

KENNESAW STATE UNIVERSITY ORAL HISTORY PROJECT
INTERVIEW WITH CHARLES W. HOFER
CONDUCTED, EDITED, AND INDEXED BY THOMAS A. SCOTT
for the
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Friday, 15 August 2014
Location: KSU Archives, Kennesaw State University

TS: Today's interview is with Charles W. Hofer who has been at Kennesaw State since 2007 and is the Regents' Professor of Strategy and Entrepreneurship and Professor of Management at Kennesaw State University. Charles, why don't you begin by talking about your educational background? I saw where you had a bachelor's degree in theoretical physics, and that was interesting for your shift to business later on. Why don't you talk about your background and maybe some mentors along the way?

CH: Okay, I'll be happy to do so. First I went to high school in a very small rural town in central Pennsylvania. At that time, while we had all the basics, we didn't have any foreign languages you could take; we didn't have any advanced courses you could take or anything like that. So when I went to take the college boards, I did well, but not super well. I was good enough to get into all the schools that I had applied to, which at the time had been Lehigh, Carnegie Mellon, and MIT, but my school would only let you do three, and my father had applied to Lafayette for me, so I had to drop one. I didn't want to drop MIT, so I dropped Carnegie Mellon. It turned out that that was a very fortuitous circumstance because I got a notice from Lafayette that they had a special scholarship day. I just about missed it, but my mother, who worked at the state Chamber, called them, and they said, "Yes, we don't know how we missed getting the thing, but come on Saturday." When I did, I apparently got the highest score on their exam. So they gave me their biggest scholarship.

TS: At Lafayette?

CH: At Lafayette [College, Easton, Pennsylvania]. It was a Union Carbide scholarship. The guy who administered the Union Carbide scholarships was a Lehigh graduate. So not only did I get the Union Carbide scholarship at Lafayette, I got the Union Carbide scholarship at Lehigh! Of course, I didn't have anything like that at MIT, so I went to Lehigh [University, Bethlehem, Pennsylvania]. I wasn't quite sure what I wanted to do. Technically, I was in engineering physics which was their word for theoretical physics, but since Lehigh wasn't very strong in the liberal arts—basically they had an engineering school, which is very, very highly rated; they had a business school which is also very strong; and their liberal arts department was the weakest. But the one thing by going into engineering physics that I was able to do was I was able to take overloads because engineers took six courses a semester rather than five with no extra fee. In fact, I could actually take seven, which I did several terms. In

addition to that I had more electives because I had started going there in chemistry, but the problem was that all the junior courses in physics had the sophomore courses as prerequisites, whereas in chemistry one year was organic and one was inorganic. You go into organic, and this year it'd have sophomores and juniors, and you'd go into inorganic next year, and it'd have sophomores and juniors, but the juniors were the people who were the sophomores the year before. The bottom line was I said, "Well, if I want to stay in chemistry, I can go back and still graduate in four years." I went into physics and took all kinds of courses—I took electrical engineering courses and all of those kind of things. I wasn't quite sure what I wanted, but as I said I took overloads, and so Lehigh was a wonderful school for me.

I did very, very well. I ended up being very fortunate. I graduated first in my class. I only got three B's. One of them was in freshman English. You could get an advanced placement course for it, but the professor I had said, "You're in the regular class, and that means you're a B to D student." No matter how well you did, you're highest grade was a B, and no matter how poorly you did, you're lowest grade was going to be a D because you weren't in the remedial English. I felt badly about that. The one that really bugged me, though, was my sophomore ROTC course where I forget what the question was now, but I thought about it and thought about it and basically wrote it up, and they graded it as wrong. About two weeks after we took the exam, we got it back. I looked at it and said, "What do you mean this is wrong?" He said, "Well, it's wrong." I said, "Well, look, here's the latest pronouncement just last week from the Secretary of Defense, and they agree with me." And he said, "Yes, but when you took the exam it was the week before that, and a week before the policy was this!" I'm sitting there so upset. Oh, my. Then I had a junior German course. I wanted to take a language, but I just wasn't strong in that. But the net result was Lehigh was a wonderful school. I loved it tremendously, and it made up for my high school lacking. I had the opportunity at that point in time to go on, and I did exceptionally well in my graduate record exams. I had applied to MIT, Princeton, and Cal Tech, which were the top three schools in the country in theoretical physics, but finally when I decided to go there, I said, "I'm not sure I want to be in physics." Then I applied to Stanford and Harvard as well.

TS: So that explains why it takes you three years [to complete a master's degree]. In 1962 you got your bachelor's, and it is 1965 before you get your master's.

CH: Well, I'll explain that in a second.

TS: Well, it sounds like you're explaining it that you changed your major.

CH: Well, what happened was I actually wasn't sure, so I was going to continue in physics, and in fact I had a big scholarship to do so. I could take the scholarship with me anywhere, but when I went to apply to Harvard, they said they didn't have the application yet. I said, "What do you mean you don't have it yet?" They

said, "Well, we've already accepted the class for 1962, and we haven't gotten the applications for '63." I was a very brash young man at that time, so what I did was I sent them my board scores, and since I had 150 points higher than their best student, they let me in! I then went to Harvard, but I went to Harvard in theoretical physics. As I said, I got in the back door, but again, I wasn't sure what I wanted to do, so during that year I spent a goodly portion of my time going to classes at the law school, the medical school, and the business school in addition to physics. After the fall semester I decided that I probably wanted to go to one of the other schools. I didn't think I wanted to be a practicing physician, so I eliminated the medical school, and I couldn't see myself as a practicing attorney, so I eliminated the law school and went to the business school.

Now if at the time they had had the joint MBA/LLB or JD programs they have now, I would have taken that, but I would have been one of the few persons who would have taken the program because those got you both degrees in four years. But for a business school student it was an extra two years; for a law school student it was just one year to get the business courses. Nonetheless, I would have been one of the few who wanted to do business, but would have preferred to have a law background. Since that didn't exist I went to the business school, but as a result of going to the business school, during the spring semester I took all of my courses in applied mathematics rather than in physics. I had asked somebody, and they said, "Oh, everybody understands that course A counts as a physics course." Well, when I went to get my degree, everybody but the Registrar understood that that was what it was. The net result was that, even though I attended in '62-'63, I didn't get my degree, which was in applied mathematics, until '65 because I had to take an extra applied math course in order to have five courses as a major.

TS: Applied mathematics sounds more business oriented than the more abstract math classes; is that right?

CH: Yes. Well, they were very theoretically applied math courses. When they say applied math, it's sort of a tongue in cheek designation. It wasn't so much that they were applied; it was just the math courses you would take. In other words, you would take stuff like advanced differential equations, which was very theoretical, but differential equations is nonetheless an applied branch of mathematics rather than, let's say, group theory. In any event, I then transferred to the business school in '63 and went through the first year there in '63-'64. I took the additional applied math courses, but because of the intensity of the business school, it wasn't until the second year that I could get the second course that I needed. As a result of that, I technically got the degree in applied mathematics in '66.

TS: I've got '65 for the applied mathematics.

CH: Well, the MBA is '65 in the spring and the mathematics degree, maybe it is fall of

'65, but I thought it was spring of '66.

TS: Well, now our catalog could have been wrong, but the one I looked at was applied mathematics in '65 and the MBA in '66.

CH: No, the MBA was definitely '65, so they have the two reversed.

TS: Okay, so the KSU catalog is wrong. I looked at the 2008 catalog.

CH: The catalog is wrong because the MBA was definitely in '65. In other words, I went straight through the MBA program, but in addition to that I had to take the applied math courses back at the graduate school of arts and sciences. I couldn't take an applied math course in the business school. What I had to do was arrange my class schedule so I could go across the river from the business school dorms to take those classes. That meant that I had a good schedule to let me do it, one in the fall of '63, but the other one wasn't until the spring of '65. While I technically completed it in the spring of '65, by the time I got everything done they didn't get the application for graduation in. So technically the MS was in the spring of '66. At that point in time, I had done very, very well in the business school. I graduated with high honors, and I was also what was called a [George F.] Baker scholar [given to the top 5 percent].

At that point in time, I wasn't sure what I wanted to do, but one of the great teachers at Harvard Business School was a gentleman by the name of C. Roland Christensen. Chris as everybody called him was a spectacularly good teacher. The simplest two ways that I could explain that was, number one, Chris would typically teach the strategy class, and at the Harvard Business School they would have a point system in terms of rating teachers. You had seventy or eighty sections. Chris would regular get a 4.97 or a 4.98 out of 5.00. Nobody got 4.9's. The next highest teacher was like a 4.75 or something. He was absolutely spectacular as a teacher, but he wanted to start a Ph.D. program in strategy. So he enticed myself and a gentleman by the name of Richard [P.] Rumelt, who had entered Harvard from [the University of California Berkeley, where he had received B.S. and M.S. degrees in electrical engineering in 1963 and 1965, respectively]. He had entered the doctoral program directly. What Chris had done was he had enticed several of us to be the first strategy Ph.D. students.

TS: So is this a cutting edge field at that time?

CH: It was brand new. It was the first Ph.D. program in the country in strategy. It was the only place you could get a Ph.D. in strategy. Chris enticed us. Howard [H.] Stevenson, who just retired as the associate dean at the Harvard Business School, was the third student, and I believe there was a fourth one named Malcolm [S.] Salter who also taught at the Harvard Business School. Rumelt is just about to retire from UCLA [where he holds the Harry and Elsa Kunin Chair in Business and Society]. We were the first class in terms of strategy.

TS: How do you define strategy? As a cutting edge field, what's different about strategy than what they had been doing in Ph.D. programs before?

CH: The bottom line is that before they had all the traditional functions, accounting, finance, marketing, human relations and so forth. There might have been one or two schools that had a degree in management, but management was general management like the undergraduate management textbook that covered all that kind of stuff. Strategy was focused specifically on the roles and functions of the general manager, and since the primary function of the general manager is to set organizational goals and develop strategies to achieve those goals, that was basically how the field got defined. The Harvard Business School was the first school in the country and the world to have a Ph.D. in strategy. I went there, and again I had gotten a good scholarship because I had done very, very well in my graduate record exams.

In fact I didn't even realize quite how well I had done on my graduate record exams until one time when I went home maybe twenty years later. [Back in the 1960s] I was very, very worried that I might get drafted because of the Vietnam War at the time and switching from the sciences into the field of business. The one thing they had done back at that time [was] they had changed the graduate record exams primarily I guess at the encouragement of the military. Currently and prior to that you could get a 1600, the same you would do in the college boards as the maximum score. What they did was they wanted to separate out the people at the very top, so you could get an 1800 in terms of English and math; instead of going to 800 it went to 900. Eight hundred was the 99 percentile, so what they were doing was splitting out the 99 percentile people. From 800 to 900 everybody is 99, but it's how high in the 99th percentile you were. They went to 950 in the achievement test, which mine was in math and science. The bottom line was I ended up getting 1835 out of a possible 1850.

I knew it was a good score, but I didn't know quite how good until later. It instantaneously got me into any Ph.D. program I wanted to get into, but, more importantly, as I said, twenty-some years later I went home to rural Perry County in central Pennsylvania [where] they filled most of their draft [slots] by volunteers who said, "Why don't we go shoot the Gooks." What I was doing [there] was I was closing my mother's estate; she had just passed away; and as the senior son I was closing the estate. So I went out there, and when I was closing the estate, somebody said, "Charles Hofer; are you Charles Hofer from Duncannon?" I said, "Yes." He said, "I want you to go meet somebody." So he took me over. This was in Newport, which was the county seat of the township. I met this guy. He was the guy who was in charge of their draft and other selective services. The bottom line was I was wondering why he wanted to see me. The net result of that is—he kept it, but he showed it to me—he got a letter that had been signed by the Secretary of the Army and the Secretary of Defense that basically said. "Under no circumstances do you draft this kid," because of how well I had done on the exam.

- TS: Well, it seems the military would want you for that reason.
- CH: Apparently they felt that if you were that good you could do other things.
- TS: Do something else. Right.
- CH: I think 1750 was where they did the cut off, but a significant number of the people over 1750 have won Nobel prizes. I didn't stay in the sciences, but apparently it was a good indicator of that. As I say, because at 800 you are already in 99 percentile, so when you go up to 900 you're just splitting it out even further. But I didn't realize. I was very worried that I was going to be drafted because I didn't know about the letter. But in any event, I got my doctorate in strategy, and then I started teaching.
- TS: I've got business policy [as your major Ph.D. field]. What's the difference in that and strategy?
- CH: Business policy is what strategy was called in the 1960s. The field underwent a transition, and in fact it was a transition that I helped engineer. It traditionally had been called business policy because business policy was the capstone course of the MBA program. It was the course you would take where you were supposed to be taught how to think like a general manager. The essence of the field of business policy was to teach you how to think like a general manager. In essence, if you went to Harvard Business School, they hoped you would do very well. Eventually, you should hope to get to be the vice president of finance or accounting or what-have-you in your company. Once you were there the next thing up was to be the president or the general manager of the business. So the business policy course was the course where you were trained how to think like a general manager. At the time it got its name because basically you were responsible for setting the overall goals of the organization as well as the policies for each of the functioning areas. You would set policy in finance; you'd set policy in accounting; you'd set policy in human relations; and so forth. Ultimately, we began to realize that all those policies had to fit together, and strategy was the common thread that linked all the policies together. I was one of the academics who held a conference in 1977 in Pittsburgh that resulted in the 1978 book that was called *Strategic Management: A New View of Business Policy and Planning*.
- TS: I've got that for '79. You had an early book, *Strategy Formulation: Analytic Concepts*, in '78.
- CH: Yes. The bottom line was I did a whole series of books on strategy formulation, organizational goal-setting, strategy implementations, and so forth, for the West Publishing Company where I was the senior author and editor. In addition to that we had held a conference at the University of Pittsburgh in 1977, and we worked on the book in '78. It was supposed to have been published in '78, but it didn't

get out until '79 because we switched to Little Brown as the publisher.

TS: I see. The first was West Publishing?

CH: West Publishing Company was the series of books and then that book, we had two potential publishers. We were originally looking at Dow Jones-Irwin, but we decided that the Little, Brown [and Company] contract was slightly superior. What we did was we accepted the contract with Little, Brown, which is why the book ultimately was published in '79 instead of '78.

TS: Little, Brown is certainly well known to everybody.

CH: Oh yes. That was one of the significant books. One of the reasons why I got to be well known is that in 1984 John A. Pearce II & Richard R. Robinson published "Classics of Business Policy," *Proceedings of the 1984 Southern Management Association*, New Orleans, November 1984, in which they identified the "Top 20 Classic" articles in the field of Business Policy of which my article, "Toward a Contingency Theory of Corporate Strategy," [*Academy of Management Journal*, Fall 1975] was listed third on the list; and in 1985 Benjamin M. Oviatt & Warren B. Miller published the Top 30 Most "Significant Contributions to the Strategic Management Literature" at the Annual Meeting of the Academy of Management, August 1985 in which three of my publications made the Top 30. My book, *Strategic Management: A New View of Business Policy and Planning* (Little, Brown, 1979) was ranked sixth; my "Contingency Theory" article was ranked sixteenth, and was the highest ranked article of the five in the Top 30; and my book, *Strategy Formulation: Analytical Concepts* (West Publishing, 1978) was ranked number thirty. In fact, I was the only person to have three works on the list.

TS: Wow! That's great.

CH: Our '79 book, *Strategic Management*, ranked 6th best in the history of the field. My article, "Toward a Contingency Theory of Business Strategy [*Academy of Management Journal* 18 (December 1975): 784-810]" ranked 16th and was the highest ranked article. Then my *Strategy Formulation: Analytical Concepts* book ranked 30th. I also edited two of the other books on the list, but nobody else had more than two books. In fact, I think only one other person had two books on that list. Two persons did the top thirty classics of business policy and two others did the top twenty articles. On the article survey it was the third highest article, but on the classic survey it was ranked as the most significant article.

TS: It's probably pretty obvious to anybody in the academic world, but it may not be to other folks—what was it about teaching and research that attracted you to college teaching as opposed to become a general manager of a corporation?

CH: Well, that's a good question because I wasn't even sure myself! In fact, my first

position wasn't a position in any of the schools that I wanted to go to, so I got a position to teach at the Singapore Institute of Management for a year and a half. I had never been out of the country, so I used that as an opportunity to go all over the [world].

TS: You got pretty close to Vietnam then.

CH: Oh, yeah. The benefit of that was the position was funded by the Ford Foundation. They bought you an around the world ticket that was, A, first class and, B, as many stops as you wanted. For example, I left from Boston and flew home to Harrisburg, Pennsylvania to see my parents, then flew from there to Chicago to see the girl I was dating at the time, then from Chicago to Seattle because one of my colleagues from the Harvard Business School was running for governor in Washington, and so I got to talk with him, and then from Seattle to Hawaii, from Hawaii to Japan....

TS: Oh my! Sounds like a long vacation to me.

CH: Japan, from Tokyo down to Kyoto, and then from Kyoto to the Philippines, and then from the Philippines to Singapore. While I was in Singapore, I got all around Southeast Asia, and then finally came back the other way around. So I went from Singapore to Rangoon to India to Beirut to Istanbul and then into Rome and Paris and London before flying back to Boston.

TS: Wow. Was there much of a global focus to the Harvard Business School when you were going there?

CH: Yes, A, it was global, and, B, they always had what was considered the point of view of the general manager who was the CEO or the president. From all of my Ph.D. studies that was what I was interested in, but if you get back and say, "Why did I get into academics and into strategic management," I guess there were two things or maybe three that you could fit in. A couple of years ago I had written up a page, which I'll give to you, where I try to address the question. I start off with the question simply as, "Is mankind better off today than it was 2500 years ago?" I think everyone of us would say absolutely, but the next question then, you say, "Why?" Okay, if you go back and look at some of the disciplines—for example, my congressman, because of my high College Board scores, wanted to send me to West Point or Annapolis. I wanted to go to the Air Force Academy, but they wouldn't let me in because at that time you had to have perfect 20/20, and I didn't. So I didn't get to go to the Air Force Academy.

But if you take a look, we have wonderful modern generals, MacArthur, Patton, all of those people. But are they any better than Caesar or Alexander the Great or what-have-you? Not a whole lot. Or if we take a look at political science, yes the U.S. is tremendous and our Constitution is really great, but ancient Greece was also relatively strong as was Rome. We had the Code of Hammurabi and the

Magna Carta and so forth. Philosophy, yes, we have Russell and Whitehead, but are they any better than Plato and Aristotle? Not necessarily. You go to painting and [other visual arts] and you've got Da Vinci and Michelangelo. Yes, we've got Cézanne and Van Gogh. Music, you've got Beethoven and Brahms vis-a-vis Tchaikovsky and Stravinsky. Even in medicine, where we use biotechnology, the Hippocratic oath is thousands of years old.

If you take a look at it and say, "Why are we really better off," there are two fundamental reasons. Number one is technology. You take a look at all the technology—whether it's animal husbandry, driving, fireplaces, what-have-you—we've gone from animals pulling plows to tractors and combines, from drying and bottling foods to refrigerators and freezing, from writing and printing to telephones and internet. So the net result is in all of these areas we have tremendously developed, and in all of those instances those new technologies were brought to us by business. The bottom line was there were essentially two reasons behind the tremendous progress we've made. Number one is progress in technology, which we've made by people in the sciences, but number two, the application of that technology to common everyday problems for you and me....

TS: So capitalism and the profit motive?

CH: Which were done by business. My summary was, most of mankind's progress over the last twenty-five centuries has come from the application of technology to human problems in economically viable ways. Business is the organ of societies whose mission is to apply technology to these problems, and general managers or entrepreneurs are the architects of the strategy that determines how those resources are going to be applied. So I said, "That's why I'm in strategy, and that's why I'm in business." That got me in. Now why teaching, well, I happen to enjoy it, and I thought that I could influence as many or more people through teaching as I could do on my own, but I've done both.

TS: It sounds like you've got a strong historical basis for your philosophy.

CH: Yes, but that's why I got into strategy in the first place because you could do it. I said that, and so the net result is that technological development in terms of new products for innovation or more products are the driving forces of that. In fact, there's a book by Fred [J.] Young called *How To Get Rich and Stay Rich* [Lifetime Books, revised edition, 1995] that on an individual basis says, you can inherit it or marry [well] or you can win the lottery, have unique [talents] or skills like a basketball player, you can invest wisely in the stock market if anybody knows how to do that—or in real estate—or you can start and grow your own business.

But if instead I take a look at this not just from a single individual, but from an economic perspective, the answer is innovation creates new things, it develops new products, and it significantly improves existing products. Productivity makes

those things more cost effective and more durable, i.e., they last longer and are cheaper. The other thing is that turnaround management, which is the other area that I specialized in, restores things that other people have messed up. So the net result of all of that is that I've spent my entire academic career doing entrepreneurship and turnarounds. The great thing about entrepreneurship and turnarounds is that strategy is the key to success in those fields. One of the things that I sometimes do when I talk to people about entrepreneurship—and remember I'm going to come back and talk about turnarounds as well—but I point out to everybody that entrepreneurship is really a career, it's not an event.

I say, "Let's suppose you're going to graduate in your mid-twenties, and you're going to retire at seventy which is the current retirement age. That's mean you have a career spreading over forty-five years. How long are you going to be in each position or how many positions are you going to be in?" Well, if you take a look at the normal business, most people spend about three, four or five years in each position before they get promoted or move up. If you use four years as an average or maybe four and a half years as an average, it says you're going to have ten or eleven positions during your career. One of the things I say is, "Okay, you can start here, and if you want to be the CEO, you can go to any company and find out what the last two or three positions before the president are. The tough thing is to make the jump between the end of your first three and where you need to be."

But more importantly, let's suppose you take a look at entrepreneurship. What is the track record for success in businesses in our country? Well, the [U.S.] Small Business Administration has put out statistics, and for any business the success rate is basically 20 percent, i.e., four out of five businesses fail. Now, the first thing I'm going to say to you is that's all businesses; that's not a business where you have somebody who knows what they're doing. It also assumes you're not learning from what you do. But let's just take that. I had a background in mathematics, so the bottom line is when I say it's a career not an event, let's suppose you start doing new businesses, and it takes you four to five years, and after four to five years you will either be successful or not.

Let's suppose you keep going out, and you say the statistics are 80 percent you're going to fail, what are the statistics that you will ultimately succeed, i.e. on the tenth try you'll make it? Well, if you have an 80 percent failure rate, the probability of success on the first try is 20 [percent]; on the second it's 35; on the third it's 50; on the fourth it's 60; on the fifth it's 67; on the sixth it's 75; on the seventh it's 80; on the eighth it's 83; on the ninth it's 86; and on the tenth it's 89; and on the eleventh it's 91. That's assuming you don't even know what you're doing. If you assume that you know what you're doing, and you learn a little bit—and this comes from venture capital statistics for venture capital based ventures—the first thing I have to say there is I'm not talking about ventures that the venture capitalist deems to be successful, rather the ventures that the entrepreneur deems to be successful. What's the difference? Well, the venture

capitalist has to make 25 to 30 percent of their money. If they don't get a big return, it's unsuccessful. But if you say, "How many of the venture capital based businesses actually go down the tubes, that is fail or lose most of the money? It is only 50 percent. The other 50 percent are there, and they're up and running and they're making a profit. They are just not making a 30 or 40 percent profit. So half the businesses funded by venture capitalists are successful for the entrepreneur.

Regrettably, four of the five of those that are successful for the entrepreneur are not successful for the venture capitalist because they don't make quite enough money to pay the entrepreneur back, but the tenth one does. The tenth one makes up for all the others, but nonetheless from the point of view of the entrepreneur half of them are successful. So if you go to a fifty-fifty—that is the kind of venture to be funded by a VC [venture capitalist] because you've learned about it, and you assume no learning between events is 50 percent on the first time, 75 on the second time, 88 on the third, 94 on the fourth, 97 on the fifth and 99 percent on the sixth. Now, if you assume that you learned a little bit, let's say by a third, it's 50 percent on the first, 83 percent on the second, 98 on the third and 100 percent on the fourth.

TS: So don't worry about failure.

CH: So the bottom line is if you know what you're doing, and you learn from what your mistakes are, you're going to make it. An example of this is the Ford Motor Company is Henry Ford's third company. He had a first one that failed, the second one was break-even, and the Ford Motor Company is his third. The Hershey Chocolate Company is Milton Hershey's fourth. The net result is you need to learn how to do those things, and that's what we try to teach in the basic entrepreneurship course.

TS: You think entrepreneurs are different than other folks in that they can live with failure and live with stress and so on?

CH: Some of them can, some of them can't. Those who can't tend to go out and dig around and try to get as much information as they can. Others are willing to play it loose. I've found both kinds, but if you take a look at it, the one thing that is relatively clear is that except for persistence and a little bit of above average IQ, and when I say above average I'm talking the B average in college; I'm not talking anybody who's a superstar; so 115 IQ is enough.

TS: In others words you don't have to be brilliant to be a success.

CH: You don't have to be a genius to be successful in business. In fact, your persistence and your attitude may be more important. If you're going to be a general manager, you have to figure out your strategy; you have to build an organization; you have to innovate; and you become an entrepreneur. I have a

diagram, which I'll give to you, which I've done this. I've done an analysis of probably one of the most successful entrepreneurs of all time, Jack Welch at the General Electric Company. Having said that, the bottom line behind entrepreneurship, which is the great thing about entrepreneurship is it may take you ten or fifteen years, but you become sufficiently wealthy to support your family, your employees, and everybody else, and you bring society additional new products and services that were never there. But you can nonetheless be successful as an entrepreneur like Henry Ford. Henry Ford didn't invent the automobile, but what he did was he made it more inexpensive. He invented the technology for being more productive.

TS: The assembly line.

CH: The assembly line. He didn't invent the assembly line; he applied it to automobiles. Somebody else invented the assembly line, but what Ford did was to apply it to automobiles and made the first inexpensive automobiles.

TS: They say he started paying five dollars a day, and everybody thought he was a radical.

CH: Absolutely. But the net result of all of this was that he became an entrepreneur by being a productivity director. He didn't invent the car, but what he did was he made the car less expensive and more durable, so that for the common person you could finally afford it. The net result of all of that is that there are wonderful things that have happened as a result of what Henry Ford did, and that's basically what all entrepreneurs do.

As I said, the other field that I specialize in is in turnarounds, and what turnarounds do is you take a company that had previously been successful, it had good products, it had good services, and all of those, but somehow the current management team has messed it up.

TS: I think I told you I did an interview not long ago with Norman Radow [former chair of the KSU Foundation] who worked with the Lehman Brothers in doing exactly that, of taking companies or apartment complexes that were only about a third full and turning them around.

CH: Yes. You can do it in real estate or you do it in companies. A whole series of my publications are on turnarounds. Not only did I do stuff on turnarounds, I have probably the best known and highest rated article in the field of turnaround management, but there's now an organization called the Association of Turnaround Management, which gives a certification called the CTP, Certified Turnaround Professional, and I was the national grader for the first ten years. If you wanted to get a CTP, you took three exams, one in accounting, one in law, and one in management, and I was the national grader for management. I can tell you—and this is an aside—David Perdue would have never made it!

TS: You were telling me that over the phone. Well, we're not going to get political here.

CH: Let's put it this way. I don't know enough about his background to say one thing or another. The real fault there, in my opinion, is not his but the board of directors. If they were looking for a turnaround manager, they should have known about the CTP; they should have gotten somebody with the appropriate qualifications for doing the job. So if they hired him, and he wasn't up to the job, it's the board's fault for hiring somebody who wasn't up to the job.

TS: Okay.

CH: Having said that, when I started my career, as I said, I started at the Singapore Institute of Management.

TS: How long did you stay there?

CH: I stayed there for a year and a half. Then when I came back I got a job at Northwestern [University]. It was an interesting thing because they wanted to do interviews, but they weren't willing to fly me in from Singapore. I said, "Hey, I can't do this." So we finally made a deal. They said they'd hire me sight unseen for a year, if I would be willing to come. The deal was if for any reason I didn't work out, then I was gone after that year, but at least I'd be back in the States.

TS: So this would be 1971?

CH: This would be the 1970-'71 academic year. I came back, and I worked out quite well, and so midway through the first year they gave me the standard three-year contract, which then rolled over when I did my publications. [Robert B.] Bob Duncan, who later became [provost] at Northwestern [from 1987 to 1991] and I were their top two junior faculty.

TS: Is that right?

CH: He was in organizational behavior, and I was in strategy, and we were their highest rated faculty. [Organizational behavior includes] human relations and those kinds of things.

TS: Did you get tenured at Northwestern?

CH: Yes, but for a whole variety of reasons I decided to move to Stanford.

TS: What year was that?

CH: That was in 1976.

TS: This is before your books start coming out.

CH: Yes. I brought some people in there to start a department [at Northwestern]. I brought Ian [C.] MacMillan in from South Africa. He later became the head of the area at Columbia and later [executive director of the Sol C. Snider Entrepreneurial Research Center] at [the] Wharton [School, University of Pennsylvania]. I had assembled a good group of people, but while they were willing to keep me, they weren't willing to keep Ram Charan. McMillan was a traditional academic like myself, but Ram Charan was—and I guess what I was upset about at the time was that Northwestern wanted everybody to be cut from the same cookie cutter, and I said, “That doesn't make sense in a well rounded department.” The reason I brought Ram in was because he was a great teacher. To put it another way, Ram is the only person who comes close to Roland Christensen in terms of student ratings. When he was teaching while he was still a Ph.D. student at Harvard, Ram would be 4.93s to Chris's 4.97, the next best faculty, as I said, being in the 4.7s. When he came to Northwestern, they were on a seven point system, and he got a perfect 7.0 in eleven of the twelve courses he taught and got a 6.96 or something in the other course. Ram was a really great teacher. The reason why I left Northwestern was because Northwestern wouldn't give tenure to Ram. I said, “This doesn't make any sense, so I'm going to go some place where I can do something like this.” Ram since then first got himself a job on a temporary basis at Columbia, but then he has been out on his own doing executive program teaching independently [through his company Charan Associates, Dallas, Texas] ever since. For example, GE has an executive training facility in Crotonville, New York. Ram is the only person who for the last fifty years has taught their strategy class. He has similar things for most other major corporations. He makes himself three-quarters of a million [dollars] to a million and a half a year teaching exclusively in corporate executive training programs.

TS: I was thinking that's probably more lucrative than college teaching.

CH: Yes, it's more lucrative, and he's dealing with people who are ultimately going to become the CEOs of a company, and he has since then regularly written a number of co-authored books typically with the president or the chairman of the board of the company for whom he was doing the teaching and would also usually be an informal advisor, i.e., right-hand man to that president or board chair. He did all of that.

I went to Stanford, taught there for a year, and did very, very well there, but they weren't quite sure what they wanted to do. Unbeknownst to me they had created a Stanford Plan for the 1970s, which led them from being rated tenth or eleventh best in the country to second behind Harvard. They felt that they should do something similar to that again. While they hired me in 1976-'77 to come and teach there, while I was there they decided they wanted to do the Stanford Plan for the 1980s. As a result of that, they said, “We are therefore not willing to make

commitments.” Once they decided to do the Stanford Plan for the ’80s they said, “Such commitments would have to wait until after we’ve completed the plan.” I said, “I’m not going to wait that long.” I came back East and taught for a year at Columbia. I left Stanford in the end of the summer, in August, but I then went from Stanford to West Lafayette, Indiana, where I wrote the books—the West series as well as the strategic management book—with my co-author Dan [E.] Schendel of Purdue University. I had started the books when I was at Stanford, but because they weren’t yet done, what we did was I stayed in a small apartment that I got in West Lafayette and then would work directly with Dan at Purdue. Purdue wasn’t sure they wanted to do the thing either, so what happened was Dan’s wife, Mary Lou Schendel, who was a lovely and very gracious woman, would type all the stuff for us. Neither Dan nor I could do typing worth anything.

TS: Okay, so you’re not teaching at Purdue; you’re in an apartment writing books.

CH: No, I’m not teaching at Purdue. I’m just writing books with Dan. He was teaching, and Mary Lou was typing up what both Dan and I wrote. Dan and I had slightly different views of some things, but nonetheless we were two of the most advanced people in the strategy field at the time. So even though we differed on some things, we were united in the fact that we agreed that what had existed before didn’t work out. Of the new stuff let’s say I was right on probably 80 to 90 percent in terms of the books that we ended up with, but Dan was right on a number of places, and not only was he right on maybe 10 or 15 percent, but even on some of the things where I was right, he helped fix it up. In other words, he polished and better crafted what I had put in. It was a collaboration, and we got both books done, but then after we got done in the fall, I then went to Columbia for that winter/spring. I taught at Columbia that winter/spring.

TS: That would be the winter of ’78.

CH: Yes. Since I wanted to stay around there, I looked around and one of my friends who was also a colleague from the Harvard Business School, a gentleman who had been a junior faculty member there when I was there whose name was William [D.] Guth. He was now at NYU [New York University] as the head of the Management department.

TS: Oh, so that’s how you got to NYU?

CH: After I finished my spring semester at Columbia—and again, they weren’t quite sure what they wanted to do—I called Bill, and I said, “Look, Bill, I’m not sure what’s going to happen here at Columbia.” He said, “Well, if it doesn’t work out come down and teach for us.” So I then got a job at NYU for the next two years. For ’78-’79 and ’79-’80 I taught at NYU.

TS: Then you came to Georgia?

CH: Then in '80-'81 I came down to Georgia. I was teaching at NYU, and I was teaching the strategy and entrepreneurship course and enjoying it a whole lot.

TS: How did they attract you to Georgia?

CH: I had never been to the deep Southeast up till then, so I had no clue. What had happened was there was a gentleman who had been another friend and colleague by the name of William [F.] Glueck, and William and I were very, very good friends even though we had never gone to school together. We were both involved with the Academy of Management. When Bill was the president of the Academy, I ended up becoming the president of the strategy division of the Academy. I was doing all the stuff in strategy and making that a strong division when he was the president of the Academy. He had been quite helpful in terms of giving advice of who I should co-author with, who I should not co-author with, et cetera. He had taken a position at the University of Georgia as a tenured full professor. He ended up dying very young in his early to mid-forties of Lupus. Bill had been at Georgia and in that position. When he was at Georgia, he was telling people about me and what I had done. In addition to that one of my better Ph.D. students, a fellow by the name of William [R.] Sandberg—Bill had been a student of mine at Northwestern, but Northwestern didn't yet have a Ph.D. program [in strategy]. It had an MBA in strategy but it didn't yet have a Ph.D. in strategy. The second Ph.D. program in strategy was started by Dan Schendel, my co-author, at Purdue. So Bill left Northwestern and went down to Purdue to work in the Ph.D. program there.

Bill is a talented guy; he's a bright guy; he does very, very good things; but he rubs some people the wrong way. I suppose I do to. But the simplest way to say it is that Bill Sandberg and I rubbed each other the right way; Bill Sandberg and Dan Schendel rubbed each other the wrong way. Bill had been at Purdue for two years and had passed all of his comps, but didn't want to do what Schendel wanted him to do in terms of dissertations, so he looked around. Because I knew Bill Glueck down in Georgia, and Bill had a Ph.D. program, I got Bill to hire Sandberg into the Georgia Ph.D. program. Then after Glueck passed away, not only did the people at Georgia know about me, but I had Bill Sandberg who was lobbying my case. So Georgia made me an offer. It was an offer that I couldn't refuse. Originally, they were going to give me an associate professorship with tenure, but when all the books came out and they saw some of those, they instead brought me in as a full professor. They didn't bring me in with tenure because of some rules.

TS: Board of Regents policies.

CH: The Board of Regents policy, and then it took me a little bit longer for me to get my tenure at UGA than I wanted to, but I understood what was happening. When they brought me in, I had just finished these two books in strategy, which, besides the recommendations from Glueck and Sandberg the books made me look

- attractive. Well, all of a sudden these books become the top two books in the field of strategic management. They had other people in the department they wanted to bring up for full tenure, and if they looked at me vis-a-vis them, the other candidates didn't look so good.
- TS: Right I understand. So they wanted you to hold off?
- CH: Yes, since I was there and had the full professorship, and since the other guys because of the six-year rule had to go up, they postponed me until the fifth year because they didn't want to bring me up in years three or four because there were other candidates they wanted to get through.
- TS: So they said, "Don't worry about it; you're going to get it"?
- CH: "Don't worry about it; you're going to get it." But the point was they were afraid they wouldn't get the other people.
- TS: And it wasn't going to affect your salary.
- CH: It didn't affect my salary. So I had done all of that....
- TS: I was going to ask you—I know you were only at Purdue for a semester and weren't really on the faculty, but I just did an interview recently with Stephen R. Cheisher, who was a department chair there at the time and then became president of Southern Polytechnic in 1980. I wondered if you ever ran into him.
- CH: No, I never ran into him. Remember I wasn't in a department, and I was working [on writing books]. Let's put it this way. The two most significant people in the field of entrepreneurship in the early years were Karl [H.] Vesper at the University of Washington who got his degree at the Harvard Business School, and [Arnold C.] Arnie Cooper who also got his degree at the Harvard Business School. Arnie Cooper was at Purdue at the same time as Dan Schendel, so I was sitting there writing two books with Dan Schendel, but during that entire semester I maybe saw Arnie Cooper one time. I knew Arnie Cooper; we were good friends; and if I only saw Arnie Cooper one time. I didn't really see anybody else!
- TS: I understand. It's amazing though that Purdue had such a fabulous faculty.
- CH: They were very, very strong, which is one of the reasons why I sent Bill Sandberg there.
- TS: You had been jumping around from place to place, and you found a home apparently at Georgia because you stayed for the next twenty-seven years.
- CH: Right, I found a home, stayed there for twenty-seven years, and very much

enjoyed it. There was a point in time where I ended up being a long-term beneficiary, but not necessarily short-term. Our department chairman while we were at Georgia was a gentleman by the name of [Richard C.] Dick Huseman. In order to keep everybody happy, he would do something that wasn't done here at Kennesaw—maybe it was done at other schools—but if there was a raise that would come down, everybody got the same raise.

TS: Oh, my!

CH: No matter how good or weak you were.

TS: No merit increases?

CH: No merit increases. But what Dick did was when somebody was ready to go up to the next level, he would point out how poorly they were being paid compared to people in that position at other schools and get them the big raise at that point.

TS: But you couldn't get promoted any further, so that wasn't helping you.

CH: That worked out for most of the people there. The problem was I was already a full professor. I'm sitting there saying, "How can we do this?" I finally looked around and saw the Regents' professorship, and it turned out at that time that there was nobody in the entire University System of Georgia who had been a Regents' Professor of Business.

TS: Oh, really?

CH: Really.

TS: What had they been in?

CH: They were all in chemistry, physics, the hard sciences, and similar areas. But there was nothing in the write up that said you couldn't be in business, so I applied for a Regents' professorship, and because of my books and my track record I was the best guy around.

TS: What year did you get that?

CH: I think I got it in '93. That's when Huseman made me whole. I was made whole when I got my Regents' professorship. I actually became the first Regents' Professor of Business in the history of the State of Georgia. There is a lady, I believe, from Georgia Tech [Marie Currie Thursby] who in [2012] became the second Regents' Professor in Business. [Ed. Note: She holds the Hal and John Smith Chair of Entrepreneurship at Georgia Tech along with her Regents' professorship]. But there have only been two of us.

TS: How many Regents' Professors are there?

CH: I think it's one or two a year. You can only get a Regents' professorship at UGA, Georgia Tech and the Medical College of Georgia.

TS: Right, the research institutes. Not even Georgia State?

CH: You can't even get it at Georgia Sate.

TS: So three of the four research institutes.

CH: So you can't get it at Georgia State, you can't get it at Georgia Southern, you can't get it at Kennesaw or any place else.

TS: But once you get it you've got it for life?

CH: Well, not necessarily. You get it, and you have it for three years, and then you reapply, and assuming that you continued to do the [same] kind and quality of work, then you have it for life.

TS: Just one time that after three years you have to reapply?

CH: Yes. You have to reapply after three years. After that reapplication, it is then for life, although I did have to ask if I could transfer it to Kennesaw.

TS: Right. So you're the only one in the history of the university system that has taught in what is now a comprehensive university.

CH: Yes. I'm the only one there. I'm the only Regents' professor that Kennesaw has had and is probably going to have for a long time.

TS: Well, according to Dan Papp's speech yesterday, it's going to be years and years before we're classified as a research university, if ever.

CH: Yes. So it'll be years and years before you get another Regents' professor.

TS: Right. Unless it's like you to bring it with them.

CH: Right. So I had been doing very, very well at UGA, but unfortunately, and I mean this as no disrespect—I loved UGA, and particularly I loved the students, and I loved the technologies. I was doing two things—number one, I was teaching the MBA courses, and not just courses but an entire sequence in Entrepreneurship New Venture Creation.

TS: You were doing it all yourself?

CH: Yes. In addition to that there was a Ph.D. program in management, but you could specialize in strategy, so I was the one who was teaching the strategy specialization. Now, the basic quantitative methods courses you would take with other faculty members. The basic underlying management courses you would take with other faculty members. But the strategy courses you would take with me. I was teaching both the Ph.D. in strategy and the MBA in strategy.

TS: How many classes were you teaching a semester?

CH: Two. Typically, I would teach three MBA classes a year and one Ph.D. class a year. In the fall I would teach the strategy Ph.D. course and the basic entrepreneurship course, and in the winter/spring I would teach the business plan and the launching new venture class. I wouldn't be teaching anything in the Ph.D. in the spring, but I would then pick up and teach more in the MBA program. It worked out quite well. Remember UGA—and most people don't realize this, but they have very, very bright MBAs. If you judge by graduate record exam scores UGA MBA's rank in the top ten in the world, and that includes Harvard, Stanford, Northwestern, Oxford, Cambridge and so forth. They have very, very bright MBAs, but they're very young. They're all in their early twenties, and that became, at the MBA level, a slight source of frustration for me. Why, because UGA was also one of the top five universities in the world in terms of agricultural biotech. I would go out and find wonderful projects from the agricultural biotech faculty for MBA students to develop business plans on, and they'd develop business plans, and we'd go to compete in business plan competitions. The reason we did that was because you can compete with everybody. You might not be able to do something against Harvard or Stanford or Northwestern in the field of strategy, but you sure as heck could in the field of entrepreneurship by going to business plan competitions. I took my MBA students down there. The very first year I had created the Georgia Bowl[®]. We did that and I had my first team and I learned about Venture Labs[®] or Moot Corp[®] and basically wrote them and told them about my teams and said they were really good and shouldn't I come? They [replied] with a no thank you. Well, it turned out that while they said thank you but no thank you, that year—and it's only that year—San Diego had its competition after Venture Labs[®] or Moot Corp[®]. It was then called Moot Corp[®]. Moot Corp[®] was basically the first week of . . .

TS: Moot Corporation?

CH: Moot Corp[®] was the name of the business plan competition. It was named after moot court in law schools. Law schools had moot court, so Texas named its business plan competition Moot Corp[®]. That year theirs was the first week of May, and San Diego was the second week of May, so that year San Diego only brought in the five best teams in the country, which were two teams from Georgia, my two teams that I had wanted to put into Moot Corp[®], two Texas teams, and a fifth team I believe from Indiana. Well, that year the Texas team had won Moot Corp[®], so a week later we show up in San Diego, and my two teams

finished first and second, and the Texas team that had won Moot Corp[®] finished third. The next year Moot Corp[®] moved its competition, so it was the latest competition that was ever going to be held in the United States, so nobody would ever be able to beat the Moot Corp[®] winner. But guess what? The next year I had an automatic invitation to Moot Corp[®].

TS: It sounds like you're doing a lot of teaching and mentorship.

CH: Yes. I loved what I was doing at the MBA level; and, in fact, I established the best business plan competition record in the world while I was there. I had maybe 120 different projects, seventy teams that went to business plan competitions, and my teams finished in the top five in forty-five of those and won thirty of them. So we were by far the best team in the country. In fact, there was an article published, I forget whether it was in *Fortune Small Business* or *Inc.* or *Entrepreneur*, but it said that power in the business plan competition was largely bi-polar with Texas holding Moot Corp[®] and Georgia being where we were. Our record isn't quite as good since I came to Kennesaw because my students aren't quite as good, but at that point in time as they pointed out two-thirds of the competitions were won by Georgia and Texas, and the third was won by somebody else. In any event, I did that, but my frustration was that only about ten or eleven of those 120 teams were launched.

TS: Launched?

CH: Yes, started a business. The reason for that was because even though those students were really bright, they were really young. They were all in their early twenties, so they didn't have enough real world experience to do the things, which is one of the reasons why I ended up coming here to Kennesaw.

TS: Oh, the non-traditional students?

CH: It's non-traditional; most of my students are in their mid to late thirties; a few are in their early forties; a few in their early thirties; but the bottom line is I've had let's say thirty-three teams here, but of those thirty-three teams, nineteen are either successfully launched or in the process of launching. They haven't won nearly as many competitions because the students aren't quite as good—the competition is like going on Jeopardy or Wheel of Fortune; you've got to have really fast answers to the questions.

TS: Okay, I understand, but the experience counts for more than maybe the innate ability in terms of being successful in the startup companies.

CH: Oh, yes, absolutely. You learn all kind of things because you run into the best judges in the world, and so it's been wonderful for our students here at Kennesaw. As I said I haven't won as many, but the reason why I'm here is because I had let's say 10 percent of my ventures at UGA started, but here I'm already over 50

percent, and it looks like it's going to be 60 to 70 percent.

TS: Talk a little bit about how you were recruited for Kennesaw.

CH: Well, can I come back to that in a second?

TS: Sure, go ahead with what you were talking about, and we'll come back to that.

CH: The other thing that I did was I did the Ph.D. program. I was even more successful in the Ph.D. program than I was with the MBA program because again, in the field of entrepreneurship, you had two awards. There are awards for the best dissertation in new venture formation called the Heizer [Doctoral Dissertation] Award [in New Enterprise Development], which I had actually created at Northwestern in the early 1970s and got [Edgar F.] "Ned" Heizer to fund it—Ned Heizer, Jr. [1929-2009] He had originally been with Sears in its Allstate subsidiary, and he started the first publicly owned venture capital firm in the United States and then later [in 1969] created his own firm called the Heizer Corporation, which he got funded mostly from angels and rich personal friends from around the Chicago area. I got him when I was teaching at Northwestern to come in and be a mentor in my MBA classes and got him to give—he later put in a chair and a center [Heizer Center for Private Equity and Venture Capital] at Northwestern, partially because of my influence. He also funded the Heizer Award for the best dissertation in the field of new enterprise development. Later, when we began getting stuff in small business, I got the National Federation of Independent Business to create a similar award for dissertations in small business [The NFIB Doctoral Dissertation Award in Entrepreneurship and Independent Business]. I created all the dissertation awards that the field of entrepreneurship has, but at the time I didn't have any Ph.D. students at Stanford or Columbia or at NYU or at Northwestern, but when I went to Georgia after Bill Glueck had died, I got the opportunity to create and teach in UGA's Ph.D. program. My students from there have won more Ph.D. dissertation awards than the next five universities combined. My students have a total of thirteen dissertation awards, the next best school has three, and then there are four other schools with two. I have thirteen and the next five schools combined have thirteen.

TS: My goodness. That's great!

CH: So I know how to do really good dissertations, but that wasn't why Kennesaw wanted to get me. Kennesaw would come to the Georgia Bowl[®] or the Georgia Cup[®], which was an undergraduate competition that I had created and started, which is the second oldest business plan competition in the world, which I created at the University of Georgia—it starts the business plan season, and Moot Corp[®] ends the business plan season—when I did that I would invite all the schools from Georgia. Later I expanded it from the state of Georgia throughout the Southeast, and now I have selected other schools beyond the Southeast. I invite some people from Chicago; I invite some people from Manitoba and so forth; but it's not really

national; it's sort of quasi-national. It's mostly the Southeast plus five or six selected schools. In any event [Timothy S.] Tim Mescon, who had been the dean [of the Coles College] here, knew what I had done in the Georgia Bowl® and knew what I had done in the Ph.D. program and kept wanting to get me at Kennesaw. He had never been able to get me there, but my great frustration with the University of Georgia was with our president. As I said, we had [Michael F.] Adams [UGA president, 1997-2013], and Adams was the most incompetent college president I have ever seen.

TS: Okay.

CH: Do not misunderstand; the man meant well; he was one of the nicest human beings you could ever want to see; he was a tremendously nice person; but he came from a third tier community college in Kentucky. [Ed. note: Adams was president of Centre College in Danville, Kentucky, from 1988 to 1997].

TS: I think they had about 900 students when he became president of UGA. [Ed. note: Centre is a private college chartered in 1819 and loosely affiliated with the Presbyterian Church (U.S.A.) It currently has 1381 undergraduate students. In 2013 *Forbes* ranked Centre as the 32nd best private liberal arts college in America. It has also received high rankings from *U.S. News and World Report*. Adams is remembered at Centre College for his role in tripling the endowment to \$120 million and for nearly doubling faculty salaries].

CH: He ran UGA, which was a tier-one research institution like it was a community college. Of course, the alums loved him because he would do outreach for them, but he wasn't doing the stuff that would lead you to be a great tier-one research institution.

TS: Well they had a little trouble with their foundation over there too.

CH: Yes, they had some stuff there too. When I went to UGA, they had a businessman who had been the dean—[William C.] Flewellen [Jr., dean 1968-1982], who was probably, until I had gotten here to Kennesaw the best dean that I'd ever had. He had been a businessman before he became dean. As long as Flewellen was there I loved it, but then his replacement didn't have a clue, and the replacement's replacement didn't have a clue. When we finally went to get the replacement's replacement, they brought in three persons one of whom was also clueless, one of whom was marginal, and one of whom was really, really good. Of course, the one person they decided not to hire was the really, really good guy. After they turned him down, he accepted a job at Stanford instead. If Georgia had decided to hire him, he still might not have come. But somehow they [didn't] think that he was good enough to teach at Georgia, but he was nonetheless good enough to [hold] a deanship at Stanford. When they finally hired the third "I don't have a clue dean," I said, "I've got to look around." I called Tim and said, "Tim, you've been trying to get me to Kennesaw for fourteen or fifteen years; is

- the offer still open?" He said, "Yes." So at that time I left and came over. He had to put some stuff together, and they had to do a regular call, and in fact when they did the call they also found another gentleman who was pretty good by the name of Lance [E.] Brouters, who is also on our faculty. In the call that was designed to get me, they ended up getting two people.
- TS: He came from UGA also?
- CH: No Lance came from somewhere else. He didn't get his degrees at UGA [Ph.D., University of Florida] and he wasn't teaching at UGA, but he was a traditional researcher, whereas I was not a traditional researcher. I had done stuff, but I had come out of the Harvard, Stanford research tradition, not the UGA or the other research traditions. When I was at UGA, they wanted you to have twelve articles, preferably half of them sole or lead author for associate, and twenty-four with half sole or lead authored for full professor with tenure. They counted articles. Northwestern and Stanford and so forth never counted articles. In fact, at Stanford, when you went up for tenure, their comment was you may submit any seven publications. If you submit ten they'll ask you which three you want to drop.
- TS: So they're interested in quality and not quantity?
- CH: They only wanted seven maximum, and they wanted quality. For example, when I was at Northwestern, Northwestern had this policy that they would evaluate you at the end of your sixth [year] and give you a year or more to look around, but if you went into year eight you would get tenure. They had this one guy by the name of Mark Satterthwaite. They liked what he was doing, but he wasn't quite good enough, so they said, "Look, what we'll do is we'll re-evaluate you again at the end of your seventh, but if the answer is still no, you've got to leave right away." In addition to doing whatever you're doing, you've got to be looking around.
- TS: Can't go into the eighth year, right.
- CH: No, can't go into the eighth year. So Mark finished his one article during that year, but he finished it late in the year and it hadn't even published yet. They had to evaluate him, so they sent the article out for review by four scholars. Then they went through the evaluation process, and it took an hour and a half or so for them to do the review. After doing the review they finally decided they were not going to promote Mark to associate with tenure. Instead they promoted him to full with tenure.
- TS: (Laughter.) These are external reviewers?
- CH: Yes. There were four external review letters. Each of the external review letters said, "This is one of the best articles I've read in this field in the last twenty-five

- years.” And each of the four review letters was signed by a Nobel Prize winner in economics.
- TS: Well, that’s the way it ought to be.
- CH: The dean, when he announced the promotion [in 1978] to full with tenure, said, “If you’ve got a big enough bat, you don’t have to swing it very often!”
- TS: That’s great. [Ed. note: Satterthwaite currently is Professor of Strategy and the A. C. Buehler Professor in Hospital and Health Services Management in Northwestern University’s Kellogg School of Management].
- CH: So I’ve always come out of that tradition.
- TS: And Georgia was bean counting.
- CH: Yes, and Georgia was doing bean counting. The reason I got my Regents’ professorship though—and the only one in business—was because I was the only one who had the citations that you needed to do it.
- TS: You had plenty of beans also.
- CH: Yes, I had plenty. My book *Strategic Management: A New View of Business Policy and Planning* at the time that it was written [1979] and for the fifteen years thereafter was the highest rated book in the field of strategic management. If you get more than I think it is 200 cites for a book, it puts you in the top 1 percent or 0.1 of all books ever written, and it is there.
- TS: Now, the *Strategic Management: A Casebook in Policy and Planning* [1980 and 1984], was that a textbook?
- CH: That’s just a standard textbook. No, this was the one that was called *Strategic Management: A New View of Business Policy and Planning*—the Little, Brown book.
- TS: I saw that you had two that had the title *Strategic Management* [with different subtitles] about the same time.
- CH: No, no, the other is a casebook. It’s a traditional teaching book; that’s all it is.
- TS: And then you had a book that I don’t think we’ve talked about: *Future Firms: How America’s High Technology Companies Work* [Oxford University Press, 1998].
- CH: Yes. That’s a co-authored book with one of my Ph.D. students [Eric J. Bolland]. We focused on what the more aggressive firms do in order to keep themselves

aggressive and attuned to the future. Likewise, my article, “Toward a Contingency Theory of Business Strategy,” once you get above 125 or 150 cites per article, you’re again in that 1 percent or 0.1 percent rarified atmosphere. There may be another one or two now, but as of the year 2000, it was the only article in the field of strategic management to have hit that mark. I have two of what were considered to be the thirty most significant contributions, and both of them hit the super magic number. But that’s what I was doing at UGA. I was sitting there saying, “Hey, when I have something to write, I’ll write it, and when I write it, it’s going to make a big splash.

TS: Now I guess the last one at UGA was *Measuring Organizational Performance: Metrics for Entrepreneurship and Strategic Management Research* [with Robert B. Carton, Edward Elgar Publishing, 2006].

CH: That was with Robert Carton, who is one of my Ph.D. students. Bob had his undergraduate degree from Duke [B.S. in Management Science and Accounting] and then came to UGA to get his MBA and stayed on to get his doctorate under me. His team did well in business plan competitions when he was an MBA student. Then his dissertation was one of the top-rated dissertations in the field of entrepreneurship. There will probably be an article and a book, which I’m going to publish after having retired. But the net result of all that [research] is, if you go through and try to say, “how can you predict success in the field of entrepreneurship,” the best metric that exists in the field today is—with one exception that I’ll come back to—of the traditional financial measures is return on investment. It has an R-square of about 0.102. Return on equity, return on assets, return on sales, and all the other metrics are below 0.1. To put it another way, there’s no such thing as a good metric in the field of entrepreneurship for the performance of companies. What Bob Carton’s dissertation said was, “Let’s see if we can’t develop such a metric.” We came up with what we called the Carton-Hofer Measure, and our metric has a 60 percent R-square. As I said, return on investment is 0.102; we’re above 0.65, so we’re 500 percent better than the next best metric. I have then taken that one and modified it myself since then. On the small samples—it’s not a big sample—we did a sample of over 4,000 firms where we tested that in the book to get the R-square of over 0.65. I’ve only done small quasi-random samples for the modified metric, but my modified metric is approaching 0.9.

TS: Wow, that’s getting there.

CH: Yes. It is getting so good that we’re not sure whether our metric is the more accurate thing or whether the things that we’re correlating 0.9 with are the thing! Slowly but surely we’re getting there in terms of doing all of that. But I talked to Tim Mescon and said, “Time to come.” He said “Fine.” They didn’t have a Ph.D. or a DBA program at Kennesaw at the time.

TS: We were just getting into doctoral programs. [Ed. note: The Board of Regents

approved KSU's first doctorate, an EdD, in 2006; the second was a DBA (Doctor of Business Administration) in 2008].

CH: You were just beginning to get into it, and they wanted me to focus on the MBA program and the teams, and so that's what I've done. It was very clear that that's what they wanted me to do, and that's what I did. I pointed out to them that I could have worked with one or two of their students at the doctoral level and probably gotten a guy to win the dissertation award, but they said, "No, concentrate on the MBA program." So that's what I did. As I said, I had some thirty-three projects, but of those projects, I've got eighteen of them, which is [54.5] percent that are either successfully launched or in the process of successfully launching; I have eight that we know aren't going to go anywhere; and I have another seven where the people are deciding whether they want to do it or not. Of those seven, my best guess is that at least three will probably launch.

TS: That's a pretty good percentage.

CH: It looks like we're probably going to be about twenty-one of thirty-three [63.6 percent]. I've brought a sheet where I listed them.

TS: Great. In terms of building credibility for our masters' program I can't think of anything better than that you say, "The people that come here are going to go out and start their own businesses and be successful."

CH: Yes. Almost all of the ones that are listed as successfully launched—KanToo, Millionaire Moms, High Road Ice Cream, V-Chain Solutions, iSchool Initiative, Game Corner Media, and CampusTax—are what I would call smaller niche ventures. I'm not saying they're not going to be big, but they're all going to be niche. Like High Road Ice Cream, which is now being sold in a whole variety of stores, which the president uses all the time for his faculty parties and so forth, nonetheless is a very specialized, super premium ice cream. It's really successful, but it's never going to be a multi-billion dollar company. It will get into tens if not hundreds of millions, but it won't get bigger.

By contrast, the ones in the process of launching are going to be super big. So iSpies, Bright Idea Energy Solutions, and Brons Maintenance will probably be like the other ones, smaller to medium. But NuVision Pharmaceuticals, HydroCoal Technologies, Kudzilla Plant Control, and DSGM Systems are going to be relatively high potential new ventures. When I say high potential, I mean in the hundreds of millions if not billions of dollars of sales. For example, NuVision Pharmaceuticals is a project that I heard [about] when I was in my first year here, and I heard it from the wife of the inventor. They had to do something in the undergraduate entrepreneurship course, and the person who was doing that asked me to be a judge. Well, they did their presentation, and I said, "Wow." It wasn't a good presentation, but the product was fantastic. I asked if I could use it. I'm a diabetic. My foot had been stepped on, and I had an ulcer that wouldn't heal. It

had been stepped on in August, and here I was at the end of November, and it wouldn't heal. They were going to do surgery on my foot and chop off the end of my toe, which I wasn't gung-ho about. Then I found this particular product. I asked the husband of the lady who was the undergraduate student if he could make me some. His name is Boris Gorinshteyn, and he said, "Yes."

Boris was a rather unusual young man. Boris was first generation American. When he was eleven years old, he had his own laboratory in the Soviet Union. When he was fourteen he took fourth place in the USSR Science Competition, which ticked him off to no end, so he came back at fifteen with a totally different project and took second place, remained ticked off, came back at sixteen and won. He's the only person in the last seventy-five years in the former USSR Science Competition to have a fourth, second and first in three consecutive years. When he got to the U.S., he developed a product that neutralizes Mace in less than two minutes and won the International Sheriffs' Association's award as the product of the year. If the cops Mace you, they have to wash you down after they've got cuffs on you with Boris's product, but his company got the benefit of that, not Boris. But Boris developed another product. His wife's grandmother was in the Soviet healthcare system, and there you frequently die of bed sores within a year. Well, he developed a product to wipe her down, and it prevents bed sores. She died fifteen years later never having developed a single bed sore.

A modified version of that product is the one that I used to heal my diabetic ulcer. When I came in in early January, because I had postponed my appointment for the surgery from just over the Christmas holidays to the Martin Luther King holidays, and my wife wasn't gung-ho about it, and my doctor wasn't gung-ho about it, but I said, No way!" I used Boris's products from the beginning of December through the beginning of January, came in, the surgeon looked at my foot, cancelled the surgery, and I've never been back. The product is made out of all natural ingredients. It has gone through the equivalent of two FDA-stage two trials in the USSR with 100 percent cure rate in ten weeks. The best thing in the United States is a product called Regranex[®] that has a 43 percent cure rate and is so carcinogenic that the FDA won't use it for more than twenty weeks. NuVision is a company in which I'm sitting with them and working with them, but the real thing behind that is Boris Gorinshteyn, who is the inventor, and his wife Kate, who is the director of manufacturing, and then Ken Langston, who is currently working for IBM, is our director of sales and marketing, and Ted Randall, who not only got his MBA from here but got his [DBA in May 2013] in information technology is the acting CEO of the company.

We have just gotten an offer from a major venture launch firm here in the greater Atlanta area affiliated with Chris Brown and Associates. Chris Brown is the gentleman whose grandfather had done real estate development in the Greater Atlanta area. His father not only did real estate development, but created a funding subsidiary to fund real estate development. Well, what Chris did was when he took over he stopped doing real estate development, but he took over the

funding operation. But what he did was in addition to funding real estate, he funded other projects that looked like real estate. What I mean by “looked like real estate” is they would need money for only one or two years, and then they would turn cash flow positive. So he wasn’t looking at things that were going to take five or six or seven years of investment before they would turn cash flow positive. You had to have something that was going to be cash flow positive within three years at the most, preferably two years, but which would be cash flow negative for a year. Like real estate, they would be willing to put in almost any amount of money and then get real estate returns, i.e., 10 or 15 percent interest, which is very high return these days, rather than the 25 or 30 percent that you get in real ventures. Chris had created his own firm like that, which used to look around for ventures for a long time. I had met him at an organization sponsored by Karen Rands, who had done some of these things.

After [Brown’s] initial fund was filled up, he went to do another fund. He had gotten his initial people, angels and VCs and so forth, from here in the greater Georgia area, mostly from Atlanta, but he couldn’t get a follow-on group from there, so he looked around Europe for some and did that for a year or so. I had lost track of him until he finally came back. He finally got somebody else from the United Arab Emirates to fund him. The reason I say that is because not only is he willing to fund NuVision for \$50 million, but more importantly I mentioned to him one of my HydroCoal projects, and that was going to cost maybe a billion dollars, and he said, “Yes, we can do it if we need to.”

TS: Oh yes, HydroCoal runs together as one word?

CH: Yes. So of the four projects that I’m intimately involved in, NuVision, with its products that we originally called Veloxiderm and Trioxiderm, but we found out that Veloxiderm had something close enough so that we couldn’t get the name, and so he said, “Why keep Trioxiderm if we can’t have Veloxiderm?” So Trioxiderm is now called BerbereX[®], and the one that was going to be Veloxiderm is now Nuvileo[™]. These are products that prevent bed sores and heal diabetic ulcers. We also have the Nuvileo products that will heal acne and heal or prevent sunburn very, very quickly. So NuVision has a number of products like that, and the first products are going to be on the market later this year, so again it looks like something that Chris Brown would fund. That’s the one that’s going that way.

We have another one that is DSGM, stands for Drive Safe Glucose Monitoring system or the Glusonic Alert[™]. That one is a product that looks like a watch, but gives you 24/7 continuous measurement of what your blood sugar is. Bill Cross, who is a Kennesaw undergraduate who came back—he dropped out, but now he’s back, and I’m going to try to get him his undergraduate degree from here—he’s also a used car salesman—but his oldest son has Type 1 diabetes, and his oldest son almost passed out because he was going low and fortunately got pulled over by a cop who recognized the symptoms, had him test himself and figured out how

low he was going, so had him chew an energy bar. But just the week before somebody had gone off the road and drove directly into a fuel tank and ended up getting killed because of that. Bill was interested in this, and he went and talked to the faculty members at Harvard. While they were telling him about the project, they didn't have a technology that would necessarily work. Then he went to [Johns] Hopkins and did the same thing. They didn't have a technology either. So he finally went to the University of Texas, Houston, in their medical branch, and found two doctors, Drs. [Donald S.] Prough and [Rinat O.] Esenaliev, who had a product that will measure blood sugar non-invasively using ultrasound. It sends—like little radar pulse—an ultrasound pulse down that bounces off the third layer of your skin and bounces back up. By measuring the transit time you can measure skin thickness. It gives you a better than 95 percent accurate reading, and almost 100 percent on lows, of what your blood sugar readings are. The first version of the thing, you would have to test yourself once because it won't know whether you started at 100 or 150, but it will track continuously thereafter. In the first generation you put it on and then you test yourself and if the thing says you're at 100 and the meter is reading 120, you dial it down to 100, and from there on out it gives you continuously accurate readings. Since I'm a diabetic I've tested that. Bill's son has tested it. He's actually going to Harvard this week and do some testing on that. Roche is tentatively funding that, but again [we would like] somebody such as Chris Brown to commit and fund it for us once we get past the wrist watch phase. But basically this is one where, as I say, they use ultrasound technology for doing that.

In addition to that I have another project that will have a better version of insulin that we could get funding for. We could ultimately have the watch to tell you how much insulin you need, an insulin pump to put it in, and a new form of insulin that would be much more concentrated, so you use less insulin, have less side effects, and be much more adaptable with miniature insulin pumps. I know or have relationships to the technologies around that entire set of products. For example, the product that gives you better or more intensive insulin comes out of the University System of Georgia. Insulin is a peptide [hormone]. Peptidases [enzymes] break down peptides in the body. If you're a diabetic and you shoot yourself with insulin, take 100 ccs, only about 20 to 25 gets in your blood stream. The remaining 75 plus are broken down by the peptidases in your body to make other things out of. Well, it turns out that these little peptidases that break them down—if you take a look at a peptide, and let's say a peptide is a long, thin thing like a little snake—the peptidases, some of them sort of gobble them from the end and swallow them whole, the others bite them in half. It turns out that 95 percent of them swallow them whole, 5 percent bite them in half, and by putting a special block on the end, we can keep the ones that swallow them whole from swallowing them whole, so it extends the life of the insulin, so you only need one-fifth as much. The net result is we've got a whole variety of products related to that.

HydroCoal Technologies, that's the one that's different from the others. Again, it's one of my Kennesaw projects, but HydroCoal™ was invented by—our

student is Randy Taylor, and his father invented it. His father had his undergraduate degree in aeronautical engineering from MIT. We've known for 100 years how to convert coal into synthetic crude oil and synthetic natural gas. In fact, the Germans did it in the Second World War to drive their whole war machine. Most people may think it's amazing, but it's never been a big secret about how to do it. The only two problems were, A, it had never been clean, and B, it was never cheap. Well, over the last seventy years we figured out how to make it clean. In fact, there's a plant that we U.S. taxpayers have spent over \$5 billion building in North Dakota that regularly converts coal into synthetic natural gas and sends the CO₂ to Canada for enhanced oil recovery, and the skies are blue and cloudless overhead. It's really clean. Other people have figured out how to make it clean. But nobody else knows how to make it cheap. Right now we're buying regular crude oil for \$80 or \$90 a barrel. The price for the traditional method of converting coal into synthetic crude brings it in at a price of \$120 to \$130 a barrel, so it's not economical yet.

Well, what Randy's father did was he said, "There are only three possibilities. A, it can't be done; but nobody wants to believe that; B, it's going to take somebody smarter than Einstein to do it and that ain't me; or C, the problem's not in the conversion process; it's in the inputs. Everybody else is trying to change the process." Actually when they convert the coal, they don't try to convert coal as you and I think of it. When you and I think of it, we think of coal about the size of my cell phone in a lump. What's actually burned when you do that is they take this lump of coal, and they grind it up so it's the size of beach sand, and that's what they burn, and that's called standard pulverized coal. It's about 100 microns. What Randy Taylor's father figured out was that the problems were caused by the grinding process. He developed a totally new way to grind coal. Instead of making it the size of beach sand, he makes it the size of a dust particle. He makes it one thousand times smaller, and he does it without exposing it to air, which is where you get some of the carbon dioxide or other compounds that make it very difficult to do.

The net result is HydroCoal™ is now a thousand times smaller than standard pulverized coal, and it burns like natural gas; it doesn't even burn like coal anymore. If you want to have a natural gas boiler, it costs \$2 billion and it's made out of tungsten reinforced stainless steel. Not all of it is tungsten reinforced, but all of it is reinforced stainless steel and it burns at 2600 to 2800 degrees F. If you make this stuff into the HydroCoal™, it burns in a regular cast iron boiler like natural gas at 1600 to 1800 degrees F and burns with a clear blue flame. As a result the boiler, instead of costing \$2 billion, costs \$1 billion. And we've already proven at a commercial scale the burning of the thing. Eventually we'll also do the conversion into synthetic natural gas instead of crude oil. But the bottom line is that is clearly going to be a multi-billion dollar project when it eventually comes along. Now because of the Obama administration's aversion to coal, we're not doing very much in the States, but we have all kinds of demand from people in the Third World for whom coal is a whole lot cheaper than oil. We actually

have plants in Pakistan and one of the Caribbean Islands that looks like they're going to be built in the next year or two that will burn HydroCoal™. Those are something we may be able to get Chris Brown to fund, not the HydroCoal Company, but rather the plants, because again the plants look like real estate, and so they would be able to fund that.

Then I have the one other one called INCA, which is International Nutraceutical Company of America, which has a product called Revalife® that successfully treats osteoarthritis. Osteoarthritis is a breakdown of cartilage in your joints. Rheumatoid Arthritis is a disease of the bone that makes little holes in the bone and that carves up your cartilage. But Osteo is where the cartilage has to be continuously replaced. With people with intermediate to severe osteoarthritis, you're not making enough cartilage to replace it. INCA was invented at the University of Georgia. While I'm still working on it here, it came from the University of Georgia. The co-inventor of the project at the University of Georgia had severe osteoarthritis. He knew the benefit of glucosamine pills, but he also knew that your body naturally excretes 90 percent of the glucosamine in the pills, so if you have more than a mild case, the pills aren't good enough for you. There is a clinic in Florida that if you read the Delta magazine, they advertise there, and they'll give you shots straight into the joint, but most people don't want to pay for shots into their joints. It turns out that this particular product is the only form of glucosamine that can be transported through your skin. Glucosamine chlorides, and hydrochlorides and fluorides and hydro fluorides cannot be transported through the skin; they won't get through the third fatty layer. Well, NAG glucosamine can be transported, and so there's only one form of glucosamine, NAG, which occurs less than 0.05 percent naturally. One transport agent will get it through, so the company has two U.S. and several international patents on its formula.

Because of the time that it took to get those patents, we still have fifteen years to run on it. We've got a product that will successfully treat osteoarthritis. The company is just getting started, but that should become at least a multi hundred million dollar company and maybe even a multibillion dollar company. Right now the people who have osteoarthritis are spending over \$8 billion dollars for products to treat it. Of that, \$8 billion, \$6 billion is just pain relief, Celebrex®, aspirin, Advil® and so forth. Two billion dollars however is for glucosamine pills, but those are mostly purchased by the people who have a mild case for whom it works. The people who have had intermediate or severe have tried the pills, but find out they don't get enough glucosamine, so they have gone off them, which makes it a little bit difficult for INCA to try to entice them back to a cream, but nonetheless once we got them we've got them because it works wonderfully well. What was I doing when I was here at Kennesaw teaching all these different students and teams how to start new ventures? I was also working part time on the DSGM, NuVision, and HydroCoal projects, as well as part-time on the INCA project. Now that I'm retired I'm 100 percent on those things. I'm not teaching anymore, so I'm just doing those things.

- TS: Well, that's enough to keep you busy. Let me ask you just a few more questions to kind of wind things up.
- CH: As I said, the net result of all of that is I've always been into creating new ventures, and let's just take any one of those last four projects I told you about, HydroCoal, NuVision, DSGM or INCA and Revalife[®]. Any one of the four is going to make a heck of a lot more contribution to mankind and humanity than even if I had gone out and won a Nobel Prize.
- TS: Absolutely.
- CH: And that's only one of the four. If all four come around, I mean, that's going to be big time. Let's say HydroCoal comes around when we get a Republican administration in, if we do the next time around, the bottom line is we could bring \$1.25 gasoline back to the American public.
- TS: That would be something, wouldn't it? Well, your enthusiasm for teaching and for mentoring is very obvious, I think, from just listening to you talk. Why don't you talk about the students at Kennesaw that you've been teaching particularly in the master's program where you've been devoting most of your attention.
- CH: Exclusively. Almost exclusively.
- TS: Are they all coming from the metro Atlanta area or are you attracting students from all over the country or, who are the students that we get in this program?
- CH: We get students from all over the country, but having said that, probably 85 to 90 percent of them are from the greater Atlanta metro area.
- TS: They're coming to Kennesaw because we're here?
- CH: Because we're here, yes. Although we do get some from all over the country. Let's take a look at the four teams that I mentioned. HydroCoal, basically the principal two people associated with HydroCoal are Randy Taylor who lives in Athens and myself, but the other one is Rusty Denton who lives in Lawrenceville. He's the patent attorney. He's a very, very good patent attorney, and I've used him as a patent attorney in my courses here at Kennesaw.
- TS: Now did Randy Taylor start out in your classes in UGA before Kennesaw?
- CH: No, he contacted me the year I was leaving, and I gave him the name of the person who was coming in there and told him about it, but he wanted to work with me. So he came here and took the MBA courses here. There were two other people; one was Aaron Meredith who's now got his MBA from Kennesaw. The other gentleman with that team also has his MBA from Kennesaw. Both of them,

because of the time it takes to get HydroCoal done, are working full-time. Aaron Meredith is with Georgia Pacific and the other guy is with another large company, but both of them have committed that when we get sufficient funding to successfully launch HydroCoal, they will leave their existing jobs and come back to work for HydroCoal. Now, let's move to NuVision. Boris Gorinshteyn's wife got her undergraduate degree from Kennesaw. Once I saw the product and got him in here, he came here to get his MBA. The other two people on that, Ken Langston got his MBA from Kennesaw. He's from the greater Atlanta area. Boris is from the greater Atlanta area; he lives near Alpharetta. But Ken is working for IBM here in the greater Atlanta area. Then the current acting CEO or president of the company [Ted Randall] is in Saudi Arabia, but while he came to Kennesaw, his primary home is in Utah. He started at Kennesaw while he was on an assignment for his company here in the Atlanta area, got his MBA, then stayed to get his doctorate, and now has both an MBA and a doctorate from Kennesaw, but then got a very, very good job in Saudi Arabia, and he's been over there for two and a half years. Once you're out for three years, you can keep all the money you've made tax-free, and since they've been paying him significantly high wages, let's say \$150,000.00 plus a year, he doesn't want to have to pay taxes on that, so he is currently starting a program to teach Saudi women entrepreneurship. He will do that for the next nine months at least, so he will stay out for at least three years to be able to then come back. So he's in the beginning of launching this entrepreneurship program for Saudi women, which he's using most of my materials for.

TS: Which is pretty radical in Saudi Arabia.

CH: It's pretty radical, but we may in fact invite them to the Georgia Bowl[®] this year. We could have the first team to ever compete from Saudi Arabia in the Georgia Bowl because the one thing at least we know about a team of women from Saudi Arabia is they're not going to have to worry about airfares to get here. That's where that team came from. Now let's take DSGM. DSGM has Bill Cross who had started at Kennesaw, but had to withdrawal as an undergraduate because he was having problems with his family. His father was in the process of passing away. He ended up starting a used car business to provide revenue to the family, but when his first son developed Type 1 diabetes he was the guy who went to Harvard and Johns Hopkins and ultimately the Medical College of Texas in Houston and found the technology DSGM needed. So he then came here and found me.

I got him to re-enroll in his undergraduate program, so he's been taking one course a semester ever since then, and he's now well into his junior year, although I wasn't able to get him a [Coles College] REAL [Recognizing Entrepreneurial Activity and Leadership] Initiative Award this year even though he's done a bunch of wonderful projects. The problem was that he had two sophomore courses that he hadn't yet completed. He finished one sophomore course this summer. He has a number of his junior classes done, but he probably isn't going

to graduate next year. But I'm going to nominate him for the 2015 REAL awards, which I can do as a retired faculty before he'll probably graduate. I got him to promise that he'll go on and get his undergraduate degree, so he'll probably graduate in 2015 or maybe 2016 with his undergraduate degree.

With regard to DSGM there were two other Kennesaw students who worked with Bill for a long time on it. One was a lady by the name of Jenifer Renshaw. She got her MBA from here, and in fact she's now working in one of the programs here in an outreach program, so she's actually doing work and partial administration and outreach here at KSU. The other gentleman also got his MBA from Kennesaw. Both of those people were from the greater Atlanta area. Bill is the farthest away; he's more almost South Georgia, but nonetheless he drives here in order to get the degree. He has to do it in the evening, and he has to do only one class because of the length of drives. That's three of the four.

CampusTax is one of my more successful recent teams. The lady there got her undergraduate degree from one of the smaller schools in Georgia, but she got her degree there with highest honors, and so did very, very well. In order to pay for her education she did tax returns. Well, one of the things that she did was she figured out how to become a super expert in tax returns for students because she was a student herself. It turns out there are a whole bunch of deductions that most people unless you're the H&R Block specialist in colleges, don't even know about. There are also a whole bunch of scholarships for college students that most people don't know about; you won't find if you do a typical online search. So what she has started is a company called CampusTax and Financial Aid Services where she's got a database of over 1,000 scholarships about 80 percent of which nobody's ever heard of, and they couldn't find them if they tried to search them on the internet because they're given by people who don't do a whole bunch of advertising, but she can match you up with those.

She can get you funding, and she's gotten about 50 percent of the students who have come to her funding, i.e. scholarships to more than pay for her fees. She has relatively low fees, and she also finds them deductions that they typically don't know about, and if you try TurboTax, TurboTax doesn't even know about these deductions. I'm not saying that if you went to a TurboTax expert they might not eventually be able to find them, but because she's been there, she's found them all, and even if you went to a regular H&R Block person they wouldn't know about it. Is there somebody for H&R Block who would? Yes. But it's not in the normal training because most of the people for H&R Block aren't going to school full-time or those who are are still being reported on their parents' taxes as opposed to being over the age of 21, so they have to file their own returns rather than being reported on their parents' returns. So she's got this service for doing tax returns for college students who have to file their own returns and gets them scholarships and gets them better returns. One person thought they were going to have to pay \$2,000, but by the time she got done she saved them \$6,000, so they made \$8,000 in terms of returns plus got a \$3,000 scholarship. And it cost them

\$400.00 to do that.

TS: That's a good deal.

CH: Ty [Woods], regrettably, missed the Venture Labs[®] competition because she was pregnant, and, regrettably, she lost that child. Both she and her husband are African American. The students we have are almost equal part women as men, all kinds of minority groups, and all kinds of ethnic groups—well balanced. The only thing we ask them is “are they interested in doing new ventures?” If they're interested in doing new ventures, we get them involved. Let me just run through a couple of quick ones. Checked Pet. Checked Pet was a lady who hasn't decided whether she wants to do it full-time, so she's doing it part-time. It was something where what she was going to do was a website so that you could do all kind of beneficial things for your pet. KanToo, that's one of the ones that's up and running. The gentleman involved in that isn't even a Kennesaw student, but his daughter was a Kennesaw student. She saw the Concept-2-Reality Competition[®] that I started here, and so she entered the product that her father had invented in the Concept-2-Reality Competition[®], and it won. We then formed a team and took it to Business Plan Competitions. What he's got is a product that you do one coat, and it looks like the best refinished mahogany or teak or what-have-you that you've ever seen in your life. In fact, one of my office doors he refinished with one coat on a Sunday afternoon, and everybody wanted to know how I got a teak door at Kennesaw! It's a fantastic faux finish product.

Millionaire Moms—Joyce Bone created a website as a service to help mothers who want to start their own businesses, so in one sense she's doing something similar to what I'm doing except she's doing it for working mothers. As she said, most of the women she gets aren't going to become millionaire moms, they're going to become multi-thousand-aire moms, but nonetheless they're going to earn enough money to either support themselves or give substantial additional support to what their husbands earn through what they're doing in terms of a business. She's successful in getting them launched in those businesses. Another such venture was the Atlanta Women's Pro Soccer team. KSU's building a soccer stadium. This is one where the guy in charge of that idea came and got a student team from Kennesaw to do the business plan that he's now using to start the Atlanta Women's Soccer project.

Eco-Green Glass—that's one that one of our MBAs brought me—together with Basil Haslett. Basil is well known as a world-class architect in etched tempered glass. If the prime minister of Ireland were to come to [meet President] Obama, he would probably bring some of Basil's etched glasswork to give as a gift to President Obama. Basil has a unique background. His father was a monument mason, which is the English word for grave digger—he'd do the tombstones. His wife's family was in banking, so for twenty years or so he was a banker, but that finally turned him off, so he retired from banking and started doing monuments. Then somebody bet him that he couldn't etch glass, so he went out and etched

glass. They then said, “Well you can’t etch tempered glass.” And he used the techniques that he had developed for etching gravestones to etch tempered glass, and he has some patents on it. He’s the only person in the world who can etch tempered glass. When everybody else tries to etch tempered glass, 99 percent of it breaks and shatters into a million pieces. He’s the only person who can etch tempered glass, and he does world-class artwork in etched tempered glass. What he would do in this building is he would etch this glass window. He might leave a little center portion free so that we could look out, and some light would come in. But the portion that’s etched can’t be seen though. He’s found a unique thing.

What he did is he used etched glass in his greenhouse. It turns out that if you etch tempered glass, the light will come through, but the heat can’t come through. When we’re looking out, we couldn’t see through the glass anymore. We could see the shadow of the trees or the shadow of a person standing there or a shadow of a plane going overhead, but we couldn’t see the trees or the plane or the person. You can look at the person, and you can see this person is about six foot or seven foot or what-have-you, so you can see their outline, but you couldn’t distinguish their facial features or the color of their clothing or what-have-you. You get a partial transference. The light comes through, so the room would still be as bright as it is now. It just would be with diffused or filtered light, and that’s why you can’t see the exact pattern. It keeps the heat from coming through, so it reduces the heat transfer across the glass by 85 percent, so it would reduce the heating and cooling cost of this room and this entire building by about 25 to 30 percent.

For new buildings that’s a major, major factor. Ultimately he’s going to put it in greenhouses because they want the sunlight for the plants to grow but not the heat, so they’ll save on heating and cooling. That’s just plain vanilla etched green glass. But long term, let’s suppose you’re going to build a great big new Hilton hotel down South, if we make it out of glass and use Basil’s etched glass, we could put a great big “H” on the outside to stand for Hilton, and then on the inside carve the curtains and everything else, leaving a small window space. As a result of that we’ll reduce the heating and cooling costs of that hotel by over 25 percent, and Hilton will get all those benefits. They will get a great big “H” on the outside that everybody will love and think about, and they won’t even have to put up curtains in the room or pictures in the room because the glass will maintain the pictures of the curtains. We had a team of MBA’s, Irene Elcock and Dennis Loubiere and also Joe Jordan. Eco-Green Glass has three students associated with it.

High Road Ice Cream—the gentleman there was in our executive [MBA] program. Because I was teaching part-time in the executive program, they said, “Hey, this one looks like a real venture.” While they were in the executive program, they said, “Can we do this?” So I had them develop a business plan to go to national business plan competitions. They won in Nebraska. They’ve now launched the venture. They’re very, very successful in doing it, but they didn’t come from our traditional MBA program; they came from the executive program.

The real reason why they're successful is because the gentleman who founded that was an instructor at the New England Culinary Institute, and so he was their master chef. He had not only graduated from there, but was one of their best teachers for ten or fifteen years before he came here to get his executive MBA.

V-Chain Solutions is one guy from Texas and one guy from South Georgia, and that's a team that again went to business plan competitions for us. What they have is a technology for significant improvement in energy consumption by buildings. It's a similar benefit to Eco-Green Glass, but done in a totally different way. In essence, what they do is they modify the heating and cooling equipment itself to allow it to be more efficient than it would normally be. SoVerse—an MBA from Kennesaw with a number of other MBAs who have been members of the team—has a technology for developing websites for businesses that's relatively inexpensive. Bright Pill Solutions was a technology developed by one of our adjunct faculty members. The team was some of his students who took his undergraduate class in biotechnology, and even though they were undergraduates we got them into my MBA class, so they could go to business plan competitions. What this guy had was a pill for improving biopsies for Celiac disease. Celiac disease is something that's very, very difficult to diagnose and treat effectively, and so what they have is something that looks like a little pill. You swallow it, and after it goes down through your stomach and into your small intestines, the doctor can trace it with an x-ray machine. Once it gets to your large intestines, he'll send instructions, and the pill will open and take a small biopsy off the intestine wall and then close itself back up. After it's excreted in the feces, they recapture the pill and can use the biopsy for doing significantly improved testing for Celiac disease and other similar diseases. The faculty member is Dr. Kirby Black, who is one of our adjuncts.

Then I guess I'll do two more, and then I'll be done. Sika Productions is one of our minority undergraduate students. She's primarily done the thing on her own. What she wanted to do was a program for doing African American theatre, but to put it on video tape and to show it on restricted channel TV, so that the African American community, but really everybody, could benefit. In some of those things the cost of putting together a program is so high but attendance is [so] low that because of the cost structure, we don't get proportionate representation of African American works for African Americans as we would for other stuff. As a consequence, she wanted to do it to be able to videotape it and then show it in perpetuity on historical channels and so forth. She called that technology and that company Sika Productions. She put together the company and is in the process of launching it now.

The final one, Goat & Compass Brewing, was originally called Trouble Brewing Company, but they lost that name. The gentleman involved, John Kater, has an undergraduate degree from one of the California schools [City College of San Francisco] as a brew master. He had worked in Alabama for a period of time for one of those microbreweries developing their brews. Ultimately, that brewery

shut down, but he was smart enough to maintain the intellectual property rights to the brewing formulas that he had developed. Then what he did was he said, “Okay, I’m going to try to make these as specialty beers, which I’ll be able to sell to specialty microbreweries and other specialty retail outlets through the state of Georgia and maybe eventually [elsewhere].” The stuff really tastes good. The guy is really good in terms of brewing the stuff. He has five or six different beers that are different flavors. He’s also a literature buff, so not only does he have all these wonderful beers, but he has all of them named for scenes or characters in Shakespeare plays. I forget where Trouble Brewing came from, but he’s got that done. One of his beers is called Cade’s Felony [after Jack Cade’s rebellion against Henry VI in 1450, dramatized in Part 2 of Shakespeare’s *Henry the Sixth*] and one is Goat and Compass. I forget all of the other names right now because it’s been a while, but he’s in the process of getting that one launched. Not only are they wonderfully tasting brews, but the guy is really tongue in cheek with his brand names. Again, we took that one to several national competitions.

We’ve had a whole variety of projects. I guess the only other thing I’ll mention in passing is one called Tag Alongs. The person involved had to move and take some time off to do it. He had some problems with the U-Haul he rented, so he designed a unique kind of trailer for a car. It’s a trailer for a car that you can store much more easily in your garage, and it’s much easier to put together, and it’s much more aerodynamic, therefore it uses less gas [and has] all kinds of unique benefits. Because it is a vehicle, and because vehicles like that have to get appropriate certification, it’s taken the guy longer to get it completed than some of the other projects. He’s working on it part time when he’s not working on his job. I hope he’ll get it finished, but it’ll be a little bit longer before that one gets launched than some of the others.

The great thing I liked about coming to Kennesaw is, as I said, at UGA I had very bright students, and we won lots of competitions, but less than 10 percent started their businesses. Here 67 percent look like they’re going to be up and running. As somebody who teaches it and wants people to do it, you can’t get any better than that.

TS: Well, that really answers the last question I was going to ask. It sounds like you’ve enjoyed your time while you’ve been here at Kennesaw.

CH: Oh, absolutely. While I will be disappointed at missing the students here, because I’ve really enjoyed it, nonetheless, since I’m working with at least three of the teams plus one of my UGA teams in terms of actually launching the ventures, it’s still a lot of fun.

TS: All right. Well, that’s a good way to end. Thank you very much.

CH: Not a problem. It’s been my pleasure.

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