### **PROFILE**



# "BPM is Dead, Long Live BPM!" – An Interview with Tom Davenport

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Tom Davenport is the President's Distinguished Professor of Information Technology and Management at Babson College, the co-founder of the International Institute for Analytics, a Fellow of the MIT Initiative on the Digital Economy, and a Senior Advisor to Deloitte. He has written or edited 24 books and over 250 articles, published in the Harvard Business Review (HBR), Sloan Management Review, the Financial Times among many outlets. He earned his Ph.D. from Harvard University and has taught at the Harvard Business School, the University of Chicago, the Tuck School of Business, Boston University, and the University of Texas at Austin. One of HBR's most frequently published authors, Davenport has been at the forefront of process innovation, knowledge management, and analytics and big data movements. He continuously provides cutting-edge insights on how organizations can use analytics, big data, and artificial intelligence to their advantage. He's written or co-authored five books on business analytics and five on artificial intelligence. Tom has also been named one of the top three business/technology analysts in the world, one of the 100 most influential people in the IT industry, and one of the world's top fifty business school professors by Fortune magazine. Tom can be contacted best via tdavenport@babson.edu and https://www.tomdavenport.com/.

**BISE:** Thanks for taking your time, Tom. Let's start by briefly looking back. In 1993, you published your seminal book "Process Innovation – Reengineering Work Through Information Technology". This book has without a doubt influenced generations of business process management (BPM) academics and professionals. Why was there such a strong demand for BPM back then?

**Davenport:** It probably came from what was going on in the global economy. The US economy was in the doldrums, while the Japanese economy was very successful.



There was a feeling that the Japanese approach to quality and processes was one of the reasons that made them so successful. So I think a desire on the part of American and European organizations was to emulate their success. While it turned out the Japanese economy was not that successful over the long term in productivity and growth, in much of the rest of the world the takeaway was that two things are important: business processes and the technology that supports them.

**BISE:** So process thinking was the right tool at the right time?

Davenport: Well, it was not new at the time in that you had people like Frederick Taylor talking about this long before. And then there were people who were in the quality movement and already quite process-oriented. But I would say that none of them had the IT flavor in their views of process management. I really became aware of that from working closely with Michael Hammer, who had been a computer science professor at MIT before becoming a consultant. He studied office automation and argued for the idea that you shouldn't automate a bad process but rather change it. Hammer and I kept working on this and published our books pretty much at the same time. Reengineering was viewed as radical and new, and there was an appetite for dramatic change. So, it was definitely a zeitgeist type of demand.

**BISE:** After the hype in the 1990s, BPM seems to gradually have lost its popularity. Today, some people say that BPM is old-fashioned, maybe even "dead". What happened and do you have sympathy with such claims?

Davenport: Well, on the one hand, this was a reaction to the popularity of Six Sigma and the advocacy of it primarily from Jack Welch, the CEO of General Electric. Proteges of Welch ended up going to a variety of other organizations and tried to apply the idea quite broadly. It didn't go that well. For example, Six Sigma turned out not to be a great fit with the very innovation-oriented culture at 3M. Many organizations decided that classical, i.e. Six Sigma-style, BPM wasn't well suited to business activities with a focus on innovation and change, and so they dropped it. In addition, the literature and even some of the BPM software vendors were making the case for engineering organizations to the ultimate level of detail. I think that turned people off. Some processes are more structured than others. Research and development, for instance, is less standardized than manufacturing processes. My sense is that particularly in Europe, you had some manufacturing organizations such as Siemens, for example, that were consistently process-oriented and did quite well with it.

On the other hand, there was the issue of how process thinking and process-oriented organizational structures relate to the functional and business unit structures that most organizations have. Functional structures are largely based on skills. If you know a lot about finance, you are in the finance department. Process-oriented structures, however, are based on how work is done and trying to improve that work operationally. Sure, there's always a need for that, but it neither makes process thinking the only dimension of organizational success nor BPM the only relevant management discipline. And if you want organizations to throw away their existing structures, functional units and so on and replace them all with process-oriented units, it's not going to happen. As a Head of Finance, you probably don't want to be replaced by the Head of Orderto-Cash. I was never really a believer that process-oriented structures and process owners needed to be the only organizational structure, but they should complement the other structures. Basically, we still debate this today, but back then there was a strong advocacy of process thinking being the only feasible way of organizing.

**BISE:** Recently, we have seen technological breakthroughs – some closely related to processes such as process mining, others beyond such as generative AI. How should these technologies and process thinking be combined for business value?

**Davenport:** I think that you need processes in the first place to make any kind of technology work within an organization. Technologists think that introducing the technology itself is going to yield benefits. And you know, we've had a fair amount of research by economists suggesting that technology in many cases does not really lead to the kind of productivity gains that it should have. Let's take a look at generative AI, an example that everybody is very excited about. It was all the rage in terms of technological innovation, but the pendulum is swinging back a bit. People are starting to say: "We're not sure we're really getting any productivity benefits out of this technology. It's hard to establish the value of it, so maybe we're spending more money than this technology deserves".

My take is this: If you want to be successful with generative AI – or any other technology, for that matter – you need to have a clear process for it to be used. Generative AI is broad, so it can be used for a lot of different use cases – but wherever you use it, you have to establish a process. You have to measure the economic value that you're getting. And you can only measure this when you know how it was before and how it is now. Everybody needs to be following more or less the same set of processes in using it. If we're going to create any sort of consistent outcome, we need to measure that process to see whether we're getting productivity or not. That will happen through disciplined experimentation, control groups, people not using it compared to people using it frequently, or people using it in different ways.

Furthermore, generative AI is typically used by knowledge workers, who historically had a lot of autonomy. So



you have to figure out how you get them to adopt it. Such questions can be answered when taking process-oriented lenses, but sadly most organizations are not very good at this. They may end up throwing away the most valuable technologies because they can't test or measure them in a rigorous fashion. I was recently writing about law firms using generative AI, and one of the people said: "If you don't have a good lawyer in the loop of generative AI, you're going to get bad law." So both at the beginning to specify the problem and at the end to make sure that the generative AI returns high-quality content is where you need qualified people in the loop. Unfortunately, however, not all knowledge workers are likely to follow that approach. There was an MIT experiment shortly after ChatGPT came out and 68% of the participants in this experiment who were doing a task with generative AI thought the output of the model was fine with them. They didn't even look at it. That's really dangerous and process controls could be quite helpful in that regard at least to some extent.

**BISE:** It seems you have an optimistic view of BPM in light of these technologies. Do you mean that these technologies can advance BPM in organizations?

**Davenport:** I believe that new digital technologies can lead to a revitalization of process thinking. Either as the tool for monitoring your process, or as an enabler of a lot of different and better processes. I've started to see that a lot of organizations are saying they need to embrace some technology capabilities, maybe process mining or robotic process automation, because instead of improving processes, they think they can automate them or help the organization automate them. It's a good idea. But the key is this: you still need that disciplined process thinking if you're going to get value out of any technology.

**BISE:** So, what BPM skills and capabilities do organizations need today?

**Davenport:** First of all, organizations should be much broader in terms of BPM options than they historically have been because so much of it has been lean management and Six Sigma. Organizations should be familiar with the idea of end-to-end process reengineering or redesign, and I would introduce professionals to how you can impose a process-oriented organizational structure with a light touch, that is how you make process thinking co-exist with other types of organizational responsibilities. Then I would expose organizations to relevant technologies in the field, ranging from process mining over robotic process automation to the use of AI in business processes.

The other thing is about control. The first step in process improvement is often that you need to minimize unexplained variation. We are coming in with an assumption of saying, "we need to control, we need to manage, we need to standardize". And I just don't think that this is always

the right first step. Control can be an element for highly structured processes. But allowing some variation is the way that we get innovation. Sometimes it can introduce problems, but I think it can be quite positive as well. In all cases, it would need to be contingent and open-minded, and that's a thing process professionals require today. If the owner of a particular process or the group with which you're working wants to focus more on innovation and change, that's not going to co-exist well with a strong control orientation. So organizations and professionals need to understand that the purpose of a process should come first and that the process is embedded in a specific context. The means by which the process is managed should come second. Oftentimes it's the other way around.

Finally, I think critical thinking is going to be a very important skill because we're going to all be looking at lots of output created by smart machines and trying to decide whether it is correct or interesting or whether there is anything unique about it. I conducted 29 case studies of people who work alongside AI. The ones who are really successful at it are the ones who are willing to try new technologies and new ways of working. They are always thinking about what could make their jobs better and more effective.

**BISE:** Speaking of control, we find ever more intelligent systems with their own agency in processes that execute tasks not only automatically but autonomously, often with some black-boxed operations. Do you consider this as an opportunity, a threat or is it both?

**Davenport:** In a way, these systems are not as different as they seem because they're statistical in nature. They are making predictions of what words or image components are going to come next and so on. And some of them are going to be quite good and some of them are not—we're not going to easily eliminate those bad predictions from that kind of technology. So I think it's quite useful to start measuring things in the same way that we measured process outcomes to see how often we get unacceptable "hallucinations", which in the end are really just bad predictions.

I've also learned that business is not a deterministic set of processes. We need to consider much more the perspective of people working in the process than we do at the moment. The idea that we're going to establish a process design and that people will sort of slavishly follow is really not very accurate or even a positive thing. Moreover, it's not always a good thing to be in control and it's unlikely to happen in any case. You could say that process mining gives us the illusion of control and that we can pinpoint exactly who's causing the problem in the process and fire them or punish them or whatever until they perform well. I do think that process mining is very useful. It's really hard to think how we ever thought we could manage processes



without it. On the other hand, I think you have to allow for innovation, uncertainty, and variation in any human process. And the same holds true for processes involving intelligent systems. And if it's statistically based and predictive, you know your predictions are going to be wrong sometimes, even if you're using AI in the process.

**BISE**: The latest advances around process mining brought BPM back on the board room agendas. This is a unique opportunity for the community. What is your advice to researchers?

**Davenport:** Personally, I am trying to make the work that academics do more relevant to businesses and valuable for business people, as opposed to the highly rigorous but not very relevant research that largely comes out of most business schools. Doing work that improves the lives of people as opposed to just, you know, getting more papers published. I think I'm unusual in that I have tried to be applied in my orientation, but nevertheless, I am closing in on 150,000 citations. As an academic, I've found that if you like to do applied work, if you get in early to a field and write something that practitioners might find useful, then you know you make their lives better and end up getting a lot of the citations because academics have to cite something.

I also like the anthropological orientation and ethnographic approach from Xerox PARC where they were really looking closely at how people do work and understand why they do what they do. I became interested in it because I was doing work in knowledge management back then. If you're just looking at the steps that people perform, you can observe that by machine – for example through process mining – you don't get any sense of why or the meaning of the task in the broader context. We should pay attention to that.

**BISE**: Apparently, you have a good sense of trends and upcoming topics. How do you know what matters to research and practice?

**Davenport:** I try to talk to as many business people as I can. I'd like to say that it's more sophisticated than that, but I've always believed that academics and practitioners should get together in both unstructured and structured settings. It's talking to people about what's happening. This kind of understanding is key to finding out what matters most.

**BISE:** Thank you, Tom, for this inspiring interview.

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