



Transcript for the WLEI Podcast:

People First Leadership: A Conversation Between Jim Morgan and Alan Mulally

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Read this transcript of a wide-ranging discussion in which LEI Senior Advisor Jim Morgan and former Ford Motor Company CEO Alan Mulally reminisce about the leadership philosophy and management strategy that led to what some have dubbed "[the biggest turnaround in business history](#)." Throughout the conversation, Mulally provides valuable insight for current leaders like you who are trying to navigate today's disruptive and turbulent environment -- so much so that those who have both [listened to the recording](#) and read the transcript say you will risk missing a lot by just listening.

Jim Morgan: Good morning, Alan, and welcome to the podcast. It's truly an honor to have you join us today.

Alan Mulally: Well, it's good to see you again, Jim. Glad to be with you.

Morgan: Great. So, let's get right to it. Your management system, in my view, was absolutely crucial to Ford's turnaround, and a great deal has already been written about your weekly BPR (Business Process Reviews). But it's my view that your working-together management system is much more than just a weekly meeting. So, I wonder if you can talk about the essential elements of a good management system and why it matters to a successful company.

Mulally: I'd be glad to, Jim. If it would work for you, let me back up a little bit and share with the audience how I ended up developing this fundamental management system that you are describing.

As you know, I had the fortune to work at Boeing for 37 years before I joined Ford, and I had the honor to serve on the design team of every Boeing airplane -- so the 707, 727, 737, 747, 757, 767 -- and I was the chief engineer for the 777 airplane. Then as the CEO of Boeing, I helped launch the 787. So, if you look at all the flying in the world today, nearly 70% is on Boeing airplanes.

You know, the commercial airplanes were really the first internet because we actually got people together around the world, and we could find out we had more in common than we were different.

Commercial airplanes are really sophisticated, as we all know, and complicated because of the safety requirements. An average commercial airplane has four million parts, and you think about the quality, fuel efficiency, safety, reliability, and maintainability to be able to carry 300 passengers halfway around the world. So, on all of these programs, we actually make a commitment five years in advance to deliver all the performance on schedule. So, it's an invention with four million parts, and we have nearly 600,000 to 700,000 talented people working on the airplane to create this invention and deliver it on schedule.

So, some principles and practices I have learned over the years are the essential part of the management system, and a few of them are -- it's all about people. That's where the "people first" comes from. Everybody needs to be included -- all the consumers, the traveling public, our employees, the suppliers, the financiers, the regulatory agencies -- and it's so important to come together around a compelling vision for the product, the strategy for achieving it. And then, of course, the relentless implementation plan, which, as you mentioned, is the business plan review meeting every week.

On top of that, clear performance goals are really important, facts and data. We care, of course, what everybody thinks, but we want to know what the data is that everybody's looking at because we're inventing this great product.

Also, the behaviors. So, there's the process part, then there's the behavior part, where everybody knows the plan, they know the status, they know the areas that need special attention, and we actually color-code the charts so that we can easily see what's on plan -- an issue we might have, we have to work around, and also maybe an issue that we don't have a plan for. Attitude is really important. Propose a plan, be positive, find a way, respect each other, listen to each other, and trust this process of working together.

The last one is really: have fun and enjoy the journey and each other. There's just nothing more fun than creating value for the people of our world with these great airplanes. The corollary to that is: never joke at anybody else's expense because it's never funny. The reason that's so important is that if people think they're going to be a victim or made fun of, they're not going to be forthcoming on what the real status is because they don't want to be a victim. So, it's a lot of fun doing it, and just know: no humor at anybody else's expense.

When you look at that as a management system, it's really the culture. It's this process of working together, the business plan review, the special attention meetings, and the leadership team, where everybody's included, is the second piece. The behaviors, expected behaviors, is the third piece, the creating-value roadmap and the BPR, where every week with the entire team, we're going through every element of the plan.

And, of course, the importance of the leader and the leadership team. You add those five or six pieces together, and that, inherently, then creates the culture that we used at Boeing -- and then, of course, the culture that we implemented at Ford when I joined you guys at Ford.

Morgan: And it was incredibly powerful. What about for a leader that is just trying to establish a management system. Where do you suggest they get started?

Mulally: Well, I think that the most important thing is to, again, think of it as a process, the meetings that you have with the team and the organization because that's how you get the work done. So, being really intentional about the business plan review each week, a two-hour meeting, everybody's there. Then, the areas that need special attention, schedule maybe four of those a month; then one on strategy, one on product, and one on process improvement, another on people. So, anything that needs special attention, you have built-in in your management system, time to address that with the team. Then just start doing it. And it'll be amazing because you end up pulling together as a team and building a cohesive leadership team that is creating clarity -- that's over-communicating clarity, reinforcing clarity, and moving forward, implementing your strategy to implement the vision that you'd laid out for your business.

How to Change a Leader's Behavior

Morgan: Perfect. When you have to influence or change a leader's behavior, what's the best way to go about that?

Mulally: Well, what I found is that we're all human beings, and we really do want to contribute, and we want to make a difference, so the most important thing as a leader is to pull everybody together around the vision for the business or the product, pull everybody together around the strategy for achieving it, not only the technical strategy but the partnership strategy and the expected behavior strategy. Then, make that really clear, really intentional, then just start operating with this process and these behaviors. And any time you see a behavior that's not consistent with what you've agreed to on working together -- like the respect each other and help each other -- stop the meeting or talk to the person in private. Show them what you've agreed to, and then share with them that the expectation is that we are going to operate this way.

I've always said to them also, as you know Jim, that if you don't want to do this, if you don't want to follow the process or the expected behaviors, it's okay. And they'd go, "Oh, you mean I get an exception?" I said, "Well, no, not really. It means that you're deciding to move on because anybody that doesn't operate this way is poison in an organization, as we all know." And you think about the performance reviews we do with all of our employees and ourselves. And you think about on one axis will be your technical contribution and the other axis will be your working-together skills. Sometimes, they'll be somebody that's way down the working-together skills, but they're way high on their technical contribution.

So, they'd always say to me, "What do we do about that?" And I'd say, "Why is somebody like that?" And they'd say, "Well, we've been working on their working-together skills for a lot of years, but they just don't want to commit to that." So, I said, "Well, let's go over the behaviors and make it clear to them, so they're not going to be surprised. Give them two performance periods, and if they choose not to move up and to the right with the working-together in addition to their technical skills, then they're choosing to move on, and we'll help them move on. We still love them. Remember, it's people first is the first principle, but they're going to be happier, the team's going to be happier, and I'm going to be happier, and it's okay. We wish you the very best."

It's amazing to me, Jim, that 80-plus percent of the time when you're clear about the process, and you're clear about the behaviors from a product point-of-view or a business point-of-view, that 80-plus percent of the time people will move very positively to a working-together contributor.

Morgan: That's great. I remember: participation is not optional, right?

Mulally: Exactly, exactly.

The Urgency of Understanding the Competitive Situation

Morgan: Exactly. So, in the book *American Icon*, there's a quote that's attributed to you that I think is great, and it's something like, "the problems at Ford were not as bad as I thought, they were much, much worse." What did you mean by that? What were some of the more daunting problems that you encountered when you arrived at Ford?

Mulally: Wow, well, I really got off to a good start understanding Ford because when Bill Ford called me, and Bill Ford's a great leader and he wanted help. He was the chairman, the CEO, and the president at the time. And they were going through a lot of changes with the competition, with

the quality of the products increasing around the world, with the globalization of the products, and the competitiveness.

One of the things he shared with me was that Ford had become a house of brands. They had purchased Aston Martin, Jaguar, Land Rover, Volvo, Mazda, and they really had lost the brand essence of what Ford was about, which was still 70% of the business.

Also, they'd become very regionalized. Henry Ford set Ford up that way so that he could provide not only great cars and trucks in every country around the world but also provide great jobs and careers and contribute to the economy. But, of course, with the union agreements we had, we couldn't match our production to the real demand. We had become a fast follower, as we had a lot of overcapacities, become a fast follower from a technology point of view, where we were the leader. So, you add all that together, and we're losing money on every brand and every vehicle. And Jim, as you well remember, because I was fortunate enough to meet you right when I arrived, and the first forecast that we all saw when we got it out in the open, our profits for the entire year, this is in August, was a \$17 billion loss.

That was the forecast, and four months later, we achieved it. So, this was not a forecast-accuracy issue; this is: we needed to really deal with the reality of where we were, not the way we wish it could be or wanted to be or hoped it could be. But we need to pull together on our reality of where are we going take our company. What are we going to do about our product line to serve our customers and then develop that strategy and that relentless implementation plan with the BPR? And that's exactly what we did together. And even though the situation got much worse because of the financial crisis in the United States, during the worst of times, we borrowed \$23.5 billion to finance the plan to restructure the business.

Then also, simultaneously, to invest in all the new products that people really wanted value and match our production to the real demand. Then, work together as one Ford, one team worldwide using all of our resources to not only save Ford but create an exciting, profitably growing Ford based on the best cars and trucks in the world.

Morgan: When you were first studying the situation at Ford in the early days, did you ever feel like, "What have I gotten myself into?"

Mulally: Well, of course, when we announced that I was leaving Boeing, and here I am the CEO of Boeing, and one more airplane I want to help redesign, a replacement for the 737, and I announced that we were going to Ford, I got a lot of calls about, "What are you doing? Don't you understand that manufacturers are in trouble? They can't compete with the best in the world." So, at the end of the day, the reason I decided to join you and Ford, Jim, was, I really felt like I was being asked to serve a second American and global icon. You look at Ford, and you look at Boeing, and you look at the products and services that they make; it's the reason we're free as a country. It's a manufacturing base, innovation base of the United States, and it's going to continue to be fundamental to economic development and our environmental sustainability and our energy independence, and safety.

So, I thought about that, but I also had my working-together principles and practices. And I knew that if we pulled everybody together that we were not only going to be able to save Ford but create a sustainable, viable way of going forward, which is what we did together. And, did we have fun or what, Jim?

Morgan: It was an incredible experience. It absolutely was. We did.

How to Align Siloed Functions

You mentioned one of the challenges at Ford was that it was highly regionalized. I would add to that that it was also highly siloed in terms of functions. That's a challenge that a lot of senior business leaders have today. Can you talk a little bit about how you went about reaching out and communicating with and aligning a company that was, I don't know, almost 300,000 people? What advice would you have for a leader that has that kind of challenge right now?

Mulally: Oh, you bet. Well, on the multinationals, or even if you're not a multinational, but if you have a number of product lines or business areas around the world, I've always used a simple matrix organization. If you think of it, the vertical on the organization would be the customer-facing, they could be the product line, like in Boeing's case, each of the airplane programs, but it's the P&L responsibility. In Ford's case, we used those regions, like North America, South America, Europe, and Asia-Pacific. Each of those is a Profit & Loss organization, so there are many assistant CEOs that lead them.

Then horizontally going across will be all of the functions that make it all happen, like engineering, manufacturing, procurement, finance, communications. Then just write a big "working-together" across that matrix organization. So, you have one Ford now, so one plan, one [set of] performance measures, one vision, one strategy, and everybody. Remember we made our cards up --

Morgan: I do.

Mulally: ... that had "One Ford" on it and had the plan on one side, and it had the behaviors on the other? And then start the business plan review every week and have all those P&L leaders there -- at every meeting, you have the functional leaders. Then, all of a sudden, all the silos collapse because now everybody ... You think about it when you're sitting in the meeting, the business plan review.

Remember, and you were there with me many, many times: I would start with a summary, go through the vision, strategy, and plan, what the status is, and then each P&L leader would go through their view of the world, for their business all around the world, each of the product leaders -- including you leading product development -- would go across all the products across the world. Within two hours, we all -- all of us -- knew everything about the business -- the strategy, the product, the process, and the people -- and they're all color-coded. Now, everybody can feel no stress, no anxiety because we know what the issues are, green, yellow, and red, and we're committed to helping each other turn the reds to yellows to greens.

Remember we could hardly miss a BPR, Jim, because -- I think I missed like maybe 10 in my 45 years of doing this because you can call in from anywhere, and it's so exciting to see the reds turn to yellow to green but also see a new red because it was a gem. Because now you knew what the issue was, so now you could work on turning it to yellow and green.

Morgan: I remember the first time you said that, that the red is a gem. It took me a while to figure out what exactly that meant, but, yeah, it was great. One of the things that reminds me of is the incredible degree of transparency that we were. You were able to achieve in the business plan review, but that didn't happen automatically. Can you talk a little bit about how you encouraged people to be transparent and share the real information?

How to Encourage Transparency and Information Sharing

Mulally: Well, that's a really important question. That was a real turning point, as you remember, when we first started because the Ford leadership team had never had everybody on the team, the P&L leaders around the world, and the functional leaders. They didn't know each other; they had different business plans. The philosophy at Ford, of course, was like most companies still, is you only brought an issue to your supervisor or your manager when you had a solution. So, from a Deming point-of-view, you're managing a secret. You don't know what's going on, so you're just meddling.

So, the important thing was to make a breakthrough in that culture, where not only was it okay to show a red, but it was expected because that was the only way we were going to be able to deal with your reality and help each other.

I remember when we started, the BPR was going pretty well, and we were building a very cohesive leadership, and the only problem was that all 300 charts that we all used were all green. So, I remember stopping the meeting a couple of times, and I said, "You guys, you know now we're going to lose \$17 billion. Is there anything in your area that's not going well? Just maybe one or two little things?"

Of course, the eye contact goes down to the floor because people couldn't imagine actually sharing the real situation without personally ruining their career. Finally, Mark Fields, who was leading North America at the time, and Canada, had a problem with a lift actuator issue on a new edge launch in Oakville, Canada. So, he told his team the day before the business plan review, "I think this is one of those red things Alan's talking about with stock production, which is the right thing to do. We have 10,000 vehicles sitting out on that tundra."

I remember one of his vice presidents said, "Well, good luck, Mark. It was nice to know you. We'll go ahead and color that red for you." So, we get in the meeting the next day, we're going through all the green charts -- green, green, green -- and then up comes this red chart on the launch of the **Edge**. Mark mentions that they got this issue and everybody -- I mean, the air is just dissipating from the room to see what I'm going to do and what's going to happen to Mark. So, I started to clap, and everybody in the room thought, well, the two doors behind the Thunderbird room there are going to open up, two, large men are going to come in, they're going to extract Mark from the meeting, and it's all over: We'll get back to the way we used to run the place.

Of course, I asked the leaders if they had any thoughts right away to help Mark. Derek Cusack, your leader at the time, said, "Well, I've seen that issue on such and such. I'll get you the technical data right away." Bennie Fowler, who's leading quality, had another positive comment. Then remember Joe Hendricks, who's leading manufacturing worldwide, he said, "Well, you know, we're going to figure this out. I'll get the manufacturing engineers identified. Then when we get the solution and switch out the parts, we'll get going again. So, I'll get them identified and get them up to Oakville."

That interchange took like eight or nine seconds. Then we went on in all the rest of the green charts. Next week, only Mark's chart was red again. Of course, they were still surprised that he was still there. So, the next week it was yellow, and we had a solution. And the next week or so, it turned green, and all the vehicles started flowing around the world. You remember that following week, Jim, the entire 300 charts looked like a rainbow.

Morgan: Yes!

Mulally: There were a lot of greens, but there were a lot of yellows and a lot of reds because there's always a lot of good things going on in every company or every program. But what everyone knew now, they were going to trust the process. We knew that no matter what happened, we were going to be able to deal with reality and help each other turn the reds to yellows to green, and that was the culture change.

That was a moment that I knew, and they knew that no matter what came at us -- whether it was tsunamis in Asia-Pacific, whether it was a financial crisis, whether it was ever-improving competition -- that we were going to work together to design and produce and support the best products and services. And we were going to create a viable business.

The Practice of People First

Morgan: It was definitely a big change in the organization, that's for sure. One of the other things that I think was a huge change was your people-first approach to leadership. While a lot of companies say similar things, I know I could really feel the difference at Ford, and so could a lot of other people. Can you talk a little bit about what people-first means to you?

Mulally: Oh, absolutely. People-first means love them up -- absolutely love up all the participants, meaning that it's appreciating that they are part of a bigger vision to create something very special, to create value for people. In our case, we dedicated our life to safe and efficient transportation and a strategy for achieving it and then a working-together process to achieve it. So, we want everybody's hearts and minds, not only their technical capability. They are part of the team. They are human beings. They deserve to be appreciated, to be loved, to know what the plan is, and to know what the status is -- because then they're going to be able to do their best work and then feel that satisfaction of meaningful accomplishment.

So, at the most fundamental level [people first] is appreciate every participant -- and be really clear about the process we're going to use and the behaviors, which allow them to be the very best of themselves, also. But what it really means is to include everybody, appreciate everybody, recognize everybody, thank them every day, help them make sure they have the tools and resources.

But the best thing is that they know everything about the plan, they know everything about what the status is, and they know the areas that need special attention. That's the most respectful thing you could ever do with all the participants, to love them up.

Morgan: Yeah, I agree. Where does that spirit, that type of leadership, come from for you, Alan, and why do you think it's so important?

Mulally: Well, I grew up with pretty modest means, but I was really loved by my mom and dad. They had great expectations for me making a significant improvement to the world. Every day my mom and dad would say things like, "Well, remember honey, what the purpose of life is, is to love and be loved." And I'd say, "I understand." "But in that order, honey." "Okay, got it." The next day it would be, "Alan, you know, to serve is to really live." "Thank you, Mom." The next day it would be, "It's nice to be important, honey, but it's more important to be nice." "Thanks, Mom." The next day it'd be, "By working together with talented people, you can make a significant difference to a lot of people in our world."

Then another one, Jim, that they would say is, "Now, who you are, honey, who you really are, not just your competence but who you are as your character, who you are is going to have a very significant influence on your leadership contribution going forward." So, with that and also not having any resources, I started out with my product development and my business-plan development with my *TV Guide* route, my paper route, my lawn mowing business, the bagger and the checker at Dillon's grocery store, the night manager, farmhand, a rancher, construction. Every job that I had was my love made visible.

The smiles that I got from all my customers and my clients just reinforced those fundamental principles that it's all about working together. I remember one time, Jim, that in my lawn mowing business -- my dad had taken me to a Royals baseball game in Kansas City, and you know how they cut the field back and forth?

Morgan: Mm-hmm (affirmative).

Mulally: It's just so beautiful. So, I had a client that had a very large yard, so I thought, "Gosh, this is great. This is going to be an innovation of a lifetime," and so I cut his yard that way. So, I got a call from him, and he said, "Alan, I really like your innovation and your focus on me and surprising or delighting me, but I just don't want my yard to look like a baseball diamond." So, I actually redid the yard, Jim, and he actually gave me a bigger tip because of my innovation to exceed his expectations.

So, my entire life and then growing up at Boeing on the airplane programs and then going to Ford, it was all about that vision of serving and everybody pulling together and everybody feeling that respect and appreciation. So, that's where it always came from. I always felt like my biggest contribution was to hold myself and the team responsible and accountable for following the process and following the expected behaviors.

The Keys to a Successful Transformation

Morgan: That's awesome. Those are great stories, thank you. Moving beyond your grass-cutting and paper route, you've also led two hugely successful transformations of global, iconic companies, Boeing and Ford Motor Company. What do you think are the keys to a successful transformation, and what's the primary role of the CEO in turning those companies around?

Mulally: Well, the most important thing in any transformation is starting with the fact that you're dealing with reality. I mean, what is the reality, not what we wish it could be or hope for. And in Boeing's case, after the 9/11 terrorist attacks, or after the rise of Airbus as a major competitor, where are we really? In Ford's case, we were losing \$17 billion, and our products weren't the best in the world anymore. And make it okay to deal with that reality. And then, really come together about where you want to take the company. That's the vision, and that's the strategy, and that's the plan.

Then the most important thing for the CEO is to hold themselves and the team accountable for dealing with that reality, for coming together around the vision and strategy and plan. Then every week, relentlessly implementing that strategy and plan in a positive, can-do, find-a-way attitude.

Morgan: That's great. Sort of building on this idea of effective CEOs, you mentioned earlier that you had the opportunity to lead in development, including leading the total development of the Triple 7. How did that prepare you for your CEO role?

Mulally: Well, it's amazing because, as you know, those principles and practices in the management system, as I've shared with everybody, that's really what I know. I learned that from an early age, as you asked about, but all the way through all the airplane programs. So, when I was asked to be the CEO of Boeing Commercial Airplanes, I just implemented the very same working-together management system, including the process and the behaviors. Because managing a business has all the same characteristics as managing a program: we need to make products and services that people want and value and improve our quality and our productivity every year. If we do that, we'll be able to profitably grow.

So, it was absolutely the foundation of just moving from program management and creating these products to managing a business to have it profitably grow. And the only way you can profitably grow, which is great, is to make products and services that people want and they value, they'll actually pay you for it, and improve your quality and productivity every year. So, at the most fundamental level, Jim, it's just a design job, right, just like designing an airplane or a car. So, include everybody on the revenue side and include everybody on the productivity side.

The neat thing is, if you're profitably growing, then it's much easier to work the quality and the productivity because, now, people don't have to worry about being laid off because you're growing. So now, their hearts and minds can be absolutely focused on not only the products but also on your quality and productivity.

Morgan: I also recall that, when you came to Ford, you looked at the extended enterprise -- you talked to dealerships, you talked to suppliers. You really worked at including everybody. Can you talk a little bit about that experience?

Why Including Every Part of the Value Chain is Vital

Mulally: One of the most important principles of working together that we've used is, everyone is included. I remember that when I first got there. I'll just use one example, the same way with the suppliers and the same way with the dealers. I was invited -- they were going to have all 4,000 dealers, all the store owners for Ford from across the United States, at a meeting, and we had it at Ford Field, where the Lions football team plays, and they invited me to come to address them. And I said, "Well, I just got here. What would you like me to tell them?" And he said, "Well, they know we're in trouble, so why don't you just tell them why you came. Why would you come to Ford?"

So, they kept asking me, "Well, what would you like us to put on the teleprompter so that you can read it to them?" And I said, "Well, I don't really do teleprompters." So, I walked out, and the other speakers ahead of me were talking on the teleprompter, and all the teleprompters around Ford Field went black. I walked out, and I introduced myself, and I just talked to them. I told them why I came. I told them what I thought we needed to do to simplify Ford, to focus on Ford, the brand.

Mulally: I'd like to have a complete family of vehicles: small, medium, and large cars, utilities, and trucks; right-size our production to the real demand; take out a small home-improvement loan to finance the restructuring and the development of new products; and work together as one team. And the most important thing was going to be you, the dealers, because no one in Detroit sells any cars or trucks, and you have the best relationships with your customers and your clients. So, we're going to work really closely with you and make sure you have the best cars and

trucks in the world, and you're going to take the lead, like you do, to manage the relationship and sell and support the vehicles.

So, I was trying to figure out how to get their attention, so I asked all the Ford employees that were there to stand up, and they were all in the front row, Jim, because they wanted to see who I was also. So, I said, "Oh dear, what am I going to do now?" So, I said to them, "Okay, I'd like all the Ford employees to turn around and face all of the 4,000 dealers at Ford Field. So, they turned around, clink, clink, clink, clink, clink, turned, and they're looking out at the dealers, and I said, "Now, I want you to tell the dealers that you love them." And they all looked down at their shoes, and they said, "We love you."

I said, "Well, why don't you look at them, and then let's try it again." So, they raised their faces up, and they said, "We love you." And, of course, their relationship was horrible because we were making not the price they needed, and it was almost like they were estranged. So, I said, "Okay, one more time. Let's say it like you mean it, and it'll be a self-fulfilling prophecy." And, so, they smiled, and they said, "We love you." Well, that was the first time, and then all the dealers started clapping, all 4,000, because they were worried their businesses were at risk and all but their family was going to be gone. Now, they knew that it was going to be about people working together, and they had a really important role.

Man, as you know, Jim, did they come through. They helped with making sure we had the right products. They are probably the best distribution network in the world to support our customers, by not only selling the vehicles to them but also supporting the vehicles in service.

The Influence of Lean Thinking and Practice

Morgan: That's a great story, and they are so important to the success of Ford. Some of the people listening might not realize this, but you have a long history as a student of lean. Can you talk a little bit about that and how that is influenced your leadership style?

Mulally: Oh, absolutely. It's kind of where we first met, but we didn't know each other. So, gee, ever since I joined Boeing, Boeing has always been in continuous improvement. It was Bill Boeing's vision just like it was Henry Ford's vision. We were always benchmarking ourselves against the best in the world and, with the rise of Toyota, we were fascinated by the Toyota Production System. And of course, you and the Lean Enterprise Institute captured that in *The Machine that Changed the World*. I mean, a phenomenal, phenomenal piece of research and work. That resonated with me; I still have my copy all marked up.

We would take all of our leadership to Japan, and Toyota was very respectful of Boeing and, of course, when I was at Ford, they are really respectful of Ford because Mr. Toyoda actually went to see Henry Ford originally, and Henry Ford shared with him the Ford Production System, which is where Toyota started. So, then they grew their kaizen process and continuous improvement, they took that to a whole, another level to be the best production system in the world.

And you captured it, we captured it, and we kept improving. That's how Boeing ended up taking on Airbus and all the governments of Europe to create an aerospace company that could compete with Boeing. We became, again, the number one aerospace company in the world. So, I have, like you, continuous improvement, focus on the customer, including everybody, everything coming from the gembu, so you actually know what's going on. Everybody's participating. I think that's been a major contributor to Boeing's success and to Ford's success.

How to Learn How to be an Effective Leader

Morgan: Did you have leaders that you admired as you grew up at Boeing or leaders who mentored you along the way?

Mulally: I've had so many, Jim. Everybody that I've worked with, just the way that I approach everything, is about lifelong learning and continuous improvement. I've learned from every person I've worked with, worked for, and people that have worked for me. All of the people I've worked with I have learned from. As a matter of fact, some of the leaders that maybe didn't operate as much the way we're talking about here with inclusion and respect, I learned a lot from too about how I didn't want to operate and why I didn't think that was effective.

Just our relationship: remember when we met, and I was fascinated by all the variability that we had in the Ford vehicles. And we knew we were never going to be able to deliver the products that people want and value with ever-improving quality and productivity with all this variation. I remember inviting you over, and you came with all the drawings for all of the hoods on all the vehicles, and we laid them all out on the table. It was one of the highlights of my early introduction to Ford to get a chance to meet you, learn about what the product was. And right there, we made a decision together that we were going to have as a main portion of our plan, a fundamental part of the plan, would be to eliminate all the variation that people didn't have value for so we could really focus on world-class, on what the customers really, really wanted.

Morgan: Yeah, I don't know if I shared this with you, but when I first received your invitation, I actually thought it might be a colleague playing a practical joke to see if I would wander over to the CEO's office. I had my assistant call over and make sure it was legit. And that kind of demonstrates how different your style was from previous CEOs.

The auto industry is going through an incredibly difficult and rapidly changing time, and new technologies are popping up all over the place. Auto startups seem to be on every corner. What advice do you have for the people who are trying to lead their companies through these very challenging times?

Leadership Through Challenging Times

Mulally: The technology, the globalization, the mass-movement from the rural areas into the cities, all of these things are leading to a tremendous, what you consider to be disruptions but also tremendous opportunities to further serve the greater good. My advice is to continue to use that business plan review and that creating-value roadmap process where, in the business plan review, every leader goes through what's happening, from their point of view, in the world: demographics, technology, globalization, suppliers, competitors.

So, every week, we're going through all of the things that are changing, then checking our plan to see where we might need or want to capitalize on those changes from a strategy point-of-view and then continue to build that into the business plan review. So, for example, the things that are going on with the power trains now, with electric vehicles, with natural gas, the power trains, with hydrogen, with autonomous vehicles, with transportation as a service, these things are just nothing but great opportunities to figure out ... We're always going to have cars and trucks, but they're going to be part of a bigger transportation system because, with the cities

getting bigger, this is going to be a quality-of-life issue and a quality-of-life opportunity: rapid transit, mass transit.

So, by constantly looking at all of these things and then incorporating them into your business plan -- but with a product plan -- then not only are you going to be able to continue to profitably grow and serve. But also, it's going to allow everybody to focus on continuous improvement and the greater good worldwide.

So, just build it into the process, keep enhancing the culture to deal with it, make it a positive thing, so people aren't scared about the change, and embrace it for the greater good.

I'm very excited about the potential that we have to really improve people's lives, especially from a safety point-of-view and transportation-as-a-service, to be able to move around in these ever-increasingly large cities.

Morgan: I agree, and I think the BPR you set up is the center of rapid-learning loops. Each week you learn more and can help manage through this environment, so I think the BPR is central in that.

Mulally: You bet.

Fast-Forward to the Future

Morgan: Last question. Today, you're still busy. I know you are on the boards at Google and the Mayo Clinic. What kinds of things are getting you excited these days? What kind of challenges are you dealing with?

Mulally: Well, I'm also on the board of Carbon3D, Jim, which is the first 3D technology that actually creates the product in 3D as opposed to layers on additive manufacturing. This is our dream. I'll just stop there. This was our dream when we created the Triple seven digitally. Where all four million parts we wanted to capture digitally, now the data can be saved on servers around the world. Then, when you needed a part, you just pull it down and make the part in 3D. The simplification of all of the logistics and the warehouses and being able to do it in a timely manner, was our dream. Now we can do that by creating the products with oxygen and light at Carbon3D.

So, that's been really, really, really fun to support. Of course, as you mentioned, Google will continue to change the world because their fundamental vision is to organize the world's information and make it available to all of us. You think of what that's done for all of our lives, plus businesses -- one of them being the Mayo Clinic. The Mayo Clinic is the finest institution for serious and complex healthcare, and it's being digitized. And all that information is being made available so that we can learn from it and continually improve our healthcare.

So, all of them kind of fit together because it's all about technology -- about digitization and miniaturization of sensor-set. And it's all about improving people's lives, whether it's transportation or manufacturing. As you know, people want to know how I could help them with working together and their management systems, so I've enjoyed that too, and I'm also really enjoying Nicki, my wife of 49 years, and our five kids.

I guess you could say I have a portfolio of things, and I get a chance to keep working with you, and I'm looking right here at our latest creation together, *Designing the Future*, by Mr. Morgan and Mr. Liker -- that was really fun to support you with that too.

Yeah, thank you so much for that. You added so much to that book. It's got your fingerprints all over it, and thanks so much for joining me today. It was great talking to you again.

Mulally: Well, Jim, I just, one more time, you were one of the first people that I met when I joined Ford. You were well along on continuous improvement and lean and lifelong learning. You had a critical job in the design and manufacturing of the Ford cars and trucks, and you trusted me, and you embraced me. And I'll always treasure our working together, starting with your leadership and your partnership and your friendship. I wish you the very best in your continuing contribution to design and manufacturing and quality and productivity. So, thank you very much.