Getting smart about applying data, analytics and artificial intelligence to achieve higher power.
Will your organization be a disruptor or be disrupted? Technology waits for no one, so organizations need to quickly get smart about the combined power that data, analytics and artificial intelligence (AI) can offer in transforming their business.

The blend of technology, data and talent that makes intelligent systems possible has reached critical mass, driving extraordinary growth in AI investment globally. In India, AI has the potential to add close to US$1 trillion, or 15 percent of India’s current gross value by 2035.1

As AI starts to pervade boardroom conversations, the convergence of data and analytics powered with AI can realize new levels of value. We call it Applied Intelligence.

Accenture Applied Intelligence applies AI and human ingenuity to help clients solve their most complex business problems by:

- Providing deeper insights and recognizing patterns in data
- Enabling highly targeted outcomes
- Empowering the automation of processes at a scale that humans simply cannot hope to match
DEEPER INSIGHTS FROM DATA

Many organizations understand that big data can help them solve their business challenges. But today, big data has evolved to ALL data and can provide a much more holistic view of customers and operations. Leveraging all sources and types of data—unstructured, dark data and third-party sources—can uncover previously hidden insights.

The Lodha Group, a real estate major in India, teamed with Accenture to bring the benefits of big data analysis to improve their lead conversion. Using several of Accenture’s big data tools at two key projects in Mumbai, India, The Lodha Group achieved a 50 percent increase in lead conversion by more effectively being able to prioritize their efforts and resources.

In the highly competitive retail marketplace, Accenture is helping retailers understand what drives traffic to their various stores, whether it is in-store, online or mobile. We integrate the dozens of internal and external data sources, whether it’s stock keeping unit (SKU) data, geolocation data or web browsing, and then leverage machine learning to identify the real drivers and patterns in traffic to help clients define strategies that will allow them to attract traffic in an extremely targeted manner.
Creating Targeted Outcomes

As the data explosion has been accepted by many, we now need to make the data tangible and real to be able to create value for customers and businesses. Pragmatic approaches with clearly defined targeted outcomes must be identified and applied to solve business challenges.

The ability to understand individual preferences and behaviors is allowing businesses to move from looking at markets of millions to looking at a million markets of one, to get to the real individual.

This opportunity crosses many consumer-facing businesses such as healthcare, retail, hospitality and financial services. For instance, Accenture’s data science team helped an online insurance client reduce churn and improve profitable growth by building an algorithm to predict the customer lifetime value of all their existing and potential clients. Each customer was matched to the right offer. The matching helped to retain and attract new customers and drive profitable growth for the company.

Another fitting example is Accenture’s work with one of India’s leading travel services companies to drive sales growth through analytics. Accenture’s strong capabilities and extensive experience in customer analytics and sales transformation have helped the client grow its holiday business more than 18 percent annually. This omni-channel growth is being powered by analytics in combination with targeted, customized marketing campaigns focused on customer propensity to travel.
AUTOMATION AT SCALE

Using AI, machine learning and advanced algorithms enables organizations to unlock tremendous value from data that was previously unreachable. Businesses are still in the infancy of tapping into the vast potential of these combined technologies, but now is the time to accelerate. Many organizations have a true hunger to apply these new capabilities to be more competitive, open new markets, create new revenue streams or build new business models across the globe.

Top e-commerce companies in India are in a head-to-head competition to gain market share. They are using AI to create better products, user experiences and logistics, as well as to effectively target the right demographics.

Flipkart, for example, is using AI to replicate and scale the in-store experience of having a sales associate. Users are guided with relevant questions to help them find the exact product they need in an online setting. Flipkart is also using AI to optimize intra-city logistics and help predict product demands and returns. Myntra, the online fashion retailer acquired by Flipkart, is using AI to process fashion data and predict trends to launch a fully automated clothing collection without any intervention from a human designer.

In the financial services industry, Accenture recently implemented an intelligent anti-money laundering and know your customer solution for a banking client. The solution leveraged a combination of technologies—robotic process automation, AI and analytics as a service—to help the bank increase compliance while reducing operating costs. Cost savings of more than US$230 million were achieved over a couple of years, while also reducing human intervention in processes and scaling them for better reliability.

Embracing this convergence of AI and analytics ultimately will change the way we interact with people and technology, improve our decision-making and give way to new agility and opportunities.
AI WITH HEART

At the same time, we need to pay close attention to responsible AI, balancing intelligent technology and human ingenuity, as noted in Technology Vision 2018. Explainable AI and AI transparency are critical—particularly in areas such as financial services, healthcare and life sciences—and will help promote trust while also preserving maximum flexibility to innovate.

For all the promises AI holds, there’s an equal amount of anxiety across economies and societies. Many people feel that advanced technologies will bring profound changes that will also raise ethical challenges as people adjust to the more prominent role of automated decision-making in society.

As AI becomes more sophisticated, it will start to make or assist in decisions that have a greater impact on individual lives. Business leaders will need to apply and enable “Responsible AI,” founded on the principles of:

- **Accountability and transparency** where AI generates explainable results, algorithmic accountability and unbiased decision-making
- **Security and safety** where physical safety and security is ensured to build consumer trust in AI and automated systems
- **Human-centric design** where deployed AI is anchored to an organization’s robust compliance and core values
To help fight bias in AI, Accenture’s Applied Intelligence group developed AI Fairness Tool. Launched at the CogX conference in June this year, the tool allows companies and governments to assess whether their AI systems will treat all people in a fair and unbiased way. Developed in collaboration with the Alan Turing Institute, the tool’s key features include:

**DATA ASSESSMENT AND REMOVAL OF RESIDUAL IMPACT:** The tool checks the data that feeds an AI tool and determines what impact sensitive variables (for example, gender) have on other variables.

**AI MODEL ASSESSMENT AND ADJUSTMENT:** The tool tests for algorithmic bias and adjusts the model for equalized impact to make sure people are treated fairly.

**CALCULATION OF ACCURACY TRADE-OFFS:** The tool shows whether improving model fairness will affect its accuracy and to what extent.

Accenture’s AI Fairness Tool is part of a suite of offerings to help organizations create agile, responsible AI that integrates ethical assessments into the innovation process—without slowing it down. More than ever, organizations must have strong core values and be ready to defend them vigorously—and AI needs to reflect them.

**CONCLUSION**

The powerful combination of data, analytics and now AI, is fueling socio-economic growth. By using the vast amounts of underlying information we have available and leveraging AI to analyze and harness it, we can fundamentally improve businesses and the quality of life for people around the world. We also can deploy AI to address global issues that otherwise look intractable, like climate change, congestion, pollution, health and many other problems we face as a planet.

The new imperative of our digital transformation is to balance intelligent technology and human ingenuity to innovate every facet of business and become a smarter enterprise.
REFERENCE

1 Accenture and Frontier Economics; see “About the Research” for methodology

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 more than 435,000 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.

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