fit together to keep the organization running.

Lex Sisney, author of *Organizational Physics*, lays out three highly abbreviated steps for building an organization design:

- Identify the core functions needed to support the strategy.
- Define what each function is accountable for and how it will be measured.
- Place the functions in a structure.

The result is a structural diagram that may look like a traditional org chart, but has a different intent. Where the org chart maps reporting lines between people, the structural diagram maps what functions need to be performed and where responsibility for those functions lie. The org chart emerges from the structural diagram. There's a lot implied in that high-level process, but Sisney's very comprehensive blog post offers a well-explained before-and-after example illustrating his points.

As John Beeson notes in a 2014 HBR article, organizational design is frequently the province of consultants, and every consultant has his or her own model or framework. But, Beeson argues, organizational design has evolved from a "big bang event," most often associated with significant downsizing, to an ongoing process of continual adjustments to improve efficiency and spur growth. That means every manager has to deal with, and every manager should have a model for approaching it. For Beeson, it doesn't much matter what model, as long as it helps you to address five key questions:

- What is the business's value proposition and sources of competitive advantage?
- Which activities directly deliver on that value proposition?
- Which structure should we choose and how do we overcome its inherent downsides?
- What type of leadership and culture are required to deliver the value proposition?
- What organizational practices are required to reinforce the organizational intent?

There are, of course, some more-or-less standard structures used by many

organizations, including traditional hierarchical structures, as well as more organic variations such as matrix and network structures; each varies in terms of the level of complexity, formality, and inclusiveness it allows and in how communication occurs. A *Mind Tools* survey article on organization design offers a useful summary and comparison of each of these models (as well as a good introduction to the basic principles of organizational design).

For those seeking a more systematic introduction to the discipline of organizational design, along with frameworks, tools, and processes for undertaking a structural redesign process, there are several options. Burton, Obel, and DeSandis offer a primer on the basics of organizational design and a step-by-step process for structural design. Stanford offers an overview of the field and an approach structured around five core principles in the Economist's Guide to Organisation Design. Kesler and Kates offer their own "scalable, five-step process" for organization design, directed specifically at business leaders. Any of these will provide a solid overview of the field along with some tools for engaging with it.

Organizational design may seem mundane, but it is every bit as critical as the big work of culture change. As Lex Sisney, author of *Organizational Physics*, put it in a blog post, "how your organization is designed determines how it performs." How an organization is structured will determine how it responds to changes in its environment. An organization's structure may nurture or inhibit innovation. Where the structure runs counter to the strategy, people will become frustrated and abandon change in favor of the path of least resistance.

## **Reviews**

The Big Data-Driven Business: How to Use Big Data to Win Customers, Beat Competitors, and Boost Profits

Russell Glass and Sean Callahan (Hoboken, NJ: John Wiley & Sons, 2014)

Although big data has become a pervasive buzzword, few businesses fully understand what exactly big data is or how

it can be leveraged to support growth and innovation. Russell Glass and Sean Callahan attempt to address these issues and deconstruct the dauntingly complex notion of harnessing big data for business applications. Glass and Callahan are pioneers in this field, having deployed big data strategies to grow Bizo, a business-to-business marketing company, until its acquisition by LinkedIn for \$175 million. Both are now at LinkedIn; Glass is the head of marketing products and Callahan is a senior manager of content marketing. The authors give readers an insider's look at how big data can be used by laying out the available technologies and their implementation and showing how a newcomer can deploy big data tools for business goals.

Beginning with a simple idea—that "the companies that most effectively use big data to gain insight into their customers and act on that data will win"—the authors conclude that modern businesses should "be data-driven and customer focused." The notion that a business should be customer focused is hardly novel, but historically it has been difficult and expensive merely to collect and store the data needed to glean transformative insights—let alone perform the analyses that lead to these insights. The advent of inexpensive large-scale data storage and advanced analytics capabilities is quickly eroding this barrier, making it possible for businesses to implement a data-driven approach across the organization. Big data analytics can provide new insights in the form of more focused information about what customers like and what makes them buy-leading to moreinformed decisions about, for instance, what could be optimized in the pipeline. Coupled with existing data and resources, big data can be used to generate and score new leads for sales, inform product development, and provide a hyper-focus on customers—potentially all in real time.

These benefits are not restricted to business-to-consumer companies; the authors provide several examples of business-to-business applications. For instance, they describe how DocuSign, which provides solutions to manage digital transactions, saw a "1.1 percent increase in conversion rate [which] . . . equates to \$6.5 million" just a few months after implementing predictive lead scoring.

Glass and Callahan recognize that adopting these strategies may seem difficult; the first step, they say, is empowering IT to work directly with marketing to ensure on-demand access to the data stores and analytics tools. Recognizing that data is often segmented, broken up among various departments, and difficult to access, they lay out a plan of action that begins by bringing all the data together under one roof and providing easy access to the consolidated data for employees that need it.

The rising tide of data-driven businesses, along with a parade of highprofile data breaches, has raised consumer awareness about data security and privacy, making security a central component of any big data effort. Glass and Callahan note that a surprising number of companies fail to take basic steps to protect sensitive data, such as placing databases behind a firewall. With this in mind, they devote an entire chapter to outlining how to protect the data, as well as relationships with

consumers who are increasingly concerned about how companies use private data. Some of their suggestions include increasing consumer awareness about how data are collected and used and paying close attention to what private data is stored and how it is maintained.

The book largely skirts one key hesitation businesses often have in implementing big data solutions cost. Instead of suggesting how readers might address costs head-on, the authors emphasize the incalculable value of the innovation that can emerge from implementation of these technologies. While this may be true, it is unfortunate: it would have taken very little exposition to show that the costs can be managed through cloudbased tools, such as software-as-aservice (SaaS), which make the technology accessible even to small and mid-sized companies.

Although it is largely focused on the marketing applications of big data, *The Big Data–Driven Business* provides readers with a solid view of the big data space that offers a good starting point for those throughout the organization. Using an appropriate blend of nontechnical language and case studies, the authors convey the information in a very readable format. The case studies are informative enough that parallels can readily be drawn to applications in other areas, such as product development and strategic planning.

The innovations drawn from the rise of big data and big data analytics is just a precursor to those that will emerge from the data tidal wave promised by the emergence of the Internet of Things (IoT). While IoT is not a focus of this book, the authors do note that "Cisco Systems estimates that 50 billion machines will be online by 2020" and that IoT will "generate more data than the desktop Internet and mobile Internet combined." The key factors in whether a company will be able to ride this wave or be washed away by it is having a solid data strategy in place as well as the ability to integrate both the data and relevant insights into corporate culture.

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