

# FOR DECADES, EXECUTIVES RAN THEIR COMPANIES ON BUSINESS PROCESSES BASED ON MYRIAD RULES, STANDARDS, AND KPIS.

That approach worked well, enabling firms to increase their operational efficiency and cut costs while maintaining high levels of quality in their products and customer service.

But markets have become increasingly dynamic, and many companies with rigid business processes are now finding themselves at a distinct disadvantage.

By the time those organizations have redesigned their business processes and implemented any changes, the market may have already moved on.

To become more agile, many companies have been migrating their business processes from rules-based systems to more flexible, outcome-driven approaches. Implementing such transformations, however, has been much easier said than done, but the leading companies in many markets have wisely been deploying advanced Artificial Intelligence (AI) technologies to facilitate the transition.

# FROM RULES TO BUSINESS OUTCOMES

The traditional goal of IT has been to make business processes faster and cheaper. That approach is still necessary but no longer sufficient for firms to remain competitive. Today, IT has to do much more, enabling companies to respond more quickly to dynamic business conditions.

Consider, for example, financial institutions that must routinely deal with fast-changing regulatory and security requirements like the Foreign Account Tax Compliance Act (FATCA). Such regulations may require banks to continually adapt their KYC (Know Your Customer) business processes and, in such demanding environments, companies would be at a sizeable disadvantage if they kept relying on rigid, rules-based systems that are difficult to revise.

To attain greater organizational agility, many firms have been moving toward outcome-driven approaches and dynamic business processes. In the healthcare industry, for example, organizations have been adopting a "pay for performance" model, which offers doctors, hospitals, and other medical providers various financial incentives for meeting specific performance criteria, such as controlling a patient's weight and blood pressure. In the past, that industry was governed heavily by strict rules that dictated, for example, exactly what procedures were covered for certain conditions and how much doctors and hospital could charge for them.

But companies have had trouble implementing such outcome-driven approaches. For one thing, the systems require timely data and analytic methods to answer key questions about the organization's performance.

Has the new marketing campaign resulted in increased revenues at higher margins? Did the move toward fewer suppliers help reduce manufacturing defects? Has the new online ordering system led to increased customer satisfaction? And so forth.

Now, though, the use of AI technologies—a combination of IT systems, tools and methods that enables machines to sense, comprehend, act and learn—is enabling companies to overcome those difficulties. In the past, a big challenge in moving toward outcome-based approaches has been that executives were too busy improving the "how" of their operations, so they couldn't properly focus on the "what" and "why" of their business. The application of advanced AI technology can take care of the "how," freeing executives to concentrate on the "what" and "why" issues. That's one reason why, in the recent Accenture Technology Vision survey, 85% of executives said they will be investing extensively in AI-related technologies over the next three years.<sup>1</sup>

The use of AI confers numerous benefits. For one thing, the technology helps enable the analysis of unstructured data from a variety of sources across social media channels. It also allows firms not only to automate certain processes but also to reconfigure them to complement and, more importantly, augment the skills and expertise of employees. Moreover, the conventional approach of using rules-based business processes will generally lead only to incremental improvements in performance. In contrast, AI can help generate huge disruptive advances that can potentially become "game changing" innovations.



AI CAN HELP GENERATE HUGE DISRUPTIVE ADVANCES THAT CAN POTENTIALLY BECOME "GAME CHANGING" INNOVATIONS

## INDUSTRY AFTER INDUSTRY

Because of those benefits, many leading companies have been deploying AI to make the transition away from rules-based systems. This transformation has been occurring in industry after industry, particularly in the following applications:



## PROCUREMENT MARKET INTELLIGENCE

### Data analysis has long been crucial for procurement departments, and AI can help to enable firms to obtain superior market intelligence.

In addition, the technology is now allowing executives to perform outcome-based analyses that can optimize for the whole corporation, not just for individual business units. At one global consumer goods manufacturer, an AI system helps compile detailed intelligence reports on suppliers by automating the search, extraction, aggregation, and synthesis of unstructured data. Not only has the technology streamlined the process – it used to require up to three working days for experienced procurement experts to prepare a report on a single supplier – the system also helps to enable twice the coverage of information. But it's not that AI has replaced humans; instead, it has augmented them.

The reports generated by the system are reviewed and improved upon by human procurement analysts, and the overall result has been enhanced sourcing insights and a 30% increase in capacity. Moreover, in the future the system will help the company to obtain an end-to-end view of its entire supply chain, so that executives can optimize various outcomes – quality, delivery time, costs, and so forth – for the entire corporation and not just for a local operation or individual business unit.



### All technology is also being adopted in the customer engagement and service operations of many companies.

These AI systems can resolve about 80% of customer interactions that are fairly routine, and human experts handle the other 20% that are more complex. At one multinational technology company, an AI system with natural-language processing is used to analyze customer e-mails, automatically handling the simpler requests and identifying which cases might require "white glove" treatment by a human agent. The result has been overall faster resolution of requests and an increase of about 30% in capacity. Other firms have deployed AI for claims management. At one large insurer in Europe, an AI system processes unstructured data from various documents, including the insurance claim form, invoices, doctor diagnoses, and so forth, and then proposes a solution for any particular case.

That proposal is then presented to a human for acceptance or modification. These types of applications are now evolving toward more outcome-driven approaches with the end goal of improved customer satisfaction. In making that transition, some companies have overhauled their entire perspective toward customer service, moving away from a reactive mindset (waiting for a customer request or complaint) and toward a proactive mentality (anticipating requests and problems before they occur). Advanced AI systems can be used, for example, to accurately predict when industrial equipment might fail so that proactive measures can be taken to avoid any unanticipated breakdowns. The result: increased customer satisfaction from manufacturers that can run their factories on a regular schedule without suffering costly, aggravating shutdowns.



#### **CONTENT MANAGEMENT**

For many online and e-commerce firms, AI technology is an effective mechanism for monitoring everything that's posted on their platforms to detect obscene or illegal material, off-brand content, and counterfeit goods.

These firms thrive on fast moving, fresh products and the speed of product changes makes product tagging a challenging task. Current processes to detect inappropriate content or to perform detailed tagging—on gender and product attributes, for example—are manual and require humans to review images and take appropriate actions. One online company worked with Accenture to develop artificial intelligence models that learned from large amounts of images and can now tag and categorize products based on detailed attributes and detect inappropriate content. The AI-augmented process performs at an order of magnitude faster than the manual process with substantially higher productivity and enhanced the customer search and experience on the website.



## FINANCE AND ACCOUNTING

Regarding the FATCA regulations cited earlier, the application of AI systems is helping banks to reconfigure certain processes on the fly to accommodate the continual changes in requirements for reporting the foreign assets held by U.S. customers.

Again, these systems are more outcome-based, operating on general guidelines regarding account data rather than on specific rules, and their design focuses on accountability, fairness, and transparency.

Furthermore, for financial accounting systems in general, AI can now be used to perform journal entry and reconciliation, and soon the technology will be able to spot and potentially resolve audit issues in real time, advancing organizations from traditional quarterly closing to continuous closing capabilities.

Thanks to these types of applications, AI has the potential to boost labor productivity by up to 40 percent,<sup>4</sup> and it's important to note here that this rise in productivity can lead to profound organizational changes. These innovative technologies will fundamentally change the way work is done, eliminating repetitive tasks and supporting people in complex and creative problemsolving. Managers and employees can, for example, concentrate more on the "what" and "why" of business. As such, AI will be vital for companies making the transition to outcome-driven approaches, freeing people and resources to prepare the business for new models.



AI AUGMENTS PEOPLE AND ALLOWS THEM TO FOCUS ON HIGHER-VALUE WORK, DECISION-MAKING AND INNOVATION AND REINFORCES THE ROLE THEY PLAY IN DRIVING BUSINESS GROWTH.

## WHAT TO DO

Implementing advanced AI systems, however, remains a challenge, requiring a change in mindset as well as investments in key areas. The transition to outcomes-based AI will take concerted effort from the senior leadership in the following ways:

- Executives need to adjust their basic mindset toward an **outcome-driven perspective**. But this doesn't mean throwing the baby out with the bathwater. Instead, best practices and business expertise can be used as the foundation for AI outcome-driven approaches.
- The needs and objectives of the different business units and operations must be communicated effectively so that the IT organization can build the levers to **collect the right data**.

  Unfortunately, many companies remain heavily "siloed," and corporate data remains a hugely underutilized asset. Al can improve the enterprise's ability to fully leverage that information.
- Management should remember that AI by itself is not a panacea.

  The trick is to **combine knowledge-driven approaches with data-driven methods,** and to mix machine learning with machine reasoning.
- As technology reduces the gap between effective human and machine cooperation, businesses need to account for human behavior.<sup>2</sup> The goal is to have **technology adapt to people**, rather than the reverse.

  Well-designed Al systems are capable of doing that.
- In terms of outsourcing, companies will have to rethink how to structure those relationships. Business processes have traditionally been driven by service level agreements (SLAs). This will change as companies move toward outcome-based approaches, with agreements based on the business value created by the work.

# BRAVE, NEW, OUTCOME-DRIVEN WORLD

Without a doubt, the emerging era of outcome-driven AI is a brave new world. In the future, even the task of reconfiguring business processes themselves will be automated and handled by AI systems. And as AI moves beyond being a back-end tool to becoming the primary interface with customers and employees – making interactions simple, smart, and more human – it will become the face of the company's digital brand.<sup>3</sup>

Think of Apple's Siri, Amazon's Alexa, and Microsoft's Cortana. As such, executives have much at stake in developing and implementing outcome-driven Al systems, and the retooling of business processes to become more flexible and fluid is just the beginning of that transformation.

#### REFERENCES

- <sup>1</sup> Technology Vision 2017, Accenture. <u>www.accenture.com/technologyvision</u>
- <sup>2</sup> "Design for Humans: Inspire New Behaviors," Technology Vision 2017, Trend 4, Accenture. <a href="https://www.accenture.com/us-en/insight-human-technology-design">https://www.accenture.com/us-en/insight-human-technology-design</a>
- "Al is the New UI: Experience Above All," Technology Vision 2017, Trend 1, Accenture. <a href="https://www.accenture.com/us-en/insight-artificial-intelligence-ui">https://www.accenture.com/us-en/insight-artificial-intelligence-ui</a>
- 4 "Why Artificial Intelligence is the Future of Growth," Accenture. <a href="http://www.accenture.com/futureofAl">http://www.accenture.com/futureofAl</a>

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