Paul: Hello and welcome to the Keep Moving podcast with MIT Professor John Donovan.

Over a 40 plus year career Professor Donovan has impacted thousands of organizations and founded 27 companies, six of which went public. He is a sought-after entrepreneur and business adviser throughout the world. We will dig into what makes businesses tick and how to make them more successful. Welcome.

Paul: Today we're going to talk about the Donovan Model. Sometimes it's been referred to as the Donovan framework. But what is does is the model gives you a framework of how to understand how companies and entrepreneurs interact and how the market works.

Before we get started, I'd encourage you to pause this podcast and go and download a copy it. It's available at professordonovan.com/model. Again, professordonovan.com/model. What you'll see basically, is an x and y axis that has management in the bottom left corner inside the x and y axis. And on the top right is the entrepreneur space.

So, we have two spaces roughly defined. The right hand top triangle of that axis is the entrepreneur space. And the bottom left is the management space. And it's important to note that the axes on the left, the y-axis, goes to standard to revolutionary. It's the type of technology and its impact. And then on the bottom, we have perceived customer wants, starting out near the zero axis and all the way up to real customer needs. At that intersection at the zero point is a black hole.

We're going to talk about this today. First of all, Professor Donovan, where did this come out of? I know you've been thinking about this and working with this. What's been the sort of part that's sort of spurred you on to think of things this way?

John: What happened is, if I look back at my history is, I started teaching at MIT technical people, and I branched out and started teaching some technical people within companies. And then I moved into executive training, in executive education.

What I noticed is what companies are successful and what companies weren't. And I found a dichotomy that had trouble with. I took a look in those days at companies like Digital Equipment Corporation that were managed really well. They worried about cost, they worried about markets, they worried about profitability, stockholder relations, but yet, they failed. And I couldn't figure out why they failed.

Correspondingly, I saw companies like General Motors or General Electric that continually to be successful. What did the difference was?

And then I saw companies during that period, like Hewlett Packard, that were doing really well, and I said, "What were the keys?" And then I started separating operational people with entrepreneurs. Once I did that, poof. This model then came about. And I realized the president of a company had to really be ambidextrous. He had to be a good manager and a good entrepreneur. He had to do both.

And underneath him, he had different characteristics. When he was a good entrepreneur, he had to be a good leader. What are good leaders? They're dispensers of hope. It's okay if the entrepreneur side of him fails now and then.

I'll give an example: Samsung. Chairman Lee clearly made right choices moving into cell phones and moving into flat screens, but he made some other choices like moving into the automobile industry and failed. It was okay. Nobody said he was a failure. And as his son said to me one time, "He only has to make one right decision a year, and Samsung survives."

However, on the operational side, failure is unacceptable. You cannot turn around and fail. You cannot fail to produce an automobile that's seats explode. You cannot fail to have a drug that has got safety problems with it; food that has bacteria in it.

Operationally in the company, everything has to be right. So, operational people are dispensers of caution. They're constantly saying, "It has to be right. Careful of this. Careful of that." Everything has to work.

So, you need two sides to a company to be successful: Entrepreneurs and operational.

Now, why do you need the entrepreneur at all? It's because whatever space you have in that diagram, the lower left, that space can disappear with a disruption. That's really what happens. That space gets exploded.

Now, you've got that vertical axis, the y-axis. That's not just from standard technologies to revolutionary technologies, that's from processes change, that's from government regulations change.

And then on the user's side, what users say they want today, tomorrow they want something different. So, the entrepreneur is operating in the space of revolutionary processes and technologies and in spaces where they've got to educate their customers and such.

Now, what happens is those lines shift. When that lower left hand corner blows up – it blows up because technology, that lower axis, the x-axis, moves up. And the y-axis, because people want something, moves over to the right. All of sudden, there's nothing left for the operational person. The entrepreneur then must have an operational idea.

Now, it's not good enough that you just have an entrepreneur, because having a great idea isn't good enough unless you can monetize it. So, you have to take that idea and place it back into an operational space for them to scale it, for them to make money with it, for them to gather structure around it, and then the cycle starts all over again.

Paul: So, the whole idea... We talk about right hand ideas and left hand ideas. The right hand ideas being focusing on the right part of this graph and the left hand is focusing on the left. So, left hand ideas are management ideas: Cutting costs, like you've said. And as we enumerate here, business model, asset scale, profitability, status quo, resistance to change.

And then, on the right hand side, or the entrepreneur side, it's new ideas, business needs, customer needs, disruptive technology, and a disruptive environment. And there's a barrier between those two zones, or those two areas. One of the tricks, I guess...and this is really for a new company, would you agree? I'm sorry. In an existing company.

John: Right.

Paul: But it is sort of the same in a new company is that the entrepreneur has to operationalize their idea in order to be successful. Is that true?

John: In a new company, the entrepreneur is alone. So, in the new company, he has to not only come up with the entrepreneur ideas, but it's left to his capability and his steam to operationalize that.

In a large company the entrepreneur does have, with support of management, the luxury of coming up with the idea and then breaking through and having the operational people then take that idea and scale it. That only works if – if – senior management protects those ideas.

For example, at Xerox–

Paul: I was just going to say, why don't you bring up that [park? 00:07:38] and Xerox?

John: Xerox has Palo Alto Research Center. They did the mouse. They did Ethernet. They did wonderful things.

Paul: Okay. So, they've got an entrepreneur up here in the top right that invented the mouse.

John: Right.

Paul: They bring it up to that barrier that's talking to management and say, "We've got this thing called the mouse." Why didn't Xerox sell it?

John: Because Xerox management placed it under the control of operational people. The operational people... If you're an operational person, you say, "How am I incented [sic] right now?" I'm incented to get out the new color copies, and if I do, I get a bonus. If I do, I get a vacation. What do I get out of this new idea? Nothing. So, they don't fund it. They let that die, and they put their resources in their current operational things that they are incentivized to do. So, the new idea dies.

Paul: But that's a failure of senior management.

John: Failure of senior management and the culture that the senior management has placed in the company.

Paul: But the senior management is sitting there saying, "Our stock price is great. We're doing really well. My shareholders are going to be upset if I start selling mice. Nobody knows what a mice is – mouse it."

John: Right.

Paul: A mice is. So, they don't know what that is, and I've got this army of salespeople that are doing great. They hit it out of the park every week. They're selling more copiers, everything. So, how do they deal with that? How does that senior executive go and say... Because these also could fail. He might come in with the mouse, and nobody might buy it.

John: That's right. And that comes back to this other component. There's several steps here. The entrepreneur has to come up with ideas, they have to be monetized and then operationalized. And then the other thing is this black hole. What's preventing anything moving in here.

It's this thing called black hole, and what that is, it suck all the energy out of a company. It freezes everything. It doesn't let the entrepreneur come down, doesn't let ideas go up.

And one of the things in the black hole, you just went through a litany of one of the impediments, namely success. People and success.

Now, what do you do about success? There is the extreme that Paul O'Hare, the chairman of Liz Claiborne said to me, "We're so successful, sometimes what you have to do is create a crisis."

Paul: Interesting.

John: He advocated creating a crisis. What's really more the case, because things are changing so quickly, the crises quickly come upon you. So, what you have to do is the key for senior management that they've got is change. How do you manage change? That's this black hole.

It's interesting is that as an MIT professor, I always thought of the hard sciences. That's hard. It's calculus. It's physics. It's all those. Those are the hard sciences by definition. And those flakey things like touchy-feeling, conflict, all the things that they teach in the liberal arts area of how to get along with people and relationships and such... Oh, that's the soft sciences. That's easy.

When I became president of a company and running companies and doing these sorts of things, I realized the soft sciences are really the hard sciences. Give me advanced differential equation and I can solve it. Give me a mutiny within a company where they are not trusting senior management, how do you solve that?

So, what the senior management has to do is to think, "How does he" – and this is the core here – "enact change?" I argue, my whole argument, the process in unchanged in this black hole, is that people change all the time. Some people say, "I won't change." People change all the time.

So, for example, I'd like to have all the listeners do this. Fold your hands. Just fold your hands. Now, you've got your hands folded, look down. Some people have their right thumb on top of their left thumb. Some people have their left thumb on top of their right thumb. If you've got your right thumb on top, sort of raise your hand a little bit. If we could all the listeners at once, we would see about half of you are right-thumbers, half of you are left-thumbers. This is Democrats and Republicans. I don't know which one they are.

Now, what I'm going to ask all of you to do. Could you change all the fingers in your hands? Change them exactly opposite so your thumbs are on top and all your other fingers are wedged together in a different way. How does that feel?

Paul: Strange.

John: Strange. I had a General Kellogg turn around and said to me, an army general and said, "This feels perverted." That felt strange. That's a minor little change. You're going to go in and tell the people in your organization that the things they've worked on in management, they're producing that Blackberry with that key, and all your customers are saying it's great, is not good and we've got to try something else.

Paul: Who do you think you are?

John: That's going to feel perverted. It's going to feel strange. It's going to feel bad. So, my argument is change feels uncomfortable. Now, people say people won't change. I say they change all the time. You behave one minute with the taxi driver in one way. The next second with your spouse, you behave altogether different. You change dramatically.

People in Alaska behave quite differently than the people in Boston, Massachusetts. Change immediately. What are, then, the impediments to change? That's the key. You have to get rid of the impediments, and I'll give you some of them.

One is people don't see a vision. They don't see a vision. So what do you have to do? You draw up diagrams. You turn around and build pilots of it. You get early adopters. You have to share the vision. And that's why I said earlier, when you said the entrepreneurs within Blackberry, if they had tried many of those things, built pilots, showed them, their colleagues and senior management could have said, "Oh, now I see the vision for this new touchscreen."

Paul: And what you're saying is they may have seen it and said, "That's crazy."

John: That's crazy. Then they could see it and it's crazy. Then the next thing that you've got to do is what's the next impediment? And next impediment is culture. The culture is, "We have to have everything right."

Let's take the cultures. What do you do for cultures? You take this Japanese culture, a shy Japanese girl that is so respectful, never speaks above a whisper. How do you get her to change so she becomes a top presenter and executive? You take her out of that culture, and you her into another culture. You take that shy Japanese girl, and you put her into an MIT fraternity house, or an MIT sorority house, and within a year, she's as boisterous as any American.

Paul: Is that a good thing?

John: I don't know... So, that's a good thing. You've got to make sure you change people for the right because you could create monsters. That's a very good point. So, culture is an impediment to change.

Lack of judgement. If you don't have good judgement, big problem. You can't change people if you're showing bad judgement. What do you need for good judgement? You need three things.

You, as the leader, have to be able to look at the data... First of all, gather the data, and if you're gathering the data, what mode do you have to be in? Curiosity. Let me get any piece of data. I'm going to make this judgement about growing this product or what. I'm going to be curious.

After you gather the data, what do you have to do? You have to analyze it. What mode do you have to be there? You have to be neutral. I'm not going to say one way or the other. I'm going to look at the data.

Then, the last thing you must do is you must act, so you must do something immediately.

A basic, fundamental problem I'm going to tell to everybody that's listening to the broadcast, no one is good at all three because there is an oxymoron. How can you be this curious, neutral person and, when you act, you're decisive? You believe you're right. You don't listen to anybody else when you're acting. You're charging ahead. You've got to be two different people. So, how do you do that?

I've seen very few people that can do that whole span. What you have to do is have a co-pilot. Your co-pilot has got to complement you in what you're not good at. I'll give you Ross Perot.

Ross Perot, presidential candidate, founder of EDS, founder of Perot Systems, would act. Who was his co-pilot? It was Meyerson. Most people don't know that, but Meyerson was in the backroom at EDS doing the analysis, gathering the data. And then Ross Perot would act.

When he didn't have Meyerson next to him, it was a disaster. When he ran for president of the United States, he picked the wrong judgement, the wrong person to be vice-presidential candidate. [Inaudible 00:16:34] vice-president? I don't know. Bad. Disaster.

He then started Perot Systems after he sold EDS. He didn't bring Meyerson. He didn't have his co-pilot. It was a disaster. Then he got his co-pilot back, and it became a success. You have to look for co-pilots.

Now, what is a co-pilot? A co-pilot will tell you when you're wrong. How many people will tell you, for example, that you've got bad breath? Think about that. It's a good idea for them to tell you, and it's a good idea for you to know. But how many people will tell you? The answer is very few. How many people will tell you that you have over-reacted or that you're out of line with something so that you can correct it? And then how many people will you listen to for that?

Another impediment to change is good judgement. I'm going to tell you, what you have to do there is have a good co-pilot.

Another impediment to change, a big impediment to change, is trust. If somebody doesn't trust you, they won't change for you. You have to establish their trust. But just as importantly, is you cannot break it. Trust is very fragile. It's Humphrey-dumpty. It can break. And that comes back to, if it breaks, you can recover if you admit it immediately. You've got to preserve the trust. And that's what happened. That's what happened to Mr. Nixon. That's what's happened to these other people. Great leaders. They made a mistake. They lost our trust. But they didn't admit it and correct it.

The American people, for example, are very forgiving, extremely forgiving. If you just tell them, I made a mistake, and it works. It works politically, and it works many other places. It works.

Paul: But it does seem to be we have fewer and fewer people saying I made a mistake.

John: Very few. That's exactly right. As our culture changes where it is becoming more of a black mark to make mistakes, a permanent mark... As the nuns used to say to me when you made a mistake, "You're going into the permanent book for that mistake."

Paul: Oh, boy. Really. Gee.

John: When I was in elementary school that's what the old nuns said. That's a permanent mark in your book.

Paul: Now, we're talking a little bit about the relationships that play into this model and how they sort of change things. And you have helpful discussion of some of those crabs and cynics. Can you go through that for us?

John: There's another problem with change that you've got to realize. Some people, there's a few, that you just cannot change. And those people are damaging to your organization. I have to make a distinction here between a skeptic and a cynic. A skeptic is somebody who will challenge you. Is that change right? Is that change right? Is that change right?

Once you convince them, either through pilots and education and all the things I've just said, good judgement and everything. They then become your greatest advocate because they never... It's just as difficult to get them to change off your subject. So, they stick by you forever.

Paul Johnson at Unilever was one of those. Very skeptical about surround
and three-tiered architecture and everything. But once we convinced him, he became the champion of that.

Now, that's a skeptic. A cynic is, no matter what you say to them, they're going to find something wrong. They're not going to go that way. I draw the analogy of crabs. They are crabs.

My son and I, we'd go out on a Sunday afternoon into Manchester Harbor, and go out with our boat and pick up crabs. We put them in a basket in the back of the boat. Now they're trapped. However, they could have crawled out. They could have just gone up the basket and out the other side, back into the ocean. Why didn't they?

It turns out, as soon as one crab starts crawling up, the other crabs do what? They reach up and pull him back down.

Now, how do you recognize a crab? How do you recognize somebody in your organization that's a crab? First of all, crabs move only sideways or backwards. They never move forward.

Paul: That's fascinating.

John: So, if somebody is objecting to you, one easy way to smoke them out is say, "What's the alternative?" If they have no alternative, they're moving sideways or backwards. Beep, beep, beep. Is that a crab?

If you can determine they're a crab, which you cannot change. If they're a cynic, you cannot change them. You can't teach a bunny how to speak, not matter how you try. "Bunny, tell you're cold. Tell me you're cold." He just won't teach. A crab you cannot teach him to move forward.

What do you like to do about your crabs in your organization? The problem is crabs in your organization will pull other people down. So, you've got to do something here. What do you do? What I'd like to do is boil them.

Paul: But that's frowned upon.

John: That's frowned upon. So, what you have to do is identify the crabs and then isolate them. Now, if you have the ability in an entrepreneur organization, fire them. If you've got a small company, get them out of there immediately, because they'll pollute everything. But you don't have that in big companies usually, and certainly in government organizations you don't.

So, what you would do is you try to isolate them. Assign them to other projects. Assign them to other locations. Just get them away from the people that you don't want to see polluted, because they will pollute your entrepreneur activities ever becoming operationalized.

Paul: So, if you came into an organization as a consultant, and you saw crabs, you would say, "Stop everything and fix that, isolate them."

John: I would say isolate that because if you don't you're never going to get through it. Those crabs will pollute and bring other people down. You have to keep moving. And that goes back to our first broadcast.
What the president of Yale said to me when I got one of my degrees and I lingered on the stage, he said, "Son, let me give you some advice. Keep moving, keep moving, keep moving."
I'm going to tell you, every CEO in every company has to keep moving, keep moving, keep moving because if you don't keep moving, you are going to die.

If you think about it, if you're a company, what disruptions is going to occur. I can't tell you. I'll just tell you, there's going to be one. What I can give you is a structure of how to operate in that disruption. That, my friend, is the jewel of this model. And I have to say one of the things that John did in his doctoral thesis is he promoted this model and then said one of the big black hole things... And I just said, impediments to change was culture, was lack of vision. His thesis was your customers were an impediment to change because your customers want your present products. They want you to keep servicing your present products.

So, you've got a lot of forces moving against you to change, and it takes leadership, courage, hope, vision, all of those things for the leaders to follow this model.

Paul: So, it's not only dictating it, it's supporting it really. Because you could have a chief innovation officer. There are some of those floating around out there. But if they don't have the resources or even the – I don't know if it's unilateral – ability to do things, but really the backing of senior management.

So, I think what I've seen is good application of this diagram is for senior management to understand this, because entrepreneurs, we can find them. There's a lot of people who have good ideas and can respond them, but without that infrastructure, that safety net of support of senior management, they're not going to be successful.

John: That's right. You cannot be successful as an entrepreneur in a company. You'll get killed as an entrepreneur in a company. Every single bonus and everything is going against you. You get bonuses because your share price goes up. Share price goes up because your profitability goes up. Profitability goes up because your production is going up, because the operational

aspect of your company is running well. Not your entrepreneurial activities. Because your entrepreneurial activities suck away profits, suck away those sorts of things. But in five years, they're the salvation you've got.

Paul: Was this 30 years ago called the research department? Or how is that different? Because HP used to invest in research. Xerox did as well.

John: The answer is the seeds of an entrepreneur idea were in the research department. So, AT&T had Bell Telephone Laboratories. Incredible. People who graduated from MIT... We have a 4.0 scale at MIT for your grades. They wouldn't take anybody that wasn't close to a 4.0. They're the most brilliant people. They did the Big Bang Theory in there. They invented the transistor. Extraordinary. That, you could say, is the research arm. But it wasn't connected to the operational aspects.

So, that was sitting out there, a little bit with Xerox, with Palo Alto Center, a little bit with IBM's Yorktown Research Center. It wasn't connected in so that things could move from Bell Telephone Laboratories, get a business model, and then come into operational.

Paul: Why were they doing it then? Why were they researching?

John: They thought it was... In the case of AT&T, they had enormous profits. They were a monopoly. They felt as though they had to give back something to society and give back something to the world. So, they would turn around and enter into joint partnerships with MIT to develop the Multics operating system, to develop the internet. They got together with GE to do the same thing. The Big Bang Theory. What does AT&T get out of proving that the world started with just a few atoms and zoom! The world, the galaxy, the whole universe started that way.

So, it was really an idea of giving back more than somehow getting profitability. I think that those two things are mixed up in there.

Paul: Interesting. So, senior management sort of said, "Let them do what they want. We're making enough money to cover it."

John: Exactly.

Paul: Now, we're talking about an entrepreneur in an existing organization. I know in your book there's a section on new entrepreneurs, and we see that on the news every day, new entrepreneurs. But do they face the same challenges of they're in the right hand side. They come up with an idea. They're basically by themselves, and they have to bring in management to operationalize. Are those necessarily the same people? Or do they need help?

John: Usually the entrepreneur is not a good manager. Usually. So, he has to bring in co-pilots. Let me give you concrete here.

The entrepreneur really destroys structure. He's always looking for cracks in the structure, crises and opportunities. He gets young people around him that doesn't pay attention to certain rules and such.

When you're going to operationalize something, you've got to put structure around it. You have to be... I'll give you a concrete example. If the entrepreneur is doing the operational thing, he will freeze the marketing force. And marketing force will say, "This is today's product, my sales

force, but just wait for my president. Tomorrow he's going to come up with a new idea. Why bother selling today's product because tomorrow he's going to have a new product."

You can't do that because you're freezing your operational people. You need somebody to be in structure and the entrepreneur has to respect that. And the operational people have to respect the entrepreneur. And I've emphasized more the entrepreneur.

You asked about research organizations. Those research organizations could have been a glimmer of hope. You want to have those. But then you want to be able to take those few good ideas and operationalize them.

ONR, Office of Naval Research, the United States Navy sets aside a large amount of money for doing research that may or may not be good for the Navy. Most of the time they have projects for the Navy. But they invented GPS. Can you imagine somebody going to the head of ONR, Office of Naval Research, and saying, "I'm going to put an atomic clock up there in a satellite that is going to be able to tell where anybody is within a square meter on the earth"?

The guy would say, "You're crazy."

They invested in that. That one worked. There are 10 other ideas that didn't work.

Paul: That's true. We don't see all the ones that fail.

John: That fail. But the Navy has turned around and developed a way of taking those ideas that work and operationalizing them. So, for example, when we had this Cole disaster. That's when terrorists came up next to this ship, a little fishing boat. It had explosives in it and it blow a side in. It almost sunk the ship at the port.

ONR said, "Let's look at that problem." They came up with 10 ideas. One of them is to double hull the whole ships. Another is to have radar to see who's coming close, and all these ideas.

Well, eventually they came up with one or two, and they piloted it and such. It worked. Then the operationalized it.

So, if you have a closer link between... I don't want to say get rid of your research, but you've got to turn around and figure out a way to operationalize it. Unless you're in straight the business of helping society in a research organization, like DARPA is. DARPA is funding things that might help the government but might help the world.

So we, the United States public say, it's okay. We'll fund that. And whatever it is goes into the public domain. Good idea. And the internet came out of that.

Paul: Right. We don't know if that was good or bad yet.

John: That's correct.

Paul: Well, our conversation has been wonderful and insightful. I want to remind you that the diagram we're talking about is the Donovan Model, and it's available at professordonovan.com/model. M-o-d-e-l. And we really encourage that you download that and look at it. And we'd to hear your questions and comments about it as well.

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