



CASE STUDY

Toward Ending Educational Privilege

Coursera: An Agile Company Partners with the Best Universities to Rapidly Scale Higher Education and Lifelong Learning

May 2020



IFC

**International
Finance Corporation**
WORLD BANK GROUP

Creating Markets, Creating Opportunities

ABOUT IFC

International Finance Corporation (IFC)—a sister organization of the World Bank and member of the World Bank Group—is the largest global development institution focused on the private sector in emerging markets. We work with more than 2,000 businesses worldwide, using our capital, expertise, and influence to create markets and opportunities in the toughest areas of the world. In FY19, we delivered a record \$19.1 billion in long-term financing for developing countries, leveraging the power of the private sector to help end poverty and boost shared prosperity.

ABOUT THE CASE STUDY

Expanding access to quality and affordable education is a central element to eliminating extreme poverty and promoting shared prosperity. In developing countries, private education providers play a critical role in the delivery of education, skills, and training that is affordable and relevant to the needs of the labor markets. IFC's education practice is developing several case studies that showcase success stories in IFC's education portfolio around scale, skills, innovation, and affordability. The case studies highlight how IFC clients have contributed to meeting IFC's strategic goals in education for (1) developing skills and enhancing employability of graduates and trainees, and (2) increasing reach and impact at all levels of education.

WRITTEN BY

This case study was authored by Ann M. Casanova, with valuable insights provided by IFC colleagues Juliana Guaqueta Ospina, Shannon Atkeson, Salah-Eddine Kandri, Thomas Kerr, and Elena Sterlin.

ACKNOWLEDGEMENTS

A special note of appreciation is extended to Coursera for sharing details about the company, in particular Daphne Koller, Jeff Maggioncalda, Leah Belsky, Emily Glassberg Sands, Shravan Goli, Arunav Sinha, Tom Kovats, Lily Gordon, Chandni Brunamonti, and Eva Nierenberg.

In addition, IFC would like to thank Professors Matthew Rascoff from Duke University and James DeVaney from University of Michigan for sharing insights about their experience with Coursera.

Special thanks to Aliza Marcus for communications advice, Leticia Crentsil for copy editing, and Irina Sarchenko and Scholastica Graphic Design for the creative design.

DISCLAIMER

The findings, interpretations, views and conclusions expressed herein are those of the author and do not necessarily reflect the views of the Executive Directors of IFC or of the World Bank or the governments they represent. While IFC believes that the information provided is accurate, the information is provided on a strictly "as-is" basis, without assurance or representation of any kind. IFC may not require all or any of the described practices in its own investments, and in its sole discretion, may not agree to finance or assist companies or projects that adhere to those practices. Any such practices or proposed practices would be evaluated by IFC on a case-by-case basis with due regard for the particular circumstances of the project.

RIGHTS AND PERMISSIONS

© International Finance Corporation 2020. All rights reserved. The material in this work is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law.

PHOTOS

@ Coursera and Shutterstock



Table of Contents

Supporting the Digital Transformation of Higher Education to Increase Access	1
In Search of a Viable Business Model	5
An Adaptable Business Model: Responding to Market Needs	9
Results: Coursera Emerged as a Market Leader	19
The Role of IFC	23
Conclusion	25
Annex A: Credentials and Tuition Costs	26



Coursera is helping higher education institutions undertake digital transformations with Silicon Valley level-of-quality tools to rapidly deploy online courses on their campuses.

Supporting the Digital Transformation of Higher Education to Increase Access

When Siddhant S. was a university freshman studying information technology at the Indian Institute of Information Technology in Gwalior, India, he wanted to learn Python, a specialized computer programming language, but it was not offered by his small institution. His brother recommended [Coursera](#), the largest online learning platform in the world, which partners with prestigious universities to deliver courses and degrees. Siddhant enrolled in [Programming for Everybody \(Getting Started with Python\)](#), offered by the highly rated “Professor Chuck” at the University of Michigan.

“The content was outstanding,” recalled Siddhant. “The lecture videos and programming assignments covered the material in breadth, as well as depth.” Hooked on the caliber of quality and the ease of access, Siddhant started taking courses in computer science, machine learning, and data science. Then he tried Specializations from the University of California, San Diego and Johns Hopkins University. On his CV, he listed all the credentials he earned from each university, completed via Coursera. Siddhant credits what he learned through Coursera with helping him get a job as a data scientist, even though he was an IT major.

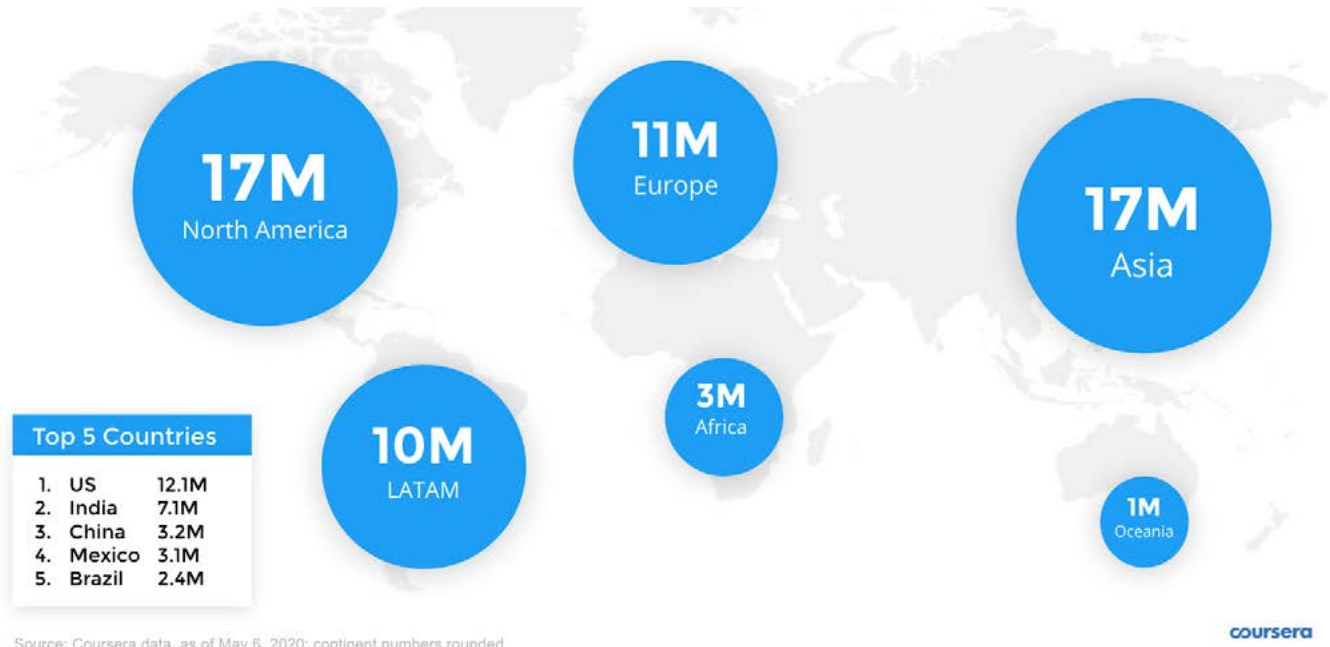
Siddhant’s story is becoming more common around the world, thanks to Coursera, whose mission is to provide anyone, anywhere with life changing access to some of the world’s best higher education. Coursera is using technology to help end educational privilege for millions of students around the world who are limited by scarcity in the local market, high tuition cost, or geographical constraints.

To help institutions like the one Siddhant attended, Coursera launched [Coursera for Campus](#) in October 2019.



Siddhant credits what he learned through Coursera with helping him get an internship in biotechnology, and then a job as a data scientist, even though he was an IT major.

COURSERA REACHES MORE THAN 58M GLOBAL LEARNERS



Institutions that do not have the faculty or the programs to offer courses in traditional and cutting-edge areas can now integrate Coursera for Campus into their core curricula by offering students, alumni, faculty, and staff access to Coursera's vast library of courses, giving them immediate access to job-relevant and multidisciplinary learning opportunities.

In addition, Coursera is helping universities embrace digital transformation with a "private campus option" that facilitates the introduction of hybrid learning on campus. Client universities create their own proprietary content for the exclusive use of their enrolled students. Coursera guides faculty to create their own courses with Silicon Valley level-of-quality tools.

With the onset of the COVID-19 pandemic, Coursera started to get a number of requests from colleges, universities, and governments asking for rapid assistance. In response, Coursera launched the [Coursera Campus Response Initiative](#), which offers any affected university

limited time access to a maximum of 5,000 licenses for free. Through [CourseMatch](#), institutions can align their on-campus course catalogue to similar courses on Coursera, thus enabling universities to quickly deliver relevant content to their students.

KL University in India was one of the first institutions to embrace Coursera's online learning platform, and students were pleased that the courses would count for credit. As of April 28, 2020, 1.3 million students had gained access under the Initiative. Jeff Maggioncalda, Coursera's CEO explained, "As a global community of educators, we are honored to be serving institutions and student communities during this crisis."

About Coursera: Coursera delivers top-quality courses through [partnerships](#) in 50 countries with nearly 170 leading higher education institutions. In the United States, marquee partners include [Stanford](#), [Princeton](#), and [Yale](#) universities. Internationally, Coursera has partnered with [HEC Paris](#), [Tecnológico de Monterrey in Mexico](#), and the [Indian School](#)

of [Business](#), among others. It has also joined forces with more than 30 industry partners such as [Google](#), [Amazon](#), [Web Services](#), and the [World Bank](#).

Through these partnerships, Coursera offers a wide range of courses—more than 4,200 in [11 fields](#), as of May 6, 2020, along with numerous credentials including 2 bachelor's and 17 master's degrees, 430 Specializations (in which learners take a series of courses in a field), and a variety of special certificates. Courses are free to audit, but certificates, which demonstrate a passing grade, start at \$39 while degrees start at \$9,800.

As of May 6, 2020, Coursera had more than 58 million learners on its platform, of which about 58 percent are male and 42 percent are female. Nearly 80 percent of learners were outside the United States, with large concentrations of students in Brazil, China, India, and Mexico. It offers courses in 20 languages, with subtitles in more than 40 languages.

Students worldwide are benefiting, and in its 2019 Learner Outcomes Survey (report forthcoming), 87 percent of Coursera learners reported career benefits such as getting a promotion, a raise, or starting a career. Further, in its own [2015 study](#), Coursera found that “in developing countries, people with lower socioeconomic status and with less education are more likely to report benefits.”

Bridging the Gaps: Why is Coursera's unprecedented scale and reach relevant? Because of unmet and growing global demand for higher education that is pitted against existing capacity constraints. Holon IQ anticipates that by 2030 demand for higher education will increase by an additional [350 million](#) post-secondary graduates. Further, McKinsey estimates that by 2030 between [75 million and 375 million](#) people may be displaced by automation and will need to change occupations and learn new skills. Reskilling will require more education, further straining institutional capacity. “To meet higher education demand... at least two universities will [need to be built each day](#), over the next 10 years,” said Patrick Brothers of HolonIQ.

Coursera is helping bridge the gap between educational supply and demand by rapidly scaling up access to quality education around the globe. By unbundling parts of higher education, with courses and micro-credentials, it offers a route for broader and more affordable access.

Seeing enormous potential to help learners in emerging markets, IFC took a \$7 million equity stake over several rounds beginning in 2013 to help Coursera expand internationally, further develop its technology platform, and promote collaboration tools.

IFC was interested in working with Coursera because of the strong fit with [Sustainable Development Goal 4](#) and IFC's mission of promoting access to quality, affordable, and relevant education that leads to increased employability. It provides an opportunity to address the increasing misalignment between supply and demand for quality education provision. IFC believes that the development impact, while still incubating in emerging markets, could be permanent and large.

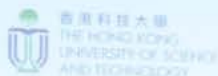


JEFF MAGGIONCALDA, CEO

“ In response to COVID-19, Coursera launched the [Coursera Campus Response Initiative](#), to assist any affected university with limited time access to a maximum of 5,000 licenses for free. As a global community of educators, we are honored to be serving institutions and student communities during this crisis. ”

Plenary panel Coursera for partners

James Devaney | Assoc. Vice Provost, Academic Innovation, University of Michigan
Luz M. Ossandon | Director of Online Learning, Pontificia Universidad Católica de Chile
T.C. Pong | Acting Provost, Hong Kong University of Science & Technology
Matthew Rascoff | Assoc. Vice Provost, Digital Education and Innovation, Growth & Degrees, Duke University



The caliber of institutions that were partnering with Coursera gave it credibility, creating a magnetic attraction and momentum for other top institutions to join.

In Search of a Viable Business Model

In 2011, Stanford University professors Andrew Ng and Daphne Koller saw enormous potential in the experiments that they were tinkering with in their classrooms. Koller had been piloting shifting lectures online to leverage class time with students more interactively. Ng had taken his popular machine learning course, typically taught to a large auditorium of 400 students, and put it on the Internet, for free, in the fall of 2011. He was stunned by the results—that semester, more than 100,000 students viewed the course. Sensing tremendous opportunity to bring education efficiently to millions through Massive Open Online Courses (MOOCs), in October 2011, the pair founded Coursera with a dream of making the best education in the world freely available to any person who needs it.

When Coursera was launched, nobody knew what to expect. As is typical with many technology start-ups, Coursera started without a business model, but the co-founders had a strong conviction that bringing top-quality education to the world was the right thing to do. Venture capital investors Kleiner Perkins and New Enterprise Associates had the same view and in April 2012 they invested \$16 million in Coursera. The founders and investors believed that the potential for a large and rapidly growing user base would lead to revenues that could eventually sustain this great experiment—they just weren't sure how.

Attracting Top-Caliber University Partners: What was clear from the start was that to attract large volumes of students, Coursera needed to scale rapidly and benefit from early mover advantage. To do that, it needed external partners who could provide a critical mass of top-quality content very quickly to stay ahead of the competition—which was fierce from the start.

As the MOOC market unfolded, various providers experimented with different business and financing models. Udemy, a for-profit founded by another Stanford professor, decided to produce all its content in-house. EdX, a non-profit, founded and financed by MIT and Harvard, was also partnering with other institutions for content development.

The timing to recruit top partners was good for Coursera. The Internet had changed life, from journalism to retail, and traditional education appeared ripe for disruption. "There was a sense of existential crisis," recalled Matthew Rascoff, Associate Vice Provost for Learning Innovation at Duke University, an early partner, "and a mix of optimism and fear about the future of brick and mortar institutions, and they didn't want to be left behind."

Koller began to crisscross the United States, and later the world, to get top universities to put their courses on Coursera's platform for free. Stanford University was on board, but Koller still had to convince other highly ranked universities to open up their content.

"Universities had reasonable reluctance to make the crown jewels available for free to everyone," Koller said, recalling that she would ask them, "Do you want to shape how technology is going to shape universities? Or do you want to hide your head in the sand and pretend it's not going to happen?" What Coursera could offer these mission-oriented institutions, she told them, was "an amazing opportunity to offer education more broadly to a very, very large number of learners, which would also increase the visibility of its brand."

The pitch worked. In addition to Stanford, Koller recruited elite institutions as founding partners, including Princeton University, University of Michigan, and University of Pennsylvania. "We were attracted to an opportunity to experiment at the intersection of design, pedagogy, and technology," explained James DeVaney, Associate Vice Provost for Academic Innovation at University of Michigan.

In April 2012, Coursera launched its platform and by July 2012, less than 3 months later, it registered a record 680,000 students in 43 courses. The caliber of institutions

that were partnering with Coursera gave it credibility, creating a magnetic attraction and momentum for other top institutions to join. By July 2013, Coursera had attracted 83 institutional partners across 16 countries.

By the end of their first year, Coursera, Udacity, and EdX had nearly 5 million users globally but compared to the competition, Coursera and its partners were ahead. They had more course options and a better technology platform, positioning it as a market leader, which helped it go on to attract millions of students.

Creating and Capturing Value: Early Experimentation with Revenue Models

The founders strongly believed in offering free access to all courses but for the educational venture to continue to grow rapidly and be sustainable over the long term, Coursera had to figure out how it would generate revenues. Coursera and the universities planned to experiment with different revenue models. The partnership agreement with universities listed eight possible models that could lead to revenues.

COURSERA PARTNERS WITH 170 TOP UNIVERSITIES



One early model Coursera piloted was a career services program, which matched students and employers and charged companies for the introduction. But at that time, Coursera did not have the learner depth and the scale to match an international base of students with employers, so the company dropped this.

Coursera experimented with certificates, but nobody really knew if unofficial, non-credit bearing credentials would be valued by learners and employers, particularly in a continuing education segment where many students already had a degree. They found that over 60 percent of learners who earned a "Certificate of Accomplishment" shared their accomplishment on LinkedIn. A later study by [Duke University and RTI International](#) found that employers favorably viewed online courses.

Freemium: In January 2013, in search of ways to monetize the product, Coursera introduced a freemium model, part free, part paid, called "Signature Track," now known as certificates. A student could still take a course for free but would be charged \$49 to receive a "Verified Certificate" at the end of the course. This demonstrated that the learner earned a passing grade and that the learner's identity had been verified, thereby ensuring academic integrity.

The certificates were a success but there was a large public outcry from users who had grown accustomed to a free certificate for courses. Still, the change was essential to put the company on a track to financial sustainability. By September 2013, Coursera announced that it had reached an important milestone, having earned \$1 million in revenues from 25,000 learners. This also validated the introduction of a "brand new currency for lifelong learning achievement."

Coursera continued to experiment with different ways of capturing value. In June 2016, it piloted paid-only courses but ultimately decided to revert to its free-to-audit model.

"Capturing value was tricky because Coursera had to strike a balance between making some money, without squeezing the free value that kept people coming back, while not being overly aggressive so that it would shut down the low-cost acquisition and the word-of-mouth that was driving high levels of engagement on the platform and attracting universities," Maggioncalda said.



DAPHNE KOLLER, CO-FOUNDER

“Universities had reasonable reluctance to make the crown jewels available for free to everyone... But Coursera could offer an amazing opportunity to offer education more broadly to a very, very large number of learners.”



As content began to explode on the platform, Coursera began to focus on its core areas of strength, which were business, technology and data science. These were niche areas with high global demand and insufficient supply.

An Adaptable Business Model: Responding to Market Needs

Evolutionary Innovation

For the first three years, Coursera was focused on building the platform, attracting more university partners, and growing the learner base. It also added new leadership. In March 2014, Rick Levin, the former President of Yale became Coursera's CEO, taking over from Ng and Koller, who had served as co-CEOs. Given the importance of Coursera's relationships with highly selective universities, Levin brought gravitas that helped it to continue to attract more leading university partners. Koller served as president between 2014 and 2016.

With a view toward sustainable growth, Levin and Koller co-introduced a series of evolutionary innovations with products that were an extension of what it was already doing with courses, while creating more value for paid products. Coursera adjusted the paywall, introduced new products, adapted pedagogy, and upgraded the platform.

Paywall: The freemium model was largely working, but it had some elements of risk. Some learners had been gaming the system and were telling employers that they had passed the assessments without paying for the certificates. As a result, in October 2014, Coursera moved the paywall forward so that students would now pay prior to taking the assessments. Students could still audit courses and watch unlimited videos for free, but if they wanted to use the certificate to prove competency, then they had to pay for the additional value that Coursera and the universities were providing.

Products: Coursera found that some students were looking for a deeper and more meaningful educational experience that would allow them to demonstrate mastery and transform their career opportunities. In January 2014, Coursera started to diversify its products and began offering

Specializations, a series of highly substantive and rigorous courses that were bundled.

Depending on the type of Specialization selected, learners could complete the program in three months to one year. Learners paid for Specializations on a monthly basis with fees that ranged between \$39 and \$79 per month. Specializations proved to be highly popular and by October 2014, Coursera reached \$1 million in *monthly* revenues. Today, Coursera offers more than 430 Specializations.

In 2019, Coursera added *Professional Certificates*, credentials in a form similar to Specializations that prepare learners to pass industry certification exams such as in IT support, data science, SAS programming and AI Engineering. Professional Certificates can take anywhere from 18 hours to 10 months to complete, with tuition fees starting at \$39 a month.

As part of Coursera's revolutionary innovation, discussed below, it began offering 8 *MasterTrack™ Certificates*, which are smaller segments of specific universities' master's programs that can count toward a full master's degree, and it also began offering degrees on the platform.

Coursera introduced a series of evolutionary innovations with products that were an extension of what it was already doing with courses, while creating more value for paid products.

Contract flexibility

Create contracts based on your org needs and invite learners flexibly

Rich learner profile

Enhance actionability of reports by merging internal context on learners e.g., Role, Title, BU, Geo, Function, Manager etc.

Power to curate

Add, delete and curate your very own collection of courses

LMS Integration Ready

User, curriculum & learner progress management

Utilization insights

Dashboard for utilization of licenses

Learner Nudges

Personalized nudges with insights to drive retention & completion of at-risk learners

Track skill proficiency

Track and measure the skills your employees are developing

Highlighting & note-taking

Help learners study by allowing them to take notes (in beta)

Tuition and Financial Aid: Over time, Coursera's product base has evolved to satisfy a wide range of learner needs and price points ranging from \$39 to \$99 for a course. In February 2020, it introduced an annual subscription model through [Coursera Plus](#), which gives learners access to most courses, Specializations, and Professional Certificates for \$400 per year. Tuition prices for degrees range from \$9,800 to \$42,000. (See Annex A: Credentials and Tuition Costs.)

While university partners determine prices, Coursera provides input and together they determine the optimal pricing in a given market. Coursera's data team tests tuition prices to ensure that products are accessible around the world. As a result, prices can vary between developed and emerging markets. For instance, the [Bachelor of Science in Computer Science from the University of London](#) ranges between about \$13,100 and \$19,700 depending on geographic location, with lower prices in certain countries.

In 2016, Coursera began offering [full scholarships](#) to help students who demonstrated financial need. The source of the financial aid varies. Courses, Specializations, and professional certificates are financed directly by Coursera, while MasterTrack™ certificates and degrees are co-financed by Coursera and partner universities. About one-third of individual learners enrolled in paid courses receive financial aid.

Cost and Revenue Share: When the partnership agreements between Coursera and the universities began, there were many unknowns, nevertheless, the partners agreed to share between 6 and 15 percent of total revenues, and 20 percent of gross profits, minus costs. The initial revenue share formula proved to have a high administrative burden since individual course production expenses had to be frequently calculated. Further, it did not provide the universities, who were incurring significant costs—some between \$30,000 and \$50,000—with enough revenues. As a result, they decided to eliminate the cost reimbursement component and simply split revenues half and half.

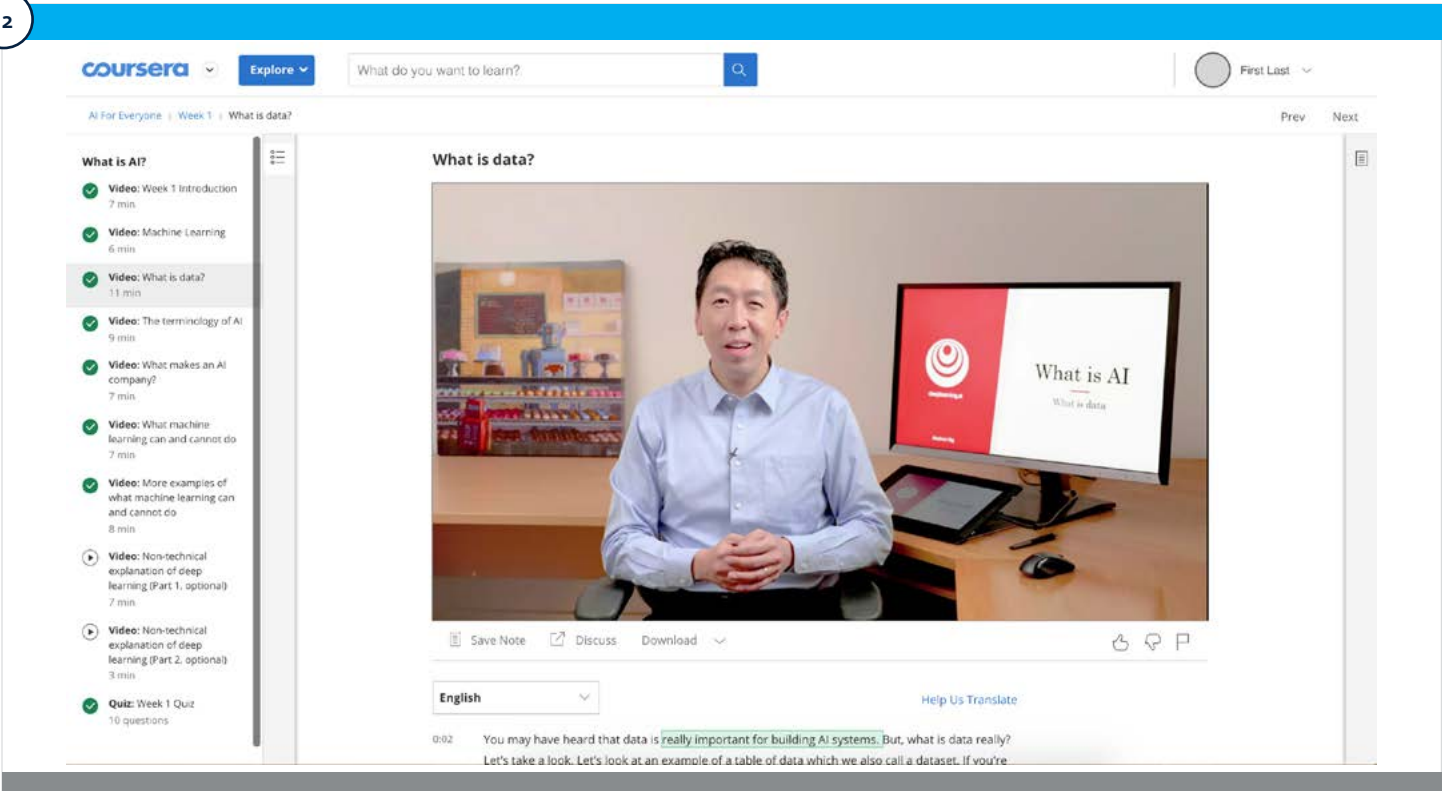
Focus: Content development in the early days was entirely in the purview of partner universities. Any institution could create a course on any topic ranging from machine learning to personal development. As the variety of the content began to explode on the platform, Coursera began to focus on its core areas of strength, which were business, technology, and data science. These were niche areas with high global demand and insufficient supply. In [mid-2015](#), Coursera began to ask universities for proposals to create content for Specializations in these strategic areas.

Understanding Latent Demand: In recent years, Coursera adopted a "Learner First" philosophy and worked to better understand what they needed on the platform. Coursera started to identify trends in job openings, skills searches on Google, and popular courses on competitor platforms. These insights help Coursera decide what kind of product to introduce—whether it is a course, a Specialization or a degree from a particular tier school, on what subject, in what languages, and at what specific skill level. The model helps predict how many enrollments and how much revenue it could attract.



EMILY GLASSBERG SANDS, VICE
PRESIDENT OF DATA SCIENCE

“Understanding what paid products learners are interested in and making sure they are exposed to it efficiently and in a personalized way helps them advance their career goals, and also helps convert them to paying customers, which drives up the lifetime value of the learner.”



Coursera developed a tool which helps learners enroll in the right content that is required by their chosen career in order to link learners to jobs more rapidly. Andrew Ng, Coursera Co-Founder, is shown teaching one of the most popular courses on data science.

As a result of the gap analysis, Coursera introduced the [Google IT Support](#) Professional Certificate, which is now one of the top performing products. This certificate targets learners without a college degree, who may have fewer job prospects. “They can now spend eight months and a few hundred dollars to become an IT support specialist. This type of product innovation is meeting the needs of society and had phenomenal growth in 2019.” Emily Glassberg Sands, Vice President of Data Science, said “By more deeply understanding what people need and positioning it in front of them, Coursera is able to segment and convert them (from free to paying) faster.”

In another example, in 2019, Coursera began to expand its areas of focus into other high-growth areas and introduced a health care vertical. In the midst of the pandemic, it is offering courses about [COVID-19](#), including one from [Imperial College London](#), which has been at the forefront of the global response.

As a result of these improvements, the rate at which learners are coming to the platform has accelerated since 2015. Through February 2020, Coursera was adding an

average of 700,000 new learners per month. In March, as the threat from COVID-19 became even more critical and many turned to online learning, demand surged with more than four million learners joining in that month alone.

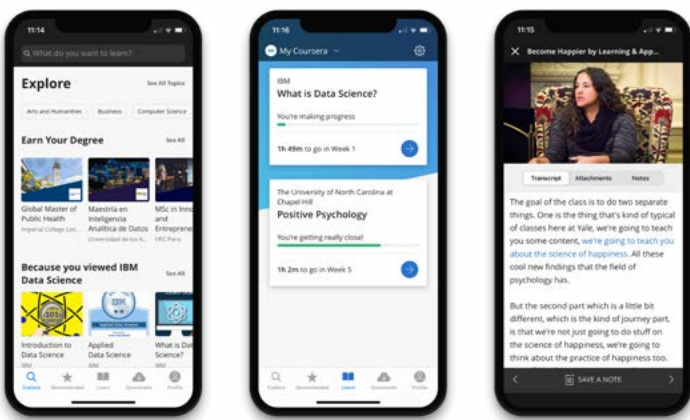
Navigation Tools: With thousands of courses on the platform, it was getting challenging to find the right content. For instance, a search for “data science” yields nearly 1,500 possible courses, Specializations or degrees. Coursera started to think about ways to better serve its audience. It needed to narrow the field so that learners could find the correct content on their first attempt to keep them engaged.

Between 2017 and 2018, Coursera created a machine learning-powered search tool and an internal data analytics tool, which helps learners look up specific skills at very granular levels and then directs them to the courses with the skills that they want to develop. Now, a learner seeking beginner linear regression in Spanish can choose from 8 options. This helps learners find the right match so they can enroll in the content that is required by their chosen career and links learners to jobs more rapidly.

Pedagogy: Coursera initially structured courses in the same way that was traditionally done on university campuses. There were 12 week-long courses but according to Koller, “that turned out to be too long, so we made the courses more compressed.” Short courses now take just a few weeks to complete and have been broken up into more digestible, three to ten-minute modules that follow a sequence. This provides the learner with greater flexibility to engage with the content in shorter time frames and helps with retention.

Platform: In late 2014, Coursera launched its own on-demand technology, which largely liberated Coursera learners from the typical semester start and end cycles. It experimented with different iterations and today, learners can start many courses the same day they were browsing the platform. This speed helped capture learners at the moment the impulse to explore the topic hit them.

In 2014, Coursera also added a mobile application for smart phones. The platform allows learners to switch back and forth between desktop and mobile seamlessly so that learners can continue their place in the course without interruption. Further, learners can download and view courses offline, which is highly relevant in emerging markets.



In June 2016, Coursera upgraded its technology to a different platform to better manage the new tools it was adding. Rascoff (of Duke) explained, “The mobile app built by Silicon Valley software engineers, is built at a level of professionalism and user experience that you don’t see in homegrown software from institutions. We never could have done that.”

Through February 2020, Coursera was adding an average of 700,000 new learners per month. As the threat from COVID-19 became even more critical and many turned to online learning, demand surged with more than four million learners joining in March alone.

To further simplify and enhance the learner experience, in 2019, Coursera launched [Coursera Labs](#), which expands Coursera’s project-based hands-on learning capabilities. “It allows learners to seamlessly work on projects and assignments in a browser without any environment setup or software downloads.” Through the acquisition of [Rhyme Software](#), a platform for hands-on learning, computer programming students can apply theory to live assignments in the virtual classroom, while the professor oversees student work and engages with them from the cloud. See the video [here](#).

The cutting-edge technology combined with shorter modules meant that learners could now dictate their schedule of learning. Learners could work at their own pace and reschedule deadlines. They could now learn anywhere, anytime, whether that was commuting to and from work or during a lunch break. These innovations could eventually make access to structured learning as ubiquitous as the mobile phone.

Revolutionary Innovation

Around 2013, the MOOC hype had diminished and Coursera, like others in the space, had to navigate several challenges. Robert Groves, the [Provost at Georgetown](#) wrote in October 2014, “As early as last year, the trough of disillusionment arose in MOOCs—development costs were higher than expected; the interested population worldwide was not found to be the uneducated but those already

having higher education degrees; the dropout rates were very high; and the percentage willing to pay for a certificate of completion tended to be low.”

Coursera was not immune to these issues. The individual courses provided late monetization and even today, the completion rate for individual courses is still less than 10 percent. A variety of factors affect the conversion rate of learners from free to paying, according to Maggioncalda, who became the CEO in 2017. “Certain courses and Specializations such as data science, AI, and deep learning, which are scarcer due to the nature of these new, emerging disciplines, have higher conversion rates than liberal arts courses. This is attributed to stronger market demand for those skills and higher salaries in those fields,” he said.

Conversion rates also vary by region. Learners in more affluent countries are more likely to purchase courses, while learners from many emerging markets such as Brazil, China, India, and Mexico, where there is large demand but significant university capacity constraints, tend to gravitate toward auditing MOOC courses for free. While this brings down the paid learner base percentage, Arunav Sinha, Head of Global Communications, said that “Coursera sees offering free courses and helping learners to access better credentials with financial aid and scholarships as a key part of our social mission.”



ARUNAV SINHA, HEAD OF
GLOBAL COMMUNICATIONS

“ Coursera sees offering free courses and helping learners to access better credentials with financial aid and scholarships as a key part of our social mission. ”

Long-Term View of Learners: Coursera is taking a long-term view of individual learners in the consumer segment because they still bring value to the company. Free learners are an essential element of Coursera’s whole business model. It needs them to attract high volumes of students to the platform at low cost. They in turn attract new learners to the platform by word of mouth and contribute to the broad base of data that Coursera is harvesting to better understand learner needs and trends. The free learner also brings a lifetime value across a continuum, beginning with an individual course and culminating in a degree. “MOOCs are the gateway to online degrees,” said Maggioncalda.

New Business Lines: To offset the free learners who made up Coursera’s consumer business line, between 2015 and 2019, the company embarked upon a journey of revolutionary innovation to capitalize on emerging opportunities that could provide more stable and predictable revenue streams.

In 2016, Coursera launched two new business lines, “degrees” and “enterprise,” to address different client segments with different needs. Each is supported by separate teams, technology, and budgets. The degrees line sought to provide online learners with access to traditional degrees and to micro-credentials. The enterprise line started to tailor efforts to the strategic needs of business, governments, and university clients.

These new business lines gave Coursera early monetization, volumes, and diversified revenue sources. In 2017, nearly 90 percent of revenues were derived from the consumer segment but by 2019, that was diluted to about 65 percent, while enterprise and degrees accounted for 35 percent.

Degrees at Lower Cost: In May 2015, Coursera and the University of Illinois decided to venture into the degree space together, offering a flexible online MBA called the iMBA. This was the first of what is now a range of master’s and bachelor’s degrees in its growing portfolio.

Coursera and the universities have been able to dramatically lower the price of tuition for many online degrees because its labor and operating costs are lower. Generally, out of

100,000 participants per course, Coursera only needs 200 paying learners to break even on an average course. The incremental cost of adding more students to the platform is near zero after costs are covered. This has significantly spread out the cost of faculty labor per student. Further, since more than half of degree students already have some experience with the platform, it is driving Coursera's student acquisition cost down, now at about \$1,500.

All these elements, combined with large volumes of students, are driving economies of scale—and the result is lower tuition prices. Illinois' iMBA is the [most affordable](#) online MBA from any top 50 business school in the United States at a price of \$21,000, or as Koller [said](#), "about one-third the cost of MBA's from institutions with similar stature." The program has been so successful with nearly 750 graduates that last year it [suspended its residential MBA program](#), which typically had about 200 students.

In terms of the economics of the business line, since the content is largely produced by the universities, with support from Coursera on the technology elements, the universities take a higher share of revenues because they have higher costs to adapt the degree to an online format.

As of May 6, 2020, there were more than 6,700 active degree students enrolled across Coursera's 19 degree programs. The degree business line is growing rapidly, at a triple digit growth rate, and is starting to outpace the consumers segment. As a result, Coursera sees degrees as an integral part of its future strategy as it allows the company to diversify from lifelong learners and strengthen its role in tertiary.

MasterTrack™ Certificates: In search of new ways to further unbundle credentials and give students tangible benefits earlier in the learning journey, Coursera piloted with University of Michigan, a MasterTrack™ Certificate program. The partners took a real master's program and broke it down into micro-credentials that could be taken separately, stacked and reattached for credit. This feature allows students to validate whether the program aligns with their interests before applying for admission. The

“We began to understand that we can help businesses to solve key corporate challenges with curated content that delivers skills.”



LEAH BELSKY, CHIEF ENTERPRISE OFFICER,
SENIOR VICE PRESIDENT

micro-credentials are eligible for university credit and count toward the degree if the student is accepted into the program. The pilot was successful, and the new product was officially launched in 2018.

Enterprise: The enterprise business line consists of three segments—[Coursera for Business](#), [Coursera for Government](#), and [Coursera for Campus](#), which is aimed at college and university clients that do not produce content on the platform. The underlying product on the platform is the same for all clients, but the institutions are leveraging the platform for different strategic purposes while benefiting from highly attractive pricing.

Given different client profiles, the enterprise business line does not use the freemium model for revenue generation, but rather, sells licenses. The list price for a one-year license is \$400 per user; however, clients receive volume discounts. Enterprise is a big part of Coursera's long-term sustainability strategy because its clients have learning budgets that provide it with early monetization. "It's a major market opportunity that we hope is repeatable and scalable in a way that is more effective than the consumer business line," said Leah Belsky, Chief Enterprise Officer, Senior Vice President. It all started with Coursera for Business, which in 2019 was one of the fastest-growing segments and had the biggest increase in new revenue.



Coursera for Business: In the early days, Coursera's employees began to notice a trend. Companies had been using Coursera for continuing education. Some companies were also reaching out and requesting group pricing for their employees. The Coursera team realized that formalizing corporate training was a large global opportunity that in 2015 was estimated to be worth \$12 billion annually in the United States alone.

Product-Market Fit: As Coursera was engaging with corporate clients, it began to understand that the additional value it can bring to businesses was not simply to offer a vast catalogue of top-quality content for a large number of employees, but rather to become a strategic partner to help businesses solve key corporate challenges with curated content that delivers skills. Coursera began to focus more on aligning the product-market fit to help companies meet their strategic objectives, increase productivity, and innovate.

Coursera then began to leverage its in-house data science team to bring further value to clients through several new tools. The Essential Skills Map identifies the critical skills needed to achieve specific corporate goals. It then provides a customized workforce transformation learning strategy, which ranks the top recommended skills in business, technology, and data science that learners need across specific functions. The tool helps companies to decide whether they need to up-skill, re-skill or deep-skill.

The platform also allows skills tracking through Skills Development Dashboards, which helps organizations

benchmark what skills and competencies its employees currently have, compare it to others in the industry, and identify top performers. For example, since there is a global shortage of data scientists, Coursera can identify which computer engineering employees have the strongest proximal skills, such as in math and statistics, and provide them with incremental training to then move internal staff into that new role.

The strategy has elevated the discussion with corporations and as a result, Coursera is now a one-stop-shop. "The relevant skills that employees can acquire by retraining employees with potential to move them into in-demand roles is positioning companies to drive innovation and profitability," said Belsky. "This can save them time and money over the long run."

The approach has been widely successful and drives the growth strategy today. Coursera is becoming a strategic upskilling partner for several multinationals. As of May 6, 2020, Coursera had grown this segment to more than 2,400 corporate customers, more than 100 of which are Fortune 500 companies.

One recent example is Novartis, one of the world's largest pharmaceutical manufacturers. In September 2019, it began offering its entire global workforce of 108,000 employees in 140 countries unlimited access to Coursera's entire catalogue. Two months later, it began offering eligible employees free tuition to earn master's in Computer or Data Science. The partnership enables Novartis to deliver critical digital skills, establish a culture of learning, and promote innovation.

Coursera for Government: Coursera realized that governments had similar needs as the business community for upskilling, reskilling, and deep skilling its human capital but its audience was different. Coursera for Governments addresses the needs of different population groups: one, the broader public workforce that is either unemployed or underemployed; two, refugees who need to be reskilled as they integrate into new host countries; and three, government employees who need continuing education to, for instance, undertake digital transformation of government services.

With a view toward helping governments and companies identify the skills of the future, Coursera developed the [Global Skills Index](#). The annual data report draws on skills performance data from learners on the Coursera platform and analyzes skills proficiency across business, technology, and data science skills for 60 countries and 10 industries. The data report identifies skills strengths and gaps across countries, which is valuable for guiding discussions with governments on how to build a strategic skills development plan.

Coursera now has partnerships with governments in Australia, Colombia, Egypt, India, Kazakhstan, Pakistan, Philippines, Singapore, United Arab Emirates, and the United States. In the area of workforce development, in Egypt, Coursera is providing job-relevant skills for 3,600. It has a 90 percent completion rate. In Pakistan, over 8,000 citizens filled all the available spots in the first week. The waiting list had over 24,000 people after the first month. The largest partnership to date has been with the Abu Dhabi School of Government, which will train 60,000 government employees in critical areas. This establishes a new global model for public sector skills transformation at scale.

In response to the unemployment crisis caused by COVID-19, on April 24 Coursera launched a [Workforce Recovery](#) Initiative to help governments worldwide provide their unemployed citizens with free access to 3,800 online courses. The initiative's goal is to help affected workers develop the knowledge and skills to become re-employed. The governments of Colombia, Costa Rica, Greece, Malaysia, Panama, Ukraine, and Uzbekistan were among the first to make the initiative available to their citizens.

Coursera for Campus: In 2012, in the midst of MOOC mania, many believed that online learning would replace traditional universities, but this did not transpire. Coursera for Campus began as a pilot with Duke University and other early university partners. "We saw the benefits it was offering our own students and believed it was a powerful tool to help other institutions in emerging markets meet demand, fill gaps in the curriculum and the course catalogue, and accelerate digital transformation," said Rascoff.

The global launch took place in India in October 2019 and operates under a license model costing less than \$400 per student, per year. "We wanted the business to be a fast business, which creates a business model that can be recurring and providing long-term value to a client," Belsky said. This enables Coursera to extend volume discount pricing and offer discounts in certain geographies.

As of early 2020, the company had sold Coursera for Campus to 25 university clients in 13 countries, with an additional 17 universities leveraging Coursera for Campus for their own internal use.

Those numbers grew considerably when, in response to the COVID-19 pandemic, Coursera offered free access to Coursera for Campus for any affected university or college. The initiative was launched on March 12, 2020 and by early May, Coursera had already received more than 22,000 inquiries from colleges and universities from over 120 countries who sought access to the initiative. More than 3,100 unique universities and colleges have launched 7,300 academic programs.



MATTHEW RASCOFF, ASSOCIATE
VICE PROVOST FOR LEARNING
INNOVATION, DUKE UNIVERSITY

“We saw the benefits Coursera for Campus was offering our own students and believed it was a powerful tool to help other institutions in emerging markets meet demand, fill gaps in the curriculum and the course catalogue, and accelerate digital transformation.”



Universities were attracted to the large number of learners from around the world, and learners were attracted to the large number of quality offerings from prestigious institutions, and this created a virtuous cycle of growth that reinforces itself.

Results: Coursera Emerged as a Market Leader

Three-Sided Platform Ecosystem: Over time, Coursera's business model matured from that of a simple MOOC provider to a more complex three-sided platform, servicing learners, educators and employers. The three segments created an ecosystem that generates network effects, or improvements to the value of the service that is generated because of the increased number of participants on the platform. This is helping Coursera to improve its products, grow, and maintain a competitive advantage.

The ecosystem cultivates synergies between the segments. Universities were attracted to the large number of learners from around the world, and learners were attracted to the large number of quality offerings from prestigious institutions, and this created a virtuous cycle of growth that reinforces itself. Further, consumers were contributing to lower acquisition costs for enterprise and degrees.

As of May 6, 2020, on the supply side, Coursera had more than 200 university and industry partners that were creating content. On the demand side, Coursera has more than 58 million individual learners, (consumer, enterprise and degree students), 2,400 enterprise clients, 11 governments, and 3,000 university campus clients. They are all generating tremendous amounts of data that is giving Coursera many insights.

Coursera is sharing those insights with its partners, and that has been making traditional institutions more agile. For instance, it is taking feedback from learners and employers on content and utilization data and sharing those insights with them to provide a deeper understanding of what the market needs.

By sharing this type of large-scale, global market information that universities would not have otherwise had, leading partner universities have been able to customize the development of new courses, improve the teaching experience on the platform, and improve the overall learner experience. Coursera has provided the tools and financial incentives for universities to innovate and iterate at a much faster pace than they could have working alone. This can ultimately transform learners' lives more rapidly by helping them gain the right skills that employers need on a just-in-time basis.

As far as employers, since they are engaging with the platform themselves, they have newfound appreciation for the quality of online product offerings and as a result, they are recognizing those credentials when learners present them at the time of hiring, promotions, and reassignments. This is further validating the value of online degrees and credentials.

In addition, Coursera has recently started working with employers who are struggling to fill technology and data skills positions and connecting them with learners in that field. Coursera has partnerships with a consortium of

THREE SIDED PLATFORM: NETWORK EFFECTS

200+ EDUCATORS



1 Teach at scale and lower cost

2 Gain insights about demand and respond with new courses

3 Innovate faster

4 Improve teaching and learning



58+ MILLION REGISTERED LEARNERS

- 1** Gain credentials affordably
- 2** Provide feedback on content
- 3** Generate data to identify trends



2,400+ EMPLOYERS

- 1** Recognize credentials
- 2** Transform talent rapidly
- 3** Build talent pipelines



30 top-tier employers and is starting to build talent pipelines with some learner segments, such as those in the Google IT Support program. Some learners have already gotten jobs.

Lastly, the cross fertilization of activity across business segments is channeling more upstream opportunities for higher value services. About 45 percent of enterprise clients and 60 percent of degree students came from the consumer business line and this is promoting growth in segments that provide more stable sources of revenues.

Revenues: Coursera does not publish annual revenues, but in 2018 Forbes estimated that the company had revenues of around \$140 million. Regarding 2019, Tom Kovats, Vice President of Finance, said that on a gross revenue basis, the consumer business was the most significant revenue earner generating about 65 percent, while enterprise brought in about 26 percent and degrees about 9 percent.

Depending on the business line, Coursera shares its revenues with the university partners according to different schemes. Consumer uses a 50/50 revenue share model. For enterprise, the share is higher for Coursera because it incurs the higher costs of a sales force and customer success teams. For degrees, the universities take a 60 percent share because it is more expensive to adapt the content to the online platform.

Coursera has raised a total of \$315 million over several funding rounds in seven years. According to Sinha, head of global communications, "Coursera has well surpassed unicorn valuation of \$1 billion, but has not broken even yet because we are heavily reinvesting back in the company."

Enterprise and degrees have high upfront costs but as the cohorts stack and new learners come on board, Coursera expects to see good growth and profitability over time.

MOOC Market: As the early MOOC pioneers searched for successful monetization strategies, all have refined their business models. Coursera and edX went on to compete head to head serving a global audience with similar business models serving consumers, corporate clients, governments and while adding micro-credentials and degrees.

Despite competing with MIT and Harvard, Coursera was able to scale faster because of its access to large amounts of capital, its ability to grow the user base and expand in demand content through its large partner network, the three-sided platform and strong leadership.

Meanwhile, Udacity's model struggled and moved away from higher education to focus on employers. It changed CEOs and laid off about 40 percent of its employees last year.

At the end of 2019, Coursera was far ahead of the competition, leading in terms of number of partners, learners, courses, micro-credentials and degrees. See table below.

The overall market has continued to grow. Prior to the COVID-19 pandemic, the global online higher education market, which includes MOOCs, degrees, and Online Program Management providers (also known as OPMs), was worth \$30 billion in 2018 and is projected to grow to \$74 billion by 2025, according to HolonIQ. That figure is likely to rise as institutions coping with COVID-19 pivoted to online education. What began as an emergency response could accelerate broader and permanent digital transformations.

TOP 5 MOOC PROVIDERS (2019)

	Learners	Courses	Microcredentials	Degrees
Coursera	45 million	3,800	420	16
edX	24 million	2,640	292	10
Udacity	11.5 million	200	40	1
FutureLearn 2,4	10 million	880	49	23
Swayam 2,3	10 million	1,000	0	0

Source: [Class Central](#)



"IFC is a mission aligned investor, and our champion in the external world. They also provide us with trend insights, thought leadership opportunities, and access to certain institutional opportunities."
—Jeff Maggioncalda, CEO.

The Role of IFC

Around 2012, Juliana Guaqueta Ospina, an IFC Education Specialist, discovered Coursera. She was intrigued by its potential “to penetrate education systems globally to expand learning opportunities,” she explained. Ospina decided to cold call Ng to see if there was any interest in working together and found that there were synergies. She later met Koller at a World Bank conference and they agreed the timing was right for the next funding round.

Coursera wanted to work with IFC because of its reputation and ability to bring additional investors to future funding rounds. In July 2013, as part of Coursera’s Series B round of funding, IFC made a \$5 million equity investment in Coursera and helped it to crowd in investments from other organizations such as [GSV Capital](#), [Learn Capital](#), and [Laureate Education Inc.](#) The round raised \$63 million to help the company expand its technology platform, including mobile apps, expand internationally, and develop collaborative learning spaces. IFC participated in additional investment rounds and increased its investment to a total of \$7 million.

Since the early days, IFC and Coursera have worked together to broaden access. When Koller was building up the base of partner universities, IFC facilitated introductions to leading institutions in Latin America, India, and Africa. Coursera was creating original content for the Latin American market, and IFC helped it prepare the [global launch](#) of Coursera in Spanish at a well-attended event in Colombia.

IFC has also provided Coursera with advice and acted as a sounding board to brainstorm ideas and approaches to create solutions in emerging markets. Given the relationship built on trust between IFC and Coursera,

IFC has provided honest and candid feedback to help the company navigate new areas and markets where IFC has expertise.

“IFC is a mission aligned investor and our champion in the external world,” Maggioncalda said. “They also provide us with trend insights, thought leadership opportunities, and access to certain institutional opportunities.”



JULIANA GUAQUETA OSPINA,
IFC EDUCATION SPECIALIST

“ I was intrigued by Coursera’s potential to penetrate education systems globally to expand learning opportunities. ”



Coursera emerged as the MOOC market leader because of its speed to market, which was characterized by rapid partner, course, and learner growth. This was driven by a marriage of university powerhouses with the best Silicon Valley product and engineering talent.

Conclusion

Coursera's history has been that of a company in constant motion. Over the course of eight years, it has demonstrated traits of an agile company: velocity, adaptability, stability and efficiency. Coursera emerged as the MOOC market leader because of its speed to market, which was characterized by rapid partner, course, and learner growth. This was driven by a marriage of university powerhouses with the best Silicon Valley product and engineering talent.

Following a successful proof of concept, Coursera continued to innovate. It began with early adopters who had the academic capabilities to adapt to and complete courses in a virtual environment. Then it built up its capabilities to serve different student demographics and markets, evolving its client base from lifelong learning consumers into corporate, government, degrees, and most recently university clients.

Coursera's ability to adapt its business model to provide a better product-market fit, has allowed it to be responsive to the unique needs of distinct segments with a range of credentials at different price points. By rapidly scaling up access to top-quality education, Coursera is lowering tuition costs, and this is fueling huge cohorts of students.

This refreshed focus on affordability has been a game changer in the field of education that is driving growth and is opening up access to a rapidly growing base of about 30 million learners in emerging markets. Learners around the world are able to unlock transformational career opportunities, get better jobs, and earn higher wages.

The three-sided marketplace has contributed to the validation of a new currency for higher education with universities and employers recognizing credits and unbundled credentials, through course and MasterTrack™ certificates. While nearly 40 percent of learners who come to

Coursera have already completed a bachelor's degree, they now have access to a wide catalogue of credentials from prestigious universities that they would never have had access to previously, either because of cost, geographical barriers, or work and family commitments.

What began as a leap of faith for Andrew Ng and Daphne Koller, has evolved into a company that has emerged as an education technology giant. In less than a decade, Coursera and other MOOC providers have collectively "helped over 380 million students take over 30 thousand courses and earn 50 degrees from over 1,000 universities globally," according to [Holon IQ](#).



JAMES DEVANEY, ASSOCIATE VICE PROVOST FOR ACADEMIC INNOVATION, UNIVERSITY OF MICHIGAN

“What lies ahead is an opportunity to end educational privilege. We shouldn't be satisfied by democratizing access to content. We need to democratize access to choice, to pathways, and to networks that provide a lifetime of support and inspiration.”

Annex A: Credentials and Tuition Costs

Educational Program and Credential	Description	Completion Timeframe	Tuition cost
Individual Courses Course Certificate	<ul style="list-style-type: none"> • More than 4,000 on-demand courses in Arts and Humanities, Business, Computer Science, Data Science, Health, Information Technology, Language Learning, Math and Logic, Personal Development, Physical Science and Engineering, and Social Sciences 	<ul style="list-style-type: none"> • A few weeks • Self-paced 	<ul style="list-style-type: none"> • Free to audit—no certificate • \$39-\$99 per verified certificate • Coursera Plus, \$400 per year
Specializations Specialization Certificate	<ul style="list-style-type: none"> • A bundled series of 3 to 10 courses in specific areas designed to help learners master specific skills such as Business Foundations • More than 400 Specializations 	<ul style="list-style-type: none"> • Few months to a year • Self-paced 	<ul style="list-style-type: none"> • \$39-\$79 per month • Coursera Plus, \$400 per year
Professional Certificates	<ul style="list-style-type: none"> • Training programs for careers in specific fields such as IT support, Data Science, SAS programming, and AI Engineering • Prepares learners to pass an industry certification exam such as IT support • Career support resources such as resume and interview preparation • Access to hiring partners who seek these credentials 	<ul style="list-style-type: none"> • 18 hours to 10 months. • Self-paced 	<ul style="list-style-type: none"> • Starts at \$39 per month • Coursera Plus, \$400 per year
MasterTrack™ University Certificate	<ul style="list-style-type: none"> • Real Master's programs that have been broken down into smaller modules allowing learners to explore new fields affordability • If accepted to the full Master's program, the MasterTrack™ Certificate counts toward the degree 	<ul style="list-style-type: none"> • Less than one year • Self-paced and fixed schedule 	<ul style="list-style-type: none"> • \$2,000–\$7,000 per certificate • Option to pay in installments • Financial aid available
Degrees Accredited University Bachelor's or Master's degree	<ul style="list-style-type: none"> • 19 degrees (and growing) in business, computer science and engineering, data science and public health. • Same credentials as students who attend classes on campus • Sampling of partners: HEC Paris, Michigan, Pennsylvania, Illinois- Urbana Chaplin, University of London, Universidad de los Andes 	<ul style="list-style-type: none"> • 1 to 4 years • Self-paced and fixed schedule 	<ul style="list-style-type: none"> • Bachelor's and Master's \$9,800 to \$42,000 • Option to pay in installments • Financial aid available

STAY CONNECTED

WEB: www.ifc.org/education

LINKEDIN: www.linkedin.com/company/ifc-education

TWITTER: #ifceducation

For more information about IFC's investments in health please contact:

Elena Sterlin

Global Manager, Health and Education

Email: esterlin@ifc.org

Washington, D.C., USA

www.ifc.org/education

www.ifc.org/health

Salah-Eddine Kandri

Global Lead, Education

E-mail: skandri@ifc.org



Creating Markets, Creating Opportunities

2121 Pennsylvania Avenue, N.W.

Washington, DC 20433

Tel. 1-202-473-1000