

echnology is changing the way any industry operates today with organizations investing heavily on digital transformation to stay relevant. Companies realize the importance of maximizing the value drawn from data to make informed decisions.

Industry leaders are looking towards Analytics and Artificial Intelligence (AI) as engines that would transform them from a digital enterprise into an intelligent enterprise. The potential of analytics and AI to add business value cuts across the value chain. In many instances, it is transforming the functions of procurement, operations and logistics, marketing and sales and customer service. However, it is customer experience (CX) where the opportunities are huge for AI.

Unfortunately, customer service is traditionally looked at as a cost-driver, not as a revenue-generator. The truth is that companies globally lose more than \$75 billion each year due to poor customer experience1.

Customer engagement includes various touchpoints with customers, right from the Zero Moment of Truth to the Ultimate Moment of Truth. It is imperative that enterprises are able to engage with customers with the right

message at the right time through the right channel at each touchpoint.

With technological advances in AI, companies are revolutionizing the way customers engage with them. Advanced analytics, AI-driven content personalization and conversational systems like chat-bots provide value through revenue generation and cost optimization.

# How enterprises should approach Al for CX

Enterprises should adopt a three-pronged approach to deliver on the business outcomes that AI and advanced analytics promise — right process, right technology and right capability (See Figure 1).

Right process: Need for imbibing a Sense-Think-Respond-Learn (STRL) process in solutions that convert raw data into actionable intelligence

Right technology: Technology landscape driven by AI, automation and cloud adoption with right skillsets

Right capability: Engineering customized solutions built through a research-based approach to deliver innovative solutions at scale

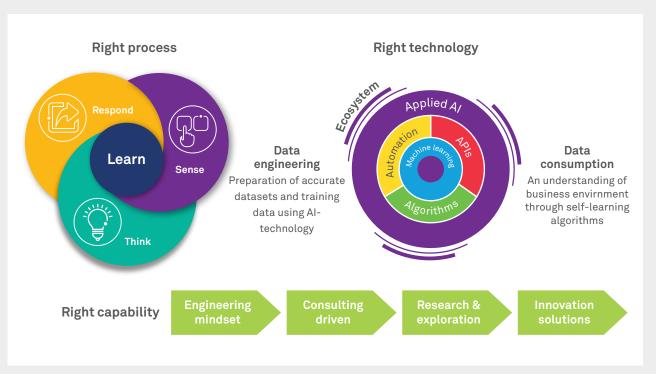


Figure 1: Framework for enterprise Al adoption



Having the right set of processes ensure consistency in delivering promised business outcomes through intelligent systems powered by the right technology and right capability

Having the right set of processes ensures consistency in delivering promised business outcomes through intelligent systems powered by the right technology and right capability. Businesses will have to invest in the right technology across the data value chain from data engineering to data consumption. Right capabilities with focus on business outcomes and in building innovative solutions at scale will prove to be a differentiator for businesses.

The focus of this paper is on the right processes that will ensure organizations obtain maximum value out of their AI initiatives for building great customer experience. Enterprises should adopt a Sense, Think, Respond and Learn (STRL) Framework to tackle business challenges through AI.

On identifying the customer experience-related business problem that the enterprise would like to address through advanced analytics and AI use cases, it should

Sense: As a first step, it is imperative for organizations to take stock of the current situation by acquiring and assimilating relevant data and by preparing accurate and efficient datasets that could feed predictive models. This step generally leverages techniques for data preparation, descriptive analytics, text and speech analytics, video and image analytics to provide a view into what is happening currently.

For instance, in the CPG or Retail industry, organizations could gather complete customer information by analyzing web metrics, social media profile updates, customer purchase patterns, cart abandonment and category spend analysis.

Think: As a next step, organizations should identify the appropriate analytical models and the statistical/machine learning algorithms that drive these models to facilitate insight generation and cognitive intelligence. This step involves making use of advanced analytics and Al techniques to explain and predict customer behavior, and provide recommendations for next-best-action scenarios. For example, organizations need to apply AI/ML techniques to analyze search patterns and customer behavior to predict when a customer is going to churn out; how much a customer is likely to spend and which product is a customer most likely to buy etc. Al techniques like image recognition and computer vision help in revolutionizing product discovery through AR-enabled visual product searches. This enhances the experience of an online shopper and provides an offline experience online.

**Respond:** Based on the actionable intelligence obtained, businesses should strategize their plan of action to deliver business outcomes. This step involves delivering personalized customer

engagement leveraging new digital capabilities.
For example, organizations need to design personalized campaigns based on the insights to engage with customers and enhance customer experience and loyalty. Organizations must leverage AI techniques like Natural Language Processing, and Generation, Speech and Text Analytics to build intelligent chat-bots and virtual assistants to deliver high impact business outcomes in customer service through voice-based shopping and product discovery.

Learn: The key to making this framework actually work is ensuring the system continually learns through feedback systems during the Sense, Think and Respond stages. The network effect applies perfectly here as with more and more usage of intelligent systems, the systems become more intelligent.

## Al challenges and the way around

Fundamental: Given the possibilities of leveraging AI to deliver excellent CX, organizations are contemplating ways to tackle one major barrier — Gaining user trust on technologies like AI. AI gone wrong can have huge repercussions. Design plays an important role here.

Organizations must have a design-thinking led approach, which places the user at the center of it all, while engineering the CX. Key principles that enable trust in the end-user should be incorporated. These include transparency and explainability aspects of the recommendations thrown by the AI system, testing of extreme cases, and availability of holistic training data sets to avoid ingrained biases.

Organizational: With data-driven customer experience taking the driver's seat and being seen as a critical differentiator in gaining online market share; the CMO and CIO organizations need to work hand-in-hand to sync market requirements with organizational technology maturity.

Technology: Legacy and latency issues could impede new rollouts. Back-office systems need

to be upgraded before charting a roadmap for the future. Stakeholders need to be careful of leaving latency loopholes within existing systems.

#### Conclusion

Today, CIOs are being measured on the impact they bring to the business. CX improvements across the ecosystem (supply chain partners, marketing value chain and back office systems) will now be more closely measured on improvements to benchmarked bottom-line levels. The times ahead are exciting for enterprises that leverage AI to create meaningful experiences for the customer. The coming together of data, algorithms and design will catapult CX, which is geared for disruption.



### References

https://www.forbes.com/sites/shephyken/2018/05/17/businesses-lose-75-billion-due-to-poorcustomer-service/#59321d8716f9

# About the authors

### **Praveen Kumar**

Strategy Consultant – Data, Analytics and AI, Wipro Limited.

Praveen has extensive experience in designing solutions and offerings in the advanced analytics space. He has a deep understanding of the analytics industry and the digital ecosystem. He provides advisory services and thought leadership for building value propositions and driving cohesive strategies.

### Arjun Pandalai

Senior Consultant -Consumer Business Unit, Wipro Limited.

Arjun has over 7 years of experience across the Consumer industry, in consulting, business analysis, agile development, solution definition and alliance management. He has a strong understanding of marketing, supply chain and customer experience (UI/UX development) and has worked in developing CRM and ecommerce web applications in consumer and telecom space.

### Wipro Limited

Doddakannelli, Sarjapur Road, Bangalore-560 035, India

Tel: +91 (80) 2844 0011 Fax: +91 (80) 2844 0256

wipro.com

Wipro Limited (NYSE: WIT, BSE: 507685, NSE: WIPRO) is a leading global information technology, consulting and business process services company. We harness the power of cognitive computing, hyper-automation, robotics, cloud, analytics and emerging technologies to help our clients adapt to the digital world and make them successful. A company recognized globally for its comprehensive portfolio of services, strong commitment to sustainability and good corporate citizenship, we have over 175,000 dedicated employees serving clients across six continents. Together, we discover ideas and connect the dots to build a better and a bold new future.

For more information, please write to us at info@wipro.com

