Incorporating EBM into New Ventures

For most senior leaders, the challenge to evidence-based management is not in running the legacy business, but rather in attempting to make rapid decisions in the fast-evolving, high-risk, and future-critical aspects of their organizations. Guest columnist, Adam Bryant, and column regular, Sonja Meighan, sat down with **Josh Walden**, Senior Vice President and General Manager of Intel Product Assurance and Security Engineering Group, to ask about his insights on what he wished he'd known moving into his first "new ventures" role, and what he would tell newcomers to such roles today. Hint: balancing innovation with discipline is key.

For HR leaders and learning and development experts, the question is how best to support today's leaders, and groom a consistently strong leadership bench, to navigate the rapids Walden describes below.

Intel *is one of the world's largest technology company's and is number 46 on the* Fortune *500. Intel's mission is to utilize the mission of Moore's Law to bring smart, connected devices to every person on earth while serving as a role model for how companies should operate. Their strategy is a virtuous cycle of innovation bound together by the goal of greater connectivity and enhanced performance. Intel's global team of over 107,000 strong across 58 countries is a powerhouse of engineering and technological excellence that empowers solutions to the world's toughest problems while creating the technology of tomorrow.*

People + Strategy: You've had many jobs over your 35-year career at Intel. Which one allowed you to practice evidence-based management the most?

Josh Walden: It was when I ran Intel's semiconductor factories, which meant overseeing 11 different factories and more than 13,000 employees. If an issue came up, we would use model-based problem solving. We would ensure that we had root-cause fixes in place if there were issues, and we could understand what was different and what was driving the issues. We would come up with a model, test the model, and make sure we corrected the issue. It was a very structured approach to problem-solving with a strict methodology. The biggest judgment calls we had to make were around predicting demand. There were a lot of variables to consider.

My role with the least amount of data points for making decisions was when I ran the New Technology Group. We were incubating and testing ideas and making decisions on whether we should build something ourselves or invest in, or potentially acquire an outside company. It was very different from my predominantly engineering background, plus I owned a P&L in that role. So I went from doing engineering work with very structured methodologies to something that was more abstract and figuring out strategically what we needed to do that fit with Intel's overall strategy. I oversaw all of the advanced research, except for process technology development for the factories. We worked with universities and consortia, and the Intel labs were under me. I pulled together several operations and combined them under the group, including wearable technology and 3D depth cameras. I started a modular innovation group to allow people to experiment and create their own products and make it easy to design within Intel.

P + S: Because you were testing and moving into markets, by definition there wasn't a lot of data to draw on to help inform your decisions. It was more about judgment calls and bets.

Josh: Very true. I inherited several different businesses. We had to objectively determine which ones would generate an operating profit or just revenue. Even though we went into those businesses, we were testing them. At the time, we went after everything from sensors on snowboards to drones. What was going to make a profit and what was good for branding? The goal of the New Technology Group was not to keep growing businesses within my organization, but to grow and incubate them to the point that they were ready to stand on their own or to transition into a different business group.

We had a very structured process for our investment decisions. We established stage gates, so we would invest a certain amount of money and then assess where we were. Is the market responding the way we expected it to? Is the technology maturing? Is the software there? Is the ecosystem ready for it? If not, you stop it, kill it, or sell off the assets.

The greatest ambiguity was in looking at industry trends. What was going to take off? When was it going to take off? Is this the next big thing? The best example is augmented reality. I think it will be huge, but I don't think it will be huge this decade because the technology and the experience aren't where people are going to accept it. Or consider virtual reality. It is a niche right now. I don't think the technology is there to deliver the user experience yet.

P + S: What new muscles did you have to build for that role?

Josh: I had never run a P&L before. And the time I spent visiting customers was pretty limited in my previous jobs. But now I was visiting business leaders in China and elsewhere to get a sense of their demand for a particular product and what the revenue might be. How do I project that? There was a lot of ambiguity because these were brand-new technologies emerging.

When you work at a big company like Intel, it is easy to start to over-invest, and then after a year decide that because it's not delivering the revenue or operating profit that we expected, we're therefore going to cut it. That's why we built in a strict process of stage gates to track whether we were hitting milestones and moving on to the next stage of investments. That was a completely new muscle for me.

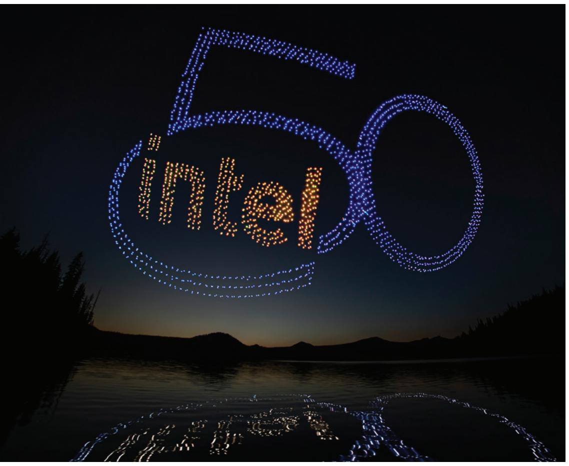
P + S: What did you personally find most challenging about applying evidence-based muscle memory in a low-evidence environment?

Josh: The hardest part is when you hit the stage gate and, if you are not meeting the goals that are set, you have to decide whether to shut down the business and invest the assets elsewhere. That impacts people, and you want to find new positions for the people who are affected by the decisions. I inherited a lot of businesses that grew too fast and we had to scale them back. For the ones that we started from scratch, we did a better job of not over-staffing them, so that if we hit a stage gate where it failed, I was able to place 95 percent of the people in other roles. But these are the hard decisions we had to make when we were looking at the businesses we were trying to grow—do I disinvest, slow it down, cut it, or double down on them and invest more?

P + S: If you were asked to speak to a group of executives about what you've learned about innovation, what are the key insights you would share with them?

Josh: As you're thinking of investing in new businesses, make sure they're not too far from the core of the company or the long-term strategy of the company. For example, we knew at Intel that we were transferring from a microprocessor-based company to a data company to "everything runs better on Intel." We built a sensor that you could put into a cricket bat that will generate data, but how can you monetize it? And what about businesses that involve personal data? How will you monitor that? You have to make sure, as you walk through some of the scenarios and businesses, that they are congruent with the long-term vision of the company before you jump in, say yes, and then find out that there are big questions and risks about handling people's data.

Another example is to think about why startups can go really fast but starting something in bigger companies



Outdoor drone light show.

takes longer. In some cases with startups that you might be thinking of acquiring, you go in and look at how they do business, and how they are certified across different countries. You may find that they are not up to the same standards as the big company. You have to have your eyes open, because if you think you are acquiring an asset that is ready to go to market immediately, you might find out that they have not followed all the regulatory approvals, which in turn sets you back a year, and you essentially miss a market window. That is very real and does happen.

We had to beef up our due diligence in some cases to make sure that when we were looking to acquire companies, we were clear about the real assets they had from a safety perspective and a regulatory perspective. Are they FCC compliant? Are they CE compliant? For a startup, not checking all those boxes might be a risk worth taking. But when you move that startup into a big company, the last thing you want to do is tarnish the brand. The lesson there is, when you are looking at these companies, make sure you understand what you are really getting.

P + S: Anything else you'd tell a first-time leader moving into a "new ventures" type of role?

Josh: The most important thing is having alignment with the CEO and CFO about the budget. And it can't be just a one-year budget. You have to maintain it, stick with it, and make sure you have the discipline to kill programs if the stage gates are not being met. That discipline is extremely important to make sure the alignment is there. Clearly business conditions can change in ways that will require cutting somewhere. But make sure you have your eyes open and have the discipline to look at your businesses regularly. Have regular touch points with the strategy group to be clear about whether a business is still strategic for the company or if it would be better to take the capital and invest it in another area.

P + S: Part of the challenge of innovation is to hit the sweet spot between structure and discipline on one side and creativity and constructive chaos on the other. How do you balance them? Sometimes the off-the-wall idea can be the next big thing.

Josh: I had a group that I lovingly called my Mad Scientists because they did a lot of experimentation. I was not investing a lot of capital, and we would test some of the businesses. They came up with technology that they were considering for a certain use, and I told them to talk to my drone group and see if we could embed their technology to potentially do indoor drone light shows. The technology started off for something completely different and we morphed into drones, and now Radio City Music Hall is using indoor drones this holiday season powered by that technology. We also created technology for drones to do big outdoor light shows. They also created sensors and algorithms for snowboarding and BMX bikes to show how many turns and flips were done and the force level.

Watching everything go by and not acting is when you go out of business. Incubating something new and different within a large comapany is a challenge.

That all came out of that small group. It was about 20 to 25 people with a lot of Ph.D.'s from various disciplines, and they had a great collective imagination. They had their own space that was very different than Intel's office space. They were incredible at coming up with different innovations. We would work with the Intel strategy group and, in some cases, with customers to see if we could scale their idea in ways that made sense in terms of revenue or brand value.

The ideas of the Mad Scientists didn't start off as things for which there was an obvious market. I don't think I saw one thing that they initially came up with that made me say, "That will make a lot of money." It was the off-shoot of an idea that was the aha moment—the thing that could grow into a big company and is aligned with the strategy of the company.

P + S: A lot of business executives can feel paralyzed by all the disruption occurring in their industry, with challenges that are far outside their core skill set. How would you advise them to help them get unstuck?

Josh: Be crystal clear about the strategy of the company. If you are building widgets and there is a disruptive technology out there, you have to be on the lookout for that. Can you be a fast follower? Is there a technology that gives you a competitive advantage? In some cases, you may not have the right skills within your company, and you have to look at recruiting people who think differently. In some instances, we brought people in from the outside who had experience in these areas as opposed to thinking we had the capability to learn and the time to go after it. A company may have to look at making a strategic acquisition to help you get back in the game. Other times you have to change leadership and enhance core capabilities. Watching everything go by and not acting is when you go out of business. Incubating something new and different within a large company is a challenge. That is why communication and alignment with the CEO, CFO, and the business units is critical.