Digital Transformation: Bridging Business and IT

For Niels Aillaud, chief digital officer of Whirlpool Corp., digital transformation means using technology to better understand customers. He spoke with Knowledge@Wharton at the "Fast Forward: Executive Strategies for Personal Digital Transformation" conference, sponsored by Mphasis.

State of Digital Transformation at Whirlpool

I think we came to a realization – and we all know this – that our consumers became much more digital about 15 years ago. But companies are still acting like this is just another channel. I think we have to realize that today we are living in the digital world and companies that don't understand this or don't necessarily move in to join their customers there are at risk today.

Companies routinely operate a very complex set of processes, to manufacture, to launch a campaign, from engineering to redesigning products. What companies are not really well prepared to do is manage chaos. They can plan for it, but they can't really manage it when it happens. The digital world is really … chaotic, a series of disruptive technologies. And the question is how quickly can you recuperate from the disruptions and actually ride the wave instead of being submerged by that wave?

Business Goals and Digital Transformation

The major goal is really to bring what is digital to consumers and to all the people inside the company. The benefit is [to enable] every member of our company -- from the CTO, CMO, CEO, all the way to the person in the factory -- to understand the voice of the consumer. And that's how I would translate being able to understand how consumers act today as they are different from what they used to do 20 years ago. That also means different things -- for sales channels … for marketers, for our engineering group. They never

used to read reviews. Our engineers are now reading the reviews, as are the marketers at the same time.

So, in terms of goals, it's the ability to actually move quickly. We can't plan for everything and that's fine. The question is going to be, once we get a new piece of information, how quickly can we react to it?

Hurdles to Transformation

There are several hurdles. It starts with making sure that digital transformation is supported at the highest level. It is a company-wide effort. It is not just one department. If you're doing one department you may be successful, but ultimately you won't move the needle. It has to be supported by your board of directors, your CMO, your CTO, of course. That's number one.

Second, do you have the right data? If you don't understand your consumers you're all going to be very limited in your ability to actually do digital transformation. Technology by itself is not the answer. Does the technology that you're actually incorporating into your process allow you to get a better understanding for your consumers? Not only what are they doing, but why are they doing those things, taking those actions? So that's really the second one, do you have the right resources in place to be able to read that data and translate it?

And then more pertinently, [can you] distribute that to the right teams along the line? Where it used to be very narrow -- to a few groups -- you will see that through digital transformation more

people will need to embrace sharing those documents and actually utilizing it in their day-to-day work.

On Personal Digital Transformation

It absolutely [is needed,] not only for our executives, but for every member, every employee. Of course, the executive would get a much higher level of education and training, but we would still have plans for every level within the company. Interesting enough, I think we've seen a change where I'm getting a lot of requests from the board asking for programmatic buys [in digital advertising], so definitely they are open to new technology. They may not know enough about it, but they're already following it. It's a big difference from, say, five years ago.

Aligning IT and Business

It's not easy, for two reasons. One, the business gets rewarded for taking risks and there are clear objectives to hit, usually it's around sales, revenue, profits. The IT organization usually gets rewarded for stability, minimizing risks. For example … success [for the CMO would be] creating a video that will go viral, that will hit your website massively with very little notice. That's what success looks like for a CMO. That is a horror story that a CTO would have. So CMO success is really the nightmare of your CTO. That's where your CDO, chief digital officer, comes in. [It's someone whose job falls] somewhere in between [IT and business] and who can actually accommodate those risks, but also gets rewarded.

Ultimately, the best way to achieve those two bipolar parts is to realign the objective. The business has to understand what risk means, and also … the IT group is there to protect the business from themselves, in some cases. Sometimes the IT structure has to be changed where they no longer merely serve as support for the enterprise, but support for their internal clients, which means supporting and actually getting rewarded by the success of their digital clients. So in sales, if my site goes down, it's not the fact that the site is up, the server is up, it's the fact that my consumers can't access information on those pages. We're no longer talking about up time, we're talking about access of documents, for instance. So, very small variations.

On the Internet of Things

It's very interesting to us for a couple of reasons. One, it is expected by our consumers. They expect to access more data than they have in the past, and be able to customize recipes or add new functionality in their device. If you think of it, their phone doesn't really change, but the new software upgrades give you new functionality and new benefits. People are starting to migrate to thinking the same way about their appliances.

On the other side, one of the key benefits … is the ability for companies to get a lot more data about their customers. It's not about prying into someone's personal life, it's understanding how people are using our device. We spend a lot of time researching, going into people's homes, following them, doing interviews. But we all know that there is a big difference between a survey when you're asking 50 people and 1,000 machines sending data of what is actually happening. We can make better products based on that [digital] data.

[With the data,] we can also do preventive maintenance: "By the way, sir, I see your washer's been running nonstop for 12 days. This part may be at risk of breaking. Do you want us to order one? Or we can send someone to your home to do a cleaning." There are a lot of opportunities to provide better service to our customers, better products in the future, and additional revenues for the manufacturer or third party manufacturers.

Let's say you put something that is very fragile in the washer. The sensor in the machine detects that there's a conflict between the cycle the person has chosen and the material that is in the machine, and stops the machine right there. So there are a lot of opportunities of cross-pollination between manufacturers of laundry [detergent], appliances and clothes. Now think

of the same for your kitchen -- there are a lot of additional opportunities.

On Hacking and Privacy

Anything that you connect to the Internet is at risk. Nothing is foolproof. In the industry, we take this seriously. We know there are risks and we're working hard to mitigate it. And that's done in two ways. One, no manufacturer can solve this by themselves. It has to go through the industry consortium and also by working with Google, IBM and the cloud providers to make sure that their equipment is secure. If you think about it, there are multiple inroads for hackers -- your home, your own personal network; the machine [itself], maybe things we may have left open; cloud services where we send all that data before it goes to a private company. …There have not been clear attacks on any of the systems, but we'd rather prepare than try to fix it later.

On data privacy, personally I wouldn't want a camera in my home. I'd be very worried about all the types of data being sent. I think even my cable provider knows a lot more than I want him to know. It is a concern when you don't know what they're doing with the data.

As a manufacturer, we want to be very transparent about what do we do with your data. We want to make sure your data is not sold. And more importantly, the data is being used to help you get more benefits. I think people are fine with [data collection], especially millennials, as long as you can provide clear benefits to them of what they're gaining -- better advertising, better service, preventive maintenance. People won't mind. It's when you don't see a clear benefit and you see all that data possibly leaking outside of your home, that's when people start having questions.

Appliances of the Future

Overall, [future appliances should make accomplishing tasks] easier in your home -- and you don't have to micromanage every step of, say, your cooking or your laundry. When you get up in the morning, your coffee is ready at 6

o'clock from Monday to Friday. But on weekends, the system is smart enough to know you're more likely to get up later and you don't want coffee but tea. So [imagine] a system that automates all this based on who you are and what are your [habits] -- all the way to your cooking. Your oven can detect what type of food you have and automatically create the right temperature and the right amount of time to cook it.

The same goes for your fridge. If I know that you usually buy a certain amount of milk every week, it'd be possible for the system to start ordering directly based on a learning pattern -- you usually have that much milk in your fridge. It also tracks other types of foods [and orders just enough,] depending if you're a family of four, two or single. This prevents waste.

Waste is a big issue, especially in the U.S. Twenty five percent of the food we buy goes to waste. If the fridge reminds you that this type of food is about to go bad, and here are suggestions on how you could cook it tonight, you can take advantage of it before you lose it for good.

Digital Transformation around the Customer

We did a couple of things starting a few years back. One, we redid our segmentations. We hadn't done that in a while. So from the get-go, we get a better understanding of who are our segments and how do they act, especially online? In terms of day-to-day efforts, we started with heavier social media monitoring -- listening to the conversations, not only on our social media feeds, but also in general in terms of topics that people -- our segments -- care about, understanding how they think and how can we help them.

We expanded reviews. Reviews are extremely important for us not only because it helps sell more appliances, but more importantly it's a great way to collect feedback on how people are using those devices and improve upon them. I said earlier that we take them seriously. In the past, it was marketing reading [the reviews] and some level of engineering.

Today, it's systemic. Every engineer responsible for a product is actually accessing that data directly and getting rated at the end of the day. So bad reviews means he hasn't done his job. His job now is not only manufacturing a great product, but also making sure that it actually follows what the customer is expecting. Those are the types of programs we're doing where we're getting closer to the customer. And it's really a two-way dialogue. We want them engaged and when they engage us, we respond to them. ◼