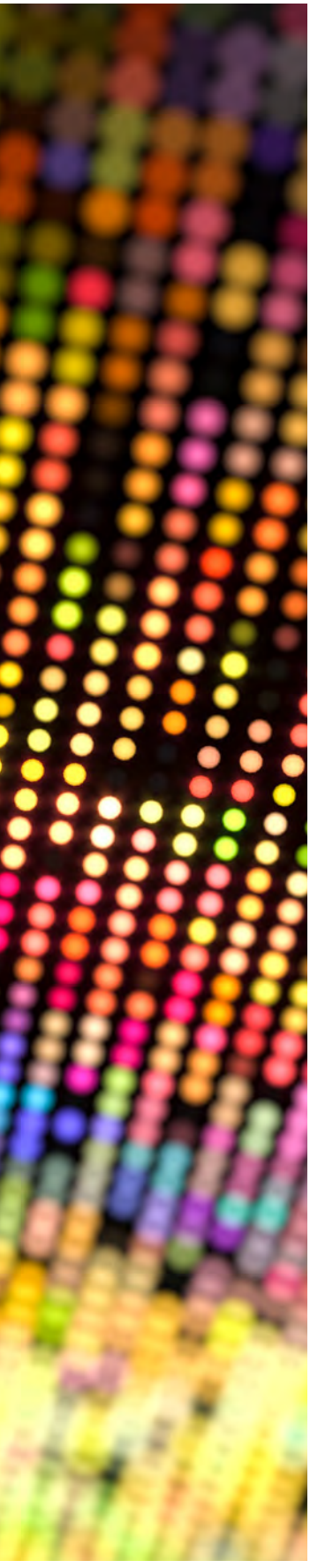
Digitalising management education: Exploring the possible

Read three perspectives, from **Arnoud De Meyer**, **Thomas Bieger** and **Robina Xavier**, that describe the opportunities and challenges of the digital transformation for business schools. All argue that having a sound strategy is essential



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Current graduates have to be equipped with the future skills needed in a world full of data and analytics. Many jobs that today's learners will be doing in 2030 haven't been invented yet. This may be a scary thought for some, while others may have already embraced the concept of lifelong learning and prepared themselves for ongoing professional and personal development. In other words, we can observe that the future seems uncertain but is still full of prospects. In a broader sense, this is also true for business schools. The digital transformation is *the* challenge of the 21st century and will no doubt have a significant impact on management education and the, perhaps underestimated, possibilities for the schools.

Reinventing the business school
Arnoud De Meyer

Technology has played a role in management education since the early nineties. I was an active supporter of the use of videos in management education, and then of the early development of online course modules that enabled the hybrid delivery of programmes around the turn of the century. I closely observed the development of massive open online courses (MOOCs) from 2010 onwards. And now I have actively participated in the complete switch to online delivery of courses and project work, forced upon us by the pandemic. At each development stage, pundits predicted that management education would radically change. In the first three waves there were some interesting experiments, but that radical change within business schools didn't happen. What did change, however, was the programme organisation, with a succession of learning management systems (LMSs) that supported faculty and students in face-to-face course delivery and evaluation. Will this last wave of technological change, with a complete online delivery of undergraduate and graduate programmes, create that lasting change?

My answer is yes, for at least three reasons. First, over the last two years, faculty all over the world had no choice but to develop online delivery of their courses and have been actively sharing best practice. As an academic community we have been creating a common knowledge base on how to take advantage of digital technology to improve our programmes and courses. This common good makes a big difference in convincing faculty of the value of at least hybrid delivery of programmes. Second, platform technologies have become more standardised and powerful. We may not yet have a dominant design of what a learning platform is, but we are far beyond the experimentation and tinkering that some leading business schools did with their in-house developed platforms. Some of the major 'edtech' companies have come up with excellent products and have raised ample financial resources to continue developing their platforms. Business schools will be able to enter into a series of partnerships with such companies. They can leave it to them to develop the technology, while focusing themselves on content development and pedagogical innovation. Third, we now see in our classrooms students who cannot remember the time when

there were no smartphones or social media. They are used to learning and developing through their access to rich media. The time of written case studies, textbooks and lectures in front of a large hall is behind us. Therefore, I am certain that a business school without a clear and ambitious digital strategy in education and research risks losing out.

The opportunities offered by a good digital strategy are ample. One of the major advantages that I see is that we can be a lot more flexible in programme design and organisation. Students get the opportunity to organise their programmes in a far more flexible way, for example, by combining courses from different schools. Faculty also have more flexibility and can use a combination of online modules with in-class discussions. I know several schools where faculty have the ability to deliver up to half of their classes online in the future. While I suspect that some business schools will stick to the traditional face-to-face interactive delivery, in particular for shorter postgraduate programmes where social networking remains a prime objective, I am also convinced that the opportunities offered by the current generation of digital technology will enable some of us to reinvent what a business school is all about.

There will be challenges. First, I suspect that many business schools will have to enter into partnerships with commercial organisations that provide and develop learning platforms, so they will have to share some of the revenues with them. I observe that for some asynchronous certificate courses these companies can take up to 60% of the revenues. That will reduce the schools' margins. Theoretically, one can compensate for this with higher volumes, but that changes the business model of the schools even more: their certificates and degrees lose some of their exclusivity and they risk becoming a commodity supplier. Second, I have seen a significant change in the role of the student. Before the digital revolution a student was, well, a student, subordinate to the faculty. Over the years I have seen that role gradually evolve into that of a partner: faculty and students interact with each other as partners to create the best learning environment. With digital technology the students get an even stronger influence on, if not control over, the programme design and organisation: they may determine when and how to study, what courses from different institutions to combine, which platforms to use, etc. Personally, I find this an enriching experience but it does raise major issues for business schools about how to organise quality control, degree certification, the measurement of the learning progress of individual students, etc. Third, we will have to invest in constant digital upskilling of the faculty. Technology is still evolving rapidly: widespread applications of AI, machine learning, virtual reality, etc. are around the corner. Faculty whose main preoccupation is to continue researching in their own disciplines may not have the time or incentive to keep themselves technologically up to date. We will need to find methods to keep faculty abreast of the technological evolution.

2030

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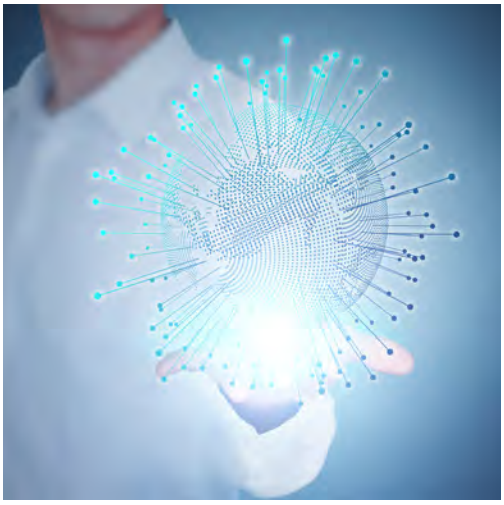

> *Learning platforms provide new learning instruments, like additional documents, assignments, quizzes, video clips explaining complex content, or recorded lectures and blogs*

Business schools need a clear and ambitious digital strategy incorporating these opportunities and mitigating some of the risks, and with ultimate accountability with the school leadership. But it has to be a flexible strategy. As I wrote elsewhere, about the management of projects that are confronted with a high level of uncertainty, there are two major ways to cope with uncertainty in strategy development: with an agile learning approach or by launching several projects in parallel and applying some kind of 'survival of the fittest' approach to those projects. My advice is to invest in a manageable portfolio of digital experiments and projects, and ensure that you consolidate and share your learning from each of these projects across the whole school. Do not commit to a fixed, immovable strategy but keep flexibility, commit to learning and maintain a degree of freedom in the portfolio of partners with whom you will need to work.

Strategic positioning of programmes
Thomas Bieger

Programmes are affected by digitalisation in three dimensions. Firstly, the programme curriculum must cover the competencies necessary for professional work in a digital age. Existing professions and careers require additional competencies. For example, a marketing programme has to include business analytics. Additionally, programmes have to prepare students for new professions, data analysis, for example, or even include new disciplines, like neuromarketing. Secondly, new forms of work and new life patterns ask for new personal skills and even attitudes. Examples include the ability to cope with affluent information and ambiguity, self-organisation, in-home working settings, collaborative online working and critical thinking, together with the increasing challenges of the social web. We have to see this development in a lifelong learning setting. Thirdly, the far more striking and, to an extent, even disruptive changes for schools come in programme delivery as new digital technologies induce them. Learning platforms provide new learning instruments, like additional documents, assignments, quizzes, video clips explaining complex content, or recorded lectures and blogs. IT-based communication tools, like video conferencing technologies, enable the disconnection of place and time of teaching and learning. In addition, IT-based applications, like gamification and simulation, allow for new dimensions of learning experiences. Using these instruments and tools, students create data that schools could analyse with big data and AI. Schools could gain new insights into students' learning behaviour with teaching and learning analytics, allowing for evidence-based programme development and renewal.

PICTURE COURTESY OF UNIVERSITY OF ST GALLEN

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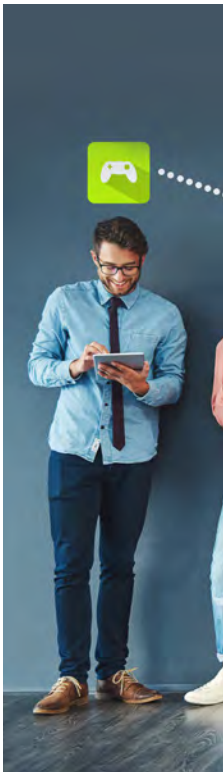
ICT not only enables new forms of courses. In addition, it facilitates complete online delivery of whole programmes. Altogether, I am sure that the variety of learning designs increases. Thereby, a categorical differentiation can be made between synchronous or asynchronous delivery. This not only impacts students learning behaviours and experiences. It also has a major impact on target markets and a school's core competencies in terms of research focus areas and the pedagogical skills of its faculty.

All this requires significant resources. Additionally, how a school applies technology affects its positioning in the academic value chain. Therefore, a school's approach to digitalising its programmes has to be led by strategy. A school's innovation efforts have to include faculty, their moderation and coaching skills, investments in learning support technologies, development of specialised support infrastructure, and dedicated technical staff in a third space between academia and administration. Hence, programmes cannot only be managed to ensure suitable curricula content and teaching quality. Schools have to make deliberate decisions on using technology and related innovation processes in programme delivery as a new or more emphasised dimension.

As with any strategic issue, there is no one-size-fits-all solution. Nevertheless, consistency is required, for example, regarding the school's vision, the markets a school wants to serve, the type of programmes it offers, and the investments it makes in technology or pedagogical innovations. Inconsistences might lead to dilemmas that will affect a university's quality and strategic positioning.

It seems clear that there will be no one, dominant model for using technology in programme delivery and structure. But I think there will be a shift of mere knowledge learning from the classroom to flipped classroom concepts. Most probably, we will still see face-to-face-only teaching institutions in the future. They bring together international students and international, research strong faculty anchored in their regions, and act on an integrated academic value chain. Other schools might operate as international online institutions with a maximum fragmentation of the value chain, for example, focusing on the pure development of IT-based learning tools or serving as a platform for online programmes. Thereby, they could rely on the research results of others.

Taken all together, it seems evident that schools need a clear stance on their digital learning positioning as a basis for decisions on their programmes. Otherwise, a school's position in the market will be blurred, resources will be wasted and quality will be reduced over time.



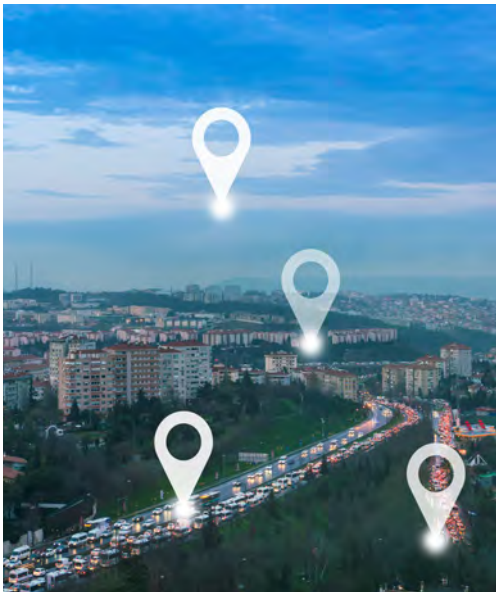
The example of the **University of St. Gallen (HSG), Switzerland**, might inspire and trigger some thoughts on crucial aspects of a consistent strategy and programme delivery. The university is a leading European business university and a mid-sized research university. Also, it has strong ties to practice thanks to a well-established physical campus and its location in a very thriving business and university ecosystem in Switzerland. Furthermore, as a public university owned by the canton/state, it wants to positively impact its immediate regional environment. Therefore, it has taken the strategic decision to be a campus university and focus on student value based primarily on on-campus interaction.

As a result, pure online programmes are not included in the school's programme portfolio.

Nevertheless, the university developed online courses to increase faculty competencies in digital learning that can help them move to blended learning. In addition, the school uses digital learning to support the acquisition of knowledge. For example, a gamification app has been developed for the *Introduction to Management* course to allow students to learn theoretical course content in cheerful competition. The university also uses technology to enhance classroom experience in blended learning approaches. For example, for the master course in *Marketing Management*, a management simulation allows students to reflect and apply learned content. Accordingly, the university invests in the pedagogical capacities of its faculty. Therefore, it operates a Centre for Didactical Development (Hochschuldidaktisches Zentrum) and offers technical support to faculty with its Teaching Innovation Lab.

The primary strategic investments are in improving the students-faculty ratio by, firstly, employing additional faculty and, secondly, investing in the physical campus with new campus buildings and infrastructure, eg, a new learning centre, the "SQUARE". In addition, the school employs learning analytics to develop the delivery quality further. For example, for the *Introduction to Management* course, a sample of students is monitored based on a learning diary approach linking learning strategies to students' success. Together with these efforts, the strengthening of research guarantees that front end content is delivered that holds an advantage compared to standardised and commoditised offers of global online teaching platforms.

Further good practice examples include schools focusing on online programmes and, thereby, expanding their market reach and leveraging their specific research focus with a clear positioning strategy and top-quality cooperation partners around the globe. Other schools may also focus on on-campus delivery with a clear investment strategy in technology tools like simulations that enhance students' learning experiences. Schools can potentially leverage their simulations by selling them as a service to other schools.



Enriching the internationalisation agenda
Robina Xavier

Being free to explore the possible in a world where some things recently became impossible, albeit for a limited period of time depending on where in the world you are based, has seen innovative business schools fully embrace opportunities to enrich their internationalisation agenda with digital technology, and I believe this will continue at speed. Digitalisation opens up a wealth of opportunities for schools and their partners to connect across borders, time zones and social networks. Innovation can occur within all parts of the internationalisation considerations for schools: policy, context, content and networks. Geography, social or political pressures often limit the engagement of international faculty in many of our schools. Technology allows richer engagement with international faculty regardless of their home location, from expert lectures through to longer-term engagements for digitally-visiting professors. While maybe still second best to being there in person, technology advances are making these experiences richer by the day and often provide the opportunity to engage with an expert in their field who could never invest the time needed for an in-person engagement. Similarly, home faculty can engage more fully with international partner schools on research projects or teaching programmes where direct engagement may be limited by financial and personal constraints. International mentors can be established to support faculty development, particularly for schools where the international experience of existing faculty is limited. Schools can leverage both their internationalisation and impact agendas through enhanced digital engagement for students. Student projects can be enriched by engaging with clients or other student groups outside a home country or by having drop-in sessions with high-profile international executives including alumni. Live case studies can bring together international participants to guide and challenge students on cultural implications of different ideas tested in real time in multiple markets. Students can provide direct support to vulnerable communities in other countries or help lift the aspirations of the next generation of international leaders through international buddy programmes. Where the cost of travel is too high or caring responsibilities too great, schools can expand their international student profile through offering online learning to students in their home country. This could be for pathway programmes or full programmes or something in the middle. Not only does this provide opportunities for those who could never take up in-country study, it also has the potential to enrich the experiences of on-campus students as they are more directly exposed to the experiences of others.

The digitalisation of a school's internationalisation agenda should always start with the school's strategy. Whatever is planned needs to make sense within the strategy and must always be deliverable at the level of quality expected of other activities in the school. Using digital technology is not an excuse to do things in a substandard way; to the contrary, it is the

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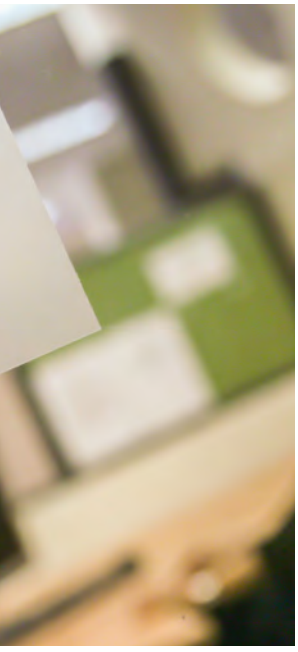

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opportunity to do things differently to bring greater benefits to the school and its stakeholders. It is worth investing time upfront to be clear about the benefits and risks. This can concern all aspects of operations including the student body, faculty profile, partnerships, research and connections to the world of practice. The key benefit as described above is one of access. One of the key risks is that schools may stop investing in in-person experiences and see the digitalisation agenda as an 'or' rather than an 'and' within their overall internationalisation strategy. This could be particularly true for schools struggling with their faculty profiles, international student cohorts or student exchange programmes, or for those trying to spread their financial resources further in challenging times. There are many studies that suggest an online experience may not be as rich as an in-person experience for particular activities so the quality of engagement and interaction always needs to be considered. As with all things, we will learn through doing, so experimenting in this space and sharing those experiences will benefit the entire EFMD network.

Digital technology is underpinning much of our everyday life so it makes sense to see it as also playing a key part in our schools' internationalisation agendas. I believe the integration of a school's physical and virtual internationalisation activities opens up opportunities to enhance the experiences of both our students and faculty and enables richer engagement with a wider set of stakeholders. Schools have the opportunity to distinguish their offerings through this agenda or form collaborations with like-minded schools or other partners. Digital technologies can help overcome the tyranny of distance and bring our increasingly diverse network of international schools closer together.

Conclusion

As the worlds of work and life are changing, management education is changing. Consequently, schools with the ambition to be among the best globally need to keep up with these developments. We should all embrace technological change as an opportunity to connect across time and borders, enrich experiences and gain valuable insights. Collaboration in the framework of EFMD Global will support schools on this journey.

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