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When *Information Revolution* was published in 2006, no Chinese-based companies were among the top 10 largest companies by market capitalization. Apple didn’t sell phones. Facebook was something college kids used to connect with their friends. Back then, we talked a lot about the amount of data coming in and faster processing speed.

What we believed then remains true today: Data, and the decision-making process, can be moved throughout the organization to equip every decision maker (automated, line worker, analyst, executive) to make the best choices. By operationalizing analytics, organizations can identify and quantify both opportunity and risk. *Information Revolution* highlighted SAS’ Information Evolution Model, which helps organizations understand how they interact with their information and how to extract more value from it through analytics.

**SO WHAT HAS CHANGED?**

Business intelligence still matters. But today’s global economy requires predictive analytics and forecasting to play a more active role. Insights from unstructured data now hold great promise. New ways to store, move, and process data have made big data more accessible and affordable than ever before. Delivery has moved to mobile. Many leaders run their businesses from tablets and smartphones.

A persistent myth is that technology alone enables all this. Sure, you need technology, but it’s just one component: People, information processes, and culture are equally critical. That’s really what this book is about—transforming your organization to harness all four components.
PUTTING THE SPOTLIGHT ON PEOPLE AND CULTURE

After *Information Revolution* was published, accelerated processing speeds gave rise to near-real-time results. More granular exploration of data became possible in ways that weren’t quick or easy before. Organizations that treat their data as an asset continue to:

- Invest in people with the skills to extract the insights that were hidden in the data and surface them to decision makers throughout the organizations.
- Foster a culture that encourages using data to uncover new business opportunities and gain a better understanding of their customers.
- Have an executive sponsor who leads the effort to find, hire, cultivate, and support individuals who embrace fact-based decision making. This executive sponsor pays particular attention to the communication challenge that data-driven decision making presents. It’s important to have an executive who can articulate what the analytical insight returns can mean to the business units—and win over skeptics.

If top executives still make decisions based on gut feeling and data-driven individuals are still a separate part of the business, no amount of technology and data governance processes will make a difference. But if an organization is committed to using data successfully, one strategic hire can have a huge impact. A new type of professional, the data scientist, can bridge the communication gap that prevents an analytical culture from taking hold. Tom Davenport, in his *Harvard Business Review* article “Data Scientist: The Sexiest Job of the 21st Century,” describes a data scientist this way: “It’s a high-ranking professional with the training and curiosity to make discoveries in the world of big data. . . . Their sudden appearance on the business scene reflects the fact that organizations are now wrestling with information that comes in varieties and volumes never encountered before.” Data scientists help organizations get the most out of their data, in part, by using business requirements to drive the information exploration and the application of analytics. Data scientists often have a background in math, statistics, and computer science, but aren’t necessarily experts
in any one of those fields. They have to be very good at translating the value of data to the business and helping analysts understand what they need to do.

Internal communication and business and IT alignment continue to present challenges for organizations. Many rely on enterprise Centers of Excellence to boost business-transformation efforts.

My point is: You can’t just bring in technology tools to solve your business problems and expect them to do all the work. You must have the infrastructure capabilities, the skilled people, the information processes, and the cultural commitment to derive the most value from your data.

AND SOME THINGS STAY THE SAME . . .

Some things haven’t changed, and one of them is taking a structured approach to building toward the enterprise level of information maturity—and beyond. The five levels outlined in 2006 remain relevant today (though we’ve grouped the levels into three key categories). Unfortunately, many organizations are in a quandary about how to reach information maturity. Now here’s the clincher: “By 2015, 15 percent of organizations will modernize their strategy for information management capability and exhibit a 20 percent higher financial performance than their peers,” according to Gartner.¹ These are clear signs of strategic initiatives by many organizations to reach higher maturity level.

To get started, you need to understand where your organization is today before you can build toward the future. This is particularly important as it relates to purchasing technology. Organizations that say they have not received a strong return on their investment in analytic technology frequently suffer from information maturity issues and may benefit from a business-transformation effort. Assessing maturity is a process, but well worth the effort in the knowledge you will gain. It can be painful to find out your organization is not at the maturity level you assumed. But, you will have a clear picture of how to begin developing your road map to get to the next level.

A fact-based decision-making culture is no longer an option; it’s a requirement spreading across industries. To stay competitive, be
proactive. Use the Information Evolution Model. Let your data give you a fresh perspective on your business—see what’s working, fix what isn’t, and set your sights on new opportunities.

—Jim Davis
Senior Vice President and Chief Marketing Officer SAS

NOTES


Over the past 28 years of my professional career, I had the opportunity and privilege to work with many clients in almost all industries and sectors in the United States, Europe, the Middle East, Asia, and Latin America. I have helped these clients improve their efficiency, change their operating models, and transform their organizations. Although each region has business and cultural differences, all organizations face the same types of core challenges when they look closely at their operating models and evaluate their efficiency and alignment. When organizations realize they have a weakness in their decision-making process, strategy, or business functions, the first impulse is go with the easy answer first. Often in my travels I’ve seen a new technology being touted as a cure-all. And while new technology might be needed, the business results could vary considerably. Visionary leaders and executives realize that the key to unlocking their organization’s full potential requires honest and objective observation and evaluation of how the organization conducts its daily routine tasks.

Two key obvious ingredients are required to develop strategy and make sound decisions—information and skills. Accurate and consistent information provides a detailed understanding of business performance. People with the right skills can explore this information and analyze it to help their organization make sound decisions. This may be all organizations need if they limit their view to specific tasks or functions. But the focus should always be on enterprise performance. The formula for an efficient operating model will now need two more ingredients. Decision makers from various business units need to interact and collaborate to make the right decisions for the enterprise. Then the human nature characteristics and challenges quickly bring our attention to the internal organization culture that
we all recognize in our individual environments. Each environment has its own unique formal and informal business practices, norms, and expectations that influence how decisions are made.

Aligning all business units around enterprise performance can be difficult. Effective organizational transformations can achieve alignment when organizations focus on their four key pillars—people, processes, technical infrastructure, and culture. The winning organizational transformation formula is now complete. When I visit clients I emphasize that it doesn’t matter that you’ve mastered one, or even two, of these factors—you need to work on all of them to bring your organization into alignment and truly transform it. Think of it like a recipe. Cut out a key ingredient, or substitute a poor alternative, and the recipe won’t taste the same—it might not even work. It’s the same with organizational transformation. If you ignore the culture part, the best technical infrastructure in the world won’t help you improve the organization’s business performance.

Many visionary leaders and executives realize the need to take a comprehensive look at their organizations. Addressing weaknesses and leveraging strengths in the current capabilities in each environment requires business transformation efforts in many cases. Leaders who realize that and, more important, act quickly can produce significant results for their organizations. I wrote this book because many executives still struggle with how and where to start. Approaching these complex organizational challenges needs a structured approach and a sound strategy that is tailored for each environment. This has been a significant focus of my professional career, and I wanted to share my experience and provide a roadmap for organizations to follow.
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Have you ever asked a question that no one in your organization could answer? Or maybe someone answered it, but it turned out the information driving the answer was so flawed that you really got no answer at all. Or maybe you got multiple conflicting answers that took hours, days—or maybe even weeks to straighten out.

Have you ever wondered why—in an age when bar codes are on everything, every conversation with a customer is recorded, and the Internet is full of comments about your products and services—you don’t really know who your customers are? Or what they want? Or, more important, what they might want next year? Are you frustrated because your organization isn’t achieving its goals? Or are you wondering why your organization is not keeping up with the competition?

You are not alone. Information, and the business insight you can derive from it, is coming so fast, from so many sources, in so many different formats, and at such incredible volumes that it is difficult to grasp. It’s not hyperbole to suggest that gaining insight from data is like drinking water from a fire hose. Business insight is derived from an organization’s information by using the domain knowledge of its resources and applying analytics to mine the data for critical trends, forecast revenue, determine customer propensity to buy products and