India's path to digitalization
The corporate agenda

High performance. Delivered.
Foreword

The time is right for Indian companies to pursue digitalization—whereby digitized resources, such as cloud-based software and machines equipped with digital sensors, are transformed into new sources of profitable revenue.

The market is there: Indian consumers are fast going digital—snapping up smart phones and tablets. E-commerce is expanding with speed. India’s digital talent pool is growing. And an explosion in volumes of data traffic promises ever more feedstock for analytical engines to extract useful business insights from data. Governments at the Centre and in States are also doing their bit by building digital infrastructure to bridge the last mile network gaps.

We surveyed more than 100 senior executives to find their readiness to make the most of this fast-maturing opportunity. We found very high levels of awareness amongst executives on digital technologies of the present and future (such as Internet of Things). Executives we surveyed also agree that digitalization is a strategic growth imperative. But, many are far from prepared to meet it from a position of strength.

To avoid missing the “digital bus,” numerous companies have rushed to adopt digital technologies such as social media and cloud technologies without appropriately aligning it to their broader business goals. Focused on earning quick returns on such digital investments, businesses are working to pluck “low-hanging fruit” such as process efficiencies and productivity gains. As a result, many have missed out on adopting a planned induction of digital technologies towards developing new-to-market offerings — the true value inherent in digitalization. They have therefore put their current and future digital gains at risk.

In this report, we provide a step-by-step approach towards transforming digitalization into a driver of profitable growth. We recommend a three-step approach focused on, creating awareness and confidence around digitalization’s benefits within the business; developing a digitalization roadmap; and building a business model for digitalization supported by the right capabilities and culture.

Digitalization is real, and a growing number of Indian companies are already reaping handsome rewards from it. Heightened awareness now needs to be backed by a real workable digitalization action plan. The Accenture Technology Vision 2015, shows that the digitalized pioneers are doing far more than simply flexing their digital muscles. They are fundamentally changing the way they lead, are stretching the digital boundaries of their enterprise and tapping on every opportunity to tap into the expanding array of digital customers and other digital businesses.” CEOs who choose to embark on such a journey without a roadmap will be placing the future of their company and shareholders at stake.

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For millions of Indian consumers in cities and rural areas, “being digital” has become a way of life. Similar to what’s happening in more and more households around the world, many Indians wake up in the morning and, instead of brushing their teeth first thing, they’re more interested in checking email, reviewing their friends’ Facebook posts and Twitter feeds and checking their WhatsApp accounts. Verbs such as “Googling,” “Tweeting” and “Facebooking” are now increasingly commonplace among Indian consumers.

But consumers aren’t the only ones going digital. Indian workers are doing the same. Witness the rapidly digitizing talent pools in Indian organizations, leveraging the power of sharing, networking and gaming.

Today’s digital consumers and digitized employees are constantly connected and more informed than ever. As such, they no longer just passively accept the products and services that companies have to offer or the practices and opportunities that employers and workplaces have to provide. Just as digital customers are aggressively shaping companies’ offerings, digitized workers are redefining the way work gets done.

When it comes to serving digital consumers, gone are the days when companies could still succeed even if they kept customers waiting. Now, thanks to the increasing penetration of e-commerce, digital consumers can pick and choose the products and services that companies have to offer or the practices and opportunities that employers and workplaces have to provide. Just as digital customers are aggressively shaping companies’ offerings, digitized workers are redefining the way work gets done.

To profitably serve the growing mass of digital consumers as well as win and keep digitized talent, Indian companies can’t rely on simply tweaking productivity- and efficiency-enhancing strategies deployed in what we call the IT Era and Industrial IT Era. Instead, they will have to embrace digitalization—whereby digitized resources (such as online channels, machines equipped with digital sensors and cloud-based software) are transformed into new sources of profitable revenue.

To understand the intent, interest and intensity within companies based in India towards digitalization, we embarked on a detailed survey and in-depth interview based research. We had conversations with more than 100 C-suite executives across large, medium and small companies in a diverse array of sectors.

**Much talk—but little action**

Nine out of 10 executives in our study said that digitalization will be a strategic imperative for their companies over the next five years. Many are focusing on adoption of digital technologies such as social media, mobile devices, analytics and cloud computing (“SMAC”)—with the goal of boosting their existing IT systems’ efficiency (58 percent) or their supply chains’ efficiency (48 percent). While such gains are important, businesses focusing solely on these improvements are missing out on much more transformative forms of value that digital technologies can deliver—such as development of breakthrough offerings and closer connections with customers.

To cite two data points: Only 5 percent of our survey respondents reported using digital technologies to create a more compelling customer experience, and just 7 percent said that being digital was about transforming digital resources into new sources of revenue.

Many of our survey participants believe that high costs are preventing them from taking full advantage of digital technologies. Moreover, a large number are seeing the gains they’ve made from digital adoption hit a plateau. They haven’t yet realized that such outcomes stem from the practice of “bolting” digital technologies onto their existing operating and business model. For instance, 86 percent of the companies in our survey that haven’t defined a clear digital roadmap complained that because of the high costs of digital adoption and digital transactions, combined with infrastructure deficits, they haven’t captured digital technologies’ full potential. As explained by the CIO of a large fast-moving consumer goods company, “We have digitized our processes, but now we need to think through... deriving revenue from our digital investments.”

Clearly, while companies are aware of the importance of digitalization and keen to embrace it, many are going about it the wrong way.
Accenture's path to profitable digitalization

To help companies embrace digitalization systematically, we have defined a framework for achieving efficient as well as profitable digitalization. To develop this framework, we analyzed the experiences of firms that have begun finding their feet in this effort. While these businesses have encountered their share of surprises and setbacks, these companies are also benefiting by taking a methodical approach to digitalization.

The proposed framework comprises three steps:

1. Create awareness and ownership around digitalization. Help people throughout your organization understand what digitalization is and what advantages it offers, and foster a sense of ownership around digitalization at the highest level. Encourage top leaders across all key business functions to have “skin in the game” and to drive digitalization collectively.

2. Design a digitalization roadmap. Put customers at the center of this roadmap, and include tactics for using digital technologies to strengthen your understanding of existing and future customers. Foster participation of leaders from all ranks, by designing a “digital business value tree” as well as considering potential digital operating models. In this roadmap, show the technology and skills required to harness the true power of digital assets to deliver the desired customer value.

3. Digitalize your business model. Make the right choices about your customer value proposition, resources, profit formula and performance metrics. Nurture the capabilities and culture needed to support your business model and to thus transform digitalization into a driver of profitable growth.

To follow these steps, especially 2 and 3, Indian companies will need to customize the activities associated with each step to suit their unique business realities. Moreover, they should not abruptly jettison all of their efficiency-focused digitization initiatives. Instead, they need to find ways to leverage new efficiencies to craft a digitalization strategy that makes them more competitive in their chosen markets.

For this reason, the digitalization journey will not be easy. However, by breaking it down into stages and taking a disciplined approach, Indian businesses can go beyond merely “doing better.” Ultimately, they can transform their businesses by activating new sources of revenue that take full advantage of India’s rapid digital growth.

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Digitalization of businesses: Why now in India?

About thirty five years ago, businesses in India began experimenting with information technology (IT). By integrating IT into their businesses, they gained greater visibility across functions, automated several links in the value chain and started delivering standardized value to customers at competitive price points.

During the last decade, Indian enterprises expanded their presence across different products and geographies. Their challenge went from delivering scalable standardized value across customers to offering tailored value to different client segments at scale. Companies now needed end-to-end visibility into their value chains and enhanced process efficiency throughout the organization. To these ends, they began integrating standardized automated IT services across the value chain – the so-called factory model of developing and delivering IT.

In aligning their operating model to maximize gains from industrial IT investments, enterprises have now been compelled to take note of the digitalization phenomenon, which differs markedly from companies’ earlier experiences. Driven largely by customers and breakthrough innovations in mobile telephony, software, IT platforms and applications, digitalization is compelling industry players to take a hard look at their business models. (See Sidebar: What is digitalization?)

In just the next few years, various components of the digital ecosystem in India—including the digitized consumer, generation of digital data volumes, e-commerce and tech-savvy talent pools—are expected to mature. Digitalization is therefore a near-term strategic imperative for large businesses in India.

As the CEO of a major insurance company told us “[If] we don’t go digital, we won’t exist.”
**What is digitalization?**

Through digitalization, a company’s digitized resources (such as online channels, machines equipped with digital sensors, agile design and development teams equipped with smart phones and tablets, and cloud-based software) are transformed into new sources of revenue and operational gains.

Digital technologies including mobile computing, social media, business analytics and cloud computing drive this transformation. How? They power the digital resources, such as mobile phones, tablets and sensors that serve as rich sources of data. When combined with easily accessible software applications, digital technologies help companies’ extract, aggregate, process and transform data into valuable business insights.

Thanks to rapid technological innovation, such insights can now be captured at speed, often in real time.

The opportunities presented by digitalization are compelling business leaders to look at their business models from a new angle. For instance, digitalization opens up game-changing options to combine digital and physical resources within and outside an organization, to collaborate and integrate technologies and human talent in novel ways, to strengthen innovation and to achieve new heights of operational excellence. (See Figure 1.)

A few Indian companies have already embarked on the journey of “going digital,” and they are profiting. (See Sidebar: Brewing innovation digitally: Café Coffee Day.)

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**Figure 1: Digitalization of business**

Digitalization differs from the IT and industrial IT eras on multiple fronts

<table>
<thead>
<tr>
<th>IT ERA</th>
<th>INDUSTRIAL IT ERA</th>
<th>DIGITALIZATION ERA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BUSINESS GOAL</strong></td>
<td>Productivity</td>
<td>Efficiency at scale</td>
</tr>
<tr>
<td><strong>OUTCOMES</strong></td>
<td>Automation</td>
<td>Process excellence</td>
</tr>
<tr>
<td><strong>IMPACT AREAS</strong></td>
<td>Specific organizational functions</td>
<td>Value chain</td>
</tr>
<tr>
<td><strong>VALUE FOR CUSTOMERS</strong></td>
<td>Standardization</td>
<td>Segmented customization</td>
</tr>
<tr>
<td><strong>SOFTWARE DEVELOPMENT MODEL</strong></td>
<td>Waterfall model (a linear approach to software development)</td>
<td>Agile model – Business of Applications</td>
</tr>
</tbody>
</table>

Source: Accenture
The digitized Indian consumer

Digitized consumers (those equipped with smart phones, tablets and other data generating devices) play a central role in enterprises’ efforts to generate disruptive growth from digitalization. Consumers’ use of such devices enables companies to capture larger and more diverse volumes of data about their customers. It also gives consumers an opportunity to help shape a company’s strategies and growth. Both these gains help businesses deploy digital technologies to extract more insightful and actionable results from customer-related data.

Digitization of consumers in India is reflected in IT spending trends. IT spending in India is projected to reach US$92.9 billion by 2017, up from US$67.4 billion in 2013, according to research firm Gartner. And by 2017, the devices market will emerge as the largest segment of IT spending nationally. Growth within this segment will be driven by sales of mobile phones, which will count among the fastest-growing sub-segments within India’s IT industry.

IDC predicts that the Indian smartphone market will witness growth levels higher than any other top markets in the world— as much as 460 percent during 2013-2017 alone. The Indian market is expected to attract 155.6 million smartphone shipments in 2017, accounting for 10.3 percent of the worldwide smartphone market. (See Figure 2.)

Digital data growth in India

Growth in digital data is vital for digitalization, because companies can use digital technologies such as analytics to glean valuable insights from such data. The larger the volumes of data, the greater the likelihood that companies can capture useful insights.

Exponential digitization of the Indian consumer will lead to a dramatic increase in national digital data traffic. Consider: sales of 3G SIM cards in India are expected to grow from 35 million units in 2012 to about 272 million by 2017 as high-end 2G users opt for service upgrades.

With increased market penetration of smart devices and advances in networks, mobile data traffic is expected to achieve a compound annual growth rate (CAGR) of 127 percent from 2012 to 2017 in India. Mobile data traffic will reach 900 petabytes per month in 2017, up from 15 in 2012. (See Figure 3.)

IP traffic in India will see a CAGR of 44 percent during 2012-2017, the highest growth rate across the globe. Internet traffic in India will reach 2.5 million terabytes per month in 2017, up from 393 billion terabytes per month in 2012.

Starting in 2017, India will become home to the world’s largest population of Facebook users and will emerge as the second-largest mobile broadband market. These developments will make it easier for companies based in India to swiftly gather high-quality data and generate business insights from it.

E-commerce in India

Indian consumers are hungrier than ever for e-commerce. A recent study by the Associated Chambers of Commerce and Industry of India (ASSOCHAM) pegged the Indian e-commerce industry at US$16 billion in 2013. This number (equivalent to the gross state domestic product of a few small states in India) is growing at about 88 percent per year—driven by only 9 percent of the current online population, which totals around 150 million. Clearly, e-commerce still has significant room to grow.

With more than 300 million Indians expected to go online by 2017, India could become one of the top three fastest-growing business-to-consumer (B2C) e-commerce markets in the Asia Pacific.

According to a study by Accel Partners, revenues from online shopping for physical goods in India will reach US$8.5 billion by early 2017, and the number of online shoppers will more than double to 40 million. (See Figure 4.) Mobile shopping is expected to clock a 150 percent growth rate during 2013-2016. Desktop-based or web-based platforms will give way to full-fledged mobile versions. According to some industry leaders we interviewed, e-commerce will be driven by “mobile-only transactions” in the future.
Brewing innovation digitally: Café Coffee Day

Café Coffee Day is an Indian café chain owned by Amalgamated Bean Coffee Trading Company.

Credited for altering the coffee calculus in India by unleashing a wave of café culture, CCD, as it is popularly referred to, now has a presence across more than 1,500 large and small cities and towns across the nation. With revenues of over US$500 million and an employee base of more than 5,000, CCD has emerged as the largest organized coffee chain in India.

Like many India-based businesses, the company embarked on a digitalization journey with little planning. An unfortunate offline incident that went viral prompted CCD’s first “real interface” with social media. But instead of disengaging with digital technologies after the incident, CCD used the same social media engines to explain its position and discuss possible solutions to the problem. In a matter of days, hashtags that earlier read “CCD sucks” changed into “Kudos CCD.”

Recognizing the growing popularity of social media and the accelerating penetration of mobility, CCD established a robust presence on Facebook, Twitter and other social media engines.

When CCD acquired more than a million fans on Facebook, executives decided it was time to use social media as a tool for doing more; specifically, for creating new value. They began exploring social media as a means for co-creating new offerings with customers.

For instance, the company used Facebook to invite customers to propose definitions for two new products CCD planned to launch.

After product definitions were finalized, CCD developed prototypes and asked the same customers to taste them. Participants were given specific dates and cafes they could visit to do the tasting. They then posted their comments and ratings for the prototypes on Facebook.

CCD had hit upon an affordable and efficient process for involving customers in the development and launch of what became popular new products— including the Crunchy Frappe. As a result, the company was able to launch the offerings quickly as well as further secure customers’ trust.

CCD is a wonderful example of how companies can transition from being solely dependent on workforce and move to crowdsource revenue generating ideas — one of the key digital imperatives pointed out in Accenture’s Technology Vision 2014.

In touch with the hyper-connected: State Bank of India

State Bank of India (SBI) has been extremely successful over more than two centuries, but recently it knew it had to change.

As the country’s oldest bank, with origins dating to 1806, SBI commands more than 22 percent of the domestic market. In terms of profits, assets, deposits, branches and employees, it is the country’s largest commercial bank.

But SBI recognized that continuing to focus on its large and profitable customer base — those in the 45-plus age bracket — without addressing the growing youth population could threaten its leadership position. SBI needed an outside-the-box approach to expand its customer base. It would have to embrace banking practices preferred by hyper-connected, highly informed, value-driven young customers — the “digizens”.

As a result, SBI turned to the power of digital technologies to attract, retain and grow with these “digizens”. It created a new sub-brand specifically to appeal to this group called SBI In Touch.

To offer a seamless digital experience to the millennial generation, SBI introduced multi-function kiosks, interactive wall and table displays, smart ATMs and debit card printers.

These devices, several available to customers for the first time in India, now offer many advanced digital banking capabilities, including:

- Instant account opening with immediate provision of a personalized debit card;
- Instant in-principle approvals for education, car and home loans; and
- Instant access to remote financial advisors through high-definition videoconferencing.

To provide a customer-centric, real-time experience, SBI has created a full-fledged integrated technology platform using the combined power of analytics, cloud technologies, social media and mobility.

Beginning with the first day of its launch at six branches, SBI has witnessed a high level of retail engagement. Typically, more than 100 people on weekdays and 250 on weekend days enter each of these locations to benefit from a truly digital banking experience. The bank’s sales staff would not have been able to interact with potential new customers at that level of volume—new technologies were a critical enabler.

As SBI looks to sign up increasing numbers of younger customers, it is digitally positioning itself for future success.
Indian digital talent

Software constitutes the central nervous system of technologies driving digitalization. To harness the true power of digitalization, all businesses need an expanding pool of skilled software developers. When it comes to talent, Indian enterprises have a reason to cheer. In 2013, the United States led the world in software developers, boasting about 3.6 million such workers in the nation’s labor force. India had about 2.75 million. But by the end of 2017, India will have 5.2 million developers, a nearly 90 percent increase, versus 4.5 million in the US, a 25 percent increase.\textsuperscript{xi}

According to Oxford Economics, a demographic bulge accelerating economic growth and technology-enabled training will enable India to record the fastest annual talent-pool growth among developed and key emerging markets including Brazil, China, Indonesia and Turkey. India’s pool of college-educated talent is expected to exceed that of China and many other major emerging markets through 2017, reaching about 45 million at the end of 2021.\textsuperscript{xii}

Fast-digitizing government

Government initiatives play an important role in accelerating the pace and quality of adoption of digital technologies in India’s private sector. For example, broadband infrastructure connecting remote parts of India can help companies build better virtual connects with customers inexpensively. Businesses can also access vital information stored on publicly accessible government clouds, in real time. Using this information, businesses can make more informed business decisions more quickly.

The Digital India initiative, a government milestone project, is a case in point. This wide-ranging initiative will encapsulate not only last-mile broadband connectivity to villages but also digital identities for India’s entire population and a cloud platform for citizens. The US$18 billion project aims to provide broadband Internet connections (through a fiber-optics network) and seamless mobile connectivity to 250,000 village panchayats by 2019—and to 100,000 more in 2015. The plan also includes making many village schools Wi-Fi enabled and helping as many as 1 million people become “digital literate” in 2015 alone.\textsuperscript{xv}

In addition to improving e-governance, Digital India will likely create new avenues and platforms for information-for-all services, as well as bolster electronics manufacturing industries and create a slew of IT jobs. Government ministries and departments will be responsible for deploying their individual information and communication technology (ICT) projects in the areas of healthcare, education and judicial services. For instance, land records will be made available online, and e-literacy training programs in local languages will be delivered in 200,000 community service centers across the country.\textsuperscript{xvi}
Research methodology

This report draws on several research components. First, Accenture conducted an extensive review of the existing literature, including media resources, academic journals, corporate annual reports and business studies, to discover what issues are most pressing for India-based companies attempting to digitalize. The survey of secondary research revealed a clear deficit of insights relevant to understanding various dimensions of digitalization within Indian industry.

To address such deficit Accenture conducted discussions with 110 C-suite executives across the industry.

The face-to-face interviews and survey covered five relevant aspects of digitalization. The experience of companies towards deploying SMAC technologies was utilized as a proxy to capture their digitalization experience.

![Industry classification of respondents](chart1)

<table>
<thead>
<tr>
<th>Industry Classification</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No primary industry – Diversified/Conglomerate</td>
<td>20%</td>
</tr>
<tr>
<td>Communication &amp; Hi-Tech</td>
<td>19%</td>
</tr>
<tr>
<td>Financial Services</td>
<td>19%</td>
</tr>
<tr>
<td>Products</td>
<td>18%</td>
</tr>
<tr>
<td>Resources</td>
<td>18%</td>
</tr>
</tbody>
</table>

![Revenue breakup of respondents (in US$ million)](chart2)

<table>
<thead>
<tr>
<th>Revenue Breakup</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 10000</td>
<td>38%</td>
</tr>
<tr>
<td>5000.01 - 10000</td>
<td>19%</td>
</tr>
<tr>
<td>1000.01 - 5000</td>
<td>18%</td>
</tr>
<tr>
<td>750.01 - 1000</td>
<td>13%</td>
</tr>
<tr>
<td>500.01 - 750</td>
<td>13%</td>
</tr>
<tr>
<td>200.01 - 500</td>
<td>7%</td>
</tr>
</tbody>
</table>

**ASPECTS OF DIGITALIZATION**

**DATA COLLECTION POINTERS**

**Digital awareness and intent**
- Level of awareness and understanding of SMAC: social media, mobility, analytics and cloud and non-SMAC digital technologies.
- Interest within the enterprise to deploy both SMAC and non-SMAC technologies to achieve business goals.

**Digitalization intensity**
- Extent to which SMAC technologies are a part of their enterprises’ operations.
- The role, SMAC technologies play in helping them better address enterprises’ strategic priorities.

**Intensity of digital technology integration**
- Extent to which companies leverage the integrated power of various digital technologies to better achieve business goals.
- Barriers companies face to leveraging the integrated power of digital technologies.

**Intensity to collaborate towards achieving digitalization**
- The collaborations/collaborators being leveraged to develop and deploy digital technologies.

**Investments and aspirations towards digitalization**
- The influence of digital technologies on the present and future revenues of businesses.
- The vendors businesses will like to work with towards fully leveraging the power of digital technologies.

Finally, survey and interview data were analyzed to develop firm-level competencies that need to be developed to succeed in this area.
Indian C-suite executives recognize the importance of digitalization.

Almost 90 percent of the executives we surveyed view digitalization as a near-term strategic imperative. (See Figure 5.) Yet a number of constraints have arisen along the way that have made it difficult for companies to meet that imperative.

Figure 5: Executives’ view of digitalization

Embracing digitalization is a near-term strategic imperative for almost all businesses

A “SMACing” confusion

In their eagerness to meet the digitalization imperative, all too many companies have rushed to adopt digital technologies we refer to as SMAC: social media, mobility, analytics and cloud.

Many executives we interviewed are focused on making their one-off SMAC investments successful in the short term. As a result, they are missing opportunities to seize the larger opportunities digitalization presents. “For us, being digital... is about deploying social media and mobility,” said the CIO of a leading fast-moving consumer goods (FMCG) company when we asked about its digitalization journey.

The survey data reveals even more. For a dominant number of respondents, “being digital” involves simply deploying any or some SMAC technologies. (See Figure 6.) Only a handful of respondents (7 percent) see it as being about transforming digitized resources into new sources of revenue.

Companies that confuse adoption of SMAC with digitalization tend to view digital technologies as tools for gaining process efficiencies rather than meeting more strategic priorities—such as delivering compelling customer experiences or accelerating customer-focused R&D or innovation. (See Figure 7.)

Figure 6: Executives’ definitions of “being digital”
Many businesses confuse SMAC adoption with digitalization

What does digitalization or ‘being digital’ mean to your business?

- Mobility 73%
- Analytical Technologies 61%
- Cloud Technology 53%
- Social Media 40%
- Using digital technology to enhance productivity and efficiency across the enterprise 24%
- Replacing business/functional processes with digitally enabled processes 22%
- Turning digitized resources into new sources of revenue 7%

Figure 7: Impact of “SMACing” confusion
Companies that confuse adoption of SMAC with digitalization tend to use digital technologies to attain process efficiencies

What are the business priorities currently being addressed by digital technologies in your firm?

Business priorities in the space of talent and processes

<table>
<thead>
<tr>
<th>Priority</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attractive employment destination for technologically skilled labour</td>
<td>8%</td>
</tr>
<tr>
<td>Higher productivity and efficiency of existing IT systems</td>
<td>58%</td>
</tr>
<tr>
<td>Enhancement in supply chain efficiency</td>
<td>46%</td>
</tr>
<tr>
<td>Improvement in product and process quality</td>
<td>35%</td>
</tr>
<tr>
<td>Increase in labor/employee productivity</td>
<td>27%</td>
</tr>
<tr>
<td>Improvement in risk management capabilities</td>
<td>12%</td>
</tr>
</tbody>
</table>

Business priorities in the space of collaboration

<table>
<thead>
<tr>
<th>Priority</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformation of customers as product/brand ambassadors</td>
<td>10%</td>
</tr>
<tr>
<td>Effective collaboration with business partners</td>
<td>25%</td>
</tr>
</tbody>
</table>

Business priorities in the space of customer value creation

<table>
<thead>
<tr>
<th>Priority</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion of market-presence with digital marketing</td>
<td>24%</td>
</tr>
<tr>
<td>Scalability and enhanced quality of customer relationships management</td>
<td>18%</td>
</tr>
<tr>
<td>Enhancement in visibility of the brand</td>
<td>10%</td>
</tr>
<tr>
<td>Greater efficiency in R&amp;D/innovation</td>
<td>9%</td>
</tr>
<tr>
<td>Environment friendly value creation</td>
<td>8%</td>
</tr>
<tr>
<td>Creating more compelling customer experience</td>
<td>5%</td>
</tr>
</tbody>
</table>

Missing: a digital roadmap

Many companies seeking process efficiency gains through digital technology deployment neglect to develop a roadmap for capitalizing on the more strategic opportunities presented by digitalization. Without a roadmap, executives misperceive key characteristics of digital technologies—particularly their cost.

For instance, 86 percent of the companies represented in our survey that lack a well-defined digital roadmap complain that the high costs of digital adoption and digital transactions as well as infrastructure deficits are preventing them from capturing digital technologies’ full potential. (See Figure 8.)

To shed additional light on our survey findings, we interviewed a number of executives. We found that for many companies, lack of a strategic approach for adopting and deploying digital technologies, paired with wariness about costs, has led them to digitize only certain functions or processes, such as establishing a private cloud for data collation and sharing.

Such companies are struggling to deploy digital technologies at scale across their businesses to generate new sources of value and savings. They have focused on digitizing resources to support their existing business model, rather than rebuilding their business models from a digital standpoint. Executives from these firms find that their operating model is “just not wired to serve the digital ambition of our business.” As a result, their “digital gains have started plateauing,” but “costs to keep the digital engine going are continuing to [rise].”

As the CIO for a large FMCG company told us, “We have digitized our processes, but now we need to think through... deriving revenue from our digital investments.”

What are the key barriers your companies face in leveraging digital technologies?

![Figure 8: Barriers to leveraging digital technologies](source: Accenture survey, 2014.)

Lack of a digital strategy or roadmap creates misperceptions about digital technologies

86%
Not having a digital strategy are experiencing:

- High costs associated with digital technology and related transactions (43%)
- Deficits in infrastructures required to support adoption of digital technology (36%)
- Poor linkages between digital technology adoption and value chain efficiency/productivity (31%)
- Lack of interest/awareness/preparedness within customers for engaging into digital-transactions (29%)
- Poor level of preparedness amongst suppliers/vendors for increased digital collaboration (27%)
- Meeting the pace of innovation and change which is outstripping current in-house experience and capacity (27%)
- Lack of interest/awareness within the leadership and workforce to embrace digital technologies (21%)
- Traditional separation of Business and IT inhibiting adoption and integration of digital technologies (19%)
- Legacy structures / Internal organization and divisional silos (18%)
- Inability to generate material benefits for innovation/R&D set up from increased adoption of digital technology (15%)
The path ahead

The barriers to transforming digitalization into a driver of profitable growth may seem daunting, but they are by no means insurmountable.

Quite a few companies around the world as well as in India have begun finding their feet in this effort. While they have encountered their share of surprises and setbacks, they are also benefiting by approaching digitalization in a systematic, strategic manner.

Drawing on such firms’ experiences, we have codified a three-step framework for achieving efficient and profitable digitalization. (See Figure 9.)
Achieving affordable, profitable digitalization requires awareness, the right roadmap and a digitalized business model backed by the right capabilities and organizational culture.

**Create awareness and ownership around digitalization**
- The cross-organizational awareness agenda must be sponsored through a collaborative C-suite effort.
- Sustained sponsorship to digitalization must become a top business priority for the CEO.
- High involvement of middle and junior management in the process of awareness generation to be ensured.

**Design a digitalization roadmap**
- C-suite must draw a digitalization roadmap for the firm collaboratively.
- The roadmap must consist of a:
  - A well defined ‘outside-in’ outcome;
  - Company-specific digital business value tree;
  - Digital operating model options;
  - Talent and technology framework to drive digitalization;
  - Projections on future revenues to be clocked through digitalization.

**Digitalize business model**
- Continuously improve customer value proposition using the power of digital.
- Identify digital/digitized resources within the business ecosystem to deliver cost effective digitalized value.
- Design solutions deploying integrated and collaborative application of digital technologies profitable for the company and the customer.
- Develop appropriate metrics.

**Transform the organization to build capabilities and culture**
- Develop and leverage customer empathy.
- Partner with right ‘digipreneurs’.
- Develop I.A., the new technology growth compound.
- Install the culture of collaboration and trust.
- Nurture analytical talent for digitalization within and outside.
A quick overview of the steps

**STEP 1**
To approach digitalization strategically, organizations must make a paradigm shift in thinking, culture and behavior. Unless these changes are driven from the top, different parts of the company will continue to define and approach digitalization in their own way. This can boost digitization in the enterprise—but it will not necessarily help the business use digital resources to develop new offerings or enter new markets.

Hence, as the first step, forward-thinking firms must create awareness of what digitalization is and what advantages it offers, and foster a sense of ownership around digitalization at the highest level. The objective is to encourage top leaders across all key business functions to have “skin in the game” and to drive digitalization collectively.

**STEP 2**
Firms must develop a digitalization roadmap. They should put customers at the center of this roadmap and include tactics for using digital technologies to strengthen their understanding of existing and future customers. Fostering participation of leaders from all ranks, companies must design a “digital business value tree” (discussed more fully below) as well as consider potential digital operating models.

In the roadmap, they also need to depict the technology and skills required to harness the true power of digital assets to deliver the desired customer value.

**STEP 3**
Companies must digitalize their business model, which requires making the right choices about their customer value proposition, resources, profit formula and performance metrics. They need to also nurture the capabilities and culture needed to support their business model and thus transform digitalization into a driver of profitable growth.

Many actions associated with this framework, especially in steps 2 and 3, will need to be customized to suit a company’s unique business realities in the Indian context. For instance, the model of digitalization will be different for companies specifically focused at rural markets as compared to urban customers. Moreover, firms should not abruptly jettison all their efficiency-focused digitization initiatives. Instead, they need to craft a roadmap for leveraging new efficiencies to achieve a digitalization strategy that makes them more competitive in their chosen markets.
Step 1: Create awareness and ownership around digitalization

Many of the Indian C-suite executives we spoke with in our research have only a basic grasp of the value that digitalization can create. To reap the full rewards promised by digitalization, CEOs will need to push themselves and their peers to better understand what they can gain from digitalization—and to sponsor digitalization efforts in a sustained way.

Creating awareness

The CEO can begin the sponsorship journey by creating a digitalization council including the rest of the C-suite—such as the Chief Operating Officer (COO), Chief Financial Officer (CFO), Chief Marketing Officer (CMO), Chief Information Officer (CIO) and Chief Human Resources Officer (CHRO). The council’s responsibilities will include learning more about digitalization, using existing channels to communicate its benefits and leading digitalization initiatives.

For example, a global player in the field of healthcare, consumer lifestyle and lighting has established a Digital Board with the CEO as its chair. The board includes the CIO, CMO, head of design and CHRO. Additional members include the Chief Security Officer responsible for risk management and the Chief Strategy and Chief Innovation Officer.

The board has identified tasks for itself and each member that are linked to the organization’s overall vision for digitalization.

As a next step, a company’s digitalization council can gather insights on the latest socioeconomic and technological trends shaping digitalization. For instance, it can organize “connect” or “learning” sessions with leaders of startups, with venture capital or angel investors and with top academic experts.

But simply creating awareness of digitalization among top management will not be enough in itself. Council members must also consciously build awareness among lower-level managers and among employees; for example, by writing about the digitalization imperative in companywide newsletters and on function-specific messaging boards.

To create awareness at scale, the council can also experiment with digital gamification. In collaboration with companies, venture capitalists and other relevant players, council members can organize “hackathons” aimed at giving employees a real-life sense of how commercially viable products can be developed with digital technologies and existing technological infrastructure.
Building a sense of ownership

CEOs need to demonstrate their ownership of the digitalization drive to set an example for other members of the council. To do so, they can use platforms such as annual general meetings, the CEO letter in the annual report and interactions with media. For example, the chief executive of a large Indian FMCG company was featured in a media article as someone who is open to learning the essentials of social media from a very young individual in his organization. The message the company wanted to provide was loud and clear: If a CEO does not understand digitalization, he cannot understand his digital customers.

To build a sense of ownership of digitalization among top executives, the CEO can raise thought-provoking questions about how the various functions can help drive the company's digitalization agenda. (See Figure 10.) With digitally savvy Indian youth flooding the workforce and a growing pool of senior executives well versed in digital technologies, C-suite executives of large Indian companies will find it increasingly easier to communicate their vision for digitalization throughout the top leadership team and the entire organization.

![Figure 10: Creating a sense of ownership on digitalization](image)

Provocative questions encourage C-suite executives to think about how they can help drive digitalization in their company

**CEO**
- How do we deal with digital disruptions in our industry?
- How does digitalization grow our business and better our market positioning?
- How does the organization need to transform itself to grow profitably in the digitalization era?

**COO**
- How can the company use digital technologies for increased speed to market and flexibility?
- How can digital technologies improve company's business process efficiency and relationships with customers?
- How will the company execute the transformation agenda to deliver profits in a digitalized business environment?

**CFO**
- How will digitalization impact margins and profitability of the firm?
- How will the pace of digitalization of company's partners impact the company's cash flows and costs?
- How will digital technologies help arrive at better-informed real-time financial decisions?

**CMO**
- How can the marketing strategy be better aligned to needs of a digital customer?
- How will digitalization disrupt marketing strategy associated with various experiences to be delivered during the consumption lifecycle of the product?
- How can digital technologies be utilized to attract new customers and retain them longer?

**CIO**
- How can existing IT infrastructure be leveraged to achieve first-rate digitalization at affordable costs?
- How can digital resources from the digital ecosystem be sourced at optimal cost?
- How can the company leverage IT organization's knowledge of technology and talent to drive innovation and insights relevant to digitalization?

**CHRO**
- How can the existing talent and human architecture be transformed to execute the digitalization agenda?
- How can digitalization agenda of the company become a tool to attract and retain digital talent?
- How can talent from the digital ecosystem be leveraged to help attain the digitalization agenda of the company?

Source: Adapted from "Growth strategies for a digital world," Accenture, 2014.
Step 2: Design a digitalization roadmap

An effective digitalization roadmap contains five key components.

**Clearly defined “outside-in” outcome**

A strong outcome orientation encourages a sharp focus on digitalization throughout an organization and enterprise-wide collaboration to capture its opportunities.

In a digitalized business, outcomes are customer driven. To achieve profitable digitalization, businesses need to start recognizing the connections among the information, motivations, decisions and actions driving customers’ decisions. They need to define an “outside-in” strategy for making digital customers—whether consumers or other businesses—co-creators and shapers of experiences.

While Indian companies have dramatically improved their customer orientation as compared to a decade ago, digitalization will demand that companies keep on out performing themselves in this area using the power of digital technologies. Their challenge in this space multiplies as they go increasingly global and start addressing customer priorities at a B2B and B2C level across various cultures.

Some companies are already getting adept at this. Mahindra USA (MUSA), which sells farm equipment in the US and Canada, reported it’s highest ever market share and retail sales during the year ended March 2013. Besides many other relevant measures to win over new customers, the company has effectively leveraged social media and the internet to sell its products.

On conducting detailed research of their prospective customers, MUSA discovered that 75% of customers use the internet for product comparisons and other information when they decide to purchase a tractor. This led us to completely revamp our website and transform it from an information provider to a sales-facilitation and retail support tool.

The MUSA website was redesigned on the basis of nine months of feedback and revised no less than five times to incorporate the waves of feedback received from customers. Unique features added based on this feedback are a tractor selector tool for first-time buyers and the ‘Tractorpedia’, which provides visitors with extensive information on tractors and tractor technology.

The Mahindra Max was the first ever tractor to be launched via the internet in North America. Taking best practices from India from the successful Digital launch of the Mahindra XUV 500 – this involved a 10-day teaser campaign encompassing YouTube and the MahindraMax.com site which revealed the new tractor piece by piece over a 10-day period to generate buzz around the product.

All these initiatives have resulted in a loyal fan following for the brand amongst Hobby Farmers, no mean feat considering the fact that tractor conversion is traditionally quite difficult.

**Digital business value tree**

Companies can deploy digital technologies to foster digitization (aimed at achieving new process efficiencies) as well as digitalization (which focuses on driving new growth). Whether a firm is in the B2C or B2B arena, a digital business value tree can help it build a simultaneous view of digitization and digitalization. (See Figure 11.)

A digital business value tree helps companies take their first big leap toward building a business from a digital standpoint. Moreover, exploring questions such as those highlighted in Figure 11, helps executives unearth crucial factors they might have otherwise overlooked.

For Indian businesses, largely adept at leveraging the power of digital to attain greater efficiencies, this tool can push top management to think about how they could use efficiencies derived from digitization to support their company’s digitalization agenda for driving new growth. For example, a manufacturing entity currently investing in making its prototyping process more efficient with the use of 3D printing can now start thinking of making this process of 3D printing more collaborative and impactful using the power of cloud technologies and analytics.
Digital business value

GROWTH THROUGH DIGITALIZATION

Who will be the new customers and how can business be done with them digitally?

What are the new offerings to take to the market using digital technologies?

How will digital technologies transform the earning and margin model?

With whom should the company collaborate to deliver better digital value to the customer?

How can integrated application of digital technologies deliver better customer satisfaction?

EFFICIENCY THROUGH DIGITALIZATION

How can process improvements across business be carried out through digital technologies more efficiently?

How can digital technologies help optimal utilization of existing IT resources and assets?

How can digital technologies make the procurement, production, sales and after-sales engine respond more quicker and better?

How can digital technologies help business reduce costs and become more leaner?

Source: Adapted from "Growth strategies for a digital world," Accenture, 2014.
Digital operating model options

To provide a compelling customer experience while running a superbly efficient digital organization, companies need to select the right digital operating model. In our work with clients in India and internationally, we have seen four different such models emerge in the last decade. (See Figure 12.) Each has its own advantages and challenges.

A centre of excellence (CoE) model provides central access to digital skills and delivery, combined with close links to other business units. Business units set their digital strategy and manage specific digital technologies, while the CoE standardizes and shares applications, processes, data and business functions to drive greater consistency.

In the integrated digital platform (IDP) model, digital products and services are well integrated across channels. The IT platform and business services are centralized, and a dedicated team takes responsibility for digital strategy and execution.

India-based companies deploying the CoE and IDP models have increasingly focused on leveraging their vendors’ strengths to drive greater efficiency. For example in many small and medium sized Indian banks, the top management while taking responsibility of organizational transformation has preferred establishing a shared services model in the space of customer care and relationship management, payment services and other areas of low complexity with the support of expert vendors.

Unlike the CoE and IDP models, the partnership and user group models are open, collaborative and “outside-in.” For instance, in the partnership model, business units share their technological infrastructure with startups to sharpen their digital strategy and support successful execution of the strategy. Many large India-based as well as international mobile instrument manufacturers are utilizing this model to develop state-of-the-art applications for their handsets.

In the user group model, companies look to their user groups to not only shape their digital strategy but also innovate game-changing digital offerings. In this model, business units throw open their technological infrastructure as well as innovation labs to user groups.

The partnership and user group models are more evolved than the previously described models. They are generally adopted by companies that have a strong digital vision and policies that spell out legally binding guidelines regarding privacy and data security.

A significant number of Indian banking institutions, auto-component companies and pharmaceutical firms that have begun using digital technologies are experimenting with the CoE or IDP model. Meanwhile, a growing number of automobile companies and FMCG businesses in India, eager to enhance their digitalization drive, are deploying the partnership or user group model.

Talent and technology framework

A talent framework that helps transition employees, managers and executives from an IT-driven mindset to a digitalization one is critical for any firm seeking to extract maximum value from digital technologies and resources. In the era of enterprise IT, Indian companies concentrated on planning IT right, doing IT right, making outcomes more predictable and creating value while maximizing control and minimizing risk. However, to capture the opportunities presented by the new era, companies will need to deal with three variables – speed, innovation and uncertainty.

To do so, top leadership teams in Indian companies will have to build a flexible technology framework that combines the power of digital talent with the digital ecosystem within and outside their organizations to quickly deliver new value to customers.

Defining a technology framework will require the CIO’s office to reinvent itself. The office will need to become an integral part of the business teams, with the collective goal of creating smarter, more seamless and more secure experiences for customers. With organizations pushing for greater agility, the office of the CIO will need to start thinking on how they can develop simpler, more modular apps — a trend widely referred to as the “Business of Applications” in Accenture’s Technology Vision 2014.

The CIO’s office will also have to build a plan for mastering the evolving hybrid IT environment and keeping the company’s enterprise architecture robust and agile enough to scale up and scale down to the business’s digital demands. But while enabling digitalization, the CIO’s office must continue monitoring costs and driving efficiencies that support the company’s digitalization journey.
Digitalized revenue projections

The CEO and the top team need to define a number (or a range of numbers) representing the revenue they want their company to bring in through digitalization. And they must communicate this aspiration throughout the organization.

This is a tough task. Indeed, about one-third of the executives we interviewed in this study either had nothing to say about this issue or could not describe the contribution that digitalization might make to their revenues.

The top team must also recognize that communicating the potential benefits of digitalization can have enormous additional advantages. It sets an inspiring mood in the organization and stimulates people in different parts of the company to think about the changes they need to make. It also serves as a barometer of the company's digital ambitions for its shareholders and investors.

Figure 12: Four digital operating models

Digital operating models are key to unlocking efficient and innovative value in a digital organization

Step 3 (Part A): Digitalize the business model

After fostering awareness and designing a digital roadmap, Indian enterprises need to digitalize their business model. Any business model has four fundamental components: customer value proposition, resources, profit formula and metrics. Companies need to synchronize these four components with their digitalization agenda.

Use digital to improve the customer value proposition

Customers drive the digital world, in B2C and B2B businesses alike. The data and demographic transformation unfolding in India is providing B2C companies with an opportunity to link social media and mobility with analytics to quickly gather and process new forms of qualitative and quantitative data. In the B2B context, connected devices with ubiquitous sensors and mobile networks — a trend referred to as “Digital-Physical Blur” in Accenture’s Technology Vision 2014 — are increasingly appearing on manufacturing companies’ strategic radar. For instance, more than 90 percent of the manufacturing executives we surveyed expressed an eagerness to experiment with the Internet of Things (IoT).

In the B2C realm, many Indian companies now have access to large volumes of diverse data being generated through social media such as Twitter and Facebook. They can complement such data with non-digital data gathered through phone conversations with customers as well as insights provided by dealers and salespeople.

Companies can use robust data analytics techniques to generate superior insights on how to continually improve their customer value proposition. In Accenture’s Technology Vision 2014, we call this the Data Supply Chain. To unlock the data’s full value, companies must start treating data more as a supply chain, enabling it to flow easily and usefully through the entire organization—and eventually throughout the organization’s ecosystem of partners.

(To read how a large Indian insurer continues to improve its customer value proposition utilizing the power of digital technologies please read: A leading Indian property and casualty insurer: Using customer analytics to drive top-line growth)
A leading Indian property and casualty insurer: Using customer analytics to drive top-line growth

The Indian property and casualty (P&C) market, which has seen little product innovation, had begun experiencing intense price competition that comes with commoditization, along with increasing expectations of better service at lower prices from customers.

Against this difficult backdrop, one of the leading P&C insurers identified better management of its existing customer and channel relationships as a strategic lever for maintaining its market leadership. To this end, the company defined a set of immediate priorities:

• Increase disintermediated sales by reaching customers directly through the digital channel.
• Manage performance of channel partners more scientifically.
• Increase loyalty among the company’s most profitable customers.
• Target existing customers with more profitable offerings.

The challenge

The P&C insurer faced a number of complications in attempting to meet its newly defined strategic priorities. For one thing, the company had traditionally taken a one-size-fits-all approach to managing customer lifecycle and channel partners, and had made little or no effort to understand their preferences and needs. Moreover, historical data on customers and channels was often disjointed, which meant that decision makers lacked a common “single view” of these key aspects of the business. They thus had a limited understanding of customer and channel segments. Finally, the company had no experience with targeting customers or channel partners through tailored interventions.

The solution

To address its challenges, the P&C insurer decided to work with a service provider to apply cutting-edge analytics at a level not tried before in the Indian P&C insurance industry. The technological initiative it settled on, called Project CReST, went beyond generating analytical insights aimed at delivering end-to-end business value, and sought to implement “last-mile” changes across the organization.

The solution comprised five key elements:

• Leverage the service provider’s existing customer analytics record (CAR) offering, by customizing it for the Indian P&C insurance environment and building a single view of each customer and channel partner.
• Design advanced “real-time” statistical models by employing techniques such as multivariate logistic regression, and validate them using “out-of-time” samples.
• Use the resulting scorecard to segment target customers and channel partners based on desirable behaviors exhibited.
• Design multi-channel campaigns targeted at each segment, including testing competing hypotheses about messaging, timing and channel of intervention using a champion-challenger experiment design.
• Execute the campaigns by influencing stakeholders across departments, providing needed training and evaluating benefits against a randomly selected control group using an integrated performance tracking and monitoring system.
The outcomes

The team that led these activities created a number of reusable assets. It also gained two key insights. First, team members realized that it was possible to build advanced statistical models in the Indian P&C insurance industry despite limited data. They also concluded that it was possible to use insights gained from such analytics to influence customer behavior through differentiated interventions despite commoditization in the industry.

After launching its customer initiatives, the P&C insurer saw a 3-5 percent increase in its retail business’s top line. For example, an online renewal campaign delivered a 20 percent revenue lift for automotive policies. In addition, a campaign centered on upselling health insurance led to a 3.6-fold increase in upsell rates over the pre-campaign period.

Prior usage of analytics by Indian P&C insurers was limited to underwriting. Thus, Project CReST was the first of its kind in the P&C space for using customer analytics to drive revenue growth. The P&C insurer acknowledged this in its annual report: “Recognizing the importance of data and analytics for business growth, the Company has invested considerably to build sound statistical models for the Company’s retail portfolio. The Company will continue investing into analytics to further drive its business.”

As for channel partners, the company’s innovative approach to channel segmentation will serve as the basis for its distributed channel engagement initiatives, and has established the P&C insurer as a first mover in channel management in the Indian P&C insurance industry.

Strategy for success: Rigorously manage the change process

The P&C insurer took a rigorous approach to managing the change process associated with its digital technology initiatives. It evaluated the models developed for Project CReST on the basis of global best practices. They then used the models to define target groups. They estimated expected benefits and rolled out the change campaigns.

The response to the interventions were rigorously tracked, and “lift” was measured against a randomly selected control group. This approach was complemented by strong governance, including weekly senior management reviews to ensure that the strategic benefits met expectations and to address any operational inefficiencies. As a result of this rigorous approach, the P&C insurer could easily track the value generated by Project CReST and link that value to specific interventions at the level of individual transactions with customers and channel partners.
Identify digital resources to deliver cost-effective value

The past decade has shown industries as diverse as automotive, telecommunications, banking, FMCG, jewelry and healthcare that Indian customers want price-competitive offerings packed with cutting-edge features that deliver a world-class experience. This development has presented an opportunity for companies to provide “affordable excellence” – an experience that is world class but also financially manageable for customers throughout the offering’s lifecycle.

To deliver affordable excellence, B2C as well as B2B companies must identify and source resources competitively across the value chain. They then need to turn those resources into assets that deliver immense customer value at affordable price points. To achieve this goal, industry players in India need to effectively deploy digital technologies as well as the maturing digital ecosystem, which comprises consumers, startups, small enterprises and non-governmental organizations. Many companies have already started down this path, and those that offer affordable excellence are taking the lead.

Take Nestle, which pioneered the concept of inexpensive, healthy hot-noodle snacks in India. To promote its Maggi instant noodles brand, Nestle used a digital platform to generate ideas for flavors and recipes through crowdsourcing. It launched the “Maggi—Do Minute Mein Khushiyan” (Happiness in Two Minutes) campaign to evoke the emotional relationship consumers have with the Maggi brand. As part of the campaign, the company created a Facebook app that enabled consumers to share their personal stories about Maggi in video, photo or written formats. All stories received were uploaded on a website, and the best stories were recognized and made into films.

The campaign received an overwhelming response from customers, with people of all ages sharing their experiences. Key success factors were consumer involvement and the user-friendly Facebook app.xviii

(To read how Hindustan Unilever has successfully tapped the power of startups and empowered its Shakti Ammas, please read: Hindustan Unilever: Affordable digitalization maximizes Project Shakti’s value)
Hindustan Unilever: Affordable digitalization maximizes Project Shakti's value

Rural India has roughly 650,000 villages, home to about 830 million consumers. These consumers and their families represent huge business potential for Hindustan Unilever (HUL)—if it can determine how to make its products available to rural residents.

To that end, HUL developed Project Shakti—a unique rural distribution model where the company appoints and trains underprivileged women to distribute its products in their own and neighboring villages. These so-called Shakti Ammas (“power mothers”) are making significant contributions to their household income, often doubling it.

Launched in 2000 with 13 Shakti Ammas in the district of Nalgonda (in the Southern Indian state of Andhra Pradesh), Project Shakti embodies HUL’s guiding principle of “doing well by doing good.” It helps HUL products reach consumers in far-flung, sparsely populated rural villages while also providing income-earning opportunities for women. The program constitutes a key element in HUL’s Sustainable Living Plan.

In 2013, the project had 65,000 Shakti Ammas working in 15 Indian states, benefiting more than 4 million households in over 160,000 villages. HUL is committed to increasing the number to 75,000 Shakti Ammas by 2015.

The challenge

Given the rural context in which the Shakti Ammas work, HUL faced a challenge in providing them with the technology and analytics support they needed to maximize their sales to local retailers and consumers. These women entrepreneurs were using manual bookkeeping to manage their inventory and record sales transactions, and the process was prone to errors. Moreover, given the large distances between villages in rural India, HUL could send company sales representatives to visit the villages only once or twice a month. That made it hard to supervise the Shakti Ammas and advise them on how they could improve their sales.

Any solution that HUL devised would have to factor in rural India’s limited transportation and communication infrastructure. And given rural women’s lower educational levels, the solution would need to be easy to operate as well as help these female entrepreneurs improve their financial and social standing in their communities.

The solution

HUL chose mobility as a platform for deploying a technological solution to Shakti Ammas’ challenges. Rural women equipped with a mobile telephone and a stable network connection would stand the best possible chance of improving their income as well as burnishing their image and standing in the community. Empowering Shakti Ammas in the mobility space would also open doors for them to sell products and services provided by other companies in addition to HUL, thereby multiplying their income sources. Their reputation as just “detergent or toothpaste salespeople” but give way to one of businesswomen rolling out a range of services including banking, insurance and healthcare.

With these gains in mind, HUL collaborated with Tata Docomo to organize handsets and arrange for a mobile connection for the Shakti Ammas. Working with a startup, it also developed and deployed a low-cost mobile IT solution called Shakti Mobile—a mini-ERP package that can be operated on an entry-level smart phone. The application, available in eight languages, enables Shakti Ammas to take and bill orders as well as manage inventory.
It also provides the women with updates on promotional offers and discounts. To compensate for the poor mobile coverage in rural India, the application has been built to work offline as well. Shakti Ammas simply have to sync with the main server once a day after finishing their work.

The outcomes

Shakti Mobile was rolled out to all Shakti Ammas during 2012. Since its launch, more than 40,000 Shakti Ammas across India now conduct transactions through the application. As a result, they have been able to spend more time in the field—closing deals and making money. More important, their entry onto the “mobility highway” has connected them with companies in addition to HUL. For instance, many Shakti Ammas are now working as banking and insurance agents or pre-paid telephone connection providers. Consequently, Shakti Ammas have significantly increased their initial earnings.

HUL has also benefited immensely. Millions of small rural retailers now buy its products, and HUL has gained distribution efficiencies by supplying retail outlets consistently. The company has also identified a wealth of cross-selling opportunities for its large product portfolio by analyzing billing data generated by the Shakti Ammas.

Strategies for success

Leverage the ecosystem

HUL successfully minimized fixed costs associated with the design, development and launch of Shakti Mobile by working with collaborators from the ecosystem that shared similar values. Its alliance with Tata Docomo is an apt example. Tata Docomo wanted an experienced network of distributors to reach consumers in remote pockets of India, which Project Shakti offered. HUL, for its part, needed a sturdy handset and stable mobile connection to launch Shakti Mobile: Tata Docomo could easily provide that platform.

Given frequent power outages and poor mobile connectivity in remote regions of India, HUL also had to develop an ERP package with offline capability. That way, stored data could be transferred to servers from the ERP package residing on Shakti Ammas’ mobile devices.

The HUL technology team collaborated with several niche players that specialize in low-cost mobility solutions to quickly develop an end-to-end, scalable solution. The resulting system freed up resources within the company to train Shakti Ammas to correctly use Shakti Mobile and to build additional innovative solutions to further enhance Project Shakti’s effectiveness.

Define the right metrics

Project Shakti defined performance metrics to ensure that the initiative would remain aligned with HUL’s strategic priorities while simultaneously supporting growth in the number of Shakti Ammas.

Examples of metrics include the number of times in specific time periods that each Shakti Amma uses Shakti Mobile to order new stock, to log in sales to the retail outlets she covers and to synchronize her mobile phone data with HUL servers. HUL backs up such performance metrics with the right incentives. For instance, the company provides higher commissions to women who make the most consistent use of Shakti Mobile.
Define a profit formula based on digital enhancement of customer gains

Profit maximization, especially in a digitalized context, is an “I” (company) with “You” (customer) game, not a game of “I” versus “You.” In this context, customers are no longer takers of offerings but active co-creators of their experiences with companies and their products or services. In such an environment, profits are defined by the level of efficiencies companies can achieve during value creation (from offering conceptualization to launch) and the share of wallet they earn by providing a differentiated experience they have co-created with customers.

Take the life sciences industry. Accenture maintains that convergence of digital technologies enabled and driven by the cloud, will be key to developing a profit formula centered on lowering costs and delivering enhanced and differentiated customer value through greater collaboration between R&D community, companies, doctors and even patients. Companies that own the management of scientific and experiential content, data analysis and the processes surrounding will dominate the market. All services associated with the gathering and consumption of data will be provided through the cloud. Market leaders will create an environment conducive for building relationships with patients and providers using the channel of their choice. Through “social listening” in the pipeline drugs arena, companies can cost-effectively learn about patient needs and physician treatment approaches.

Mobile solutions providing access to a wide library of collateral such as drug fact sheets (capturing drug side effects) can help sales teams customize sales calls to physicians’ specific training needs and interests. And through more dynamic, personalized discussions with physicians, salespeople can strengthen these key relationships.

Life sciences companies will therefore gain valuable economies of scale, thereby reducing total cost of ownership. They will also achieve the flexibility and agility they need to experiment without making massive investments and thus falling prey to “sunk cost” thinking. They will find it easier to work with other stakeholders, such as payers, and to support new arrangements with service providers and engage in new kinds of joint ventures and alliances. Furthermore, they will be able to handle volatile levels of demand and gain access to the latest technological innovations, including methods for managing and analyzing big data.

Define appropriate performance metrics

The metrics a company uses to measure organizational and workforce performance need to reflect its commitment to digitalization. Top leadership in consultation with workforce must devise metrics that encourage the right mindset and behaviors.

Purely financial indicators do not fully capture a business’s progress toward commercial viability in its digitalization efforts. Companies must also select metrics for assessing the strength of their digital customer value proposition. For example, a firm would want to know the size of the long-term income differential generated by a particular digitalization intervention as compared with differentials delivered by alternative projects.

The business would probably also want to know the impact that such a differential has on aggregate market demand. To this end, indicators such as return on capital employed (ROCE) could prove more useful. By using the right metrics, a company can know whether digitalization has generated robust value for large numbers of customers over a sustained period. The enterprise can therefore determine whether its digital initiatives have generated enough demand to support prices and volumes that could exceed the costs of production and marketing, including the cost of capital. To gain such insights, companies need to find new ways to measure digitization efficiency rather than overall efficiency.

We have listed metrics associated with each element of the digital business value tree to help companies understand the differentiated impact of digitalization and digitization on their businesses. (See Figure 13.)

(To read how Accenture’s ‘Connected Crop Solution’ leverages the power of digital to help agro-input companies make profitable connections with small farmers please read: Accenture Connected Crop Solution for Smallholder Farmers)
The right digital metrics can help companies assess the impact of their digitization and digitalization initiatives

Digital business value

**GROWTH THROUGH DIGITALIZATION**

<table>
<thead>
<tr>
<th>Question</th>
<th>Metrics</th>
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</table>
| Who will be the new customers and how can business be done with them digitally? | • Percentage of digital sales/total sales  
• New contestable markets entered |
| What are the new offerings to take to the market using digital technologies? | • Number of new digital offerings  
• Number of digital offerings with a consumption lifecycle focus |
| How will digital technologies transform the earning and margin model?    | • Digital customer profitability and margin  
• Cross-sell and up-sell  
• Digital ROCE vs. physical ROCE |
| With whom should the company collaborate to deliver better digital value to the customer? | • Ratio of digital/non-digital collaborations  
• New technologies developed  
• Margin difference due to collaboration |
| How can integrated application of digital technologies deliver better customer satisfaction? | • Digital customer-engagement score  
• Innovative technologies resulting from integration  
• Digital customer retention score |

**EFFICIENCY THROUGH DIGITIZATION**

<table>
<thead>
<tr>
<th>Question</th>
<th>Metrics</th>
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| How can the process improvements across business be carried out through digital technologies more efficiently? | • Time and cost reduction to process improvement for digital vs. non-digital  
• Number of processes improved |
| How can digital technologies help optimal utilization of existing IT resources and assets? | • Cost-of-complementarity  
• Digitization vs. non-digitization ROI |
| How can digital technologies make the procurement, production, sales and after-sales engine respond more quicker and better? | • Digital time to closure of actions in each function vs. non-digital  
• Reduction in leakages, complaints  
• Vendor & customer satisfaction scores |
| How can digital technologies help business reduce costs and become more leaner? | • Total cost savings as percentage of investments resulting from adoption of digital technologies over a defined period |

Source: Adapted from “Growth strategies for a digital world,” Accenture, 2014.
Accenture Connected Crop Solution for Smallholder Farmers

Companies that make agricultural inputs such as seeds, fertilizers and pesticides generally employ field agents to trek “the last mile” to sell products to rural smallholder farmers.

The challenge

Smallholder farmers, input companies and field agents all face unique challenges in the effort to improve farmers’ and their families’ lives.

Farmer challenges. Smallholder farmers in India who continue to follow traditional practices do so because they lack access to knowledge about more innovative practices. Living in remote areas, struggling to nurture crops on tiny plots of poor-quality land, they overuse macro-fertilizers and miss the benefits they could gain by using micro-fertilizers tailored to their crops and soil conditions.

Company challenges. Agro-input companies have products that can help farmers grow healthier, more abundant crops. However, getting these offerings to farmers is difficult, because they live in remote areas often characterized by poor transformation and communication infrastructure. Without access to meaningful market information, these companies struggle to develop the aggregate demand forecasts.

Agent challenges. Field agents are the link between their company and its farmer customers. Yet many of these workers lack the specialized agricultural knowledge to recommend the right products to farmers for their specific crops at each stage in the growing cycle. They also have no way to easily gather, record and review farm and crop details on each customer they serve.

The solution

Accenture Connected Crop Solution for Smallholder Farmers uses digital technology to help improve field agents’ sales effectiveness and farmers’ crop yield. The solution’s rules-based, contextual recommendation engine augments field agents’ generalist knowledge with the specialist knowledge they need to be more effective. Agents use mobile devices to review product information, gather and record information from the farmers they visit and offer advice to farmers at critical points in the crop life cycle.

• Pre-season. Before the planting season begins, field agents gather farm information and crop plans from customers and upload them to the system. They may also send soil samples to a lab to determine micronutrients that may be needed for specific crops. The system analyzes all the information provided and recommends soil preparations, soil amendments, row-to-row and plant-to-plant spacing, and irrigation plans.

• Planting. The system prompts field agents to recommend the right product mix, dosage and usage to farmers for improving yield.

• Growing season. Throughout the growing season, field agents are reminded to prompt farmers to follow the right dosage and usage schedule at each crop stage. Agents can also use the solution to find answers to farmers’ queries.

• Post-season. The system prompts agents to gather and upload farmers’ actual crop yield and any pest issues. This data enables the company to gain insights into market needs as well as agent performance.

The outcomes

Accenture Connected Crop Solution for Smallholder Farmers seeks to raise farmers’ and agents’ productivity while also improving input companies’ sales. (See Figure 14)

Farmer gains. Personalized advice delivered by field agents at each crop stage helps farmers adopt and correctly use the right products to improve crop yield and thus enhance their income. Pictures and videos shown on the handheld devices help farmers, who may be illiterate, to learn about more effective products and practices.

Field agent gains. Field agents become trusted advisors in the region as more and more farmers experience gains coming from agents’ advice. And with greater trust and loyalty from farmers, agents can sell more and increase their own incomes. With helpful prompts from the system, agents become more productive and reach more farmers, driving further gains in sales and income. Job satisfaction improves, and attrition drops. This further strengthens customer loyalty because agents and their farmer customers can continue building a relationship.

Agro-input company gains. More valuable and productive field agents extend the company’s coverage across a region, increasing sales and shareholder value. Crop plans that agents capture from farmers give the company the information it needs to develop aggregated demand forecasts for each product and design region-relevant sales and marketing strategies.
One India-based input company achieved results that far exceeded its goals:

- Field agent performance improved significantly in just three months, with agents reaching on average 15 farmers per day against a goal of 12 and a baseline of seven.
- In that same time period, 64 percent of farmers registered by field agents converted to the company’s products, and 74 percent of them went on to purchase its products again.

- Increased agent productivity helped generate a 56 percent increase in sales for the same time period over the previous year.
Step 3 (Part B): Build the right capabilities and culture

In Accenture’s 2014 global CEO survey, whose sample included a robust Indian component, respondents identified organizational transformation as a key requirement for leveraging the true power of digital technologies.\textsuperscript{xx}

For Indian companies seeking to digitalize their business model, the effort will remain only a pipe dream unless they can master two elements of organizational transformation: building relevant capabilities and encouraging a digital culture. We discuss these below.

Develop and leverage customer empathy

Customer empathy means understanding a customer’s wants and knowing how to interact with that customer in a personalized way. It’s the ability to imagine the customer’s life and to build a sustained relationship, versus merely conducting transactions with him or her.

In a company that has a digitalized business model, customers drive profitability. Thus, Indian enterprises need to excel at building customer empathy as well as leveraging it appropriately. This is easier said than done, but some companies have mastered the task.

Consider LEGO. Through intensive customer interaction, the company recognized that its fans are left with many unused bricks and other parts from sets they use to build their models. Moreover, the company understood that its fans put these parts in one big communal LEGO box. It did not want customers to throw these parts away, but instead use them to build their own creations. LEGO therefore introduced its “Rebrickable” service. Rebrickable shows which LEGO sets can be built from the sets and parts a customer already owns. Customers can choose from official LEGO sets or custom-made “My Own Creations” (MOCs) dreamed up by different designers. All MOCs include building instructions. Rebrickable uses powerful algorithms to calculate what other sets/MOCs people can build from their existing sets and loose parts. If a person doesn’t have exactly the right pieces, the service shows close matches and performs some color matching.\textsuperscript{xix}

As many of the experiences companies currently provide their customers go online, businesses will need to find innovative ways of building customer trust and empathy. As aptly put across in Accenture Technology Vision 2015, the companies that succeed in this “Internet of Me” will become the next generation household name.

Partner with the right digipreneurs

According to NASSCOM, startups in India will drive the growth in outsourcing contracts for SMAC digital technologies. The market for such outsourcing is expected to reach US$287 billion by the end of 2016, up from US$164 billion in 2013. Clearly, Indian technology startups, estimated to grow in number from just 450 in 2012 to around 2,000 in 2015, have emerged as a force in the digital technology space.\textsuperscript{xviii}

This is good news for large companies keen to digitalize cost-effectively. But the challenge for them lies in determining how to choose the right digipreneur, as their partner, fully leverage the partner’s strengths and grow with the partner.

While many large companies know how to complete the first two tasks, very few are investing in their digital partners’ growth. As one senior executive explained to us, large companies in India still have to develop a culture of respect for startups. “Innovation labs in many large companies,” he pointed out, “do not have the cultural makeup to mix and mingle with the youngsters running startups.”

Even as big companies in India struggle to master this part, some multinationals have begun launching accelerator programs for new technology ventures in India. Consider Target, the US$73 billion American retailer. The company aims to help startups by providing them with US$30,000, along with access to mentors, tools, resources and operational support.\textsuperscript{xxi} Target is expected to work with startups focused on mobile, data and analytics, video content, social and search. These are all critical to retailers seeking to ensure the right merchandise assortments in stores, determine the right prices, and accelerate delivery to customers.
Develop “I₃A₃”: the new technology growth compound

Technology is both a driver and an enabler of digitalization. It drives change through developments such as rapid customer adoption of digital devices and channels, the need for analytics to make sense of ever-bigger volumes of data, the emergence of new technology-led innovators, and more complex digital and physical security threats. Technology enables change by presenting new ways for companies to manage existing operations and to flexibly meet volatile business conditions.

In large organizations, especially those based in India, the responsibility for capitalizing on these twin strengths of technology falls squarely on the CIO’s shoulders. CEOs generally task their CIOs with working closely with the CMO, CFO, COO and at times the CHRO to “make the business more digital.”

CIOs thus have an opportunity to become growth enablers—but in a challenging setting characterized by conflicting demands. For instance, in many companies, the CMO wants the CIO to invest in the latest and best digital technologies. Meanwhile, the CFO wants the best outcomes at the lowest cost. And the COO wants to see technologies drive results at speed.

To accommodate these diverse priorities, CIOs need to craft an affordable, acceptable and adaptable (what we call A₃) technology execution plan by building an interdisciplinary, innovative and integrative (I₃) team. We refer to the resulting I₃A₃ framework as a technology growth compound. And we maintain that it can help CIOs deliver out-of-the-box digital solutions across stakeholders as well as position the organization to achieve disruptive business results. (To read how Essar Energy’s CIO built a technology team capable of leveraging the power of automation and digital technologies to deliver business results, please read: Essar Energy: ‘Team Digital’ delivers business excellence affordably)
Essar Energy: 'Team Digital' delivers business excellence affordably

Essar Energy is a world-class, low-cost, integrated energy company with US$16 billion of assets across the power and oil and gas industries.

Essar Energy's refining and marketing business primarily consists of refineries in India, the UK and Nigeria. Essar Energy serves retail customers in India through a modern, countrywide network of 1,400 operational retail fuel outlets. In the oil and gas sector, the company has 15 blocks and fields in the various stages of exploration and production of oil and gas in India, Indonesia, Madagascar, Nigeria and Vietnam. Essar Energy has seven operational power plants in India and one in Algoma, Canada.

The challenge

Oil and gas is an industry where a delay or a single mistake at the level of rig or in a refinery, can have a cascading impact across the company's operations. Hence, on-ground teams across the downstream operations of oil and gas business always find it a safer option to deploy know-how technologies and their upgrades from select vendors. What they forget is that the stability being created at the level of operations is being injected at a huge price. And that price is the rigidity and excessive dependency on a few vendors giving the latter a control over the technological future of the company.

Also in resources, industries such as oil and gas, the CIO's office is generally perceived as a support office — an office that at best can support automation, help better organize information for the refining and processing teams. They are not seen as growth enablers or drivers of better automation and machine performance.

These industry-wide problems were also being encountered by the CIO's office at Essar Energy. In light of the same, the challenges before the CIO's office were twofold:

• Put in place a process that would inculcate a feeling of trust and confidence within design, engineering, plant maintenance and on-ground teams to work with a larger variety of new-age automation technologies; and

• Transform the CIO's office into a growth enabling engine for Essar Energy.

The solution

The CIO's office developed a two-part solution for these challenges.

Part one involved making the CIO's office more customer centric and assimilative — their immediate customers being the downstream operations teams. The CIO's office built a team of chemical engineers, mechanical engineers, chartered accountants and management graduates who are not only proficient at deploying IT and digital technologies but also understand the business value chain. Also, these pool of resources are not restricted by a choice of technology but are focused on delivering the most appropriate solution for the business requirement at hand. By building such a team, the CIO's office has created IT extensions to the business teams who act as the seamless conduits between business and technology. Hence, the solutions being provided by the CIO's office have become increasingly more and more acceptable as they are no longer 'IT solutions' but 'business (IT) solutions'.

The second part involved in creation of a three-point technology execution plan which made digital automation more acceptable, adaptable and affordable.

1. Standardization: upfront deployment of the best technology platforms (such SAP and AspenTech) across as many business functions as possible.

2. Penetration: while IT solutions are developed and deployed, many solutions lack the ongoing usage of the same. Also, most of the solutions/automations are used only 20 to 25% of their actual (prescribed) capabilities/functionalities. In cases/areas/sub-processes where there are no standard solutions available or lack fitment, deploy customized solutions which fit completely with the business expectations and result in automation of the process areas/segments which lack automation.

3. Consolidation: irrespective of the underlying transaction system, provide a single decision support system to business teams which focuses on driving the dual aspects of KPI driven dashboards as well as operational reporting, catering to not only to senior management but also to line managers.
The outcomes

In line with the business strategy of optimizing existing assets, SAP Solution Manager has been implemented across the organization which has helped enhance, automate and improve the management of operations such as human resources, finance, treasury and the supply and trading systems.

Applications like Weighbridges, Terminal Automation, Trade Capture, Payment and Indent Management System are also integrated with the SAP System with the standard SAP Process Integration (PI) platform.

Work Clearance Management System has been implemented within ERP, catering various types of security-related work permit needs with enhanced flow and traceability in future.

In addition to this, the implementation Corporate Dashboard across all divisions of Essar Oil Limited has had a transformational impact on how variety of information as well as data across multitude of systems like SAP, Aspentech, Microsoft, TAS, BullDog, etc. is being looked at not only by senior management but also by various line managers across the organization hierarchy for better decision-making.

In keeping with the company’s commitment to Green initiatives, a tool called ‘Boardbooks’, which seamlessly works on traditional computing devices as well as new age tablets, has been implemented using the Software as a Service (SaaS) technology. This has helped Essar Oil Limited conduct its Board and its Sub Committees Meetings and other executive level meetings eliminating use of paper.

Email and mobile-based alerts have been adopted for Manufacturing Execution Systems in order to minimize failures and maintain a safe operating environment.

Process Information Centre is enhanced for effective monitoring of critical operation parameters to leverage maximum plant capability.

Integration of Laboratory Information Management Systems with Manufacturing Execution Systems and Process Information Centre is helping the business to meet market demand and tight quality targets.

The budget for the CIO’s office has increased by 100% year-over-year as various parts of the organization now firmly believe that the CIO’s office is driving their agenda.

The CEO now proudly mentions CIO’s office as a growth enabler rather than a growth support function.

With all the automation that has helped in improving employee productivity and bringing in efficiency in both business and IT operations, CIO’s office has contributed hugely to the EOL growth story.

Strategies for success

Deploying technology platforms to drive trust

The CIO’s office invested in creation of the state-of-the-art technology platforms. These platforms became a springboard for collaboration between CIO’s office and several operating teams to develop innovative customized solutions for each of the downstream teams. The active involvement of the CIO’s team with refining, processing, jetty operations groups in the process of designing and developing innovative platform driven solutions helped them understand each other’s needs better. Improved interaction across teams helped launching best practices that benefited from the best of both worlds – digital and industrial engineering. Moreover, it accelerated the uptake of digital solutions across various functions within the organization.

Proactively identifying opportunities for digital technology deployment

The CIO’s office started approaching various parts of the organization proactively to understand their problems. Leveraging the cross-disciplinary skills of its team members, the CIO’s office was able to proactively point digital solutions to these problems – answers that operations teams had failed to identify earlier due to poor knowledge of digital technologies.

Making CIO’s office responsible for IT and digital design and deployment across functions

The CIO’s office approached various key functions across the organization and asked them to cede their IT and automation budgets to the CIO’s office. The functions gladly accepted this offer as this released them from the pressure of ensuring productive spend of these resources. With more budgets in hand, the CIO’s office was able to put together a larger pool of resources to drive higher level of automation at the firm-wide level.

Alignment of business and IT objectives

The CIO’s office is constantly focused on aligning and re-aligning all its initiatives along the business priorities and strategy themes each year so that business team’s efforts are complemented neatly.
Instill a culture of collaboration and trust

Data sharing is on the rise in India. (See Figure 14.) On a personal level ("I" in the figure), a growing number of Indian youth are comfortable sharing data about themselves online with friends and with organizations such as banks, automobile companies and FMCG firms. Meanwhile, on the enterprise level ("We"), rapid developments in mobile technology, remote working and user expectations are intensifying the Bring Your Own Device (BYOD) phenomenon, whereby employees use their own mobile devices to carry out their work. On the business ecosystem level ("Us"), digital stakeholders are increasing sharing their findings and insights with each other using cloud technologies and social media.

Increased data sharing on all these levels is translating into opportunities – such as companies’ ability to design more personalized forms of value for customers. Yet for many executives, it also presents complex challenges. As the CIO of a large product engineering firm told us, “We constantly run the risk of our ecosystem product development data being downloaded on devices brought in by our employees and shared privately by them.”

Executives responding to our survey also identified privacy and security concerns as the biggest barrier to benefiting from collaborative application of digital technologies.

To capitalize on the opportunities and surmount the challenges, companies need to foster a culture of collaboration and trust. Setting up mechanisms supporting resilience can help. In our Technology Vision 2014, we lay out a blueprint for “Architecting resilience” and explain how building to survive failure is the new mantra of nonstop business.

Policies that help employees get maximum business value from digital technologies can also prove valuable. Accenture, for instance, has found that allowing employees to use their own devices to carry out their work has boosted their productivity by providing them with greater flexibility for performing tasks. The company has therefore embraced BYOD for smart phones by offering Accenture employees the choice of a corporate-owned device or the ability to purchase a personal device in many countries. All users can sign up for Accenture’s corporate liable mobile service. Accenture’s cross-browser compatible application architecture and implementation of appropriate security and mobile device management capabilities have proved key to enabling employees to be productive anywhere, anytime and on any device.

Figure 15: The “I,” “we” and “us” of data sharing

Data sharing is on the rise at the personal, enterprise and business ecosystem levels

I – Personal data
Trend: Data sharing

We – Enterprise level data
Trend: Bring Your Own Device (BYOD), Using free cloud based applications

Us – Ecosystem level data
Trend: Digital collaboration and co-creation
Nurture analytical talent

Building an analytical talent pool to service a company’s digitalization needs is a vital step. But for large Indian companies, it will be challenging—for several reasons. The biggest difficulty will come from startups. Aggressive, well-funded new ventures are now scoring many wins against bigger, established companies in the war for talent. These smaller, younger players are successfully luring away top-notch talent at campuses and are using better salaries and work profiles to recruit workers for mid- to senior-level positions.

To attract and retain the best analytical talent, large companies will need to nurture a startup culture not only within their innovation labs but also across the organization. In addition, they will have to define an appealing, clear career path for analytical talent. In the words of a senior executive from a resources company, “Analytical talent must not feel [left] out in the race to the top.” Equally important, large companies need to let their analytical employees collaborate and work with the best minds globally, so they feel challenged.

The second big hurdle will be internal. Inability to clearly comprehend the next big digitalization opportunity will keep companies guessing about how much and what kinds of analytical talent they will need in the near and long term. Amid such uncertainty, companies can try tapping external talent pools through unique collaboration models. In Accenture’s Technology Vision 2014, we characterize this imperative as moving from workforce to crowdsource in the borderless enterprise era. Picture a workforce that extends beyond a company’s employees—one that consists of any Internet users. Cloud, social and collaboration technologies now allow organizations to tap into vast pools of human resources around the globe, many of whom are eager to help. Such an approach can give every business access to an immense, agile workforce that is well suited to solving the company’s problems—and that, in many cases, may even be willing to do it for free.

Cross-sector collaboration is also worth considering. For example, Philips and Eindhoven University of Technology (TU/e) have announced a strategic cooperation aimed at accelerating the exploration and development of digital innovation in healthcare, lighting and data science.

The two organizations have set up a program whereby researchers will work together to develop new digital technology in real-life settings. The program includes state-of-the-art test beds where researchers will test and validate digital technologies and accelerate the adoption of new integrated health, big data and lighting solutions. This partnership allows the TU/e to provide positions for more than 70 additional PhD candidates, out of which Philips will finance 30. In total, more than 200 researchers, professors, doctoral candidates and students will be working in close collaboration.
Accelerating along the road

Our survey findings suggest that companies are poised to digitalize in a big way.

Around 30 percent of the C-suite executives we interviewed in our research, expressed confidence that their companies could generate at least 25 percent of their total revenues through digitalization in the next five years.

On average, three out of every four C-suite respondents are already aware and checking out on next-generation digital technologies such as the Internet of Things, mobile robots and 3D printing. And for such companies, the domestic market will be unfolding substantive opportunities to experiment and succeed. Initiatives such as ‘Make in India’ (in the area of manufacturing), ‘Jan Dhan Yojana’ (aimed at financial inclusion), ‘Smart Cities’ (in the infrastructure space) will be opening large markets for companies to launch new-to-the-market scalable offerings in partnerships with governments, startups and other key players in the digital ecosystem.

As explained in the Accenture Technology Vision 2015, becoming a digital business is no longer simply about incorporating digital technologies but is about using digital technologies to weave businesses into the broader digital fabric that extends to customers, partners, employees and industries.

We believe that by mastering the three-step process described in this report, corporations based in India can accelerate their transition into becoming truly digitalized powerhouses capable of profiting from such material opportunities the nation has to offer.
Footnotes

1 Gartner (2013); “Gartner Says India IT Spending to Reach $71.3 Billion in 2014”; downloadable at: http://www.gartner.com/newsroom/id/2610615 and accessed on May 23, 2014
2 Op. cit. i
6 Op. cit. v
9 Oxford Economics (2012); Global Talent 2021; How the geography of talent will transform human resource strategies: October.
10 For more on digital physical blur and other digital trends, please refer to Accenture Technology Vision 2014 downloadable at: http://www.accenture.com/microsites/it-technology-trends-2014/Pages/home.aspx
13 Accenture (2013); A new era in Life Sciences: Cloud computing changes the game; Accenture report
14 Accenture (2013); CEO Briefing 2014 – The business agenda for India: Competing in a digital world; Accenture report
15 http://rebrickable.com/about accessed on July 10, 2014
17 Shilpa Phadnis & Sujit John (2014); “MNCs work to accelerate startups in India”; Times of India; can be accessed at: http://timesofindia.indiatimes.com/business/india-business/MNCs-work-to-accelerate-startups-in-India/articleshow/30916514.cms; and downloaded on July 9, 2014
19 http://www.rebrickable.com/about
20 http://www.accenture.com/microsites/it-technology-trends-2014/Pages/home.aspx
26 http://www.rebrickable.com/about
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