or 'usually' used. Two fifths (38%) said their School uses flipped learning 'sometimes', while 24% said they use flipped learning 'rarely' or 'never'.

### VIRTUAL REALITY

The use of virtual reality (VR), including the use of VR materials, courses and campuses, is becoming more and more common among the world's top Business Schools.

A quarter (25%) of participants said that VR technology is being used for teaching purposes at their Business School. Two thirds (61%) of participants said their School does not use VR, and 14% did not know if their School does or not.

As Figure 2 shows, the most common use of VR, cited by 65% of those who indicated the use of this technology, is to make teaching more 'exciting'. A similar proportion (62%) said their School uses it to modernise the process of teaching. Half of participants said VR is in use to teach in a more productive way and 46% said it is creating more of a differentiated learning experience for students.

Less commonly cited uses of VR are to adjust to students' different learning styles (23%) and to bring learning closer to the student interests (35%).

### VIRTUAL CLASSROOMS

With reference to any programme within an institution's programme portfolio, 75% of respondents said their Business School currently uses virtual classrooms, 20% said their School does not and 5% do not know.

This is an increase of 25 percentage points from the 51% proportion who cited the use of a virtual classroom in the last survey. A virtual classroom is here defined as a digital learning environment that allows teachers and students to connect online in real time.

### TEACHING METHODS

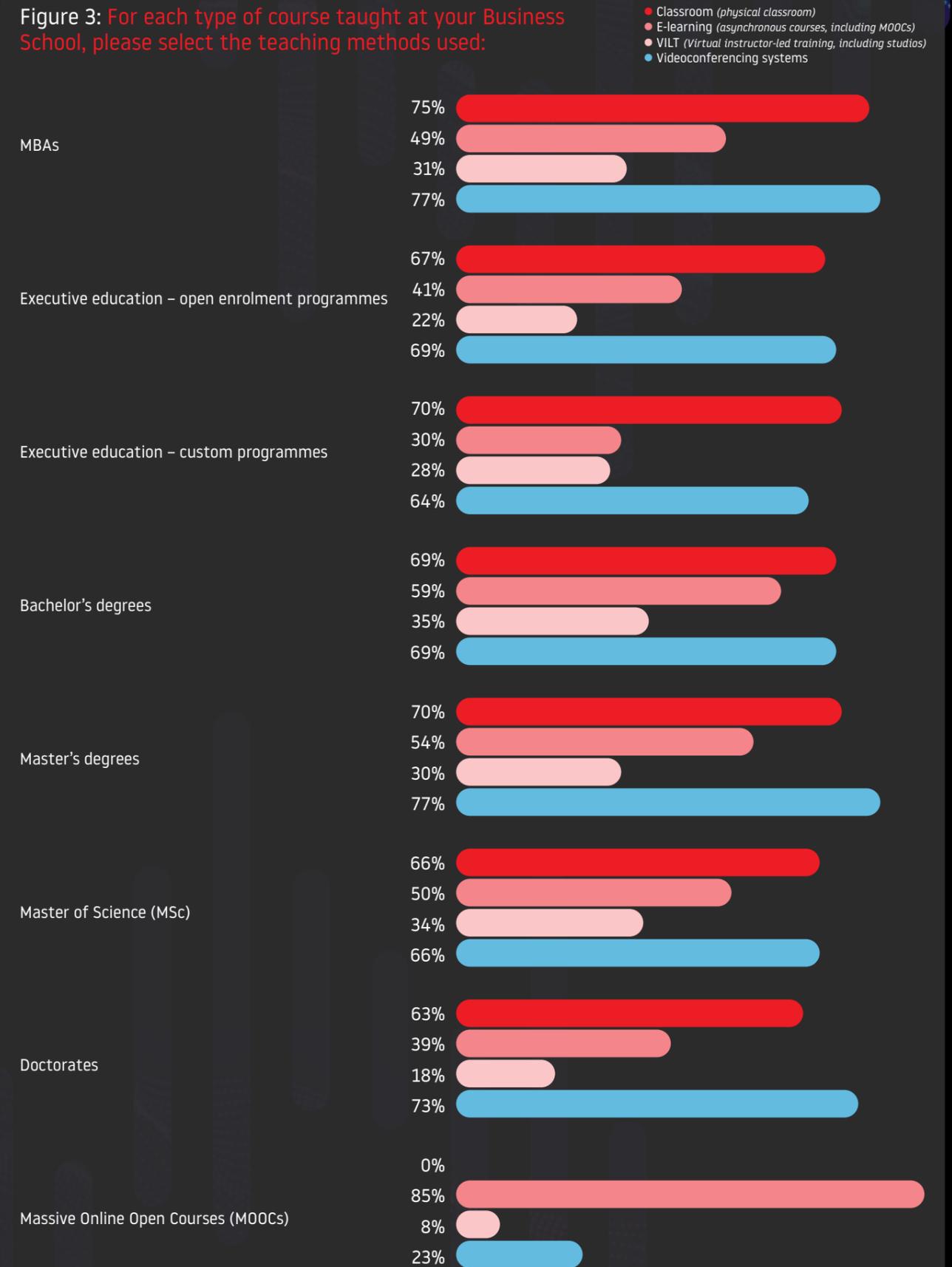
Delving deeper, participants were asked to share which of their Schools' programmes use the methods outlined above. The results are shown in Figure 3. Across most programmes, classroom-based delivery and live videoconferencing systems are the most common delivery modes, among respondents' Business Schools.

High proportions reported the use of videoconferencing systems in their Schools' master's degrees and MBAs (77%), doctorates (73%), custom executive education programmes, and bachelor's degrees (69%).

Comparably high proportions indicated the use of classroom-based learning to teach MBAs (75%), custom executive education programmes (70%), master's degrees (70%) and bachelor's degrees 69%.

Less commonly found teaching methods include virtual instructor-led training (including studios), in use at around a third of the bachelor's, MSc and MBA programmes available at respondents' Business Schools.

Figure 3: For each type of course taught at your Business School, please select the teaching methods used:



# SECTION 2: SYNCHRONOUS VS. ASYNCHRONOUS LEARNING

This section compares the use of synchronous and asynchronous learning at Business Schools. Learning which takes place synchronously happens in real time, while asynchronous learning equates to learning activities that do not take place in real time.

Looking at both synchronous and asynchronous learning, responding Business School leaders were first asked to rate how effective they believe digital teaching methods are across a range of activities.

More than nine in 10 (92%) believe that digital teaching methods are either 'very effective' or 'somewhat effective' in delivering flexibility of learning. A similar proportion (88%) believe that digital teaching methods are 'very effective' or 'somewhat effective' for two-way discussions between facilitators and students, and 84% believe they are 'very effective' or 'somewhat effective' for the ability to work on team projects.

Participants are least likely to say that digital teaching methods are either 'very effective' or 'somewhat effective' in relation to wellbeing initiatives for students (40%) or student engagement metrics (49%).

In two separate questions, participants were asked about the biggest advantages of using online asynchronous and synchronous digital teaching methods. The most popular advantage, cited by 74% for both asynchronous and asynchronous digital teaching methods, is less travel for students.

For online asynchronous digital teaching methods, the second-most popular advantage is being able to record the sessions (66%), whereas the second-most popular advantage for synchronous digital teaching methods is the ability to have international collaboration (70%).

Being able to generate and use metrics in relation to students' learning is not seen as a noteworthy advantage by participants for either asynchronous (26%) or synchronous (22%) digital teaching methods.

Participants were then asked to give their opinion on how synchronous and asynchronous digital teaching methods compared to the traditional in-person teaching experience.

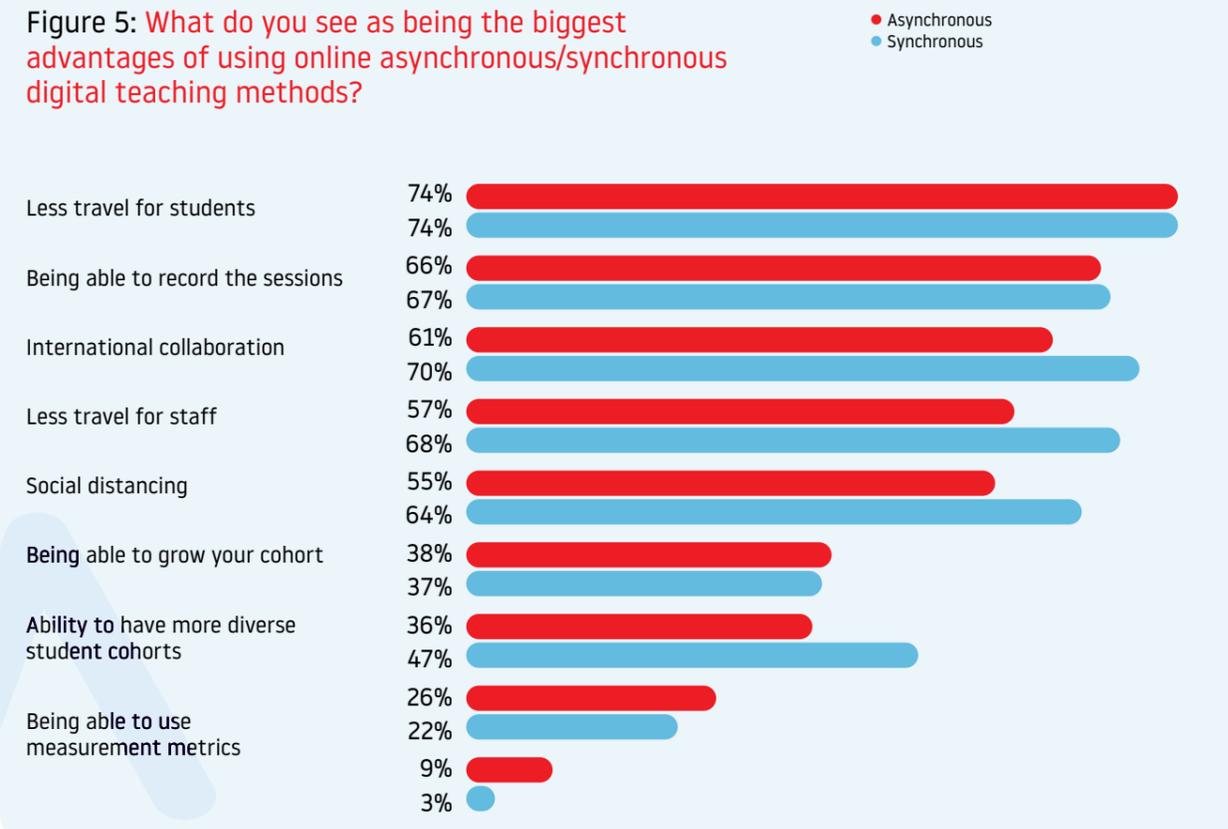
Approximately a third of participants appear to be strong proponents of digital teaching methods. A total of 31% expressed their belief that synchronous digital teaching methods are either 'much better' or 'somewhat better' than the traditional classroom teaching experience. The equivalent proportion for asynchronous digital teaching methods is just a fraction lower, at 30%.

Even so, responding Business School leaders generally show much less trust in asynchronous forms of learning

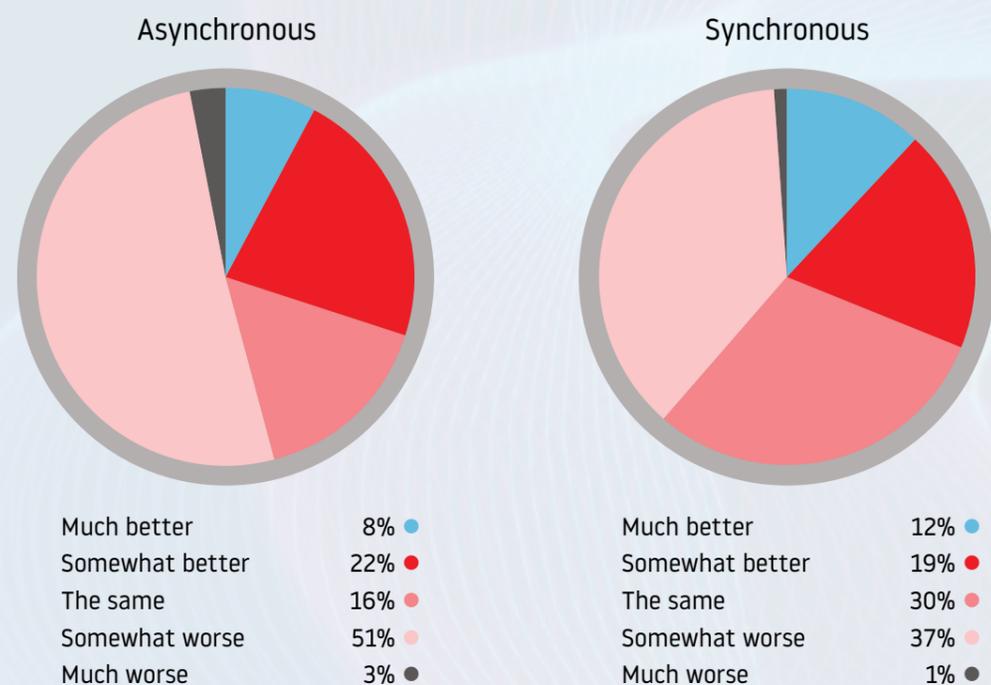
Figure 4: How effective do you believe digital teaching methods (synchronous and asynchronous) used at your School have been in terms of delivering the following:



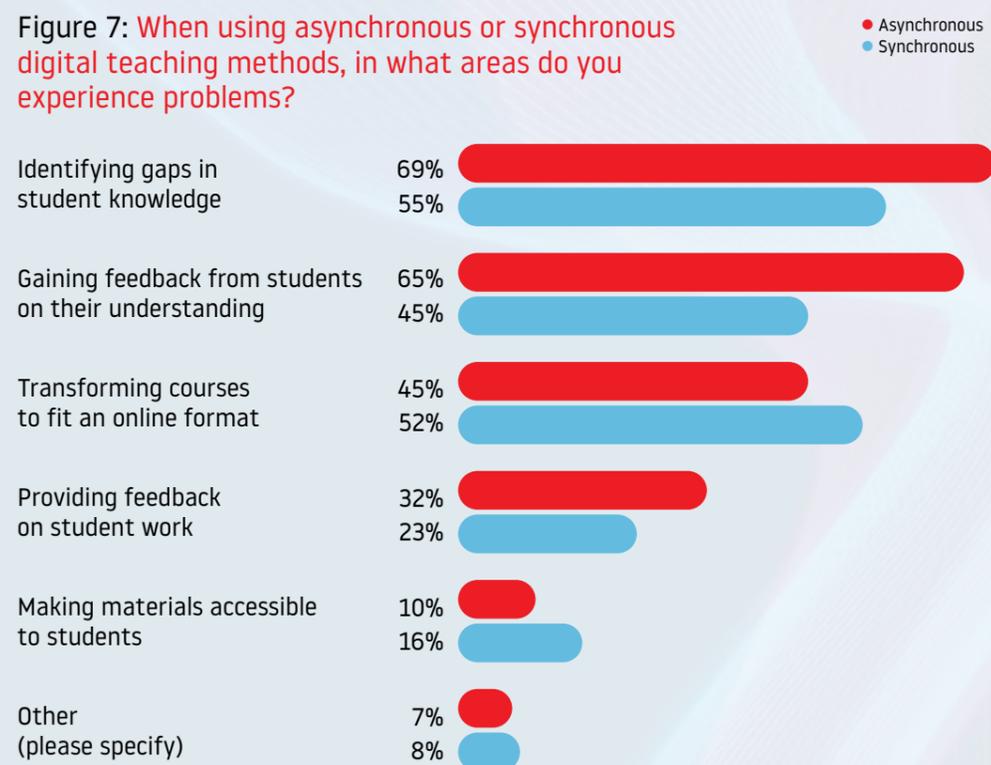
Figure 5: What do you see as being the biggest advantages of using online asynchronous/synchronous digital teaching methods?



**Figure 6: In your opinion, how do asynchronous/synchronous digital teaching methods compare to the traditional classroom teaching experience?**



**Figure 7: When using asynchronous or synchronous digital teaching methods, in what areas do you experience problems?**



than synchronous forms. While 30% of participants think that synchronous digital teaching methods offer a comparable experience to that of the classroom, only 16% of participants feel the same way about asynchronous learning.

In addition, 54% believe that asynchronous digital teaching methods offer a worse experience for learners than classroom-based teaching, compared to 38% who thought this to be true of synchronous digital teaching methods.

The survey then went on to assess problem areas experienced by participants when they are teaching online, asking about specific problems relating to any interactions they have with students.

Whether it's synchronous or asynchronous methods being used, the biggest problem reported by participants is identifying gaps in students' knowledge (55% and 69%, respectively).

For asynchronous methods the second-largest problem reported is gaining feedback from students on their understanding (65%). While, for synchronous methods the second-largest problem relates to transforming courses to fit an online format (52%).

Less than one fifth of Business School leaders find making materials accessible to students problematic when using either asynchronous or synchronous digital teaching methods.

When it comes to using synchronous digital teaching methods, the biggest challenges faced by responding Business School leaders has been lack of engagement from students (cited by 64%); connection issues from students (cited by 54%) and adapting programme design to online teaching methods (cited by 53%). Other challenges experienced by a significant proportion of respondents include a lack of technological ability on the part of teaching facilitators (cited by 40%), connection issues from educators (cited by 33%) and non-interactive programme designs (cited by 31%).

The cost of training (14%), difficulties of integration with existing IT (15%) and the cost of subscriptions (15%) are less likely to be cited by Business School leaders as major challenges in the delivery of synchronous digital teaching methods.

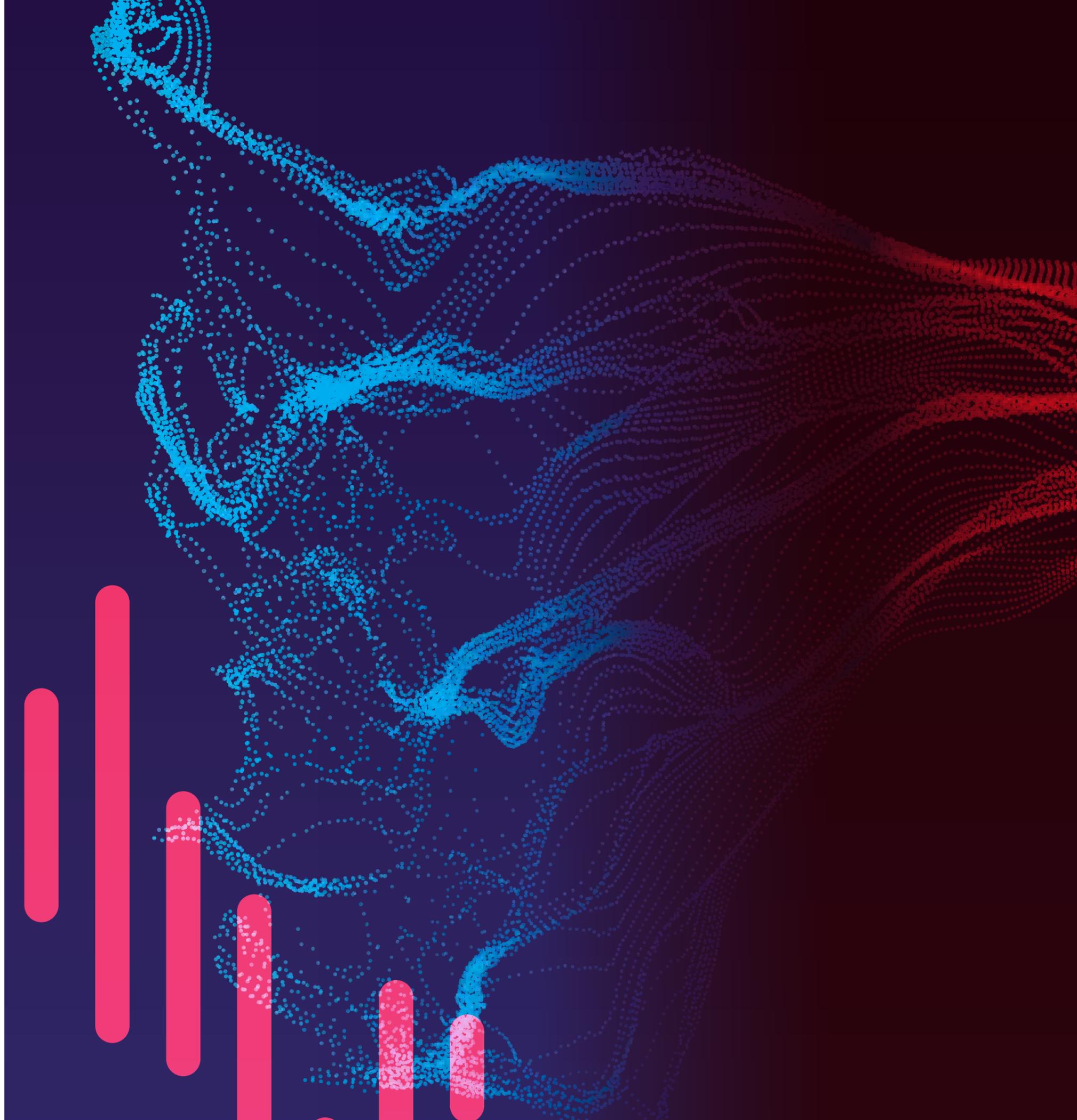
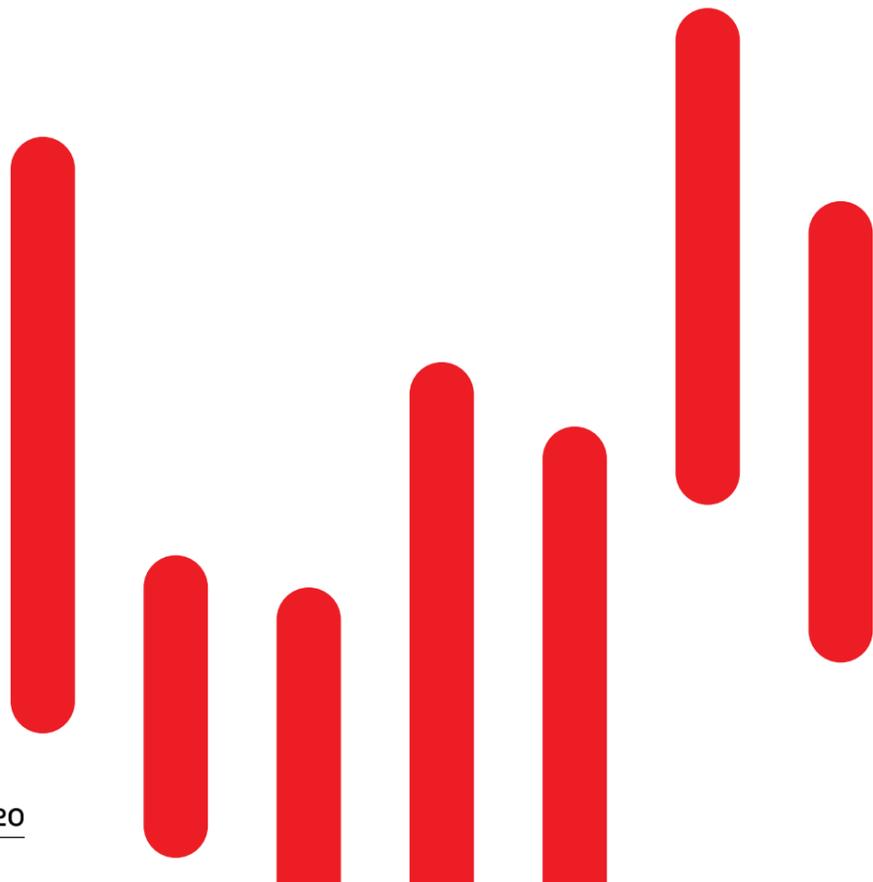
## STAFF AND FACULTY VIEWS ON THE USE AND VALUE OF TECHNOLOGY

How do members of staff and faculty feel about the implementation of new technology? Participants were asked for their views on facilitators and faculty members' level of satisfaction with the current use of current synchronous digital teaching technologies at their Business School.

Overall, the results were very positive – 93% said that they believe that facilitators/faculty are either 'very satisfied' or 'fairly satisfied'. Only 7% believe that the facilitators/faculty at their Business School are 'not satisfied' and no participant thought that they are 'not at all satisfied' with the current setup.

Student experience is a central consideration for any form of online learning provision, so participants were asked what they think adds the most to student experience when delivering courses online.

In response, 65% of Business School leaders said they believe the ability for students to have break-out sessions adds value. The same proportion also thought that the ability to record sessions adds value. The next most popular answer was the ability to have interactive quizzes and polls (56%). Aspects such as a shared whiteboard space and engagement metrics were deemed to add value by fewer in the survey sample (cited by 34% and 24%, respectively).



# SECTION 3: THE IMPACT OF COVID-19

This section of the report seeks to analyse and compare Business Schools' responses to the Covid-19 pandemic and the migration from physical to online teaching and learning, in light of lockdowns, social distancing, and enforced quarantines, during 2020.

Business School leaders were asked to share some insight into examples of how their Schools had innovated in terms of programme delivery during the past year – and in light of the Covid-19 pandemic. It should be noted that the survey was launched at the end of May 2021, thereby allowing participants to reflect on a full calendar year in which the pandemic was present and in which many Business School strategies have evolved from those of immediacy and rapid implementation, to those with a view on the longer-term 'new normal'.

As Figure 8 illustrates, the year was eventful for most Business Schools. More than nine out of 10 (91%) leaders indicated that their institution has increased the amount of digital or online learning opportunities; 78% pointed to lectures being conducted using virtual teaching technology; 59% said their Business Schools' delivery strategy has been changed to be more 'fit for purpose'; and 57% said their School has increased its teaching capacity with regards to new technology and innovation.

Considering Covid-19's continuing impact on the world, it is not surprising that the majority of leaders (88%) cited that their Business School's motivation to implement new technology has been to ensure course continuity during the pandemic.

There are, of course, other motivations, but many of these also bear some relation to the impact of the pandemic and the great shift online, both in higher education and the working world. These motivations include needing to meet prospective students' expectations (cited by 62% of Business School leaders), wanting to be ahead of the market (cited by 44%) and the need to prepare students for the digital workplace (cited by 44%).

Leaders in this sample are less likely to be motivated to implement new technology in their Business School by pressure from the higher education market (29%) or the desire to set up new revenue models (38%).

To understand the impact of the pandemic and to assess Business School leaders' thoughts towards it, participants

Figure 8: In what ways has your Business School innovated its programme delivery in the past year?

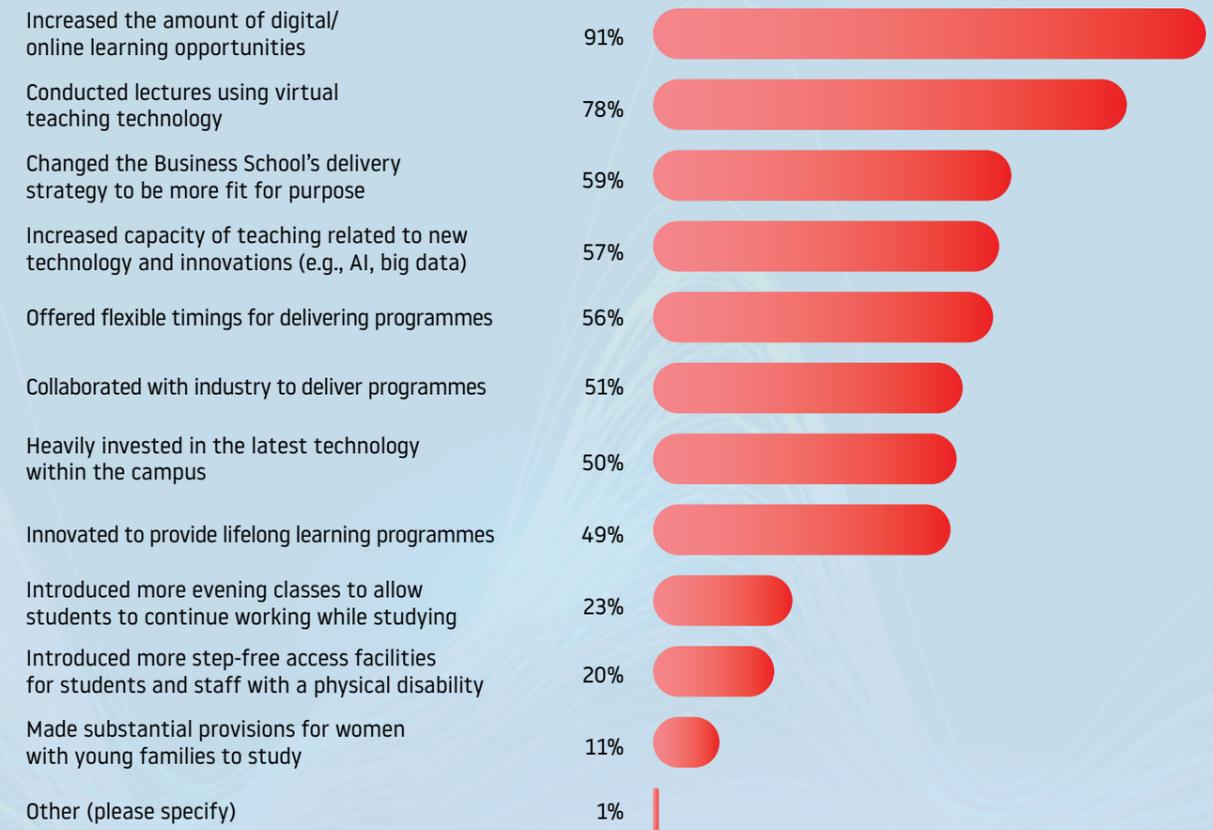
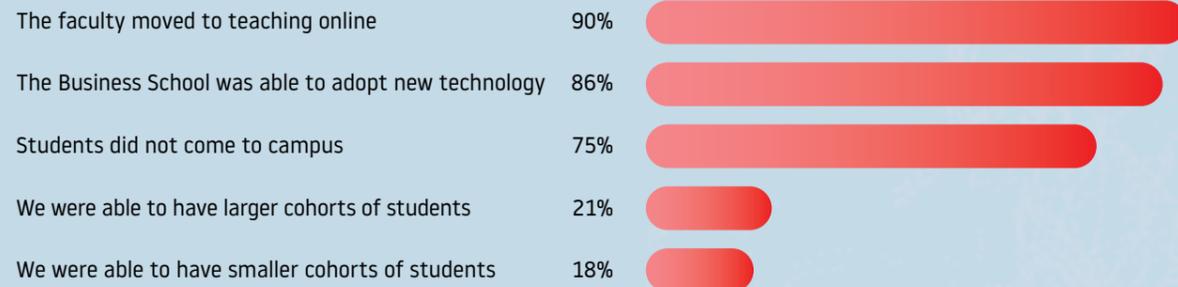


Figure 9: What have been the motivations to implement new technology into your Business School?

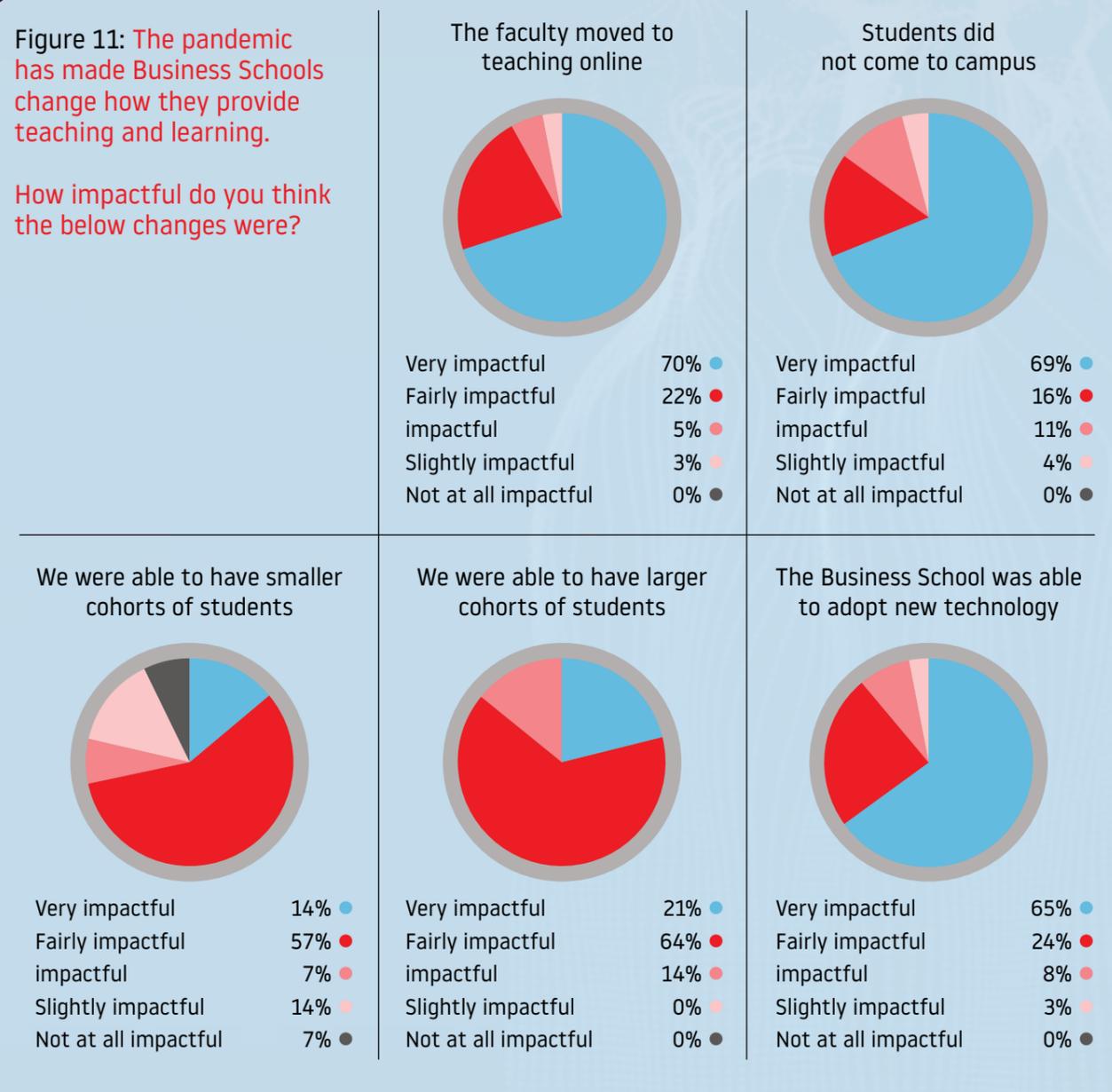


**Figure 10: The pandemic has made Business Schools change how they provide teaching and learning. Which of the following applies to your Business School because of the pandemic?**



**Figure 11: The pandemic has made Business Schools change how they provide teaching and learning.**

How impactful do you think the below changes were?



were asked a series of questions regarding changes which had been made to their Business Schools during the pandemic.

Nine in ten participants (90%) acknowledged that their School has moved faculty to teaching online, while a similar proportion (86%) believe that their Business School has been able to adopt new technology. Three quarters of participants (75%) confirmed that the pandemic has impacted students' ability to come to campus.

To understand the ramifications of these changes, the participants were asked to rate how impactful each of the changes listed above had been. All are seen to be impactful by at least 70% of participants, with 92% participants describing faculty moving to teaching online as either 'very impactful' or 'fairly impactful'. A similar proportion (89%), think that being able to adopt new technology has been either 'very impactful' or 'fairly impactful'.

Participants were then asked to rate how they felt about each of these changes, with the results shown in Figure 12. Overall, participants are very positive about the adoption of new technology at their Business School – 95% gave this a positive rating. In addition, 80% feel positive about the change of faculty moving to teach online. Any ability that a Business School may have had to enrol larger cohorts of students, as a result of the shift to online models, is seen as a positive change by 78% of participants.

Students' inability to come to campus elicited the largest negative response from participants, with 41% rating this change as 'negative' or 'extremely negative'.

Looking to the future, participants were asked what aspects of changes implemented in the past year they wished to keep. Technology is a clear winner here – 84% of participants said they plan to keep new technology adopted and none said that they plan for it to be discarded.

Elsewhere, the consensus in this sample is to keep aspects of the enforced changes – 62% said they plan to keep aspects of faculty teaching online and 65% will look to keep aspects of students not coming to campus, suggesting that Business School leaders envisage the use of hybrid or blended models in the near future.

The pandemic has not just affected teaching methods, its impact has been wider than this. An overwhelming 83% of Business School leaders believe that the pandemic has triggered major changes to their Business School's long-term strategy as a whole long-term strategy. Only 17% of participants believe that it has not.

Figure 12: Do you believe that the following changes made to your Business School because of the pandemic were positive or negative?

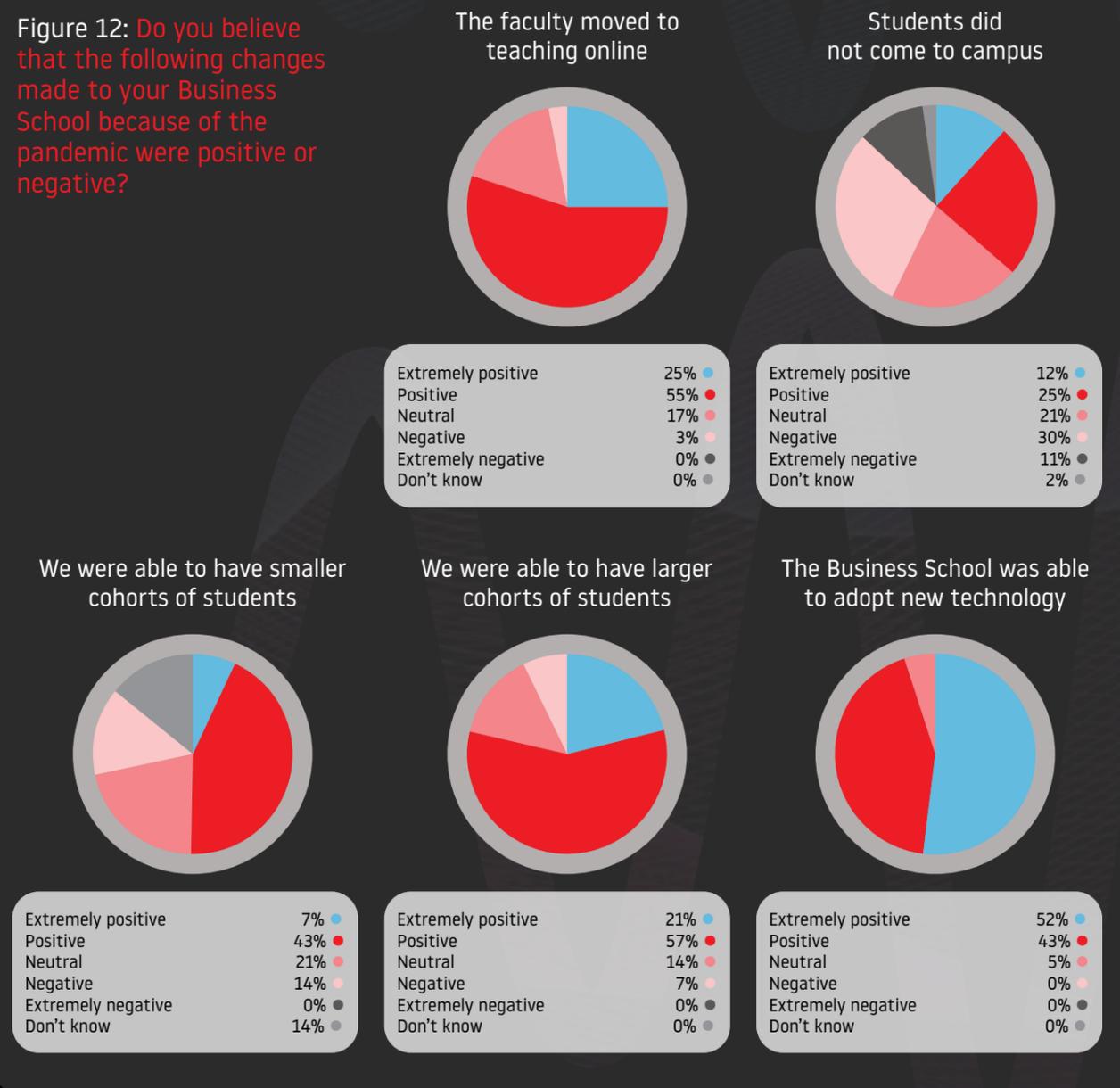
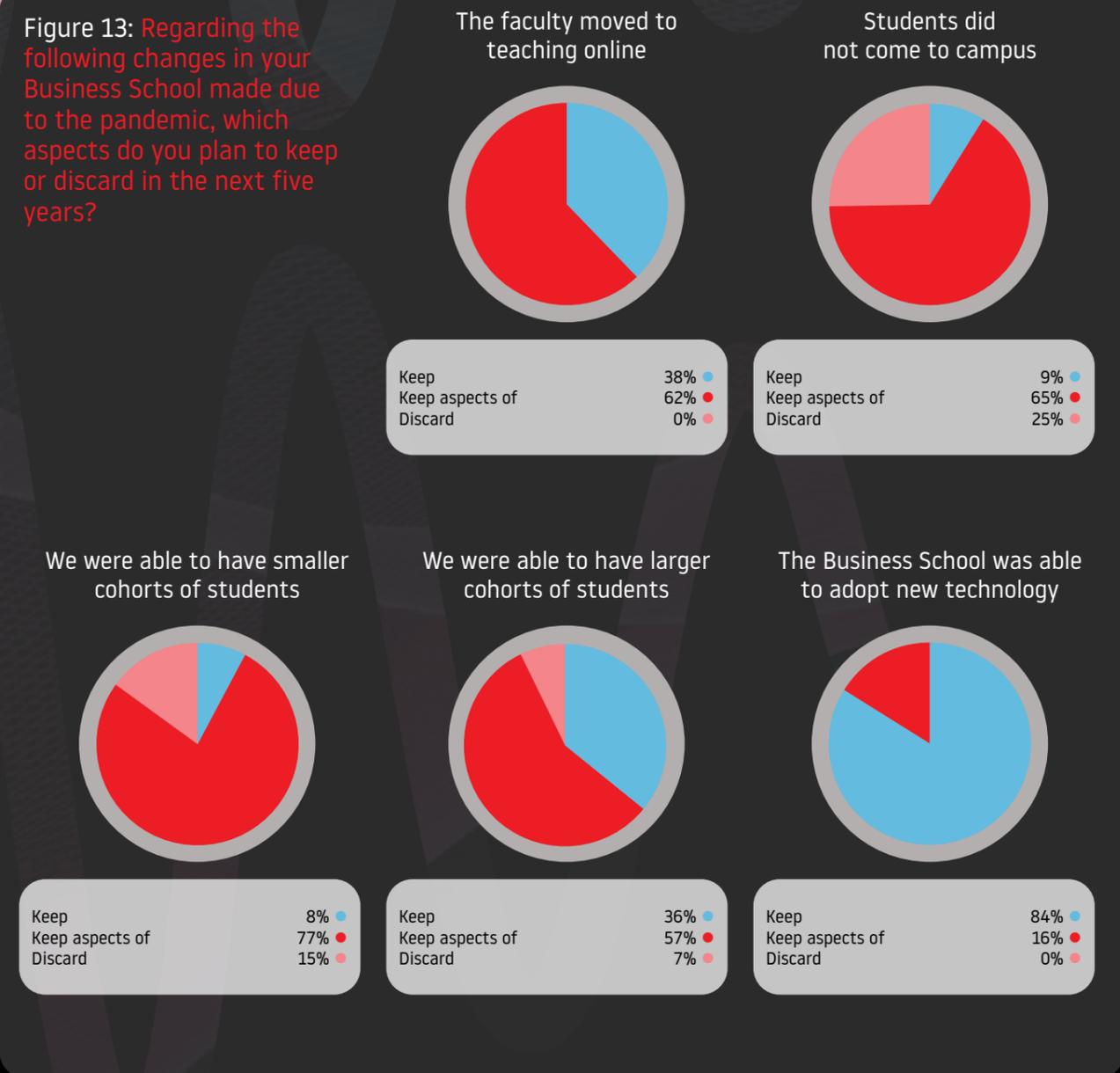


Figure 13: Regarding the following changes in your Business School made due to the pandemic, which aspects do you plan to keep or discard in the next five years?



Those who said that Covid-19 has triggered major changes to their Business School's long-term strategy, were asked for details of how. Some of the individual answers given include:

- Distance learning will remain as the main method [of teaching] – totally [online] for many courses and partially [online] for the remaining ones

- Digital transformation has become our challenge
- New markets are now accessible and there are new levels of competition
- Giving greater priority to innovation of teaching methods and pedagogic approach centred on technology

- Opening up to new markets, with greater teaching flexibility
- Teaching methods and pedagogy have changed and students' attitudes to studying online has been highly impactful – thus, strategically, we are more focused on developing hybrid and MOOC courses

- We have tried to expand further into other countries to make some balanced profits, as every country has its own rules dealing with Covid-19. We are looking to conduct more partnerships and create new programmes that can attract students of all ages
- Online and blended [education models] are here to stay

# SECTION 4: INVESTMENTS

This section focuses on the investments that Business Schools have already made and how they plan to invest in new technology in the future.

First, participants were asked about investments their Schools are making in digital teaching across a variety of programme formats (MBAs, executive education, bachelor's degrees, master's degrees, MSc degrees, doctorates and MOOCs).

The MBA is the area receiving the most funding for digital teaching methods, among respondents, with 83% of participants' Business Schools investing a moderate amount or more in this programme. This is a notable rise on the equivalent figure in last year's report, when 74% of participants said their Business School is investing a moderate amount or more on digital teaching methods in its MBA programme.

Master's degrees are also receiving significant investment in digital teaching methods. Among those attached to institutions which offer them, 78% of respondents said their Business School is investing a moderate amount or more in non-MBA master's degrees, which represents an increase of nine percentage points from 2020.

Doctorate level courses are not receiving the same levels of investment for digital teaching at most Schools – among those offering doctorates, just 47% of participants said their School is investing a moderate amount or more in digital teaching for these programmes and 9% admitted that no budget has been allocated for this at all.

To better understand Business Schools' investment strategy and provide greater context to the money spent on individual programmes by Business Schools, the survey went on to ask, in approximate terms, how much revenue is generated by each type of course at their Business School.

Among AMBA-accredited Business School leaders in this sample, 42% believe that their MBA programme(s) generates 40% or more of their School's total course revenue from fees. Business Schools' portfolio of bachelor's degrees are also seen as big earners – 39% of participants said that these generate 40% or more of their total course revenue from fees.

To better understand exactly in which areas the majority of Business School investments are being, the participants were asked to select from a range of options relating to online learning technologies, covering both synchronous and asynchronous teaching.

Figure 14: At your Business School, how much do you invest in digital teaching methods for each of the programmes below?

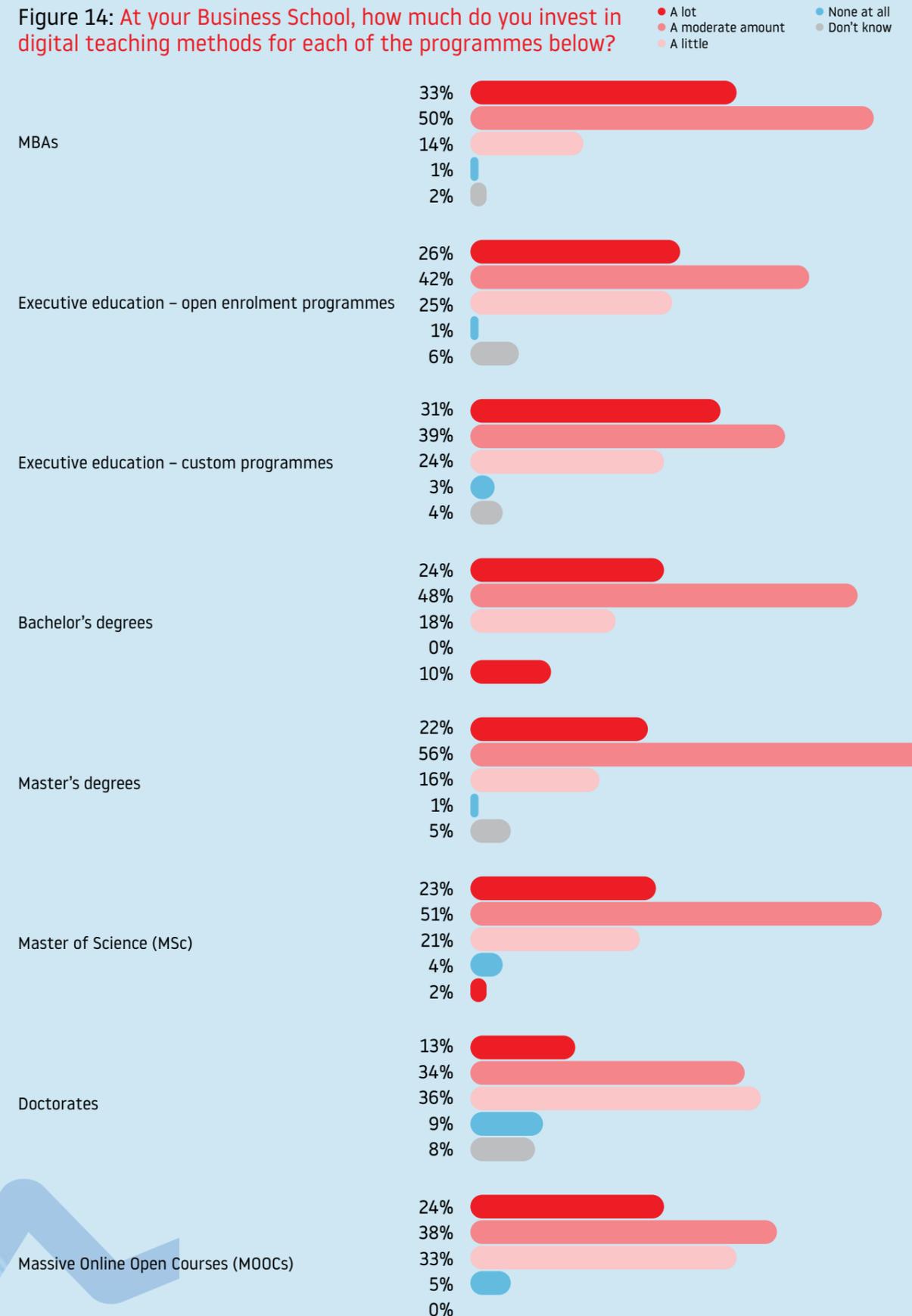


Figure 15: Approximately, what percentage of the total course revenue generated at your Business School from fees, is generated by the following programmes?

	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
● MBAs	3%	27%	16%	13%	14%	8%	5%	6%	3%	2%	4%
● Executive education – open enrolment programmes	7%	45%	19%	10%	10%	4%	1%	0%	2%	0%	2%
● Executive education – custom programmes	14%	49%	20%	6%	3%	2%	3%	0%	1%	0%	1%
● Bachelor's degrees	8%	19%	13%	21%	15%	8%	4%	1%	4%	1%	4%
● Master's degrees	11%	25%	17%	16%	10%	10%	3%	0%	2%	0%	3%
● Master of Science (MSc)	15%	39%	25%	5%	7%	3%	0%	2%	0%	2%	2%
● Doctorates	36%	41%	9%	2%	2%	3%	2%	0%	2%	0%	3%
● Massive Online Open Courses (MOOCs)	67%	14%	10%	0%	5%	0%	5%	0%	0%	0%	0%



As can be seen from Figure 16, the area most often receiving high levels of investment at Business Schools around the world is 'flexibility in learning' (cited by 77% of respondents). High levels of investment are also being made in the 'ability to work on team projects' (cited by 68%), 'two-way discussions between facilitators and students' (64%) and networking opportunities (56%).

Student engagement metrics and wellbeing initiatives for students are areas in which the majority of Business School leaders do not believe their School is investing heavily, cited Only 25% and 18% cited student engagement metrics and student wellbeing initiatives, respectively, as key areas of current investment.

With regards to future investment, 82% of responding Business School leaders said that they are planning to invest further in digital teaching methods over the coming two years. The remaining 18% are unsure. No survey participant said that their School is not intending to invest in online teaching methods. Interestingly, these results mirror those in response to the same question in 2020, showing a continued understanding of the need for investment in digital.

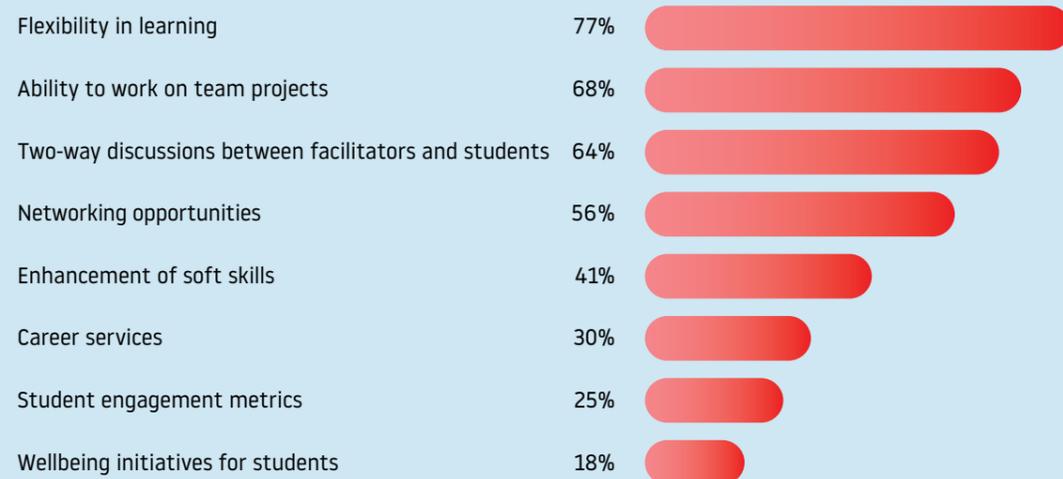
Participants were also asked where they believe their Business School's investment priorities lie over the next two years. Here, 'flexibility of learning' comes out top once more – 67% of leaders named this as a priority area of investment for their Business School. Other top priorities selected by participants include the enhancement of soft skills (57%) and student engagement metrics (45%). Career services and student wellbeing initiatives are considered less of a priority among respondents, with only 34% and 25% (respectively) believing their Schools will prioritise these areas for investment.

Closing off this section of the survey, participants were given an opportunity to describe exactly how their Business School is intending to invest in the future with regards to digital teaching methods. Common answers given include the need to invest in new hardware, the training of faculty, online content production and readying programmes for hybrid learning formats.

Some specific individual answers on the question of future investment plans include:

- Develop a platform for online learning and promote programmes to the international education market
- Working closer with the learning design team
- Digital content creation and enrichment of the LMS ecosystem
- New VR system and online course system
- Build new virtual platform for further teaching and learning
- Assessments (especially exams) augmented reality and gamification
- Create new labs, an AI institute and new simulation software
- Course transformation and development of learning management skills in teachers

Figure 16: In which areas has your School invested most in online learning technologies (synchronous and asynchronous)?



# CONCLUSION

In January 2021, when AMBA & BGA released the first iteration of its Education Technology Research, in association with Barco, the overarching takeaway was that things would never be the same as they were pre-Covid-19, and that a new era – one we'd only previously debated and considered – had arrived almost overnight.

The Business School leaders who took part in that research showed their Schools to be both pragmatic and agile in the face of the disruption caused during 2020. Initially reactive to the need for the rapid adoption of new technology in the face of social distancing, they then ascertained challenges quickly and moved to address them.

But, at that time, commentators in both the edtech and business education arenas were questioning whether Business Schools would be continuing to adapt to the impact of Covid-19, or if they would enter a new phase of innovation – moving from crisis mode to creative strategy and the development and finetuning of technology provision, as the world began to move into recovery, once the availability of vaccines began to reduce the impact of Covid-19 in many parts of the world.

Nine months on, this fresh piece of research reveals that Business Schools have more than adapted and that the vast majority of Business School leaders (84%) want to keep the technology they've put in place over the past 18 months, with no respondents wishing to return to their pre-Covid status quo.

Approximately two thirds of participants would like to see faculty and students continuing to work online in at least some aspects of the courses, suggesting that Business School leaders would like to see their Business School move to hybrid or blended models of education.

But perhaps most importantly, an overwhelming 83% of Business School leaders believe that the pandemic has triggered major changes to their long-term strategy. While the jury was divided towards the end of 2020 (among those responding to the report released in January 2021), Business School leaders are now seemingly

confident that blended and hybrid models will replace the traditional classroom-based delivery of courses over the next five years. Since the end of last year, there has also been an increase of 24 percentage points in terms of the volume of survey respondents using virtual classrooms (75% in 2021 vs. 51% at the end of 2020).

While there is a sense of optimism in the long-term future of digital learning at Business Schools, challenges remain – not least in terms of a perceived lack of engagement from students (cited by 64% of survey participants), connection and bandwidth issues from students (cited by 54%) and the need for ongoing amends to course materials required for digital delivery (cited by 53%).

Yet, it is flexibility of learning, rather than concerns about delivery, that has moved to the forefront of Business School leaders' minds, in terms of their investment priorities for the next two years, with more than two thirds (67%) of leaders believing that is where their Business School must put its effort and budget.

There has been no shortage of investment in enhancing and improving learning systems, with the MBA receiving the most funding for digital teaching methods. More than three quarters of Business School leaders polled (77%) are continuing to invest in online technology to enable more flexibility, and eight out of 10 leaders plan to invest yet more in this area between now and 2023. Other top priorities include the enhancement of soft skills (57%) and student engagement metrics (45%).

While Covid-19 still looms large over strategists for any immediate initiatives, the exponential change and evolution witnessed at Business Schools over the past two years has begun to address lingering challenges with which educators had been grappling for years – globalisation, volatility, flexible learning, lifelong learning, consumerisation, the influx of digital natives, to name but a few. Now that the mechanics are in place for Business Schools to use technology effectively, the opportunities for business education to further develop global, agile and personalised offerings seem limitless.

