

# INFLECTION POINT



HOW THE CONVERGENCE OF CLOUD, MOBILITY, APPS AND DATA WILL SHAPE THE FUTURE OF BUSINESS

## Praise for Inflection Point

"Scott Stawski weaves together a compelling set of observations regarding the technology 'perfect storm' that is gathering force and threatens to disrupt many businesses. By remaining centered on his own first-hand experiences and the thought leaders who have influenced him throughout his career, he crafts an entertaining and engaging story to demystify a complex subject. The result is a must-read for C-Suite executives looking to chart their own course through the current technology headwinds and to navigate successfully through their inflection point."

—Dave Sutton, Founder and CEO of TopRight Partners and coauthor of *Enterprise*Marketing Management

"Batten down the hatches! The IT department is under assault from the most unlikely of sources: one of its key suppliers. In a compelling book, Scott Stawski of Hewlett Packard predicts that the IT department of the future will buy no hardware or software and will shrink to a fraction of its current size. In its place, IT will become a broker of services supplied from the cloud. It's hard to argue with the powerful message of this well-written book."

—Al Ries, Chairman at Ries & Ries and best-selling author of *Positioning: The Battle for Your Mind* 

"A timely reminder of the essential aspects of world class organizations and of how revolutionary technology changes will dictate future success."

-Gary Tessitore, CEO of Polyair Inter Pack Inc., Toronto, Canada

"Scott Stawski has methodically looked at technology and has a clear vision on how it will evolve in the future. Every CEO should read this book as he is on point about how technology is rapidly changing in today's business climate."

—Tammy O'Connor, former CEO, Red River Solutions

"This book is an eye-opener for CEOs and CIOs, and also for stakeholders and business technologists in general. The Continual Transformation Ecosystem operating model is the only way to go. If you think your business is at the verge of a technology-driven inflection point, you must read this book carefully. And if you don't think so, perhaps you should look around and think twice."

—Miguel Pereira, CEO, SocialNoise, a digital creative agency of reference in Spain and Mexico "Scott Stawski delivers, in an engaging and easy-to-understand way, a clear vision of a connected future, accelerated disruption across industry, and how businesses can navigate the continual and rapid change."

—Scott Etkin, writer, journalist, and editor of Data Informed

"Inflection Point is an essential primer no matter what sort of business you are. Large incumbent? Quickly spot the weaknesses in your information infrastructure. Insurgent start-up? Map out where you can swiftly beat the established players. Three hours with this book will save you three years of pain."

—John V. Willshire, President, Smithery.co

## Inflection Point

How the Convergence of Cloud, Mobility, Apps, and Data Will Shape the Future of Business

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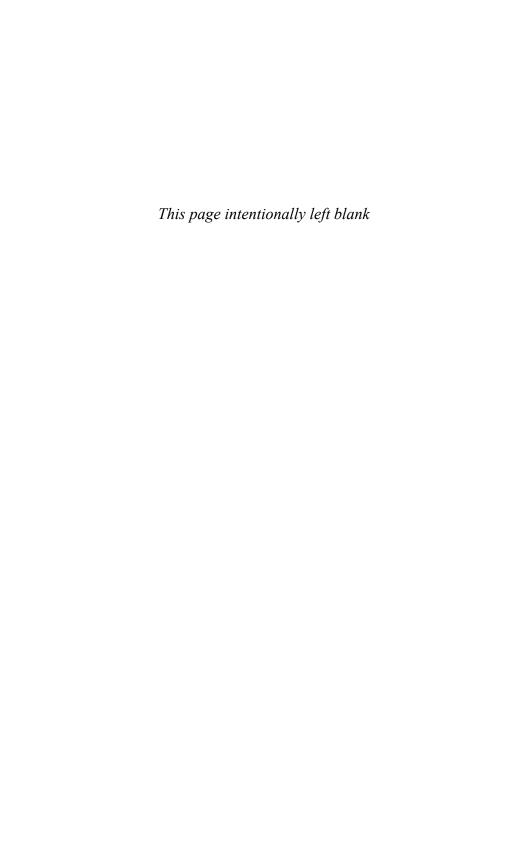
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Dedicated to my family.
For Mom and Dad,
who gave me the foundation for
the man I am today.

And for Hope, Henry, and Sun-Tzu, who give me endless love daily.



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#### Foreword

We are in the midst of a major market disruption. Cloud, mobility, big data, and security are converging, and how enterprises respond will determine success or failure. Turning game-changing ideas into value faster than competitors is no longer a nice goal to have—it is the only way to survive and thrive. Companies like Uber and Airbnb didn't exist until a year or two ago, and they are already transforming their respective industries. We no longer have the luxury of time. We need to drive continuous transformation in our enterprise at the pace being set by these market-making competitors and radically shift to the way customers want to do business, or we risk losing them.

All of this is creating a true inflection point for executives around the world—disrupt or be disrupted. Companies need to embrace their core competencies and both act and react instantly to new strategies, tactics, and market pressures to ensure competitive advantage. In this book, Stawski uses real-life examples to demonstrate this need to drive continuous change and innovation, create new business models, and make technology a true business enabler.

This is an excellent guide for any CEO, CIO, and business or IT professional that is seeking to understand the changing world of enterprise IT, its relationship to a company's overall business strategy and success, and how to turn it into a competitive weapon that helps propel your business further, faster.

—Mike Nefkens, Executive Vice President, Enterprise Services, Hewlett Packard Enterprise

## Acknowledgments

Ernest Hemingway once said, "There is nothing to writing. All you do is sit down at a typewriter and bleed." Well, I can now say from experience that he was correct. As the thesis began to shape in my mind, my original timeline for writing this book was 60 days. Surely, if I worked each and every weekend and many nights after the family fell asleep, I could have this book finished in two months. More than a year later, as I finish the final edits, I realize that even in one year, this book could not have been completed without the background, direct assistance, and overall motivation provided by many others.

I've dedicated this book to my mother, father, wife, son, and, yes, our dog Sun-Tzu. The foundation they have provided me in my life placed me at the keyboard. However, my wife Hope Stawski deserves special mention for her direct contributions to the project. Without her research, copy suggestions, copy edits, pictures, storytelling, and many late-night snacks, this book would not have been possible.

At the foundation of the thesis of this book are the concepts of core competency and competitive advantage—concepts discovered over the years in many different channels and venues, as well as in practical use. All of us using these concepts must acknowledge and thank C. K. Prahalad and Gary Hamel, who introduced the idea of "core competencies" nearly twenty-five years ago, in a *Harvard Business Review* article titled "The Core Competence of the Corporation." Their lifetime work around the concept of core competencies has influenced countless business leaders worldwide. We must also acknowledge and give thanks to Harvard Business School professor Michael Porter, who is an authority on competitive strategy and the author of *Competitive Advantage*. His theories on corporate strategy and competitive advantage are in use in C-level suites and board rooms around the world. This book and the thesis it puts forth would not be possible without the seminal works of those individuals.

I must extend heartfelt thanks to all the individuals at Pearson that made this book possible. Their encouragement and counsel has been invaluable. In particular, this book would not have been possible without the hard work of Jeanne Levine, Elaine Wiley, and Kitty Wilson. You made this happen, and I thank you.

Finally, I would like to thank all my colleagues at Hewlett Packard. While the thesis put forth in this book is solely my own and may not represent the views and/or opinions of Hewlett Packard, the nine years of employment with Hewlett Packard have afforded me an extraordinary opportunity to work with some of the best technologists, business consultants, and business operators in the world. In particular, I would like to give thanks to the support provided by Mike Nefkens, Louanne Buckley, Eric Harmon, Chris Donato, James Best, Laura Farmer, and Terence Ngai. From these individuals, I have learned and continue to learn. HP truly does make it matter every day.

#### About the Author

**Scott Stawski** is an Executive and Global Area Sales Leader for Hewlett Packard Enterprise. Scott is responsible for managing the sales and revenue generation activities for HP's largest and most strategic global accounts, exceeding \$500M in revenue annually.

Prior to his current role, Scott oversaw the Applications Sales Group for the Americas at Hewlett Packard, including the automotive, manufacturing, industrial, energy, communication, media, and entertainment sectors. Over the preceding five years, Scott and his team have sold more than \$3 billion in IT services.

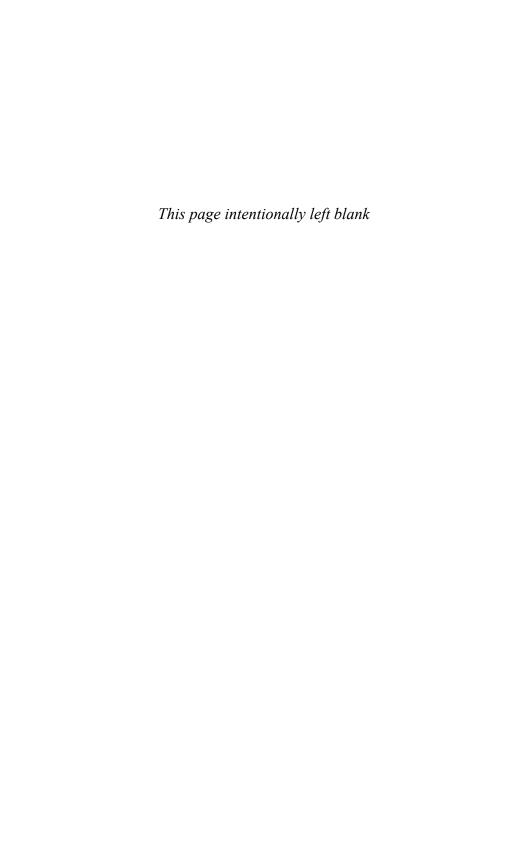
Prior to executive-level sales leadership positions, Scott was in IT services delivery and account management. Scott brings a wealth of experience in business outcome-based technology service delivery. He has led numerous multimillion-dollar business intelligence and technology solutions and strategy engagements for Global 500 companies within the health and life science; manufacturing and technology; retail; travel; communication, media, and entertainment; and consumer packaged goods sectors.

Prior to joining Hewlett Packard, Scott was a Senior Principal at Knightsbridge, a leading business intelligence consultancy acquired by Hewlett Packard, where he developed business intelligence strategies and platforms for Fortune 500 companies.

Before entering technology consulting, Scott held executive and management positions at the CRM consultancy Inforte and newspaper chain Knight Ridder.

A trusted advisor for CEOs, CFOs, and CIOs in the Americas, Scott is a recognized expert in analytics and data management, technology strategy, outsourcing, and next-generation application transformation to the cloud. A contributing writer for leading publications, Scott is a speaker and facilitator at many of the leading industry shows and conferences and is frequently interviewed and quoted by leading media outlets, including *The Economist, The Chicago Tribune, San Francisco Chronicle, Editor & Publisher, Crain's Chicago Business*, and *National Public Radio*.

Scott is also Secretary of the Board for the Celina Economic Development Council and active with ChildFund International and Shakespeare Dallas and is working towards his Master of Liberal Arts, Extension Studies at Harvard University.



1

#### Introduction

Strategy needn't be mysterious. Conceptually, it is simple and straightforward. It requires clear and hard thinking, real creativity, courage, and personal leadership.

—A.G. Lafley, CEO, Procter & Gamble

When you think about going sailing off the coast of a faraway land, you probably don't imagine yourself fighting for your life in a sudden, horrible storm. But that's what happened to us, and I'm very fortunate to be alive to tell the tale.

Several years ago, I took a break from my responsibilities with Hewlett Packard Enterprise. I sailed with my wife, Hope, and my then-eight-year-old son, Henry, to St. Vincent and the Grenadines, a set of islands in the Lesser Antilles archipelago just north of Venezuela. As a family, we prefer deserted islands and hidden bays where we can drop anchor and let tranquility envelop us, as you can see in Figure 1-1.



**Figure 1-1** The Stawski family, during a sailing trip to St. Vincent and the Grenadines.

We had been on vacation for fourteen days, sailing, snorkeling, and scuba diving while living on a fifty-foot ship named the *SS Angel in Paradise*. I was the captain, Hope was my executive officer, and Henry was the first mate. I had been around boats since I was a child, growing up near Chesapeake Bay, and I learned to sail when I was a student at the College of William and Mary. I passed on what I knew to my "crew." I taught them both seamanship, and they quickly became good sailors.

I am very careful when I am on the ocean. I have backup equipment, and I have backups for my backups—multiple GPS units, radios, and compasses. I always keep a "ditch bag" filled with food, water, a desalination system for getting drinkable water from the ocean, and another GPS and radio. In an emergency situation, the ditch bag is always ready to be tossed into a lifeboat or overboard.

During this trip, I checked the weather regularly, not just for the upcoming day but for the whole week. In the Caribbean, small "tropical squalls" tend to appear around three or four o'clock each afternoon. The seas leap around three to five feet, winds jump to twenty

miles per hour, and rain falls for a time. This type of squall typically lasts an hour. If you're an experienced sailor, these squalls aren't a big deal. But on this particular day, I listened to the weather forecast and discovered that our expected tropical squall would be turning quickly into a full-blown tropical storm. Later, that same storm would continue to develop into Hurricane Alex, the first hurricane of the season.

At the time, we were about seventy-five miles off the coast of Bequia, nearly six hours from land.

We could see the storm coming, as shown in Figure 1-2. The boat's barometer plunged, the clouds darkened, the waves swelled, and the distance between the crests of the waves—their "wavelength"—compacted from a gentle 300 feet down to 50 feet; they hammered into our boat relentlessly. The winds worked their way up to a steady forty miles per hour, with gusts in the sixties. It was bad.



**Figure 1-2** A normal squall turns into Tropical Storm and eventually Hurricane Alex.

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I needed to project confidence for Hope and Henry while still providing the honest information they needed to hear. I told them that we were in some danger, and they could see that for themselves: it was already the worst storm they had ever seen at sea. I asked them to put on their full storm suits with their life jackets and then to harness themselves to the boat's lifelines, and I did the same while I helmed the ship. Hope double-checked the ditch bag to ensure that it was ready and sealed. We readied both the dinghy for possible use and the emergency lifeboat stowed under the transom of the boat.

When the storm hit with all its fury, Hope and I made eye contact. It was one of those nonverbal conversations spouses are able to have when they've been married for a long time: we didn't want Henry to panic. The wind speed had increased from forty to sixty miles per hour, with gusts now in the eighties. Wave height was now fifteen to twenty feet. We were under a small storm jib, which allowed us to keep the bow of the boat into the waves to prevent a knockdown. However, in storms like this, rogue waves tend to form. A rogue wave comes out of nowhere. It is bigger than the other waves and usually not traveling in the same direction as the regular waves. Several rogue waves hit us, the highest around twenty-five feet. We never capsized, but several times we experienced what in sailing lingo is known as a *knockdown*: the boat was pushed sideways to where the mast hits the water and pops back up.

This is when I fell in love with my wife all over again. As we rode out the storm, Hope started singing the theme to the old television show *Gilligan's Island*. It was hard to hear over the wild winds, but somehow the song calmed us, and we knew we would survive.

We rode out Tropical Storm Alex. It took about an hour and a half to get through the major part of the storm. After it passed, we experienced the calmest and most beautiful weather of the trip. We sailed on to a beautiful island called Mustique. We were exhausted and soaked, but we felt great about ourselves because we knew we had faced a daunting situation and prevailed.

It may seem like a cliché to compare business trends to stormy seas or to equate the responsibilities of CEOs to the job of a ship's captain, but after my experience in the Caribbean, these analogies took on new power for me. The parallel is completely apt. Trends in business are like the weather. Sometimes the world is calm and everything is smooth sailing. Sometimes a slight disturbance comes along, in the form of a squall or a new competitor. Sometimes squalls develop into full-blown storms—think declining profits or market share. Every now and then, a real life-or-death hurricane-like situation arises, wreaks terrible damage, and threatens to sink the whole proverbial ship.

As a consultant, I see these patterns over and over again at various companies. Businesses often sail headlong into "hurricanes," or what Andy Grove, the former CEO of Intel, calls inflection points—events that change the way we think and act. In Grove's book Only the Paranoid Survive: How to Exploit the Crisis Points That Challenge Every Company, he further elaborated that an inflection point is an event or a series of interrelated events that result in a significant change in the progress of a company, an industry, a sector, an economy, or even a nation. Inflection points can result from action taken by a company or from action taken by another entity that has a direct impact on that company. Regulatory changes, for instance, can lead to inflection points for companies by either introducing or removing constraints on the way those companies do business. In technology, the mainframes and the Internet have both created inflection points; in politics, the fall of the Berlin Wall and the assassination of John F. Kennedy were both events that became inflection points.

Grove was an immigrant moving to the United States from Hungary when he was twenty years old. He is a true pioneer of Silicon Valley and an icon in the semiconductor industry. Grove never forgot the history that brought him to America, nor the upheavals that began to shape his thinking. In his memoir, *Swimming Across: A Memoir*, Grove writes:

I had lived through a Hungarian fascist dictatorship, German military occupation, the Nazis' "Final Solution," the siege of Budapest by the Soviet Red Army, a period of chaotic democracy in the years immediately after the war, a variety of repressive Communist regimes, and a popular uprising that was put down at gunpoint...[during the course of which] many young people were killed [and] countless others were interned. Some two hundred thousand Hungarians escaped to the West. I was one of them.

Later in life, his deeply personal experience with trends, upheavals, actions, reactions, and business storms began to take shape. Of particular interest to Grove was how to recognize when a business or business leader became immersed in a trend that was really something more—an inflection point. "New rules prevailed now—and they were powerful enough to force us into actions that cost us nearly half a billion dollars. The trouble was, not only didn't we realize that the rules had changed—what was worse, we didn't know what rules we now had to abide by."

History shows that, when businesses come upon inflection points, most take cautious steps that are too small and insignificant to address the change. Laggards who underestimate the change or misunderstand the real nature of it do too little—and pay the price by going out of business. Eastern Airlines, RCA, Woolworth Company, and Circuit City are just a few examples of companies that have failed to weather their industries' inflection points. Yet, for each inflection point, there are also always businesses that understand the opportunity and seize it; they move first, and they reap the rewards. So, for every Borders and Blockbuster that goes out of business, there is an Amazon that not only took their place but probably caused the disruption that resulted in their demise.

The business world today is changing very quickly; we are in the midst of a major inflection point that is leading to a host of changes—a lot of stormy weather. Companies that can understand and predict the impact of these changes have the opportunity to leverage them for true competitive advantage.

This new, major inflection point for business is a combination of several trends that together are causing major business disruption. At the foundation of this inflection point is information technology, specifically the convergence of cloud, mobility, software as a service (SaaS), and data. It is this convergence that is powering a second and more significant round of disintermediation and in some cases reintermediation under new business models.

We will discuss and define disintermediation, reintermediation, and the resulting business disruption in the next chapter. That being said, with every business disruption, there is a potential opportunity. Companies can use the same technology convergence that is powering today's inflection point not only to survive but to thrive. This is what Hewlett Packard Enterprise calls "The New Style of IT"—a complete reshaping of how businesses use information technologies.

For the past forty years, IT has been transforming the business world by devising new processes for production, operations, and personal productivity, and by revolutionizing the ways in which people communicate and collaborate. IT was at the forefront of our culture's last major inflection point—mainstream use of the Internet—and now it is pushing forward an array of new, game-changing ideas: cloud technologies, mobility, SaaS, and Big Data. As these technologies converge and become "consumerized," operational IT will slip into the background of all business activities and become both a utility and a true business enabler—empowering companies to focus on their core competency and power an operating model that embraces speed and flexibility through continual transformation.

The "new style of IT" promises greater simplicity, agility, speed, and affordability. IT as a real business utility is here now, and its presence means that no company should ever have to "buy" a software license or "own" a piece of IT hardware again.

A handful of young companies have already grasped this new reality: Netflix, Uber, and Snapchat have all become household names by embracing a new technology operating model. But other companies are continuing to spend way too much on outdated operational IT. *CIO* magazine, which conducts an annual "State of the CIO" survey, found in 2013 that the average IT budget as a percentage of revenue was 5.2 percent, up from 4.7 percent the year before. Gartner Research said that 80 percent of enterprises would overspend on IT through 2014. NPI Research estimated that companies overspent by more than \$207 billion on technology and telecom purchases in 2010 alone—and that number is increasing.

From my personal experience examining many companies, I estimate that enterprises are overspending on IT by as much as 40 percent. Every dollar they spend on operational IT is non-revenue-generating and comes directly out of their profit margins. And the traditional capital expenditure (CAPEX) IT they are purchasing is locking their businesses into an inflexible operating model that is hurting their competitive advantage.

This overspending is especially surprising because the business professionals who are making these decisions are already behaving like savvy consumers in their home and personal lives—just not in their businesses. As consumers, we don't care where our electricity comes from—wind, solar, nuclear, whatever: we flip a switch, and we get light. Similarly, if we want a social media platform to connect us to our family and friends, we hit a button on our smartphone, and we're connected. We do the same for each of the IT tasks in our personal lives: e-mail, personal accounting, our daily calendar, video meetings, and chatting. This is the consumerization of IT.

But in business, these same basic tasks are thought to require a great deal of customized IT work, with a tremendous amount of IT department interface and CAPEX. There hasn't been a consumerization of IT as a utility in the business world. The objective of most current IT departments is still to "build and run." They build IT, and they run IT. In the future, however, the objective of the IT department will be not to build or run anything at all but to be a service broker of IT business enablers. They will establish an architecture, set standards, and provide governance for an ecosystem of providers that supply the IT services to their business users.

#### **Penguin Corporation Deals with IT**

Let's look at a hypothetical large, old-line company that I'll call "Penguin Corp." Penguin is a global consumer packaged goods company headquartered on the West Coast that is struggling to make decisions about its IT future. The company uses Microsoft Office, which employees download, and Microsoft Outlook, which employees use to access e-mail and is hosted on the company's computers in data centers throughout the world. It has twenty data centers located throughout the world that it either owns or leases. Penguin has hundreds of enterprise applications from software companies such as SAP, Oracle, and Microsoft, from which it purchased licenses and pays annual software maintenance fees to run on servers in those data centers.

Penguin has more than 40,000 employees, and it purchases tablets, laptops, or workstations for most of those employees. This company generates \$35 billion in worldwide revenue and spends 4 percent—or \$1.4 billion a year—on operational IT. It spends an additional \$140 million on IT capital expenditures. Only the depreciation of that expense is included in the \$1.4 billion number cited above. So, Penguin Corp's real IT cash outlay is closer to \$1.54 billion annually. The CEO and CFO have benchmarked their IT expenditures. The

Fortune 500 IT spend is slightly above 4 percent of gross revenue and the overall median is 3 to 5 percent, so everyone at Penguin is comfortable with the current IT budget.

Upper management recognizes that the world is moving away from these localized software installations and moving toward the cloud. So, their major initiative this year will be switching the whole company from Microsoft Office 2010 to Microsoft Office 365. Office 365 is delivered to users through the cloud and includes Exchange Online for email, SharePoint Online for collaboration, Lync Online for chat and other communications, and a suite of Office apps—web-based versions of the traditional Microsoft Office suite of applications. This cloud-based package will free Penguin from needing to install and run any of this software through its own data centers.

This is Penguin's major transformation initiative for the year. Penguin is looking to address the trend toward cloud computing by making an incremental decision—not a transformative one. It may be addressing the trend, but it is not getting ahead of it. What would a transformative scenario look like for Penguin? It would involve eliminating all data centers, moving 90 percent of all application workloads to the cloud, rationalizing and reducing the application footprint by 40 percent, and moving all applications to consumption-based SaaS, with a significant open-source application footprint. How about reducing the overall IT spend by 30 percent and reducing capital expenditures by 95 percent?

Why would a well-run profitable company decide to make small, incremental changes when transformative ones are required? There are a variety of reasons. Organizations tend to prefer incremental change to transformational change. Penguin's management believes they should keep their legacy applications because their employees are comfortable with them. They're convinced that it's too difficult to initiate a more transformational change at a big company. And Penguin's CIO, like his counterparts at other major companies, may have tunnel vision when it comes to keeping IT assets under direct

ownership. CIOs like to develop technology. True, every CIO wants to meet the needs of his or her company's business users. In the old IT model, that meant building, owning, and running every aspect of the IT department. This led to the building of IT empires with a lot of people working for them, and the old model ensured the value of these people within the company.

In general, CEOs and CFOs seldom disregard the recommendations they receive from their CIOs—largely because they lack the background to do so. CFOs by function come from finance. CEOs usually come from finance, marketing, or sales. Rarely do we see a CEO with an IT background, so when the CIO tells a CEO something about a trend in technology, the CEO tends to accept rather than question deeply.

So, in the case of Penguin, the company will invest in an incremental solution that gives the false impression that the company is not falling too far behind the curve. In the short run, it will continue to be profitable and a leader in their industry. But over time, the ongoing, unnecessary commitment of energy and resources to IT will interfere with the company's ability to think creatively, innovate, and establish a continual transformation environment (CTE). In short, in today's business environment, Penguin will lose competitive advantage.

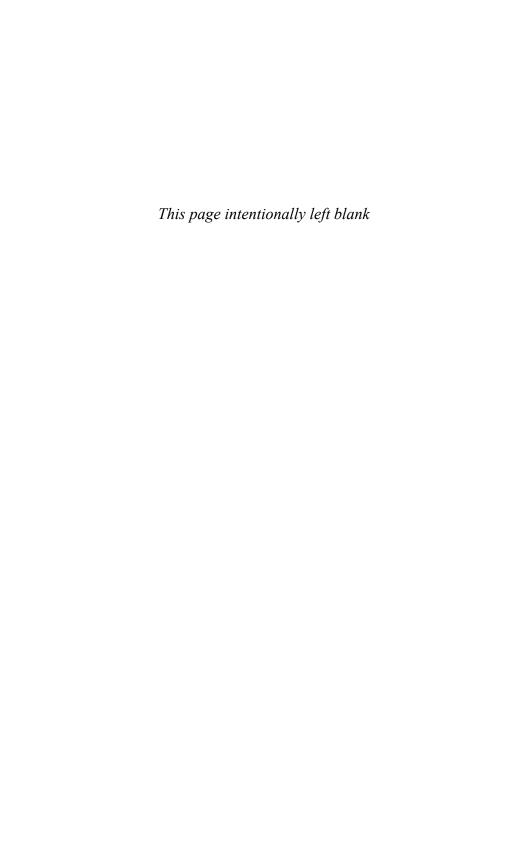
Today, we are at the next major set of inflection points. Massive business disruption is occurring, and this disruption is accelerating and becoming more impactful. At the same time, the convergence of trends in cloud, mobility, SaaS, and Big Data can dramatically change the operational IT landscape for businesses. For operational IT, companies must move to a consumption-based utility environment powered by business-user selection of the technology enablers and business process providers necessary to best perform their functions. The IT department of today must transform into a brokerage of these IT services, with functions and processes outside the company's core competency handled by an ecosystem of trusted partners and providers.

Market pressure and business disruption from the current inflection points are only going to increase. However, as CIOs and enterprises embrace this new style of IT, management bandwidth and operating and capital expenditures will be freed to allow companies to focus on their core competencies. And this consumption-based, IT-as-a-utility ecosystem will provide the flexibility and scalability to create a CTE that will power competitive advantage strategies.

## Understanding Operational IT Versus Product Development IT: What Is the Difference?

The thesis of this book involves a fundamental change in the way operational IT is provided to the business users of a company by the IT department. To understand this imperative, we must also understand that we are discussing operational IT only. Operational IT is the IT enablers necessary to run the business operations of a company. IT enablers are needed for sales, administration, marketing, finance, operations, human resources, and manufacturing and distribution. Operational IT is not a product or service that the company takes to market; rather, it is what enables the business's functional areas. It is this operational IT for which companies must change the current operating model to the "new style of IT."

IT is the product or service of some companies. For software companies, product development IT (also known as just plain R&D) is synonymous with product innovation. Product development IT is at the heart of the products or services offered by web-based service companies like Facebook. These companies require product development IT, and that development is intimately tied to their core competencies. While these companies should also move their operational IT to the new style of IT, they must continue to nourish their product development IT as a key internal business unit within the company. In fact, moving the operational IT to the new business model will free up resources and management bandwidth to broaden and deepen the R&D/product development functions for these companies.



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