



Michael Botos



Mary Drotar

# Observations on implementing an innovation system— Q&A with Michael Botos of Cardinal Health

Michael Botos, VP, Strategy and Innovation, Infection Prevention Group of Cardinal Health; interviewed by Mary Drotar, Partner, Strategy 2 Market Inc. (mdrotar@strategy2market.com)

How are service companies innovating these days? Many are not only improving their overall innovation processes, but also taking a closer look at the Front End of Innovation. Mary Drotar explores what Cardinal Health is doing in this regard in her interview with Michael Botos.

Hospitals face many challenges, and among the biggest are the problems created by health care-associated infections (HAIs). Such infections create a multibillion-dollar challenge for these institutions. And according to the Centers for Disease Control and Prevention (CDC), one in 20 patients will acquire an infection during their hospital stay. That adds up to about two million infections every year, at an average economic loss for the hospital of nearly \$5,000 for each patient. Even worse—nearly 100,000 patients per year die in U.S. hospitals from these infections.

Michael Botos currently leads strategy and innovation for the Infection Prevention Group at Cardinal Health, an \$89 billion global health care manufacturer and distributor. The infection prevention business focuses on customer-driven product innovation and horizontal (cross-business) integrated solutions to reduce the risk of HAIs. Before joining

process, tools, and technologies that comprise our end-to-end innovation “system.” Today, innovation is a critical element of our culture at Cardinal Health.

**Drotar:** Was the plan for embedding innovation into the organization influenced by Cardinal Health’s business strategy?

**Botos:** Absolutely. At Cardinal Health, the business strategy defines our innovation agenda. But at the same time, innovation informs our business strategy. We define innovation as new products, services, and business models that delight our customers and challenge conventional thinking in a way that creates sustainable advantage and economic profit. From this definition, it is apparent that innovation and strategy are inextricably integrated. Strategy looks for customer-driven opportunity areas, or “fishing holes,” where we can define a sustainable competitive advantage. Innovation, however, focuses our attention on solving unmet customer needs. Strategy and innovation are really just two lenses on the same problem. It’s impossible to separate the two. A well-defined strategy drives innovation, but effective innovation challenges your strategy.

**Drotar:** How did you and your colleagues approach implementation of the end-to-end innovation system you described? Where did you start?

**Botos:** We have several different businesses, each with different economics and innovation objectives. We needed to make sure our innovation process, tools, and technologies were flexible enough to support these different businesses. For me, it was helpful to create

an organizing framework to understand and anticipate all the moving parts. That way, I could systematically address each piece of the puzzle with confidence that it would all fit together at the end.

**Drotar:** Describe the pieces of the puzzle.

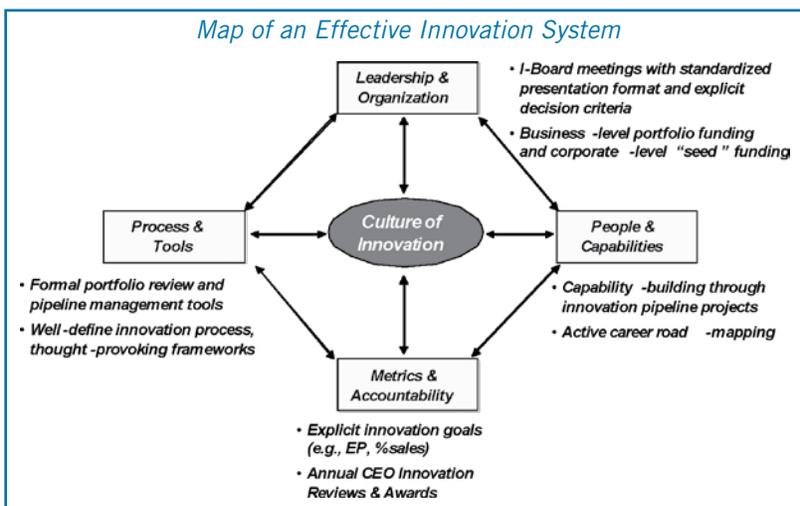
**Botos:** There are four components of an effective innovation system: leadership and organization, people and capabilities, metrics and accountability, and process

“At Cardinal Health, the business strategy defines our innovation agenda.”

Cardinal Health in 2006, Botos spent fifteen years as a consultant at the innovation boutique firm, Strategos, and in the strategy practice of Ernst & Young.

**Mary Drotar:** Why did you decide to leave consulting to join Cardinal Health?

**Michael Botos:** I joined Cardinal Health to strengthen and formalize its Front End Innovation processes. I saw the opportunity to put theory into practice and play a significant role in embedding a culture of innovation at the organization. When I joined, a fairly robust phase-gate process for new product development was already in place. But the processes for idea generation and selection to ensure good ideas entered this pipeline were less structured. Over the past several years, we have worked together across the businesses of Cardinal Health to develop and test the



SOURCE: Michael Botos

and tools. Building a culture of innovation requires a systematic approach to address all four of these components simultaneously. If you drop the ball on any single piece, you're potentially putting your whole program at risk. A lot of people tend to focus only on the process. I think that's too shortsighted.

**Drotar:** What were some of the first steps taken by the infection prevention business when implementing the innovation system?

**Botos:** We started with governance and criteria for decision making. For instance, we asked, How do we ensure that decisions are systematically and consistently made, what are the right criteria, who are the right people that need to be in the room making those decisions? We also created an innovation board (I-Board), which included a standing, monthly three-hour team meeting for

the review of new product concepts. Once you turn on the innovation engine, the ideas start coming fast, and at some level, they are all good ideas. We realized that

“Once you turn on the innovation engine, the ideas start coming fast.”

if we didn't have a consistent process for evaluating and selecting those ideas, we might not make the best decisions and would quickly run out of capacity to bring ideas to market.

**Drotar:** Where do you get most of your new product development ideas? Do you get them externally or internally?

**Botos:** I would say it's about fifty-fifty right now, in terms of external and internal. Given our size and position in the health care value chain, many technology companies, customers, and inventors bring ideas to us. We listen to these ideas in the context of our deep understanding of customer workflows and unmet clinical needs. Many times, we are able to stretch these raw idea fragments into larger, value-added solutions for our customers. We have a systematic approach for evaluating and prioritizing these ideas based on customer needs and alignment with strategy.

**Drotar:** What do you think are the three most important considerations for implementing an innovation system?

**Botos:** I would place governance and decision criteria as number one. Process is number two, and the education, awareness, and acumen of the team members is number three. And to make it happen, you need strong leadership. You have to be working on all of those components simultaneously. Any process can work, and there are many different process permutations that work for different industries. And any tool will work, because as long as the team is focused on the right customer problem, it will find a great answer. The most important component, though, is a system of innovation governance that consistently evaluates, selects, and prioritizes ideas, and that allocates scarce financial and human capital resources.

**Drotar:** It appears that decision making is critical for your system to be successful?

**Botos:** That is correct. The most critical thing is to have the right people in the room making the decisions, and to have the right criteria in front of them so they ask the right questions. Without the right criteria, you're chasing every idea and you find it difficult to say no to anything.

**Drotar:** Something I often see in companies is a tendency to squeeze an inordinate number of projects through the pipeline, when there are clearly insufficient resources to work on them all.

**Botos:** Yes, that issue was pervasive in many organizations

where I consulted. It's the belief that more is better. To some extent, at the Front End of Innovation, that is true. But you have to quickly prioritize the biggest and best ideas, and assign a clear owner with the capacity to drive those ideas forward.

**Drotar:** Describe a typical innovation team and the roles of its members.

**Botos:** A team will assemble around a new opportunity. In most cases, there is a marketing or business lead that brings in technology-testing resources from research and development and design requirements or product limitations expertise from regulatory or both. Finance supports the business case, and legal undertakes an intellectual-property scan. Depending on the nature of the project, information technology might also get involved. In our industry, there are many quality and patient-safety elements that need to be actively managed to bring a product to market. All these experts work together to deliver products in an efficient and customer-driven way.

**Drotar:** Do you provide training and support during implementation of the innovation system?

**Botos:** The innovation training we do is very project-oriented. We'll pick a business issue or a customer problem that we want to solve. Then we'll define the tools that need to be used through the process to get to the deliverables. As we go through the process, we train intensively on the tools using real-life examples and solving real customer problems. Our philosophy is "learning by doing" rather than general awareness building. §

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