THOMSON REUTERS

EDITED TRANSCRIPT

Donaldson Company Inc Investor Day

EVENT DATE/TIME: APRIL 09, 2019 / 12:30PM GMT

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

CORPORATE PARTICIPANTS

Brad Pogalz *Donaldson Company, Inc. - Director of IR*
Jeffrey E. Spethmann *Donaldson Company, Inc. - SVP of Industrial Products*
Michael Wynblatt *Donaldson Company, Inc. - VP & CTO*
Richard B. Lewis *Donaldson Company, Inc. - SVP of Global Operations*
Scott J. Robinson *Donaldson Company, Inc. - Senior VP & CFO*
Thomas R. Scalf *Donaldson Company, Inc. - SVP of Engine Products*
Tod E. Carpenter *Donaldson Company, Inc. - Chairman, CEO & President*

CONFERENCE CALL PARTICIPANTS

Charles Damien Brady *SunTrust Robinson Humphrey, Inc., Research Division - MD*
George James Godfrey *CL King & Associates, Inc., Research Division - Senior VP & Senior Research Analyst*
Nathan Hardie Jones *Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst*
Brian Drab *William Blair - Research*

PRESENTATION

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Good morning, everyone. If I could have your attention, I'd like to get started.

Welcome to Donaldson Company's 2019 Investor Day. My name is Brad Pogalz, I'm the Director of Investor Relations and Corporate Communications for the company.

I want to thank all of you in the room for joining us here at the Stock Exchange, and also I want to thank those of you participating through the webcast. We sincerely appreciate that you're investing your time this morning to get to know our company better and all about the great things we're doing inside the company.

So first, a couple of housekeeping items. The first, as you'd expect, forward-looking statements today carry some risks and uncertainties. I've got a list of them here on this slide and then we've got them in our press releases and SEC filings as well.

Second housekeeping is hopefully something you find more exciting, today's agenda. At a high level, our goal today is to provide an increased level of transparency into the company. We want to talk about the markets we're in, the culture of the company, our strategic priorities, where we're heading, the things that we're working on, the tailwinds that support it and a variety of things. You'll hear about these details later. But from our point of view, we think this sets us up really well, everything we're doing, and positions us for long-term profitable growth and creating value for all of our stakeholders.

So in terms of the tactical agenda, Tod will start us off this morning, he'll walk through the company overview, our strategic focus, some industry tailwinds that support both segments and our strategic direction.

And then we'll transition to Michael, he's our Chief Technology Officer, and he'll talk about leadership through innovation. Technology leadership is a critical differentiator for Donaldson in the market. So I'm excited for you to hear that part as well.

Rich is going to come up and talk about global operations and our focus on operational excellence, especially as we enter this point that we've been talking about, this operational inflection point for our company.

And then following Rich, we'll have our first Q&A session. I'd like to ask that questions during that session be focused on the presentations you've heard.

We'll take a short break after that, and then Tom and Jeff will have an opportunity to tie all of this together, how our market tailwinds, strategic focus, operational excellence and leadership through innovation go to work in their businesses. And then Scott will be able to talk about how we support that work, disciplined financial management, our capital deployment, and we'll also talk through our fiscal '21 targets, which we announced this morning.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

After that, we'll have another Q&A session. Hopefully, this is a chance to answer all of the questions you've got from the day.

And then for those in the room, we're going to transition to what we're calling a leadership luncheon, and this is really exciting thing. So in addition to the presenters today, we've got all of our senior leadership team here. I want to thank them for coming to New York to join us, and I hope that you have a chance to interact with them over lunch. This is an opportunity to find out who they are, how they think about their businesses, their roles at the company, and what's important to us is that you also get a sense of Donaldson's culture.

Since I joined Donaldson, 4 years ago, one of the things that's impressed me the most about the company is the culture. We have a mix of tenures. We have people that have worked for 40 years or more at Donaldson and we have a lot of those people, and we have a lot of new faces. And across that group is this common thread, people at Donaldson care about the company. They care deeply about their customers, they care about each other and they really want the company to do well. So there's this culture of ownership and accountability across our organization that I think is pretty powerful.

When I think about my role in that and dealing with all of those in the room and on the phone, we have a great group of analysts that cover our stock. They know the company well, they know our industries. And then you put that together with an engaged and supportive shareholder base that thinks long term, which, as a 104-year-old company, we do too, this combination is pretty powerful. So for an IR person, this is kind of a dream situation. I'm honored to be here with you today and talk about that.

So as we think about the rest of the day, I hope that you have a chance to have your questions answered through our presentations, to answer -- or get some questions out yourself and hope you enjoy the day. We're excited about it.

So with that, let's get to the good stuff. I'd like to welcome Tod Carpenter, our Chairman, President and CEO. Tod?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Thanks, Brad, and thanks all of you for being here today and your interest in Donaldson Company. First, for those that don't know me, a little bit about myself. I have a manufacturing undergraduate degree, I have an MBA. I started my career in Los Angeles working in the aerospace and defense industry and a host of operations roles working for Hughes aircraft company. I later then, post-Cold War, my wife and I moved our family back to our midwestern roots in 1994 where I consulted within management consulting and IT-based systems for a couple of years. From that job, I joined Donaldson Company. I've held numerous positions across Donaldson, including living here in -- at the corporate office in Minnesota also being responsible directly for Belgium, and then back to Minnesota as I progressed through my career.

Well, it was fun this morning in meeting you as a number of you commented, "Hey, you updated the investor deck for the first time in over 10 years." Thanks for starting the day with a laugh. What we really try to do is focus on giving you a greater transparency into our company and give you a robust deliverable that you can take back and have in your hands on the story every day. You can share it with your colleagues and that you have a deep understanding of everything that we're going to cover today.

So with that, let's dive in. Through my presentation, I want to give 5 -- I want you to have 5 key takeaways. Strategy is about choices. Donaldson's first choice is we are a filter company. Our second choice is that we are a technology-led filter company. The combination of those 2 items allow us to offer our customers strong solutions and therefore, we gain deep customer relationships.

The second point is we have a diversified portfolio of businesses across the corporation, and we drive through those businesses recurring revenue with replacement parts. We are a razor to sell razor blade business.

Additionally, and I'll talk more about this later, we are expanding our addressable market opportunities and specifically I'll touch on that and Jeff will give you more detail later in the day. We have an experienced management team that is committed to our long-term strategic goals.

Fourth, we are everywhere the customer wants us to be. We are global in our production and our distribution and our sales teams are

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

local to give a local personalized touch to our customers.

Fifth, we're a strong values-based company. Our values are integrity, commitment, respect and innovation. Those values allow us to have a strong ownership corporation, and we often describe ourselves as we are a say what we do, do what we say culture. That aligns directly with our shareholders and gives us a sense of responsibility, a responsibility that we carry into disciplined capital management, and Scott will talk more about that in greater detail in his presentation.

Diving deeper, we are a 104-year-old company. You can see, we have 2 operating segments, Engine and Industrial. We are -- our geographic revenue is represented in the bottom wheel there in the middle, and you can see that we are represented in all geographies of the world.

The end markets that we serve are on the right. It's important to know that -- note that within the right, we have 2 colors we have broken down for you new equipment and replacement parts' revenue within those end markets. We'll say throughout the day, new equipment, but you might hear us say first-fit. It means the same thing. We have over 14,000 employees, and being a technology-led company, the best indicator of our belief and our commitment to that is that we have over 1,800 active patents in the corporation and over 100 laboratories.

Our recent strategic evolution, I want to recap, starts in 2015. We had strong headwinds across our end markets. Donaldson turned 100 year old -- 100 years old, I was named the CEO in 2015, and we focused and we looked and worked hard at controlling what we can control. We restructured the corporation to align with what the realities of the market were, and we looked to build on our replacement parts business. Our external story to all of you during that time was we focused on our win rates and our win rates were above market average. Because they were above market average and because we took a disciplined approach to getting our company efficient and structured appropriately, we knew we would come out of this -- that tough cycle stronger than when we entered.

And in 2017, that's exactly what happened. Our company began to grow as the end markets recovered, but more importantly, as our share gains also took hold. We look to reinvest back into our corporation. We started to reinvest $165 million. Clearly, we focused on capacity expansion to meet the overall demand, but we also advanced our research and development focus making sure that we can keep our leadership position of technology in the filtration industry and to further develop our material sciences.

Looking forward, we have a bright future. Our future focuses on growth coming from 3 major priorities. Expanding the technologies and solutions that we have; expanding market access, or you can read that as geographies where we are underrepresented; and continuing to execute strategic acquisitions. I'll talk more about those 3 points later.

We have a strong experienced leadership team with an average tenure in the company of 15 years. Shown here are my direct reports, but also with us today in the room are the other appointed officers of the company. Sitting in the back, if you could raise your hand to show where you're located, I would appreciate that. Sorry for those of you on the telephone listening. But they did actually just raise their hand. In short, all the Donaldson leadership team, the officers of the company, are here today so that we can be available in support of the shareholders.

We meet now across our corporation, the top 125 leaders annually come together and there is one goal that we ask for as a deliverable out of those meetings. My first slide for the last 3 years, and will be I believe for many years to come, is our number one deliverable out of that is alignment. We look to align the leadership team throughout all levels of the organization of what we're trying to accomplish strategically long term but also within our annual priorities.

We also have a very strong Board. We have a committed Board that helps drive shareholder value, and you can see we have a diversity -- a diverse Board, and we have advanced our diversity of the Board over the last couple of years. Most importantly, the diversity of thought represented here by our Board members is strong. We have representatives from the banking industry, from the food industry, from the transportation industry, we have multiple representatives from industrial manufacturing as well as distribution, and we have multiple representatives from service-based industries. We have a strong Board and I'm fortunate to get to call on them as often as we need.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Across our organization, we have, within the last few years, introduced a new model for leadership development. Our corporation looks to advanced filtration and the technologies of filtration worldwide. To do this we need strong talent. So we implemented a model just a few short years ago and it centers on 5 basic principles. Those principles are: develop, collaborate, innovate, achieve and grow. And if you read our descriptions under there, you'll also know that some of that touches directly with my highlighted points a moment ago. Collaborate, for example. We look to build strong relationships across the organization internally but also with our customers. By collaborating exceptionally across the organization it allows our company to act and execute as one Donaldson. As a leader in the company, it's your responsibility, and we look for you to grow your talent. Across our corporation at all levels, we have this defined in great details so that you have an understanding of what your expectations are.

We also have a strong corporate responsibility culture. We're a manufacturer. Safety is important to us. 2 years ago, we refurbished and we refreshed our EHS plan, and we are now in the process of rolling that out so we can continue to improve upon our safety record.

Something new for us within the last few months is we've added to our company a manager of sustainability. We'll be -- we are currently building a foundation of a plan and will rollout targets in the future specific to that initiative for us. Our employees are engaged with the community, they're engaged from a volunteer sense but also through our Donaldson Foundation through a monetary sense.

From a voluntary type of an example, I'll give one where we have several hundred riders annually riding in the multiple sclerosis, 150-mile bike ride. On the first day, it starts in Duluth, Minnesota, way up north. They ride 75 miles and then they stop at the world-famous Donaldson rest stop, where of course I'm helping to fix pulled pork sandwiches to feed all of the riders so that we can keep the energy up and ride another 700 -- 75 miles the next day. It's an excellent weekend activity, and we have raised hundreds of thousands of dollars for MS as a result of that.

Additionally, we have a strong governance culture. We have a transparent culture, and as I said before, we've recently made good inroads on the diversity of our Board, and we have a strong Board with a good time line of service.

The last point, compensation management. I want to expand upon within the next slide. But our compensation management across the officers as well as the Board of Directors directly aligns with the shareholder. I'll explain a little deeper. Our stock ownership requirements are above market. Mine, for example, is 10x base salary, whereas market is 5x, and it's true of all the officer positions within the corporation. This helps our officer base to think like owners not managers. We believe in this principal, and we'll continue to have this focus of a strong ownership across our officer group.

We balance the annual compensation and the long-term compensation. Annually, our targets are based on revenue growth, EPS and ROI. Long term, our targets are based on revenue growth and ROI, with ROI being a gate. This is an important principle relative to ROI because if we do not meet the thresholds for ROI, growth doesn't matter. That helps us align directly with the shareholders -- what the shareholders want and what the company wants and that is profitable growth, not just any growth.

We have a diverse portfolio of product groups. Shown here in the top left is our Engine air business where our company started 104 years ago, it's the largest portion of our portfolio of 39%. And we take that engine air technology and we look to migrate it across all the markets that we could possibly use it in. For example, the one next to it, many of the air principles that could be discovered in Engine air are also used in the industrial air business and vice versa.

A new entry for a company that we're excited is about in the middle on the bottom row, it's process filtration. It's been growing double digits for several years now, and Jeff will talk about that and specifically tell you how we win later today.

I told you we are a razor to sell razor blade business. So how has our razor blade sales been? Since 2012 to 2018, our replacement parts business has grown 36%, while the company has grown 10%. You can see we're outpacing the balance of the company growth, showing the strength of our innovative technology solutions upfront, which plant seeds in the long term for future growth or replacement parts growth.

Shown here are the business segments that we often talk to all of you about on the right side. And more importantly, again, we show you

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

within those business segments, the first-fit or new products, base revenue as well as the replacement parts portion of that revenue. We have sustainable competitive advantages being a technology-led filtration company. Frank Donaldson solved a customer's problem within the agricultural industry 140 years ago. The why and how he did that are still valued principles in our company today, and we use them in every business as we continue to look to deepen our relationships with our customers as a result of solving their complex issues.

Our strong customer relationships comes from -- allow us to have a more upfront cycle with their engineers, so they'll often come to us and say, "Hey, this is what we're seeing, can you help us solve this complex issue?" And of course, we have our engineers, our technologists meet with theirs and really offer that customer the best solution that the market can have technologically.

Having those strong customer relationships also goes to our manufacturing plants. The manufacturing plants across Donaldson certify themselves to all the needs of the customers. We have many plants in our company that are actually certified to many different customer levels, so across the construction industry, the agricultural industry, et cetera, and they'll carry all those certifications as required by all of our customer base.

We have a diverse global business. We have a robust portfolio of technology that allows us to enter multiple end markets within filtration. We have -- this allows us to really have that technology and the application of that technology meet the local-based demands of our customers. So again, with the local touch. All of this helps us to retain a higher percentage of our Aftermarket business.

This is my favorite slide in the deck. And the reason it is, is because it helps you gather together all of what I've been trying to explain and where our investments are and how we're doing. We look at our company and break our portfolio into 4 areas. First is Advance and Accelerate, specifically invest to grow above end markets and above company average. Critical core, invest to grow at company average, which is again above end market. Mature, this is more of a mature-based market where we look to drive that business through efficiency so it can continue to return cash to the organization to fund other initiatives. And last, fix and reposition. Self-explanatory.

If you look in the bottom right, you can see that our Advance and Accelerate, 53% of our portfolio over the past 3 years has grown roughly 16%. This is where we have been investing heavily and we've been talking to you about our investments and it's working. Our critical core, which is growing above market averages, is growing at roughly 10%. Our mature had slight growth that's because of share gain within a couple of those markets, however, they are still efficiency plays for us. And the fix and reposition, we've talked to you externally about our Gas Turbine story and that was a choice. I'll talk more in the next slide.

This slide gives you a sense of where our focus is and our strategic execution. We have long -- we have some long-term headwinds. We recognize 3. First, talk about our Gas Turbine business. Our Gas Turbine business fits within the power industry. The power industry is an industry that cycles, however, Donaldson changed our strategy 3 years ago in recognition of the oncoming cycle and we pulled away from large turbine projects, that means base and peak load power plant construction. We did this well ahead of the market and we started talking quite early and we focused on restructuring that business and making sure that business can have efficiency of the bottom line and efficiency of the new market realities. The team and the business has performed excellently. We've now got it into a position where we look to stabilize this year and looking forward, we look to grow primarily through our Aftermarket opportunities.

Our disk drive market. The disk drive market is in a secular decline. That is clear based upon all of the storage requirements going to flash drive. However, it's not going away. The disk drive markets with expanding storage needs for cloud-based applications, et cetera, will always be there. We have the leading technology within that market. And as the requirements for disk drives continue to go up, technology continues to be a leading demand point, which allows us to win more share. Clearly, we'll walk down, but we'll also maintain our #1 position, and we like that business because of the technological challenges and it plays to our strength as a corporation.

We recognize electrification, we understand electrification, we study electrification every single day. We get it. And led to our view, is electrification will not have an impact to our corporation or to our end markets over the next decade or more. Now we also want to acknowledge that medium duty or some would say, return to base platforms, such as a bus or maybe a waste disposal or garbage truck, they can go out and do their daily work, come back home to a home-based recharge, go out the next day and do it, that's clearly where we will see electrification take place.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

I do want to point out that, that market is less than 2% of the company's sales. That is where electrification will gain share. Also the other variable to consider when we form our view is that there are millions of vehicles throughout the world on -- using heavy-duty diesel engines. Their average life is between 8 to 20 years. Those vehicles have to have an end-of-life moment before the end user looks to a replacement of them. The technology of electrification today needs to step up to be able to meet the work requirements of those machines. For example, today, a farmer is not going to go -- begin to plow the field for 4 hours, break for lunch while the battery recharges and then come back and begin plowing his field again. What's likely to win in this space is hybrids, and Tom will talk about hybrids a bit more later.

We also have tailwinds. We have 4 strong tailwinds across our corporation, and they will be addressed by Tom in the industrial segment -- or sorry, in the Engine segment, and Jeff in the industrial segment. And they'll give you more specifics relative to these 4 tailwinds and how they apply with -- later within their presentations. For us as a company at the macro level, as engines continue to get more and more complex, the filtration needs become more technology-based and less commoditized. This gives us a tailwind. Tom will give you a strong example of that a bit later.

Our customers don't want just a buying partner, they want somebody to solve their complex problems. We have deep relationships across all of our industries and this plays to a Donaldson strength.

Intelligent filtration, connected filtration. Jeff will talk about that. This is one of our growth opportunities in the company, and we have been working on this for multiple years now, Jeff will give you a greater appreciation. But the customers really want worry-free filtration. They'd rather work on producing their products, not worrying about, say, the dust collector.

And there is increasing world standards. Emerging markets are looking now and having strong conversations to catch up to more mature markets while the mature markets continue to expand and demand cleaner opportunities across the board. Again, Jeff and Tom will give you a more specific look at these tailwinds.

Looking at our strategy more broadly. The filtration market is a $65 billion market. Within our Engine segment, we have a $16 billion addressable play. I want to note that within the Engine side about $1 billion to $2 billion of that is Aerospace and Defense, and about another $1 billion of that is what we call stationary hydraulics. The balance is heavy-duty diesel engines.

Our industrial air market is $6 billion. When I talk about intelligent filtration and the investments that we're making, that opens up the service-based opportunities to the customers we already enjoy and that gives us another $3 billion opportunity within that segment.

Also within food and beverage, you'll notice that there is a darker gray in the food and beverage piece of the pie then the balance, it's because we haven't gone after the entire food and beverage, we've gone after where we believe we have a technological-based solution in a product we call LifeTec and that is giving us roughly a $2 billion addressable opportunity.

So when you add that together, $2 billion of the food and beverage, $3 billion in service and $6 billion of what we have always been, we are expanding our addressable opportunities within the industrial sector from $6 billion to $11 billion.

Now I want to point out the other colors because within filtration often the conversations happen about end markets. But for us it's about technology. And the technology enables where else the company could go longer term. So food and beverage where we're in the darker slice, that $2 billion, we are investing in technology to continue to bring good value propositions across that market. As we continue to accelerate our technology investment and expand our material sciences, that naturally would allow us to flow into the specialty chemicals and electronics markets. We're already in specialty chemicals and electronics, but we're in it with air. We do not sell liquid. The food and beverage naturally migrates the technology developments into that type of a sector over time.

The technology base that you bring within those 2 markets in a much longer period of time allows the company to be positioned 1 day in the future to go into medical and pharmaceutical. I have that piece of the pie black because I want to let you know that it enables us to, but given the material certifications and the lengthy sales cycles, that is not a short-term opportunity as we view it. So you can see the way we view technology and the development across our corporation is as we continue to strengthen in the material sciences, we enter

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

the food and beverage market and then we can naturally migrate over time into these other areas.

Again, it's a $65 billion filtration market, our Engine business addresses $16 billion and our industrial business now has an addressable opportunity of $11 billion.

So we look to grow in those areas through 3 priorities. Expand our technologies and solutions, extend market access or into geographies where we are underrepresented, and to continue to execute strategic acquisitions.

Going in a little deeper into each of those 3. We're on a -- when I talk about expanding our technologies, we are on a multiple-year journey where we're expanding our R&D from 2% to 3% of revenue to 3% to 4% of revenue, specifically with a focus on material sciences and materials capabilities, which then enable us to go and broaden our addressable markets and further diversify our corporation. All of this brings a stronger solution to our customers, we advance of our technology leadership position much greater, and we deepen our relationships with the customer base keeping that leadership position worldwide.

One such investment, and we talked about this on our last call, is that we are investing $15 million on a new material sciences business in Bloomington, Minnesota at our corporate campus. We break ground in roughly about 30 days. Although, I heard this morning that there's a snowstorm coming to Minnesota, so we'll have to see how that works out. But at this point in time, the first shovel gets underway within the next 30 days. Again, this is one of our R&D investments to focus on broadening our material science and keeping our leadership position.

This is the one slide that we felt was very important that best describes the results of our strategy that we kept from the original deck. We use innovative proprietary filtration solutions to solve complex customer problems, which drive a greater retention for our customers and for us in the aftermarket. Shown here in blue, you can see our opportunity and our customers' opportunity to capture a higher percentage of market share for a longer period of time as compared to the legacy products is a good representation of what we bring.

A couple of good examples on this chart are PowerCore, which over the last 5 years, and even in the downward cycle, grew -- while material headwinds were affecting us, PowerCore still grew. And in the last 5 years, our PowerCore revenue has doubled. Within the industrial segment, we have 2 proprietary products to highlight our Downflo Evolution as well as PowerCore products have now become over 10% of our industrial air filtration business.

Razors to sell razor blades. Important customer-based solutions to help -- of proprietary nature to help drive Donaldson's filtration replacement part sales. We're proud of our global representation and who we are as a company and the progress we've made over the decades.

Shown here is our current footprint of revenue, shown along the bottom are opportunities within those geographies. A common theme of all of those opportunities is that all of them require a technology-based solution within that region. They play specifically to Donaldson's strategic focus and our advantage as a company.

We have a disciplined approach to M&A. Scott is going to talk later and -- to you about the 6 acquisitions we have done and their performance, so I'll save that for Scott. What I want to focus is -- with you about is our process. Specifically, our process, we look for characteristics such as things that will bring technologies or new products to our company. Things that would grow additional diversity in our corporation meaning nondiesel-based engines or what we would consider to be industrial. We look for replacement parts or consumable-based businesses. We look to expand our liquid capabilities. We also look to enhance our intelligent filtration journey, specifically our connected products or services related to that where we can advance the services-based model.

We have a robust process and that robust process means, we have a number of targets across the company that a number of people are working on. We look to develop those existing relationships. And given those existing relationships, that allows us largely to be able to execute on the acquisitions.

So again, our process is robust. It is strategic. It is selective. And we have a strong pipeline.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Wrapping all of this together, our fiscal '21 financial targets are this. We look for our company to grow 3% to 7% annually, which would be above market growth. We look to expand our operating margin by 120 to 200 basis points. We look to return our company to an incremental margin in the 20% to 25% range. All of the financial -- all of the leadership team in this company are committed to these financial targets.

So with that, I want to return to the 5 key takeaways. We are a technology-led filtration company. We have a diversified portfolio. We have an experienced leadership team that is committed to our strategic goals. We are everywhere the customers want us to be. And we have a strong ownership culture that aligns directly with creating shareholder value.

With that, I would now like to introduce our Chief Technology Officer, Michael Wynblatt.

Michael Wynblatt ***Donaldson Company, Inc. - VP & CTO***

Okay. Good morning. It's a pleasure to get to talk to all of you today about 2 of my favorite subjects, which are innovation and technology. In fact, I joined Donaldson just 18 months ago precisely because of our strategy of innovation leadership and technology leadership. There's a lot of ways that a company can differentiate itself in the marketplace. But if you're a techie guy, you want to be at a company where product superiority through technology is not just a goal but the expectation. And that's what I found at Donaldson, and I've really been enjoying myself the last 18 months.

A little bit about myself. I've spent most of my 21-year career focused on commercializing breakthrough innovations and mostly technology-based innovations, and learning how to do that at innovative companies like Siemens and Eaton and Ingersoll Rand.

A couple of the messages that I'd like you to take away from my presentation today. The first is that, that innovation leadership strategy is working, and I'm going to try to give you a little bit of intuition as to why technology is so important in our industry. Then I'm going to go a level deeper, and I'm going to talk about why scientific fundamentals really enable us to make great filter media, which is the key part of most filtration products.

Then we'll talk a little bit about the future and I'll try to show you how intelligent filtration and customized filtration are going to be 2 of the key ways we're going to leverage our technology advantage to grow in the future. And finally, I hope you'll see that although we've got a technology lead today, we're doubling down on our innovation and technology efforts to maintain that leadership in the future.

So you're going to hear a lot today about technology leadership, innovation leadership, some of you may wonder what that means if you're not that familiar with the filtration industry, you might think it's kind of low tech. So I thought I'd tell you a little bit about filtration and about our industry and why technology is important.

So we make filters and then some separators. And the basic principle is a kind of the same, you've got a flow, that flow is going to be a mixture of different things, could be liquids, could be gases. And usually, there is a good fluid like fuel or water and we want to retain that. And then typically there is a contaminant, we want to remove as much of that contaminant as possible, and we refer to that as the efficiency of a filter. So if we take out 99% of the contaminant then that filter is 99% efficient. And if that was the only thing we had to do, that would be easy, right? We'd just put up a wall and we would just block everything. But of course we have to let the good fluid through. And there's a more subtle point, which is that, that fluid is getting pushed or pulled by a pump or a fan or some kind of machine and if the filter introduces any resistance that we call, the pressure drop, across the filter then that pump or that fan has to work harder. And so that's an inefficiency in the system, and so we always have, as an important second goal, to try to introduce as little pressure drop as possible.

Now again, if that was the only goal that would be easy too, right? We would just have an open window. But then, of course, we would lose all of our efficiency. So I think you can see that there's this sort of a natural trade-off between having high efficiency and having a low pressure drop. For any technology that you pick, so a typical filter media we might use is cellulose, you're going to get a curve, which represents that trade-off. The more efficiency you get, the more pressure drop you get.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

The place that advanced technology can help you, for example, if we were to use our Donaldson Ultra-Web nanofibers on top of that cellulose, is that you can get a better curve, right? So you still have a trade-off between efficiency and pressure drop. But at every point along that performance curve, you get an improved result with better technology. And so that's a key place where technology can help us.

But it's a little bit more complicated than that because the pressure drop also changes over time. You can imagine that as the filter starts to fill up, the pressure drop tends to rise. And this is another place where technology can really help you. Again, if we were to put our Ultra-Web nanofibers on top of that cellulose, it creates this really complex pore structure, which allows us to trap a lot of contaminant, but still retain paths for the fluid to pass through. And so that means that as you start to build up contaminant in the filter, there's still room for the fluid to pass through and so you don't get as much pressure drop. So technology means that over time, as your filter fills up, it doesn't clog as quickly and so your filter lasts longer, which is important for the customer.

The other issue that we've got to deal with is that there's a lot of different kinds of contaminant. So filtering 100-micron particles is very different than filtering 100-nanometer particles that are 1,000x smaller. Also there is different types of contaminant. So you think about like hydraulic fluid, that's something -- one of our products is to filter to hydraulic fluid. Well, you get little metal particles in there, but hydraulic fluid itself also degrades over time and so you get kind of sludgy stuff. And there's also air in hydraulic fluid, which can cause surprising damage to a hydraulic motor. Well, filtering particles is different than filtering sludge is different than filtering air, and so our customers need solutions that can handle all of these different contaminants, and we have to develop technologies that, therefore, can handle that range of contaminants as well.

Well, I can summarize our approach to developing technology by saying that we try to develop a deep insight, both in the customers' needs as well as the technology's opportunities. And for each specific customer need to match it with the best technology opportunity. So all of this starts over here, on the right with -- as Tod was saying, our deep strategic relationships with our customers, both OEMs and end users. We invest a lot of effort to really try and understand what are the jobs that the customers are trying to get done. And in fact, they tend to bring us their hardest technical challenges. In many cases, companies that we've been working on -- working with for decades. Then we take these learnings and we leverage them to build application-specific solutions, and we usually do that in partnership with the customers.

Now in each one of those solutions, we also have elements, these are like the blades in our razors-and-blades model. They're the consumables that eventually will fill up with contaminant and then the customer would want to buy something new in the aftermarket. There is typically a lot of innovation in these elements. So some of you may be familiar with our PowerCore product line, where we've been able to mold our media into these optimally shaped flutes that gives us such great performance. And an important part of our strategy with the elements is that we develop intellectual property around the fittings, how the element fits into the solution, and that helps us to retain our Aftermarket business, not only for us, but also for our OEM customers who very much appreciate that.

But the real secret sauce in most filtration products is actually the filter media. That's the material that's actually doing the filtration. And one of the things that really differentiates Donaldson from our competitors is that we design our own media in-house, and we retain the intellectual property around that. And this is what allows us to create those differentiated trade-offs between things like filtration efficiency and pressure drop and lifetime so on. And the reason that we're able to create our own media with differentiated characteristics is that we've invested heavily for decades in understanding the underlying chemistry and physics and material science that go into these media products. We've designed -- we can design our own fibers, our own membranes, our own coatings and our own manufacturing and fabrication processes for all these things. And we design them with the goal to create the very specific chemical structures or microstructures that achieve the results that the particular customer is trying to get based on our knowledge of those customers.

Now across this whole spectrum, we have dedicated teams. So all of our business units have applications engineers and product engineers. And we have centralized teams, they are specialists in media and in the underlying sciences. All in all, over 800 scientists, engineers and technicians. And since our origin's as a small family-owned company, these teams are -- they're accustomed to working closely together, to build optimal solutions from end-to-end.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Another thing that we've done across this whole spectrum to double down on our technology expertise is that we've developed proprietary digital modeling tools. And of course, we buy the best off-the-shelf CAD and modeling and simulation tools like anybody would. But for more than 2 decades, we've been investing in our own proprietary add-ons and additional digital tools that embed the expertise of our technical specialists. So as an example, we have specialists in fluid dynamics, and in order to leverage that expertise across our whole engineering team, they've put their knowledge into digital engineering tools, let's say, that an element designer can use. And so an element designer could actually test to see what is going to be the pressure drop across his new element without ever having to build it, only in simulation. So this is a really efficient way to spread our technical expertise across our whole engineering team.

And it's been working. So you can see here some of the names of some of our successful innovations over the years. Each one of these has driven hundreds of millions of dollars in growth as we take share in existing and new markets. And here is the chart that shows our revenue since 1960. And you can see it has a nice quadratic growth curve, we've been growing steadily, and we really get paid for our technology. So across every one of our end markets, Donaldson products command a price premium compared to our competitors even as we're competitive for market share. Now of course, all this technology takes money and we've been investing heavily for years, but we feel like we're getting a good return on our investment. So this is our ROIC for the last 12 years, and you can see very consistently at or above 15% ROIC, which we are very proud of.

So the strategy has been working. But I'm sure some of you are wondering what's next? And what are we going to do to keep growing in the future? So I wanted to share with you a couple of technology areas that I'm particularly excited about and to try to give you a flavor. The first one that I wanted to talk about is the evolution from best effort filtration to really intelligent filtration. But if you think about the filtration industry today, filters are what I would call a kind of best effort product. We design them as cleverly as we can, we test the heck out of them, but once they get installed by the user, for the most part, nobody really checks to see how well they're working. And this leads to different consequences, one of which is, that we tend to have to design our filters for the worst case. Since nobody's really checking to see if the filter is working well or not, we have to imagine what kind of bad environments might these filters be put in and design the filter to take care of those environments. A simple example is a truck like this one. Well, most customers will just buy this truck to work over the highway, but some customers might buy it to use as a dump truck in a quarry. And since we know that, we make sure that we've designed our filter to stand up to that harsh quarry environment, which is probably putting a lot more into it than it really needs for the over-the-road application.

Well, as technology in connectivity and sensing is improving, it gives us a chance to actually monitor our filters in real time and see how well they're doing, and this is the first step to what I call intelligent filtration. And we've actually got off to a really good start here. So Jeff is going to talk to you later about our industrial air business, where we already have solutions today where our systems are connected and we're able to remotely monitor and analyze our performance in real time. And Tom is going to talk in our Engine business that we've already been able to connect our systems up to our OEM and third-party telematics solutions and again, to be able to provide data and to -- and analyze the results.

And we can really provide direct benefits to the customer as a result of this technology. The first is, just the peace of mind that the filter is actually working and protecting their investment and that's important. I'm going to talk a little bit more later about why that's important. But in addition to that, we can also tell the customer, for example, the -- what the pressure drop across the filter right at this moment is costing them in terms of energy, for example, fuel economy. Maybe they'd like to make a change a little bit earlier so that they can get a little bit better energy efficiency. And we can also make a prediction for them about when the filter is going to clog up before it actually does sufficiently in advance so that they can change the filter in line with an optimal maintenance cycle.

In fact, we've actually been able to demonstrate for some customers that they're changing the filters too often. Now that's kind of interesting, right? Because it means that being able to monitor your filters in real time could be a bit of a threat to our business and to our competitors because changing your filters less often is bad for business today. And if filters are really designed for the worst case then in the actual case they may last a good long time. But we really see this as an opportunity because if we can verify for the customer that their filter is actually working at any given time, then they don't really have to worry about that worst case. And if we are free to design for the actual case, then Donaldson's technology gives us a chance to really rightsize that filter. So across whole families of products, we'll not only be able to offer more value in terms of verification and prediction of the performance, but we'll be able to optimize the total cost of ownership as well. And our competitors who don't design their own media, they're going to have a much bigger

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

challenge to take advantage of this opportunity.

Now for all of this to work, we have to be able to optimize our filter designs for particular applications in use cases. So that then brings me to the second technology direction that I wanted to talk about, which is the move or the evolution from generic filtration to customized filtration. In a lot of filter applications today, the tests that we use to verify that a filter is working or to compare head-to-head whether a particular filter is working, are kind of genetic.

I'll give you an example, which is in diesel fuel filters. So the Society for Automotive Engineers' standard test for a diesel fuel filter is to filter out Arizona road dust. The standard test, the standard equipment, and that you can compare the results across place and time, which is good. But is there really a lot of road dust in diesel fuel? Well, actually, no, there really isn't. And it's kind of a shame because there's actually a lot of really interesting stuff in diesel fuel that you have to filter out, right? That comes from the interaction between the fuel and the additives and the fuel distribution infrastructure and the drivetrain under all kinds of different environmental conditions, a lot of kind of interesting gunk shows up in that fuel and your filter better be able to handle it, but not a lot of road dust.

So does that test really help a lot? Well, maybe you learn a little. But what you'd really like to do is, you'd like to understand what contaminants are really occurring in the field and then design the chemical properties or microstructures of your media to handle those contaminants. So I'd like to give you a specific example of that for a contaminant that really does happen in diesel fuel, which is water. In our On-Road and Off-Road businesses today, a lot of the vendors have moved to the common-rail fuel injector. And the common-rail fuel injector, unfortunately, tends to be very easily damaged by water. So for example, in the southeast part of the U.S, which is one of the more humid environments, we've been able to estimate that about 45% of all engine damage is actually caused by water damage to fuel injectors. Well, that's a billion-dollar opportunity if you can solve that.

So we've actually had a breakthrough recently that I want to share with you today about developing a media that can actually grab ahold of water in diesel fuel. And I'm going to show you some videos, if I got a pointer here. So in each one of these videos what you're going to see is a filter media which is submerged in diesel fuel, and then we're going to add some water and the water drops are dyed blue so that you can see them a little bit more easily.

So the first one to look at is here, and this is just like a regular cellulose media. And so what you're going to see are the drops just like you'd expect if you dropped water onto a piece of paper, they just kind of get absorbed right into the media. So that's a kind of an untreated, not very fancy, approach.

Now the second one, we've treated the media to be water repellent. So now the drops of water just roll right off the media. And that might be useful in some applications. This also I would say fairly easy thing to do. But in the last case we've actually treated the media so that it grabs a hold of the water droplets and actually allows them to, what we call, coalesce into larger droplets. And what you're seeing here is something that nobody's ever been able to do before and which we were recently issued a patent on. And the reason this is so important is because in the demo the drops are sized to be big enough that you can see them, but in real life the drops are microscopic. And the key to being able to extract water from fuel is to take those microscopic drops and form them together into larger drops, which is exactly what this media allows us to do.

Now this is just one example of a customized solution. So we've been spending a lot of effort in recent years to understand the contaminants that really do occur in a field and to design custom solutions. So you should see a lot more breakthrough innovations like this from Donaldson in the years to come.

Now in this particular application the technology is for removing water from fuel. But the underlying technical principles can actually be employed much more broadly in applications like removing oil from compressed air or removing water from air. And so although customization is about solving particular problems, our strategy of applying technology broadly still definitely applies.

Well, we've got a lead in technology right now, but we're definitely not resting on that success and we're taking a number of efforts to accelerate our innovation and technology initiatives. First is, we're increasing our investment. So even though in 2017 we had a pretty hefty $54.7 million R&D budget in the company, but in 2018 we increased that by 10% and our plan is to increase it by an additional 10%

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

in 2019 and 2020.

We're also spending that money in a very disciplined way. So intentionally we're trying to focus more on breakthrough technologies than just incremental investments. And 2 ways that we've approached that, the first is that from our core engineering team, we've carved out dedicated teams to focus on advance R&D and innovation, so that there's people coming to work every day who clearly know they have the day job to think about the future and about breakthroughs. And then we've also taken that incremental investment and we've spent all of it on specific programs where we feel there's a higher than normal potential for a significant technology breakthrough. So it's not just more funds but it's also more focus.

We're working on our execution. So we recently retooled our innovation process. And as we've been investing more in technology, of course, that has allowed us to expand our talent pool. And one of the things which has been a pleasant realization is because we have a dedicated -- advanced R&D team, because we're focused on breakthrough innovations and because we're investing more in R&D, that turns out to be a pretty attractive place for technical talent to come. And so even though the job market for scientists and engineers is pretty tough right now, we actually had a lot of success. Just as one example, in the last 18 months while I've been with the company, we've been able to get 11 new PhDs to join the team. And so that's really a bolster for our R&D efforts.

So I hope you've enjoyed hearing about some of my favorite subjects, technology and innovation, and I hope you took away some of the key messages that I was trying to give. The first is that the secret to winning in the filtration market is to have great filter media, and that's really enabled by having great scientific fundamentals like we have a Donaldson.

We think that intelligent filtration is going to allow us to have new value propositions for our customers, and that customized filtration is going to allow us to dramatically improve the performance of some of our existing value propositions. That the technology and innovation leadership strategy has been working, and that we've been growing the company and getting good return on our investment as a result. And although we're leading in technology today, we're definitely not resting on that, but we're accelerating our efforts to maintain that lead in the future.

So thank you all for your time. And now it's my pleasure to introduce my colleague, Rich Lewis, who's our Senior Vice President for Operations.

Richard B. Lewis ***Donaldson Company, Inc. - SVP of Global Operations***

All right. Good morning. First, I'd like to do a little introduction on myself. I've been with Donaldson since 2002, been in operations most of my career with Donaldson. I joined the company at a site down in Indiana. And actually a personal story about technology, when I joined the company, I did not have a background in filtration. I really didn't know a whole lot about the industry, I was a manufacturing guy. And part of the process was to go to Bloomington, our headquarters, and interview and tour. And one of the things that actually helped me decide between Donaldson and some other opportunities I had was the technology story. I was quite impressed, even back then, on what they would allow a new person to see. We had a lot of technology, a lot of development. And as a operations guy, I really appreciate that. If you look at some of the stuff Michael's is talking about right now, it's very, very interesting and cool stuff.

I've been in my current role about 3.5 years. I'm very excited to talk to you about operational excellence. We look at that as a catalyst to enable profitable growth, and hopefully I can show you how we do that.

So a couple of key messages for today, 5 points. One, as part of our brand promise, we have a technology-led filtration company. But the other side of that is we have to deliver products on time every day to our customers. It's a very critical part of our brand and our story. We have a worldwide agile supply chain, as Tod mentioned. We have 43 plants, 20 distribution centers in 24 different countries. That allows us to optimize both our cost structure and to provide excellent service to our customers.

We do have an operating model, we call it Donaldson Production System. This model's been in place for about 10 years. And really what it does is it formalizes how we want each of our sites and our businesses to address our customers and their needs, how we engage our employees. And then third and very importantly, how we identify efficiency opportunities in the company so we can drive further expansion of margins, inventory turns.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

The last 2 years -- 2.5 years have been very focused on recapitalizing our company. If you look, we were a $2.2 billion company in 2016. We recapitalized to be a $3 billion company. It's taken a lot of our energy, a lot of focus to deliver those capacity investments. But we're now reaching a very critical point where we're starting to pivot from capacity, investments, hiring and training new employees to really focus in on margin and leverage, and we're right in the middle of that pivot, as we speak.

So a little bit about the evolution of our operational excellence program. So in the early years of this slide, we were really focused on actually developing new capabilities. And a lot of those capabilities were in emerging markets, so taking production that we had done in the U.S. and Western Europe and putting those in India, Brazil China. We were also investing in low-cost countries, specifically Eastern Europe and Mexico, to support our developed large markets.

And then finally, I would say, from an operational excellence point of view, we were really, pretty -- it was fairly widespread on how we approached it. And it was probably, mostly, dependent on the particular site leader. And we had some plants then were really excellent, we had other ones that were still figuring out their way.

Now as we transitioned into the second phase, this was the years of the global recession. Obviously, we spent a lot of time going down and then sort of doing that follow-on recovery. But the one big takeaway from an operations perspective is we formalized our operating model, we took those best practices from those really good excelling plants and we put them into a program that we could take across our entire portfolio. And so we called that the Donaldson Production System. On the slide here it says DPS 1.0, and we've been executing to that level for the last few years. Additionally, we spent 4 years putting in a global ERP system. And as I mentioned, the last couple of years have really been around capacity investment and really trying to take our company to another size to handle $3 billion of revenue.

As I mentioned, we're at an inflection point, and a lot of my presentation is really going to be talking about where we're going forward and how our focus is going to be changing here in the next couple of years.

So 3 areas that we're specifically looking to address. The first one is going to be cost. We've incurred a significant amount of cost over the last couple of years as we've invested to this new level, so we're looking to regain and gain back some leverage.

The second one is capacity. We still have a significant amount of projects in-flight. For me, as an operations guy, we look at -- the most difficult part of the project is deciding when to invest, where to invest. Actually, once we're in the execution phase, I don't worry quite as much. Our company knows how to do that, and we can do that well.

And then the third thing is capability. So you talked about -- Michael talked about significant investment in R&D, those then translate into things that we have to make and new operational capabilities to commercialize those. My goal and our goal as a company is $100 million of cost take-out over the next 2 years and a 5% to 10% improvement in inventory turns.

Now I'll get a little bit more specific with each one of these. So first up is capacity. And how I look at capacity is really simple. Today's capital investments are tomorrow's depreciation. It's a cost. Every time we try to make a capital investment, especially capacity related, we're looking to do 2 things. One, make sure we're supporting and getting into right location to enable long-term growth.

And the second one is try to put it in a location that improves our cost structure. 85% of the investments, and you can see in F '19 and '20, these are going to be our peak capacity investment years and CapEx years. We'll start returning to a more normal environment in F '21. But 85% of the investments we're making right now are in locations that improve our overall company weighted cost average. So that is a nice thing to have in both an upcycle and a downcycle.

One of the headwinds we've had the last couple of years, the most significant headwind has been inflation of our material cost. From F '17 into F '19, we've experienced significant inflation. If you look at it, it's an annualized impact of just north of $40 million. Now our engineering teams and our procurement teams have been fighting very hard to offset these costs and mitigate those. Our engineering teams, and I have an example that I'll share later, really, they're looking to try to design our products with different materials that might be lower cost. And in a lot of cases they use less of the materials through an efficiency gain.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Our procurement teams are spending a lot of their energy on trying to create better price competition among our supply base. One example is, we had our global ERP system. We aggregated our global demand for some adhesives that we buy. We went out on a global bid and we saved $3 million. That's a project that we probably would not have done when we were on a bunch of disparate systems. And so there's things like that. There's e-auctions, using low-cost country sourcing. This is what they do every day.

But if you step back and you look at this in a broader context, so I would say, one of the DNA elements of Donaldson is the strong focus on cost reduction. It is part of probably 90% of operation leaders' incentive package. So we set up very specific goals, and it is a huge part of their incentive package every year. Typically, our target is $40 million per year. We need $30 million to $35 million to offset annual cost increases. Those would be merit increases in our plants, they would be productivity agreements with our OEM customers, and then what I would consider as standard levels of material inflation.

Clearly, the last 2 years, the material inflation has exceeded what a standard level would be, and we're looking to regain that back in the next couple of years. Our target in the next couple of years is the $40 million per year, plus an additional $20 million on top of that. So a minimum $100 million cost reduction in the next 2 years.

So as we look forward, we have really 4 strategic areas that we're going to be focusing on in the next 2 years. The first one is the relaunch of our Donaldson Production System. We're calling it Donaldson Production System 2.0. I'm not a marketing guy, I'm an operations guy, so we're going to have to live with that for now. The idea is, we're not redoing our Donaldson Production System. What we're doing is, we're going back after specific elements that we created 10 years ago and we're looking to drive those to higher levels of excellence. It's specifically targeted at productivity in our plants. I'm looking for a 10% productivity improvement in the next 3 years. And my case study that I'm going to share with you in a minute was a pilot program to sort of test the validity of this target. So we believe there's a lot of opportunity there, and we're really looking to drive further productivity.

The second one is footprint. So Tod talked about how we look at our businesses as a portfolio. I also look at our plants and distribution centers in the same way. And as we've brought on new plants, it's creating opportunities to reoptimize our footprint.

And so as we move forward over the next 2 years, and these plants come online, we'll be repositioning our footprint to take advantage of some of the new cost structures that we have.

The third is connected supply chain. Tod talked a lot about our diversification strategy into new regions. If you look today at the amount of placement parts we sell versus 10 years ago, it's dramatically higher. That's a different supply chain than making a product and selling it to an OEM on a first-fit application. So we're going to modernize and upgrade some of our tools, they're both under our global ERP. Some of those tools and processes really allow us to connect the supply chain all the way from a forecasted demand back through our supply base. This is actually the initiatives that are going to allow us to expand our inventory turns.

And then finally enhance our capabilities. So Tom and Jeff will talk a lot today about where they want to go and which regions. These capabilities will be twofold. One would be the manufacturing of new products that we don't make today for new markets that we're trying to penetrate. And the other ones will be taking capabilities that we have in the U.S. or potentially Western Europe and moving those to new regions like China.

So we have some very specific targets from all of these objectives and priorities. The first one is around margin. We talked about the $100 million. We're looking for a 75 -- a 50 to 75 basis point increase in gross margin. The second thing is really around our customer. Since we've been expanding and we've had a surge in demand, our delivery and our supply chain have been stressed, so we're looking to return back to what I would call historical Donaldson standards on servicing our customer.

Third is around asset turns, specifically, we mentioned inventory turn, a 5% to 10% improvement.

And then the last one's around people. Tod mentioned, we have 14,000 employees, 10,000 of them work in operations. The vast majority are potentially hazardous work environments with machinery, fork trucks, so safety is a very, very important criteria for us. We rolled out a

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

new EHS framework 2 years ago. We've been initiating that program in the U.S. Now we're looking to take global deployment over the next 2 years.

And then I mentioned the Donaldson Production System. Again, a very targeted initiative. And we're going after our highest cost of goods plants, so we can try to get a quick return on that investment.

So this case study is really around a very successful product line, it's around PowerCore. The technology that Michael mentioned, it's grown significantly over the last 10 years. And as it's grown, we've invested in new manufacturing capability, new production lines. Why I like this example is, number one, it illustrates 2 things. The broad spectrum of our continuous improvement culture. This involves corporate scientists in Michael's group all the way down to production operators in our plants. And then the second thing is, it targeted pretty much all of our product cost structure. So there's targets for material variable cost, labor variable cost and the fixed cost of the product.

So what we asked this team to do was twofold. One, there was a new technology. Michael talked about our ability to form filtration media in very precise shapes. The corporate scientists and our product engineering teams had used a -- well, I think his term is, it's a super computer cluster. I'm in operations, I don't like to use the word cluster. It's not a good connotation for us. But they modeled using millions of simulations, the best shapes possible to maximize the dust-loading capacity of a filter. And with that, we can take out 10% of the material -- the filtration material in a filter.

So they modeled that. This was a 3- or 4-year project. Then we went into prototype phase, and now we're in early production phase. And what this allows us to do, and we had to figure how to make this repeatedly, it required a redesign of our production lines. So our advance manufacturing teams spent a couple of years understanding how we can make these shapes precisely and repeatedly. And now we're in early production and we expect that 70% of the product line will convert to this, what we call, generation 3 PowerCore. And so 10% material reduction on a product like that is a significant cost reduction.

The second piece, and this gets back to the capacity and the capital, we asked the team of process engineers and advance manufacturing engineers to take an existing line with a target of 20% reduction in the cost of a new production line and 20% throughput improvement on the existing lines. So we did a pilot program on a line down in Iowa. And they achieved some significant results, 22% reduction in capital, mainly through reengineering the line piece by piece, figuring out what elements were no longer critical and value added. And in some cases simplifying the design. And as we've been adding capacity, we've implemented those design changes and we're seeing those benefits.

The second piece was the throughput reduction, so it was a case study to see what was feasible if we were to achieve a 16% reduction, and that's part of our productivity initiative going forward, is taking that learning and deploying that across all of our plants around the world. The key message from me on this is it's really about continuous improvement in everything we do. This is just one example.

So takeaways, leading levels of service has been and will continue to be in a profit and growth enabler for us. It's a choice we make. It's part of our brand proposition. Secondly, our global network is very effective at servicing our customers regionally and also optimizing our cost structure. It's also been very helpful in the world we live in today from an agility and risk management standpoint. There's always social, economic, political challenges coming up, and we can move production from site to site or we can move sourcing from supplier to supplier. So it's been very advantageous.

Donaldson Production System is our operating model. We feel like there's a tremendous amount of runway left in this tool. We're doubling down on that in DPS 2.0 with a very specific mission of driving 10% productivity improvement.

The last 2 years have been very challenging as we've grown the company. It's been the most challenging supply environment in my professional career. We are now at a point of stability, and we're starting to pivot the company very aggressively with very clear intent on margin expansion and inventory turn improvement. And we're in the midst of that right now.

And then again, Donaldson, one of the things Michael talked about, technology, and how much he likes our innovation strategy, and it's

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

part of the expectation. Continuous improvement is also part of that expectation. This is something that we wake up every day to do, and I'm very proud of that, and it's something that we'll continue to do in the future.

With that, I'm going to invite Michael, Brad and Tod back up. We have our first Q&A session, and so we'll break the presentation here and let you guys ask some questions.

QUESTIONS AND ANSWERS

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

We've got about 20 minutes for Q&A for these folks. As I mentioned before, please keep your questions limited to the presentations you just heard. And we've got a couple of microphones in the room that we'll walk around, so please leverage those for the benefit of folks on the webcast as you're asking your questions. So we'll open it up. Nathan here in the middle second table.

Nathan Hardie Jones ***Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst***

I guess I'll start with one right from the end of that presentation. That next-gen PowerCore product that you were looking at there, one of the things you had on there was a 10% material reduction. You're at about 45% material costs. So if you hung on to all of that, that would be about a 450 basis points margin improvement on that product. Can you talk about how you think about using that to compete per share, letting it drop to the bottom line? How you balance the outlook between those 2 kind of things?

Richard B. Lewis ***Donaldson Company, Inc. - SVP of Global Operations***

So let me clarify one point. So the 10% reduction is in the filtration media, which only represents a portion of the total material costs in that product. So it's not quite that large, but it's still significant.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

(inaudible) obviously, but what we look to do with our technology, particularly with that in PowerCore is to really maximize the overall share across. Remember, we're trying to plant seeds for future growth with a razor-to-sell razor-blade model. And so the more population that we can get out there, the better the long term for the corporation. So we look at our technology breakthroughs in that sense, give the customer a strong solution but also allow really maximizing the population out there.

Nathan Hardie Jones ***Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst***

So those kind of things -- and this is just one example, but those kinds of things you would anticipate using more to compete for share than you would letting it drop to the bottom line to improve margins?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

It's a balanced approach. It depends upon the particular market. If we're dealing directly with an OE, you have a different type of a sales process than if you're direct to an end user, for example, right? So consequently, we look to balance all of that in the technology application. And it is specific by end market across our broad-based portfolio.

Nathan Hardie Jones ***Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst***

Okay. And then on the first-fit versus replacement, you had that split going from 50-50 to 62-38 replacement, which I think is clearly driven by those proprietary products where you retain more of the aftermarket as you go through time. Can you talk about where you are in the mix of proprietary versus commoditized kind of products, where you see that going over the next few years? And how that'll influence that mix longer term.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

The big opportunity, and the message we're trying to give to all of you is, we're a technology-driven filtration company. The proprietary offering out of Donaldson Company today across our portfolio are a much greater percentage of our offerings than they were even 10 years ago. 10 years ago, no matter what business side, either the industrial or the engine side of our corporation, we may offer you an air-based solution, for example, 25% to 30% of the time a proprietary filter. Whereas today it's now more like 75% to 80% of the time. There are still markets where more of a commodity-based solution works. Those are in emerging markets, for example, depending upon the application, but Donaldson technology is really making inroads across the globe.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Charley?

Charles Damien Brady ***SunTrust Robinson Humphrey, Inc., Research Division - MD***

Just back to Rich's presentation on the KPIs and what's the return on invested capital you guys look at on the R&D spend? And kind of on those KPIs you put up there, can you give us some sense where those are today? And I guess looking longer term on these R&D projects, particularly with the breakthrough products, what's your time line to determine whether or not you're going to stop putting money into it or it's going to work?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Yes. Maybe Rich can start and then we'll have Michael join in here.

Richard B. Lewis ***Donaldson Company, Inc. - SVP of Global Operations***

Yes. So if I understood your question correctly, where do we stand on the KPIs that I showed? So from an inventory turn standpoint, we're in the 5.2 to 5.3 turns ratio. If you look at where we are on some of the delivery metrics, and we talk about 95% of our sites being at what we consider leading levels of delivery and quality, we're probably in the -- and I don't have the exact number, but it would be somewhere in the upper 80s today. Historically, we would be closer to that 95% level. And EHS framework, we don't really have a metric there, it's really about implementation of those 2 things and they're just now getting started on the global implementation of the Environmental Health and Safety framework. We have 2 years here in the U.S. We've seen a significant reduction in accident rates here in the U.S. this year because of that, a double-digit reduction. And the DPS 2.0, we're just starting to implement that, and that's really where we're targeting the 10% productivity from our base today. And that's really measured site by site versus an aggregate number from the company perspective.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

So maybe just one other quick bit of color before tossing it to Michael about the technology development is, also within our operations teams across all of the operations organization, there's the bonus structure and the metrics that we have relative to that are obviously take care of the customer as Rich talked strongly in his presentation, but also continuous improvement, whereby cost reduction for -- by every plant matters. And that's directly tied to the compensation through our model that we have across the company. So Michael maybe you can expand a little bit about technology breakthroughs.

Michael Wynblatt ***Donaldson Company, Inc. - VP & CTO***

So a couple of thoughts about sort of the timing of new technologies and how long we invest before they come to market. One of the things that's interesting about our business is a lot of the products are sold through -- originally through the OEM channel. So an OEM may come to us and we'll present them with a new technology and they'll say, "Okay, we really like this, we want to incorporate this." And then they may spend 2, 3, 4 years developing their, let's say, vehicle platform before that technology actually comes to market. So there's -- in many of our markets there's a kind of a lag between when a new technology we think is kind of ready and when it may actually arrive in the market. The other thing it's interesting is, because we have such broad applications, but they're all about filtration, we can spend time and effort developing a core filtration technology. And then we get a bunch of different chances to commercialize that in different markets. So we may spend many years developing the original technology platform. But then when we take a particular application, let's say, we want to apply this particular one to venting in automotive, that's where our new innovation process comes in. And we can do that relatively quickly to assess whether that's a good opportunity or not. We -- it's one of these things like a funnel where at the beginning, you're trying lots of ideas, and we're able to throw out a lot of those ideas in 3 or 6 months. But then the ones that are really promising that end up being our products because of what I said earlier, they may take a couple of years before you -- they reach the market.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

[Brian]?

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Brian Drab ***William Blair - Research***

So I'm doing some math here and calculating incremental operating margin based on your guidance, just the midpoints of the guidance of about 28% for the 2019 to 2021 fiscal time periods. Is that -- first of all, is that how you're thinking about it? Am I doing some calculation wrong here? And if I'm right, are we now to expect maybe a company that going forward mid-teens operating margin with high 20s incremental operating margin? And you've had this period where it's been tough. You talked about the material inflation to get that incremental operating margin. But going forward, should we think about it as a company that can do that pretty consistently in the high 20s?

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Yes, if I -- I think that's an important question that Scott will talk more about in his presentation. So if I could ask that we table that. But to your point, the one thing that I'd highlight, and Tod just gave you the overview, Scott will go in more detail. But the bottom end our 21 range is north of anything the company has delivered. We've set 15% out at the bottom end of that range. So Scott will give some more details on that.

Brian Drab ***William Blair - Research***

I didn't mean to jump ahead there.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

No, no, no.

Brian Drab ***William Blair - Research***

Tod did put that slide up.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Yes.

Brian Drab ***William Blair - Research***

Just one more quick one, too. On the slide where you talk about the expansion of the TAM and these new markets that you could get into over the next 3 to 5 years, can you say anything about what percentage of your revenue do you think might come from those new markets 5 years from now.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Yes, specifically, Brian, we haven't really taken an external view to be able to say it will be X in the connectivity or the intelligent filtration, it'll be Y into the food and beverage. Clearly, we have those plans internally, but we're, at this point, going to really try to focus on letting you understand the strategy, why we believe we can win, how we're going to grow, and really focus on the importance on how it aligns with our overall corporation. And Jeff will really give you a better sense of that within his presentation here this -- or after break.

Unidentified Analyst

Tod, I appreciate the new targets that you put out, that's very helpful. Can you give us a sense of the linearity of how you achieve that? Is that more back-end loaded? The way we should expect that? Or is it more continuous progress on that? And then secondly, are there any near-term targets we should look at to see that you're achieving your objectives, that you're on track to getting to the 2021 targets?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Yes, thanks for the question. So as Rich talked about specifically when he talked in his targets, we're at an inflection point in the corporation. We know that. We understand looking at our recent performance in the quarters, you look at our gross margin activities, Rich tried -- I think did a good job of explaining why we had such difficult headwinds within the gross margin opportunities where we're investing in expansion. We actually grew even much faster than we as a company had expected. And then the inflationary pressures really become the -- presented far more headwinds than we expected. Now looking forward, we're at this inflection point where we have worked through allow -- really getting our capacity expansion to where we can meet a $3 billion corporation type of needs, and that allows us to pivot strongly. So a lot of that internal work will be normalizing the internal supply chains that we've been talking at a

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

quarterly basis and getting that to the appropriate level, as we have enjoyed in the past. So much of that comes frankly from an internal view within the margin expansion opportunities. Also, the other part on the customer side is we are now back to a more normal pricing type of a cycle, and we've also built that into the model as well. Looking as far as near-term points, [Paul], I think as we looked and modeled what we thought we can execute on the gross margin expansion, we felt as though that would be a bit more linear actually. It wouldn't be a step. And so therefore, it's not really back-end loaded. And you could think of it -- and we embrace that type of approach.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Yes, George?

George James Godfrey ***CL King & Associates, Inc., Research Division - Senior VP & Senior Research Analyst***

Tod, I think you just answered a portion of my question and maybe you want to wait until the next section. But if I think about your R&D spend going up 100 basis points, the midpoint of your margin range going up 160, so that's 260 basis points that has come out of other parts of the business. Do you see that more a pricing benefit? Or as you just pointed out, gross margin that you're going to improve the efficiency with which you produce the products to get that 260 basis points?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Yes, as far as the margin expansion, we would look at that now as -- it's important to understand that we embrace the fact that we're at a -- we worked really, really hard over the last couple of years to get to this point. And we are really pleased to be at the point that we are, that inflection moment where we can now look internally and really drive our gross margins up based upon our own efficiency. It's hard work. It takes time. But we know how to do that work and we've demonstrated that in the past, and the corporation is really aligned to do that. So we look at that, George, more of an internal type of an expansion opportunity than an external view.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Any other? Yes, Nathan?

Nathan Hardie Jones ***Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst***

A question on the CapEx. There was a slide up there that had pretty large capacity investments in '19 and '20, and then those ramped down in '21. There was an other bar in there that ramped up pretty considerably in '21. Is that you prioritizing capacity investments in '19 and '20 and maybe deferring some other CapEx into 2021? Just interested in what that might...

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Nathan, specifically later in the day, Scott is going to talk about CapEx, and he is going to give you a better sense of how we're flowing in there. What Rich has talked about, you want to expand maybe on...?

Richard B. Lewis ***Donaldson Company, Inc. - SVP of Global Operations***

Yes, so the rest of that bucket would be new products, new technologies that we're commercializing. Those would be probably the largest of the other buckets. And it's a little bit of a estimate at this point because 3 years from now, we'll see what's coming to the market. But if we look back historically, that's probably a more representative balance of what we would see going forward in a steadier growth environment.

Nathan Hardie Jones ***Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst***

And then one on the material costs. You'd had a '15, '16, '17 drop down, back up in '17 and '18. I think we can understand that that's from a lot of inflation in the system. Maybe you can talk about the things the company did from '15 to '17 to drive that number down. If that's a more representative number of where we should be once we absorb all of this inflation and where we could potentially go from there?

Richard B. Lewis ***Donaldson Company, Inc. - SVP of Global Operations***

Yes, so if you look, there's 2 things that went on there. One, we were in a deflationary environment, and our procurement teams did a nice job of negotiating down to that level. I would say '17 is a little optimistic. We timed some long-term contracts at very good timing. And so if you look at the actual markets indexes of steel and some of the commodities that we buy, they did not look that good. So I do believe

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

'17 is probably a little bit better than normal. But it's somewhere between '17 and what we saw in '16, that's probably -- when we get back to a slower growth environment, that's the level that I would expect it to return to. Obviously, we will see because there's a lot of political things that are playing on the pricing of some of our commodities. So that will have an impact, trade agreements. We'll see

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Perhaps time for one more question before we break? All right, seeing none. We'll take a short break. I'd like to reconvene at 10:20.

(Break)

PRESENTATION

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

All right. We can just get going again. Thanks for the engagement this morning. Before we get into Tom's portion, just a reminder that we'll have a second Q&A session. And then on top of that, I also want to ask or note to everybody in the room and those participating in the webcast, your feedback is really important to us. So we certainly appreciate the questions today, but also expect a postevent survey coming out. We'd really appreciate if you took just a few minutes to answer questions about your experience today because we just want to do better. And as Rich said, continuous improvement is important to us. So again, I'd ask that you take a couple of minutes to complete that when you see that, and it should be out shortly after the event. We appreciate the time.

So now I'd like to welcome our Senior Vice President of the Engine Products business, Tom Scalf.

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

Thanks, Brad. Morning, everyone. So again, my name is Tom Scalf. I lead the global Engine business. And what I'm going to do this morning is take what Michael talked about where we develop technology and what Rich spoke to about how we deliver that technology to our customer and put it together on our commercial business for you on the Engine side.

So before I start, just a few quick comments about myself. So I'm approaching my 30th anniversary with Donaldson. Worked with Donaldson my whole career. Spent the first half of my career in operations, running plants in the U.S. and in Europe, and then I moved over to the business in Engine and was a product leader, then moved over to our industrial division and led a couple of businesses in industrial, returned back to Engine about 5 years ago in this current role where I've been leading Engine since then.

So first, today, I want to take you through the key themes for Engine, and hopefully, you'll see these themes run throughout my presentation. And at the end, you'll be able to recite them back to me.

So our first one is, as Tod led off with, we're an innovation leader with customer relationships across all of our channels, so both the OE channel and the Aftermarket channel.

Secondly, we're leveraging our position as the leader in heavy-duty air filtration to grow faster in both fuel and hydraulics, and I'll have some examples towards that.

Third, we have a strong track record of delivering technology solutions to our OEM partners and winning platforms with them so that we can grow our share.

Fourth, we're growing our independent Aftermarket channel by focusing both on having a broad product portfolio, so the customers can access the products they need, and focusing on large strategic accounts who really value the proposition we bring to the market.

And then finally, we see the opportunity continue to grow in our markets as we see the opportunity as our -- needs of our customers continue to increase, and we see this unique opportunity in both China and India as regulations drive them up the technology curve and require greater filtration.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

So just a quick frame-up for what the Engine business is today. So I want to draw your attention down to the images at the bottom. So remember, we are about heavy-duty equipment that is predominantly powered by diesel engines. So that is our business, both On-Road and Off-road equipment. Last year, we finished at $1.85 billion in sales, and we had margins of 13.9%.

If you look at the ring chart in the center, I also want to highlight that between our independent Aftermarket channel and our OEM Aftermarket channel, that represents 68% of our revenues. So 2/3 of our business is in this recurring Aftermarket annuity stream, followed then by 18% in our Off-road channel first-fit solutions, then the On-Road and then the sliver of 6% that is our Aerospace and Defense business, which I'll talk about again later. And last year was a really strong growth year for us.

We continue to grow nicely this year because the markets have been up. And we see the wins that we had through the prior year starting to come to fruition. So a nice growth across all of our segments. The first-fit leading as customers are building more equipment, but that stable Aftermarket business is still growing at 16% for us. And again, you could see on the slide, all the end markets we serve and how we segment them by our Aftermarket opportunity and how those end markets look, and then our On-Road, our Off-Road and our Aerospace and Defense channel.

And just for a second to make sure everybody understands what we do in Aerospace and Defense, so we have both commercial aerospace opportunities, military aerospace, and then defense is predominantly ground vehicles. So think an environment track-type vehicle would be creating a lot of dust, is the big opportunity for us there. And what we try to do is take commercial solutions, up armor them and sell them to those unique customers.

So when we think about the business and you think about those both first-fit and Aftermarket channels, we really do it through 2 different channels in our business. So 60% of our revenues go through the OEM channel, right? So this is where we sell a first-fit solution and an OE-branded Aftermarket solution to an OEM customer and partner. This other 40% goes through our independent channel where we're selling the Donaldson-branded products on -- typically to an end user through distribution, and it's -- typically, we're targeting late first owner, second and third owners who've moved off the OE brands looking for more value, but still want a good technology solution with high quality.

So what's unique about those 2 channels? So for us, the value proposition for our customers in the OE, these are big, sophisticated customers. So for us, we're bringing them -- typically, we're solving a problem for them with increased performance, we're selling them a system, we're focused on creating that IP solution which carries and protects that Aftermarket along with that first-fit interface so they can retain the Aftermarket. And really, this is where we leverage what Rich spoke about, our global operations, right? So we need to serve these customers everywhere they operate in the world.

What's interesting about it for Donaldson? Well, for us, we're working with these partners, and we're developing technology. And then when we win a platform, that gives us assurance that we're going to be funded to develop that technology. So for us, it's a business that's very well managed. It protects us somewhat over the long term for these investments that we know we have a market and then ties us with that customer over time.

In the end, we really want to win platforms, and then with that, we want to manage the Aftermarket with our partners to make sure that we both capture that Aftermarket business.

Now if you switch over to the Aftermarket side, what's unique about that? Well, here, we're using a broad product portfolio to sell these end user-focused customers. And they need a broad portfolio because they want to shop their filters with one supplier, so we need to provide the vast majority of what they need. For them, it's really about availability. When they need the part, they need the parts. So we have to be close to where they are and be able to supply that part, either ourselves or through distribution. And we really position ourselves as a premium product. So if you think about the stratification in the market, there is an OEM brand way up here at the top and then there's a lot of price players who live in a continuum down here. We want to be right in that middle where we're pretty uniquely positioned. And because we've been a strong OE partner for years, folks recognize us partly as an OEM brand. So we get to move up into that unique space.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

This is a high-volume business, it's all Aftermarket, it's all parts. So we really like that aspect of it because it's stable and recurring revenue over time. And again, for us, because we operate globally, we're going to price in a local market, but we always want to position ourselves as a premium product.

So I'm going to move over a little bit and talk about our available market in Engine. So we live in a $16 billion market, and I just want to walk you around this wheel from a product perspective of what these products mean and how we think about them.

So if you start at the top, the light blue lube filtration, to us, frankly, that's really a commoditized product. We haven't really been able to find a point of differentiation, but this is something -- because every customer needs an oil or lube filter, it has to be in our catalog. So for us, we've mostly focused this in the Aftermarket. And we don't spend a lot of our development resources on it. We're paying enough attention that if a customer need starts to arise, we could get into that business and pay attention to it.

Hydraulics is the single biggest segment for us because it's very diverse. In this case, it's both mobile Engine and because all hydraulic sits in Engine, our industrial segment. So a large end market for us. And historically, we've been the market leader on the mobile side in the U.S. And what we want to do is reinvigorate that product line. Michael spoke about some of the new opportunities we're seeing in hydraulics filtration around customers being really interested in getting air out of their hydraulic systems. And I'll talk a little bit about hybridization of equipment, and that drives some needs for further hydraulic filtration as well.

So we think we're well focused on this, and our short-term opportunity here is to more globalize this business with a specific focus on Europe. So we've been in Europe with hydraulics. We think we have an opportunity to grow there. And we're going to watch Asia. So far, we haven't seen a predominance of our Asian customers really valuing hydraulic technology. It isn't really where they're spend their time and efforts, so we're not highly focused on Asia today.

At the bottom, it's fuel. And I think you've heard us talk a lot about fuel over the last 5 or 6 years. This is where we've been intentionally trying to grow the business. We saw an opportunity, and Michael spoke about the common rail fuel systems, driving pressures up as they try to deal basically as a way for engine manufacturers to reduce the emissions out of their engine. This higher fuel pressure, frankly, meant they needed more -- a better filter.

And so with the opportunity, we had a very unique media Synteq XP, and we leveraged that media to become -- to move from an Aftermarket player to move into a first-fit position with a number of Off-Road customers. So I think what's really interesting about this is it's been opportunity for us to grow, and we haven't even seen a recurring bid yet on a program we've already won. So we won programs 5, 6 years ago, they're now moving into production. They're starting to ramp up that curve. So this opportunity is only going to grow for us, and we haven't yet had to rebid one of our own programs. So every win globally on fuel is an incremental win for us.

We move around to engine air, well, this is where the company was invented. This is where we are, the clear market global leader in heavy-duty air filtration. And as I said earlier, we're leveraging that position with customers and folks who really value and understand our technology solutions to pivot that over into fuel and hydraulics.

And then Aerospace and Defense, I spoke about, and again, here, we're really looking at taking commercial solutions and up-armoring from those unique solutions in Aerospace and Defense.

So as I move over, Tod introduced the idea of how we're going to drive strategic growth. And for Engine, these really pivot down to a couple of key themes. So at the top, of course, we're a technology solutions provider. So we're going to continue to sell technology-driven products to our customers. On extending market access for Engine, that's really a geography play. So how do we be more where our customers want to be? And I'll talk a lot about that on the next slide. And then finally, from an acquisition standpoint, I tend to think of those as a couple of things. So one, that it gives us a capability that we can use to help sell more products. That's what we did with Filter Minder 3 years ago. We bought a capability in sensing and indication that we knew could help us forward, and I'll show you an example on that.

On geography, we bought Partmo down in Colombia a couple of years ago to gain access -- more access into that vibrant market. And

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Hy-Pro, the acquisition we made 2 years ago, was really both about gaining customer access and the applications knowledge, a capability to sell hydraulics more effectively. So that's how we think about acquisitions in the Engine business.

As I move on now, I want to start walking through that technology story a little bit. So the tractor is really an example of how we think about our business. So if you look at a piece of equipment, whether it's On-Road or Off-Road, there are multiple filters on each piece of equipment. So an On-Road truck typically has 4 to 6 filters, Off-Road equipment might have 8 to a dozen.

So a lot -- it's a target-rich environment for us. So lots of filter on a platform, and we think about each of those unique platforms in a customer's profile as an opportunity for us. And actually, that tractor is 2 platforms because both the tractor and the engine, right? So typically, even if the engine is being made by that manufacturer, they're doing it in a different value stream, so we have to engage the Engine guys, then we go over and engage the platform guys.

And the way we think about a platform like that is there's 3 critical pieces that we really want to be engaged in: the air filter, the fuel filter and the hydraulic filters. So if we look at those opportunities, typically, those are 3 different engineering groups. So we're going to engage those and triangulate the opportunities to understand what's happening. If someone is working with us on next-gen piece of equipment and they're talking to us about the air filter, well, then that tells our hydraulic team that there's a hydraulic opportunity there. If we're working with the Engine side of the business on a new engine, we know, eventually, that new engine typically get strapped into new platforms, new pieces of equipment. So again, we just pivot over to start asking questions about, hey, where is this next -- what's the next -- what's the 6-liter engine going to go into? It's going to go into a skid-steer loader? Okay, we go over and start engaging with the skid-steer loader team. So for us, we use these 3 different filter opportunities to triangulate and create more opportunities to win.

The 2 points I really want to highlight here, again, I talked about over fuel wins the last few years. Over 5 years, we've grown our fuel business 70%. We've moved from an Aftermarket provider to a first-fit provider, and we continue to leverage that even more to gain more credibility in the Aftermarket as more of an OE provider.

The other thing that we will talk about more in the next slide is these opportunities in China and India. So today, we are in China and India and Brazil, [for that matter], really to support our global customers. So we're there to support these big global customers who might be in the U.S., they might be in Europe, they might be in Japan, but they're also in China to be local. So we've been there for more than a dozen years, supporting them with our technology and capabilities. What we're doing is trying to engage the local customers to really expand that market.

Before I go over to the geography opportunity, I just want to spend a minute a little bit on how we think about the equipment advancing and our alternative power plants. So for us, we really expect diesel engines to continue to be refined, especially in the Off-Road space. You think about a piece of equipment like a hydraulic excavator or a bulldozer, that might end up in hundreds of applications in hundreds of different environments, right? They understand that because they've been doing it for 90 years with a diesel engine. So that's going to be hard to replicate all the capabilities that a diesel can do in other engine platforms, all right?

So for us, we expect that need of the diesel to continue to evolve to create increasing opportunities for us in air, fuel and hydraulic, depending on the platform. In the case of this in our On-Road truck, on OE where they're mostly on air, in the aftermarket where they're in air and fuel, lube and others. And if it's an Off-Road diesel engine, we also add in the hydraulic opportunity.

Where we're really excited is when you pivot to the middle on hybrids, and we really see this gaining predominance in the Off-Road side. Today, it's relatively small. And what we've been experiencing with our big lead customers on the hybrid side is what happens is, hybrid equipment gets more complex and it gets more expensive. So suddenly, that equipment has to do more and the space to put your filtration in gets smaller. So some of our natural advantages on shrinking packaging, doing more with our filter, gives us advantage, plus they know we can give them a premium product that's going to perform better on their premium product. And for them, they're going to sell a more expensive piece of equipment to an end user but it's going to lower the end user's total cost of ownership, but what's really going to matter is that equipment is going to have to last longer. So reliability goes up, which, again, drives premium filter requirements.

And so again, for us, this drives the air, the fuel opportunity, but a lot of hybridization is done with hydraulics, so it increases the demand

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

on hydraulics.

And then if you get over to fuel cell, so fuel cell is one of those other alternative energies we see probably mostly aimed at the On-Road market, so pictured here with the next-generation truck. And for us, I want to point out that on a fuel cell, there's still an air intake system. So there's still an air filter there. So -- and in fact, that air filter is more complex than what we would sell to a comparable diesel engine truck today because it not only has to filter dirt, the particulate, but it also has to deal with organic contaminants that can foul the fuel cell mechanism. And so we're going to protect it both with a chemical-based filter and a particulate-based filter, so it increases that demand and requirements of the filter. So it's an interesting opportunity for us in that segment as that potentially changes.

Tod spoke to the industry tailwinds. The same one apply to Engine, so I want to spend just a second on a little more details here. So for us, we are technology experts in filtration. Our customers come for us to solve their problems. So if you think about the first 2 examples there, we took a need in U.S. truck to take these big cans that were hanging on the outside of a truck 10 years ago and put them under hood. They wanted to gain fuel efficiency. And who could do that? Well, Donaldson could do that because we can shrink the package. And when we did that, we created this unique solution PowerCore that is really difficult to manufacture, challenging Rich's group, and that is a barrier to entry to other folks, along with our patent portfolio. So we moved that under the hood, gave our customer increased value, and frankly, we capture more market share and we better retain the Aftermarket to grow our On-Road share.

The second example I mentioned earlier is leveraging the Synteq XP media to win in fuel. It's a really extraordinary media that is more efficient but actually holds on to the dirt under the normal environment of an engine. An engine pulses, it cycles, it vibrates, and when it hits those cycles or it pulses, it wants to shed some of the dirt downstream. And I'll come back in my last case study and show you exactly how we've used that to win.

For us, increasing value on strategic partnerships is really about bringing those customers in and engaging them. I love the picture we chose here because this is one of our labs, and I bet Michael gets somewhat frustrated because there's not a day in Bloomington where we don't have customers touring our labs. That is a big way for us to win. Engaging our customers; bringing them in to work on their problem; showing them our capabilities, which are very unique in our industry; and being very transparent with them on what we're doing. Michael talked about the water and fuel separation we're doing now. Ten years ago, we would've really wanted to have a product that was pretty well perfected before we showed our customers that. We've already engaged a couple of our lead customers with that technology to get the reaction and understand how they would want to see it used going forward so we could iterate that development as we go forward. And we've actually already put product out to field test way earlier than we ever would have into our Aftermarket channel to learn how that actual filter might work in a real world, all right?

Thirdly, and again, Tod introduced the idea that we're going to see more demands for connectivity. So it's kind of natural that we create a lot of value for our OEM partners because they get to sell the parts, the filters for them are parts revenue. And a great way to do that is make sure that they know when they need a filter, that they capture that end user's filter demand, and we want them to do that as well.

So a couple of years ago, we looked back and said, "Hey, we've been making mechanical indicators for years, so how are we going to leverage mechanical indicators into these sensors?" And we looked around and saw that Filter Minder, a small company in Iowa, was already doing this. So rather than try to organically do it, we looked at them as a place we could create a center of excellence, really focus them on having great sensing technology and leverage that into our OE base. So that's what we've been doing with it. And again, I'll have a case in the end, it's a little bit different. We continue to be very focused on selling these opportunities to OEMs, but OEMs are challenging, right? They take time. Filters are probably fifth on the list that they want to connect, not first or second. So we'll partner with them and our 10 or 12 global lead customers on this and a lot of engagement on, but nobody has really acted very far yet. We right now are selling 3 sensors out to OEMs. Lots of opportunities going forward, and every one of our air platforms, we're actively engaged in selling that to our customer. But we see an opportunity to pivot and go to the Aftermarket with this, retrofit some solutions and gain practical experience with it. So I'll explain that in a bit.

And then fourth, this need for increasing standards around the world. And this is really clearly about emissions and emissions for us in the developing world. So you think about what we've gone through on -- in the U.S. with our emissions requirements and in Europe and in Japan, meeting these emission standards, this drove an increased need for filtration. Same thing is currently happening in China and

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

India, and we're in a really great position to leverage that. But I want to be clear, right, there's a great need for these increasing standards and that's going to drive demand, but our current customers come to us on every single bid opportunity with an increased specification for their current filter. So if we bid a tractor 5 years ago and we're bidding a new tractor now, that expectation of that filter has moved up. And that's a perfect environment for a technology-based company because as those specs go up, we're the ones who can solve those problems.

So let's just talk a little bit about that connected filter example. So again, we're working with our OEMs, really engage with them. Actually, it's a great product just to get us into a deeper relationship because we're really interested in it. And we've been working through it, and we see a number of unique opportunities around this intelligent filtration or connectivity opportunity. So we see an opportunity put in unique identification to the filter. So the system knows it's the OEM genuine filter. So that's really important for a lot of our customers, especially on bigger, more expensive equipment.

Secondly, we see an opportunity just to connect into their infrastructure. And if you think about it, we want to win an air cleaner or hydraulic system, but one of the ways we could get beaten is if somebody had a better way to connect it to the system, which is another one of the reasons we triggered that Filter Minder opportunity so that not only were we leading in the filtration technology, we wanted to lead in the connected filtration technology.

And then thirdly, it's just that overall infrastructure of capturing that Aftermarket and then understanding what's happening with the filter to get back at Michael's point about smart filtration. What's happening to filter? How do we deliver a better filter over time? We want to get that data so we can continue to improve our performance.

So in this case, we actually went into the truck market in the U.S., focused because we need to get practical learnings from this opportunity. So recently, about 3 weeks ago, we launched a new product, and it basically takes the current mechanical indicator, which is on every single truck in North America, you unscrew it and you screw on a simple sensor. That sensor connects if they have an existing telecommunications system or telematics system in the truck. So we partnered with one of the lead partners, and for them, they love it because it provides more information to the end user for their system. So we piggyback off this existing telematics system, we get information and we enable the end user to understand where's their filter at.

For a trucker, there's 2 things that Michael spoke to. One, they want to maximize fuel efficiency, and a dirty filter reduces fuel efficiency, requires more power. Secondly, the last thing they want to do is have a dirty air filter that needs to be changed while they're out on the road. Our air filter is a simple maintenance item for them. They do it typically once a year. They want to tie it to another major service because they're going to take the road -- the truck off the road to service it anyway, they want to combine those 2. So they can be looking at where that filter is at and either pulling it in early to do it with the service or pushing it out and maximizing it to get it to another service. So for us, we think there's a lot of value for customers here, and we can learn a lot about how the filters are behaving. So this is a product we've just launched in the market here in the past month.

So let's switch over now to that geographical opportunity for us. So the map here is really where are global OEMs producing equipment. So the U.S. is 15% of the global equipment production; Europe is about 30%; Latin America, mostly Brazil, 6%; and then APAC's in at nearly 50%. So Asia is really where a lot of the world's equipment is made. And within Asia, it's really today about China and Japan. We have really strong presence in Japan. We're the market leader in air filtration, and so we see opportunities there still on the fuel side, and that's my last case study.

But in China, we're there to support our global customers. And historically, engaging local customers in both China and India has been challenging. A great example for me is we had a tractor manufacturer in India who was shipping new tractors into the U.S. The U.S. dealer network came to Donaldson and said, "They've got 1950's air filtration technology on this tractor, our end users won't tolerate it. Can you sell us an air cleaner we can retrofit?" So we then went back and used this to go back to that Indian manufacturer and we gained a 10-year development agreement with them to switch their technology so that they could export the tractors with modern air filtration. A great way to engage the customer that came from an Aftermarket win in the field.

So we want to be there as these customers move up the curve. So if you think about it, we're there with our global customers with our

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

technology capability and our operational capability on a curve. We want that curve intersection with these local customers. And what's driving that is either those needs to export or these environmental requirements that are going to push their engine technology up where they need better filtration. When those curves intersect, that's where Donaldson wins with local customers in China and India.

And before I leave this chart, I do want to point out another big opportunity for us. So for the last dozen years, Latin America has really been our Aftermarket growth champion around the world. So we've built a really dynamic model in Latin America where we service these customers, we've built a lot of capabilities and tools around serving customers in a developing region. So now we could port those capabilities out of Latin America into developing regions like Asia and Africa and using the same tools we've developed from the teams in Latin America. Selling into a developed region is a really different skill set than selling into a developing region. So for us, that's been a really unique opportunity to leverage the capability of one of our teams and take it around the world and utilizing these global processes more and more.

So I'm going to move over now to 3 case studies that talk about how do we win in this business, and these are all examples, with the exception of the third one, of kind of low-level examples of how we win every day, right?

So in this first case, we had an Off-Road customer who had a new platform. This is about 6 years ago and we did not win this opportunity. And we really viewed that as that's a loss for us. We want to win every one of those. But in this case, with this win, we would have been at like 92% of their air filtration share globally. And they just didn't want us to have that high a share, so we lost that piece of business so that they can keep a little bit of a competitive edge in the business. So we lost it, but in partnering with that OEM and trying to win the business, we understood this need was going to come to the market so we released an aftermarket offering in our independent aftermarket under the Donaldson brand.

Several years later after release, the OEM realized they were having trouble with our -- with the competitor's filter. The fuel was leaking. It wasn't working real well. They had some challenges with it. They came to us and said, "Hey, do you guys -- would you guys know how to solve this problem?" We said, "Yes, we know how to solve the problem, and in fact, we have a product in the Aftermarket today to do that." So the customer actually took through then our aftermarket product, we rebranded it for that OEM, selling it through their aftermarket channel. And as that partnership, because we had to -- because it looked different than the original part, we had to train their dealers on why this part was better. So we partnered with them, built some videos, did some dealer training to help their dealers take on board this new product, which helped us sell more.

But through that codevelopment process, they opened up the opportunities for us to rebid the first-fit air cleaner and bring in a new IP solution that would protect that solution for at least another 10 or 12 years. So we had to rewin that business, and we now today share about 92% of their air filters across this family product globally. But again, as we were doing that development work, deepening that relationship, they're looking at their next-generation family of these products.

And as we're in there working with their engineers, their engineers approach us and said, "Hey, we're going to modularize this family across 5 vehicles. Could you tell us how you would think about how you would do that from the air cleaner perspective? What would that look like?"" So we codeveloped the specification with that customer for their next-generation tractor. And that's great because now when it comes to bid, we'll intimately understand exactly how to attack that opportunity, and that gives us a better chance to win that business. Deepening the relationship, solving a customer's problem, and giving us an opportunity to win in the future.

Move over to another example, and this gets back at Michael's example of real-world test dust. So we had an agriculture customer who was using our PowerCore. So you can see the filter here in the middle, it's covered with this fine fuzzy dust. Well, that's material that should never get to the filter. We really cannot filter that. And so something is wrong in their system. And we provide some of the system and then they do some of the system work in this case. So the customers came to us and said, "Hey, we're having trouble in this challenging application," think it might have been Sunflower. And it's a unique application and they just couldn't solve the problem. So we started looking at the system, and while we were looking at the system and starting to iterate designs that we could work on, we realized that the test dust, that Arizona fine road dust was not going to represent what the customer was seeing. So we created a unique ag dust to represent what an ag customer really sees.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

So we took that Arizona road dust and we left it in at 60% of the base. We took some chopped up seed and we made that about 30% of the base. Then we added in cotton fuzz and we added just a little bit of chaff, wheat chaff in. And that weird, complex ag dust, we started to test these solutions for this customer, solved the problem, educated their engineers. And now we have a proprietary way that for ag customers, we accelerate our real-world simulation so that we can develop -- we do it, as Michael said, online in a computer cloud, we stimulate the filter. Then we build a filter and we test them so we can validate them for the customer. Then the customer sends them in the field test so they can validate them in the real world. We want to make that middle test as few and as quickly as we can, and unique dust like this really helps us do that. So again, deepening the technical relationship, getting more engagement with the customer.

Now let's move over to the fuel side. So I said earlier we have really good market share in air filtration in Japan. Now we were in the right place at the right time 50-plus years ago, really have a very strong market share there. But one of the challenges with that market share is they don't want to give us their liquid opportunities. They aren't interested in us talking about hydraulics. They haven't been interested in us talking about fuel because they manage that purchasing by splitting up these product segments. So we frankly had deprioritized Japanese OEMs as we moved out on the fuel filtration opportunity.

We had a Japanese OEM who had engines showing up in the U.S. and they started seeing injector failures. So with those engines, they came to us, one of their service people, and had seen something about Donaldson's XP media. Came in, and said, "Hey, do you think this could solve our problem?" So we, of course, felt like it did. So we asked them if we could get an engine and we could test it. So we brought the engine in, and this chart up here is a representation of what we found. So the red line is our competitor's filter. And what you see is it rises very highly. And this is the amount of dirt that's going past the filter to the injector. So that's bad, right? So the red line rises very quickly, more dirt going downstream, and then you could see that pulsing effect I mentioned. So as it pulses, it sheds more dirt. And then it comes back down as it gets dirty, and then it pulses and goes again. But that was not meeting the customer's needs. The blue line below it is the Donaldson filter. Half the dirt going downstream. And yes, we see some pulsation effect too, but it's much more compact than what our competitors see.

So with this information, they went out to field test. They found that, in fact, the Donaldson filter did work better, did solve their problem. And so we were able to win their aftermarket opportunity on this engine set here in the U.S. But while we were doing that and while we were doing this testing, we have a unique test that simulates the real-world test. So we have a test stand back in one of our buildings that not only tests the fuel like we would on every other filter, but it's on a vibration stand and we shock it. And we did as we went out to hundreds of vehicles we've tested over 50 years, got those vibration profiles. So we have one for a Class 8 truck, we have one for a bulldozer, we have one for an ag tractor. And we loaded in, as we run these fuel filters, so we could see what is going to happen in a real-world environment.

The Japanese engineers from the OEM in Japan were shocked by this and loved it. And then they engaged us on helping them to develop their next-generation engine, and we were able to win that engine. And what's really good about that engine for us is we're able to take over what we call 80-millimeter product, there's 2 fuel filters on each engine, so we were able to take our -- one of our 80-millimeter products from the current engine. But they wanted more capacity on the second filter. They wanted a 93-millimeter, and we didn't have that product available. So this customer is our lead customer on tooling up that 93-millimeter product, which then we can take out and sell to other customers. Again, reducing the risk to Donaldson for developing that second size.

So a really great win for us. And also -- for us, with Japanese customers we found, you got to have one to get others. So now this is our lead Japanese OEM on fuel. And as soon as we have this in production, we're going to take it out, they'll see it, they'll know it's the Donaldson product, and we're going to go out to those customers who are already customers today on air and engage them on how we can do more with them on fuel filtration.

So talked a lot about how we're going to win in this business, why we're excited about it, why we're confident in it and what do we see going forward. So I think from a revenue standpoint, we do expect that our markets could cycle down, right? We've been on a great growth curve the last couple of years. My business is cyclical, that's the nature of it. So we're looking forward with a little bit of conservatism and saying, we'll see growth at 2% to 6% CAGR for the next couple of years. So that gets us above $2 billion, maybe a size $2.2 billion. And on the margin side, we're going to grow incremental margins up 90 to 170 basis points, up to 14.8%, up to potentially size 15.6%.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

And again, a couple of key drivers of that. We're assuming some leveling in our end markets. But typically, our aftermarket annuity continues. It's more stable, and it will continue to grow faster than GDP. So that's what's going to power the growth. We also have some incremental wins that are going to come on stream, that OEM I just talked about with the fuel opportunity.

And then finally, we see that margin expansion coming from what Rich spoke to earlier, our operational team refocusing back on cost reduction, our product teams refocusing back on cross reduction and our continuing efforts to always drive our position as a premium product provider so that we're always working on pricing.

In our aftermarket, we very aggressively manage prices on an annual basis. But in a case like this where we see really aggressive commodity increases, in some regions, we might have raised our prices last year 4 times. We have to protect the margins in our aftermarket business where we control the pricing more.

On the OE side, it's a negotiation, and we have to value that partnership and protect it, but we also want to get paid for what we're doing. So I think that's a bit of how we see that going forward.

So finally, the key takeaways. I bet, by now, you could help me with them. So again, we're a technology leader, and these deep customer solutions or relationships, help us sell this new technology. Can you imagine for these fairly conservative OEMs, they don't want to see the new technology all the time, but our relationship over up to 100 years allows us with confidence to sell the product.

Secondly, we're leveraging our position in air to sell more hydraulic and fuel. Thirdly, we continue to be focused on these OEM platforms and delivering solutions to them. Fourth, we're focused on growing our independent channel at a faster rate through focus on a broad portfolio and these strategic accounts who value our capabilities a lot like a large OEM does. And then finally, this opportunity to grow our share in developing regions and as our global customers increase the demands on filtration.

So thank you very much for your time, and now I'll be turning it over to Jeff Spethmann, my partner, who runs our industrial business.

Jeffrey E. Spethmann ***Donaldson Company, Inc. - SVP of Industrial Products***

Thanks, Tom. Good morning, everybody. I am Jeff Spethmann, and my job is to grow our Industrial Products business. So the guys talked about our long-tenured employees. I'm actually a Donaldson boomerang. I started my career with the company 30 years ago as a design engineer, and for the first 12 years, served in roles in engineering and operations and leadership and then I left. I spent about 12 years outside the company, running small manufacturing firms for private equity owners.

I came back to Donaldson 6 years ago in our Engine business and have been in my current role for the past 3 years. So I'm a boomeranger and I'm a storyteller. We have 100 great stories to tell in the industrial segment but I only have 30 minutes today, and I actually think Tom might have used 5 of them. So I'm going to focus on 5. And from those 5 stories, I want you to take away these key points. First, key point number one, Tod did a great job covering this for me, so I just want to put a bow on it.

In our GTS business, we've repositioned our company to match the market opportunities. Our reliance on large turbines is greatly reduced. We're growing our Aftermarket business there, and it's improved our profitability. GTS is contributing to the positive results of the industrial segment. And I'm going to share a story about what we're doing in that business to grow our aftermarket position.

Second, across the rest of the portfolio, we've got a really broad base of solutions that we bring in to a wide range of markets. That base of innovative solutions has enabled us to grow our installed base of customers, okay, across markets and around the world. We continue to grow that base every day, and I'm going to share a story from our dust collection business that illustrates how we're using innovative products to win market share every day.

Third, we're continuing to invest and expand our portfolio. Adding services enabled by connected solutions, adding new products that deliver a differentiated performance to get into new markets. Our launch of LifeTec process filtration for the food and beverage market is a great example of this, and I'm excited to tell that story.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Fourth, we're doing a number of things to increase the breadth and the depth of our customer relationships. We're adding to our direct sales force in certain businesses, certain regions. We're working to strengthen our channel partners, and we're leveraging our e-commerce platform. One of my favorite stories about sales channels is the work that we're doing to develop strategic accounts, okay, large companies with global operations. So I want to share a story about that.

And then finally, probably our most exciting initiative for a long-term growth is the investments that we're making to develop connected solutions. This is so powerful, it's -- we're really early on, but it so powerful for us because it creates new value for our customers and it enables us to grow our service businesses. So I want to tell you where we are with that effort and then how it fits into our growth strategy.

Before I get into those stories, Brad gave me a handful of slides that I have to go through. First of all, just a snapshot of our segment and our performance in fiscal year '18.

We delivered strong operating margin, nearly $900 million in sales. We did that by serving applications across a wide range of markets, and you can see those markets. We consolidate these businesses into 3 groups. First, Industrial Filtration Solutions, or IFS, where we're providing first-fit solutions and replacement parts for dust, mist and fume collection; for compressed air filtration; and for process liquid and air applications.

Second in our special applications group, we have a business in disk drive filtration, a business in semiconductor filtration, we sell PTFE roll goods, and we've got a growing business in integrated Venting Solutions.

And finally in our Gas Turbines business, we provide great first-fit solutions that help improve operating efficiency, for both small and large turbines and we provide a wide range of replacement parts for our filter houses and our competitors.

You can see the results that we generated in FY '18 kind of by group. We actually managed down our sales in GTS, Tod talked about that, by reducing our exposure to large turbine projects and working only on the projects where we could make a profit.

We generated good growth in our Special Applications businesses and we actually generated great growth in our Industrial Filtration businesses. We were able to leverage some of our investments into a little bit of a market tailwind. A good year and we're very proud of it.

Tod did a nice job kind of laying out what our synergies are across the whole corporation, right? Deep technical expertise, 100 years of filtration experience and our global footprint.

People ask me often if I can describe the synergies in our industrial segment? And so I'd like to spend just a minute talking about that.

On the IFS side, the Industrial Filtration Solutions, if you walk through one of our customer's factories, you're likely to see solutions from 3, 4 or even 5 of our industrial businesses. The breadth of our product portfolio and the solutions that we can offer provide great synergy across our customer base.

In our Gas Turbines business, it's really about leveraging technology and technical expertise. A lot of the technology used on a gas turbine filter house is the same as we use in a dust collector, so we're able to leverage some of the developments Michael and his team are coming up with.

You combine that technology with deep expertise in airflow management, and we're providing solutions that improve the generating efficiency of a turbine.

And finally in our Special Applications businesses, it's really a story about advanced materials combined with deep, deep technical expertise. Michael got up here and did a great job talking about chemistry and physics and kind of the foundational sciences. This is where that comes to play, where we're delivering differentiated performance in very challenging applications, dealing with particulate filtration, dealing with chemical filtration, vapors and humidity, in critical environments from inside of a computer disk drive, to the

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

operating environment around a track edge laser manufacturing semiconductor chips. Kind of a cool business.

When you look at the portfolio overall and the segment overall, it's about technology, the breadth and reach of our applications, and our global reach. So there is synergy across the industrial segment, it actually drives for us some strong competitive advantages. Another one of my required slides.

So our number one, a full suite of filtration solutions. In each case, we're differentiating based on performance, right? The technology that Michael brings, we complement that with strong application expertise so that we're sure we recommend the right solutions and that we ensure that we're delivering the performance that we've promised.

Second, on the industrial side, we leverage our global footprint. The operations footprint and the reach of our sales network to deliver top-tier service to our customers in every region where they do business.

And in our Aftermarket businesses, especially on the industrial side, having product available immediately is a competitive weapon for Donaldson Company, we win business based on product availability.

Third, I talked about the -- you're going to hear me say broad portfolio like 17 more times. I talked about the breadth of our portfolio of solutions. It gives us a lot of kind of entry points for conversations with customers. And once we're in there, we have bandwidth to solve more and more challenges for them. That's strong.

The introduction of our connected solutions platform sort of enables us to better leverage our application expertise and it really deepens our discussion with our customers.

And finally, our global e-commerce platform, which is new to the industrial side of the company, ensures that we are accessible to our customers and easy to do business with.

Finally, the depth of our technical expertise, Michael gets up here and blows my mind, along with the depth of our customer relationships, puts us in a position to get into filtration challenges that other companies can't. Protecting critical environments, getting into complex applications like semiconductor manufacturing.

We've been able to build profitable businesses in these niches. And we've been able to leverage technology from one niche to the next, to the next. For example, the technology that we're using to grow our Integrated Venting Solutions business, looks a lot like the technology we use in our disk drive filtration business.

Great competitive differentiators. I'm going to talk a little bit in my stories about how we leverage these to compete. But first, I want to talk about where we compete.

So Tod's slide showed $65 billion. I've taken $22 billion of that slide into the scope of my presentation. $22 billion is our estimate for the total market, for industrial and process filtration products and services.

Historically, we've focused on dust, mist and fume collection. Basically that's $6 billion industrial air wedge.

Over the last few years, we've introduced a line of process filters for air and liquid applications to get us into the food and beverage market. And we've launched our connected services platform to get us into that service ring on the outside.

Those 2 moves have increased our addressable opportunity from $6 billion to $11 billion today. And that push into food and beverage gives us a path to those other markets in the future. Now Tod and I are still talking about timing on that.

So this is the third time you've seen this slide. The industry tailwinds. I want to tell you how they play in the industrial segment and hope that the third times a charm.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Increasing standards around the world. Environmental concerns have taken on a higher priority. And in a lot of countries, that drives government regulation, right? Like California. Government regulation sort of changes the equation for how our industrial customers think about filtration systems. They value high-performing filtration systems when they have to comply with regulations.

We are really well positioned to deliver that performance.

Jumping to technology needs as our customers start thinking about filtration performance. Our technology stands out above our competitors. And we've continued to invest in extending our technology leadership and introducing an expanded offering of our solutions.

We've seen a clear trend, especially with large companies, towards standardizing their filtration solutions. You can imagine a large -- well, I'll share a story about a large [Agriculture] (corrected by the company after the call) products company. They've got operations all over the world. They want to standardize their filtration solutions, ensuring that they're complying with regs everywhere, and that they're leveraging operational efficiencies.

Donaldson's kind of deep application expertise builds confidence with these customers. And our unique ability to engage with them globally positions us as a great partner for them.

And finally, connectivity is one of the big themes of the day, right? As the cost of connecting equipment has come down, it puts us in a position to connect our equipment so that we can monitor performance over time, and ensure that things are working.

We're well positioned to deliver these services. And I look forward to sharing that story.

Okay. This is where I get to start telling the stories. Of course, our growth initiatives align with these same 3 themes. I'm going to tell you a story of how we're using innovative products that build market share in one of our existing markets. Going to tell you a story of how we're using innovative products to get into new markets and expand our addressable opportunity.

I'll talk about strategic -- developing a strategic account. But in addition to that, we're doing a lot of other things to expand customer access, adding to our direct sales force, building strong channel partners and leveraging e-commerce.

And then we always look for opportunities to accelerate our progress with acquisitions that are aligned to our core strategy.

We win share with innovative products. In our dust collection business or industrial air filtration business, we launched a platform of cartridge dust collectors in our fiscal year '15, called the Downflo Evolution. And we've continued to build on that product launch in the years that followed.

The design of the Downflo Evolution brings customers great performance. In a much smaller package and with lower energy consumption.

We had a great win recently at a major tractor manufacturer, where we used our Downflo Evolution combined with our proprietary Ultra-Web filter media that deliver a performance advantage that the customer could measure and appreciate. That helped us [unseat] an incumbent competitor. Cool story. $800,000 first-fit order, and we're going to support this equipment with proprietary replacement parts for the next 10 to 15 years.

I think this is a great example of how we're using our innovative products to win share every day in our current market. And it's helped us to build an installed base.

We've got worldwide, we've got a 160,000 Donaldson dust collectors installed and operating, at 32,000 customers. And we enjoy the Aftermarket business from those customers.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

The relationship with those customers gives us an opportunity to move into those other applications, right? Compressed air filtration and so on.

Well, great story about how we're using innovative technology to deliver a performance advantage to our customers to win share everyday and grow our installed base in our current markets.

I've got another great story of using technology to win Aftermarket business in our GTS, our gas turbine aftermarket.

And again, if you look at gas turbine overall, we've reduced our dependence on the large turbine segment, turns out, that's where the issue was. We've increased our focus on growing our Aftermarket business. That's where the opportunity is.

Michael talked earlier about innovative filter medias. One of those for us is Synteq, our Synteq coalescing media. And Tom actually highlighted that in one of his case studies. So it's a media that we use across the corporation. In the industrial segment, we use Synteq as kind of the backbone of our proprietary Turbo-Tek filters that are designed for Gas Turbine Systems that run at high operating hours, 5,000, 6,000, 8,000 hours a year.

We had a great win with these Turbo-Tek filters a couple of months ago, at a base load generator in Southern California. This is a turbine that's been in operation for 15 years. The filter house on this turbine was actually provided by one of our competitors. But the customer was experiencing short and unpredictable filter life. So they would have to stop expectedly and change filters. Unplanned maintenance cycles, it's not a good thing.

When they installed our Turbo-Tek filters, they saw their performance stabilize and improve. Reduced maintenance cycles, more predictable, it's a good way to run a power plant.

This is a nice order for us, $125,000 aftermarket. The customer has additional installations that they plan to change over to Turbo-Tek based on the performance improvements they've seen. We introduced Turbo-Tek about 3 years ago. It's a family of filters. In that 3 years, sales have grown to about $6 million. And one of the cool things about that Turbo-Tek family, it's a premium product. These filters sell for 2x to 3x the price of a competitors' substitute.

But for me, this story is -- I get 2 points out of this story, right? It's a great example of how we're leveraging Donaldson innovative technology to add customer value and getting paid for it 2x to 3x the price of a filter. But the customer sees that payback in about 6 months, based on improved power output from their turbine.

It's also a great example of what we're doing to generate share growth in the profitable side of the GTS business in the Aftermarket. So good story.

We use innovative products to get into new markets. In our compressed air filtration business, we offer a full line of dryers and filters for industrial compressed air. Some of our customers in this business are in the food and beverage industry. And we saw an opportunity to move downstream from the industrial air into process air and liquid applications. Okay, so to understand the difference between industrial and process, it's helpful if you think about our customers' product.

Processed air or liquid is actually an ingredient of or in direct contact with the customers' product. It's the water in the bottle.

So we introduced our line of LifeTec process filters for air and liquid applications in fiscal year '16. And the thing that's different about our LifeTec filters, they've got a unique design that provides improved strength and integrity for our customers and also can provide increased product throughput for them. Michael's curves about pressure drop versus efficiency versus throughput. We've got a better trade-off.

Our global distribution reach also ensures that we can provide unmatched availability of this product, which is really important because

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

the food and beverage customers tend to require replacement parts unexpectedly if they have an upset in their process or if they're changing batches.

So we used these advantages to win a new customer recently, it's a brewery in the United Kingdom, where we're providing a trio of LifeTec filters for a multistage cold filtering process. And -- as the story goes, when the customer validated our filters in this critical application after they got through that validation piece, they chose to work with Donaldson based on the improved product throughput that they saw and our ability to deliver filters from stock. So this one customer provides us with about $200,000 a year in Aftermarket revenue in the food and beverage industry. There are thousands of opportunities like this around the world.

Since we introduced our LifeTec line in FY '16, we've done a nice job growing the business, 20% per year. We've got a strong foothold in the food and beverage industry, which is great. And we're continuing to invest in our capacity and capabilities to support the growth of this business.

I think this provides us a great example of what we're doing to use new products and our technology advantages to increase our addressable opportunity.

I told you I'd tell you a story about strategic accounts. I think of all the things that we're doing to increase our sales presence, this is potentially one of the most powerful. We're working in one case with a global ag products company. And their objective -- they have operations all around the world, and for them, industrial air filtration or dust collection is kind of a question of safety and compliance. But they're kind of pushing a program to try to standardize their solutions around the world. So that they know they're in compliance, that they're protecting their employees. And they want some operational efficiency out of it. So we launched a program with this customer to go site-by-site and perform assessments of their current situation. And then we're following up with recommendations and proposals to help them meet their goals.

This customer aligned with Donaldson because they've got confidence in our application expertise and because we are uniquely able to engage with them at their facilities around the world. We can provide them with local support that understands the local regulations and speaks the language of their local facility managers.

So we're in the early innings with this customer. But so far, just this fiscal year, we've delivered $3 million in first-fit dust collection equipment, and we're going to support that dust collection equipment with Aftermarket Products and our services for years to come. It's a great story. We're really excited by the long-term potential of this relationship. And we're developing a number of relationships just like this.

So this is the slide before my favorite slide. But I think our push to develop and grow our service businesses anchored and enabled by connected solutions is probably one of our most powerful longer-term initiatives. And I want to tell you where we're at with this and then I'm going to get to my favorite slide and tell you how it fits into our strategy.

Our team has been working to validate the technology that we're using to connect our dust collection solutions. And maybe more importantly, they've been working to develop the business models that we're using to deploy this technology in a way that we know creates value for our customer and generates profitable growth for our company.

Kind of a cool story, in one of our pilot installations, we've got a remote monitoring system on a fly-ash dust collector for a coal-fired boiler. Our system identified an unusual spike in the pressure drop across this dust collector and sent an automated alert to our technical team. Our team, our service tech, responded by reaching out to the operator and actually using the insights from our connected dust collector, identified that they had an upset condition in their boiler that sent a slug of fly ash to the collector. So our technician was actually able to walk the customer through a fairly simple cleaning cycle and the system returned to normal operation.

The cool thing for me is, our remote monitoring system on a dust collector found a problem further upstream in their process, and our technician was able to fix it with the customer over the phone, saved the customer about 3 days of unplanned downtime and the related maintenance costs that would've gone into kind of recovering from this upset.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

So a cool story about what this is capable of, we've launched a subscription-based remote monitoring service. We launched it actually last week in Europe and back in November in the U.S.

And there are 2 options. A self-serve option and a full-serve option. In the self-serve option, the customer actually monitors their dashboard and alerts that they get if the dust collection system requires attention. And then the customer will go and perform their required maintenance. In the full-serve option, Donaldson watches the dashboard, Donaldson gets the alerts and if the system needs attention, we'll dispatch service people to go perform that service.

So we launched -- just recently, we recorded our first revenue in March. That's a good milestone. The reaction from the marketplace has been encouraging. Challenging for us to put sales projections on this because it's brand-new, new to us, new to the world. But we're excited about it.

Our team is working to develop use cases for additional applications. And we're working to perfect the hardware that we're going to use to install into our first-fit applications. So these initial offerings are for collectors that are already installed in the field.

This is a powerful tool for us. Connected solutions enables us to deliver new value to our customers. And it kind of changes the conversation. And it unlocks an advantage for us to plan that service business.

Okay, this is my favorite slide. I gave you a heads up it was coming. I talked about our competitive strengths, right? I talked about our innovative products, our big installed base, right? I want to talk to -- and kind of tie all of those things together by describing this for you, this is our growth model for the industrial business.

Historically, we've focused on delivering products. Best-in-class products that offer differentiated performance. Products. In fact globally, we are recognized as the leader in many of our industrial applications.

Today, with the investments that we've made and that we continue to make in our team, in our technologies and our capabilities, we are positioned to deliver solutions. Built on that foundation of best-in-class products, but filtration systems that improve our customers' operations.

In the future, we're going to deliver outcomes. So what's an outcome. It's a best-in-class filtration product built into a system, connected. So that we can monitor performance and optimize it over time. So that we can deliver to our customer improved productivity and cost efficiency. Lower the cost of their filtration, right?

In fact, they can forget about their filtration. We'll take care of it. And they can focus on the things that make them money. They can focus on their core business. So this is our vision to grow the industrial filtration business over the years ahead.

For me, this is really, really powerful because this builds on our competitive advantages, right? A lot of people could put this slide up, I don't think anybody else can do it. It builds on our competitive advantages. It leverages our applications expertise. It increases the value that we can bring to customers and it really changes the conversation with our customers. In fact, it changes the game. That's why that's my favorite slide.

Okay. So I talked about our businesses, our opportunities and our growth plans. I want to finish up with our financial targets, returning to the compulsory slides.

We've got great growth plans in our industrial businesses, right? In fact, I think we're going to outpace the market by 2x to 3x. So that growth will be tempered a little bit by slower growth in the Gas Turbines business. And we're projecting a mid-single digit softening in our disk drive business. We roll all that together and we expect to deliver between 4% and 8% CAGR on our top line over the next few years.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

We're also going to expand our operating margin. 180 to 260 basis points of margin expansion as we shift the mix of our products and leverage our operating expenses.

So bottom line, improved profitability on growing sales. That's my job. So I look forward to that. I hope it's come through. I like talking about industrial businesses, all right? It's a lot of fun, I like what I do every day. I want to end with a quick summary. Of my key points.

Number one, we've got a broad portfolio. We solve a variety of filtration problems across a wide range of end markets giving us a great installed base and we're growing that base every day.

Number two, we're continuing to invest to introduce new products and solutions to expand our addressable opportunity.

Number three, we're investing to increase our sales presence, both in person and online, to drive penetration across our markets and around the world.

Number four, the introduction of connected solutions and services is a big deal. It creates new value for our customers and deepens our relationship and it unlocks for us the opportunity to grow our service business.

And finally, we've wrapped all of these investments and initiatives up into a, what I would call a game-changing growth model, that leverages a foundation of best-in-class solutions, our applications expertise, our global reach, local touch, changes the conversation with our customers and moves us from products to systems and solutions to outcomes.

So thank you very much. With that, I'm going to turn it over to Scott Robinson, our CFO, who will give you an overview of our corporate financials.

Scott J. Robinson ***Donaldson Company, Inc. - Senior VP & CFO***

Good morning, everybody. So I have 12 slides left and then Tod has 1, so we're getting to the end. I know it's been a long time so I appreciate your energy and your listening.

I want to start -- Tod brought up the MS 150 at the beginning and in that triggered a story in my mind. So when I was -- I've been at Donaldson 3.5 years. When I first got here, my wife and I met Jeff and his wife and they were talking about this MS150 thing and my wife's a big workout person and she's like, "We've got to do it." And then everywhere you go at Donaldson, like everybody's saying, "You got to do the MS150". Okay, so I'm like -- all right, I'll start training. I think I rode behind Jeff about 50 miles blocking the wind for me and then I think I had about 6 of those pulled pork sandwiches once I got to see Tod about 2:00 in the afternoon. But I did make it, I'm a two-time survivor. I'm -- so I'm proud of that.

A little bit about myself. I spent 11 years at Coopers & Lybrand and then PricewaterhouseCoopers. I worked at Minneapolis, I worked here in New York City, I worked in Düsseldorf, Germany, and then back to Minneapolis. And then I went to Deluxe Corp, there I was Director of Internal Audit and Assistant Corporate Controller. And then I went to Imation. Imation is a spinoff of 3M, and I worked 11 there -- 11 years there with my last job being CFO. And then 3.5 years ago, I came to Donaldson, and I really feel Donaldson -- coming to Donaldson has been a blessing to me, I'm really grateful for the opportunity to work there and I really enjoy working there.

So I want to talk about 5 things at Donaldson that really excite me. When I first got there, I would say Donaldson was really an income statement-driven company. We really focused on profit and how much we can generate. And since then, we've tried to refine our processes to include a little bit more about working capital and invested capital.

And I think we've made good progress there. When I think about the 5 things that really excite me about Donaldson is we are a diversified portfolio of filtrations businesses with strong recurring revenue streams and a profitable growth.

We can make investments in R&D as Michael said, which can be leveraged across many of our products and deliver strong ROI as he showed.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Thirdly, we spent 4 years in putting in Oracle R12. That's quite a project. We're in now, we're on our 11th quarter, and so we feel good about where we're going. We have a lot of opportunity to globalize, optimize, and standardize our processes. Those aren't just words, I have many examples across finance, customer service, IT, where we've really improved our processes. We're also receiving better real-time global information from the system that helps our decision-making process.

I'm on a mission to drive $25 million in savings from the system. So we spent over $90 million. We want to return a $25 million out of that system by reduced processing costs. And as we budget our functions, looking forward, we already know their targets and they do as well. So they're engaged in this part of the goal.

Fourth, the last year, when we did our plan, Tod, myself and Angie, our leader of FP&A went around the world. And we spent 100 hours in meetings reviewing department expenses. You might think 100 hours of department expense reviews is kind of like sitting on the dentist chair for 100 hours, but I actually found it fun and very interesting.

Our philosophy was a zero-based approach, whereby, we really only wanted to give the functions and the operations, the expenses they needed to operate. And we wanted to carve out expense dollars for investments, such things as venting, process, connectivity, things like that. And we were able to find expenses to put on our growth investments that help improve the return of the company. We're going to complete the same process this year in June, and I can hardly wait for that trip.

Lastly, Donaldson has a very strong record of returning cash to shareholders. So we've been paying dividends for 60 years and then many years of share buyback. And that's a very strong track record that I would like to continue and I'll talk more about in a bit.

Moving to our financial performance. Over the past 3 years, Donaldson has experienced very strong growth. We've grown sales 23%, and we've grown EPS 32%, while generating annual cash conversion of nearly 100%.

Further, we grew our operating margin by 100 basis points over those same 3 years. And that's while experiencing all the freight and raw material inflation you've heard about today.

Our ROIC for fiscal '18 was 18.6% and ultimately, ROIC is a key figure as you have to think about the capital you invest for the profit you generate. As Michael noted in his presentation, our ROIC grew from 14.3% in 2016. We're very pleased with that improvement and the investments we are making will deliver strong ROI.

Moving to liquidity. Our approach to liquidity is to maintain a conservative balance sheet with a targeted net debt to EBITDA ratio of plus or minus 1, but with the investment we made for BOFA last quarter, we sit at 1.1. We will maintain strategic cash in locations where we know we'll be making investments such as China. We're going to work to optimize our global cash management through all the things made possible by U.S. tax return.

Our working capital will improve as our supply chain normalizes with the arrival of a new capacity that Rich talked about. As can be seen, we have ample liquidity to execute our capital deployment priorities, which are to invest for organic and inorganic growth, pay dividends and buy back shares. And I'll talk more on each of these as I move forward here.

In terms of capital deployment, a quick look at the last 3 years. As I said, during this period, we're nearly 100% cash conversion. Donaldson is a bit of a cash machine. And over the last 3 years, we have deployed $900 million split as shown. We are in a period of elevated CapEx this year and next as we work to bring on new capacity. Our future priorities will continue to include CapEx, dividends, share buyback and we'll continue to be disciplined when it comes to acquisitions.

In terms of CapEx. You can see here that we've averaged $80 million through our recent history and then we've increased to $120 million as we bring on new capacity. This capacity will help us normalize our supply chain and also reduce our costs and therefore, improve our gross margins.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

So we would expect to be elevated for this year and next. And then we expect to come back down to align more consistent with about 3% of sales. We're also very excited, as Tod mentioned, to be opening up a new R&D facility in Bloomington. Hopefully, shortly we'll start [digging] on that one when the snow goes, I guess. And that's a great investment for us and that'll help propel our R&D forward.

In terms of M&A. Tod shared some of the ideal characteristics. So I want to spend some time on the financial criteria we apply when we're looking at a potential opportunity. We'll always stay within our core filtration, looking to add new technologies, or products, new customers and new geographies.

When we address financial metrics of an acquisition, we think about EPS accretion in the first full year. We think about ROI exceeding our cost of capital within 4 years. And we think about the EBITDA margin exceeding the Donaldson EBITDA margin within 4 years. So for a longer term, our acquisition should help to mix company up.

One additional point about acquisitions. So as you've seen, Donaldson has a very tenured employee base, which I'm glad to be a part of. But we have all these people who know all the filtration companies. And our best of chance of success in an acquisition is when a company hits a life cycle change and their owners are concerned about the go-forward company and that might be its employees, its heritage, its community, its products, its customers. And because we know these companies and I think often, more importantly because they know us, we have a much better chance of success on that acquisition. In situations when it's just a direct sale of an asset to the highest bidder, we generally don't win on those because someone is always willing to pay more than we will.

We went back and looked at our acquisitions. Went back to fiscal '15. We had completed 6 acquisitions over that time for a period of $250 million. We tried to score them each on this chart. And we're really pleased with our progress and with our success. You can see we're doing really well, with the exception of Northern Technical. Our timing on Northern Technical was not good with turmoil on the power gen industry really starting essentially right after we closed.

I am proud that we had the courage to step back from the larger turbine projects because they weren't generating enough profit for the return employed. We still believe the longer-term outlook for Northern is positive and that all of our acquisitions will deliver positive results for the company.

Moving to dividend growth. You can see here, I'm really lucky to work for a company that's paid dividends for 60 years. I think it's a pretty impressive chart. And 3 years ago, we were added to the S&P High-Yield Dividend Aristocrat Fund. And that's as a result of 20 years of consecutive dividend increases, which is another impressive run. And we've increased the dividend in the last 3 years since then. So I have 60 years of dividends and 23 years of increases. That's a fair amount of pressure on a CFO and I have to keep that trend rolling because I don't want to be the guy who messes that up.

In terms of share repurchase, we have another impressive chart. So we are committed to offsetting the dilution from employee-based compensation programs. As can be -- and as can be seen over a long period of time, we've had a 2% average share count reduction. So we've been able to more than offset our employee compensation programs and bring the share count slowly down over time. In the future, again, we're committed to offset annual dilution of approximately 1% and we will govern our future share additional buyback based on our balance sheet metrics.

Moving on to our outlook. As a reminder, here is our FY '19 forecast. You may have noticed that we kept our guidance ranges fairly wide when we issued this forecast on March 6. The size of the ranges speak to the increasingly mixed operating environment that we discussed on our last conference call. At the same time, favorable results from a strong execution of our strategic priorities and year-over-year improvement in operating incremental margin rates are expected to deliver record levels of sales on EPS in FY '19.

Before transitioning to our longer-term outlook, I want to quickly touch on some dynamics within our 2019 forecast. We typically don't provide quarterly guidance but we felt it may be helpful to offer a few high-level comments about our expectations for the back half of the year.

As I said on our earnings call, we expect to build to a back-half incremental margin in the high 20% range. More specifically, we build to

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

this level over time. Our Q3 forecast for sales and margin reflect a modest sequential improvement. And then we've planned for a bigger sequential jump in Q4. There are a few dynamics at play in this forecast. First is the impact from currency, which weighs heavier on Q3 than on Q4. We also have some equipment timing that swings the year-over-year changes in quarters like GTS. Next is the traction from our operational improvement initiatives, which will gain momentum later this year and into future periods. And finally, the comps in Q4 are easier than Q3 in terms of both sales and inflationary pressure.

Again, we thought we'd take this opportunity to help with modeling the back half given the unique dynamics between the third and fourth quarters.

Moving to our long-range view. You can see that we expect good momentum in FY '18 through FY '21. As I say almost every day and I've said to many of you, we are committed to increasing levels of profitability on increasing sales. And I think you saw a lot of examples of that today.

I believe we can continue to deliver increasing levels of profitability on increasing sales while investing for the future. When we consolidate Tom and Jeff's numbers, we see some strong numbers. And please note that these numbers do not include any acquisitions. So assuming the macro acquisitions listed here on the slide, I just want to run through them quick. We expect annual revenue growth of 3% to 7%. As Tod mentioned, our Advance and Accelerate portfolio is an important part of how we deliver strong growth and we expect it to continue to outpace our average company growth.

We believe our market positions and proprietary products will deliver growth rates above the markets we serve. An operating income improvement of 120 to 200 basis points. And that's on top of 100 basis points that we delivered the last 3 years between 2016 and 2018. Incremental margins in the 20% to 25% range with an expectation above that for fiscal '21.

At the beginning of my presentation, I went through 5 key items that I'm very excited about for the company and I'd like to summarize them again.

One, we are a diversified portfolio of filtration businesses with strong recurring revenue streams. Two, we have the ability to leverage our R&D investments to deliver profitable growth. Three, we have a shiny new ERP that we are just starting to leverage. Four, we are targeting our expenses to drive margin improvement. And five, we are committed to a strong record of returning cash to shareholders.

I am committed to these points and I think about them each and every day and I hope you can see my passion for them. I really believe Donaldson is well positioned by leveraging the assets we have and smartly investing for the future while continuing to return cash to shareholders.

Thanks for your time and interest in Donaldson. And with that, I'll turn the call back to Tod for his closing remarks.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Thanks, Scott. Appreciate that. He really did ride 150 miles by the way.

So before I ask everyone to come back up, all of the presenters, and answer all of your questions, I'd just like to go back and retouch where we started the day.

Specifically within our agenda, by now, hopefully, you understand we are a technology-led filtration company. We had Michael talk about some of the basics of how we see filtration and gave you a peak into some of our laboratories and the cool things we have going on. We think everything that Michael talked about and what we have in our laboratories is really fascinating and frankly, we're just a bunch of geek -- filter geeks.

The diversified portfolio of our company, I talked about the opportunities, what we're addressing as a corporation, and the fact that we have expanded our addressable markets, particularly in our industrial space going from $6 billion to now $11 billion.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

We have an experienced management team. And they're all here today, committed to our shareholders. Tom and Jeff talked specifically about our growth opportunities within those business segments, and how we win. Rich talked about our global footprint and how we look to expand our gross margins with continuous improvement and the fact that we as a company are at an inflection point. We understand that. We embrace that. And we're pivoting in order to be able to have margin expansion going forward.

Last, we talked all throughout the day about our corporate culture and the strength of our corporate culture, a culture that we're very proud of. And that leads to disciplined capital management and Scott talked specifically about our targeted areas across there. And that we are a consistent story within capital management.

So we believe that we have a very strong value proposition across our customer base. And as we continue to execute our strategic plan, we will drive long-term shareholder value. So thanks for being here today. We really, really appreciate your time.

I'd now like to call all of the presenters up and open the floor for questions.

QUESTIONS AND ANSWERS

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

All right. [Becky and Theresa] are coming around with the microphone so let's use that one. Nathan, start us off again.

Nathan Hardie Jones ***Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst***

The quick and the dead. Going back to the CapEx and capacity questions. Clearly you talked about the R&D center. One of the questions we get from investors is, why adding capacity at this point in the cycle, when maybe we're peaking, maybe we're going into a downturn? I think there is a good explanation for that but maybe you can just talk a little bit more about where the capacity is going? Why it's going there? Why now? What the benefits are, et cetera?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Well specifically we're adding capacity and that's a large portion of the investments that we have across our corporation over the last couple of years. Frankly, because we had situations where we were more comfortable in the 60% to 70% utilization rates but we took off and we had not enough capacity to deal with the growth that our company experienced over that period of time. The capacity expansion was necessary to meet what we currently already had in hand. But I want to also make the point that, we have a 5-year capacity and operations plan. And all we really did was took some of the projects that we had on the drawing board within that 5-year plan and accelerate them by as much as 2 and 3 years. So adding capacity today, we're just really executing to that plan. Should we have headwinds going forward, there is another corresponding portion of that plan that we'd execute and we've demonstrated the strength of our ability to execute that portion of the plan when called upon.

Nathan Hardie Jones ***Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst***

And my follow-up one is going to be on China. You guys are saying high growth off a small base over there, I think primarily in the engine side of the business as China OEMs have started to adopt that new technology. I was interested in one of the comments that you made that China is not really interested in premium hydraulic products. Can you maybe talk a little bit more about why that is? How you see that evolving over time? I know you guys said it's not a big area of focus now, but just how you see that going in the future?

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

Yes. No, it's a great question for clarification. So we have not seen a behavior where when we gauge their engineers that they're really talking about the same kind of system reliability and performance that we see in other regions. And part of that, I think, stems from the way they buy equipment in China. So if you buy a piece of construction equipment, it's been smaller fleets, individual operators buying it, and they buy it with a focus on a real short-term contract. There's also not this behavior of reselling equipment or trading in equipment and trying to maximize the value of your equipment over the life of it. So some of it is end-user behavior that's transferred to their OEMs. As their OEMs get more sophisticated as they export more, I think we'll see those capabilities come through. Right now, the air filtration is needed to enable the emissions, complain engines. And to get into the space claim, right? The space claims have gotten tighter so we can solve those problems. Hydraulics is still kind of a bolt-on system that they're not really using the levers to full capability in the

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

system. It's just not -- I would say, where their pain points are yet in the system. So we'll pay attention to that and watch that, and as that matures and evolves, then we'll be there to support those customers as well. So a great question. Thank you.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Charley?

Charles Damien Brady ***SunTrust Robinson Humphrey, Inc., Research Division - MD***

Just on the margins on both the industrial and the Engine segments. On the Engine business, with the OEs, obviously it's harder to put through the pricing and there's a lag time on when you realize that price that goes through. So I'm just wondering, as material costs have gone up over the past couple of years, you've put through price increases, what's kind of the lag time before those really start kicking in from the OE side of that business? And then the follow-up on the Engine -- on the industrial side is really, what's the -- on that margin spread, what's the delta driving that? Is it pricing? Is it new product mix or something else?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Maybe we'll let Tom start on that and then we'll toss the industrial piece over to Jeff.

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

Okay. So I'll start on Engine. So again, think about 2 different channels, so in Aftermarket, we're generally very quick to respond through the Donaldson brand. So I would say, I think, typically a 3-month lag. We really want to understand what's the price or -- excuse me, the cost impact. Where is it going, because we don't want to go out with a bunch of iterative price increases, it's a balance. You want to get enough to cover yourself for now and for the future. And what we've seen is, when we go too much, the market doesn't love that. So we balance that out a little bit. Make sure we understand it. On the OEM side, you're exactly right, we typically operate with long-term agreements. We typically put indexing in for things like steel, aluminum and plastic resins. Historically, we've been uncomfortable putting in media because we believe that typically, they want to know exactly the weight on something. They want to know the exact chemical makeup of particular products so they can value it. And for us, as that sole proprietary, we've been reluctant to put that in. I think, we've seen media prices go up so much in this last turn that we've felt like, as we do new contracts going forward, we'll include some of the base inputs for medias as well, some of the feedstocks. So that'll be a way we'll recover better in the future. But I would say typically, most of our indexes are lagged 6 months. So they lag 6 months going up for us, but we'll give it back 6 months on a lag when it goes down again in that way. And each one of those is still in negotiations. So we get the index, there's an agreement there, but other, labor, material, other freight things, we have to go in and negotiate those contracts. So what I would say this time is, we've been much more aggressive to make sure we're recovering our profit as we can. So in some cases, we want -- especially want to take our customer in Europe, we ended the contract and renegotiated it simply because we couldn't, it wasn't tenable for us over the long term. There's other agreements that were relatively new that we'd used to win major new business and we felt like we had to honor those to protect the relationship. So there's a balance in that, always it's a competitive situation. Jeff, do you want to talk about margin expansion in industrial.

Jeffrey E. Spethmann ***Donaldson Company, Inc. - SVP of Industrial Products***

Yes. Thanks. I think I heard 2 questions in there so I want to make sure I got them. One of them was kind of specific to pricing and then the other was about the deltas in our margin. So pricing's a different game in the industrial side. We were -- we actually are the OEM. So we have quite a bit more latitude in the marketplace. We don't have conversations with our customers about costs, right? It's about value and price and delivering that value. And hopefully from my stories, you heard how we push the value and get a premium price. When we are seeing kind of raw material pressure in the market, we try to get out ahead of it. So if you look at some of our markets where we have a strong position, we're probably the pricing leader. Some of the markets where we're trying to break in, like process filtration, we don't have the position to be the pricing leader yet. But we stay in that top tier. It's all about the value we deliver. So I think that maybe sets up what do we -- how come our margins are expanding, well we're shifting our product mix, right? The markets and segments that we're growing and investing -- our market segments, excuse me, that we're investing in and accelerating in our growth, tend to be a higher margin and more frequent changes. So we're mixing up our margin. Does that answer your question?

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Yes. So, just maybe also an important point within the industrial sector is that because much of that's project-based as well as replacement parts, when we have a project-based backlog, that washes out rather quickly. So any type of pricing activities is really applied pretty quickly and cycled through on industrial versus Tom's business. It has that larger OE lag.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Next question. George?

George James Godfrey ***CL King & Associates, Inc., Research Division - Senior VP & Senior Research Analyst***

To stay on that the pricing theme, and Tod, you lead for a technology-led filtration company. And in the margin expansion and looking at the bullet points, in the Engine segment, pricing is the third point on how you're going to raise the margin and in industrial, pricing is even mentioned as a strategy for getting the margins higher. So my question is, if you're the premium product in the marketplace, what percentage or price point would -- do customers say, "You know what, I recognize you're the best, but you're simply too expensive", or what is the ceiling on how high you can take prices versus your competitors? And I'm thinking about the OEM example, the case study in Japan, where you clearly show your product is better. Can you quantify how much more are customers willing to pay for your better product?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

George, it's pretty complex relative to that question. What we look to do though, and it's important is, to give a strong value proposition to our customers. But balance what will allow us to maximize that first-fit win because we're really interested in long-term growth within the corporation. So proprietary razors to drive that razor blade activity. There, on the OE side, there is a price component to how they think. You can't make this so exorbitant that the pricing range to your competition is so vast that you're trying to maximize your gross margins as a Donaldson company. We're not selling thousand-dollar phones here, right? So we work real hard to get a good balance to be able to win. But then we look at it comprehensively with the first-fit and the Aftermarket to make sure that our margins really are proper and what the company needs to meet our longer-term targets. So it's very much different across the overall product ranges and across the business.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Another question. Brian?

Brian Drab ***William Blair - Research***

I'm just looking at the historical model, and maybe I'm wrong, but historically, the Engine business has grown slightly faster than industrial, right? And now we're seeing kind of a flip in that going forward. What's the key reason for that? And is it just that the Engine business is more mature maybe at this...

Scott J. Robinson ***Donaldson Company, Inc. - Senior VP & CFO***

Yes, so we've wanted our industrial business to grow for 10 years and we haven't achieved as much growth there as we'd like. We've experienced massive growth in Engine. And that's finally starting to normalize. And also with all those expense dollars we're freeing up, we're trying to target those to higher-margin products, and those are a bit more on the industrial side. So ultimately, we have to bring up that industrial growth, it has higher margins, it helps the company improve its margins in total. And as the Engine growth comes down just from the massive amounts we have, it gets a bit easier to shift that balance.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Maybe the other way to think about it is, we feel like we have strong opportunities on the industrial side, and we want to take them.

Brian Drab ***William Blair - Research***

And on the Engine side, it sounded -- especially on the last call, there was a lot of momentum in China, and you didn't get into great detail on that today -- some detail, but how much of your growth in Engine can come from this massive market opportunity that you have in China in front of you?

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Do you want to take that?

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

Yes, so I'll start with that. So we're really interested in China. We think that is a good growth opportunity for us. And I think if you think about it directionally, the Chinese Class 8 truck market's 3x as big as the U.S. market. So we see lots of opportunity. Today, we have relatively low share there. Where we've had success is in -- right now we've been turning over Off-Road customers who need that heavier-duty protection and value our technology a little more. But we have won a number of programs in -- on highway, and they're just starting to launch. So we're kind of managing 2 things here. So we're coming from a very low base.

We have those first-fit solutions just starting to launch in production. They'll kind of ramp on a hockey stick and then that aftermarket annuity follows behind that. So we do expect really strong growth. But one thing where I get nervous about putting the number out there is, we're also going to live through the natural cycles that the Engine business does get. So right now, the China truck market is in a downcycle. Last year was a very strong year. It's interesting for us to forecast the China market, I was in China last fall, and I had 2 different economists in a meeting. One out of Beijing said that she thought the truck market will be 1.2 million units and the gentleman out of Shanghai thought it would be 750,000. That market difference is bigger than the U.S. market. So we're just not sure. But I think part of it is we're on low base, but we do see really good opportunities to grow.

Brian Drab ***William Blair - Research***

What percentage of your Engine revenue is in China at the moment?

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

Today, in On-road, it's about 10%. And so, we see really good opportunities to grow that out.

Brian Drab ***William Blair - Research***

Okay. And then, can I just ask one more on industrial? You've talked about those new market opportunities, and there's more in food and bev that you can do. And then you have electronics and specialty chemicals on the radar. It seems like they're -- and I just -- I don't know, but there are a lot of other industrial markets, aren't there, that you could get into, like I'm thinking like how Pall Corporation, now Danaher, does the clean-room environments and it's got to be hydraulic fluid that needs to be filtered for industrial applications, all sorts of other industrial applications that I don't see on that pie chart. And then the subquestion underneath that too is, what do you mean specifically by electronics?

Jeffrey E. Spethmann ***Donaldson Company, Inc. - SVP of Industrial Products***

Sure. So thanks for the question. I think the -- if we tried to segment it too finely, the chart kind of gets unusable. But you raised a great point. So there a lot of hydraulic applications in industrial customers. And actually, we're selling into them. So it shows up on kind of my foundation of best-in-class solutions. It's kind of in -- wrapped in our Hy-Pro business, where we're covering both stationary and mobile. I think some of the other applications -- okay, so I think maybe I got your first question. The second question, when we talk about microelectronics, what do we mean specifically? So if you think about semiconductor manufacturing, what [prints support] manufacturing. Today, we're in semiconductor manufacturing. We provide solutions for air filtration airborne molecular control for some of the tools that they use in wafer pads. If you look at that market, there is a huge opportunity around liquid filtration, both on the supply side and the waste side of it. It's different technology, kind of critical fluids, long-validation cycle. So it's on our development road map, but we're not there yet.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Any other questions? One per customer.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Nathan Hardie Jones ***Stifel, Nicolaus & Company, Incorporated, Research Division - Analyst***

Maybe on connected solutions. It sounds like you guys are pretty early on in getting that out to customers. Can you talk about the competitive dynamics, competitors' responses to that? Does first mover have an advantage here. Does this end up being something that, that value gets competed away and it becomes the price of entry a few years down the track? Just any more color you can give us around that kind of stuff.

Jeffrey E. Spethmann ***Donaldson Company, Inc. - SVP of Industrial Products***

Shall I go first this time?

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Yes.

Jeffrey E. Spethmann ***Donaldson Company, Inc. - SVP of Industrial Products***

Okay. Well, I think it's 2 different stories. I'll start with the industrial side. We've seen some of the public face of our competitors' offerings, and I guess, I'll leave it to you to go look at those and draw your own conclusions. We're really focused on our efforts on creating customer value. So will it get competed away? I don't think so. The design of our business model basically is to create value. So we won't give it away. And I think the strength of it -- like I said, I don't think anybody is in a better position to do it than Donaldson Company, given the strengths that we already have. So it's an emerging kind of technical capability that I think just amplifies our competitive strengths and what we bring to the market.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Let me just pick up a little bit of color there then turn it over to Tom about the engine bit. So perhaps you might derive that we're "early" on that. But the fact of the matter is, we really started down this journey years ago, when we were investing. And now we're at the portion where what the early part is, we're starting to generate revenue. So that's the early innings. But as far as doing all the research, building the model, understanding the value proposition, that work's done. That work's in place. And then there's a more -- a kind of a different approach on Engine.

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

So on the Engine plan. I think the way we think of it is, again, go back to Filter Minder. We made that acquisition because we didn't want somebody to get ahead of us in that space. But we want to be able to protect that platform win. We know our job is going to be connect, frankly, what's a commercially available sensor, into their system. So our value-add there is really the packaging component of it and doing it really well, which we know how to do. Where we think we'll get more value and get it upstream into the value is where we could partner with OEMs who want to provide us back the data of how their systems are performing and give maybe a more rich algorithm that can give them again more value in there. There will be some who simply want us to connect the device. We have to be able to do that to win that platform for our filter. There'll be some who maybe want an enriched service, and we can get value out of that for sure. So we'll see how that plays out. We just don't really know right now on the OEM space. And there are so many concerns around privacy but right now, they're very, very cautious around it.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

George? Thank you.

George James Godfrey ***CL King & Associates, Inc., Research Division - Senior VP & Senior Research Analyst***

Just one more question. Thinking about the capital allocation, I think you had a slide up there that showed M&A at 5%, and you spent $250 million on acquisitions over the last 6 years that have -- and my computer died because I don't have a power source, but I don't think any money was spent on acquisitions in fiscal '18 and maybe only about $50 million in '16 and '17. So if you're increasing the size of the addressable market in industrial, and I don't remember if you did it in Engines, do you think the M&A activity would actually pick up over the next 3 to 4 years? As you said, you know all the filtration companies, you have people that [have been] in the industry for 40 years. And particularly, if we go into a downturn, I would think that it would push the seller to the table, maybe put you in a more advantageous position?

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Yes, relative to the M&A, George, I would suggest to you that years ago, you look back at Donaldson over the last decade, and we always have had acquiring corporations or acquiring as part of our growth strategy, right? We look first to really invest back into the company but also, look to acquire. We hadn't done so well at executing on that. And now, where we rebuilt the entire process that started from scratch, now we have 6 acquisitions over the last 5 years. We've got some momentum, and we've got a more robust process. Clearly, we have the powder to be able to do more, but we'll continue to make sure that our focus relative to acquisitions is strategic in nature and selective rather than just shotgunning an approach. We prefer that so that we can really execute well to our chosen priorities, and we'll stay focused in that lane.

Unidentified Analyst

Hi, can you talk about the first-fit retention across different geographies over time? And then in the emerging markets, if there's a differentiation amongst that, what's driving that delta?

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

So on the Engine side, I think, first the retention, so winning the next platform, I think is high, but it varies a little bit by product category. So on air, we're pretty unique, we are the market leader, we are highly differentiated, we are mostly beating ourselves. So what I mean by that is, we have the system on the platform today. They bring out the next-generation truck, and we have to beat ourselves again. We want to do that because we know we're not the only competitor in there. So we, more often than not, replace ourselves than we replace the competitor. So it's a very high retention rate. On hydraulics, it's very regional. So in the U.S. again, we're the market leader, we've done a good job of retaining our business there. I think in Europe, we're probably not the #1, definitely not the #1 player, we're there to compete. And in Asia, we don't really show up much to compete on hydraulics. So that's all upside opportunity. On fuel, every one of our wins is incremental. So we're beating a competitor right now. We haven't had an incumbent position on fuel to lose yet as it's come up for bids. So I think all those are incremental wins for us. I think we measure them and our product groups very differently because on air, in order to leave, we have to go back and replace ourselves. On fuel, they're all incremental. And on hydraulics, it's a bit of a mix. So I think it varies a lot. But it ends up -- our global customer relationships, the way I think of those is, they're very global. So we just don't win with one customer here in the U.S., and we don't lose with them in Europe, we tend to win with them or we lose with them globally. So that doesn't change a lot globally as you go around the world with those big global players. Did I get at your question there?

Unidentified Analyst

(inaudible)

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

Okay. Yes, I wondered if you had that. So the aftermarket retention's really almost a total of function of if it's got an IP protection scheme on it. So right now, we're in the model where nearly every first-fit program we're bidding, we're offering an IP solution. We want that because if you pay for our engineering, we need that aftermarket annuity to really get the value out of the system. And so the only place where we're a little bit loose on that or loser on that is in the developing regions where maybe those OEM customers don't have the installed dealer base to protect their own aftermarket. So there, we may use a more cataloged product. And then, we just know we have to go help them compete. But I would say, that's relatively low volume. If I was going to guess off the top of my head, I'd say 10% to 15% of our platforms, we're bidding without IP but 80%-plus, we're definitely bidding with an IP solution. And then what we expect is, of the OEM providers, we are the ones who protect our IP the best. So we give us -- we give value to our OE because we protect our aftermarket and our aftermarket the longest in that cycle. Now a lot of our competitors have followed us, and they've copied that model. So when we're competing, we're going against competitors who are also offering IP. But the minute we don't win a platform, we want to go beat that IP in the aftermarket. Not only to be able to sell in the aftermarket but to remind the OEM that maybe we were the preferred partner.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Maybe in the hall in the back.

Unidentified Company Representative

Hall in the back.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Well, start Charley.

Charles Damien Brady ***SunTrust Robinson Humphrey, Inc., Research Division - MD***

Yes, just a quick one. Scott, you talked about the debt-to-EBITDA ratio kind of 1x. I was wondering, is -- would you take that up -- where would you take that to if it was a M&A transaction? I mean, one, I think across the industrial space, that's kind of the lower end of the range, I mean a lot -- 2, 2.5 really. Just kind of wondering, what's your comfort level bringing that higher even up to over 2?

Scott J. Robinson ***Donaldson Company, Inc. - Senior VP & CFO***

Yes. So as I mentioned, we have capacity to complete a deal if the right opportunity came along, and we can get the right return out of it, we would definitely look at it. So it's kind of a case-by-case basis. But we would be comfortable bringing that up if the right deal came along. Those ranges would be something we'd consider.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

I just want to emphasize, we remain a disciplined strategic buyer.

Unidentified Analyst

On the sensor side, when you talk about those, are those a replacement item that it's replaced along with a filter or maybe on a different replacement schedule?

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

Well, on the Engine side, it's a first-fit item only. So it would go with the -- it might be a long-term wear item. But we would put it in as a fit-and-forget kind of item with it. It's really replacing the mechanical indicator that's there today that just visually indicates, once you open the Engine compartment, that you need to change. So for us, it's really a onetime first-fit solution.

Unidentified Analyst

And then the second question, are there any opportunities for you in using a 3D-printed for a filtration media solution?

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Micheal?

Michael Wynblatt ***Donaldson Company, Inc. - VP & CTO***

Yes, so we actually use 3D printing quite a lot today in prototyping, a lot of companies do that. We have started to look at 3D printing as a potential source of filtration technology. I think the challenge with the technology right now is the scale of the features is not quite what we need to do for a really good filtration. But for things like screens and scrims, it could be possible already. So we are looking at that.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

[Brian], another one here? Yes.

Brian Drab ***William Blair - Research***

One last quick one, just to be clear. Those growth rates that you're showing for the segments and consolidated do not include M&A?

Scott J. Robinson ***Donaldson Company, Inc. - Senior VP & CFO***

That's correct.

Thomas R. Scalf ***Donaldson Company, Inc. - SVP of Engine Products***

Right.

Brian Drab ***William Blair - Research***

Yes, thanks for the clarification.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.

Brad Pogalz ***Donaldson Company, Inc. - Director of IR***

Any other questions? All right. Well, this concludes the webcast portion of the day. At this point, I think we'll transition to the leadership luncheon. Food is outside there. And then again, we've got our entire management team that'll be here for the next hour or so to join you. And as a fun fact, if you're watching TV later, we're also going to be ringing the closing bell today, so that's an exciting thing for the company. And just happy to be here in New York. Thank you, everybody, for the time. We sincerely appreciate the interest in Donaldson Company.

Tod E. Carpenter ***Donaldson Company, Inc. - Chairman, CEO & President***

Thanks, everyone.

DISCLAIMER

Thomson Reuters reserves the right to make changes to documents, content, or other information on this web site without obligation to notify any person of such changes.

In the conference calls upon which Event Briefs are based, companies may make projections or other forward-looking statements regarding a variety of items. Such forward-looking statements are based upon current expectations and involve risks and uncertainties. Actual results may differ materially from those stated in any forward-looking statement based on a number of important factors and risks, which are more specifically identified in the companies' most recent SEC filings. Although the companies may indicate and believe that the assumptions underlying the forward-looking statements are reasonable, any of the assumptions could prove inaccurate or incorrect and, therefore, there can be no assurance that the results contemplated in the forward-looking statements will be realized.

THE INFORMATION CONTAINED IN EVENT BRIEFS REFLECTS THOMSON REUTERS'S SUBJECTIVE CONDENSED PARAPHRASE OF THE APPLICABLE COMPANY'S CONFERENCE CALL AND THERE MAY BE MATERIAL ERRORS, OMISSIONS, OR INACCURACIES IN THE REPORTING OF THE SUBSTANCE OF THE CONFERENCE CALLS. IN NO WAY DOES THOMSON REUTERS OR THE APPLICABLE COMPANY ASSUME ANY RESPONSIBILITY FOR ANY INVESTMENT OR OTHER DECISIONS MADE BASED UPON THE INFORMATION PROVIDED ON THIS WEB SITE OR IN ANY EVENT BRIEF. USERS ARE ADVISED TO REVIEW THE APPLICABLE COMPANY'S CONFERENCE CALL ITSELF AND THE APPLICABLE COMPANY'S SEC FILINGS BEFORE MAKING ANY INVESTMENT OR OTHER DECISIONS.

©2019 Thomson Reuters. All Rights Reserved.

©2019 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks of Thomson Reuters and its affiliated companies.