

AVOIDING THE SIREN SONG OF
TECHNOLOGY

Focusing Your Digital Strategy on Business Outcomes

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INTRODUCTION

Business meetings and board rooms around the world today are abuzz about all things digital. Magazine cover stories and corporate webinars evoke stunning statistics about the growth in mobile device usage and the precipitous rise of big data. This is not surprising as technology increasingly surrounds and enables us in almost every part of our lives. Automotive companies use software to connect dealers, customers, service centers and cars so that a flat tire triggers immediate road-side assistance. Homeowners use smartphones to turn up the temperature in their homes before they leave the office. Patients use connected wearables to send their vital signs to doctors for a virtual health check.

This broad consumerization of technology has hypnotized many of us, making us forget that technology is a means to an end. Talking about technology is often easier than talking about what an enterprise can do with it. And thinking clearly about technology can become especially difficult when employing it means a company has to change the way it does business. To leverage the real opportunities technology has to offer, an enterprise must reach beyond the question, “What are digital technologies?” and instead ask, “How can we use advances in technology to create sustainable and market-disrupting value?”

This white paper explores how progressive enterprises are taking advantage of emerging technologies and as-a-service solutions to build a “digital fabric” in which they connect their customers, employees, partners and providers. By first understanding the industry- and enterprise-specific market potential of digitally enabled growth, and then by identifying initiatives that leverage the most promising solutions toward an explicit business outcome, enterprises are able to invest in the opportunities that are right for them and capitalize on those investments over the long term.



... pivot in a direction of faster growth and new possibilities.

IT'S NOT ABOUT TECHNOLOGY FOR TECHNOLOGY'S SAKE

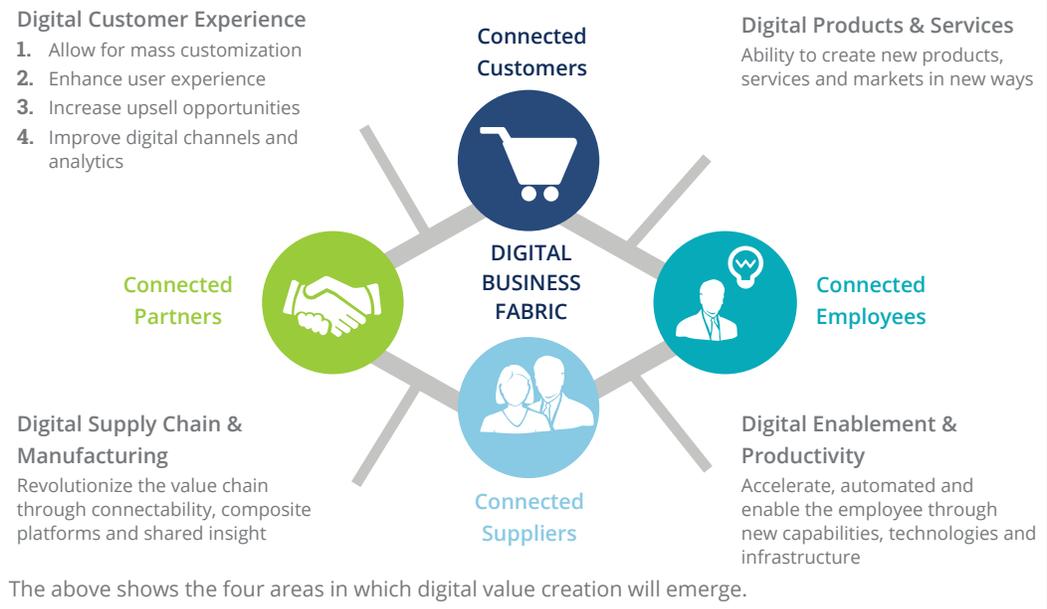
Instead of just talking SMAC (i.e. thinking of social, mobile, analytics and cloud as shiny solutions on a shelf), enterprises must focus on how the power of these emerging technologies can be combined with their specific business know-how to improve existing operations or create new streams of revenue. Business leaders must decide how digital can augment offerings specific to their core business and allow them to pivot in a direction of faster growth and new possibilities.

A look at the marketplace shows some interesting trends and patterns. In many cases, the areas that are least talked about are the ones in which organizations are leveraging “digital thinking” to make a difference. Just recently, GE showcased how it was able to absorb and integrate business and operations data, including information on more than 67,000 employees, as part of its acquisition of Alstom’s power business.

HOW CAN TECHNOLOGY CREATE VALUE?

Even in disruptive times, some ground rules don’t change. Every enterprise creates value at the intersection of four key constituents: the customer, the employee, the partner and the provider. These constituents will not change because of emerging technologies, but new technologies will increasingly connect them with each other and create a common “Digital Business Fabric.” As the connections between these constituents increase in number and deepen in nature, opportunities for an enterprise to grow also increase. These intersections are the places where technology has the greatest potential to react in real time and create growth opportunities that may not have been possible before.

Components of Digital Value Creation (Figure 1)



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DIGITAL CUSTOMER EXPERIENCE: ENHANCING CUSTOMER LIFETIME VALUE

The digital customer experience is the opportunity for enterprises to focus on using digital channels to supplement their existing customer touchpoints, with the aim of expanding and optimizing existing customer relationships or gain new ones. Companies like Amazon focus on offering a customer experience that flows seamlessly from online to offline. The company has created an unrivalled reputation for itself, in part, by ensuring that an easy online shopping experience can result in almost immediate gratification with the same-day delivery of goods. The ability to create an online customer experience defined by convenience and expediency is driven by the company's use of technology that connects delivery partners in a near-flawless delivery process. This end-to-end orchestration has forced other companies to think about how "seamless retailing" might impact and enhance their businesses. In this way, Amazon is using digital to dominate the market, lead the retail conversation and manage its brand.



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Other companies differentiate themselves by focusing on the digital customer experience through the application of analytics or big data. Analytics play a large part in increasing Customer Lifetime Value (CLV) for companies like Target that have been very successful in analyzing shopping habits and applying the findings to drive sales. Most of Target's growth from 2002, when it was a company with revenues of \$44 billion, to 2010, when its revenues touched \$67 billion, has been attributed to [its keen use of analytics](#).

DIGITAL PRODUCTS & SERVICES: CREATING NEW VALUE USING DIGITAL

New opportunities created by emerging technologies are putting some enterprises in the awkward position of having to ask themselves, "Exactly what business are we in?" As analog products and services evolve based on digital augmentations, companies that have enjoyed comfortable niches are now finding it difficult to reposition themselves. Others are taking action to get out in front of the trend. Telecom network element manufacturers, for example, can use Network Function Virtualization (NFV) and Software-Defined Networking (SDN) to convert their current legacy hardware products into software solutions.

A decade ago, network elements like base station receivers were single-function, single-purpose hardware, but today they are soft-switch, configurable and multi-function products. Now when they are deployed in the field, they can be operated remotely and updated from a central location to automatically send field analytics back to the manufacturer. This has opened up a new world of possibilities and use cases within the managed networks space, requiring the European managed network industry to start multiple initiatives (like [FP7 UNIFY](#)) to define new standards for the future of telecommunications.

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As one can see, the growing trend of “software-izing” hardware products introduces both tremendous possibilities and tremendous threats. Since products can now be sold as-a-service and continuously deployed in the field in real time, companies must quickly decide whether to continue to sell only analog products or offer subscription-based pricing models.

In other cases, digital solutions are changing certain products to make them more useful to end users. Withings, a health and lifestyle technology firm, **removed the display on its blood pressure monitor product** because a mobile app can now track the blood pressure readings and send updates directly to clinics. Removing the display made the product lighter and cheaper, and the mobile app can add location-based features that were not possible before.



Even companies without digital products are finding themselves in the digital business.

Even companies without digital products are finding themselves in the digital business. Social media has reshaped the retail industry, allowing small players without brand equity to disrupt established brands. **Warby Parker used social media to establish itself in the online eyeglasses market** with a diligent commitment to leveraging Facebook as its customer service channel and “culture-jacking” popular stories and events to associate with its brand. The immediacy of social media allows sometimes unheard-of companies to pounce on widely recognized popular culture trends in real time and link those trends to their brand. Such creative use of social networks allows companies to build rapid and widespread brand recognition and value at a fraction of the cost of traditional brand-building activities.

At the same time, a new subset of companies is leveraging online channels and data analytics capabilities to further extend the idea of products-as-a-service. Trunk Club, a men’s online clothing company, advertising “Premium Clothing, Great Advice, Zero Work,” offers a subscription-based service that assigns its customers a personal stylist-on-demand to pick out top designer labels and ship them to their home for free. Trunk Club was **recently bought by Nordstrom for \$350 million.**

The creation of digital products and services is the proverbial sweet spot where thinking digitally can open new doors for companies and expand the possibilities of redefining the business they are in, want to be in, or should be in. Beyond the creation of new revenue streams and enhancing the customer experience, advances in digital technology are creating value in other, often-overlooked segments of the market.

DIGITAL SUPPLY CHAIN & MANUFACTURING

Enterprises that are more focused on business-to-business transactions, like manufacturing enterprises, have improved operations by digitizing their entire supply chain. Logistics companies and automotive suppliers are coming together to create common platforms on which they can share insights to optimize operations for each partner involved in the supply chain.

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The University of Aachen in Northern Germany is creating **Smart Logistics Grids**, using composite clouds as platforms on which these companies can apply predictive analytics to both public and private data. This solution now connects the plant, the parts manufacturer, and the trucking company transporting the parts to the assembly plant. Each entity benefits from real-time information. The shared data includes publicly available information—like current traffic jams, weather warnings, detours on the Autobahn—and each entity uses this information along with its own private data to optimize its operations. The assembly plant now knows exactly when the parts will arrive so the path to the storage area can be cleared, and the trucking company can optimize its routes based on the delivery schedule.

GE has recently announced how **its Brilliant Factories initiative** uses sensors to stream information into a data lake and then analyzes this data for insights on downtime and efficiency. One of its new Brilliant Factories has already doubled its defect-free production numbers. These digital innovations in supply chain management have allowed manufacturing companies to speed time-to-market and control their costs.



Digitizing internal processes is an opportunity to reduce transaction costs and improve efficiency.

DIGITAL ENABLEMENT & PRODUCTIVITY

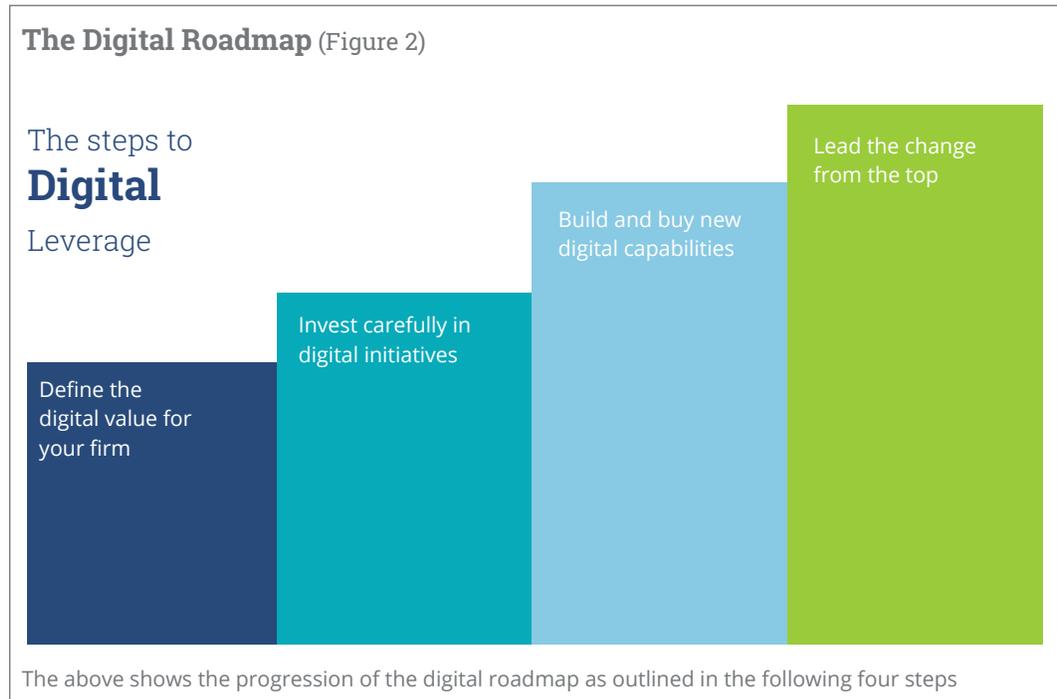
Many consulting firms today are advising companies to focus their investments on IT systems that enable innovation and market differentiation. This often leaves the IT systems for procurement, finance and HR relegated to the background, with little investment. One might think such classic enterprise-enabling functions like finance, procurement, HR and payroll have less to benefit from going digital, but this is not the case. Digitizing internal processes is an opportunity to reduce transaction costs and improve efficiency. Organizations that take the time to identify which labor-intensive activities are strong candidates for digitization are finding that, in addition to cutting costs, they are making gains in how they coordinate and collaborate across departments. Disciplines that improve efficiency and productivity, such as agile in software development and lean in manufacturing, are making their mark in organizational design, integrating an enterprise's previously siloed information and personnel to increase company-wide cooperation and coordination. HR, for example, is experiencing a huge spurt in productivity as it uses advanced algorithms to analyze public data and private data to cull and pinpoint potential hires.

Practices like value stream analysis, a method used in lean management, are now being used to determine which activities are candidates for digitization. For example, salespeople and front-line staff who are out in the field answering questions and closing deals can get real-time expert advice from mentors back at headquarters with the use of collaboration technologies. Companies that are focusing on applying digital solutions to employee productivity are seeing enormous benefits at fractional costs, with a direct impact on the bottom line.

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THE DIGITAL ROADMAP

Business executives are growing tired of hearing consultants tell them they need to disrupt the market before they get “Ubered.” They want to separate the hype from the hearsay and make decisions about how and when to embrace the digital revolution in a way that is best for their unique organizational charter and their specific industry. To see clearly across a rapidly changing landscape, organizations will benefit from first establishing a digital roadmap.



- 1. Define the digital value for your firm.** Start with a keen understanding of how the digital revolution is redefining your industry. This should be a deliberate “outside-in” study and should lead to an examination of your current approach in the context of the broader industry. Focus on the way your firm can differentiate itself. For example, how can you use your leading-edge digital customer experience to augment your current offerings? Or how can you use the cost savings you realize through a well-managed digital supply chain to offer differentiated pricing?

Companies who occupy leading positions in their markets will need to be especially careful; their pole positions are now threatened by agile disruptors. The premium automotive industry was caught by surprise, for example, when used car sales platforms grew overnight with cheap and easy access to better data on how much a buyer might spend on a year-old model. Premium players in any segment are under constant threat by niche challengers that constantly chip away at their businesses. In such cases, established companies may find that proactively leveraging digital possibilities is a last defense against disruption.

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Strategic exercises that concentrate on how digital can bolster, supplement or protect a company's offerings should result in the definition of specific initiatives that either create or prove value in terms of business outcomes. The challenge is to create new and additional paths to your customer and lead them away from competition. Disruption must create new doors before it closes old ones.

- 2. Invest carefully in digital initiatives.** Be wary of buying into the hype of digital technologies. The-build-it-and-they-will-come theory does not work in the current market. Instead, determine which of your defined initiatives can be used to drive profits and avoidance of loss in the medium-term. This can be reflected in existing and new P&Ls. Your IT organization understands how to design and buy technology; involve them closely in designing the company's digital blueprint and platform. Learn as you go through controlled experimentation in the market.
- 3. Build and buy new digital capabilities.** Speed to market is essential in the digital age. You can't always afford the time it takes to build digital capabilities on your own. Actively seek new partnerships and alliances to enhance your capabilities, either temporarily or as long-term solutions. Get IT to help you create a balanced buy/build digital platform. Speed is an essential element in creating your digital fabric. The competition will seek to replicate your success. Stay ahead of them.
- 4. Lead the change from the top.** Like any major initiative, digital transformation is a change that impacts many, if not all, aspects of an organization's operations and performance. Ensure leadership paves the way for transformation, clearing hurdles and resolving issues, and setting priorities in a constructive way. Involve each part of the organization so that it supports the design from its own perspective. Appropriate teams should make educated recommendations about how to purchase innovation, how to design a digital platform, and how to create seamless online and offline customer experiences. Leadership from IT is integral to a successful digital transformation. [Burberry's CEO, for example](#), shifted the focus of her CIO to the role of a CTO and told him to "move from the back of the bus, where IT traditionally sits, to the front of the bus."



Revenue awaits companies that see beyond the seductive glow of new gadgets to a more distant, more rewarding place.

AIMING FOR DIGITAL BUSINESS OUTCOMES

Companies that leverage digital solutions and digital thinking are leading the charge in the new era defined by increasingly sophisticated technology. But, to be sure, those that have created new service offerings and achieved organizational transformations from their digital initiatives have done so with difficulty and uncertainty. If they have been successful, it is, at least in part, because they have built healthy relationships with partners that bring market insight or help to build the right capabilities. Revenue awaits companies that see beyond the seductive glow of new gadgets to a more distant, more rewarding place that uses technology to enable and augment enterprise growth.

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Prashant works with enterprises to shape their operating models for a digital journey and brings 20 years of expertise in all aspects of applications and platforms, from designing transformations through the whole sourcing lifecycle. Prashant's experience spans a range of industries, including Financial Services, Telecom and Media, Automotive and Utilities, and a range of geographies, including Europe, the Americas and India. Recently, he helped a Fortune 100 automotive giant consolidate its next-generation sourcing for applications, executing digital transformations right up to application management. He has also structured and run a digital transformation strategy and multi-project execution for a large logistics firm in the Nordics and set up a captive offshoring unit for agile product development in India for one of the world's largest publicly-listed European entertainment companies.



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