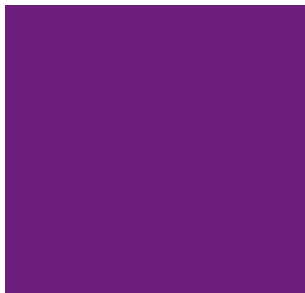


The Achievements and Future of Business Education

Columbia Business School Centennial Roundtable | New York City | May 2, 2016



Glenn Hubbard: Good morning, I am Glenn Hubbard, Dean of the Columbia Business School. Welcome to this event celebrating our 100th year. It is a time both to look back on past successes and to look forward to new challenges. Our symposium today is a key event in a global celebration that has been taking place throughout the year in different places around the world. The aim of this event is to provide a look at some critical developments that are having a dramatic impact on how business is conducted. This is a time when many would-be leaders both in our country and around the world are skeptical about what the future and the economy hold. And I think it is worth using this century birthday celebration as an occasion to step back and marvel at the role of business and its innovations, both past and future, as engines of mass prosperity.

Economists will tell you that fewer than 30% of the goods and services available today would have been recognizable a century ago, and I have no reason to believe that that won't also be true a century from now since it's business itself, and not just ideas, that propels progress. In a lecture on discovery he gave in 1858, Abraham Lincoln pointed out that "the advantageous use of steam power is unquestionably a modern discovery and yet as much as 2,000 years ago, the power of steam was not only observed but an ingenious toy was actually made and put to motion by it in Alexandria in Egypt." And "what appears strange," as President Lincoln went on to say, "is that neither the inventor of the toy nor anyone else for so many centuries afterward should perceive that the steam could move useful machinery and not just a toy." What it took to get that done, we know today, was business. That is what this symposium is about.

In this first of our three panels today, my fellow deans from Wharton, Harvard, and Stanford will join me in discussing the future of our little industry of business education. We will look at the institutions that are training the business leaders of tomorrow and developing the cutting-edge theories that transform the practice of business. Our second panel will look at global business and explore the prospects and challenges of conducting business in an era of increasing technological disruption, activism, and growing interest in digital currencies. And our third and last session will explore a fundamental challenge facing any enterprise operating today: how to identify, create, and measure value. A small group of industry leaders who have helped define this topic will provide a thought-provoking discussion.

The Centennial offers, of course, the opportunity for all of us to ask the question, "What's next?," and I hope we provide useful answers in these three panels today. I'm excited to see all of you here. But looking at a century in the past and all the future in one afternoon requires that we move at a brisk pace, so let's get started.

It's now my pleasure to introduce **Jan Hopkins**, who is a former CNN correspondent, Columbia alumna, and former President of the Economic Club of New York. Jan will moderate our first panel, and I will now turn the floor over to her. Welcome, Jan.

Jan Hopkins: Welcome everyone. Thank you, Glenn, for asking me to do this. I'm quite honored to have a conversation with such an esteemed panel. We'll talk for about 45 minutes and then open it to

the floor for questions. But let me start by briefly introducing each of the four members of the panel.

Glenn Hubbard, who has already identified himself as Dean of the Columbia Business School, is also the Russell Carson Professor of Finance and Economics. He was Chairman of the U.S. Council of Economic Advisers, and also of the Economic Club of New York, where we served together. Glenn is on several corporate boards as well as the mutual fund board.

Garth Saloner is the Philip Knight Professor and Dean of the Stanford Graduate School of Business. Garth has been the Dean at Stanford since 2009 and has been a professor there since 1990. Before becoming Dean, he served as Director of the Center for Entrepreneurial Studies, something that we will discuss in the conversation. Garth has in the past taken leave to work in Silicon Valley startups and established Seed, which is the Stanford Institute for Innovation in Developing Economies.

Nitin Nohria is the George F. Baker Professor of Administration and Dean of the Faculty at Harvard Business School, a position he assumed in 2010. Nitin served previously at HBS as Co-Chair of the Leadership Initiative, Senior Associate Dean of Faculty Development, and Head of the Organizational Behavioral Unit.

Geoff Garrett, the most recently appointed of our deans, is the Dean of the Wharton School, as well as the Reliance Professor of Management and Public Enterprise. Before coming to Wharton in 2014, Geoff served as dean of the University of Sydney and the University of South Wales in his native Australia.

One of the aims of this panel, as Glenn just told us, is to mark the Centennial

of Columbia Business School—to celebrate all that the school and its alums have achieved in the past 100 years, but also to look forward and try to see what's next in management education. In some cases, I will throw out a question to the entire group, and in other cases I'll direct questions. But this first one's going to be thrown out to the group.

Politics and the Reputation of Business—and of Schools of Business

Hopkins: Especially during the political primary season, there is a tendency for politicians to vilify business and fuel the popular distrust of bankers. My question to all of you is this: Has this wave of popular anti-business feeling had any impact on your classes so far in terms of interest in going into business school? And what are you seeing for the future?

Hubbard: Let me start by taking a shot at this one. I would say that from our perspective here at Columbia, it has not had much of an effect inside the business school, where I think there's a general inclination to trust business. But I have always thought that business schools have a role to play in society by taking a part in—and, to the extent we can, helping to inform—these conversations.

Many of the biggest social problems of our day are in fact management problems. It's not that we don't know what to do, it's that we're not doing it, whether it's about the environment, or about policies to help low-wage workers, which is a big issue in this campaign. I think we have a lot to say as business schools, but I think we have to become much more vocal and proactive in getting our positions out. I chose Presi-

dent Lincoln's remarks as my introduction for a reason: business is hardwired into the prosperity we take for granted.

Hopkins: Other comments?

Garth Saloner: Let me start by just repeating Glenn's point that I think the biggest problems in the world are business, leadership and management challenges. This is true whether you are looking at healthcare or the environment, or at energy or education. In each of these cases, the principles and methods of business—and that includes the methods of finance—have to be an important part of the solution.

At Stanford, we continue to have about the same proportion of students coming to us from finance as we have had in the past, and exactly the same proportion going into finance. So it really hasn't affected the flows in any significant way. But what has changed in the last 10 or 15 years is the increase in the number of the students who come to us wanting to bring about significant positive change in the world. And most of these students, by the way, don't think of government as the route to do that. They are much more likely to think of private enterprise as providing the solutions.

Hopkins: Nitin, can you tell us the view at Harvard on this?

Nitin Nohria: There is no greater human invention than the business enterprise. If you think about it, it's an entirely voluntary enterprise. As a consumer, you don't have to buy a product or service if you don't like it. As an investor, you don't have to invest in a business enterprise, and unless specified

otherwise, you can pull your money out any time you want. And once you've started a business, you are under no obligation to keep it going. When the business enterprise ceases to create value—that is, when it produces less output than the inputs it consumes—it generally disappears. There's a natural process of creative destruction that both builds business enterprise and forces it to evolve.

But, as you say, Jan, business generally is now on the defensive. And when responding to attacks, some justified but many not, we as business schools have to remember that the prosperity of society still depends upon the business enterprise and on the effectiveness of our business leaders. It is our responsibility in educating future leaders to ensure they understand that it is an important part of their role to make society more prosperous. Shame on us if we fail to do so. And to the extent we succeed, when people think about business leaders, they will view them as people who are determined not just to do well for themselves, but to do better for society.

Hopkins: Geoff, how do things look from your vantage point at Wharton?

Geoff Garrett: From a macro perspective, we're living in an era in which the public role of the private sector is probably going to be unprecedentedly large. Why? Because social needs are going up and government capacity to meet them is stagnant.

There are some obvious examples of that in emerging markets. Think of the infrastructure challenge. The largest challenge facing emerging markets, with the single exception of China, is building the infrastructure that will allow these econ-

From a macro perspective, we're living in an era in which the public role of the private sector is probably going to be unprecedentedly large. Think of the infrastructure challenge facing emerging markets, which is building the infrastructure that will allow these economies to realize their full potential. Given the limits of government resources, including expertise as well as capital, this is going to require large amounts of private investment and the know-how that comes with it. And I think the growing public role of the private sector is going to be a defining feature of our world going forward, which I think will increase the centrality of business schools to that world.

Geoff Garrett



omies to realize their full potential. And given the limits of government resources, including expertise as well as capital, this is going to require large amounts of private investment and the knowhow that comes with it. Or think about the importance in the U.S. of pension fund accounts. A lot is riding on that. Finance gets a bad rap for a lot of things, but if U.S. companies and their pension funds don't do their job, I don't think there'll be very many happy retirees in the United States or elsewhere.

So, I think the growing *public* role of the private sector is going to be a defining

feature of our world going forward, which I think will increase the centrality of business schools to that world.

The Cost of Business Education, and the Disruptive Effect of Technology

Hopkins: Okay, let's look at the future, then. One of the things that I think we can all agree on is that the cost of business school is staggering, and will only get higher as the years go by. Is it a sustainable model to have two-year MBAs with students that are paying \$200,000 for that

MBA, and is it really worth it?

Hubbard: Your last question is the important one. In any transactions that concern value, you gain when you make an investment in something where the ultimate payoff is greater than the cost. I think that if you're going to a world-class business school, then the answer to your question is yes, the long-run return justifies the investment. As long as those schools are delivering an experience that brings the best of what we do in great universities—like the four rep-

resented here today—together with the world of practice that surrounds us, that is the experience that people are finding it worthwhile to pay for. Again it is an investment whose payoff our students—or in some cases, their parents—seem to feel pretty confident about.

Now if the experience we were providing involved just the traditional one of learning a set of narrow disciplines separately and one at a time, it would be hard to justify that kind of investment. And I think that is why we now see a smaller number of schools providing the traditional MBA. But I think there will be just a handful of schools that survive and prosper and provide value across the board. And in such cases, the investment will be large—but so will the value of the learning experience that comes with it.

Hopkins: Presumably the four schools represented on the stage will be among the survivors?

Hubbard: I hope so, and there will be some others, too. But it won't be a large number. There are a large number of providers of business education today; and if you look at some statistics, whether it's applications or sizes of MBA programs, we're already seeing a shakeout. Nitin talked earlier about the importance of the role of *exit* in business. By encouraging, or even ensuring that, enterprises that fail to create value cease operations, the rest of the system gets stronger. Exit in universities is a more complicated thing that will take a longer period of time, but I think we are now seeing the beginnings of an industry shakeout.

Hopkins: Nitin, I understand that you have actually done a case study on the rate of return of an investment in a business school education. Can you tell us what you found?

Nohria: Nobody will be surprised to learn that people at Harvard Business School, where we do so much using the case method, ended up writing a case that allows our students to calculate the annual return on investment of getting an MBA. We provided data on what happens to MBAs over a five- and 10-year period after graduation. The average ROI turns out to be greater than 20% per annum, however you want to calculate it, from the top business schools.

That's one way of justifying an MBA, but it's a very narrow way of thinking about what students get out of an MBA at schools like those represented here. If you think about the lives our students expect to have, they come to us at age 25 or 26, and the life expectancy of almost any one of our graduates today is going to be close to 90. If we assume they're going to have careers until age 75, that's a long period of time, 50 years, to amortize the value of an investment in an MBA. If you think about investing two years of your life in a business education that could be preparing you not just for your next job, but for a lifetime of leadership, it's fairly easy to view an MBA as a great investment.

Saloner: Jan, in response to your point, and to Glenn's point about the importance of expanding the scope and mission of the traditional MBA, management education is going to have to change. And it is in fact changing to meet these challenges. In the 1970s and '80s, students would come

to us to master the core disciplines—that is, finance, marketing, and accounting, and so on. That material is now well-standardized across all of our curricula. Our faculty have written the books. And people around the world can readily avail themselves of that knowledge. So we have to go to the next level, which is to prepare them with the leadership and other skills required to create value-adding organizations and to manage innovation—skills that they're going to need to pursue to succeed in a lifetime career in business.

Garrett: I agree—and I think that this new set of requirements is leading to a bifurcation in the market that we're already seeing. The schools that can deliver these leadership and innovations skills—and thus a very high return on investment for their students—are going to thrive in the new era. But at the same time, there will still be a place for what I call credential, convenience, and commodity learning. And that is where the online MBA is playing a large and growing role. For people who want convenience, just want the three letters and maybe some commoditized understanding of finance, an online MBA might make a lot of sense. There's a bigger world of business education than a full-time MBA, and I think we have to appreciate that.

But that doesn't mean that the value proposition of the best programs will go down. In fact, I think it's likely to go up. Our degrees aren't convenience degrees.

Hopkins: Garth, Stanford is actually offering an online business program, right?

Saloner: We are. It's not a degree program, but we have begun to offer a fully

At Stanford, we continue to have about the same proportion of students coming to us from finance as we have had in the past, and exactly the same proportion going into finance. What has changed in the last 10 or 15 years is the increase in the number of the students who come to us wanting to bring about significant positive change in the world. And most of these students, by the way, don't think of government as the route to do that. They are much more likely to think of private enterprise as providing the solutions.

Garth Saloner



online executive program which we call LEAD. It's a program that takes place over two years and the students take eight courses. It resembles an MBA a little bit more in terms of the depth that you go into than the usual two- or three-week executive program. But it is purely online—and it is much less expensive.

Now if you're not familiar with how online programs work, in this particular program the students participate through what are called "avatars." When they recently had a reunion on campus, that was the first time they met each other in person, and we heard a lot of statements like, "You don't look anything like your avatar." But our experience, as reported both by the faculty and the participants, was that what

they learned was equivalent to what they were learning in the corresponding parts of an in-person full-time program.

Garrett: This strikes me as being a very important point. There are clearly limits to what we can all do on our campuses. In a world in which the aspirant global middle class is going to increase by one or two billion people, there's no way we can absorb that population on campus. We can use technology as a way to provide affordable access to high-quality business education in a way that, to my mind, does not interfere with or in any way reduce the quality of what we do on campus. In fact, it may improve the quality of what we do on campus. Look at the reach of

Harvard case studies around the world, which is really quite extraordinary. And yet it doesn't make being a student in Boston any less attractive.

Nohria: Yes, I think we have now all realized that online education is going to be an important part of the future of education, and we all have to figure out how to play. What we've at least initially started off with at Harvard is a pre-MBA curriculum we call HBX CORE. It provides people with a grounding in the vocabulary and concepts of business—accounting, economics, and analytics—in about 150 hours, all online.

It's turned out to be great preparation, even for people who are not interested in

business. For someone like my daughter who's a student of the History of Art and Architecture—and I insisted over the summer that she take CORE—a course like this could encourage her to think she might someday have an interest in a career that involves business. You can imagine many ways in which people might end up using this kind of information.

Each of the schools represented here is in the midst of a period of great experimentation. I imagine in the next 20 years we'll see a wide portfolio of choices about how people might participate in business education in the online world.

Hubbard: I also think that online education has the constructive effect of disrupting what we do here at Columbia. We have been very active for some time in online education as well as executive education. And thanks to these programs, we've found opportunities to reexamine and improve parts of our MBA program. For example, we have found that, by taking some parts of a class that are more lecture-oriented and doing them online, our faculty have more time to spend with students on experiential learning, such as case applications of theory to practical situations. So online education, besides enabling us to reach more people in more remote places, is also helping us make our product, our own MBA, more effective.

And I think we're in the early days of figuring out the best use of technology, but it will disrupt us probably in ways that weren't foreseen. What was foreseen was the rise of online MBAs. But I don't think that's going to be the most interesting part of it. I think it's going to be the way technology ends up changing what we offer and to whom we offer it.

Garrett: Yes, I think that is exactly right. The leading schools, or those of the leading schools that survive, are going to be those that go beyond the standard textbook kind of material, which can be delivered very effectively online. Glenn used the word “experiential.” I think we're all moving towards more experiential learning, and that is what's going to define the in-person experience provided by business schools. And that change is leading to a big shakeup in our industry because I don't think all the other schools are going to succeed in making that transition.

Joining Theory and Practice

Hopkins: One of the things that the accrediting body has said to business schools is to be more practical. How are each of you providing a more practical education to your students?

Hubbard: It's interesting in the context of a Centennial to talk about becoming more practical, because business schools started out long ago as essentially trade schools. They were very practical, and then the move in the '50s' and '60s was to make them more theoretical, so that people like us would start to show up in business faculties. But the next movement has been to try to combine the theoretical and the practical, to somehow offer both. And my sense is that what the top business schools are now trying to do is to completely marry the two, to make practice as consistent with the theory as possible—or, when that doesn't seem to work, to modify the theory to fit the realities of practice.

For example, at Columbia we have *immersion* activities in which an academic faculty member and a practitioner will teach together. Our research centers all

encourage, and have succeeded in attracting, the participation of practitioners. And we also have lots of adjunct faculty whose main job is working for a New York bank or investment firm or company. So, again, we don't think in terms of theory versus practice, but as a marriage of the two. And I think that's really the sweet spot for business schools today. The combination of a grounding in theory with practical experience is what our students, and their potential employers, want us to give them.

Saloner: We're doing something very similar at Stanford. The great Andy Grove recently passed away. But for each of the last 20 years, Andy taught a class on innovation with one of our tenured-line faculty, Robert Burgelman, with both in front of the class at the same time teaching in stereo. This way, our faculty member would be able to draw on his or her strengths, bringing conceptual frameworks to bear. And then Andy would invariably say to the students, “Okay, now let me tell you how that worked at Intel in my experience.” The students are enriched by getting both perspectives; and the same is true, by the way, for both of the people in front of the classroom: both the academic and the practitioner end up learning an enormous amount from each other.

Nohria: We've been very fortunate at Harvard in that, for our entire history, we've been devoted to use of the case method. In every class, students are put in the shoes of a real-world protagonist and asked to respond to the question, “What would you do in this situation?” As a result, there has been almost no role for lecturing or the presentation of theo-

retical concepts. We have always had a highly experiential or hands-on approach to learning.

In recent years, we have also been complementing our case-study method with something we call the field method, which is our approach to experiential learning. We're now getting all 900 of our students in their first year to do a wide variety of things that are more experiential, from working with companies in emerging markets to launching their own micro businesses. Our aim is to find as many ways as possible to ensure that our students find themselves in situations where they are forced to say to themselves, "Now, how can I actually put what I have been learning into practice?"

Hopkins: Geoff, how do you try to mix theory and practice at Wharton?

Garrett: Let me just say a couple of stylized things that I think are nonetheless true. The first one is that universities have been good for a very long time at learning by studying. So we're all relative latecomers to the learning-by-doing business.

The second thing is that, even with all this emphasis on practice, the pressure to maintain or even increase the academic and scholarly credentials of business school faculty that Glenn mentioned has continued to up the ante on the research side of business schools. And we all have responsibilities as deans to ensure that our faculty are meeting standards of rigor as well as practical relevance. Of course, we should be relevant, but we also need to maintain our academic standards. And, like Glenn, I think that's the sweet spot for business schools.

Is an MBA a Requirement, or an Impediment, for Entrepreneurs?

Hopkins: Garth, one of the things that has happened recently is competition from people who have been very successful in your world—that is, the Silicon Valley world—people who have skipped business school and started huge companies. Do you often find students deciding to skip business school and just go out and start a business?

Saloner: I have heard a lot of students make this point. In the many admissions events I take part in, I often hear prospective students say, "If what I want to do is start a company, I don't need an MBA." My response to that is, "That is absolutely false." To me, a promising startup is a business with serious prospects, and that either has or requires serious funding. Running, or just helping to run, a company like that is a general management job. It requires thinking about strategy, about leadership, about marketing, and all of the other disciplines. And an MBA is very useful for all of those.

Does that mean that Bill Gates needed an MBA? No, and I would love it if all of my students were Bill Gates. But for most people, I continue to think that an MBA is very valuable if you want to start a business—despite the reality that many successful entrepreneurs don't have an MBA.

Hopkins: Geoff, what are you finding?

Garrett: Wharton is very lucky at the moment to be able to claim as graduates some big CEOs in Silicon Valley, including Sundar Pichai of Google. Along with a Wharton MBA, Sundar has a Stanford

Engineering degree and an Indian IIT degree—and I think that's a perfect combination for the modern world.

But I have two main thoughts about your point, Jan. The first has to do with this notion of scaling. We tend to think of the person with the great idea as being the same person who then turns the idea into a successful business. But that's not generally the case. All the skills that we teach at Wharton can be used to help turn a great idea into a great business, and I think you've seen that in the demand for our graduates.

The second thing I'd say in response to your conjecture about young people is that, among the four schools represented on the stage, Wharton is the only one with a large undergraduate business program. We have 2,500 undergraduates as well as 1,700 MBAs. And the percentage of our 22-year-olds who go into entrepreneurial careers is much lower than the percentage of our MBA graduates. Now if you ask me why, my best guess is that it's mainly the risk aversion of 22-year-olds. And what this means for business schools like ours is that, as our graduates get deeper into their careers, more of them will begin to strike out on their own, but it will be a gradual process. And so the current focus of our career services on that first job after graduation will probably have to be extended throughout careers because more and more people will go out on their own at later stages in their careers.

Hopkins: Nitin, what's your take on this?

Nohria: One thing we can be sure of is that entrepreneurship can be done by all kinds of people. History is replete with entrepreneurs who didn't get a great busi-

ness education and started their careers at age 22. But it's also replete with people like Ray Kroc, who started at McDonald's at 55. The current model we have of a teenager who drops out of college and creates a great company is not the only vision we should have of entrepreneurship.

As for Harvard Business School graduates, we know that 50% will have founded their own company within 20 years of graduating. But the opportunity to exercise entrepreneurship can remain dormant for a long period of time. And some people, as you pointed out, Jan, may decide to skip a formal business education altogether. We all have to be open-minded about the possibility that some people might not want business education in their 20s, but may decide to come back in their 30s.

Wharton has created a great program for such people. And Harvard has a series of executive education programs that have been very successful. So, it may be sensible for some people in their 20s to say to themselves, "I'm just getting started, and it's worth staying in business and setting out on an entrepreneurial journey to see where it takes me." But then at some later point, they might find it useful to get a business education.

Hopkins: At Stanford, people are doing both, right?

Saloner: They are. Somewhere between 16% and 18% of our MBA graduates start their own company straight out of school—and that's about three times what it was a decade ago. So there is definitely a Silicon Valley buzz at work, but many students continue to feel that they benefit by coming through the Business School

for the reasons we have mentioned—that is, entrepreneurs are general managers and need general management skills.

If you look at the leading tech companies in the Valley now and in the past, many people in the C suite have had MBAs. They may not have been the technology founder, but Steve Ballmer of Microsoft, Scott McNealy of Sun Microsystems, John Morgridge of Cisco, and Sheryl Sandberg of Facebook all went to business school. Most of those companies find that you need the technologist, but you also need somebody who brings the business fundamentals.

Nohria: A recent study of all the unicorns—the private companies with valuations of \$1 billion or more—reported that a third of them have an MBA as part of the founding team.

Hopkins: So you can probably save even people starting a company some time and heartache by teaching them things that they might not learn on the job?

Hubbard: That's the hope. And the first thing they are likely to learn is that there's an important difference between an idea and a business. If someone says, "I have this wonderful idea for a new medical device," then you need to find answers to questions like the following: Is there a market for it? What's the strategy? How is it going to be financed? Those are business questions. To be sure, you don't have to get an MBA to answer those questions, but you have to think hard about them.

I think one of the things that's been under the hood, if you will, in this discussion is the large number of students who are interested in startups but who are not

themselves entrepreneurs. If you ask our students, "How many of you are interested in entrepreneurship?" a lot of hands go up, many more than the fraction who say they want to start a business. I think that a lot of these people see themselves as providing skills that complement the insights of a high-tech or healthcare entrepreneur, and I think that's very healthy for our economy.

Garrett: I agree, but that creates certainly a real challenge for us. I've just been doing some research on the first jobs for our graduates. In the case of companies like Goldman or McKinsey, they've got a sophisticated HR function, and they know how to come to our schools and go away with lots of talent. But it's the company that's looking to grow from 50 employees to 500 employees that might actually be a much more interesting place for our students to work. They could probably add more value in those companies.

But the challenge, of course, is how do you find such companies. We have reached out with a renewed focus to smaller company recruiting. But these are relatively rare opportunities—and ones where our students might both add more value and have more enjoyable experiences.

Saloner: That has been a big challenge for us, too. Things may be different for you at Harvard, Nitin. But the 800 Stanford students, counting first-year and second-year students, who get jobs each year end up going to something like 400 different companies. The days when a small number of major employers would show up and drive off with busloads of graduates are long gone; that's just not happening anymore.

We are living through a period of extraordinary change in business education, particularly from changes resulting from globalization and advances in technology. Alternatives to the standard two-year format of the MBA that has dominated for the last 100 years are proliferating. As we navigate through this change, it's very important for all of us to maintain our continuity, to recognize and preserve the core values and competencies that have distinguished our institutions for many years. For us at Harvard Business School, a commitment to leadership, to general management, and to a transformational education experience that people can get in residence in two years—these are things we should be determined to preserve and enrich, even as we prepare for and carry out change.

Nitin Nohria



Nohria: In fact, one of the most surprising things I have heard about Harvard Business School in recent years is that about half of our graduates last year accepted jobs in companies with 500 people or smaller. And the majority of those graduating students were the only HBS graduates working in the company where they got their job.

So, as Garth just said, the world of mass recruiting where people would come and make offers to hundreds of students—that is a thing of the past. Our challenge

now is to find a way to help our students and the companies that hire them to find that perfect fit between them.

Hubbard: Our alumni play a big role in that matching process. We still have a few major recruiters. A company like McKinsey might come in and hire an entire cluster of MBA students. But most companies hire just one or two of our graduates—and some years not even that—and we use alumni coaches and mentors to help our career management

center. I think we're all evolving toward the world Garth just described where there are many more employers, and we can no longer rely simply on big-institution recruiting.

Teaching Entrepreneurship

Hopkins: Can you teach entrepreneurship, Garth? You've been in that business.

Saloner: I think that there are elements of entrepreneurship that are probably innate. There's a certain passion and drive

that comes with the individual that you're probably not going to be able to teach in business school. But the process of entrepreneurship is common to most startups, and you can teach students about that process. And in so doing, as you said earlier, Jan, you can save them the heartache of making the mistakes that hundreds if not thousands before them have made at a particular point.

We teach entrepreneurship by the case method. In every class, we teach a case where a practicing entrepreneur—who we also refer to as the protagonist—comes to class, and the students discuss a situation the entrepreneur actually experienced. The students try to identify all the things the entrepreneur did wrong, with the entrepreneur sitting in the class. But the entrepreneur gets the last word and stands up for the last 30 minutes and discusses why some of those comments were on point and others less so.

Hopkins: Are these all Stanford alums?

Saloner: Some are, but not all. They're friends of ours, usually in the Valley but elsewhere as well. And we manage to get someone every time we teach the class.

The class takes students through the entire process that a typical new venture will go through, which means showing them where good ideas come from, how you filter them, how you build strategy around an idea, how you build a team, where the money comes from, how you scale the operation, how you put a good board together, and so on. Those are all, of course, very common issues in starting companies, and we know a lot about them from the research that has been done on entrepreneurship.

Hopkins: Do any of you teach entrepreneurship?

Hubbard: I have. And much as Garth just described, we too use the case method with experienced entrepreneurs as presenters. And having done this, I absolutely think that entrepreneurship is teachable. How you finance a business is a teachable skill, and so is how you negotiate with employees, and with venture capitalists. I like to say to my students, "You pick one element of the term sheet you like and I'll take all your money," and so we do negotiations.

Now I agree that you can't teach somebody to have the big revolutionary idea, but that's not what most of entrepreneurship is about. Most entrepreneurship is identifying and taking advantage of opportunities. It's literally taking a puzzle that wasn't put together well, and putting it together differently and unlocking value.

Garrett: Adam Grant, in his new book called *Originals*, begins by citing the success story of Warby Parker, an eyeglass manufacturer that was started a few years ago by a couple of Wharton MBAs. And I had two reactions when I read Adam's account of the company. First, the guys who started Warby Parker were smart; they didn't put all their eggs in the Warby Parker basket. In fact, they all had jobs somewhere else that they ultimately chose not to take. Second, although people tend to think of Warby Parker, with its social mission and stores in Venice, as being glitzy, the key insight of the founders was that the main competitor in the business was price gouging on the back-end manufacturing of its eyeglasses, and that a new

company could undercut and disintermediate them. That's a pretty savvy move, and it doesn't sound like Mark Zuckerberg in his dorm in Cambridge, Mass. It was much more deliberate and thought out. They took risks that were well calculated and managed.

Hopkins: Nitin, you talked about the number of your alums that start companies.

Nohria: We are all in the business of educating leaders. Leadership can take a variety of different forms: that of entrepreneurs, or that of great financiers, for example. That doesn't mean we can systematically take people and turn them into entrepreneurs. Like great athletes who come with a lot of potential, you can train them and they can become better athletes and express their athleticism in all kinds of ways on the playing field.

That's essentially what we do for entrepreneurs, for investors, and for all kinds of leaders who come to us. And because such people tend to come to us—and we're very lucky that we can be selective—our aim is to choose people with the greatest leadership potential. Some have entrepreneurial potential. Others have potential as investors, people who live and breathe markets. Our job is to give these people every opportunity in two years to learn and hone and develop their own capabilities, so when they leave they are prepared and ready to do great things.

Does that mean we can guarantee that every one of them will go out and become a great entrepreneur or a great financier? Absolutely not. Does it mean they learned a lot while they were at our schools? Absolutely yes. I think all of us here on this

stage would agree that what we are really in the business of doing for our students is to help them recognize their leadership potential, spend two years honing it, and thus increase the odds of their achieving greater things when they go out into the world again and exercise that potential in some way, shape, or form.

Saloner: One of the other things we try to do in our programs is to provide exemplars of possible career paths for them. As I said, when we teach entrepreneurship, we put entrepreneurs in front of the students day after day after day. And, of course, they vary enormously in their characteristics, their experiences, and in the nature and level of their accomplishments. What we see happening is that some students will watch the first two or three go through the process and say to themselves, “I could never be that person. I could never see myself in that role.” But then somebody shows up in Class 4 or 5 and they say, “I could do that. The only difference between me and that person is 10 or 15 years of experience.”

And I think that’s a very important experience for students to have. We’re helping them to figure out how to take their unique ability and, with the education that we provide, to find a path that’s right for them.

Nohria: Sometimes we also create a space for people to experiment with these roles. Sometimes people don’t realize they may be an entrepreneur or an investor; and by giving them opportunities for experiential learning, or learning by doing, we allow them to try new things in a relatively low-cost, forgiving environment. They get to try out a new role, and sometimes they end up saying, “I didn’t realize it, but I

could be an entrepreneur, or a leader”—and that gets them going. In this way, business schools can be very effective in helping people imagine different possibilities for themselves—and that can be a very powerful experience.

Garrett: If I can just add a global dimension to this for a second, when we think entrepreneurship, we tend to think a bit more locally. But I’ve just been struck in traveling around the world at how important innovation and entrepreneurship is in every country in the world. Take a sector like e-commerce, however you define it. Yes, the growth curve in the U.S. of e-commerce is pretty steep. But the Chinese curve is steeper, and the markets are already bigger. And the curve in India is almost vertical! We have alums who are now running massive e-commerce companies in India or China. They came to the U.S. for an elite business education that really helped them. But thanks in large part to their natural ability and skills—but also to the training and experiences they received in U.S. business schools—they have created and now managing companies that are adding enormous value in their home countries. We tend to think geography’s become less important, but it still matters a lot.

Expanding Abroad

Hopkins: Okay, let’s talk geography, then. It is a global world. Does that mean that for business education, you need to have campuses in places around the world? How do you get a global perspective for students?

Hubbard: I think the answer to that question will vary a lot across universities. I

think of globalization, like many things we do, as being about inhaling and exhaling. Part of what we try to do is inhale the world to this place, and that gets us the students we have, the faculty we have, and a lot of the cases we use in class. But our other response to globalization is to take our faculty on the road and spread their ideas through lectures at events held around the world.

We do teach all over the world through overseas MBA and Executive Education programs that we offer in a variety of places. But we don’t operate campuses in the rest of the world; that’s not our model. Some of our peers have overseas campuses that they call home, but that’s not what we do.

Garrett: We opened a center in Beijing last year. When I speak there, I always say to our students there that I hope we have something to offer, but we are there because we know we have a lot to learn from them. So setting up overseas centers is really designed to encourage two-way engagement, and my experience thus far is that it is working quite well.

Now, the fact three of the deans on this panel were not born in the United States might suggest how global American higher education has become. And though I might be accused of having a bias when I say this, I think such globalization has had major benefits for the higher education system in this country, not only for outsiders who have been fortunate enough to study here, or are now part of the system like me—but also for the U.S. citizens who, at least in many cases, have better or lower-cost access to what most people think is the best system the world has to offer.

But having said all that, I continue to be struck by all the limitations of what we can accomplish in our physical locations, even when we have campuses around the world. What my experience and travels say to me is that the demand for high-quality business education has gone through the roof globally—and I think it's only going to increase. And so even though I think our home campus experience will never be rivaled by anything we can do overseas or online, the challenge for us all will be to use these new technologies to provide access to some of what we do to *many more* people in more parts of the world. We've been talking a lot about technology and globalization. They are the two forces that are driving business, and they are the two main forces that are driving business education as well.

Hopkins: Nitin, I have heard you talk about sending students in their first year in teams around the world. Can you tell us why you think that is important?

Nohria: Our feeling is that anyone who's planning on becoming a business leader in the next 40 or 50 years has to learn how to operate in a global world. After all, 50% of the earnings of the S&P 500 companies now comes from markets outside of the U.S. And while the growth rate in overseas earnings might slow, especially as we expect a little bit of a slowdown in some of the emerging markets, the percentage will only continue to increase over time. And so to be a leader in most large or medium-sized companies—not just in the U.S. but anywhere in the world—it will be valuable to have some sense of what it is like to operate in a global environment and markets.

Giving students a real understanding as future leaders of how globalization works is something you can do in part by bringing the world to them. At HBS, we write 300 cases a year. We use them to educate our students about business challenges and opportunities in every corner of the globe. About 40% of those cases are about companies that operate outside the U.S. There is significant demand for *all* of our cases, all around the world, which suggests we can play a role in helping local business schools meet the demands of business education in their own markets. We can and should help such schools get better, which all of us here have done and continue to do in a wide variety of ways.

Finally, we should celebrate the fact that business is becoming more global. There will be business leaders in the U.S. and in developed economies that were not born and raised in those countries, and 20 years from now—or when it comes time to celebrate the 150th anniversary of Columbia Business School—there will be people sitting on this stage who have built great business schools in other parts of the world. We should be happy for them.

Saloner: I agree with what Nitin said about bringing the world in and making sure that our students are equipped to manage in a global environment. In fact, we require that our students have an international experience during their first year. And the students in our current student body come from more than 60 countries. That's another way in which we globalize the curriculum.

In terms of outreach, we are a smaller school than all of the others represented on the stage, and so we just cannot be all over the world. But as Glenn was saying

about Columbia, we have taken a number of specific programs—particularly those focused on innovation and entrepreneurship—and offered them in different places around the globe.

Leadership

Hopkins: One of the other things that needs to be taught is leadership, certainly in the business world. Is it something you can teach?

Hubbard: Absolutely. Again, there are some characteristics of a great leader that are in some respects innate, as Garth said, but there are other aspects that are clearly teachable. In fact, our core curriculum begins with leadership, and for two reasons. One is that it functions as a shot across the bow to a new student. It tells them, "That's why you're here, whether it's to lead in a social sector, general management in a big company, or in a small entrepreneurial company." The second reason is to make it clear to the students that there are aspects of social intelligence and specific skills that we can help them recognize and strengthen. We can help make people into the best leaders they can be, even though it's only the beginning of a long process. Most of the evolution of people as leaders takes place gradually over time. We only have people for two years. What we're doing is basically winding up that process.

Saloner: I too strongly believe that leadership can be taught. However, I don't think it's best taught the way we used to teach it, which is by putting up in front of the students exemplars of great leaders. "Here are 10 of them; pick one." I don't think that that works for most people.

One important role of business schools is to encourage more debate about the social responsibility of business and to bring those ideas to center stage. My own policy experience has made it clear to me that business people are much more influential than they think. If the business community stands up on an issue, they will be listened to. Our role as business schools is to encourage that process and dialogue by providing ideas and a forum for expressing them.

Glenn Hubbard



As a number of us said earlier, I think it has to be experiential; that is, we have to give our students the experience of running their own projects and businesses. We put our students in small teams with coaches where they run through various scenarios, and they're coached on what they're doing well and what they're not. That experience can have an enormous impact on their ability to both manage and lead immediately when they come out of business school as well as in the future.

Garrett: Our students love going to places like Antarctica and Patagonia to stretch themselves, but one of the programs that has most traction at Wharton is a nonprofit leadership program where our MBAs go work with and sit on the boards of local nonprofits; and because they're small organizations, our students

actually have to play management roles as well. That's leadership learning by doing in a way that I certainly hope adds value to the community, but it adds leadership value to our students as well.

Nohria: For our Centennial, which was in 2008 just after the global financial crisis erupted, we came up with the idea that leadership is about three things: knowing, doing, and being. You have to know the right thing to do, which means making an educated judgment call about a particular decision you are facing. Then you have to learn how to put that decision into action, so it's about doing in that sense. In the end, you also have to inhabit the "being" of leadership, which means that people have to trust you to be a leader. It's not as if you can just call yourself a leader and that makes it so. Only others have the right to call you

a leader, and we remind our students of that continually. They call you a leader because they trust your competence and your character.

We've thought very hard about how to expand leadership as knowing, which we've done for 100 years, *and* how to get better at cultivating and translating that knowing into doing. We feel we need to work harder—and this is where most of us have a lot of work to do—to figure out ways to cultivate character. How do you make sure that the time spent at business school provides ample opportunity to think deeply about how your character will evolve as a leader and what it means to be a leader?

Ethics and Business Schools

Hopkins: Can you teach ethics? I know you all do, but can you do it effectively?

Hubbard: If what you mean by ethics is literally specific rules or standards of behavior, by the time somebody's coming to us at 26 or 27 years old, I'm not sure anything we can tell them is going to be as effective as getting people to think about specific difficult situations in business that they are likely to experience. We think that our students can benefit from talking about the kind of trade-offs that people are forced to make in such situations, and from exploring the consequences that follow from how you make those tradeoffs. That is the focus of the ethics program we provide in our core curriculum. But, of course, there are other ways of approaching the subject. For example, some people use professional ethicists.

Our view is that ethics is best taught in the context and as an important part of business decisions. For example, we might have business people come in and say, "Here's a slippery slope that I was on." Very few people in life ask you to lie, cheat, or steal as an assignment. Our focus is mainly on getting our students to identify the possibility of such slippery slopes and think hard about how to avoid them or, if you find yourself on one, how to navigate them.

Hopkins: Geoff, how do you teach ethics at Wharton?

Garrett: Wharton is a big place. We have an ethics department that's half lawyers and half philosophers. And I don't know where they stand on this question. The answer to the question, can you teach ethics, is clearly yes in the sense that there is a discipline called Moral Philosophy that does just that.

But I think Glenn is exactly right when

he says that what matters is much more about application and context. Take the case of facilitation payments in developing countries, which is something that someone at Wharton has paid a lot of attention to. It is in fact a very complex issue. After all, when I pay you to do your job, there is a sense in which that is also a bribe. Is that an unethical act? All of which leads one to think that maybe one of the reasons developing country officials ask for bribes is that they are not getting paid a living wage to do their jobs—and that people who work for the public sectors in such countries often do so with the expectation that their reward will come mainly from extracting these so-called rents. Determining what is the right thing to do in such cases requires not only some ethical reasoning, at code of Moral Philosophy, but it also requires a lot of context—because, as you said, the world is a complex place.

Nohria: Glenn started by talking about Abraham Lincoln. Lincoln was once asked, "How do you judge a person's character?" Most people think the way to judge a person's character is to see how they respond in the face of adversity. But Lincoln himself, who had lived through a period of extraordinary adversity, responded by noting that most people tend to rise to adversity. The real test of a person's character, Lincoln thought, was to see how they responded when they were given power. Did they use it to their own advantage, and at the expense of others?

We have the great privilege of educating students who inevitably in their life will gain more power. We need to help them think hard about why it is that when people get power they often lose their moral

compass. As Warren Buffett says, there's a lot of money to be made by staying in the middle, and yet people often tend to head to the corners. We need to find better ways of helping our students understand that as they gain power in a very competitive environment—even if they know it's not right to lie, cheat, or steal—they will find temptation to abuse that power. How do we help them recognize that temptation and remain ethical? How do we help them make the best use of the power with which they have been entrusted? To me, that is the bigger challenge.

Hopkins: Garth, what about teaching ethics at Stanford?

Saloner: I would echo what's already been said, but add one comment. We have a very successful elective that we call Real-Life Ethics. It differs from traditional ethics courses in that it focuses on a series of very short cases that develop, and become progressively more complicated, during each class period. Perhaps the most important insight from such cases is the realization that most people do not go into most situations intending to act unethically. They reach that position through a series of small steps by taking actions that lead them into dilemmas down the road that then put them in very difficult situations, situations and dilemmas they might have avoided by thinking ahead about the possible consequences of each step. We've tried to model such developments by having cases that unfold in such a way that students can see how perfectly reasonable-seeming actions that they took in Rounds 1 and 2 have put them in untenable situations in Round 4.

The Future of Business Schools

Hopkins: This is the last question before we open it up to the audience for questions. In five or 10 years, what is your business school going to look like and what are your graduates going to look like? Glenn, do you want to take that on?

Hubbard: I think it's a great question, and we as a faculty we spend a lot of time thinking about it. What we now know is that our graduates will insist upon and we will deliver even more integrated experience; so that means less emphasis on individual disciplines, and much more on solving business problems. And that is clearly what recruiters today are asking business schools to provide.

In the future, I expect our graduates will be doing different things and that more of them will be in the younger company world, though not necessarily startups. Geoff talked earlier about the transition in revenue in companies that grow from 50 to 500 employees, and I think we'll see more of our students going into situations like that. I also think that many more of our graduates will use a business school education to prepare themselves for a wider range of careers during their lifetimes, hopefully including the social or public service sectors at some point. That would be very different from the graduates of 25 years ago.

Hopkins: Geoff, what do you see as the future of Wharton, and other schools?

Garrett: I agree with everything Glenn just said about what's likely to happen to our institutions. But that said, I think the difference between our institutions and business education in general will

probably only grow over the next decade. Why? Because the convenience moves for a lot of people in the world will become more important. For such people business school will become shorter, and less residential and more online. Non-MBA masters degrees will continue to grow. And so will undergraduate business programs, which is very a big business.

I also think that the biggest change to the world of business education will be a steady increase in the demand for non-degree business education because of the continuous upscaling that people require in the contemporary world and the world going forward. So a question for all of us will be, how much do we want to play there? The just-in-timeness of our world, together with the immediacy provided by the internet, gives us a real opportunity to be big players there. I don't think we have to do that, but we may well choose to.

Hopkins: Nitin, what do you see at Harvard?

Nohria: We are living through a period of extraordinary change in business education, particularly from changes resulting from globalization and advances in technology. It is clear that alternatives to the standard two-year format of the MBA that has dominated for the last 100 years are proliferating. As we navigate through this process of change, it's very important for all of us to maintain our continuity, to recognize and preserve the core values and competencies that have distinguished our institutions for many years. For us at Harvard Business School, a commitment to leadership, to general management, and to a transformational education experi-

ence that people can get in residence in two years—these are things we should be determined to protect, preserve, and enrich, even as we prepare for and carry out change.

Hopkins: Garth, what about Stanford and its graduates? What future do you see for them?

Saloner: If you look at higher education writ large, the way that we deliver education has not changed very much in the last 100 years. We still have an individual standing in front of a class with 30, 50, 70, or however many students on the other side of the podium—and the information goes from the front of the class to the back. The biggest revolution we had in higher education was when we moved from the chalkboard to the whiteboard. That's something that some of our colleagues have still not adjusted to! Then in a really radical move, we went all the way to PowerPoint. But the way we deliver education has remained very much the same until recently.

But I think that this is changing, that it's going to change very rapidly, and that technology is going to be the driver. Schools like ours are going to emphasize experiential education because much of the content that I just described is going to be available in many other formats using technology online or delivered at a distance synchronously.

But that is not going to be the strong suit of any of our schools or any leading business school. The four schools represented here will continue to attract the highest-potential individuals who will come for a transformative experience, which is going to be mainly delivered

through experiential learning. Then we're going to take what we have learned through research and teaching and disseminate that very widely using technology; and by that means, our influence will grow far beyond the bounds of our home institutions.

Hopkins: Okay, that was the last of my questions. So let's now open things up to the floor for questions.

Technology, Lifelong Learning, and the Value of an Alumni Network

Audience: All of the schools represented here have strong alumni networks. How relevant is it going forward into the future? You were talking about the explosion of the world population and online education. Does that reduce or even eliminate the need for and value of a network?

Hubbard: I think the alumni network is key, and will continue to be. If you think about any knowledge business, whether it's a university or a company, it's about ideas, talent, and creating networks. The glue that delivers the experiential learning is the network, whether it's alumni or practitioners who are close to us. And I think technology is a great complement to that; it reinforces networking effects.

Technology is also one of the ways we can deliver an ongoing experience with alumni who don't have the time to come to us. You can always audit a class at Columbia Business School, but how many people have the time or the ability to travel to come in and do it? I see technology as a huge enabler with alumni, and alumni will continue to play a critical role in this experiential mission.

Garrett: I mentioned the importance of our schools being there for alums in a career change sense 10 years and 20 years out, but I think the lifelong-learning aspect of our value proposition will only increase over time. Yes, you will still spend two years here—and we hope that those two years will prove to be transformative. But the network that you become part of should provide benefits throughout your career. And part of that effect, as Glenn said, will be enhanced by technology; our relationship with alums can continue throughout their careers precisely because they won't have to come back to campus to take that class. Lifelong learning strikes me as a big theme that will bond us even more tightly with our alums going forward.

Changes in the Admissions Process

Audience: Nitin, you mentioned the importance of maintaining continuity while also embracing change. How does that apply to your admissions process and the attempt to identify people with high potential?

Nohria: All of the schools represented here are very fortunate in that the basic credentials have almost become table stakes for applying to business school. If you think about GMAT scores or GPAs or where people have worked before coming to us, we have all been forced to turn away five times as many qualified people as we have been able to accept. The credentials are the easy, or at least the straightforward, part of the process. The hard part is identifying the intangibles in people—something we try to do through interviewing. We now have two people interview every person we admit. Out of the 10,000 people who

apply, we will interview about 3,500 and make offers to 1,000. We are trying much harder to find the intangibles because it has become increasingly difficult to distinguish students from one another just by looking at numerical scores.

Garrett: A few years ago Wharton moved to a team-based interview format because we wanted to see how the applicants would interact with each other when we tried to create as realistic an environment as possible. Of course, that creates challenges too, because when you set up such interviews, you have to understand make adjustments and allowances for differences in personality types and cultural backgrounds and how they tend to show up in a team context. But clearly with all the educating that we're doing now in teams, it seems to me watching someone work as part of a team has got to be part of the process of trying to identify potential future leaders.

Expanding the Social Role of Business

Audience: With development taking place around the world, and with all the associated problems and adjustments in which there are losers as well as winners and losers, business is coming under fire in lots of countries and regions. Is there anything that business schools could or should do to help companies do a better job of integrating themselves with society, of working with governments and local communities to create enabling environments in which business can prosper and development take place?

Hubbard: I think the answer to that question is 100% yes. When the United States

came up with and carried out the Marshall Plan after World War II, which was probably the single largest reconstruction effort ever contemplated, it did not come from the wisdom of the Congress. It was the business community and business leaders who conceived the plan and then drove the process of getting it enacted.

Today we don't see many business leaders stepping up to create the equivalent of the Marshall Plan, whether one designed to protect the environment, or one that aims to create a more inclusive prosperity. We have many effective and talented business leaders, but up until now, they have not done all that much to promote the general welfare. I think one important role of business schools is to encourage more debate about the social responsibility of business and to bring those ideas to center stage. My own policy experience has made it clear to me that business people are much more influential than they think. If the business community stands up on an issue, they will be listened to. Our role as business schools is to encourage that process and dialogue by providing ideas and a forum for expressing them.

Garrett: I agree completely with Glenn. And expanding on Nitin's earlier point, especially when you think about developing economies, businesses can and should be the engines of growth in those economies. But businesses, of course, don't operate in a vacuum. Their ability to succeed depends on the governmental context in which they operate, and so they have both some ability but also responsibility to help mold that context in a way that makes it possible for them to drive progress and change. And it seems to me that our business schools

can do a better job of preparing their students for that task.

Hopkins: That is a good note to end this on. And let me close by thanking each of our business school deans for taking part in what I thought was a highly informative and entertaining conversation. We learned a lot about how you all are thinking about dramatic changes in the world, and how they are affecting your students, your alums and your schools. Some of the basic things will stay the same, such as learning and working in teams and learning ethics and leadership and entrepreneurship. But some of the delivery models are going to be different. So my parting advice to the audience is to stay tuned.

Hubbard: Thank you, Jan, for being such a great moderator.