

Lecture Text

Professor John R. Wells

Strategic Agility: Managing Continuous Change

(edited for clarity)

Why Do Successful Companies Fail?

I'm just going to ask you a question, straight off: why do successful companies fail? This could be any company; I'll show you some genuine companies that it applies to. Years and years of successful financial performance, then all of a sudden, they fall off the edge of a cliff. IBM did a fantastic job of it; Texas Instruments has done it a few times; Philips has done it a few times, but it's not just high-tech companies. Marks & Spencer has done it, retail. Lots of companies do this. Why? Jerry?

___: Well, the environment changes, and they lose some of their core advantages.

PROFESSOR WELLS: Things change and they kind of don't do anything about it. It's Jack Welch—and I hope you read the article last night about Jack Welch. If a company fails to change as fast as its environment, then inevitably it will die. And the challenge of course is that the environment is often determined, because environment isn't an exogenous thing; it's our competition. If we don't manage to change faster than they do, inevitably we're going to end up in the graveyard. And it's intriguing how many companies do this. Where do you think the problem started? At the top here?

___: No. Couple of years before.

PROFESSOR WELLS: A couple of years before. Back here, when things still looked good. Carlos?

___: When the growth curve starts losing its momentum.

PROFESSOR WELLS: Its momentum. See, Carlos wants to do differential equations here: it's somewhere back there, guys. It's intriguing, the finances continue to look great, and yet there's a fundamental underlying problem. And when companies first face a fundamental problem, they have an intriguing behavior pattern: they try harder. They don't question what they do, they just try harder.

Put a pigeon, by the way, in a cardboard box with two little feeders on it—one red, one green. It doesn't matter which feeder you put the food in. Put the feed in one and nothing in the other, and it will peck around until it finds the feeder that works, and then it will eat. Then take the feed out of that feeder and put it into the other feeder. The pigeon will continue to peck the first feeder until it dies of starvation. Intriguing, isn't it? The pigeon can't learn.

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And it's funny how you can take a large number of intelligent managers and put them into an organization, and they have the collective intelligence of a pigeon. Because they just try harder. And then of course, after they've finished trying harder, they say, "Well, let's have an overhead cost reduction." And of course, an overhead cost reduction limits your ability to be able to change because you've now taken the change capacity out of the organization.

Or, "Let's have a reorganization!" And then when things really get desperate, the CFO comes in and does financial engineering. For those of you who have been CFOs, this is a matter of scraping the balance sheet of all the profits and putting it into the P&L line, by which time you've got no flexibility, and then you fall off the edge of a cliff and the company collapses. And 20 or 30 percent of the top management get fired, and lots of the employees get fired. You restructure, you refinance. And unfortunately, some companies then start the cycle all over again. Intriguing!

Why Don't Companies Change?

You have to ask the question, *why*—and that's the question we'll be trying to answer over the next hour, to try and understand, *why* no change? Now some would say there's an economic logic. In some business circumstances, you're better off continuing to do the same thing until you disappear into oblivion. So an interesting argument; I've seen examples of it, but very few companies, certainly no management teams, typically think that's what they're about. I'll try and show you some examples.

The real issue is one of inertia: companies find it difficult to change. First of all, cognitive inertia. They don't even perceive that they need to change. They can't see that the environment is changing; they're blind to it. They have a model of the world that says, we're doing the right thing, and they continue to do it. Another key challenge is action inertia: we can see there's a problem, but we can't seem to get our organization to do anything about it. And the third category, I call it volitive inertia, a fancy term for the fact that we can see there's a problem, we could do something about it, but we don't really want to. We have no will to do it; in fact, it's just too unpleasant. It's too hard, and we'd rather continue to do what we're doing now.

Strategic Agility

To deal with these issues, we need a lot more agility to survive. Agile strategy. We use these techniques, but we use the techniques in a way that we're prepared to change the whole time. We need an agile structure, an organization that will allow us to respond. Because you can have some organizations that are impossible to change, even though you know you need to. And agile minds: the people have to be prepared to change. Because ultimately, the ability of a company to change is limited by the capacity of the individuals in the company to change. And that's a key to basically making strategy happen on a continuing basis.

Let's talk about some examples.

Atari

Atari, has anybody heard of Atari? Does anybody know where Atari is now? In 1972, Atari was founded by Nolan Bushnell, the grandfather of video games. And actually,

a couple of the two earliest employees were Steve Jobs and Steve Wozniak, who then started Apple later. Fascinating company. They started with a game called Pong. Anybody remember Pong? Oh, great game. It depends on the generation, you see. Pong—before that, we used to play pinball. Pong was a great game, because you could play it with one hand and drink with the other, so it was very popular.

And Atari decided that they would launch this as a video console in 1975, and it was hugely popular. And then hundreds of competitors came in with new video consoles that you could put multiple games in. And they almost gave the consoles away. Really, they lost money on every console they sold. Why did they decide to give them away?

They sell the games! Yeah, you make money. It's the old razor blade strategy: give away the razor, then you make a lot of money on the blades. Now Atari said, well we can do that, too. And in 1976, they said, "We will launch the 2600 console." But it was going to take a lot of cash, so they sold themselves to Warner. By 1978, they still had two-thirds of the market, and Nolan Bushnell went to Warner and said, "It's time to go for the 5200, the next-generation game." And Warner said, "No way."

And he was very disappointed. He said, "We've got to start with the competition." But look at Warner's point of view. In 1976, they bought the business for multiples of \$36 million. In 1977, it made no money. In 1978, growing like a weed but making no money.

And along comes Nolan Bushnell and says, "Well, the game is over on that one; we want to start an even better one." Warner said, "Uh-uh." Right or wrong? The knife-edge of decision: when do you go to the next generation? If you go too soon, it costs you too much; if you go too late, it costs you too much. You haven't got time to debate it.

In 1979, \$239 million in sales. Warner says, "Oh, we're quite happy with that." In 1980, \$512—\$70 million in profits. 1981, \$287 million in profits. 1982, \$323 million in profits from the 2600 console. Boy, it's very expensive making a decision too soon; it's also often a big decision, making it too late.

Because 1982 was an interesting year for Atari. First of all, they turned down a game from a little, tiny company in Japan called Nintendo, called Donkey Kong, which turned out to later be one of the biggest games of all time. The second thing is, they launched Pac-Man on the 2600. And the 2600 wasn't powerful enough for Pac-Man, and it was a disaster. But then they made the biggest mistake of all in the way they actually handled the introduction of the 5200, which they introduced. Because the trade said, "Are you going to help us with this? Because we've got lots of inventory." And they said, "No." And overnight, sales of 2600 games went from X to zero. And the trade was furious. Video games went down to one dollar a piece from fifty dollars, and the industry was in disarray. In 1982, the industry was \$3 billion dollars; the trade said, "Never again." And within three years, the industry had shrunk to a \$100 million industry, because they were so mad.

What happened to Atari? Of course, they actually lost \$500 million in 1983 launching a new console, the 5200, into a market that said, "We're just simply not going to

accept it." Now you can turn around and say, was that bad timing? Or was it just bad strategic management, as you actually change your channel?

Intriguingly enough, as you look at the video game leaders, the first generation, Atari won and then collapsed. The second generation Nintendo won but never recovered from the third generation. The sixteen-bit generation, where Sega came in and won. Sega then collapsed and Sony came in. And then the next generation, Sony won again. The big difference between Sony and these other players is Sony, for the last 30 or 40 years, has been managing from one generation of technology into the next, and so knows how to manage out from one layer and into the next. And so people are speculating as to whether it's going to be our good friends Microsoft that will win the 128-bit game. But Sony looks like a frontrunner because they really understand the model of how to win.

Kodak

Another example: Kodak. Anybody heard of Kodak? In 1990, Kodak, the number one in old traditional film, by far. The biggest camera producer in the world. They didn't make any money on cameras. And why would they sell cameras and not make money on them? Film! The same story again, razor blade strategy: you don't make money on cameras; you make money on film. In 1983, 1984, somebody says, "You could have digital cameras." "Oh," says Kodak, "this is not a very good idea." But a courageous company—the chief executive says, "We will commit; we're going to be the number one in digital imaging."

Now in 1986, Kodak produced the first million-pixel receptor in the industry, years ahead of anybody else. They had the best hardware technology for the digital world. They had the best software by far; in fact, they've set the standards for digital image processing. So here's a company that, although they're threatened, invests a fortune in the new world. Pretty impressive logic.

Then you take a look at their operating profits, and they continue to go up. Have a bit of a setback, but doing nicely. Bang! What's going on? Well, let's take a look at what's really going on: global film share. In the old world, while they were looking at the new world, they completely gave up their leadership position to Fuji. There's an old story in marketing: Never let go of one branch until you've got hold of the next. Then you go into the new world, and you find that Fuji is also number one in digital processing in stores. Remember, you make your money from processing and film, and Sony is number one in cameras in the United States.

Kodak actually makes cameras. They're number three with 15 percent market share. And reportedly they lose sixty dollars on every camera they sell. Minus 20 percent return on sales. Sony makes a plus-10 percent return on sales. For Kodak, they have lost the old world and they have lost the new world. And you say, how can that be? Here's a company that was the strongest in the old world and the new world in the late 1980s. What were they doing?

Their first digital launch wasn't too digital at all. They came up with a player, about this size, that when you went to the store with your film, they would give you a CD that you could play on your TV—the box—so you can actually see your pictures on the TV. And it cost you about twice as much as a color TV to buy one of these. Who

would have bought one of those? So it's horrible, isn't it? And it's just absolutely horrible. Everybody can see that you wouldn't have bought one then, you wouldn't buy one now. Why do you think they did it?

___: They were just in turmoil, in internal conflict. You had the silver halide world, and you had the digital world. And they were trying to keep those two things blended in a way that they didn't give up their silver halide technology.

PROFESSOR WELLS: Yeah, "We don't really want to give it up!" Meanwhile, with this fantastic chip in 1986, it was 1991 before they launched their first camera, and it was a professional version. It cost the equivalent today of \$23,000. Meanwhile, Apple had already launched a camera using their chip, as had several other people. They didn't exploit their own technology; other people took it and exploited it. Intriguing. They did most of their digital development—in the first instance, they wanted to do it in Rochester. Is Rochester a big digital location for doing research these days?

___: It's not a big location for anything.

PROFESSOR WELLS: It's a company town, by the way; it's an important company town. So the expertise isn't there but they wanted to handle it themselves. Product development scattered over more than a dozen divisions. Intriguingly, I found twenty-three different digital scanner projects in the organization. Is that a way to get a decent digital scanner, to try it twenty-three times? They're just not structured in order to execute on the strategy at all. We've got a problem here of "They don't really want to do it." We have a problem here of "Hey, let's try and preserve the old world." They're not structured behind supporting it. They set up a digital lab in Japan. I thought that was a great idea—access to Japanese ideas. But then they turned round and said, "Well, the divisions have to pay for the research in the lab in Japan." And of course the divisions said, "Oh no, we're not going to pay for that." So the digital lab just meandered along; no corporate commitment at the time.

And just to keep things really going, they had seven reorganizations between 1983 and 1993. They'd come up with a great idea, that they were really a chemical company. And so they bought pharmaceuticals and blood treatment, and a whole bunch of other—which they subsequently sold, of course. And they kept changing CEOs. This was what was going on for the company.

You've got to have a lot more than just a verbal commitment. You've got to have a strategy, which they sort of had. They didn't have the structure, the systems or the incentives to really drive it through. So no agile structure, and when it came to the people, they were conflicted the whole time. They were conflicted. You've got to get the commitment behind it.

Global PCs

Another example: global PCs. Of course, IBM was number one in PCs. Here's Apple and here's Compaq. And I've combined Compaq and HP because they're together now, but this is mainly Compaq in those days because Compaq came out with the first portable. Anybody remember the first Compaq portable? Boy, thirty kilos! But it was good. But the real thing is where they really started growing and became the

fastest-growing company in the United States, was when they adopted the 386 processor and IBM didn't, because IBM didn't want to be dependent upon Intel.

And so Intel's mixed motives, and often inertia is created because you don't want to upset the channel, or you don't want to buy from a particular supplier. So that allowed Compaq into the door. HP got into the door as well because they had a fantastic distribution network. They made lots of money on printers, and copiers, and things, and they said, "OK, we'll add PCs as well." And so over time, Compaq and HP, between them, far surpass IBM and Apple. Who's this?

And so here's Compaq, up and up and up. Then of course, they buy digital equipment, and then they decide they're going to combine themselves. And Dell is getting bigger and bigger and bigger, and it is now number one in the world. Compaq and HP, both miles ahead of Dell. It must be the secret of Dell's strategy; we don't know Dell was doing. Does anybody know what Dell was doing?

Everybody knows what Dell was doing! They're selling direct and making to order, right? And the intriguing thing is, where does that turn into advantage? If you take a look at Dell's advantage, it's about 11 percent of sales. Rough calculations: in 1998, it was about 11 percent of sales. It's still about 11 percent of sales. Now of course, costs have come down on both sides. By the way, Dell makes, on average over that period, 8 percent of sales. So you can see what the average profitability is in the PC business: it's minus 3 percent of sales. Do a five forces on the PC industry, and you'll see it's a five-star turkey; that's why it makes minus 3 percent on sales.

Dell manages to make money. Yes, they've got a fantastic pipeline management system, customer inventory. They save on customer inventory and the capital involved. But the real big difference in that 11 percent is they don't offer a channel margin, because they go direct. So two-thirds of their advantage is literally the margin and the marketing; they don't give the channel. So what would you do if you were Compaq and HP in 1998? Because I can tell you, in 1998, Dell was 100 percent direct, Compaq was 4 percent direct, HP was 1 percent direct. And two-thirds of the advantage is the distribution channel. You might think about going direct, and they're storming ahead. They're already 10 percent direct, within five years.

But remember, HP has built its whole business on great channels of distribution, so they've got real mixed motives about it. The other thing is, would you sacrifice that channel to sell more PCs when you need it to sell your printers and everything else? You don't want to upset that channel, because you could lose the business. And HP and Compaq were looking at each other, each day saying, "Who's going to go direct first?" because the other is then going to pick up all the business, because you'll upset the channel. So it's more than an internal problem; it's an external problem. And indeed, Compaq actually pays local distributors, when it does go direct, to stop them from being upset and moving away from the business. Big problem.

It's an even bigger problem, of course, because HP is saying, "We won't go direct because we'll upset our distribution channel for printers, which is where we make all of our money, because we don't make money on PCs. Has anybody noticed what Dell has started to sell? Printers! They're doing exactly the same with printers. And HP is sitting there saying, "Oh, gosh!" So we'll see where they are in five years' time, but

if anybody wants to invest in the stock market, you know what put options are. So we can see: cognitive inertia. You can't actually see the problem, or you can't get agreement on what to do about it. You can't get the organization to change, and you haven't got the will to change yourself. How do you get to the agility? Agile strategy, agile structure, agile systems.

The steel industry

Why don't I pick a really dull, boring example: the steel industry. How would you ever be agile in steel? This is 1986. Nucor, a little, tiny company: 6 percent of sales compared to the three big players. Let's talk a little history of steel. Prior to World War II, there were three big steel producers in the United States. U.S. Steel had two-thirds of the market. Massive barriers to entry. It cost a fortune to get into the steel industry with open-hearth furnaces. The United States had the best technology. They were located near their customers, producing automobiles. They shipped steel all around the world. It was a wonderfully profitable time.

After World War II, it continued to be profitable until the Japanese and the Europeans came up with the basic oxygen furnace, which was more cost-effective technology. All of a sudden, the export market started to wane a bit. "Oh, but that doesn't matter because we've got a good home market. Who cares?" And the basic oxygen furnace can't produce the quality of steel our customers require.

And then the steel starts coming into the country, and all of a sudden it's no longer a local play with three competitors; it's multiple players. It's a miserable business, particularly because of one source of supply. Who had real negotiating power and extracted most of the profit out of the steel industry in the '50s, '60s and '70s? The unions. Organized labor was extracting such huge prices for daily labor rates that they were losing a fortune. Then, just to make it worse, along comes a new minimill technology, which uses scrap. So now you locate the mill near the customer; you buy the local scrap; you produce the local steel. It's low-quality steel, but your operating costs are incredibly low. And the minimum efficient scale, the size of a plant, is one-tenth of the size of the old technology. And the cost of capital per ton is one-tenth of the size. So we're now talking about capital to get in the business: 1 percent of the old technology.

Now it looked fantastically profitable. A new player gets into this business and says, "I'm making a huge amount of money because I've got low operating costs." What crosses your mind about what's going to happen in the industry? What's happened to the barriers to entry? They have dropped dramatically. So you think you might have figured out, well, actually, it looks great now, but what if other people came in? Dozens came in; dozens of minimills came in. And in the period 1966 to 1986, twenty-four of them— twenty-four new competitors—went bankrupt. So this is how ugly this business is. And Nucor is making 6 percent on sales.

Then you take a look at what's going on in terms of Nucor's performance. And every year, their productivity gets better and better and better; more and more tons per employee. And every year they're making good money. And you ask, well, how do they manage to do that? This is a really ugly business, so this must be a good example of how you can do that. Very strong focus. Their philosophy on life from the

strategy point of view is, "We build steel plants more efficiently and we operate them more efficiently than anybody else."

Because the only way you can make money in steel is being lower-cost. Very, very focused on delivering lower cost. Plant location: if they can't get the right location for a plant, they won't build it. And they want one that's got multiple transport capability. They want competitors in the rail networks such that they can drive prices down. Very low-priced electricity. They go for the lowest-cost inputs in the area they can; otherwise they won't bother. They build the plants themselves; they are the general contractor. And intriguingly, they hire local farmers to build the plant—farming labor, not union labor.

And then when they come to open the plant, they hire the same labor to run it. What's the advantage of that? The guys that built the plant, run the plant. They kind of feel they own it; they know exactly how it works. It's intriguing.

Sales and pricing: they will not give volume discounts. It sounds intriguing, but in their area they say, "We have an everyday low price." The challenge is, if you give volume discounts, that means the big customer in the region gets bigger, and the small customers get smaller. And all of a sudden, you find you've just got one customer. And when you've got just one customer, what happens to price? You've got a lot of trouble. So they said, "No, we don't want to play that game. We want as many small customers as possible." And it was in the commodity distributor end of the steel business; they kept everybody fair.

R&D and innovation: they spend an enormous amount of money on productivity improvements. But they don't have an R&D department. They have one person that scans the world for everybody else's technology the whole time, and they use their suppliers to provide the R&D. They do *D*; essentially, the supplier does *R*. And then from an innovative point of view, they're always first with the latest technology to improve the quality of steel.

For instance, everybody said you cannot make thick slab casting with this technology; it just won't work. A Germany company said, "We think it's possible. We have the technology." In comes our good friends, Nucor, and says, "Well, we're going to give it a go." What sort of price do you think they got from that German supplier, for trying the technology? A very good price! And they tried the technology; it finally worked after eighteen months. It took five years for the next competitor to be able to copy it, because they built the plant themselves. By the way, they build plants in eighteen months, which is unheard of in the steel business. Start to finish, eighteen months for a steel plant. Intriguing. They're very fast, and of course that means they had a monopoly in thick-strip casting until such time as the next player came in, and they made huge profits during that period.

They are ruthless with their productivity benchmarking. You walk into the plant, and you see their productivity number on the door as you walk in. Everybody in the plant knows about what productivity is. Very clear performance metrics in terms of your return on assets the whole time, and cost behavior relative to the competition. And big rewards behind driving costs down and delivering profitability. "Here is the model of how we work, we're continuously improving it, and we pay people to improve it."

Then of course we take a look at their structure to support this: five layers from the shop floor through to the top executive, versus twelve or thirteen for U.S. Steel. Decision making: the plant manager makes all the decisions literally. You can see exactly what he's doing because the information systems tell you. But rewarded on return on assets and continuing to invest and innovate. Five hundred employees per plant, no more, so the plant manager knows every worker in a plant. Twenty- to forty-person small production groups. I found this intriguing, because the whole plant is divided into production groups. And those production groups, intriguingly, have a group bonus. If they don't hit their productivity target, no one gets a bonus, the whole team. What sort of behavior do you think that encourages? What happens to a slacker in this company? And steel is hot.

And it's the teams that recruit. And it's the teams that have an input as to who should lead them. And who does the training? Nobody. It's up to the team to train their new people. What incentive does a team that's being rewarded for productivity have, to train somebody up, to make them productive? A huge incentive! All of a sudden, you've got an incentive machine. The actual compensation? Very low base, but with productivity incentives, they actually make more than any other steel worker. So when the plant is productive, everybody is productive.

And great information systems; everybody on the shop floor knows the productivity of every one of the units, because there's also a total company bonus, and everyone can see which business, which plant is slack and bringing everybody's bonus down. Every plant manager knows the productivity of the next plant, and can pick up the phone to try and find out how to improve. Tremendous information transparency; let's call it positive competition, internally.

And the people? Hiring steel workers with psychographic tests. They actually hire people that are goal-oriented, self-reliant attitude, and have never been in steel before. Now, very careful. Openness encouraged in this organization; if you disagree with the boss, you say so and you're rewarded for it. And if you've got an issue, the chief executive will reply within twenty-four hours; you can just talk straight to the chief executive. So no one's going to start getting too shirty with people for coming forward with ideas, because everybody can go over the top very, very easily, indeed. Peer evaluations help determine shop floor promotions.

And everybody shares in the pain. When the market goes down, they don't have layoffs, they go for a shorter workweek. And senior executive pay goes down by 60 or 70 percent. In bad times, senior executives suffer; everybody shares the pain. You've got a flexible workforce driven very hard to deliver on productivity, and they all feel they own a piece of the game. Intriguing.

Everybody said, "Well, how can you basically improve productivity above 400 tons per employee in 1986? Can this model continue to work?" So I just thought I'd give you an update since 1986. This is what's happened. They were 700,000 tons; they are now a 17-million-ton company. They're the biggest steel producer in the United States. U.S. Steel has 23,000 tons of capacity; it's managed to get rid of 3,000 tons from the twenty-six that it had. It only, however, produces around 17,000 tons, the same as Nucor. Nucor produces its steel with 9,900 employees; U.S. Steel uses

47,000 employees to produce the same amount of steel. You think you'd be able to copy it, but it's an incredible machine that you can get going. A nice, interesting story.

Credit cards

Now we'll talk about credit cards, because you read about credit cards last night. This is another wonderfully agile organization. This is the economics of the business. This is what the merchant pays: 2.2 percent. The issuer—that's the bank—gets 1.7 percent. And VISA and Master Charge get 0.4 percent for doing the marketing. And then the merchant-processor that does the paperwork is getting 0.1 percent. Well, these are very tiny numbers, aren't they? You can understand why a merchant is happy to pay 2.2 percent. They're very tiny numbers of a trillion-dollar business; this is huge amounts of money. There are thousands of credit cards. Now, if you've got thousands of people issuing credit cards, all competing in the financial service business, what would you say the average profit for those guys should be? Very thin. And yet it's the most profitable product that all these banks operate.

And so our good friends come along and start this business, and decide they're going to change prices. Here's their economics, by the way. Strategy is all about making more money from a customer, or having lower costs to serve for a customer. And here are the various sources of their money: they make a billion dollars out of credit. What drives the amount of money you get from credit interest? If you want to get more from a person? Ian?

___: Two things: one is the amount you spend and the amount that's generating interest.

PROFESSOR WELLS: Yeah, so you put your interest rate up, but you want people to spend more and not pay off their bills. You don't want the revolvers; you want the people that literally don't pay off their bill each month. You want to pick the right sort of customer that spends a lot and doesn't pay off their credit card. So they don't like revolvers. Late payment—a billion dollars in late payments. Anybody refuse to pay a late payment fee? Jasper, why did you refuse?

___: Because I thought it was unnecessary.

PROFESSOR WELLS: It was unjust, wasn't it?

___: No, it wasn't. But my estimate was, I was worth more to American Express than their £15, so I pointed that out to them.

PROFESSOR WELLS: And what happened?

___: They forgave me.

PROFESSOR WELLS: They rolled over. This customer is an absolute pain. Because I didn't get the late fee, and I had to answer a telephone call with him whining about how good a customer he was. It cost me money to give him his money back. "Jerry, I want you. I want as many suckers as I can get, because I make lots of money. Oh, it's fifteen bucks. Who cares?" So you want to pick the right customers, the ones that

just pay up and don't complain. And then of course interchange—that's the volume of business—you want people to buy a lot on their credit card. And ideally, by the way, high-ticket items on a credit card, because it costs you the same to administer a small amount as a large amount.

Now, loss provision. What is loss provision? Back to Ian.

___: The percent of the revolving book or the outstanding debt that goes bad.

PROFESSOR WELLS: Right, in other words, we don't want customers that don't pay; we love credit. But we've got to pick customers that will use credit, but end up paying at the end of the day. Services, of course: the phone that we're answering. So we don't want customers like Jasper who keep calling us up, because they cost us money. And marketing is how costly it is to get new customers. Picking the right sort of customer in this business is absolutely key. Because if we can pick low-risk customers, we can give them a price discount—in other words, be lower-cost from their point of view—but as long as the losses are even lower still, we make a bigger margin.

And we can also go to the other side. We can say, "Well, here's a high-risk customer. We will give that high-risk customer a credit card, but we're going to charge them a lot more money in interest for it. A higher price, a higher cost to serve, but we still make more money." The essence of differentiation, by the way, is you get a better price but it's got to exceed any extra costs involved. So you can play either game. And of course, as soon as you do this, the competition can copy. So you've got a fair amount of time before making money. And then everybody copies and does the same thing, and you have to think of another idea.

An intriguing game, Capital One. Strategy? They'll deliver a better product from a customer's point of view, a lower cost product. They're very much faster than their competition. Very clear metrics. Did you notice the way they reward people? They say, "We reward you based on the net present value of a customer." You go and say that to the average credit card company, "What is the net present value of the customer?" And they say, "Net? What's that mean?"

But that's what you really want. You want a customer that signs up and gives you profits every year, for years. So you want an idea of how long they're going to be with you and how much money you're going to make from them each year. And a loyal customer, even if they're not very big, can often be a very attractive customer. So everybody in the organization is motivated on, "What's the net present value of this customer?"

And the only way you can tell that is if you've got test data to show. And they're the only ones with the test data, because they track how attractive these customers have been in the past, and therefore predicting the future. So they've got fantastic data that no one else has got. And every test they run gives them more data that nobody else has got, so it gets better and better and better.

The structure to support it? Look at the way they run the organization. What do you think of that as an organization's structure? How does that compare with the average

bank? The average bank: big functional silos. They run their business just like a consulting firm. That's because they were consultants and they didn't know how to run a company. It's just as well, really, because if they'd run it like a conventional financial service firm, as one of their competitors did, they'd go bust.

But people come together—you know, you get IT people sitting with marketing people, and coming up with an idea; IT people being entrepreneurial. You know, it's incredible. And then everybody gets motivated to deliver net present value. If it works, they get the reward; then they go on to the next idea, and the next idea. That way, you end up with twenty-odd thousand ideas a year, as opposed to one idea. And it gets implemented quick, as opposed to slow.

How long does the average product last in this business? Six months! This is an incredible machine, that they're generating that number of products and making profit out of things that only last six months. But you have to have a completely different logic to your organization structure to do it. But with strong rewards, focused on what really counts in the business from a strategic point of view.

And the people are definitely not bankers. They don't hire bankers. They actually seek people that like this sort of adhocracy and moving to the next. So they're entrepreneurial types, ex-McKinsey people who literally want to do something, as opposed to advise. And they reward people for it. A completely different logic in how they operate.

So we've seen some examples of good, bad. Let's just step back and look at what's the problem: a lack of strategic agility, the lack of structural agility, what the sources are and how we can overcome it, and the lack of people agility. Because I hope that at least I've illustrated that having it is important.

Lack of Strategic Agility

The lack of strategic agility is a lack of what? Let's call it collective intelligence. It's the pigeon syndrome. And number one, it's an analytical issue—we don't know what we should do; and number two, it's an alignment issue—we can't get agreement on what we should do. And that is often much more of a problem. I find, in organizations, it's not that people don't see it as a problem, it's they can't agree on what the solution could be, because they're not speaking a common language.

The challenge is a lack of a shared, explicit model of success. I'm quite explicit in this: it needs to be an explicit model, not an implicit model. The implicit model in Kodak is, you can't make money on cameras; you make money on film. So they weren't terribly committed to cameras, whereas actually the industry profit was going to move to cameras. You had to make money on cameras if there was no film. It has to be a very clear, explicit model, and it's shared by everyone.

Lack of measures of strategic performance. Boy, oh boy. Now, what do I mean by that? Well, what do you think of financial performance as a good measure of strategic performance? We need forward-looking indicators like customer satisfaction relative to the competition; market share, relative to the competition. But it's the

lack of measures of strategic performance, and all measures of strategic performance are relative measures. The number of companies I've been to that say, "We're lower cost," and then can't tell me what their competitors' costs are. So excuse me? If you're lower cost, you mean lower than the competition.

Lack of rewards. This comes back to, we don't have a model, and we're not rewarding people for delivering on strategic performance. Capital One: net present value. Nucor: productivity improvements to drive costs down.

Lack of process for building or refining the model. These are both structural issues that drive a flexible strategy. If you don't have a way of modifying your model, then it doesn't change, by definition. I don't like the words "strategic planning process," because most strategic planning processes are glorified budgeting processes. I think getting the management team together to lay out the models—what are the real options we've got for running this business—that's strategic planning. Budgeting is entirely another matter, for bureaucrats.

Lack of openness to reasoning. A lot of companies, you're not allowed to say the obvious.

The thing I'd also emphasize, always, is we also can have trouble with customers. U.S. Steel couldn't switch its technology in the first instance, because the customers said, "We're worried about quality." IBM was worried about a supplier. Hewlett-Packard is hugely worried about its channel. That causes challenges, as well.

Making strategy more agile

Making strategy more agile. Build and maintain an explicit model of success. Use the five forces. Use the sources of competitive advantage. You can use any model, as long as it basically focuses on how you win in the business. And it's explicit: these are our assumptions about how to win in this business.

Which battlefields? That's your strategic choices. Which products, which markets, which geographies, which segments of the market? Because you know, using the five forces, that some battlefields are more attractive than others. And therefore, on average your profits are going to be higher if you choose the right battlefields.

And choose the battlefields where you think you can win against the competition. In other words, what weapons do you have; where can you win? Are you going to be differentiated, are you going to be lower cost? Are you just going to faster than the competition? These are our assumptions about what it takes to win.

Constantly monitor the strategic scorecard. Not the balanced scorecard—by all means have a balanced scorecard—I'm talking about the things that show how healthy you are from a strategy point of view. What's your relative market share? What's your customer satisfaction relative to the competition? What's your cost position relative to the competition? Always tracking, tracking, tracking. Leading indicators of strategic health, not the rearview mirror.

Reward strategic success. I say this and people say, well, that's trivial. The number of companies that don't. What they do is they reward just the opposite. And they

say, "Oh, please do *X*, and by the way, we reward you for *Y*." And it just drives you crazy, because you haven't got alignment and you lose an awful lot of motivation.

Track competition and outsmart them to stay ahead of the game. Because remember, this is the competitive environment. Let's not get too fancy about what it is—it's your competition. How are you going on the next stage on them?

I like strategic paranoia. Always be worried, not so worried that you're not going to do anything, but you're constantly testing your model, saying, what are the big assumptions? I don't mean lots of contingency planning; just identify the two or three key assumptions in your model that, if you turn out to be wrong, you'd have to change what you do. That's what I call a critical assumption. And then you test for that the whole time. And you're ready to change, because you've already identified what you would do if that assumption turns out to be wrong.

A lot of companies say, "We're going to do this," and it's heavily dependent upon what a competitor might do or not do. And so you say, "Well, what if the competitor does *X*?" "Oh well, this will be our game plan if the competitor does *X*. If one of our biggest competition is acquired by a big overseas player," they say, "we're ready, we're flexible."

Always identifying the threats and how you would deal with them. Notice the way Jack Welch does strategic planning. He said, "Oh, to hell with all this planning." Literally just wants a sheet of paper that says, tell me about what your advantage is; tell me what your biggest competitive threat is; tell me what you'd do about it, if it happened. He's focusing on the future the whole time, not the past, in terms of the way he asks people.

But not just paranoia, also look to how you can proactively change your model. What's the biggest opportunity? If this happened to your industry, it will be fantastically attractive for you. And what are the things that you can do to nudge it, such that it could move in that direction? As opposed to just worrying about what other people do, try and think out of the box about how you could make your reality more attractive.

Industry attractiveness: five forces

And of course, you've done all of this. Five forces tells you which battlefields to compete in. You've done the six forces now, because you've been told about complements. People turn around and say, "Well, are these the only forces? Are they the right forces?" It doesn't matter. This is a simple way of remembering where the competition is for profits. If you forget one of these, it's liable to be the one that bites you.

But you can add some other things to worry about. Technology affects all of these forces, so never forget it. Regulation in some markets—market preferences and tastes change. What has happened in the last one year in the United States is staggering because of Atkins. All of a sudden we can eat beef now, as much as we can load, but carbohydrates are bad. And the food industry is in disarray over it. Tastes can change, and that just changes the five forces.

Regulation. Regulation and technology. By the way, very, very often, these are the ones that are a step function, bang! And then all of a sudden the game has changed dramatically. These two—market preferences tend to change slowly, and the social demographic changes change slowly. All of a sudden, you find you've got a lot of old consumers. So remember those in building the context, as well as the five forces. But remember, we're not interested in today; we're interested in tomorrow.

Pursue competitive advantage

Better differentiation. I'm just going to give you my religion on differentiation, because I've been to hundreds of companies that just like to be different.

It's not different, it's better. It's not better, as defined by the head of R&D or the chief executive, as it is defined by the customer. Customers don't care if you innovate, they don't care what your technology is. They care about what you do for them: are you better? Acid test of whether you're better? Like for like, they will pay a price premium. If they won't pay a price premium, why do you think you're better? They'll either pay a price premium, or you get the business, i.e., you gain share over the other player at the same price. But you still don't have an advantage yet, because if it's to be better, you get a price premium, and it doesn't exceed the extra costs involved, you have a problem.

Differentiation is better, as defined by the customer, such that you get a price premium that exceeds the extra costs involved. That's the ruthless discipline of differentiation strategy.

Then there's lower cost, which is lower cost than your competition. Because if you're lower cost than your competition for the same product and you can charge the same prices, you make more profit. But beware. Many companies say, "We're lower cost," but their product is inferior so they have to offer a discount. But as long as the discount they offer is smaller than their cost advantage, they still make more money, and so they've got a competitive advantage.

But the idea that you can only be better or lower cost is, of course, rubbish. You can have both of those advantages, and many companies do; it's just how you get there. And they both disappear with time, so you better be faster. Do you get there first? If you've got a natural monopoly until the next player gets there, if they catch up, then what are you going to do for an encore? And last but not least, something you haven't covered this week I'm sure is smarter: doing things that are very, very tough for the competition to copy, or doing things today where you know you've got to change for tomorrow.

So that's the unerring pursuit of competitive advantage.

Learning path to agile strategy

Agile strategy. We have the academics here. Companies that love to analyze and never get anything done; that's the academic dimension. Then we have the Marines here, literally. This is action-oriented—let's go and do something. I'm not quite sure what, but at least we'll learn something from it. What you actually want is a combination of the two where you do a bit of analysis. You've got a pretty good idea

of where you're headed. Then you try it, find out what works, find out what doesn't, readjust, and keep learning along the path. That's very much a learning path.

It's like the Special Services. They have a clear overall objective. They start off with a particular strategy. When it stops working, one of them gets killed; they reorganize, and basically move on and get the job done. Learning in real time, because no one really knows what the competitive environment is. All the analysis in the world isn't going to tell you exactly what's going to be there in the future, because the future is uncertain. So having an approximate idea, giving it a go and being prepared to adjust, keeping the long-term goal in sight, is what agile strategy is all about.

So have your model, run the test. If it's working, fine; if it's not working, find out why, adjust the model, and keep adjusting it as the environment changes.

Variations in profitability

Now that's the strategy, and you've been talking about strategy all week. This is where profit comes from. This is averages, of course. Eighteen percent of profit seems to be determined by which industry a business is in. Thirty percent of profit seems to be determined by the relative position in an industry. Are you number one, number two? What sort of competitive advantage do you have? So we could say that half of profit seems to come from good strategy, good strategic positioning. The other half comes from doing it well.

Lack of Structural Agility

Lack of structural agility: you're not aligned with what you're trying to do. Literally, the roles and responsibility aren't there. Look at Kodak. We just didn't have a structure to execute on that strategy. That's problem number one. Problem number two is, it's hard to change the structure. Because if you change the strategy, you've got to change the structure. If you've designed it such that it's difficult to change, then you have a real problem.

So is it easy to change? Then the question is, it may be easy or not easy to change. If we don't have a way of improving—lack of renewal processes—then it won't change. And if there are no rewards for improvement, it definitely won't.

Formal and informal organizations

Look at how complex organizations are. Everybody, most people, have an organigram. Although in the good old days of dot-com, lots of people didn't even have an organization chart. Business decision processes: most companies don't do a very good job of mapping out how they make decisions. They don't even do a very good job of mapping out literally how they handle the paperwork, which I find intriguing. Because actually, a management team is a decision factory. And we work incredibly hard to get our manufacturing plants to operate incredibly efficiently. And yet, when it comes to the decision factory, we start again from first principles every time, and we're incredibly inefficient in the way we make even routine decisions. And I would say, lots of companies operate on an incredibly low level of efficiency in terms of decisions.

Then there's measurement and reward systems that are typically motivating people

to do the opposite of what you want them to do. And then there are professional development systems that don't train them to do what you're asking them to. And it's all tied together with information systems.

And if that weren't difficult enough, just knowing—because most of this isn't mapped out in an organization. There are loads of informal things going on, like who really is in charge; the informal network for getting things done; implicit rewards: if you do this, you'll get a promotion; the mentoring and coaching. It's a very complex system. And the trouble with complex systems is, when you change something here by fiat, it has horrible effects somewhere else. And you didn't ever predict it. Just like big IT systems: change something here on a monolithic system, and all of a sudden it breaks somewhere else.

Levels of agility

So if you actually, however, map everything you do, which I call level one agility, it's amazing just by looking at what you do, how much improvement you can get. So engage the front line, map what you do, and constantly question, "Does it make sense?" Always try and find a better way with your current organization, you can do. But level two is when you can turn to a totally self-organizing system. Look at what Nucor has done. It's componentized. It said, "We're going to get the twenty to forty work groups, and we're going to make them be the productivity machine. They'll find ways of improving productivity; we'll just pay for the productivity."

Look at what Capital One has done: "We're going to get people to come together to focus on the objective. They'll work out how to deliver the objective. We'll empower them to do it, but we're not empowering them to do anything they like. We're empowering them to find high net-present-value customers." Let's call it structured empowerment, componentizing the organization. Then you get a context for a self-organizing, self-improving system. And the top layers, then. Top management is there to deal with the exceptions and create the right context for making this happen, not telling everybody what to do.

You can't tell people how to do 26,000 products a year. You have to rely on them, but they literally have got very well defined parameters about what they can do and what they can't do. So you've modularized it. Clear objectives, clear definition of inputs, clear definition of outputs. And then you say, "Right, you design your own work. And if you do it better, we will pay you part of that." So you have always got the incentive to improve, such that when the environment changes, they're ready to change. You're no longer rigid and can't move, because everybody is always looking for ways of improving, as is with Nucor. And of course, the top management's job is to set the reward structures and the context, the information systems, to allow them to do that.

Lack of Agile Minds

Now let's go to lack of agile minds.

Sense of mission

Summarizing fairly quickly in fifteen minutes on agile minds, the biggest challenge in companies, I think, is, I call it sense of mission. I don't mean a mission statement. If you are wounded in battle, the chances of you getting up to fight on are entirely

dependent upon your level of morale and your clear view of objective. If you don't know what the objective is, the first bullet takes you down. If you've got a very powerful objective and you're really driven, you get up and you'll take several bullets before you finally go.

Fear of change

When people don't know what they're doing or where they're headed, when they don't have a sense of mission, then literally they don't want to change. They will be quite flexible if they think the overall objective is fair, and I've got to find a way round: "I can understand why this organization is asking me to change." Because no sense of mission increases the fear of change.

Low capacity for learning

And last but not least, the fear of change is often driven by a lack of learning capacity. "I don't want to learn; I want to do the same things." And we're all like that. And organizations where the hierarchy counts more than the strength of an argument; where you've got silos of unquestionable expertise; where people make untested attributions about others; they don't listen to other people's ideas; they blame others for the things that go wrong, you have a real problem.

Let me explain how. Change causes stress. By the way, people think that the more change, the more stress. No. Lack of change causes stress, too. Actually people like change, just not too much of it. So ideally, they want to be here, where they minimize their stress. They like it; it's a bit of fun. Now, different people have different tolerances for stress. So lesson number one, if you want to change, just hire people that want to change. That's what Capital One does, that's what Nucor does. You pick the sort of people with the right psychographic profile.

But that said, if you create a context that allows everybody greater capacity for change, it's less threatening. Then everybody will improve on average. So it's a selection process plus an environmental process.

Learning hurts, it's embarrassing, it's uncomfortable. And so most of the time we think, well, it's just not worth it. By the way, it is not true that the older you get, the harder it is to learn. It's not that you can't teach old dogs, new tricks; it's just that they can't see the benefits of doing so. It there's not a big enough payoff, why bother? We just get smarter: "Oh, God, no, I'm not going to go through that pain again." You know literally, I'd rather stick with my current score. So you just have to have bigger incentives.

And the problem is, we don't know what we know, and we don't know what we don't know, in terms of learning. And the only way we can be sure that we'll find out what we don't know is by always giving the benefit of the doubt, and listening carefully to what anybody says, and saying, "Could that be true?" as opposed to, "It's definitely not true."

Anti-learning skills

And yet, we're fantastically good at anti-learning skills. We advocate our position as if it's the truth, and make sure nobody responds. We force it on them: "I'm going to make a strong case for my recommendation, and drown them in arguments if they

dare to question it. I'll blow them away. I'll give them so much data, they can't possibly ask. I won't give them my logic, of course." You save face for yourself and others. "Oh, this person is just not up to the job. I'm not going to say it; I'm going to work round them, and ignore them." Now, of course, whether they are a fool or not, they've now become a fool, because you treat them as a fool. And you never find out whether they had a good idea in their head.

You don't test attributions because it might be embarrassing. "They don't really mean that, but I daren't admit it. God, that guy is lying. That's not what he said yesterday. There's something wrong here." And then you label that person when it may have been something completely different, and you build up the wrong model for them. You've built up a defensiveness, and you therefore can't learn from them. Intriguing. We're very good at it.

How does it show in organizations? Give people the same data. Marketing people select from that data. They then infer meanings from the data. They then draw obvious conclusions from the data. And then they advocate the position as if it was the truth, and on the other side you have manufacturing people doing exactly the same. So this is what I mean about the unquestionable silos of expertise. We must always put our logic forward and say, "Please test this." Put your opinion forward, but make sure you do it in a way that says, "Now, please test it for me."

Balancing advocacy and inquiry

Good organizations: you advocate, but not forcing the conclusions. You say, "Well, this is my position. I'll explain my logic. Let's test my logic, because it's the logic that counts." Bad organizations often, when they're not actually putting forward their opinion, they're not laying it out and they're trying to think there's a problem. Of course, in organizations that don't have opinions and don't test them, either, you've got a total losing crowd. It's balancing the advocacy with the inquiry, is the challenge. And that requires good listening.

Blame games

Another thing that gets in the way of learning is blame games. Now, if you literally focus all your energy on areas of concern that are beyond your area of influence, you get nothing done, by definition. If you focus on your area of influence, it's amazing how your area of influence tends to grow. You can find a way.

Teaching organizations to learn

Very important for learning, but how do you teach an organization to learn? Coaching, coaching. I could spend an hour on coaching, and all I would argue is that little and often, I find most personnel reviews worthless. What really counts is somebody taking you aside just after you've done something and saying, "Well, this is what you did well, and this is what you could have done a bit better. Good job, give it another go." That is incredibly helpful. "The deepest principle in human nature is the craving to be appreciated," so make sure that you appreciate the person as you do it. Tell them what they did right, and help them to improve what they did wrong, and they will appreciate you, and they will grow.

But it's behavior: like father, like son. What intrigues me is children who've never been very good at listening to their elders, but they never fail to imitate them. Have

you noticed, by the way, sometimes when you're saying something, you say, "Oh, my god. That's just what my mom or my dad used to say and do! I never wanted to be that, but I've turned into it, myself." It happens to all of us, because we're an imitating machine. Be a role model. In every culture, we find these same sorts of phrases and sayings, for very good reasons. Set a good example. "We must be the changes we wish to see in the world," says Gandhi.

The shadow of the leader

It's all about the shadow of the leader. What you do people will copy. And of course, actions speak louder than words. Carnegie: As I grow older, I care less about what people say, and watch carefully what they do.

Practice what you preach. Why is that important? If you say one thing and you do another, you are a hypocrite. That is what your subordinates think of you.

Now, just take care on that one, because if there's that gap, you're undermining your ability to do an awful lot of things. And so, now the way you deal with it, of course—because I keep making mistakes; we do it all the time—is to say to your people, "Look, I don't want to do this. When I do it, wave the red card at me." And at one point, I actually got pieces of red card and gave it to people. I said, "I want you to help me improve my behavior." And that really drives commitment, because you look an absolute idiot if you don't comply then, in terms of—it's walking the talk. So leadership is message backed by action.

What you need for agile minds

Summarizing. What do you need for agile minds? A strong sense of mission: we really know what we're trying to achieve in the long run; a context that celebrates and rewards change, and a high capacity for learning. That's what we advocate in this organization. We have opinions but we question them, and we lay out our logic so everybody can question it. At Nucor, even if you're on your shop floor, you can turn around and say, this doesn't make sense.

Risk embarrassment in the service of learning by inquiring. The reason we don't ask questions is we feel stupid. So the way I do it, by the way, when I'm feeling really stupid, I say, "Maybe I'm having a dumb attack, but this doesn't seem to make sense to me." That way, I'm trying to soften the fact that I do look pretty dumb by asking the question. I've just found that one helpful to try and risk embarrassment.

Test attributions constructively: "Did you really mean that, because I thought you said yesterday, X? But let's clarify this because I'm confused now." Don't accuse in silence; it's self-sealing. Listen positively, be accountable, coach others, and walk the talk.

Overcoming Inertia

So, how do we overcome inertia? We have to overcome cognitive inertia with agile strategy; a clear, explicit model of how to win; with clear assumptions that we're making, that, if they turn out to be wrong, we will change; and the clear metrics of success that we will reward. Agile structure: at a minimum we've mapped out how we do things. But actually we've created a business where we've got modules of

capability that kind of run their own scene, but in a very structured way.

And last but not least, agile minds. We've got an organization where people are open and prepared to learn, and courageous in learning. All of that requires, how do you get most of this into an organization? You can think about big processes and systems, but probably it takes time. But the most effective way is for you to do it. Because if you do it and you're in a position of leadership, other people will do it. And that's the essence of what leadership is all about in driving agility.

Two minutes overtime; apologies for that. Let's have a cup of tea, and I'll come back for the history of the universe after coffee, OK? Thank you.