CHAPTER **1**

Achieving High-Impact Outcomes—An Overview

The sole reason to embed data intelligence into your organization—to make it pervasive—is to help you make better decisions that lead to achieving high-impact outcomes. To get the information you need to make better decisions, it's crucial to have the ability to develop customized analytics applications quickly, and scale them up or down based on intelligence needs.

This means that you are becoming—or need to become—like a software company, whether you want to or not. Therefore, your IT strategy and technology expectations must reflect this premise.

For example, artificial intelligence and digital supply networks can enable you to become more agile by providing the ability to better understand and interpret your environment and become more responsive to business and market needs. However, the foundation of this agility is the technical infrastructure that supports all these dynamic technologies. If that infrastructure is not cutting-edge and flexible, it can't support innovative technologies.

Software companies (meaning your company!) need technical infrastructures that are more akin to those of utility companies. On a hot summer day, do you contact your local electric supplier to make more wattage available to your house in order to run your air conditioner? No, you get billed for what you utilize.

The same is true for intelligence capabilities. Establishing the infrastructure enables you to quickly access the resources you need to develop and deploy intelligence capabilities when and where you need them, and to make that intelligence pervasive.

Pervasive data intelligence is all about driving game-changing outcomes. It doesn't matter what problems you have, or which tools you buy to solve them, it's the results that matter. How well did your strategy work? How well did it solve your problems and enhance your ability to compete in a cutthroat environment that kills businesses without mercy? How well did it enable you to meet your high-impact outcomes?

To create those high-impact outcomes—outcomes that have a significant effect on your company's bottom line and that will help you thrive in today's digitally transformed marketplace—you need three things:

1. The right data to help you gain the insights you seek
2. A technical architecture and environment that stresses flexibility and scalability
3. Operational excellence, facilitated by the right data and the right technology, integrated with your organizational operations

Simple, right? No: but it is doable.

Figure 1.1

THE RIGHT DATA

Customer demands to innovate and provide better, more personalized, customer service—coupled with shareholder demands to increase share value and speed their ROI—have created a critical need for companies to better leverage data for decision-making. However, amidst the inundation of big data, it's often difficult to tease out valuable data from noise.

To get the data you need, you first have to understand your business needs. By asking the right questions, you can get the answers you seek, and get started on wringing the data you need out of the wash of data that floods your company every day.

First, ask your managers and knowledge workers what data they need to do their jobs. That's the data that will drive value and create

those high-impact outcomes that will help you thrive. Next, look at the questions you're asking. What data do you need to answer those questions and gain those critical insights that speed and enhance decision-making?

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Once you've gotten a handle on the data your people need to do their jobs and to answer the questions you have, put that data to use. Ask how you can use the data to improve your customer service. It's not enough anymore to satisfy your customers. You must delight them.

To delight them, it's critical to create a sense of greater intimacy between your business and your customers. Customers want to feel as if you know them—what they need, what they want, and, most importantly, what they don't know they want.

Next, use that data to innovate—both in terms of what you offer the market and how you operate your business. Social media has changed the market landscape and businesses that don't constantly innovate die more quickly than ever. Innovation won't be possible, however, unless your business is operating at its optimal level. To do that, you must constantly innovate your operations to achieve and maintain operational excellence.

Finally, the right data can also help you mitigate risk. There's no reward without risk, but too much risk leads to disaster. What's more, the types of risks have multiplied exponentially (fraud, cybersecurity, market, economic, political) and it's essential to evaluate them appropriately and manage them effectively. It's essential to integrate technology—especially AI—into all aspects of risk management.

There's one caveat to getting and using the right data. Do it quickly, so that you can move on to the next step: designing the architecture and environment you need to leverage that data.

THE RIGHT TECHNICAL ARCHITECTURE AND ENVIRONMENT

Creating customer intimacy requires massive amounts of data and complex, sophisticated analytics capabilities—think AI and machine learning. Risk management also requires complex analytics and sophisticated analytics, but it requires ironclad security as well. Continual innovation and operational excellence require it all—big data, sophisticated analytics, and security—but it also require flexibility in your IT infrastructure. You must be able to spin up or spin down, according to your information or project needs.

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The key to determining what technology options will work best for your business is to look at those options through the prism of your business outcomes. It's imperative to be honest with yourself about where you're starting from, and where you can realistically go, over multiple time horizons.

Construct an infrastructure and analytics maturity model. Be realistic about how much you can accomplish, but work fast. It's critical to start fast and prove value, both from a competitive standpoint and to satisfy C-suite demands and access the money you need to build your optimal state.

Any technology-architecture design you choose to help you achieve your outcomes should have three key capabilities: it should have the ability to accommodate multistructured data; it should be flexible enough to incorporate new technologies as they arise, and as your needs change; and it should be scalable to grow as you do.

To gain these capabilities, more and more organizations are taking advantage of digitization and leveraging the transformative value of the cloud. By moving your analytics applications and technical infrastructure to the cloud, you can gain a flexible, scalable platform that helps you implement your desired technical architecture—now and in the future—and achieve cost-effectiveness and certainty.

When you don't have to wrangle with applications and infrastructure management, you free up resources to focus on proving the business value of your efforts by achieving those high-impact outcomes that drive success.

There are many cloud options: public, private, and hybrid clouds; intelligent clouds that mingle the cloud with analytics technology (my personal favorite); and machine-learning algorithms to augment those analytics. The list is almost endless. However, the cloud options you choose must be purchased with the goal of enabling you to meet those high-impact business outcomes that you've defined. If you don't have clear outcomes in mind, and match the technology to those outcomes, the technology is useless.

OPERATIONAL EXCELLENCE

Once you have the data you need, and the right technical architecture and environment, the next step is to leverage those assets to improve your operations. Analytics, when embedded in a flexible, cloud-based architecture and infused into your business operations, can help you drive operational excellence.

The reason most executives give for implementing new analytics initiatives—any technology initiative, really—is to enable them to improve the way they do business and satisfy their customers. But operational excellence is more than that.

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First, it's a commitment to innovation. We touched on innovation earlier—both in terms of products and operations. Analytics and innovation have a symbiotic relationship, a virtuous circle. The answers you gain from your analytics can drive innovation, to be sure, but innovation can also spur new analytics implementations as the business grows and new products become necessary to meet growing market demands.

Operational excellence also requires clear strategic direction and focus, as well as leadership, to drive results. This is where embedding intelligence—making it pervasive throughout the organization—pays off. The insights you gain can help you develop more successful strategies and hone your focus on defining those outcomes that will have the biggest impact on the bottom line and drive shareholder value. Leadership that is committed to leveraging technology and managing by insight, rather than gut instinct, can drive strategy implementation and achievement of those high-impact outcomes. Long-term operational excellence is a matter of redefining those high-impact outcomes as customer needs and market conditions change.

DRIVING HIGH-IMPACT OUTCOMES WITH PERVASIVE INTELLIGENCE

The relationship between high-impact outcomes and pervasive data intelligence is clear. Insight is key. The right data, the right technical infrastructure, and striving for operational excellence will help you implement the analytics solutions you need to get critical intelligence and insights about your business environment. If you embed that intelligence into your organization—if you make it pervasive—you will gain an enterprise perspective on your organizational information, and you can use that perspective to drive those high-impact outcomes.