accenture

THE WISE PIVOT

REVITALIZE YOUR CORE TO THRIVE IN DISRUPTION

BUSINESS JOURNAL FOR INDIA 2019

CONTENTS

03 **Foreword**

05 **Cover Story**
Pivot Wisely
Anindya Basu

11 **Technology**
Technology IS Business
Dr. Bhaskar Ghosh

17 **Industry X.0**
Blending the Perfect Brew with Industry X.0
Rajat Agarwal
Maneesh Gupta

25 **Resources**
Fueling Innovation
Sandeep Dutta
Piyush Patel
Gaurav Moda

36 **Communications, Media & Technology**
Now Streaming
Aditya Chaudhuri
Matteo Maga

44 **Financial Services**
Embracing the Era of Intelligent Insurance
Rishi Aurora
Francois Metzler

52 **Applied Intelligence**
All Eyes on AI
Saurabh Sahu
Dr. Athina Kanioura

60 **Cyber Resilience**
They Who Sleep Catch No Phish
Kanwar Singh

67 **Digital Procurement**
An Eye on the Future
Amneet Singh
Vivek Luthra

77 **Digital Supply Chain**
The Mover Becomes the Shaker
Manish Chandra
Gary Hanifan

83 **Tech for Good**
A Booster Dose for Women's Health
Sanjay Podder
Amanda Leacy

91 **Open Innovation**
Conquering Disruption Denial
Avnish Sabharwal

FOREWORD

Digital disruption is real—and it's happening now. No industry is immune. The only way businesses can keep pace with the rapid change in this new landscape is to disrupt or be disrupted. The journey requires a certain level of confidence and intuition—a Wise Pivot to the New.

Many Indian companies already know that they need to harness the power of innovation to thrive in the digital era, but few really know how to do it effectively.

The Wise Pivot is a unique, game-changing strategy designed to release your organization's trapped value so you can invest in the future and prepare for constant change. It achieves this by optimizing the old, now and new concurrently. Those who get it right unlock tremendous capability for continuous innovation.

Businesses across industries in India are already striking a Wise Pivot, and they are using digital technologies in very distinct and innovative ways to transform. Oil and gas sectors are streamlining processes, cost models and organizational structures to unleash growth, while ever-evolving over-the-top (OTT) video streaming players are bringing about a make-or-break scenario for the media industry.

They're using advanced analytics, robotics and artificial intelligence (AI) to reinvent all aspects of the business. Digital procurement is emerging as the new center of value creation, enabling organizations to sell new products to new customers in new ways, more effectively and efficiently. Breakthrough technologies such as AI and blockchain are helping Indian businesses successfully tackle cybercrime and build "digital trust," even as they improve the customer experience.

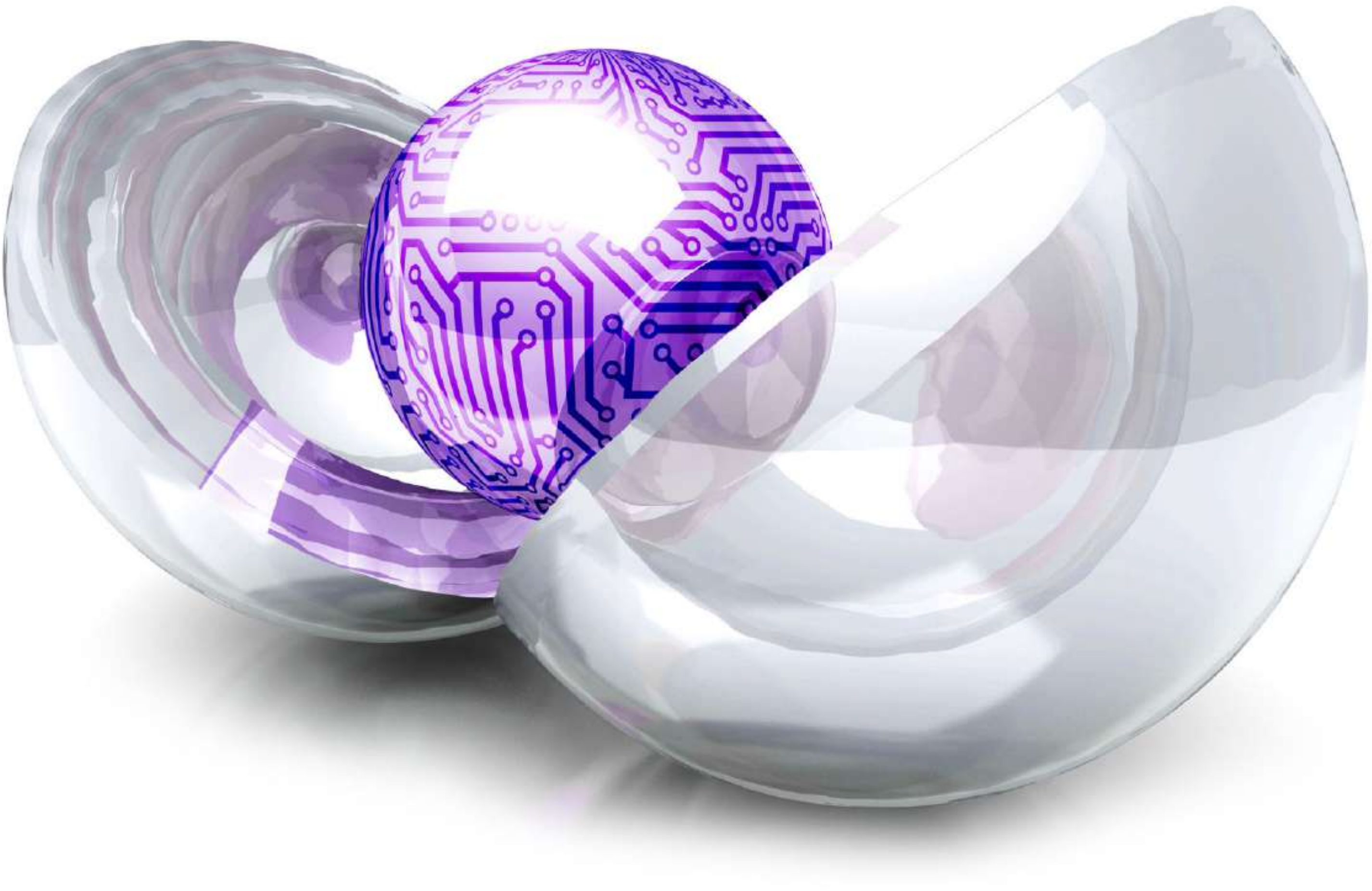
In this edition of the Accenture Business Journal for India (ABJI), you'll hear experts talk about how to move fast, how to drive performance and, most importantly, how to bring more of your value to light. You'll also hear of organizations that have made bold moves to combat disruption.

Being future-ready takes confidence and willpower. Knowing how and when to pivot wisely will determine who wins and who loses in this quest for digital success. Accenture can help your organization create its own Wise Pivot, so you don't just survive, but thrive in disruption.

ANINDYA BASU
Geographic Unit & Country
Senior Managing Director
Accenture in India

PIVOT WISELY

Embrace the power of the Wise Pivot to reinvent your business and rule in a disrupted world.



A CAVEAT FOR INDIAN COMPANIES: Disruption is a reality and it's happening now.

An estimated US$1.8 trillion of enterprise value in India is at risk of displacement due to disruption. To ensure that competition doesn't walk away with the opportunity, companies must reinvent their business models, capture new areas of growth, and invest in fast and furious innovation.

While this may seem obvious, most companies are hesitant to take the needed steps. The reasons for inaction are varied. Some are inhibited by their inability to raise or replenish investment capacity, while others are simply fearful of failure. Intensely focused on their core business—their bread and butter—they find it difficult to make the bold moves required to capture new opportunities.

The apprehension is understandable, and caution is crucial, yet inaction is not an option. Companies need to pivot to the future, without further delay.

PREPARE FOR CHANGE OR PERISH

Our research shows that companies that thrive in disruption invest in the future and purposefully prepare their business for change. They strike a delicate balance between maintaining course and speed, remaining focused on their core while reinventing it, and simultaneously creating investment capacity to scale new businesses. We call this approach, the Wise Pivot.

TRANSFORM THE CORE

To release new investment capacity

GROW THE CORE

To ensure investment is sustainable

SCALE THE NEW

To build the capabilities needed in the years to come

Balancing these three elements is crucial. Pivot too slowly to the New, and a company risks being left behind as others discover new sources of value. Pivot too quickly, and it risks jeopardizing the core business—and its ability to fund investment.

A STROKE OF BRILLIANCE

A great example of an effective pivot is that of a manufacturing major and how it has ruled the Indian paint industry for seven decades through constant reinvention. In its journey from brick-and-mortar to click-and-mortar, the company has made strategic investments in capacity enhancement to keep its operations agile and outperform the industry on return on capital investment. With unbridled ambition, the company decided to look beyond paints and become a holistic home décor solutions company, leveraging multiple consumer touchpoints. It has kept technology at the heart of its business—digitizing various functions, including customer engagement and dealer management systems, and supply chain and manufacturing operations. The company's aggressive approach to scaling its business has culminated into the launch of 23 new products in fiscal 2018.

PUT THE PIVOT TO PLAY

Our research shows that pivoting wisely is a unique journey for each company, influenced by its position, and the opportunity that triggers action. Companies can choose their "starting" scenarios—Determined, Compelled, Reserved and Restrained—to forge their own path.

The investment strategy will guide the starting point they choose, based on their investment capacity and investment velocity. This strategy starts by assessing the company's investment capacity (the resources available to invest) and velocity (the speed at which the company has been embracing new business activities) to make key decisions for the next pivot. The Wise Pivot is also dependent on having the right mindset that puts leadership, specifically the CFO, at the heart of the decision-making, to strike a holistic, effective interplay between investments in old and new business activities.

Accenture leveraged its diagnostic model to evaluate the investment and financial activities of more than 900 Indian companies across industries undertaking the Wise Pivot. The model assessed their pivot intensity using the investment capacity and investment velocity measures. The results were interesting, insightful and complex with different scenarios providing different strategic options to the enterprises.

PIVOT SCENARIOS

Investment Capacity (IC) | Investment Velocity (IV)

	Determined	Compelled	Reserved	Restrained
Starting Position	**28% companies** adopted an aggressive investment strategy supported by high investment capacity, to create future growth options ahead of peers	**15% companies** adopted an aggressive investment strategy, but strong appetite to invest in future growth is limited by insufficient investment capacity	**23% companies** adopted a cautious investment strategy, despite high investment capacity, with laser focus on maintaining a strong current business	**33% companies** adopted a cautious investment strategy, due to the need to either replenish investment capacity, or to investigate growth opportunities within limits
IC	High	Low	High	Low
IV	High	High	Low	Low
What's Next?	**Scaling new business at speed.**	**Choosing alternate funding sources to help increase investment capacity.**	**Exploring new markets to attack, leveraging the strong current business.**	**Reforming the current business to replenish investment capacity.**
Example	Investments of technology companies in internet satellite networks aimed at bringing fast, cheap access to services globally	Automakers forming partnerships to co-develop key infrastructure to accelerate adoption of electric vehicles	Transferring leading-edge technologies such as cloud-based gene-sequencing services to improve healthcare	Active asset swaps and disinvestments to create investment capacity and strategic focus in sectors like pharmaceutical and utilities

DETERMINED SCENARIO

28 percent of companies had an aggressive investment strategy supported by high investment capacity, giving them a greater propensity to scale new businesses at speed. They have invested in future growth and are better positioned not only to explore options, but also to disrupt other industries provided they enjoy strong financial performance. They have the opportunity to replicate their existing business models to a new market or industry through the right ecosystem partnerships. They need to be cautious about over investing in areas that do not create business value.

COMPELLED SCENARIO

15 percent of companies aspired to pursue new growth opportunities aggressively but were constrained by low investment capacity. These companies risk overstretching their finances and damaging the core business through reduced focus. They need to pace themselves as they create additional investment capacity by finding alternative funding sources (for example, through partnerships).

RESERVED SCENARIO

23 percent had a high investment capacity but nonetheless were cautious when it came to investments or focusing on strengthening their core business. These companies were best placed to realize new opportunities, but chose not to do so. They could easily be investing in initiatives that capitalize core strengths and build on those explicitly through new activities.

RESTRAINED SCENARIO

33 percent of companies face two major challenges—first, their investments have been restrained by low investment capacity, probably because of declining profits in their core business, and second, whatever investments they have been making are toward their current business. This group has no choice but to reform and return the current business to growth through radical actions, such as divesting nonperforming parts of the existing business.

SCRIPT YOUR GROWTH STORY

There is no magic formula to master the financial pivot. What it takes is the willingness to disrupt, and the willpower to keep moving forward.

AUTHOR

ANINDYA BASU
Geographic Unit &
Country Senior Managing Director
Accenture in India

TECHNOLOGY IS BUSINESS

Putting technology at the heart of business will enable leaders to create transformational value and make a wise pivot to the New.

We live and work in an age defined by technological innovation. Whether it is artificial intelligence (AI), machine learning and robotics, or cloud, Internet of Things (IoT) and data analytics, no aspect of our life remains untouched. But technology's greatest impact perhaps can be seen in the business world. **As early as 2013, Accenture Technology Vision declared that "Every Business is a Digital Business."** And the years have borne out the importance of that statement. Technology today is no longer just a support function for business. It is now a key driver of growth, innovation and disruption.

THE GOLDEN EQUATION

But how much business growth can technology drive?
We sought the answer through one of the largest known enterprise systems studies in 2019, spanning more than 8,300 companies across 20 industries and 22 countries. In this study, we measured the impact of technology across three dimensions: one, the extent of companies' adoption of 28 new technologies; two, penetration of these technologies across 14 standard business processes and; three, cultural readiness of the people to embrace new technologies. Based on the responses, we categorized the companies into multiple groups and selected two buckets for detailed study—the **top 10 percent (leaders) and the bottom 25 percent (laggards) in the adoption of technology. We compared business performance between the leaders and the laggards, and analyzed what we refer to as the Innovation Achievement Gap.**

The study found a strong correlation between technology adoption and financial performance: companies that excel in the adoption of new technologies also led their categories in revenue growth. The bottom 25 percent (companies that are slow or averse to adopting new technology) face an Innovation Achievement Gap, foregoing a huge slice of potential revenue in the process. The data clearly indicates there is a gap of more than US$30 billion in revenue between leaders and laggards and this gap may extend as high as 41 percent in the next five years if no action is taken. This means, the financial performance of the leaders will be 41 percent better than the laggards in the same industry and in the same geography. And, when evaluated on the singular parameter of revenue growth, the study tells us that on an average, the laggards are growing around 4 percent and leaders are growing at more than 8 percent!

1. Not only do more leaders adopt AI...
98% leaders adopted AI vs. 42% laggards.
2. ...they also adopt it earlier.
Most leaders deployed AI 1-3 years ago, while most laggards deployed only a year ago.

The study established conclusively that technology adoption boosts financial performance, opening new avenues for revenue growth. However, adopting new technologies isn't straightforward. **Earlier, technologies took time to mature, giving companies elbow room to adapt and adopt. But now, new technologies emerge and mature at exponential speed.** The challenge is compounded by technology's disruptive impact on business models. For instance, batch processing impacted pockets of business operations, but when e-commerce came in, it disrupted core businesses across many industries.

BUSINESS-IT ALIGNMENT

To tackle this challenge, business and IT must work together as partners with shared goals to deliver business results. Many CIOs still look at business as their customer, but IT isn't simply a support function anymore; it is at the core of business.

One of our clients, a global technology company, was working with Accenture as well as several other vendors. All of the vendors were delivering "green" SLAs but overall IT delivery to their own customers was "red." Accenture helped the client pivot the support model such that service delivery was fully aligned to the end goal of delivering the company's product to their end customer. Whether someone was writing a piece of code or performing network management or handling service desk requests, everyone's goal was to deliver the product to the end customer on time. That is the type of business-IT alignment needed to harness new technologies effectively.

SHARED GOALS

When businesses talk about adopting technologies such as AI, extended reality, cloud and analytics, they are seeking to accomplish three critical goals: enabling better customer experiences, boosting efficiency and powering business insights with data.

EXPERIENCE: Enabling a seamless, omnichannel and personalized experience for customers, partners and employees is a baseline expectation in the digital age. The new frontier in digital experiences is technology custom designed for individual human behavior. We are not just incorporating technology into our lives; we are embedding human experiences into the technology itself. Think about the technology we use today compared to that of just a few years ago: it has become increasingly interactive with touch displays, mixed reality and natural language processing—making it “act” more like we do. For instance, **Accenture worked with Carnival Cruise, one of the world’s largest travel leisure companies, to completely transform and elevate the customer experience using technology.** We embedded an IoT network of more than 7,000 sensors into the physical environment of ships that could sense and respond to guests’ needs and create highly personalized experiences for them.

Customers were provided with a free wearable device—a light, quarter-sized disc that enables frictionless payment, keyless room access, and helps them locate friends, family, shopping areas and other attractions around the massive cruise ship. Data captured on board helps the company create new services and experiences. Not only did the company reduce onboarding time for guests by 90 percent—from 10 minutes to 30 seconds—it also created a community of loyalists that grow stronger and more valuable over time.

EFFICIENCY: The industrial revolution completely changed the efficiency equation for entire industries by moving production from individual cottages to the factory floor. Now, technologies such as AI, robotics and cloud are doing the same for companies that have been bold enough to adopt them. Research shows that manufacturers that have started adopting AI will nearly double their competitiveness (1.8 times) in the next three years. AI’s impact is not limited to manufacturing alone.

Accenture assessed the effect of AI on 16 industries and found AI could boost average profitability rates by 38% and lead to an economic boost of US$14 trillion by 2035.

Companies are using AI to reimagine entire business processes for the digital age, improving their own business efficiency while enabling great customer experience. For instance, **Alibaba Group's financial arm, Ant Financial, developed an AI system that allows users to snap a photo after an accident, use computer vision and AI algorithms to assess the damage, automatically file a claim with the insurer, lists nearby repair shops and estimate repair costs.** With a US$150 billion evaluation and 7.5X growth over five years, Ant seems to be ticking all the right boxes when it comes to using technology to boost business growth.

Similarly, on-demand cloud computing services like AWS have helped businesses shed expensive infrastructure to cut costs significantly. But it's not a cost play only. The cloud is now a platform for innovation and growth, allowing companies to tap into virtually unlimited computing power while responding to disruption with agility and flexibility.

BUSINESS INSIGHTS: Data is one of the most precious commodities in the digital age. Every organization needs data to fuel business insights. **Online shopping service Stitch Fix sifts through mounds of customer preference data using AI to help human stylists confidently choose products customers will love, while giving the stylists more time to unleash their natural creativity.**

However, the insights are only as good as the underlying data. One of the top challenges facing businesses today is lack of trust in the quality of their data. IT must partner with business to improve data integrity and management by tackling inaccurate, manipulated or biased datasets that lead to corrupted business insights. A major oil and gas company in Asia is required to share information about their spending on local vendors and suppliers with government authorities to negotiate subsidies and benefits. The company's procurement head relied on a virtual assistant to collate this information, but the source data was inaccurate and unreliable, making the task of getting adequate subsidies very challenging. The company worked with Accenture to establish a strong data foundation by breaking down data silos, curating data from multiple sources, improving data discovery, veracity and curation through proper verification and labeling, and finally, integrating the data into a single view for real-time and accurate business insights. The virtual assistant now acts as the single source of information for subsidy negotiations, providing up-to-date information about vendors and spend details with 98 percent accuracy.

CONCLUSION

Visionary leaders are already adding new technologies to their current arsenal of digital tools as the next source of differentiation and innovation. For a growing economy like India, these technologies promise a huge windfall if harnessed correctly. **Accenture research shows that adoption of AI has the potential to add nearly US$1 trillion to the Indian economy by 2035.**

In an era where business must adopt new technologies at lightning speed, it has completely different expectations from IT as a partner—differentiated experiences, all-round efficiency and data-driven business insights on demand. To meet these expectations, IT needs to change and align itself with the business to deliver value. **More importantly, business and IT leaders need to recognize a new reality: Technology IS Business.**

AUTHOR

DR. BHASKAR GHOSH
Group Chief Executive
Accenture Technology Services

REFERENCES

1. Future Ready Business: Assessing Asia Pacific's Growth with AI, https://www.manufacturing.net/news/2019/04/manufacturers-ai-nearly-double-competitiveness

2. https://www.accenture.com/us-en/insight-ai-industry-growth

3. "Rewire For Growth," https://www.accenture.com/in-en/insight-ai-economic-growth-india

BLENDING THE PERFECT BREW
WITH INDUSTRY X.O

How digital transformation made HUL's vending machines smarter, efficient and faster

There was a time when conventional products or services were all about rich features and powerful functionalities. To some extent, these qualities may still be relevant. However, in an era where hyper-personalization, automation and artificial intelligence are the new norms, these products and services are often found playing catch-up. With disruption rearing its head from unexpected corners, organizations are seeking desperate measures to survive and sustain the gusty winds of digital transformation.

As of 2018, there were 23.14 billion IoT-connected devices globally, and by 2025, this figure is expected to reach 75.44 billion.[1]

Industry X.0 is Accenture's mantra for companies that aim to be future-ready, reinvent their businesses and deliver enhanced customer experiences. The approach uses advanced technologies to reinvent products and services from design and engineering to manufacturing and support while accelerating operational efficiency and enterprise-wide growth. **By harnessing the power of digital technologies such as Internet of Things (IoT), data analytics, radio-frequency identification (RFID), artificial intelligence (AI), cloud and more, Industry X.0 helps in transforming core systems and processes for companies across the world.**

In India too, Accenture is leveraging Industry X.0 to help large and small companies unlock the power of digital to achieve new levels of efficiency, new sources of growth and unique customer experiences. An excellent example is Accenture's work with Hindustan Unilever Limited (HUL), a British-Dutch consumer goods and services company headquartered in Mumbai. **HUL teamed with Accenture to use the Industry X.0 approach to reduce costs, enhance efficiencies and accelerate growth in its tea and coffee vending business.**

SMART MACHINES MAKE GOOD COFFEE

HUL, a subsidiary of Unilever, sells its beverages under various brands, including BRU Instant, Brooke Bond Taj Mahal, Brooke Bond Red Label and Lipton.[2]

HUL has a network of vending machines in offices, malls, railway stations, and other private and public areas across India that serve Unilever's Taj Mahal tea and BRU coffee brands to consumers.

Without a way to monitor the vending machines, HUL found itself in a constant cycle of machine breakdowns and time-consuming repairs, missing service-level agreements (SLAs). Also, the company could not track coffee and tea inventory or if the machines were being misused by dispensing substitute products from other companies. What that meant was, HUL's customers—the tea and coffee lovers—were being deprived of their beverage of choice.

With unmonitored vending machines, a lot was at stake for HUL. It required nothing short of a breakthrough solution that was smart, living, connected and adaptive—driven by Industry X.0.

Accenture anchored a comprehensive collaboration program by bringing together industry leaders—Unilever, Microsoft (MS Azure IoT platform), Brainchild Technologies (embedded sensors provider) and Vodafone (telecommunication providers). The confluence also brought together Accenture experts in digital technologies and industry groups to tap into their strong industry and technology expertise to develop an innovative, state-of-the-art solution. **The team harnessed the capabilities of MS Azure IoT platform, RFID, Dynamics CRM, a field services mobile app and analytics using Power BI to make the vending machines smart and intelligent.**

As a result, the machines are now equipped with real-time sensors that track 39 parameters or errors, promptly notifying any anomalies or malfunctioning in the system. An analytics dashboard gives deep and actionable insights into the consumption patterns, machine adulteration and misuse, timely maintenance tracking, and more. A service engineer mobile app helps the field services team to enhance accuracy and efficiency in servicing machine errors. The underlying IoT platform, powered by the various next-gen technologies, ensures that the machines are always well-stocked, giving HUL's customers a perfectly brewed cup of tea or coffee every time, everywhere. See figure 1.

Enabled by an IoT platform, a mobile service app and analytics, the smart vending machine is helping Unilever become more connected and consumer-oriented.

Figure 1:

FROM FARM TO CUP

THE JOURNEY OF A HOT BEVERAGE

Smart and intelligent tea/coffee vending machine

Hyper-personalized services

- **Greet customers** by their names through RFID technology

Sensors track 39 parameters to detect and report machine faults within seconds

Faster service

- **From 8–12 hours to a few hours—** time to detect and report defects
- **Higher machine uptime**
- **Field-service mobile app** for efficient service and support management

Customer insights

- **Analytics dashboard**
- **Cup counts, consumption trends, wastages and SLA management**

Security

- Prevent the loss of assets

Savings

- Increase in sales
- Reduction in service costs

IoT DRIVES MORE SAVINGS PER CUP

Gone are the days when products could be sold solely on powerful features. Today's customers, while very much feature-conscious, also demand more involvement and engagement throughout their shopping process. A friendly shopping environment, helpful store employees or prompt service can create a memorable shopping experience for customers, ensuring they come back for more.

One of the critical outcomes of digital transformation is enabling companies to "pivot wisely," by shifting from delivering features to delivering experiences and opening new streams of revenue. HUL made the wise pivot through a comprehensive and advanced digital transformation. The company can now offer an unparalleled and engaging experience to its tea and coffee customers, while saving costs and enhancing revenue. Here are some of the significant benefits HUL has derived from the Industry X.0-led engagement.

A PENNY SAVED IS A PENNY EARNED

HUL can track its beverage inventory, so the vending machines are always well-stocked, and no substitute products are used at the point of sale. Tracing spare parts is now easy using inventory analytics and warranty analytics, enabling HUL to reduce overall service management costs.

HYPER-PERSONALIZED SERVICES

The machine offers a personalized service to the customers by greeting them by their name displayed on the screen. **RFID technology allows visitors to quickly place and pay for their favorite drinks at the touch of a card.**

FASTER, QUICKER AND SWIFTER

The time to detect and report faults has reduced from 8–12 hours to a few hours, thanks to automatic ticket creation and the tracking of 39 parameters or errors simultaneously. **The machines' uptime has improved**, allowing more tea and coffee to be dispensed, which means more revenue for HUL. Moreover, a field-service mobile app helps HUL's service engineers view alerts, route plans, machine history and machine fault codes, making service and support management highly efficient.

UNLOCKING THE VALUE OF DATA

HUL can track cup counts, consumption trends, SLA management with better clarity and efficiency through a powerful analytics dashboard. The company can also analyze consumption patterns (time of the day, day of the week, flavor preferences and consumption rate).

ADVANTAGE INDUSTRY X.0

In a world that runs on tea and coffee, a most tragic sight would be to watch a tea/coffee lover being turned away with an empty cup because of a non-functional vending machine. For HUL and similar companies, such challenges can directly impact revenue, customer loyalty and growth.

By embracing Industry X.0, companies like HUL can elevate their processes, products and services, and outcomes to the next level. Smart and connected devices powered by IoT, RFID, Customer Relationship Management (CRM), mobility and analytics are helping companies maximize their productivity, efficiency and competitive advantage. Not just that—digital capabilities are now driving the creation of entirely new revenue streams while also offering hyper-personalized services to customers. Moreover, as the results show, companies that leverage Industry X.0 reap differentiated advantages—of innovation, agility and time to value—while their competitors play catch-up.

AUTHORS

RAJAT AGARWAL
Managing Director &
Lead – Products
Accenture in India

MANEESH GUPTA
Managing Director – Products
Accenture in India

REFERENCES

1. https://www.statista.com/statistics/471264/iot-number-of-connected-devices-worldwide/
2. https://www.hul.co.in/about/who-we-are/introduction-to-hindustan-unilever/
   https://en.wikipedia.org/wiki/Hindustan_Unilever

FUELING INNOVATION

TO WIN IN THE INDIAN OIL AND GAS MARKET

Energizing oil and gas companies with digital technologies to help them thrive in a fiercely competitive market

The oil and gas industry is sitting on a ticking time bomb—fueled by geopolitics, supply and demand disruptions, fierce competition and sustainability challenges. India, for instance, is the third-largest consumer of oil, but heavy import dependency means that any global supply shocks can have a significant impact on it. It's also the world's fastest-growing energy market that is seeing intense competition as both Indian and global players expand their retail presence. The threat of disruption from electric vehicles also looms large as the Indian government resolves to promote such vehicles. **However, there are opportunities too—a US$50 billion investment is expected over the next five years in the Indian oil and gas industry.** So, how can companies ride the wave of disruption and grow profitably?

SPARKING CHANGE

The winners will be those who can reinvent themselves by adopting new and agile business models underpinned by digital. Those who use the power of technology to differentiate themselves and find new ways to innovate and grow will gain an edge. Across the oil and gas value chain, digital solutions now offer companies everything from integrated views of operations to new platforms that streamline processes, costs and organizational structures, making it easier to gain the predictability, productivity and efficiency advantage.

Many companies are already investing in digital technologies to optimize operations, rein in volatility, boost cash flow and turbocharge growth. As many as 97 percent of upstream and 92 percent of downstream executives say emerging technologies have helped accelerate innovation in their organization.[1]

A global survey also shows that leaders—the top 20 percent oil and gas companies—have already benefited from digital. Done right, digital initiatives can improve EBITDA by up to 1 percent (of revenues); cut capital expenditure by up to 20 percent and improve global cash flows by US$300 billion by 2025.[2]

Accenture's proprietary framework provides a high-level overview of the key digital interventions across the oil and gas value chain. The framework is based on our global experience of working with oil and gas majors that have captured significant value from such initiatives (see Figure 1).

Figure 1: It pays to go digital
(percentage figures represent cost savings across initiatives)

Area	Segments	Initiatives		
MANUFACTURING 30–32%	REFINERY	IMOM (Integrated Manufacturing Operations Mgmnt)	Energy Management Analytics	Pre-Heat Train Heat Exchanger Fouling Prediction
		Blend Performance Analytics	Digital TAR	Remote Operation Center
		Predictive Asset Maintenance (PAM)	Crude flex	HSSE
			Yield/Quality Optimization	
DIGITAL SUPPLY CHAIN 26–27%	INFRASTRUCTURE IMM 2.0 PIPELINE TRADING	Supply Chain Control Tower	Terminal Automation	Fleet Tracking & Optimization
		Commercial Optimization		
		PIDS (Pipeline Intrusion Detection System)	Pipeline LDS (Leak Detection System)	Corrosion Management
				Intelligent Pipeline
CAPITAL PROJECTS		Integrated Project Controls & Analytics	AR/VR-driven Work Methods	Connected Men, Machines, Materials
		Drone-based surveys	Capital Projects Suite	
DIGITAL CONSUMER 28–29%	FUEL RETAIL LUBES/LPG	FRIS (loyalty, NFR, pricing)	Salesforce automation (NewsPage)	Analytics driven nudges for cross-sell/ upsell
		FROP (Head office, Back office ops, cloud POS)	Digital Unified CRM (Retail)	B2C/B2B Pricing Analytics
		As-a-Service	Dynamic Pricing	Online-to-outline Ecosystem
DIGITAL ENTERPRISE 10–12%	PROCUREMENT	Spend Analytics	Cost Modeling	Market Intelligence
		Payment Terms Analytics	Inventory Optimization	Bid Analytics
	FINANCE	Predictive Cashflow	Smart Reporting	Accounting & Fraud Analytics
	HR	Hiring & Retention Analytics	Performance & Talent management	
		Employee Engagement	Learning & Qualification Analytics	

Here's how digital can fuel innovation in the oil and gas industry.

FUELING EFFICIENCY IN UPSTREAM

For the upstream sector, cutting costs and improving recovery rates are key priorities. In India, oil exploration companies must contend with scarce oil reserves, exacerbated by inefficiency in oil production. Also, lack of coordination between multiple contractors in managing capital projects leads to major project delays. Digital solutions offer some serious benefits.

Advanced solutions such as **Digital Asset Maintenance and Production Surveillance** are helping increase efficiency in oil extraction and minimize downtime through predictive maintenance. The **Exploration Advisor** is enabling a private oil and gas major and a leading state-run oil and gas company to enhance the probability of success in exploration—by better analyzing massive amounts of exploration data. **The Digital Capital Projects Platform** is shortening project timeframes by 10–15 percent through seamless coordination and alignment across multiple contractors.

EXTRACTING HIGHER VALUE FROM REFINING

India's refining sector is looking at a US$30 billion opportunity from capital project investments over the next three years. However, time overruns in such projects can go up to 50 percent and cost overruns by 20–40 percent.

Digital solutions such as predictive alerts, video analytics, interactive dashboards and integration tools now provide companies clearer visibility into projects, and help detect problems early on and take quick action. **The benefits? A 10–15 percent improvement in project schedules, a 5–10 percent increase in asset productivity and more than 5 percent reduction in cost.**

Think refining in the New, think "real-time gross refining margin (GRM) optimization." **This is where advanced analytics comes in. It can help unlock value of up to US$2 billion in GRM/barrel by optimizing all aspects of refinery operations—from core operations and maintenance to demand management and crude procurement.** In India, most refining companies are setting up petrochemical plants next to their refineries to boost profitability. Digital can help not just optimize existing refineries, but also achieve better integration with new petrochemical units.

The MOM X.0 digital platform allows integration of up to 20 digital initiatives, including asset and process optimization, safety, connected workers, heat exchanger fouling prediction and digital twin refinery. The result? Companies can realize up to US$1.5 per barrel.

In lubes, players need to address the growing demand and optimize costs while future-proofing their business in a fierce market. They will gain from reducing raw materials, which account for more than two-thirds of the total manufacturing cost. High-end analytics models can help achieve this by optimizing the use of base oil and additives, reducing tolerance limits in manufacturing blending plants and improving the bottom line. Also, access to real-time data can help companies dramatically reduce high inventory and logistics costs.

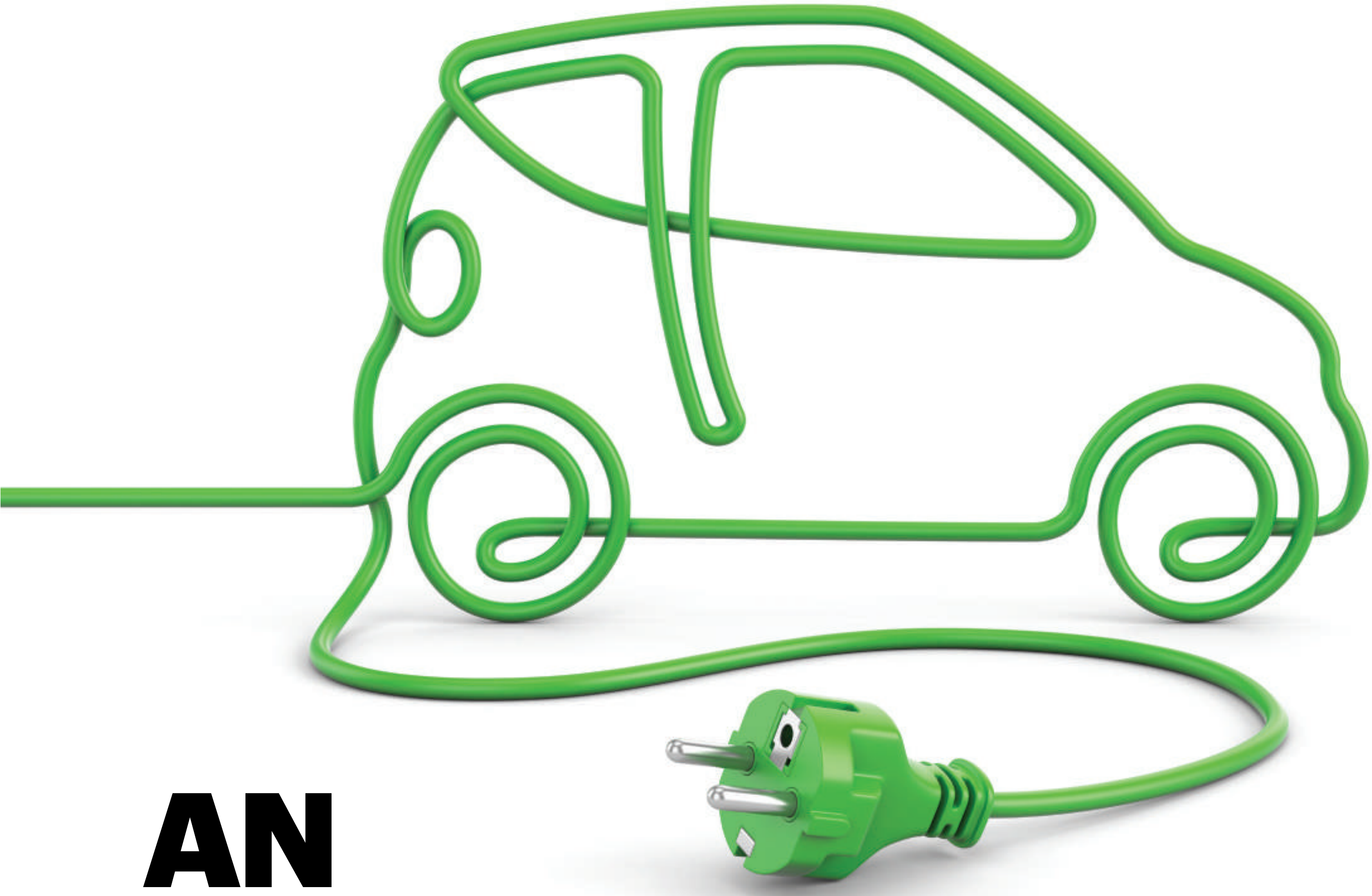
Advanced analytics modeling is helping a leading global lubricants player improve visibility into its B2C supply chain and reduce the working capital requirement of distributors in India. With insights into the market potential of each of the 400 districts in India, the company can plan its sales and marketing activities better. The company is also enhancing its salesforce effectiveness with AI solutions such as NewsPage. In effect, it is moving to a new business model—of selling services along with lubricants. **Digital tools have also helped the company optimize the warehouse network, reducing logistics costs by 8–10 percent.**

DIGITALLY POWERED CONSUMER-CENTRIC MARKETING

In retail, digital solutions are enabling companies to improve operational efficiencies, elevate the customer experience and win market share. For instance, the Fuel Retail Operations Platform and the Fuel Retail Insight Solution are giving a state-run oil and gas company the competitive edge with actionable, near real-time micro-market field-level insights into not just its entire operations, but also the overall retail business.

MIDSTREAM MANAGEMENT

In midstream, the primary challenge facing industry players is corrosion management. Companies are leveraging advanced techniques and digital tools to tackle the problem. Global oil and gas majors, particularly in the United States, Europe and Southeast Asia, have successfully embraced digital for integrated pipeline management. Such solutions can easily be leveraged in India.



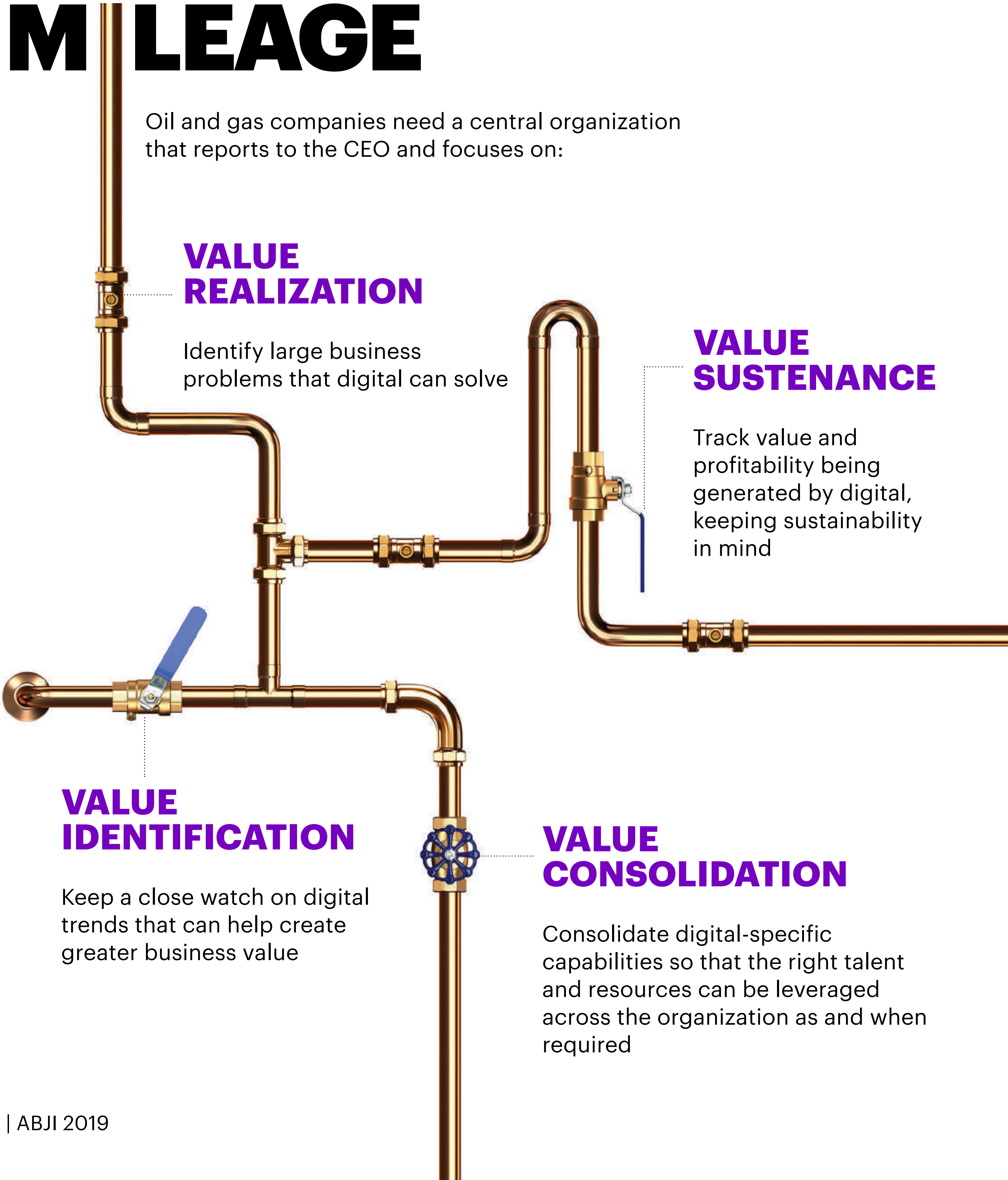
AN ELECTRIC BOOST

Globally, the electric vehicle market is growing at a rapid pace. The Indian government's vision is electrification of all public transport and new cars by 2030.[3] To realize this, the government will need to move beyond providing subsidies to auto makers and consumers purchasing electric vehicles, and focus on building an enabling ecosystem. Digital technologies are already helping create new business models for electric vehicles. For instance, battery swapping, charging infrastructure management and fleet management models.

Digital shows immense potential to empower oil and gas companies to pursue new innovations and growth at speed and scale. But, to truly seize the opportunities digital offers, companies need to take a more comprehensive approach. Setting up a digital Center of Excellence (CoE) to drive maximum value from related initiatives must be part of their digital transformation journey.

DIGITAL CoE: EXTRACTING MAXIMUM MILEAGE

Oil and gas companies need a central organization that reports to the CEO and focuses on:



VALUE REALIZATION

Identify large business problems that digital can solve

VALUE SUSTENANCE

Track value and profitability being generated by digital, keeping sustainability in mind

VALUE IDENTIFICATION

Keep a close watch on digital trends that can help create greater business value

VALUE CONSOLIDATION

Consolidate digital-specific capabilities so that the right talent and resources can be leveraged across the organization as and when required

AGILITY STARTS HERE

Accenture recommends that oil and gas companies in India must act on these five imperatives to achieve digital’s full value:

FEW INNOVATIONS VERSUS SEVERAL PILOTS

Instead of undertaking several digital initiatives, pick a handful across all aspects of the business. Technology will keep changing, but companies need to place their bets.

RETHINK. REDEFINE. REDESIGN.

When considering digital technologies for any stage—exploration, development, production, midstream, refining or marketing—be clear about the desired future state, constraints and opportunities.

MAKE CHANGE STICK

Couple digital investments with investments in people and culture. Invest in tools and training to create an environment of collaboration and experimentation.

RUN LEAN. THINK BIG.

Embrace analytics to understand how causal relationships influence decision making and organizational agility. Establish small teams that can work at speed to drive digital.

LEADER VERSUS FAST FOLLOWER

Closely monitor the market. Be flexible and learn from failures and successes of other companies.

TECH TRENDS

Indian companies must keep an eye out for global trends and shift gears with the changing market dynamics. **The Accenture Technology Vision for Energy 2019 survey of 168 global oil and gas companies identified five technology trends** that energy players must focus on to lead the next phase of innovation in what we call the "post-digital" future.

DARQ POWER

Companies must harness the power of DARQ—distributed ledger technology, AI, extended reality and quantum computing—to reimagine the entire energy industry and its role in the world.

GET TO KNOW ME

Tech-driven interactions create a digital identity for every energy customer—key to understanding the next generation of consumers and delivering individualized, experience-based relationships.

HUMAN+ WORKER

Workforces are becoming Human+ with workers empowered by their skills plus a new set of tech-driven capabilities. Energy companies must adapt technology strategies to support this future workforce.

SECURE US TO SECURE ME

Ecosystem-driven business connections increase the exposure to risks. Organizations must rethink their approaches to security in a way that defends not just themselves, but also their ecosystems.

MYMARKETS

Technology is creating a world of intensely customized and on-demand experiences, and energy companies must reinvent their organizations to find and capture those opportunities as they come.

In the post-digital era, companies will face massive pressure as customers, employees and society make their demands known. But it will also provide tremendous opportunities for companies that can deliver the appropriate experience at just the right time. Investing in the digital ecosystems of the future and the next wave of emerging technologies will give them a good start in capturing those opportunities.

The time to act is now.

AUTHORS

SANDEEP DUTTA
Managing Director &
Lead – Resources
Accenture in India

PIYUSH PATEL
Managing Director &
Global MOM/MES Lead –
Production & Supply Chain
Resources Industry X.0
Accenture

GAURAV MODA
Managing Director
Accenture Strategy
Accenture in India

REFERENCES

1. https://www.accenture.com/us-en/insights/energy/accenture-technology-vision-energy-2019
2. https://www.accenture.com/us-en/insights/strategy/oil-gas-digital-agility?
3. https://www.thehindubusinessline.com/opinion/editorial/shifting-gears/article26488089.ece

NOW STREAMING

THE BATTLE FOR OTT DOMINANCE

Setting OTT players up for success using experiential technologies

It's 6.30 a.m. on April 15, 2019. While some people in India are getting out of bed or getting their kids ready for school, thousands are turning to their mobile phones and smart TVs. Why? To live stream the first episode of the eighth and final season of the epic fantasy drama series, Game of Thrones.

With the rise of Over the Top (OTT) video streaming players in India, people no longer have to wait several days or weeks to watch their favorite shows. They can watch them in real time, uncut and uncensored, simultaneously with millions of other fans worldwide.

It's no surprise then that pay-TV is showing strong signs of slowing down globally, both in terms of subscriptions (total number of pay-TV subscribers dropped 4.1 percent in 2018)[1] and viewing time. While the trend will take time to catch on in India, its onset is inevitable. At the same time, buoyed by the convergence of low data prices, accessible handsets, a wide ecosystem of content creators and an absence of sharply segmented content options on mainstream TV, India is well on its way to becoming the second-largest digital video viewing market by 2020.

Although TV and video streaming in India are expected to coexist in the near to mid-term future, adoption of OTT technologies is outpacing, and will continue to outpace, the growth of TV, especially among the younger audiences. With more than 30 active OTT players and counting, the competition for eyeballs and share of wallet in the growing OTT streaming pie is also intensifying.

India's data usage per smartphone is the highest in the world at 10 gigabits per month. This figure can double by 2025, fueled by video streaming.

So, what will differentiate successful OTT players from unsuccessful ones?

In this article, we delve into the key questions industry leaders are thinking about while evaluating the role of the digital video sector in the overall media landscape. We will also look at how players can prepare themselves for the future.

PRIME TIME FOR OTT

The launch of Reliance Jio in September 2016 triggered a revolution in the domestic telecom sector. Data consumption skyrocketed. Competition intensified. Tariff wars began. With the average price of a smartphone being INR10,000 and a quarter of the mobile user base already owning smartphones,[2] OTT streaming players brought in content accessibility to ensure that anyone with a smartphone could stream videos, most of them for free. OTT streaming services allowed content creators to create hyper-segmentation, which allowed them to target youth with niche and specialty content. Broadcasters had a lot of intellectual property—their own content—which they could use to power their own OTT platforms. With more than 600 million people in India below the age of 25 in 2018,[3] this enabling ecosystem led to a surge in OTT services uptake.

THE BIG PICTURE

Now that the dust on the initial burst has settled, stakeholders in the value chain, such as content creators and aggregators, have turned their attention to matters other than customer acquisition. **Here are three pertinent questions they need to ask to push for revenue growth.**

Is OTT streaming additive to the category of video viewership or is it growing in lieu of other segments?

Cord-cutting—the process of cutting expensive cable connections and switching to a low-cost TV channel subscription through OTT broadcast—as a phenomenon is showing signs of growth in urban markets. But nowhere is it as pronounced as it is in the US or European markets. Almost all data sources point to OTT growth being strongly additive to the overall video growth. **With an estimated base of 250 million users, OTT as a sector is no longer playing at the fringes** but is a mainstream media segment in its own right. Strictly viewed from this lens, it has been a resounding success and has led to the overall growth of the media sector.

What is the tipping point for the OTT sector, where the scale of viewership translates into revenues?

While the current user base statistic of approximately 250 million[4] is impressive, it is expected to grow dramatically to half a billion by the coming year. But more importantly, almost all global and domestic operators are finding it challenging to monetize this ever-growing base of consumers. Fiber-to-the-home is the big hope the industry is banking on to help scale up monetization through increased at-home consumption. However, this challenge is not unique to India.

Globally, digital video viewing has 45 percent of the overall viewing share but only 23 percent of the proportionate revenue share.[5]

How players in India bridge this divide through inventive pricing and product disruptions will be the key factor in determining whether this sector can elbow its way to the top in the media industry revenue sweepstakes.

How will the sector deal with the trust dilemma?

Though not in the same boat as the social media bigwigs struggling to retain user trust, the absence of formal regulation is increasingly becoming a hotly debated topic for OTT providers. Whether it's about personal data or just the nature of unregulated content available on these services, there is a need to do more to reassure the consumer base that the currency of trust is being safeguarded and will not become a deterrent to usage and growth in the times to come.

FORMULA FOR A SUPERHIT

So, how can players of this delicately poised sector go on to become leaders of new-age entertainment services? Through a combination of insights from Accenture research and discussions with industry leaders, we have narrowed down **five key tenets for OTT providers to make a wise pivot and succeed over the next 18–24 months.**

HYPER-SEGMENT YOUR CONTENT OR GO MASS

OTT players will need to choose which side they want to lean on—create ultra-niche, super-specialty content or create content for the masses. Any muddled thinking on this will lead to a subpar product. In the future, consumer technology companies will increasingly focus on original content to retain their hold over a loyal consumer base. Hence, it is imperative for current OTT players to understand their consumers and create content based on their needs.

PARTNER TO ONBOARD, NOT TO SYNDICATE

Partnerships will continue to be a key avenue for growth for OTT players. This construct provides a win-win opportunity for both players as well as consumers. But it is crucial for the players to leverage these partnerships strategically. Partnerships should be used to enable sampling, not for short-term syndication gains. Ensuring that the service owns the consumer should be the initial objective, with an intent to monetize this acquired user base in the long run.

SELF-REGULATE TO BUILD TRUST

OTT streaming services in India have a low barrier to entry, and that has led to a perception problem regarding data misuse and unsuitability of content. Families are wary of unsupervised access, fearing exposure to inappropriate content or advertisements. In such a scenario, self-regulation is the best way forward for OTT players, even as the government mulls bringing in some form of regulation. This will enable the sector, as a whole, to build trust with consumers.

BE INNOVATION-LED

OTT streaming services have grown significantly on the back of an enabling environment, but the next spurt of growth will need to be innovation-led. Companies will need to come up with new engagement innovations using experiential technologies such as extended reality and human-computer interactions such as gesture recognition and multi-persona recommendations. Also, pricing innovations such as sachet pricing and Transaction Video on Demand can extend the experience and enhance interaction with consumers. The key challenge will be to cross-engage the new generation viewers with traditional viewers to build a monetizable base for subscription or advertising-led models.

FOCUS ON THE NOW, AND THE NEW

While OTT streaming services focus on planning for the next wave of growth, they also need to invest strategically in their current set of services. This will enable them to improve and build upon their core capabilities, while accelerating investments and embracing new technologies. This approach will assure continued revenue generation from the core business, which can be reinvested in the future of the business. It is important to strike a balance between the Now and the New. Often, while organizations are busy racing to get to the New, the core business may falter, depriving them of the revenue and resources needed to compete while attempting to transform.

TUNE IN TO NEW POSSIBILITIES

The prioritization and delivery of these five tenets will require bold vision and intense focus. When done right, it will prepare OTT players to thrive in the New. The transformation will begin with adapting to new technologies and new ways of doing business, and then moving on to building capabilities to deliver services at speed and scale. Every initiative focused on content, engagement, growth and monetization must be based on consumer and business needs. OTT providers that create and sustain consumer relevance in this dynamic, hyper-competitive market will be the winners of this exciting shake-out.

AUTHORS

ADITYA CHAUDHURI
Managing Director & Lead –
Communications, Media & Technology
Accenture in India

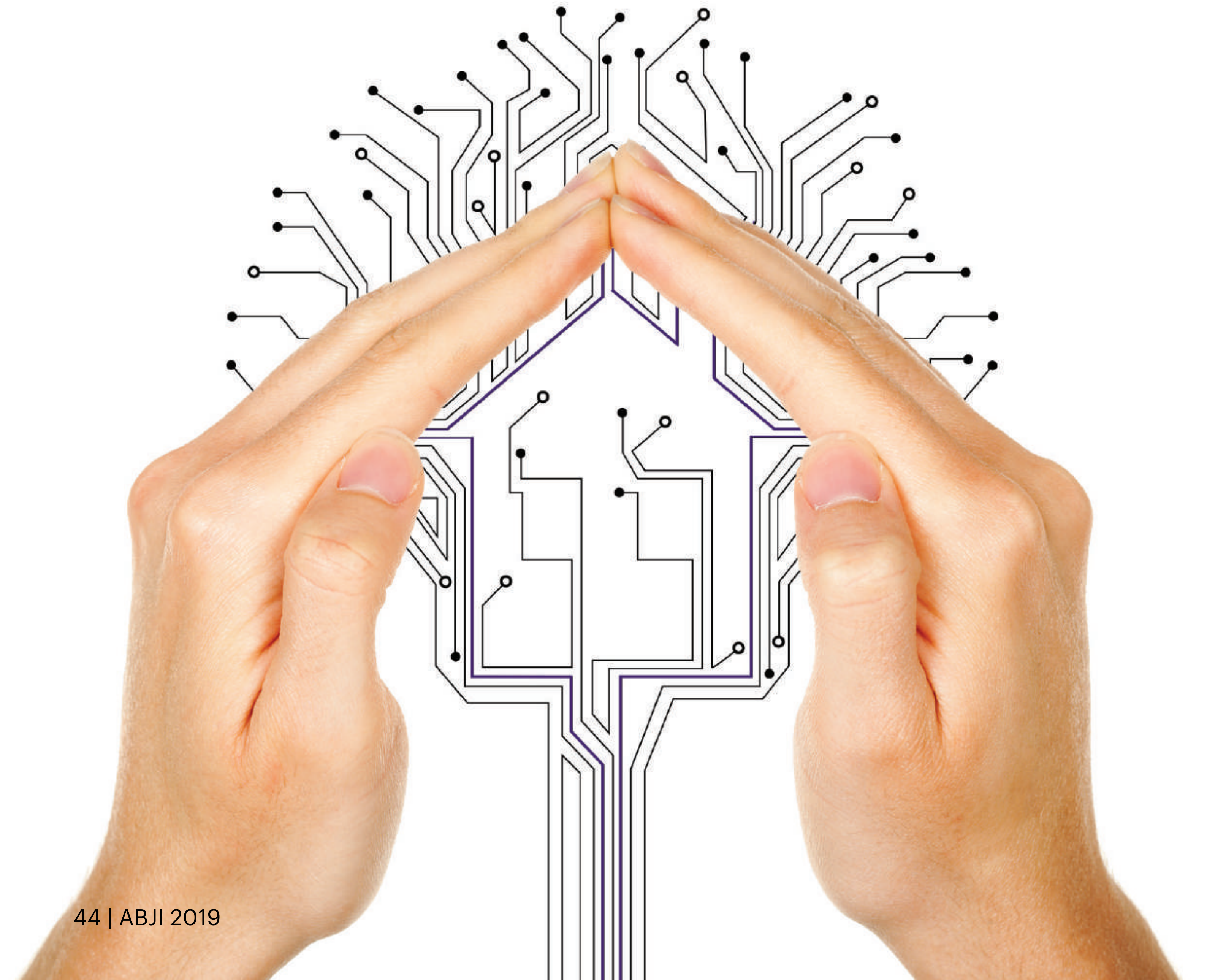
MATTEO MAGA
Managing Director & Lead –
Communications & Media, AAPAC
Accenture

REFERENCES

1. Fortune
2. Statista Analysis
3. Indian Census Data
4. Financial Express
5. “Over the Top Video is Coming of Age,” Accenture Report 2018

EMBRACING THE ERA OF INTELLIGENT INSURANCE

Harnessing the power of AI and analytics to reinvent insurance in India



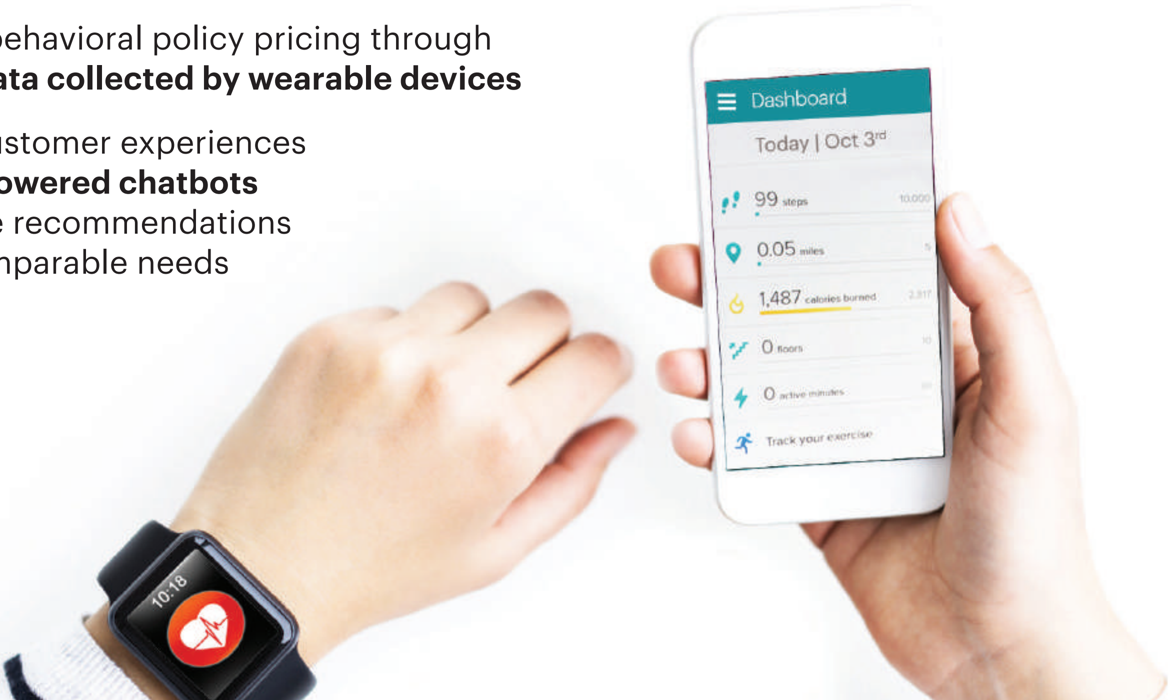
As digital reimagines businesses and entire industries across the world, insurance is no stranger to disruption. It is the fourth most susceptible industry to future disruption of the 20 industries analyzed in the Accenture Disruptability Index.[1] Evolving customer expectations and rapid technological advancement are only adding to the pressure. The new breed of digital-savvy, tech-embracing customers are more informed, empowered and, by extension, demanding. They want simple, cheap, easy-to-buy insurance that translates into personalized service in line with their changing circumstances and preferences.

Add to that, the emergence of new-age insurtechs, that are drawing from the success of digital platforms such as Uber and Amazon to offer experiences and products that are truly reimagining the purpose, provision and performance of insurance. These disruptive startups tap into the growing volume of customer data captured via websites, social media and IoT devices, gnawing away at the market share of legacy carriers.**The burning question is: How can insurers remain relevant and competitive in a digitally disrupted industry?**

BOOSTING THE INTELLIGENCE QUOTIENT IN INSURANCE

About 63 percent of respondents in Accenture's Future Workforce survey[2] believe intelligent technologies will transform the insurance industry. By harnessing the power of analytics and artificial intelligence (AI), insurers can unleash the new face of digital insurance. **Some of the areas in which AI can be instrumental in revolutionizing insurance are:**

- Introducing behavioral policy pricing through **analysis of data collected by wearable devices**
- Enhancing customer experiences through **AI-powered chatbots** and coverage recommendations based on comparable needs



- Making underwriting more effective and efficient, allowing the **underwriter to focus on strategy and portfolio management**
- Reducing the risk of fraud by **deploying machine learning to identify gaps** in processes and vulnerabilities in claims
- **Building trust by enabling smooth and quick claims management** by supporting adjusters in the decision-making process

Accenture's Global Distribution & Marketing Consumer Study found that about 74 percent of customers like to interact with modern technology.[3]

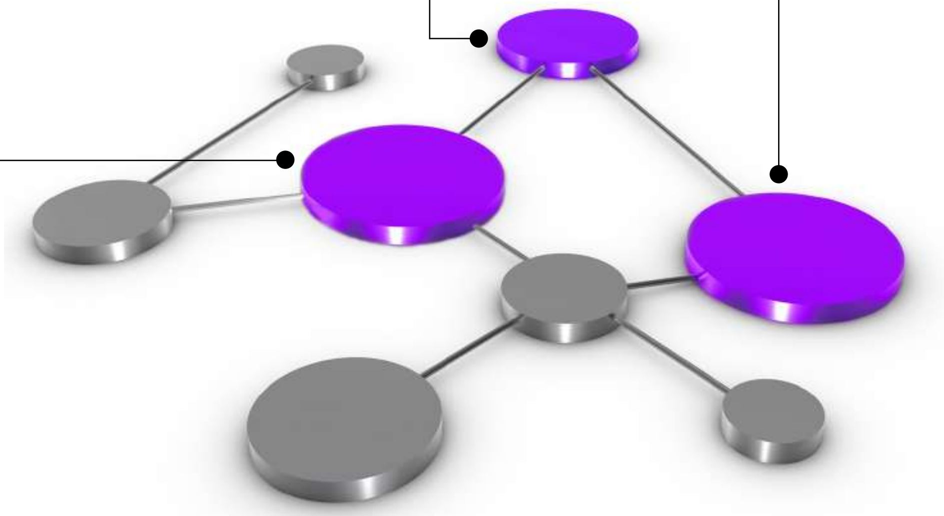
With AI, instant personalized help will become the new norm. Insurers will be able to deliver improved customer experiences and service, while gaining more granular customer insights, 24/7.

By combining analytics with AI, insurers can connect the dots and go beyond strictly transactional data to gather insightful information around customers' geographical locations, their professions, their health and ailments, and life milestones to build lifelong customer relations. **Some of the ways in which analytics can complement the insurance experience are:**

Use customized plans to build customer loyalty by **harnessing intelligent management platforms**

Prevent fraud by identifying potential customers who are most likely to commit insurance fraud by using smart social media analytics

Leverage predictive modeling to enable premium pricing by tracking individual policyholder behavior and fix policy prices



THE DIGITAL WINDS OF CHANGE IN INSURANCE

Insurers around the world have already implemented advanced technologies to provide high-quality, multichannel customer service at a highly optimized cost. That said, advanced technologies such as automation and machine learning have so far been restricted to simple and convenient processes such as data entry, compliance checks and standard customer communications. With the onset of intelligent systems, insurers are now exploring more aspects of automation such as claims inspection, verification and settlement.

Leading insurers in India are already stepping out of the box to harness intelligent technologies and reinvent experiences—for their customers and business alike.

- **Aditya Birla Health Insurance has launched a wellness incentive program, Activ Health,** which studies historical data to promote healthy living among customers.
- **HDFC ERGO has launched a community portal,** where people can get advice, discuss their experiences and share information about property and casualty insurance.
- **DIGIT, India's first digital insurer backed by Fairfax,** plans to disrupt the legacy Indian general insurance sector by introducing new products and services, and giving a completely new dimension to various business models.
- **Acko operates as an independent digital-first general insurance company.** The company creates products and delivers opportunities in areas such as personalized insurance based on user consumption behaviors.

We've helped one of the top five Indian private general insurers apply customer analytics across the customer life cycle. Accenture adopted a multipronged approach for driving analytics-based interventions.

The outcome:

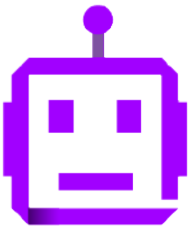
A 200 percent increase in the upsell rate for health policies, 130 percent boost in lead conversion for travel policy issuances and more than 30 percent spike in motor insurance retention rates.

PAVING THE PATH TO A SECURE FUTURE

The Indian insurance sector has seen significant changes in the regulatory framework and distribution mechanism over the last two decades. To kickstart the next wave of insurance improvement, NOW is the time for carriers to use data analytics and design thinking in product innovation. We envision four key steps to accelerate the sector's pivot to the future.

1. AI-POWERED CONVERSATIONAL INSURANCE

The exponential growth of Conversational User Interfaces (CUIs) such as messaging apps, bots and voice-enabled devices makes banking services more intuitive and intelligent. CUI is just one example of the infinite possibilities of AI in insurance. According to the Accenture Technology Vision 2019, as AI evolves to offer cognitive capabilities that can sense, understand, act and learn, AI-powered bots will interact far more naturally with both customers and employees. A few leading financial institutions in India are already at the nascent stage of adopting CUIs.[4]



Accenture has enabled conversational insurance for multiple global insurers through our proprietary AI-driven chatbot, Cathy.

The bot has been trained to address 70 percent of service requests and inquiries such as insurance issuance status, policy and document requests, claims intimation and claims status.

2. BUSINESS MODELS IN THE NEW

Carriers have so far been product- and process-driven. Going forward, they'll have to put customers at the heart of everything they do, and boost data- and analytics-driven decisions and experiences. A critical part of this rejig is striking a balance between their core business and the "new"—the gateway to dynamic growth possibilities and exponential value. Their ability to move to a hybrid "phygital" distribution model will also continue to be a critical value lever. In addition, they must look at avenues to embed insurance point-of-sale options into other shopping experiences and platforms, and forge strategic partnerships with device manufacturers, auto dealers and makers, social platforms, travel sites, banks, and household and small-business retailers to gain access to significant customer pools quickly and cost effectively. **Accenture has helped design and deploy India's first digital health insurance company that has two key operating principles—no paper and no branch.**

3. DIGITAL DECOUPLING

Insurers must adopt a hybrid approach that allows legacy systems to run in parallel with new technologies. This will help carriers gradually decouple their core systems, migrating critical functionality and data to new platforms.
A digitally decoupled architecture will enable new technologies and unlock legacy data and services seamlessly.[5]

4. BIG DATA

Insurers need to shift focus from building data capability for an individual use case to creating a data platform to support any use case. They have a multitude of internal and external data available through an ecosystem of data providers. This structured and unstructured **big data available from transactions, online purchase behaviors, health records, social and behavioral interactions and IoT devices is further processed for advanced quantitative analysis.** While sale, retention and claims management are easy use cases, saving this data can help support use cases and business models not prevalent today. **Ping An, a Chinese holding conglomerate with subsidiaries in insurance, banking and financial services, stored big data for vehicle make models, thousands of data parts, and millions of data points and images of damages. Xiang Hu Bao, a mutual insurer in the Alibaba group, leverages its detailed knowledge of customers to offer critical illness coverage.** Today, it has been able to tag this big data to run multiple AI-driven use cases and new business models.

INFUSING GROWTH. TRANSFUSING VALUE.

AI and analytics hold the promise of enhancing customer experience and boosting operational efficiency, while reducing fraud and, in turn, losses. It also enables highly skilled and much-needed insurance professionals to focus on value-added decision making. Moving to data-driven, insight-based business models will help insurers develop innovative products, understand customers and empower the workforce. To revolutionize customer experiences in an increasingly connected, always-on world, insurers will need to radically transform points of interaction—be it through wearables that produce health-related data or a telematics-connected car that communicates maintenance and vehicle usage to fix premium. **As the era of "one-size-fits-all" approaches a natural death in insurance, AI and analytics will pave the way for "made to measure."**

AUTHORS

RISHI AURORA
Managing Director &
Lead – Financial Services
Accenture in India

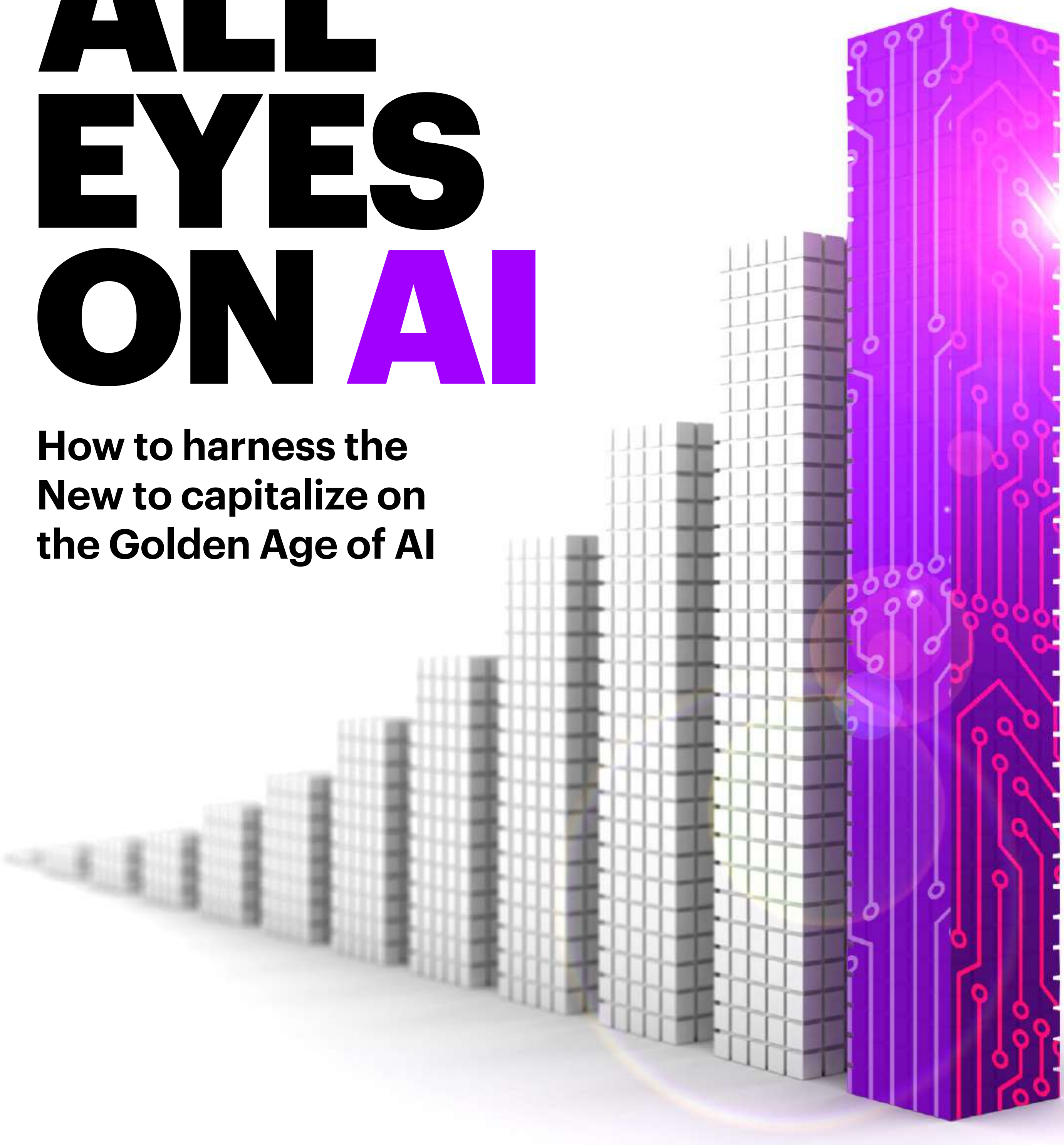
FRANCOIS METZLER
Managing Director – ASEAN
Insurance Lead
Accenture

REFERENCES

1. https://www.accenture.com/in-en/insights/consulting/business-disruption-innovation
2. https://www.accenture.com/us-en/insights/insurance/future-workforce-insurance-survey
3. https://www.accenture.com/in-en/insight-insurance-distribution-marketing-consumer-study
4. https://www.accenture.com/in-en/insights/financial-services/conversational-banking-india
5. https://www.accenture.com/us-en/insights/us-federal-government/embrace-digital-decoupling

ALL EYES ON AI

How to harness the New to capitalize on the Golden Age of AI



"It was the best of times, it was the worst of times …" ~ Charles Dickens would be right on point if he were describing the current state of businesses globally.

We are in the midst of an unprecedented time in history. On the one hand, we face never seen before levels of competitiveness, cost pressures, shareholder expectations and regulatory challenges. On the other, we are experiencing tremendous levels of digital adoption, leading to a demographic dividend in India and, more importantly, increased levels of consumerism.

For the first time in history, we are witnessing the combined effects of multiple evolving technologies (such as blockchain, AI and quantum computing), the democratization of talent, sharply reduced costs for data storage and an increased focus on managing data as a strategic asset. The benefits include revenue growth, optimized costs, higher RoI and competitive advantage in a constantly expanding marketplace.

However, with increased levels of digital disruptions across traditional industries, companies are waking up to the reality of doing business in the NEW – turning digital disruption to their advantage. Technology and innovation are key. Unfortunately, most organizations are not geared up for this challenge and often find themselves asking questions on how, when and whether these investments will even deliver. To cut through the uncertainty, organizations have started investing in technologies like artificial intelligence (AI) and automation, expecting high levels of business impact. **But, is it the best approach?**

ELEVATE YOUR ARTIFICIAL INTELLIGENCE

While AI is a game-changing technology, it isn't the silver bullet that many imagine it to be. Real digital transformation happens when you combine AI with analytics, automation and a bold vision for applying these technologies together at scale. It is what Accenture calls "Applied Intelligence"—enabling clients to do things differently and do different things.

Applied Intelligence helps businesses collect, interpret and enhance data that may have been previously hidden or out of reach to generate near real-time insights. This new applied intelligence can then be used to discover new opportunities, reimagine products and services, and open up new revenue streams. In fact, this is the point of the growth curve right before things go vertical.

STEP INTO THE NEW

There's tremendous (and growing) interest in AI technologies. Accenture's 2018 Technology Vision survey shows that 85 percent of participating executives report an intent to invest in AI over the next three years.[1] Another research report illustrates why now is the time to act.

Our findings show that AI has the potential to kick-start profitability by an average of 38 percent and lead to an economic boost of US$14 trillion across 16 industries in 12 economies by 2035.[2]

Businesses that are not investing in AI risk quickly falling behind and losing competitive advantage. To help solve business problems and create new opportunities, Applied Intelligence requires three essential steps:

1. UNDERSTAND THE POWER OF THE 3 As – ARTIFICIAL INTELLIGENCE, AUTOMATION AND ANALYTICS

Historically, companies used automation to achieve higher productivity and cost savings—think robotic process automation on the shop floor, call centers and the back office. Automation lets organizations automate current tasks as if a real person were to do them. Bots are the virtual workers who execute rule-based information processes, thereby improving accuracy and efficiency and reducing human error.

Automation alone, however, will not deliver exponential outcomes—primarily because the focus in automation is to improve the efficiency of existing processes. To realize a quantum business impact, you also need to invest these savings in analytics, where data can be engineered and analyzed at scale to drive insights never before available. Not only does this improve effectiveness and efficiency, it also promotes growth through better customer experiences and upsell, cross-sell and top-line enhancements.

Big data and analytics can then fuel AI technologies, such as machine learning, to deliver new, innovative capabilities. The combination is truly unique. Unlike any other system, Applied Intelligence can:

- **Sense** through data
- **Comprehend** what the signal is through machine learning
- **Decide** what to do
- **Act** through automation
- **Learn** based on how the action performs in the real world

When AI is applied to improve a supply chain interaction, for example, it makes every other supply chain interaction smarter. Say, an AI recommendation system develops a customer offer. If the customer accepts, the AI system is smarter about what types of offers get accepted, thereby improving the experience for existing and future customers.

Thomas Cook India discovered this opportunity when instead of investing heavily in advertising for returns, it partnered with Accenture to tap into analytics. Using Accenture's Lead Prioritization Model, we upgraded and integrated AI into the company's online and offline portals as well as its mobile app to gain accurate and researched results about customers. This 360-degree view of the customer is easily accessible to salespeople, offering intelligence on the customer's probability to purchase relative to other customers. As a result, Thomas Cook experienced a 14 percent increase in lead conversion and was able to launch targeted marketing campaigns through multiple touchpoints, leading to an unprecedented 17 percent growth rate.

2. CREATE A HUMAN+MACHINE ENTERPRISE

Despite people's fears, machines are not necessarily replacing humans. Instead, humans are working collaboratively with machines to develop new forms of intelligence and apply them to business and societal problems.

Accenture research shows that companies can achieve the largest boosts in performance when humans and machines work together as allies, not adversaries, to take advantage of each other's complementary strengths. To do this, enterprises must create a culture where humans and machines continuously learn, collaborate and drive data responsibly across every function and process. However, it requires distinguishing between automation and augmentation.

AI can automate repetitive tasks or simple decisions such as where to place inventory. But Applied Intelligence goes one step further. It also augments human decision-making.

Let's look at Tata Steel. This company dispatches around 6.5 million tonnes of coal annually using coal rakes. Along certain transit routes, though, pilferage occurs, leading to substantial financial loss. **Accenture helped Tata Steel implement an image analytics-based coal pilferage detection solution to identify the wagons where potential pilferage takes place. We helped set up an integrated camera to record continuous video feed of the incoming coal rakes and instantly share the time-stamped images on the company's IT network.** Automation features can then identify the wagons and source of the rake where pilferage is likely to have occurred in transit, allowing the company to make corrective decisions faster and more accurately.

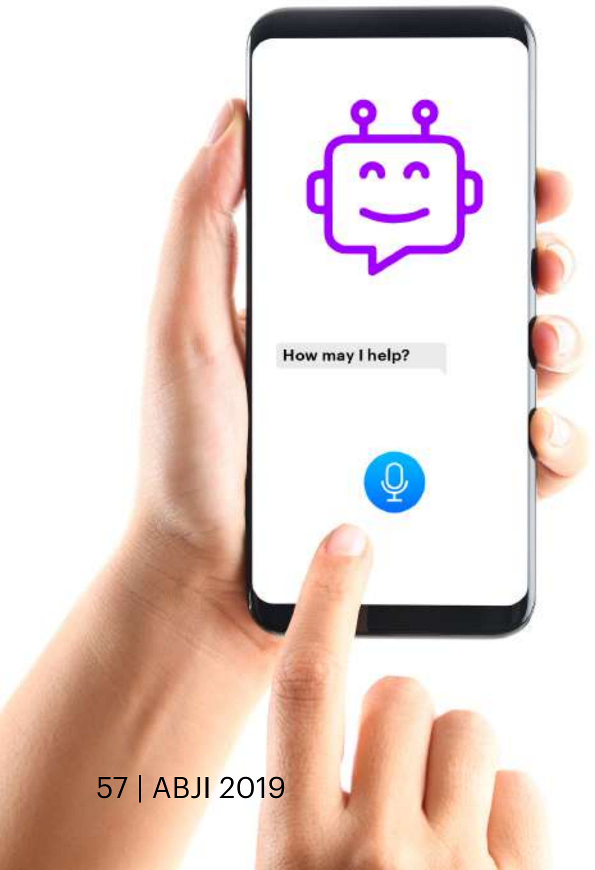
To succeed, companies must develop a data-driven strategy and enable data to flow easily throughout the organization. This includes unifying disparate data sources into a single view and making it easy for employees to interact with data in a standardized way to make real-time decisions at the point of need.

When the data gets to the point of insight or action, employees who interact with the systems or are responsible for the outcomes need to be comfortable with data being central to decision-making. They need to transition from "tribal knowledge" to a data-driven, intelligent approach. This is where the human+machine concept gets amplified and why a change in culture is so important. For example, on the factory floor, an employee with 30 years of experience running a machine needs to trust the machine to make suggestions to improve productivity or increase output.

To become more data and insights-driven, **Brandix, one of the world's leading apparel manufacturers, recently adopted this approach and enabled its supply chain team to use the analytics insights delivered on its new Sword platform to help it make decisions on how to reassign raw materials and reduce write-offs, generating over US$5 million a year in savings.** Brandix envisages deploying this combination of strategy and analytics across the whole organization, running multiple profitability uplift programs, transforming back-office operations and optimizing internal organization.

3. SCALE APPLIED INTELLIGENCE FOR ROI

When applying AI, companies cannot just focus on a single algorithm or tool. They must also have a clear understanding of how to integrate Applied Intelligence into the overall business, process or function. Companies need a strategy, the right data services platforms and a robust data supply chain that will deliver intelligent insights at scale. Enterprises also need to decide where to drive automation – **for example, through software chatbots or physical robots – and how to balance that with the human component (i.e., employees) to amplify their productivity.** These elements must also be connected end-to-end.



Data management is vital to unlock value and should be treated as a supply chain, enabling data to flow easily and purposefully through the entire organization to make decisions at the point of need. In addition, data has to move at the right speed to be relevant. For example, time-critical data should flow rapidly through the supply chain, while less relevant data should move more slowly. Quick access to the right data enables companies to perform analysis, glean insights and act rapidly to gain competitive advantage.

But they must first determine whether enterprises want to build, borrow, or buy these skills. This includes developing the strategy, applying automation, analytics and AI in the right parts of the business, experimenting and expanding across the enterprise, and ultimately embedding it across all functions and processes. And it includes choosing whether to build, borrow, or buy the data services platform and data supply chain. Working with experienced third-party providers in these areas often makes the most business sense.

NAVIGATE YOUR FUTURE

Organizations cannot rely on the historical organization of their workforce and talent to succeed. Instead, they need to build new skills, reorganize, collaborate and innovate to stay in the race. Shifting from a process-driven to a data-driven business model can change the way organizations behave – in a positive way. As a holistic approach, Applied Intelligence can give organizations the signals they need from the market and customers to adjust their decisions and strategy to promote growth and competitive advantage continually.

The RoI is real. But success requires embracing and carefully managing the dramatic change that Applied Intelligence enables. Organizations must understand the effects of their systems on customers, employees, business partners and society and have a clear understanding of the ethics to develop the right policies and procedures for AI governance and accountability. Those that do will be able to respond confidently to the digital disruption that's overtaking our world. **Now that's pivoting to the New.**

AUTHORS

SAURABH KUMAR SAHU
Managing Director &
Lead – Applied Intelligence
Accenture in India

DR. ATHINA KANIOURA
Chief Analytics Officer &
Lead – Accenture Applied Intelligence
Accenture

REFERENCES

1. Accenture Technology Vision. 2018. "Redefine your company based on the company you keep." Available online at https://www.accenture.com/us-en/insight-technology-trends-2018.

2. Accenture. 2017. "Hello Opportunity: How AI boosts industry profits and innovation." Available online at https://www.accenture.com/us-en/insight-ai-industry-growth.

THEY WHO SLEEP CATCH NO PHISH

A wake-up call for India Inc. to restore "trust" in the digital economy and build resilient businesses

Siddhi Miglani, a 25-year-old digital native, works as an executive with a technology company. Siddhi spends most of her free time online—connecting with friends, making purchases, paying her bills and more. The digital trail of online activities she leaves behind is easily tracked by social media platforms, advertisers and, unfortunately, threat actors. As is commonplace in the digital space these days, Siddhi falls prey to an e-mail phishing scam, losing all her savings in a matter of seconds. Siddhi and hundreds of unsuspecting online users are at risk from hackers today. As the Internet continues to change the way we live and work, online users need a more secure, safe and trustworthy experience—every step of their digital trail!

India is taking a huge digital leap. With its Internet user base set to reach 627 million by end-2019,[1] the country is the second-largest market for digital consumers—and growing fast.

Having reaped significant value from developing its core digital sectors, such as IT and business process management, the country is now exploring the digital opportunity in energy, financial services and healthcare, to name a few. The potential is huge. Government estimates show that digital can unlock economic value worth US$1 trillion in India by 2025.[2] While digital promises to be one of the most inclusive drivers of India's growth, a real risk exists that Siddhi and millions of millennials like her will lose "trust" in the digital economy.

The last couple of years have seen a dramatic surge in cyberattacks in the country. In fact, India was the second-most affected by cyberattacks globally, between 2016 and 2018, according to the Data Security Council of India (DSCI).[3] While a regulatory framework in the form of the Information Technology Act 2000 exists, the absence of well-defined cybersecurity laws continues to be a challenge for India. In the European Union, the General Data Protection Regulation (GDPR) established a global benchmark in personal data protection in May 2018. In India, the Personal Data Protection Bill Law, while still a work in progress, is a positive step in helping the country chart a clear path toward data sovereignty.

Indeed, "trust" is at the center of the digital economy. After all, when people create online accounts to make purchases, they don't just engage in the exchange of data, but also transact in the ultimate currency of trust. This trust stems from the confidence they have in organizations' ability and foresight to create a secure digital experience. **According to Accenture research, a "trusted" digital economy has the potential to stimulate US$5.2 trillion in value creation opportunities for society.[4]** Unless business leaders take concrete action, lack of safeguards could hurt both individual companies and the economy, and derail the growth of India's digital economy.

MAKE A WISE SECURITY PIVOT

Cybercrime defense and mitigation is a continuous journey and not a one-time event—necessitating the need for commitment to quickly turn to conclusive action. It's true that just as one loophole is blocked, cybercriminals will try everything possible in their might to move to another, more advanced way to breach security. A double whammy stares India in the face as cyberattacks continue to rise and cybercriminals get smarter and quicker. Attackers are adopting novel ways and emerging technologies to target cyber systems, leaving India's cyber future hanging in the balance.

How can Indian businesses successfully tackle cybercrime, build trust, and prepare to fight and win tomorrow's cybersecurity wars?

The answer lies in staying one step ahead of cybercriminals while continuing to use breakthrough technologies such as artificial intelligence (AI) and blockchain to secure the future. Our 2019 Cyber Threatscape report underscores the need for businesses to continue investing in digital trust. Do remember that:

- **Communications targeting the global stage may not be all they seem.** With rising geopolitical tensions, cyberthreat actors are using high-profile global events, such as sporting events, to influence mass opinion. Using emerging technologies such as AI and 5G communications, along with social media, they explore new ways of breaching security and influencing the geopolitical landscape. Businesses must become ever-more vigilant and realize that global events are often a target—with phishing scams that use lures to influence outcomes.

- **Cybercriminals are shifting—and so should you.** Cyber criminals are changing tactics to reduce the risk of detection and disruption. They favor close-knit syndicates instead of partnerships. This aids in taking advantage of the familiarity with the local environment and enhances the precision of targeting by using legitimate documents to identify likely victims before delivering malware. Meanwhile, new tactics, techniques and procedures (TTPs) such as "big game hunting" and hack 'n' hustle network access intrusions are on the rise.

- **The mixed motives behind ransomware are making it more destructive.** The drivers behind ransomware attacks may go beyond financial motives to also serve hybrid motives, such as ideological or political. For example, they could be led by a geopolitical motive aimed at paralyzing a government or a business in a specific country or region. The reality is that ransomware can disrupt operations, leading to high costs for repairing or restoring systems, and, more importantly, adversely impact the brand and its trust. Since a ransom payment may not guarantee the restoration of company data, companies must have a contingency plan in place for the recovery of operations.

- **This is no time for splendid isolation—your ecosystem needs you.** Cyberthreat actors, especially those who are part of politically motivated groups, continue to favor creating third-party compromises. To safeguard their supply chain, reduce third-party risk and insulate merger and acquisition functions, organizations should embrace proactive, intelligence-driven approaches to cybersecurity.

- **Beware of opening more than the back door.** Side-channel CPU vulnerabilities inevitably pose a high risk to organizations running their compute infrastructure in the public cloud. Adversaries can use such side-channel vulnerabilities to read sensitive data from other hosts on the same physical server. Although mitigations are available for most platforms, cloud deployments and software, they come at a cost of reduced performance, which may lead to an increase in compute costs. Organizations should understand the threats posed by CPU vulnerabilities and then design a robust risk mitigation strategy that suits their needs.

CENTRALIZING SECURITY OPERATIONS THROUGH MANAGED SECURITY SERVICES

With the move to digital and an industry-wide increase in cyberattacks, a global food manufacturer needed to safeguard its customer and employee data, intellectual property and operations. However, several acquisitions had resulted in the company's security being highly distributed and siloed, making it challenging to drive these business objectives. Accenture quickly established processes and metrics, and launched the company's first centralized security operations using existing tools and new technologies.

As the client's trusted security partner, we provide 24/7 end-to-end managed security services. These include monitoring, investigation and response for the client's network across the value chain spanning manufacturing, applications and data. With clearly defined processes and metrics, and a standardized approach, the company has completely transformed its security program. The CISO and executive team now have access to monthly dashboards that provide visibility into key metrics, trends and risks to drive informed decision-making regarding risk and investments. In addition, a highly scalable operating model has helped improve the coverage of critical assets, processing more than 2 TB of traffic per day from thousands of log sources.

A SILVER BULLET TO SECURE THE DIGITAL ECONOMY IN INDIA

India's cybersecurity market is expected to touch US$35 billion by 2025, according to the National Association of Software and Services Companies (NASSCOM).[5]

While the potential appears big, a big-bang approach to cybersecurity may not be the way to go, given companies' inadequate cybersecurity budgets, a skill gap of 25 percent between demand and supply of cybersecurity professionals, absence of holistic cybersecurity capabilities and limited awareness of cyber laws. In such a scenario, Indian companies need to take a risk-based prioritization approach to cybersecurity that starts with building foundational capabilities and maturing cybersecurity services to make them proactive and holistic for building cyber-resilience inside out. Moreover, a phased prioritization approach will not only help in achieving cost optimization and faster RoI but will also reduce risk and generate better insights on business value-chain protection.

Matching pace with their global counterparts, Indian companies are embarking on their digital journeys, with some leading the digital transformation curve. As cyberthreats and attacks become more rampant, the need to protect the value chain of businesses is ever-more pronounced. For example, manufacturing needs the protection of IT and operational technology (OT), with rampant attacks on OT systems.

Indian enterprises must continue to rise to the challenge of putting "digital trust" and security at the center of business strategy. Else, in the not-so-distant future, it may become harder to engage consumers such as Siddhi, who may start taking back control of their online time and reducing the amount of data they share on the Internet—a not-so-desirable state for one of the world's fastest-growing digital economies!

AUTHOR

KANWAR SINGH
Managing Director &
Lead – Technology
Accenture in India

REFERENCES

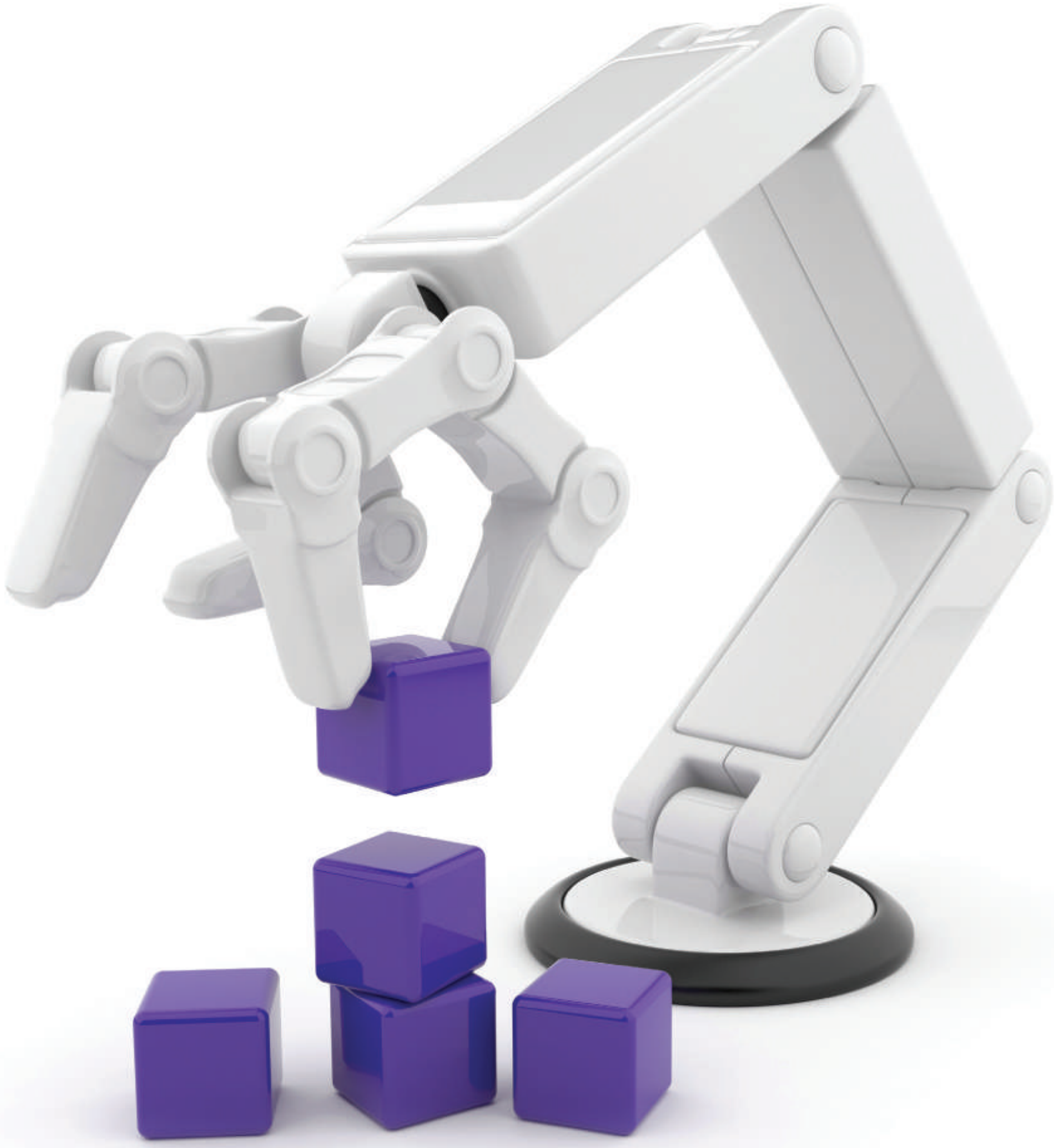
1. https://www.livemint.com/industry/telecom/internet-users-exceed-500-million-rural-india-driving-growth-report-1552300847307.html

2. https://www.thehindubusinessline.com/info-tech/digital-economy-a-1-trillion-opportunity-for-india/article26323150.ece#

3. https://inc42.com/buzz/cyber-attacks-india/

4. https://www.accenture.com/us-en/insights/cybersecurity/reinventing-the-internet-digital-economy

5. https://economictimes.indiatimes.com/industry/tech/cybersecurity-first-responders-in-demand/articleshow/67496994.cms?from=mdr



DIGITAL PROCUREMENT

AN EYE ON THE FUTURE

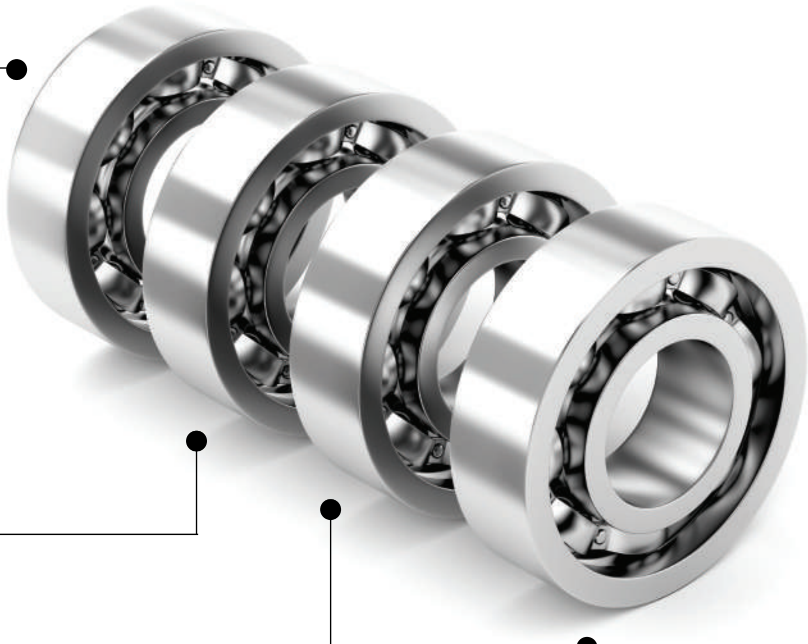
Empowering the rise of procurement from gatekeeper to strategic enabler

Picture a future in which organizations use leading-edge digital technologies such as advanced analytics, robotics and artificial intelligence (AI) to create powerful experiences for those who work in and with procurement.

The future is closer than you might think.

Digital is a major force of change for procurement organizations. Our study[1] reveals that over the next three to five years, rapidly evolving digital platforms and technologies will create a seismic shift in the way procurement is organized in India. We envision radical transformation will take place at the very core of the relationship between internal business stakeholders and the external supply base. And, this will give rise to a new procurement function that will not just drive down operating costs, but also emerge as a new center of value creation for the organization (see figure 1).

Figure 1: Our vision of the new procurement



Information over process

- Readily available and transparent markets, supplier performance and pricing
- Virtual procurement agents-led sourcing processes

Emphasis on experience

- Amazon-like buying experiences
- Real-time application of compliance and process criteria based on risk profile and market conditions

AI & information support stakeholders

- AI manages all but the rarest exceptions
- Accurate and automatic payments

Process integration

- Digital technologies break down functional silos, making the process faster and more effective

The big question is—are Indian companies ready to take the next step to rebuild procurement with digital technologies?

Let's get real. The definition of value that procurement delivers is changing—from an exclusive focus on cost reduction and savings to work that creates strategic differentiation for the company. This also means a change in the way the function is evaluated as companies use more advanced measures, ones that are tied closely to their overall strategy and financial metrics. It's time for procurement to respond to this new set of demands.

BRACE YOURSELF FOR A WAVE OF CHANGE

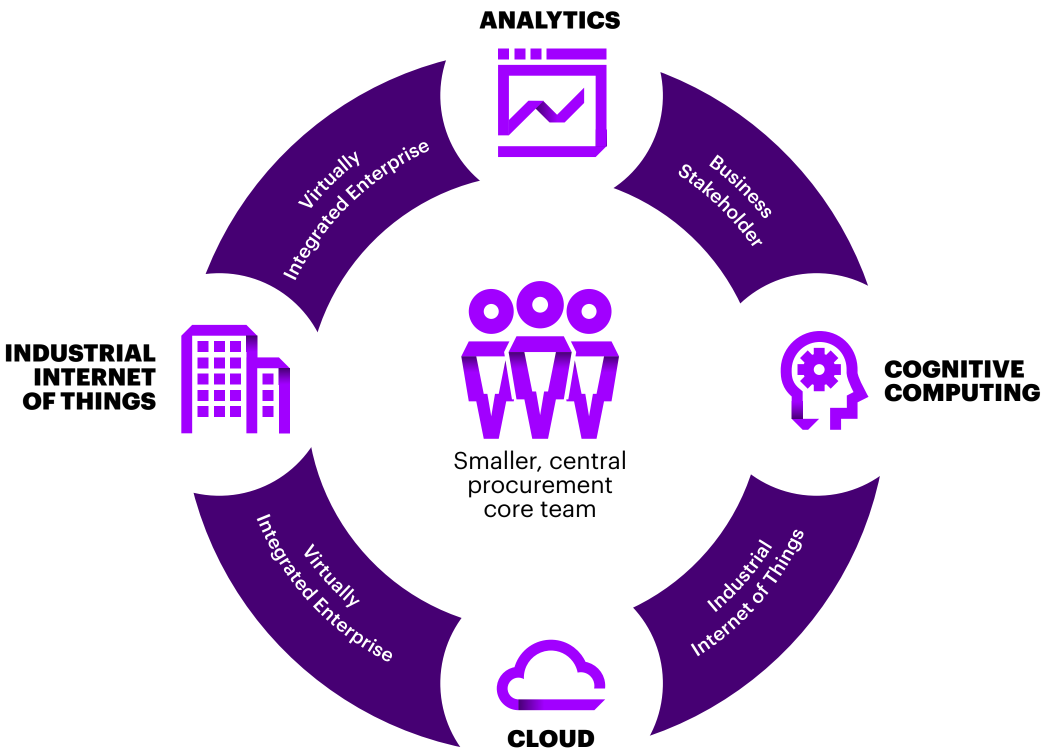
According to our research,[2] the answer lies within a virtually integrated enterprise where the line between buyers and suppliers blurs and innovation flourishes. It is founded on intimate relationships with a smaller group of strategic suppliers that allow buyers and sellers to derive greater mutual and strategic benefits than in the past.

In a virtually integrated enterprise, supplier relationships become tightly intertwined with the company as they become sources of new ideas for maintaining a competitive edge.

Four digital technologies—cognitive computing, analytics, Industrial Internet of Things (IIoT) and cloud—will act as both catalysts and enablers for this new way of doing business.

While **cloud computing** will serve as a foundation for procurement's digital strategy, real-time **analytics**, paired with the advanced use of **IIoT**, will generate deeper and more valuable insights that can greatly enhance decision making. And, **cognitive systems** will serve as digital agents integrated into the fabric of procurement, eventually handling not just transactional activities, but also more strategic pursuits (see figure 2).

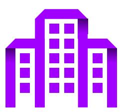
Figure 2: The future will give rise to a procurement organization of one



Together, these digital technologies will make it possible for procurement to reimagine everything it does including the archaic purchase order (PO) process and deliver the strategic, high-value results that senior executives now expect from it.

THE NEW PROCUREMENT IN A PACKAGE

To build a successful procurement organization of the future, companies will need **The Five Apps Bundle** as the underlying infrastructure supporting their procurement needs (see figure 3).



VIRTUAL COMPANY MALL
Features private and public shops for internal customers to select goods and services.

SUPPLY ANALYTICS APPS
Recommend decisions and opportunities for procurement to capitalize on.

Figure 3: Virtual Supplier Room: Creating space for collaboration

VIRTUAL SUPPLIER ROOM
Provides transparency and collaboration with the right suppliers at the right time.

VIRTUAL CATEGORY ROOM
Allows category managers to track their projects and find relevant market intelligence data for their category.

SUPPLIER NETWORK APP
Connects a company with supply markets for POs and invoices.

Organizations need to take the next step today and build a new digitally powered procurement function.

"The whole traditional procurement process is going to be dead... all will be dramatically different if not wholly automated in 10 years."

~ Chris Toomey
Senior Vice President, Coatings Solutions, North America, and
Former Senior Vice President of Procurement, North America BASF

To accelerate procurement's transformation to the next frontier, companies must make a steady march toward cloud-based solutions. These solutions offer superior usability and mitigation of risks, and use the content in the cloud to facilitate core procurement activities. As more "things" become connected to the Internet and to one another, IIoT will help companies challenge the status quo. Doing so can lead to disruptive innovations that will dramatically boost procurement's performance. We found that by pairing analytics tools with procurement, experts can make more effective, data-driven business decisions. Also, if companies can apply cognitive computing to routine, manual work and complex activities, they will end up with a dramatically different procurement workforce. A workforce that focuses on more strategic pursuits to unlock far greater enterprise value at a significantly lower cost.

THE NEXT-GEN PROCUREMENT AT WORK

Fast-forward to 2025. Aditya is a sourcing manager who is driving his company's ambitious new construction project. Using the Accenture Intelligent Advisor tool available on the Insights App, Aditya can get detailed pricing predictions in the categories of construction projects he manages in just a few minutes. Here's how. A robotic process automation (RPA) bot extracts data on suppliers and construction labor rates in India from various sources such as contracts and request for proposals. The machine learning algorithm that powers the tool feeds on this data and continuously updates itself. So, when a new construction project kicks off, the predictive model is updated as changes occur in the market and as previous project results are closed and tracked.

Aided by this data-rich, analytics-driven and AI-enabled process, Aditya can execute his construction project confidently, knowing he has made the best decision for his team and company.

TAKING STOCK

It's no surprise that a slow purchase requisition (PR) - purchase order (PO) process can cripple a business. Currently, the existing PR-PO process of many Indian companies is fragmented, leading to limited tracking, control and visibility to stakeholders. **In the future, companies must use cloud-based solutions to digitize the end-to-end PR-PO process.** This will help them achieve enhanced visibility and tracking, reduce cycle time by automating transactional activities and, most importantly, improve user experience for all stakeholders. Let's consider the example of **a leading Indian company that transformed its end-to-end PR-PO process using SAP Enterprise Resource Planning (ERP) and an e-procurement system.**

END-TO-END DIGITIZATION OF THE PR-PO PROCESS

LOCALIZED

PR Creation

SAP ERP solution

- Enter details of the PR into the system
- Request is routed to stakeholders
- Once approved, a PR is automatically generated

CENTRALIZED

Request for Quotation

E-procurement system

- Send requests directly to suppliers
- Coordinate with vendors for offers

Prepare Comparative Statement

E-procurement system

- Prepare a comparative statement or an award scenario
- Comparative statement uses historical results available for suppliers in similar categories to correlate, predict and build a comprehensive view across quality, performance, technical and commercial parameters

CENTRALIZED - CoE

Negotiation/Approval

E-procurement system

- Negotiate with vendors on prices, and terms and conditions
- Conduct e-auctions
- Gain approvals

CENTRALIZED - SSC

PO creation

SAP ERP solution

- Create POs based on approved award scenario
- Submit for PO release

BENEFITS OF A DIGITIZED PR-PO PROCESS

- Enhanced visibility and tracking of the entire PR-PO process
- Improved user experience for all stakeholders
- Comprehensive capture and easy retrieval of vendor life cycle history aids predictive analytics
- Reduced cycle time through automation of transactional activities

UNLEASH THE POWER OF DIGITAL

Our research[3] reveals **five strategic imperatives that organizations must address to transform their procurement.** In their quest to become the next-gen digital procurement, many organizations are already applying some of these imperatives.

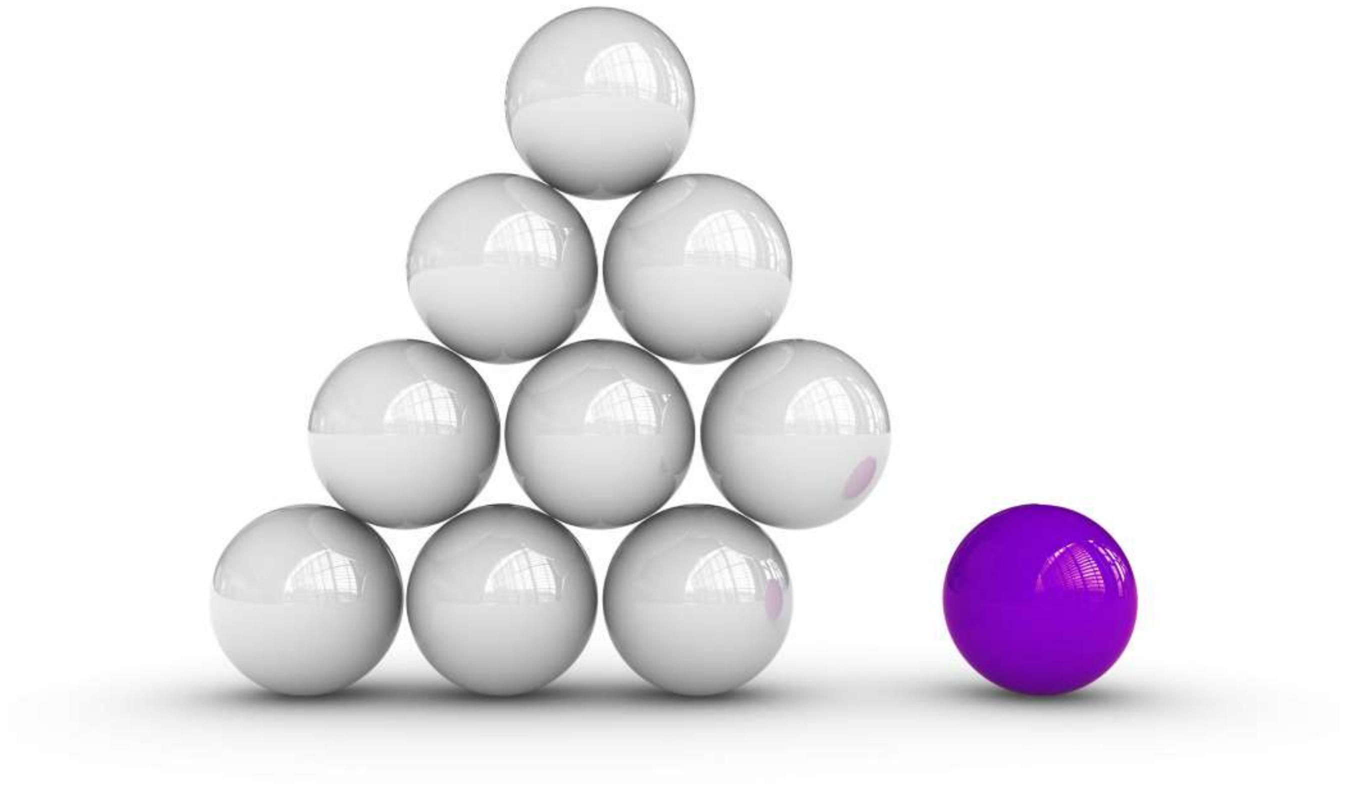
1. MAKE DATA THE ROCKET FUEL

Build an intentional strategy to capture more and more internal and external data. As data can help predict the needs of employees, know which goods or services are available to meet those needs best, determine which suppliers are the right ones and identify the right price to pay.

2. LET TECHNOLOGY POWER THE DATA ENGINE

Leverage the power of new technologies such as AI, natural language processing, analytics and bots to make sense of the vast amounts of data collected. When organizations combine relevant data with these highly advanced technologies, they can automate and enhance a wide range of activities and processes—and, in some cases, go beyond simple automation to providing advanced intelligent support.

Using RPA—a.k.a. bots—a company can automatically, with no human intervention, convert a requisition into a PO when all required fields are complete and accurate.



3. BRIDGE THE SKILL AND TALENT GAP

Closing the talent gap is one of the biggest obstacles for procurement to overcome. To generate true value, organizations should find and hire qualified data scientists, AI experts, category specialists and design professionals. Once the cross-functional team is built, develop deep skills across these areas and combine them in ways that break down old siloed functions and amplify outcomes.

4. UPDATE YOUR POLICIES AND PROCEDURES

To ensure everyone understands their new responsibilities and the new processes in place, organizations must review their operating model, and policies and procedures for relevance in the New.

5. CREATE WINNING USER EXPERIENCES

An engaging, intuitive user experience will encourage procurement's stakeholders to use online procurement tools. The more people use these digital capabilities, the more effective they will be in buying, and the more data the business can collect on specific transactions.

THE FUTURE BEGINS TODAY

Transforming procurement into a truly digital organization is a competitive necessity.

Continuing to run antiquated procurement processes can stunt growth and prevent organizations from pivoting to the New—whether that's selling new products, selling to new customers or adopting new business models.

While there is no doubt that digital can help improve procurement's cost savings, visibility, efficiency, and compliance and control, these outcomes will not come from digital alone. Digital is a means to an end—not an end in itself.

Companies should first assess if they have the vision, time and investments to raise the role of procurement within their organization through digital.

Accenture has been working with organizations globally to define and prepare them for their journey to the future of procurement.

The time to start is now.

AUTHORS

AMNEET SINGH
Managing Director – Products
Accenture in India

VIVEK LUTHRA
Managing Director – Procurement & Supply Chain Operations Lead – AAPAC
Accenture

REFERENCES

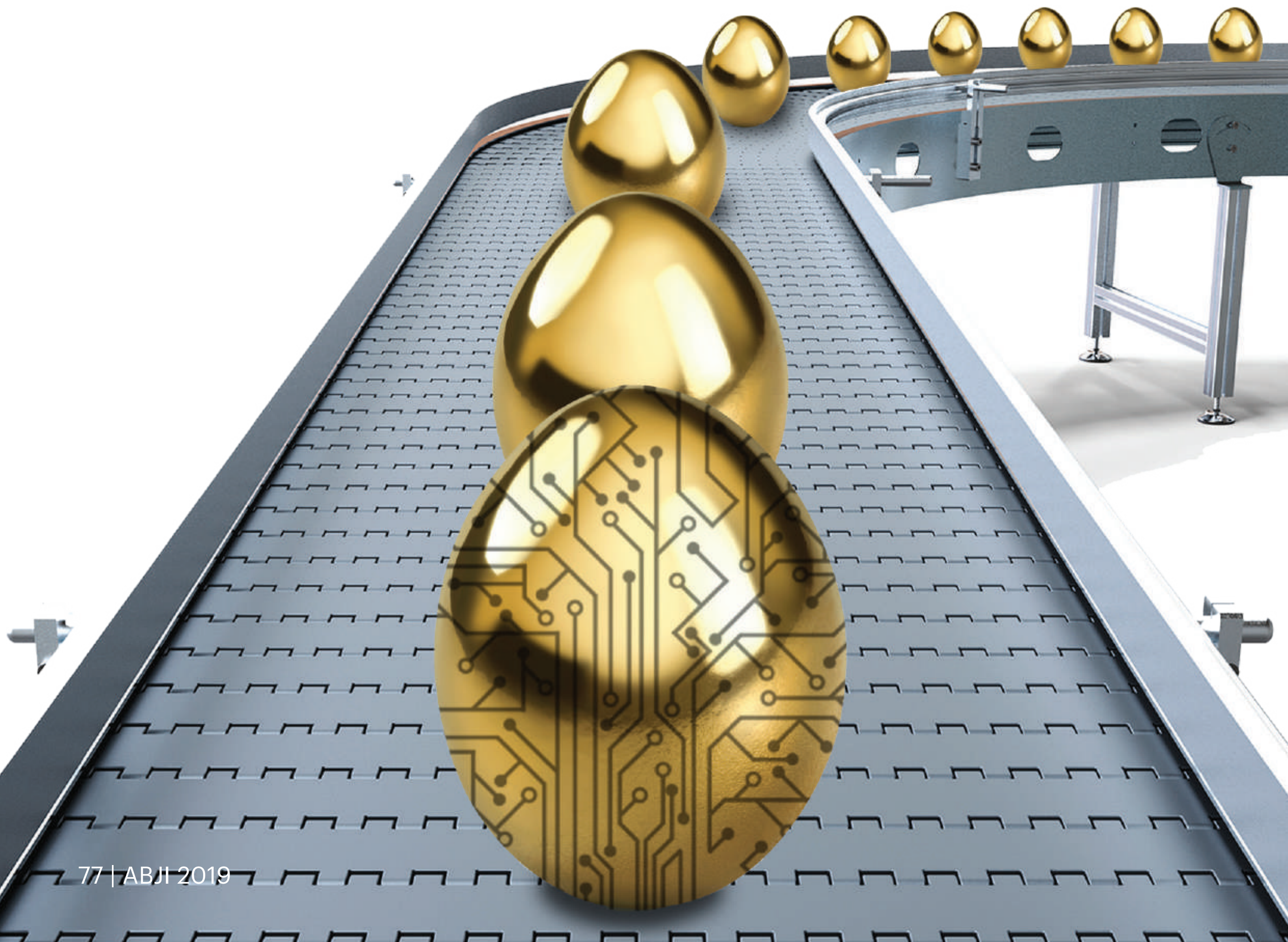
1. https://www.accenture.com/t20161127t221524__w__/us-en/_acnmedia/accenture/conversion-assets/dotcom/documents/global/pdf/dualpub_14/accenture-procurements-next-frontier.pdf

2. https://www.accenture.com/t20161127t221524__w__/us-en/_acnmedia/accenture/conversion-assets/dotcom/documents/global/pdf/dualpub_14/accenture-procurements-next-frontier.pdf

3. https://www.accenture.com/_acnmedia/pdf-63/accenture-next-generation-digital-procurement-pov.pdf

THE MOVER BECOMES THE SHAKER

How to get scalable returns from your digital investments



A large number of companies are trying to leverage digital to create new business models, improve efficiencies and get more out of their supply chains.

While many companies are investing in digital capabilities, only 13 percent have been able to get top-and bottom-line benefits from their investments.

In a recent study, we surveyed 1,350 executives across a range of companies, with a sales turnover exceeding US$1 billion, to examine if they are leveraging the power of the supply chain as a driver of growth. We categorized companies that had successfully scaled more than 50 percent of their digital investments and had higher levels of return on invested capital and digital investment than the industry average as **Leaders (22%)**. Companies whose return on digital investment was less than the industry average on scaling more or less than half of the digital proofs of concepts were categorized as **Laggards (78%)**.

GREAT ROI EXPECTATIONS

Leaders are not only meeting their expected return on investment when scaling digital innovations, they are also exceeding it. Roughly 80 percent of the Leaders have invested in big data and analytics, versus 68 percent of the Laggards.

LEADERS

21.6%
Expected

25%
Achieved

Leaders not only made significantly more returns (more than 17 percent) but also exceeded their expectations. On the other hand, Laggards earned less returns and didn't meet their expectations.

LAGGARDS

8.1%
Expected

7.2%
Achieved

WHAT DIFFERENTIATES LEADERS FROM THE PACK?

PLATFORMS
Intelligent automation platforms leveraging analytics and advanced computing

HYBRID TALENT
Creative and entrepreneurial talent who understand digital technologies, industries and functional priorities

SMART PARTNERSHIP ECOSYSTEM
The ecosystem brings complementary skill sets and new technologies to drive innovation

CUSTOMER CENTRICITY
Focus on segmenting and addressing customers as segment of one rather than a "one-size-fits-all approach"

The key ingredients that enable an organization to scale and generate higher returns from their digital implementation in supply chain and operations are:

1. PLATFORMS, NOT POINT SOLUTIONS

Companies need to move from point interventions to integrated platforms to take their digital journey forward. Platforms enable tight collaboration and ownership for achieving outcomes by providing a single point of visibility, leveraging artificial intelligence (AI) and advanced analytics.

Accenture is working with a leading oil and gas company to develop an Intelligent Procurement & Supply Chain platform, leveraging analytics and AI. The platform will help the client realize US$1 billion in savings.

2. SMART PARTNERSHIP ECOSYSTEM

Encourage supply chain and operations executives to collaborate with non-traditional players. Developing and building a true innovation ecosystem will help them deliver out-of-the-box results. According to a recent Accenture Strategy study, 81 percent of C-level executives surveyed agree that ecosystems allow their organization to grow in ways otherwise not possible. Leaders are all about partnering in an ecosystem, with almost 78 percent showing an inclination toward becoming ecosystem orchestrators, versus only 64 percent of Laggards. Leaders are also more likely to embrace open and co-innovation.

An example would be when, say, a company and its preferred parts supplier invest in blockchain or share the same vision for an AI-enhanced supply chain.

So, how can companies enhance and embrace ecosystem partners? Consider the case for collaboration: **A blockchain solution tested by a diverse group of partners, including AB InBev, Accenture, APL, Kuehne + Nagel and a European customs organization eliminated the need for printed shipping documents. The solution led to substantial annual savings for the freight and logistics industry.** Information is no longer exchanged physically or digitally. Instead, the data is shared and distributed using blockchain. This accelerates the entire flow of transport documents, simplifies data amendments across the shipping process, streamlines the checks required for cargo, and reduces the burden and risk of penalties for customs compliance levied on customers.

3. HYBRID TALENT

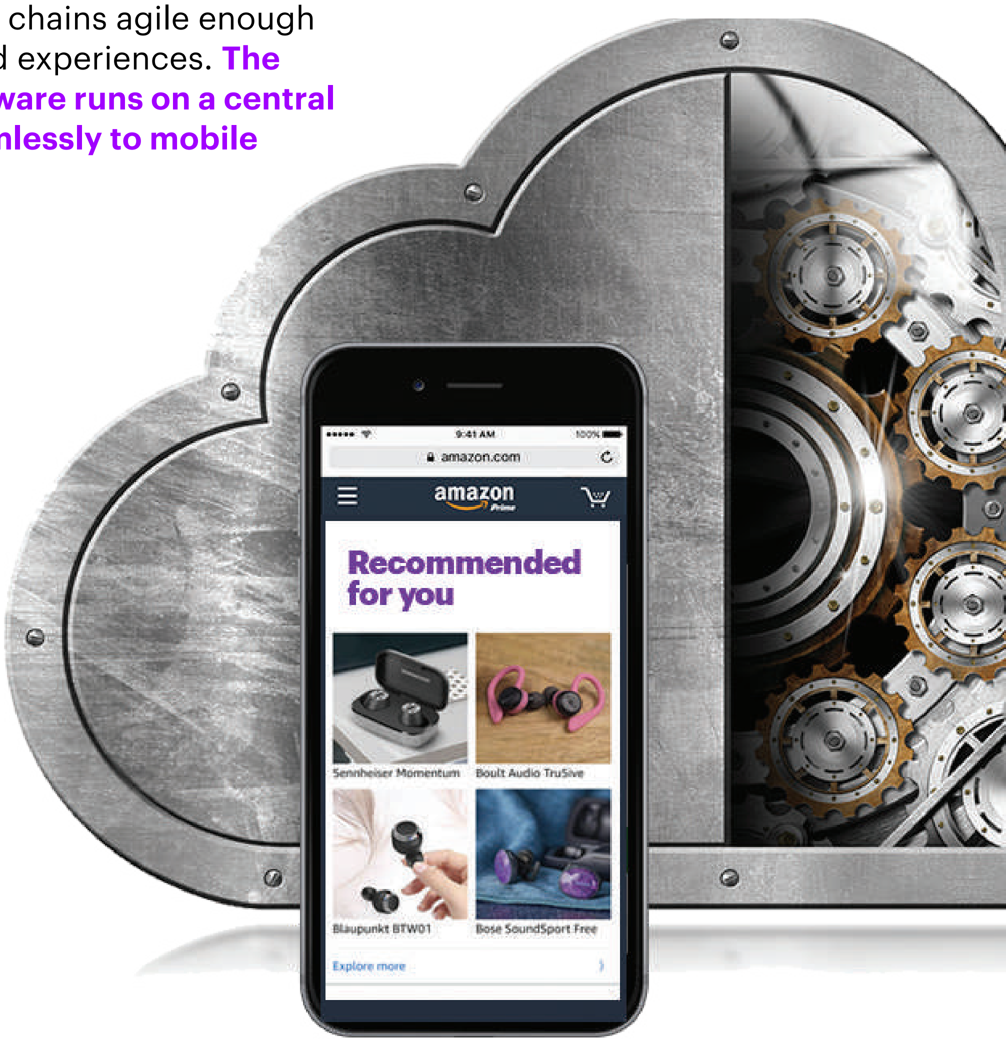
Leaders continuously invest in reskilling the workforce with digital skills and building digital capabilities through a structured process. They realize mastering the human-machine balance not only enhances productivity, it frees their human workforce from mundane, repetitive jobs. Providing employees with skills to work with customer-centric digital platforms will enable them to interpret data for better decision-making.

We partnered with one of the largest steel manufacturers in India to create an Analytics Centre of Excellence. The 30+ analytics projects, aimed at building digital and analytics acumen within the organization, were rolled out to deliver more than US$50 million in savings across the mine-to-metal value stream.

4. CUSTOMER CENTRICITY

It's the key to meeting customer expectations and enabling growth. Supply chain and operations leaders need to reinvent their operating models to be able to service the "segment of one" from the one-size-fits-all operating model. Each C-Suite member needs something different from the insights that are generated across the supply chain and operations to enable them to become more client-centric.

Leaders like Amazon leverage digital technologies that keep their digital supply chains agile enough to deliver hyper-personalized experiences. **The company's Greengrass software runs on a central platform that connects seamlessly to mobile devices. It acts locally on the data it generates—while still using the cloud for management, analytics and durable storage.** Connected devices can execute predictions based on machine learning models, allowing for intelligent hyper-personalization that gives customers the best options for them in the moment.



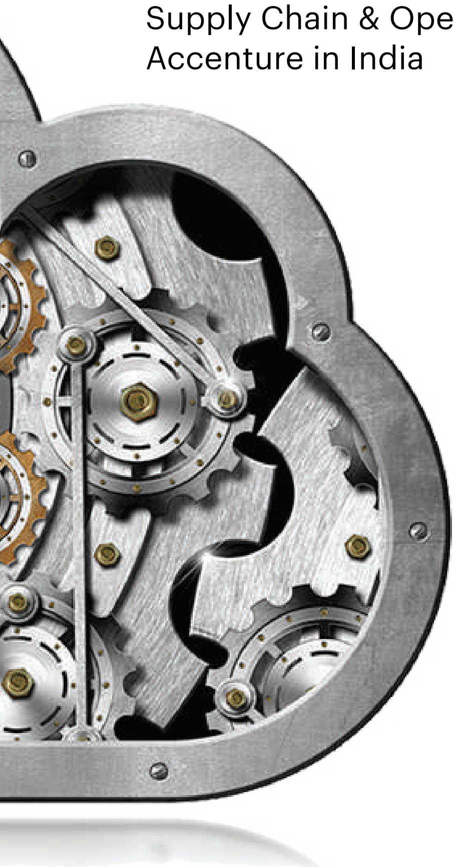
THE CORE OF THE MATTER

Without an overall digital road map, taking the path of developing proofs of concepts and pilots in digital supply chain and operations might create instant incremental success but it is difficult to scale up. It's like launching a speedboat from a ship. While the speedboat takes off, the ship doesn't move. **Unless digital initiatives are tied to the core of the business, organizations cannot deliver superior results.** It involves having a comprehensive strategy, including elements of platforms, ecosystem innovation and customer-centricity, and building a digital powerhouse of talent within the organization.

AUTHORS

MANISH CHANDRA
Managing Director – Accenture Strategy
Supply Chain & Operations Strategy
Accenture in India

GARY HANIFAN
Senior Managing Director
Supply Chain Operations &
Sustainability Strategy
Accenture North America



A BOOSTER DOSE

FOR WOMEN'S HEALTH

**Emerging technologies—
a shot in the arm for improving
women's health outcomes.**

Women's health empowerment is still a pipedream despite years of progress and government interventions. India continues to have one of the highest maternal mortality rates in the world.

Female life expectancy in India is close to 70 years, compared with 87 years in Japan and 78 years in China. Sex ratio at birth too is adverse toward women: 1.1 males per female compared with just 1.03 in Myanmar and South Africa.

Multiple policies and programs exist to improve health outcomes for women, but they are not delivering the desired results at the pace at which change is required.

The picture becomes clearer when we look at the factors affecting women's health empowerment. Rising income and education play a significant role. So does greater choice in reproduction, which is crucial for increasing women's employment levels and improving their standing in society. Other critical factors are the right to property and higher representation of women in the Parliament and government positions.

India already has several progressive policies and programs in place to improve women's health. However, the lack of integration into a holistic model makes it difficult to achieve efficiency at scale. Many programs end up duplicating infrastructure and processes without making a dent in tackling the real challenge. Also, government interventions have almost exclusively targeted care for mothers and children, often overlooking other stages such as adolescence, which could have a lasting impact on women's health and quality of life.

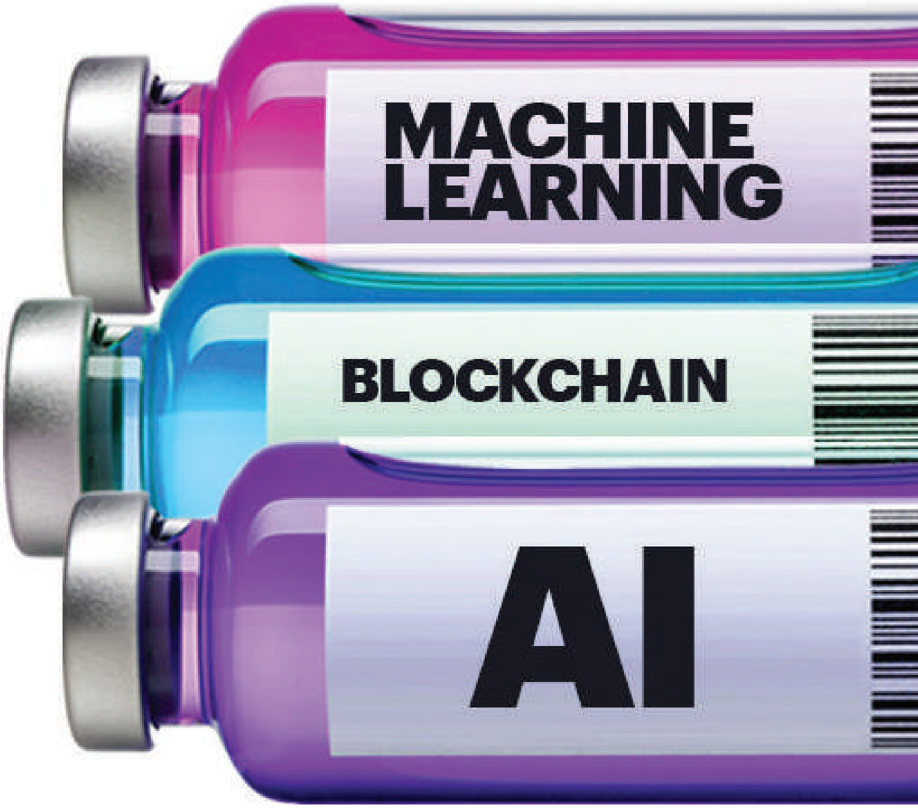
So, what can be done to truly empower women—to give them the "freedom of choice and action" that could positively impact their health? **The answer lies in emerging technologies and leveraging the power of the health ecosystem.**

TECH FOR WOMEN'S HEALTH

Emerging technologies can be a catalyst in empowering women to take control of their health outcomes. By bringing together data and systems and providing actionable insight into specific local contexts, they can help design targeted programs. Moreover, these technologies can assist in reaching the most vulnerable girls by filling the data gaps, addressing the knowledge barriers—the starting point for disempowerment—and enabling cost-effective, real-time interventions.

All stakeholders in the health ecosystem—governments, nonprofits, companies, startups and others—need to collaborate to harness emerging technologies to **empower women through all life stages, from birth to motherhood and beyond.**

Technologies such as AI, machine learning, IoT, blockchain and edge computing can help develop innovative ecosystems and platforms, and locally relevant, scalable solutions to address specific problems at each stage.



TOWARD A LIFETIME OF GOOD HEALTH

Accenture has been partnering with governments and nonprofits, piloting intelligent solutions developed at Accenture Labs to address some of the most pressing challenges faced by women in India at various stages of their life (see figure 1).

	Birth & First 1,000 days	Early Childhood	Adolescence	Employment & Motherhood
Needs	• Access to health services & information • Nutritional supplements	• Sufficient nutrition • Vaccination • Education opportunities	• Access to health information • Safe environment • Education opportunities	• Nutrition • Family planning resources • Work opportunities
Problem Areas	• Access to trained professionals • Inadequate infrastructure • Lack of nutrition	• Neglect due to preference for boys • Risk of exploitation • High mortality	• Limiting social factors, cultural taboos • Exploitative environment	• Family/societal pressures • Poor legal enforcement • Unsafe work and public spaces
Technology in Use	Digital for information dissemination	MIS reporting	Mobile apps	Digital platform
Potentially Usable	Blockchain for data management	Data analytics	AI-enabled predictive monitoring	Blockchain for property rights, AI in public safety
Case Studies	ICDS—maternal and child care	Akshaya Patra	GPower	Couple Power

Figure 1: Potential technology intervention at each life stage

FIRST 1,000 DAYS

Early interventions—prenatal and early childhood—to ensure nutrition and medical care positively impact the health and well-being of mother and child. Accenture Labs' innovative enterprise mobility solution is helping increase the efficacy of **Integrated Child Development Services (ICDS)**, one of the world's largest women and children programs, by addressing the operational gaps. The program **serves more than 58 million children under the age of six years and 10.23 million pregnant and breastfeeding mothers every year.**

Piloted across 5,000 families in Karnataka, the Accenture solution assists with data collection and integration, and helps ensure continuous care—from early registration to antenatal care checkups and institutional delivery to postnatal care.

The results: a 40 percent reduction in the time taken to register a pregnancy and retrieve relevant medical records; a 100 percent accuracy and usefulness rating from patients and staff; and reduction in the consultation wait time to near zero from 90–120 minutes, nearly doubling each clinic's capacity. What's more, a tracking algorithm determines the level of risk associated with a pregnancy, helping prioritize care for those who need it the most.

EARLY CHILDHOOD

Studies show that midday meals have a much more significant impact on girls than boys—addressing malnutrition, stunting, unhealthily low body weight, and school enrollment and dropout rates. Akshaya Patra, a nonprofit organization and the largest midday meal provider in the world, wants to ensure that no child in India is deprived of education because of hunger. It currently serves nutritious lunches to 1.7 million schoolchildren across 12 states in India.

Accenture is helping Akshaya Patra move closer to its goal of feeding 5 million schoolchildren every day by 2020. Accenture has optimized one of Akshaya Patra's 20 mega kitchens through data collection via intelligence at the edge and IoT-based monitoring of kitchen processes.

The impact:
Akshaya Patra is currently serving 20.5 million additional meals annually using the existing infrastructure.

Replicating the model across Akshaya Patra's 20 kitchens and building some additional capacity could make Akshaya Patra's vision a reality.

ADOLESCENCE

Underprivileged girls aged between 10 and 24 years remain vulnerable to child marriage, child labor, child pregnancy and trafficking. Resolving this issue requires a 360-degree view of the individual vulnerabilities of each girl to predict and prevent problems. However, the data requirements and complexity of such analyses can be daunting.

GPower—short for girl power—developed by Accenture Labs and the Child in Need Institute (CINI), leverages cloud computing and smartphones to deliver a holistic solution, affordably.
This award-winning app generates data in the field through intermediate agents. The data is analyzed at two levels—at the edge (on the mobile device) for quick decisions and centrally (via the cloud) to glean insights from millions of records. A vulnerability index for each girl, village and district is then generated based on which community facilitators are informed of the measures to be taken for each girl. Not just that, the app informs them of government schemes the girl is entitled to, along with additional mitigation steps that may be required.

MOTHERHOOD AND EMPLOYMENT

The leading cause of death for girls aged 15–19 years are pregnancy or childbirth-related complications. And the lack of women's autonomy in reproductive decision making and low involvement of men in reproductive health matters is part of the problem.

Couple Power, a joint effort of Accenture Labs, CINI and the International Center for Research on Women, is helping achieve better maternal health, one couple at a time. Piloted across 64 villages in Jharkhand, Couple Power has Lead Peer Couples educating other couples about family planning and its many health and economic benefits in peer meetings. And program coordinators use machine learning and voice analytics on an app developed by Accenture to evaluate the effectiveness of these sessions and plan interventions.

Another important aspect of women's health empowerment is employment—it can decide the relative bargaining power of women in household decision making and use of resources. However, reentering the workforce after childbirth can be a challenge. Access to high-quality feedback to improve interview skills can help.

Accenture Labs' dynamic interview practice tool provides real-time, actionable insights to job seekers. Piloted with youth@East London Business Alliance (UK) and Her Second Innings (India), it uses behavioral science, a conversational agent and emotional AI to improve interview success rates for women rejoining the workforce.

ACCELERATE WOMEN'S HEALTH OUTCOMES

There's no doubt that technology-based interventions have real potential to transform every stage of a woman's life. However, there's a need for a more holistic approach. To match the promise of intelligent technologies with women's health empowerment goals, here's an action framework the government can consider:

PROMOTE TRANSPARENCY AND DATA ACCESS

Transparency and data access are critical to drive change. They can guide policymakers to make the right interventions at the right time. However, most current technology implementations are at an operational level and need to go beyond that. **The proposed technology backbone with a unified health and social services database is a step in the right direction** because it can help fill the institutional gaps that prevent equitable distribution of resources and provide actionable insights.

MAKE TARGETED INVESTMENTS

Instead of replacing or reinventing the government health infrastructure, the idea is to make investments more targeted and effective in meeting the desired goals. **Programs need to be informed by intelligent data to improve outcomes.** Moreover, a real-time monitoring and risk management system will ensure they are on track.

TAKE AN ECOSYSTEM APPROACH

The sheer complexity of the issues and the need for substantial financial resources imply that the government must build trusted partnerships with businesses, nonprofits and academia. Emerging technologies can act as a bridge to generate a more significant impact. A good example of the power of the ecosystem and the role of technology in orchestrating it is Grameen Guru, a joint effort of Grameen Foundation and Accenture Labs.

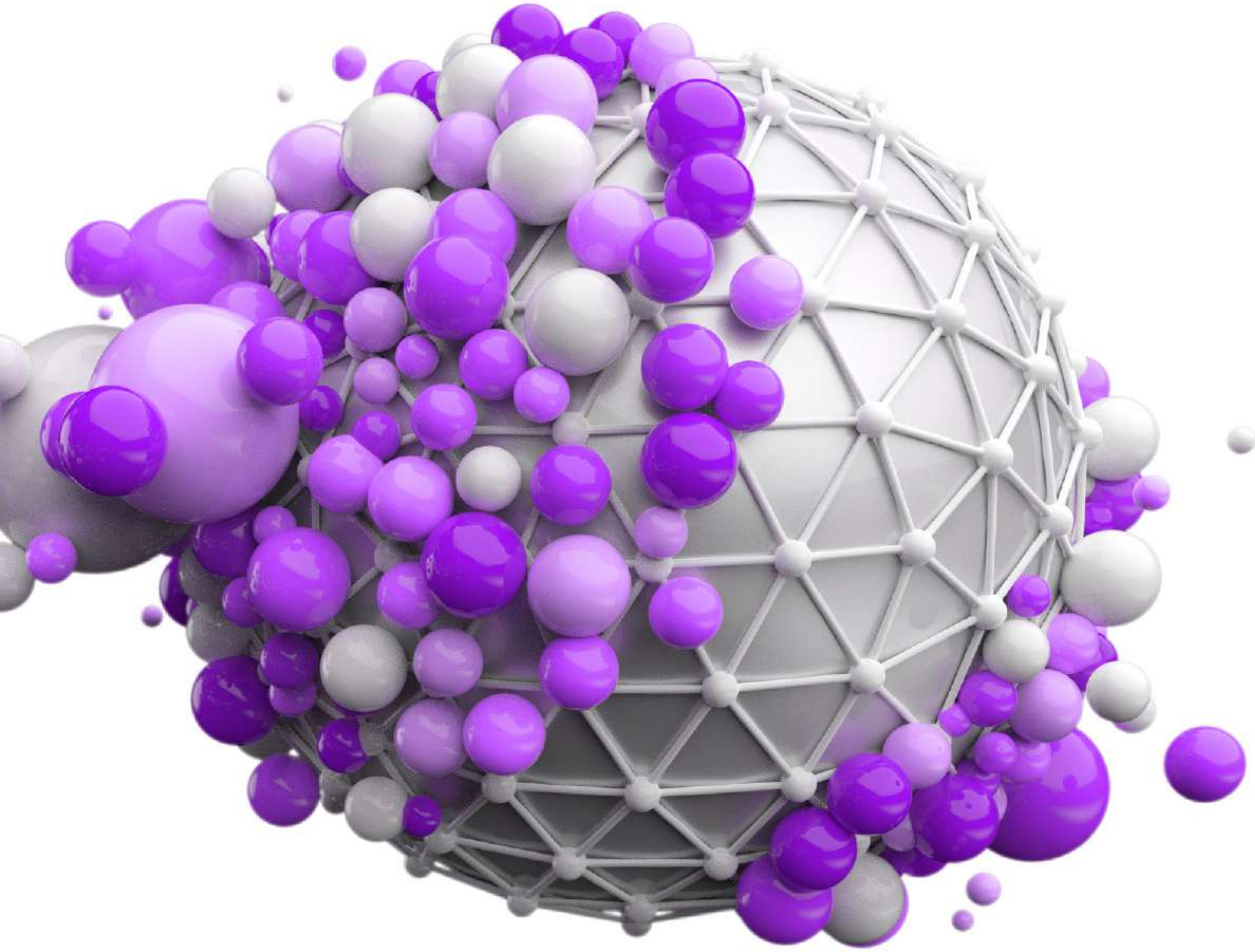
The **Grameen Guru app uses artificial intelligence and augmented reality-based technologies to educate women on financial products and services, enabling them to make informed choices.** Users can hold their phone over a brochure and the Guru virtual assistant pops up to prompt a conversation in the local language. It empowers more than 1,000 frontline microfinance workers and more than 58,000 women beneficiaries to use digital financial services.

No doubt economic development will ensure gender inequality falls and women's health outcomes improve. However, **emerging technologies can accelerate the process**—at scale and without decades spent waiting for economic growth. They can transform the current health infrastructure and resources. **Harnessing the power of the ecosystem** is critical here—it will **act as a force multiplier and help ensure sustainability, scalability and affordability.**

AUTHOR

SANJAY PODDER
Managing Director – Accenture Labs
Asia Pacific

AMANDA LEACY
Managing Director &
Global Inclusion & Diversity Lead
Accenture



CONQUERING DISRUPTION DENIAL

How to make a wise innovation pivot in the time of extreme polarities

In an era of increasing disruption, innovation is vital. However, beyond the buzzword, business leaders struggle to define and actualize innovation within their organizations.

In just a few recent years, smartphones put the largest mobile phone manufacturer out of business. Digital photography displaced the film-based camera market and, now, smartphones are disrupting the industry yet again with their high-end lenses.

There's no denying that new business models and industry-disrupting startups are putting pressure on leaders to act. Some are forced into oblivion. However, those who pivot to pursue new growth opportunities through innovation can maintain, and even surpass, their position in the market. That's easier said than done.

NOT ALL INVESTMENTS ARE EQUAL

Accenture research found that incumbents and startups together spent US$3.2 trillion on innovation-related initiatives between 2012 and 2017.[1] This included investments in research and development, technology, corporate venture capital, and mergers and acquisitions. However, only 14 percent of those surveyed turned these investments into real value. The others saw a 27 percent decrease in return on investment. The obstacles they face are significant (see Figure 1).

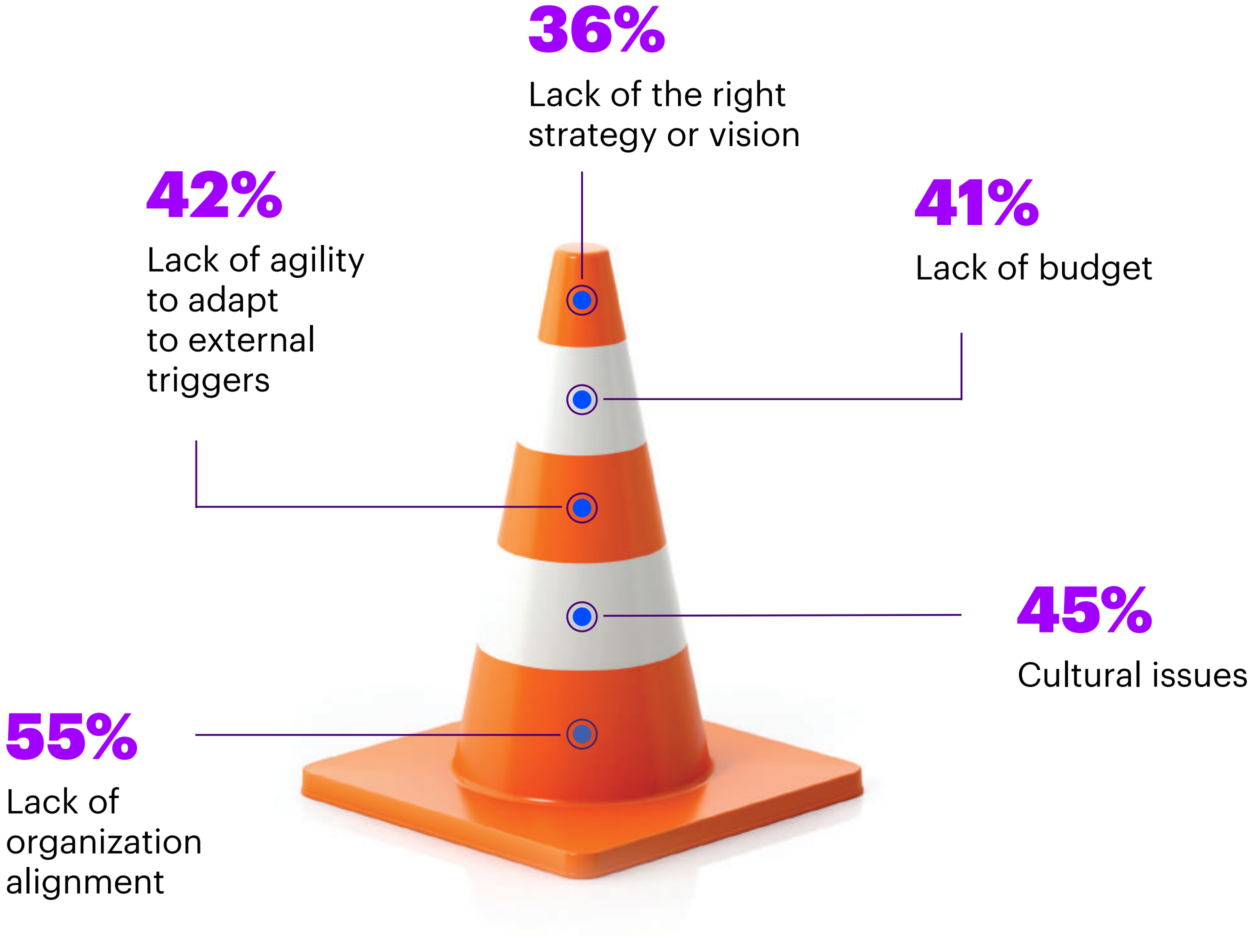


Figure 1: The most significant obstacles to innovation in large companies[2]

How can CEOs foresee disruption before it happens? Also, how can they prepare their organizations to navigate these turbulent times better?

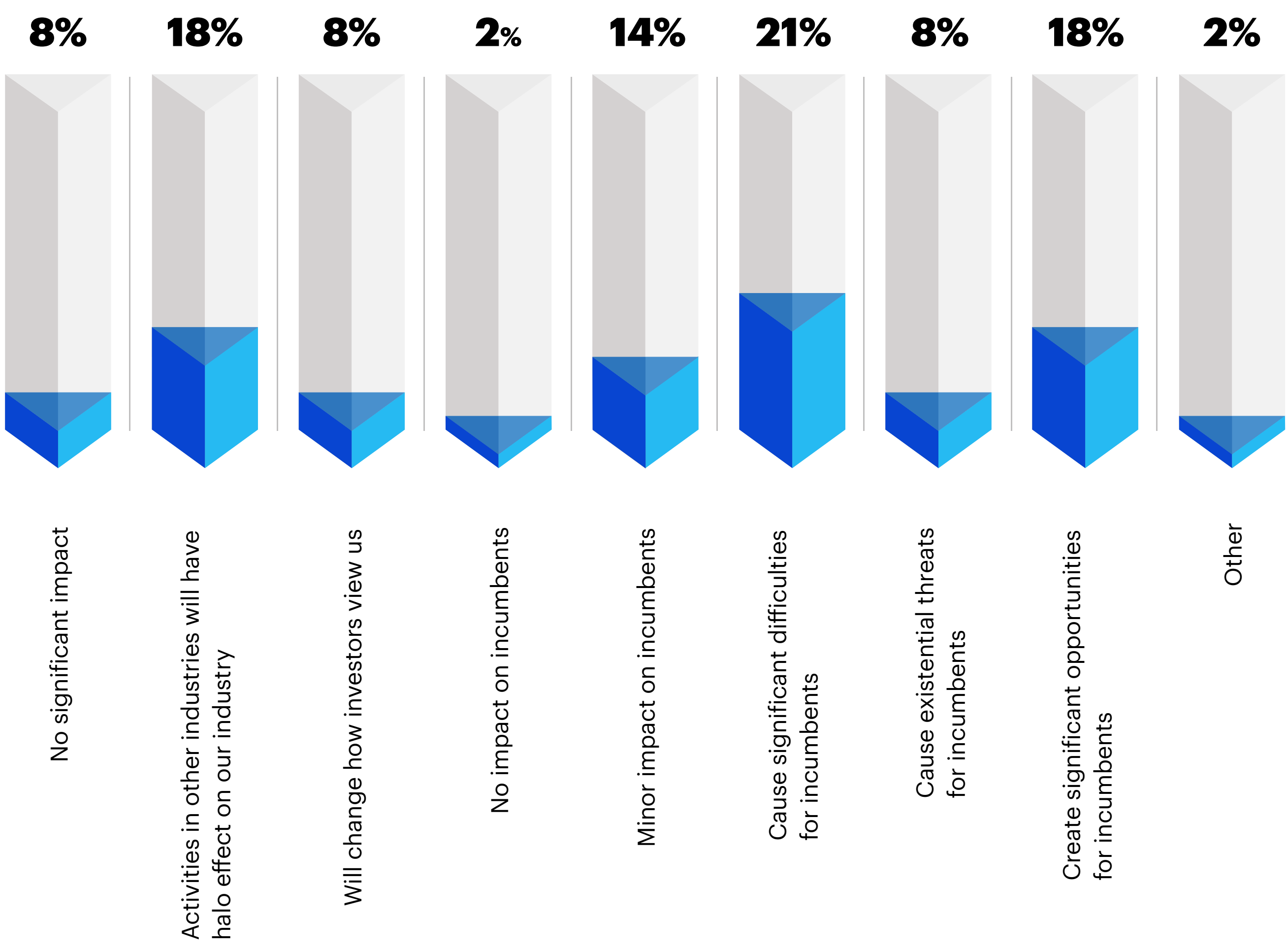
While there are no simple answers, here are two strategies that business leaders can adopt when facing these obstacles.

Strategy 1

FAIL FAST, SUCCEED FASTER

In this era of glaring disruption, many organizations are still in denial. Figure 2 shows that 50 percent of organizations still perceive the proliferation of digital giants as having little or no impact on them. When the fact is, to successfully navigate and thrive in disruption, organizations must be fully aware of the external environment. **Innovation models vary from organization to organization—from simple ideation workshops to corporate venture capital investments.**

Figure 2: Perceived impact of digital giants over the next five years[3]



However, only a few organizations have been able to turn innovation into impact, mainly because they allow employees to experiment profusely and learn. To seize the benefits of an innovation-led environment, organizations need to foster a culture of innovation and encourage their leaders to contribute to building it actively. These practices will give organizations the skills and insight they need to respond and adapt both incrementally and continually. **Here's the balance organizations need to strike:**

TOLERANCE FOR FAILURE VS. UNDERPERFORMANCE

It is estimated that 90 percent of all startups fail.[4] So, when large organizations want to emulate a startup's DNA, it is accepted that the only way innovation can take place is to tolerate and celebrate failure. While there is some truth in it, and failure is an intrinsic part of innovation, it has been widely seen that many innovators and intrapreneurs are not able to distinguish between genuine failure and a case of underperformance. Genuine failures happen in the process of pushing boundaries of innovation in the organization, whereas, a sheer case of mediocrity and underperformance can take place in the name of innovation, but could have been avoided with a little more rigor and discipline.

EXPERIMENTATION SAFETY NETS VS. INDIVIDUAL ACCOUNTABILITY

There is a universal acceptance that organizations need to provide a safety net to their innovators and intrapreneurs to give them the freedom and bandwidth to innovate without fear. Innovators and intrapreneurs tend to use company resources to indulge in blue ocean thinking and explore ideas beyond the organization's core business areas. While experimentation needs to be encouraged and protected, an individual's accountability to the time and resource commitments for these explorations must also be justifiable and contain guardrails.

AGILITY VS. PERFECTION

In today's fast-paced digital era, it is not the big fish that eats the small fish, but the faster fish that eats the slower fish. Business leaders need to, therefore, continuously look for ways to move faster and work smarter. However, the organization DNA is more attuned to achieving perfection and mitigating risks. Organizations that only recognize and reward perfect solutions tend to delay responding to external triggers, miss out on valuable opportunities and fall easy prey to disruption. Those that adopt iterative and agile methodologies, and launch their innovations in multiple sprints, achieve much higher success rates than those that are still delivering on the requirements of the pre-digital era.

Strategy 2

COLLABORATE TO INNOVATE

Collaboration is key to overcoming internal and external challenges.

An MIT Sloan survey of managers, executives, analysts and thought leaders across the world found that 80 percent of those from digitally mature companies drive innovation through partnerships.

Many of these organizations have focused solely on software platforms to drive innovation. Accenture's Innovation Architecture takes it one step further. Organizations are advised to look at a more holistic approach to innovation, relying on an architecture that brings together existing operating models and new capabilities to create a step-change in agility, efficiency, productivity and creativity. These new capabilities need not be limited to internal talent. Organizations are learning that they don't need to do everything on their own. But, they will need to collaborate.

Accenture's managed-service model, known as Open Innovation as a Service, has helped many clients on their innovation journey by collaborating with deep technology growth-stage startups. For example, **Accenture, along with its Open Innovation partner, Sirion Labs, established a Centre of Excellence in India to work on contract administration and management that services global clients.** Through this collaboration, a large airline client saved US$5 million in the first four months—double its annual target.

Accenture is also working with an international airport client in India to help define an innovation architecture and design a technology platform to improve the overall passenger experience. An Innovation Center was set up to drive internal innovation and external collaboration to deliver prototypes—and, subsequently, value—more quickly. Over the last two years, the Innovation Center evaluated more than 50 partner solutions in its effort to integrate the latest digital technologies.

TURNING INNOVATION INTO TANGIBLE OUTCOMES

There's no end in sight to digital disruption. Instead of denying it, or even delaying a response, it's much more effective and efficient to face it head-on. Some practical steps business leaders can take to navigate the unpredictability of digital disruption and turn these strategies into value, include:

- Recognizing internal challenges and embarking on a cultural transformation
- Engaging a dedicated team to help identify the transformation journey to the new
- Defining KPIs for each employee on the process and product innovation, ensuring its adoption in both the old and new business
- Encouraging rapid prototyping to prove and demonstrate a business case before committing more resources to a project
- Breaking the silos in favor of cross-functional efforts that engage diverse talents beyond the core business capabilities

Driving innovation and making it sustainable is not a "one and done" exercise. It's a continuous evolution that requires business leaders to take cognizance of their organization's polarities, address challenges through cultural change and encourage external collaboration.

Armed with the right mindset, strategy and partners, organizations can innovate and thrive in times of constant change. It's just a matter of deciding to step out of their comfort zone.

AUTHOR

AVNISH SABHARWAL
Managing Director
Accenture Ventures in India

REFERENCES

1. Accenture. 2018. "Discover where value's hiding: How to unlock the value of your innovation investments." Available online at https://www.accenture.com/us-en/insights/consulting/innovation-investment-value.

2. Harvard Business Review. 2018. "The biggest obstacles facing innovation in large companies." Available at https://hbr.org/2018/07/the-biggest-obstacles-to-innovation-in-large-companies.

3. Gartner. 2019. "CEO Survey: CEOs are divided on the impact of digital giants – now is the time for CIOs to act." Available at https://www.gartner.com/en/documents/3907012/2019-ceo-survey-ceos-are-divided-on-the-impact-of-digital.

4. https://www.forbes.com/sites/neilpatel/2015/01/16/90-of-startups-will-fail-heres-what-you-need-to-know-about-the-10/#24fe3e246679

ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world's largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With **492,000** people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. **Visit us at www.accenture.com.**