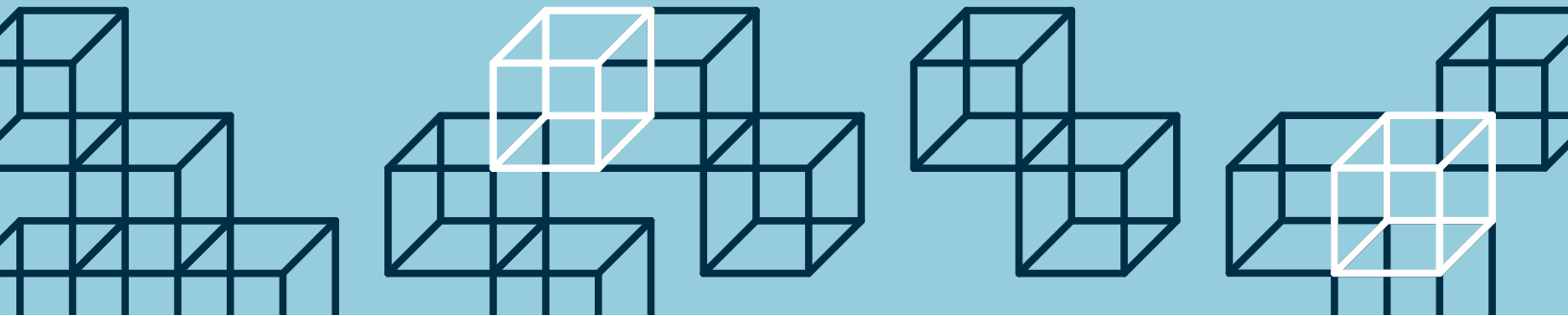


DECEMBER 2015

The winning recipe for digital transformation



Digital transformation remains the major source of change in today's rapidly evolving marketplace. When it's successful, it leads directly to increased revenue and improved profitability. The way that a business transforms digitally is best explained through a five-category framework addressing major influences on financial performance: sales, profits, cash, and risks. The categories are:

- 1 Business model and real-time architecture
- 2 Understanding, predicting, and interacting with customers
- 3 Information-based decisions
- 4 Digital automation
- 5 Technology finance and governance

CATEGORY 1: BUSINESS MODEL AND REAL-TIME ARCHITECTURE

Digital transformation starts with a business model designed for sharing information, standardizing processes, and using centralized shared-services functions. A company must determine an optimal business model and realize its effectiveness by way of a strong enterprise architecture before it can make real progress on a successful digital transformation. Those fundamental steps form the basic building blocks for maximizing sales and profits.

Sharing information provides insights about customers and products from other parts of the business. For example, in a company whose business units sell different product groups to the same customers, a single, digitally informed viewpoint facilitates collaboration and opens cross-selling opportunities.

Standardizing processes minimizes costs and bolsters an expanding business's agility, and companies that sell similar products or services to different customers thereby avoid redundant efforts. Establishing common operations across different geographies maximizes earnings because it lowers costs by avoiding spending on multiple applications. It streamlines employee training and helps teams work more efficiently. In

addition, expanding to new geographies through cookie-cutter methods leads to faster integration through more-efficient practices.

Consolidating and centralizing commodity-like shared-services functions such as accounts payable, billing, and payroll provide for further cost efficiencies—particularly by outsourcing noncore operations to lower-cost service providers.

The MIT Center for Information Systems Research has examined four corporate operating models, which address unification, coordination, replication, and diversification operating methods. The models differ from one another based on company choices around integration and standardization (figure 1). Companies with unification models sell the same types of goods or services to the same types of customers. They benefit from sharing information and standardizing processes across their organizations. The opposite model uses diversification and is typically in place at conglomerates with multiple different business concepts. These companies do not realize as many

benefits from sharing information or standardizing processes. Coordination models are used by companies that sell different products to the same customers. Such companies benefit from sharing information for specific goals, such as cross-selling, but they don't have as much need to standardize processes contributing to different offerings. Replication models are used by companies that sell similar products or services to different customers. Those companies benefit by standardizing processes but not much by sharing information, because their business units focus on their own local customers.

Recently developed game-changing technologies expand integration and standardization concepts well beyond previously established practices. Real-time information, instant global communication transmissions, and automation with built-in analytics have redefined how businesses operate. The confluence of technological improvements to such areas as storage, sensors, and mobile capabilities produces completely new opportunities to share information and streamline processes.

FIGURE 1: DIFFERENT OPERATING MODELS

Performance factors					
	Unification	Coordination	Replication	Diversification	
Nutshell	Shared customers Similar products	Shared customers Different products	Similar products Different customers	Different businesses	
Integration	High	High	Low	Low	
Standardization	High	Low	High	Low	
Description	Centralized organizational design with standardized business processes and sharing of data across business units	Creates a single face to customers without specific process standards for operating units	Operating units that perform tasks the same way using the same systems	Decentralized organizational design, with business units pursuing different markets with different products and services	
Example	Delta Air Lines Provides air transportation (similar service) for people who travel on commercial flights (similar people)	Met Life Provides a variety of insurance products (different products) for customers who typically need multiple products (similar customers)	ING DIRECT Provides consistent no-frills banking products (similar products) for millions of people in multiple countries (different people)	HRG Group Owns many different concepts, including life insurance, consumer packaged goods, and oil & gas (different products and different customers)	

Source: MIT Center for Information Systems Research

The abilities to capture data from electronic devices without human intervention, to immediately transfer information, to process massive amounts of data, and to run algorithms driven by business rules that execute business processes have changed the nature of business. Companies that have nailed the classic fundamentals of sharing information and standardizing processes and enhanced them with newer technologies are realizing financial improvements.

CATEGORY 2: UNDERSTANDING, PREDICTING, AND INTERACTING WITH CUSTOMERS

The impact of digital change influences every stage of a consumer’s decision-making process. The business world is migrating from traditional sales to digital methods of optimizing its customer bases. One method is the incorporation of decision science into selecting and targeting customers. This is bolstered by giving customers multiple channels to turn to for acquiring goods and services. As customers become more demanding and want digital products and services that are functional, simple, and intuitive, business transformations will accelerate.

Customers experience digital transformation at various rates in different industries, though the overall evolution is progressing rapidly. Retail, media, travel, and banking are prominent examples of industries that are experiencing significant digital transformation. Their consumers have forced it to happen. The general public no longer wants to go to the store to make a

purchase or visit a bank teller and have to fill out a form to make a deposit. Consumers today have easy access to information — and they’re better informed. They’re changing the rules, and they’re turning the traditional business-to-consumer model into one with a completely different environment. Traditional business-to-business models are undergoing similar transitions. Consumers demanding a digital environment (in general, the younger generations) expect to do business digitally regardless of the industry or the business functions involved.

An effective framework for optimizing customer performance is to understand, predict, and interact with customers (figure 2). That framework is intensely enabled by digital methods and requires companies to answer in proper sequence certain questions about customers. It’s important that a company figure out where each customer is on the purchasing journey, determine how valuable particular customers are, and decide on the likelihood of making them more valuable. It’s also vital to learn how to best interact with each customer through marketing efforts and sales channels and how to best satisfy the most valuable customers.

CATEGORY 3: INFORMATION-BASED DECISIONS

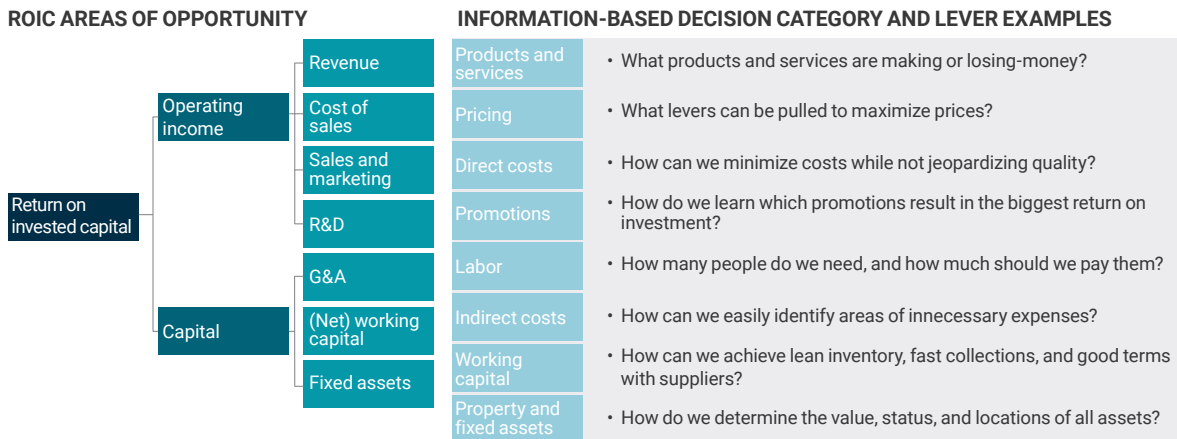
Companies with cultures of evidence-based decision making usually show markedly improved performance. They tend to be more profitable than companies that lack such a culture.¹ Managers benefit from having

FIGURE 2: LEARNING FROM—AND ABOUT—THE CUSTOMER BASE

Understanding	Predicting	Interacting
<ul style="list-style-type: none"> • Where is each customer on the journey (potential, new, rising, fading, lost)? • How do we learn everything we possibly can about each customer? • How profitable are customers? • What do the analytics tell us? • How do we put each customer in strategic segments so that we can manage them categorically? 	<ul style="list-style-type: none"> • How do we predict what each customer (and customer segment) will do at each stage of the customer journey? • How do we score our customers based on the results of our predictive analytics so that we know how to prioritize our interaction efforts? • What customer interaction tools must we develop to guide our sales force and customer service teams? 	<ul style="list-style-type: none"> • What campaigns are best for each customer at each stage of the customer’s journey? • What product mixes should we be promoting across the different customer segments? • What are the best omnichannel strategies to provide our customers with many effective ways of buying our products, and how do we make the right omnichannel investments? • How do we provide real-time systematic guidance for our front line so that sales and customer service staffs have proper guidance on how to customize service for each customer?

¹ Jeanne W. Ross, Cynthia M. Beath, and Anne Quaadgras. You may not need big data after all. *Harvard Business Review*, December 2013; <https://hbr.org/2013/12/you-may-not-need-big-data-after-all>.

FIGURE 3: CATEGORIES FOR AN INFORMATION-BASED DECISION FRAMEWORK



G&A = general and administrative expenses, R&D = research and development

Source: AlixPartners

real-time information at their fingertips, such as what is selling, who is buying it, and how it adds to the bottom line. Making that happen is a reasonably achievable goal.

Imagine waking up each morning to find a performance dashboard illustrating how your company is doing at that moment and easily switchable into different views and specifics of vital areas that need immediate attention and evaluation. Plus, having a set of systematic business rules that guide the workforce on how to act on that real-time information helps immediately capture the opportunities that get revealed through those capabilities.

A comprehensive operations management system (OMS) provides real-time information covering all critical areas. A company can construct such a dashboard-driven method of managing the business to cover principal sources of earnings and capital improvements across the organization. The following table illustrates common examples of major areas for focusing on return on invested capital and information-based decision categories that can be parts of an OMS framework (figure 3).

The main drivers of earnings and cash are categorized relatively simply by organizing them across the main line-items of an earnings statement: sales, costs of sales, labor, and general operating expenses. The levers that move cash can be categorized across the main line-items of working capital cash, such as common cash-improving methods for decreasing receivables, reducing inventory, and increasing payables. Properly capturing and systematically analyzing those influences by means of sophisticated data analytics will lead to improved performance.

A manufacturer that undertook a comprehensive digital transformation now makes such data-driven information-based decisions while aided by automated processes, which has resulted in improved financial performance. The company tied sales and operations planning together and connected them with research and development (R&D) on a real-time basis. Detailed sales forecasts and detailed production capabilities and capacities now get matched in order to improve production efficiency. Management knows how to produce items most profitably, and it prioritizes for maximized financial results if sales demand gets projected to exceed manufacturing capabilities. The company can also dial down production—and thereby reduce costs—when projections indicate manufacturing capacities will exceed demand. Real-time demand-to-capacity- matching results now influence R&D decisions. When demand exceeds capacity, R&D knows where to invest to boost capacity. When capacity exceeds demand, R&D can help streamline overcapacities and increase cost-effectiveness while minimizing inventory investments.

CATEGORY 4: DIGITAL AUTOMATION

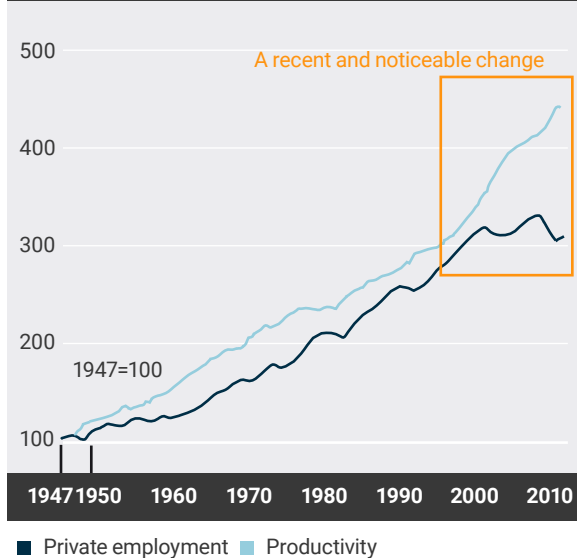
Digitally savvy companies are also improving profitability through digital automation. Today's automation capabilities far surpass conventional understanding of automation as we've known it. Computers now perform tasks more quickly, more accurately, and at lower costs than can people across numerous job functions. This holds true even for skilled positions.

Automation has long included the use of robotics and computers for routine tasks, but new technologies have created extraordinary automation capabilities that can be used in countless ways, far beyond routine functions.

Digital automation now includes machine learning and artificial intelligence, using algorithms to evaluate behaviors based on data observation. Now these programs and processes can learn from their own work, refining and continuously improving their functions.

In business, the explosive growth of complex and time-sensitive data facilitates decisions that can confer competitive advantage, but those decisions depend on analyzing at speeds, volumes, and complexities too great for humans to be able to deal with. Artificial intelligence is filling that gap as it becomes ingrained in the analytics technology infrastructure in such industries as healthcare, financial services, and travel.²

FIGURE 4: JOB TRENDS AND US PRODUCTIVITY, 1947–2015



Source: U.S. Department of Labor, Bureau of Labor Statistics

Nowadays customers use a company like WayBlazer instead of human travel agents. The WayBlazer travel platform can listen to vacation travelers' criteria for desired trips and make recommendations where to travel. WineStein promotes itself as a digital sommelier, capable of advising on the best wine pairings with any dish after it is told what's for dinner. Other companies, too, are finding that computers are the most qualified applicants for a variety of jobs.

The computerized workplace has existed in some form or other for less than half a century and is only now showing exponential increases in productivity. Analogously, there are similarities to the 30 years it took following the introduction of electricity before the workplace showed similar production leaps. Digital automation factors heavily in these rapid productivity jumps, which have not, however, added jobs (figure 4).

A century ago, job growth eventually got back on track after the labor market adjusted to its new electrified reality. That adjustment has not yet happened amid the ongoing digital revolution, but the labor market has historically been able to so adjust to disruptive change. Similar trends occurred following the introduction of the steam engine.

DIGITAL AUTOMATION = FASTER, MORE ACCURATE, WITH LOWER COSTS

Some banks were getting frustrated by the labor costs associated with increased regulatory demands, and they adopted digital automation to help reduce the costs. Healthcare patients now wear technology-laden devices to track their vital signs, and they can request medicine through mobile devices. And tax preparers have found that they cannot compete with computers.

Financial planning and analysis teams are realizing that digital automation is more efficient than creating numerous spreadsheets, which uses up time that could be spent doing something about the results. Accuracy is another principal benefit of using machines instead of manual spreadsheet processes. Financial consultancy F1F9 estimates that 88% of all spreadsheets contain errors in them and that 50% of spreadsheets used by large companies have material defects.³ Smoother input makes for smoother output.

CATEGORY 5: TECHNOLOGY FINANCE AND GOVERNANCE

Corporate thinking about information technology (IT) spending has changed, particularly among industry leaders. That's because leading companies are generating returns from their overall technology investments instead of viewing IT merely as a cost of doing business. More-profitable companies spend more on IT than their less-successful peers do—and they make better use of it, too. Companies that derive measurable value from IT drive a virtuous circle of technology investment and business growth.

Historically, IT developed customized software for automating processes and business functions. Now IT also serves to transform business models, rebuild infrastructure, facilitate corporate decision science, and create better ways of understanding and interacting with customers. Most businesses urgently need strategic IT management. If managed properly and approached with a high degree of astute integration and careful coordination between the business and IT operations, companies can minimize risks and focus on rewards.

Technology investments may be categorized

² Brad Power, Artificial intelligence is almost ready for business, *Harvard Business Review*, March 19, 2015; <https://hbr.org/2015/03/artificial-intelligence-is-almost-ready-for-business>.

³ CNBC, Spreadsheet blunders costing business billions, July 30, 2013; <http://www.cnbc.com/id/100923538>.

Governance mechanisms are key to success:

- Business and IT are strongly connected
- Business–IT decisions and accountabilities are made jointly

as run-the-business, improve-the-business, and protect-the-business types of investments. Run-the-business investments are not discretionary costs. They include investments in maintenance of current application systems, data centers, voice and data communications, help desks, desktop or laptop support, IT security, and management of the IT function. Improve-the-business investments are tools that improve operating profit and that should be managed with the same rigor as non-IT investments. Protect-the-business investments are becoming increasingly necessary because cybersecurity issues continue to pose threats.

The run-the-business and improve-the-business functions are interdependent, and investments in the two usually come from the same budget. The greater the run-the-business investment, the less money is

available for improve-the-business initiatives. The primary goal of run-the-business IT is to provide high quality at consistently lower costs so as to enable the company to invest more in improve-the-business technologies.

Protect-the-business investments are vital, because they must address the ongoing explosion of available information. Companies face unprecedented challenges and constant cybersecurity risks, which evolve daily, yet most corporate security strategies struggle to keep pace. Companies must address cybersecurity investments separately from run-the-business and improve-the-business technology investments. The key is to find the sweet spot of investing enough to be secure, but not spending too much.

Successfully incorporating technology into business strategies and underlying operational processes while managing technology investments includes creating deep connections between business operations and IT operations—and then enhancing them through joint decisions and accountabilities. Most top-performing companies have highly integrated business functions and IT functions, and they make joint IT decisions between the two areas. Business–IT relationship

FIGURE 5: DIGITAL TRANSFORMATION FRAMEWORK

Digital transformation category	Performance factors			
	Sales	Profits	Cash	Risks
Business model/real-time architecture	Shared data across business units	Standardization of processes and technologies	Systematic processes and leverage	Holistic insight and controls
Understanding, predicting, and interacting with the customer	Optimize revenue	Focus on high-value customers		
Information-based decisions and actions	Maximize product performance and pricing	Adopt granular views of expenses and profits	Establish automated working-capital management	Implement control mechanisms across business
Digital automation	Faster and more-accurate information	Labor costs shifted away from non-value-added work that is performed better by machines		Use of computers, which are more accurate and avoid costly errors
Technology finance and governance	Managing technology and IT spend as an investment portfolio through highly integrated business operations and IT operations that make shared decisions and that bear accountabilities			

managers, joint committees, and close tracking of project successes, investment management, and IT service levels serve to reinforce that connection.

Digital governance provides the framework and structure for linking IT assets and resources to enterprise goals and strategies. Through IT governance, decisions get made regarding:

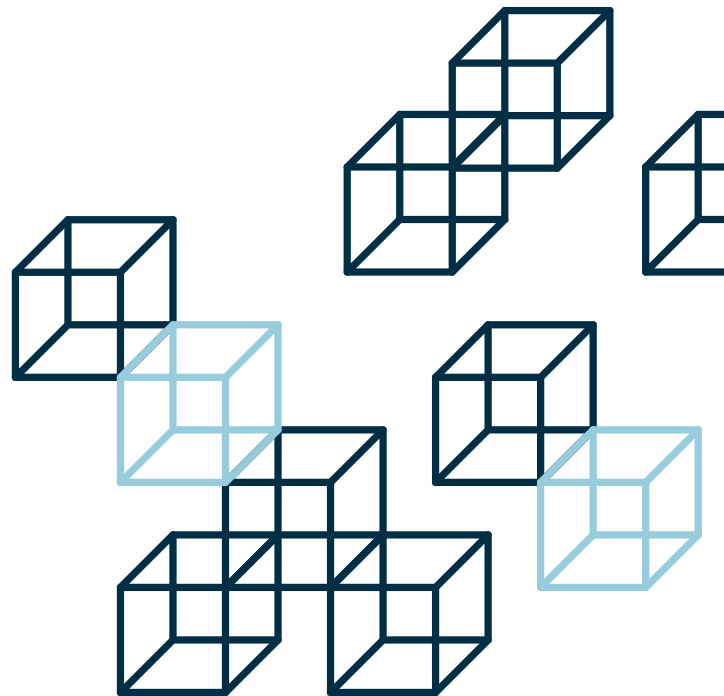
- Who has authority to make IT investments
- Where money should be spent on IT services
- The prioritization and justification of investments and controls
- The IT budget and its associated authorization level
- The composition of the project portfolio
- How projects get managed and controlled

The boundaries between business and IT are blurring. Business experts and IT experts at the most-successful companies speak a common language, and the most-successful companies have leaders who together contribute a blend of business acumen, financial judgment, and technological expertise. Executives who understand IT know (1) how their companies' IT investment processes work, (2) what they can get from investing in technology, and (3) how to get it. Companies must commit to using IT strategically if they are to become competitive. Strategic goals must be expressed through explicit descriptions of the operational requirements needed to achieve them, along with clear directions to company personnel on the required tactical steps.

THE WINNING DIGITAL TRANSFORMATION RECIPE

The winning recipe incorporating the five categories of digital transformation can be summarized as in figure 5.

Companies must determine their digital strategies and how those strategies fit into the rapidly digitizing business world. And those strategies must continue to evolve if they are to keep pace with inevitable and rapid technological change. Flexible, nimble adaptability is vital in the digital business world, and companies that lack digital strategies or remain complacent about their current ones will get caught flat-footed. **A**



FOR MORE INFORMATION, CONTACT:

Meade Monger
Managing Director
+1 214 647 7621
mmonger@alixpartners.com

ABOUT US

In today's fast paced global market timing is everything. You want to protect, grow or transform your business. To meet these challenges we offer clients small teams of highly qualified experts with profound sector and operational insight. Our clients include corporate boards and management, law firms, investment banks, investors and others who appreciate the candor, dedication, and transformative expertise of our teams. We will ensure insight drives action at that exact moment that is critical for success. When it really matters. alixpartners.com

The opinions expressed are those of the author and do not necessarily reflect the views of AlixPartners, LLP, its affiliates, or any of its or their respective professionals or clients. This article regarding The winning recipe for digital transformation ("Article") was prepared by AlixPartners, LLP ("AlixPartners") for general information and distribution on a strictly confidential and non-reliance basis. No one in possession of this Article may rely on any portion of this Article. This Article may be based, in whole or in part, on projections or forecasts of future events. A forecast, by its nature, is speculative and includes estimates and assumptions which may prove to be wrong. Actual results may, and frequently do, differ from those projected or forecast. The information in this Article reflects conditions and our views as of this date, all of which are subject to change. We undertake no obligation to update or provide any revisions to the Article. This article is the property of AlixPartners, and neither the article nor any of its contents may be copied, used, or distributed to any third party without the prior written consent of AlixPartners.