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The future of business education: A commentary in the shadow of the Covid-19 pandemic

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ABSTRACT

The Covid-19 pandemic has disrupted business schools worldwide mainly through the shift to emergency remote teaching. I provide a rudimentary framework to understand this transformation through recognizing the changes in the university, the business world and the student. This disruption is going to lead to a decade-long technology-led remaking of business education. Finally, I share a triphasic model that maps the evolution of online learning in business schools.

1. Introduction

The Covid-19 pandemic is unprecedented as a public health phenomenon due to the co-mingling of three factors, a high level of contagion, significant fatality rate and an absence of any vaccines. As a result, there has been a need for draconic emergency governmental actions. There is a strong effort to change the behavior of citizens, primarily through social distancing and “stay at home” strategies. The effort is to “flatten the curve” in order to reduce the public health burdens on the system.

While the cause of the disruption was public health, the resulting changes have been gigantic. It is no exaggeration to describe the pandemic as a once-in-a-generation “black swan” event (Taleb, 2007) in terms of the resulting economic and societal consequences. A comparison of recent “black swan” events reveals the uniqueness of the current pandemic (see Table 1).

The resulting economic and social phenomenon from social distancing has led to some swift changes in the higher education landscape. Never in our history have entire student bodies been abruptly shifted from face-to-face to remote instruction through the use of digital technologies (Zimmerman, 2020). Faculty members have had to adapt their courses in very short order to meet the moment with very little formal training. The lives of students have been changed in multiple ways, including the loss of internships, dislocations from their homes and campuses, and, the need to learn new technologies in addition to the content area (Govindarajan & Srivastava, 2020).

Previous research indicates that online learners perform marginally better than students in traditional classroom environments and blended learning approaches might be fruitful (see the meta-analysis published by Means, Toyoma, Murphy, & Baki, 2013). Despite this, faculty continue to be skeptical about the efficacy of online learning. A meta-analysis using the well-recognized Technology Acceptance Model as the basis “revealed concerns among faculty regarding their perceived barriers to student success in online classes, uncertainty about their image as online instructors, technical support needs, and their desire for reasonable workload and manageable class enrollments in online classes” (Wingo, Ivankova, & Moss, 2017, page 15). Going beyond the short-term will require a massive institutional shift to bridge the imperative for online learning with the objections from the professoriate.

This change will have to be achieved as universities face tremendous financial pressures as a result of the pandemic. Enrollments at this time are unpredictable for the upcoming terms and vary a lot based on the discipline of study. Fall quarter student body sizes are, in particular, hard to predict leading to economic and financial uncertainty for universities. At the same time, due to volatility in the stock market, the returns from university endowments are likely to be lower than expected creating further pressures. Small private institutions will be most hit and several might face calamitous consequence including closure.

While the higher education sector will have to face multidimensional impacts, business schools are affected in one other significant way. We have to pay attention to how the pandemic is shifting contours in the business world. As the business world changes, so should business schools. Businesses in some industries (e.g., retail, airlines, hospitality, sports, events) have been immediately affected by the reduction in revenue. Students that were planning careers in these fields might expect long waits or the need to pivot in other directions. Most small to medium businesses have few cash reserves. Despite governmental assistance, this crisis will lead to the bankruptcy of several companies leading to bleak economic prospects for the current
batch of graduates. However, businesses that are digitally transformed and are well suited to the rigors of home delivery have done exceptionally well during this time (notably, Amazon).

2. What do university presidents think?

Inside Higher Education conducted a survey of 172 university and college chief executives (presidents and chancellors in the US system). 56% of participants were from 4-year private institutions, 27% from 2-year public (i.e., institutions that include junior and senior years only) and 17% from 4-year public universities. This represents the first comprehensive survey of decision makers at key American universities in the shadow of the pandemic. In the short-run, these higher education leaders expressed concerns for mental health of students, mental health of employees, short-term unbudgeted financial costs, accelerated rates of student attrition and the physical health of employees. The majority of Presidents had moved the majority of all in-person classes online, suspended international travel for faculty/staff, implemented work-remote policies for staff, suspended international travel for students, suspended athletic programs, and closed most/all campus buildings (see Table 2). The Presidents generally felt that the financial stimulus from the governments provided short-term relief from losses. However, they were concerned about finding robust long-term measures to ensure the financial health of the university.

2.1. How business schools will transform

The business schools currently face a once-in-a-lifetime shift to emergency remote teaching. I present a rudimentary model that can act as a sense-making and decision-making guide. The model considers the transformations of the university, the business world and the student as a sense-making and decision-making guide. The model considers the impact of these transformations is moderated by the IT infrastructure preparedness. The move to emergency remote teaching due to Covid-19 provides a discontinuous disruption to business-as-usual. Norris and Lefrere (2011) identify five stages that universities have to go through to emerge as leaders in online learning. Their key advice may be summarized in this excerpt (page 65):

The key to evolving new, sustainable models for online learning is to utilise technology to:

- transform business models by: continuously seeking new income streams that can mitigate the need to continuously increase tuition to fill revenue gaps, reducing operational overhead (i.e. new buildings, parking lots, dorms) and other costs, seeking lower price points and enabling more rapid completion of learning objectives, and reducing the total cost of achieving learning goals.

While Norris and Lefrere (2011) and others imagined a more nimble, agile and open university engaging with extant knowledge systems, they did not foresee that this transition might be forced due to the Covid-19 pandemic. Much of their advice still holds. However, as a result of the stimulus of Covid-19, the higher education system world-wide will go through a decade of radical technology-led transformation. Below, I share five trends that will revolutionize how we educate.¹

2.1.1. The algorithm as professor. Rather than learning from a human professor, students will learn from an algorithm. The AI-enabled algorithm will provide personalized learning experiences. Students will be able to quickly master rudimentary and routinized tasks. Then, the algorithm will prepare them for an in-person experience where a “warm body” will engage them in Socratic dialogue.

2.1.1.2. The University as a Service (UaaS). At this time, we have a linear conceptualization of society. Students go through the school system, some get an undergraduate degree and then even fewer go to graduate school. The problem is the rate of change in the world is too high for this educational structure to sustain. Any given degree program might have a half-life of 1 to 5 years, based on the field. Students will need to learn what they need, when they need it. Personalized, continuing education will become the norm.

2.1.1.3. The university as assessment powerhouse. In the world of AI and automation, learning can come from many directions. Students will learn from each other, algorithmic systems and from public information. Universities will continue to have a powerful place as assessors of learning. Students will come to universities to gain objective credentials based on powerful assessment of learning.

2.1.1.4. Learning personalization will support diversity. Students of the future will have access to multiple pathways to learn the same content. Imagine a course on financial accounting that is available through algorithmic engagement, animation/video/Augmented Reality, face-to-face instruction or any mixture thereof. Using assessment data, the university of the future will be able to pinpoint the learning needs of the student and provide a personalized experience.

Notes

¹ These thoughts were featured in a LinkedIn post by the author.

Table 1

| Comparison of black swan events. |
|-------------------------------|
| 9-11 | Katrina | Covid-19 |
| --- | --- | --- |
| **Cause** | Terrorism | Nature | Medical |
| **Nature of impact** | Episodic | Regional | Exponential Growth |
| **Scope of impact** | National | Engineering of levees in the New Orleans area | Global |
| **Impact on universities** | Short-term disruption | Regional impact | Global impact |
| **Infrastructure impact** | Suspension of all flights in the USA | Multi-state shutdown in US/lockdown in some countries | Multi-state shutdown in US/lockdown in some countries |
| **Loss of human life** | 2,996 | 1,839 | 61,514 in USA, 228,000 worldwide (Google repository, 4/30) |
| **Time horizon** | Few months | Few months | Potentially 1–2 years |
| **Governmental response** | Bailouts | Regional emergency assistance | National stimulus bill |
| **Secondary event** | None | None | Mutations likely |
| **Long-term impact** | Anti-terrorism and homeland security infrastructure | Physical infrastructure emergency preparedness | Digital transformation |

¹ These thoughts were featured in a LinkedIn post by the author.
2.1.1.5. Problem solving through ethical inquiry. As the influence of Artificial Intelligence and automation explode in our lives, the need for students to become problem solvers through ethical inquiry will be great (e.g., Letheren, Russell-Bennett, & Whittaker, 2020). Clearly, the future is not simply about what the answers are. It is about what problems we wish to solve, given what we know. Students will need to become more comfortable with the need to evaluate AI algorithms on the basis of their efficacy and also, their ethical foundations.

2.1.2. Transformation of the Business World

2.1.2.1. We are all in the healthcare business now. Healthcare management will become a part and parcel of every single business. Consumers will expect hospital-level hygiene in retail environments. It will become common to credibly certify the health of physical environments through the use of public and private agencies. The bottom line is that healthcare management will become a top priority of CEOs and boards. Introducing curricula in this domain through partnerships will enhance the ability of the business schools to prepare our students for the coming reality.

2.1.2.2. Telework/Work-from-Home. Telework arrangements used to represent a minority of the workforce for any given organization. As a result of Covid-19, organizations have learned that there was some initial reduction in productivity. However, over time, the level of productivity has been similar or higher than previous status quo. Therefore, this is likely to act as a stimulus to widespread adoption of telework to a large proportion of the organization (Dingel & Neiman, 2020). Preparing our students to succeed in this environment will be important. Already, one Indian IT firm has announced that 75% of its workforce will stay with WFH arrangements reducing the need for physical infrastructure (Luce, 2020).

2.1.2.3. Supply chain re-optimization. Businesses are reoptimizing their supply chains to ensure there is no single point of failure. This is going to require a deeper integration of supply chain management into the business school curriculum.

2.1.2.4. Understanding alternative investments. During the Covid-19 pandemic, there has been a renewed interest in alternative investment vehicles. This is going to lead to a resurgence of fintech curriculum in business schools.

2.1.3. Transformation of the student

At this point, the student is going through a period of confusion as a result of the rapid change in their learning environment. Many students continue to value physical interaction and were willing to pay higher tuition to ensure that they received it. The abrupt shift to emergency remote teaching has led to a reassessment in the value equation. Business schools must keep in mind that the transformation is taking place not just with their current students, but also with their future students who are currently in elementary school and beyond.

Designing programs keeping the transformed student in mind leads to these lessons:

2.1.3.1. Virtual global education. We must remind ourselves that the pandemic has induced in us a greater belief in global connections (Luthra, 2020). Global programs have traditionally suffered from travel contingencies and immigration barriers. The pandemic affords us an opportunity to create a strong virtual global education program (Whalen, 2020).

2.1.3.2. We are all responsible for the mental health of the student. Faculty members are likely to imagine the use of technology in online learning alone. However, new systems like EAB Navigate allow universities to keep track of the holistic experience of the student (Francis, 2019). By providing a comprehensive view of the student, universities are better equipped to support all students. Incorporating these wellness strategies as students increasingly work from home will lead to new approaches.

2.1.3.3. Utilizing AI-based career planning and management. Technology tools are now expected by students not just for instruction, but also for other aspects of their experience. AI-enabled career planning and management will allow students to receive personalized guidance on
how to imagine their professional life.

2.1.4. Two key moderators—IT infrastructure and financial constraints

Many universities that are eager to enact changes in their programs will face two key moderators. The IT infrastructure of the university usually establishes the architecture that enables programs. Schools within the university may not have the discretion to develop a radically different identity. Covid-19 has provided an innovative stimulus whose potential will be constrained by diminishing budgets due to decreased enrollments, shifting government subsidies, reduced ability to sustain high tuitions and lower endowment payouts due to the market downfall. These two moderators will exert considerable influence in limiting the extent of the transformation of the business school. The physical infrastructure in most college campuses has been put in place keeping face-to-face programs in mind and, therefore, are likely to be diverted to some degree as online learning accelerates.

2.2. The evolution of online learning

As a result of the Covid-19 social distancing efforts, there has been a large-scale transition to online learning (Govindarajan & Srivastava, 2020). Over time, business schools should plan using a triphasic framework that is shown below (see Fig. 2).

The first phase is instructional continuity, i.e., emphasizing the continued availability of learning opportunities to students during the disruption. Business schools are ensuring that students receive instruction during this time. The focus is on finding a way to maintain services during the time of an emergency. During this time, business schools are engaging in “emergency remote teaching” (Hodges, Moore, Lockee, & Bond, 2020, no page numbers). The excerpt below provides a clear distinction between emergency remote teaching and online learning.

In contrast to experiences that are planned from the beginning and designed to be online, emergency remote teaching (ERT) is a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances. It involves the use of fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated. The primary objective in these circumstances is not to re-create a robust educational ecosystem but rather to provide temporary access to instruction and instructional supports in a manner that is quick to set up and is readily available during an emergency or crisis. When we understand ERT in this manner, we can start to divorce it from “online learning.” (Hodges, Moore, Lockee, & Bond, 2020)

Importantly, we must recognize that what universities currently face is a short-term effect. It is a stop-gap measure rather than a first-principles design of the instructional experience. During this time, the nature of degrees, the business model used by the college and the curriculum are static. There is simply an attempt to deliver the existing curriculum and programs to the current audiences.

The focus in phase 2 involves instructional design. Emerging from the first phase, the next step will involve developing coherent student experiences that are built on sound instructional design principles. If the first phase was focused on merely continuing the educational service, the second phase is built on the ideas of developing high-quality cohesive experiences. The components of such a well-designed online experience include digital learning methodologies, digital learning contexts, tools and simulators and support systems for digital learning (Sousa, Carmo, Gonçalves, Cruz, & Martins, 2019).

Finally, the future new normal will include the use of AI-based innovative services to enable instruction, student experience and online communities. Examples of such innovation already exist. For instance, students at Georgia Tech received assistance from Jill Watson, an AI-based service innovation (Lipko, 2016). Enacting the future world where AI-enabled algorithms will take the role of professors in key scenarios will prove to be a transformative experience.

3. Conclusion

Covid-19 forced changes in the university system at a scale that is likely to be unprecedented. This event coincides with the increase in capabilities of information technology due to the advent of artificial intelligence, machine learning and automation. The result will be a reshaping of the university. I firmly believe that business schools will rise to the occasion and will adopt a leadership role within the university.

Declaration of Competing Interest

All opinions expressed here are personal and do not represent a position of the University of Washington.

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