The Wipro HOLMES™ advantage in natural resources

Artificial intelligence applied to mining

wipro

The mining industry is at an inflection point, where new technologies are creating vast amounts of data, but the existing processes cannot handle it. This technology is creating an opportunity to work with more data to solve the same problems. Artificial Intelligence and Robotic Automation are some of the new exciting choices available.

HOLMES is a cognitive hyper-automation platform, delivered as a service through a flexible, easily consumable, consultative partnering approach. It empowers clients' businesses with highly experience driven, velocity-obsessed, disruptive technology capabilities. The platform combines intelligence and cognitive solutions, enablers and algorithmic capabilities, with integration layers and connectors.

The Wipro HOLMES™ Artificial Intelligence Platform helps enterprises hyper-automate processes, redefine operations and reimagine their customer journeys. It provides algorithmic intelligence and cognitive computing with the objective to increase operational efficiency, effectiveness and enhance user experience for enterprises across their infrastructure management, applications and key business processes and accelerates their digital journey.

Our investments

Wipro HOLMES™ has been successfully deployed in several data and information-driven verticals, where it has delivered exceptional results.

Our team of over 1,200 automation architects, automation designers, domain experts and deployment architects possess skills in AI and automation. We have invested in state of the art experience centers, demo capabilities across geographies. We also work very closely with Wipro Ventures, the strategic investment arm of Wipro. For instance, Avaamo provides an AI-driven enterprise bot platform that dramatically reduces the time needed to design and deploy enterprise bots to corporate employees and their customers. Our partners include Microsoft, HP, Google among others.
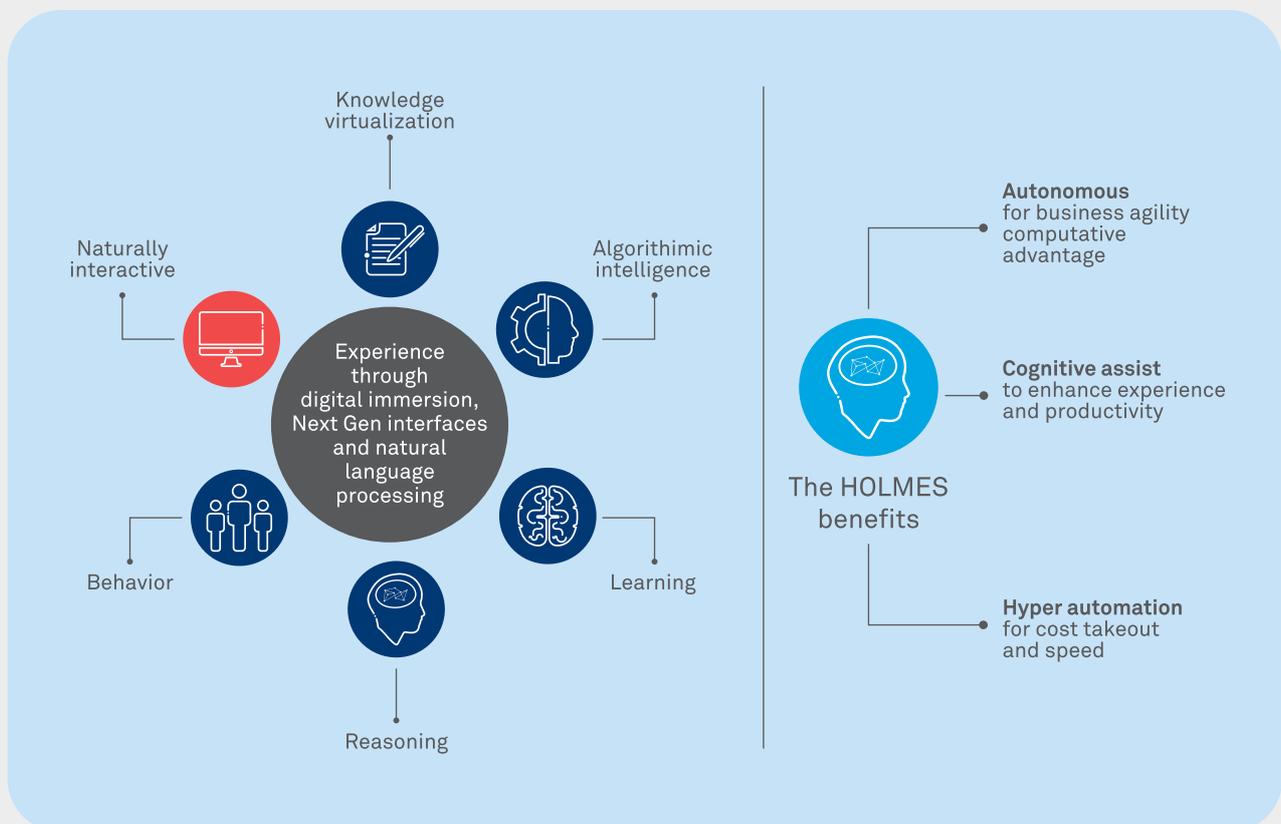

Figure 1: Platform overview

Offerings overview

- Wipro HOLMES™ for IT—with themes such as Zero Touch Automation, Test Life Cycle Management, Data to Cognitive Knowledge Transformation

- Wipro HOLMES™ for business—with 12 themes such as E-KYC (Know Your Customer), Contract Management and Data Digitization

Key applications

Wipro HOLMES™ is designed with a focus on enterprise use cases from IT and business process areas, with the ability to continuously learn from new data, recommend a solution and predict failures. The applications of Wipro HOLMES™ in the mining industry include:

- **Digital virtual agents:**
  Enhanced user experience with capabilities such as speech recognition, natural language understanding, and conversational interfaces;

  Examples–Collaborative agents, customer support/experience, DIY support, chatbots

- **Predictive systems:**
  Extracting meaning from different forms of data, using tools and techniques to discover patterns, and predict future outcomes and trends;

  Examples–Recommender systems, anticipatory systems, automated scenario modeling

- **Cognitive Process Automation**
  Cognitive Process Automation is defined and executed based on a loose set of instructions or logic. These instructions are largely machine-learnt, evolve continuously and can also be user-defined;

  Examples–Automated problem resolution, software release automation, data extraction from unstructured content, monitoring and compliance checks
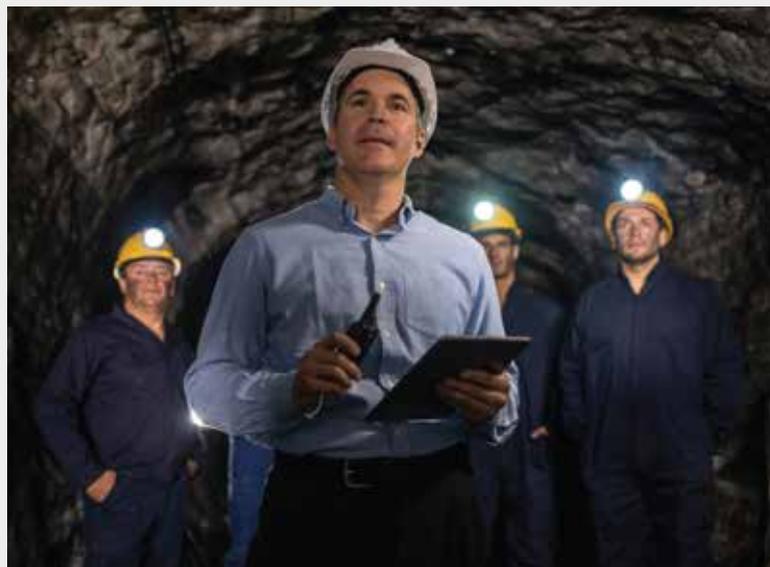
- **Visual computing applications:**
  Visual computing applications that can acquire, analyze and help synthesize realistic interactive interfaces and identify patterns and detect operational issues

  Examples–Dynamic pattern clustering, computer vision, monitoring work areas for compliance and incident management, recognition of spalling, cracked shotcrete.

- **Knowledge virtualization**
  System that can curate knowledge by using AI techniques and rely on usage of expert knowledge databases to make decisions;

  Examples–Diagnostic experts, advisory systems, natural language generation

- **Robots and drones**
  Robotic automation is powered by a repetitive set of instructions. These instructions are mostly defined by the user and sometimes machine-learnt. They can be fed into the system by analyzing repetitive patterns, learning tasks from experts and autonomous vehicles;

  Examples–smart drones, smart robots, brain-controlled robotics, autonomous rail and fleet

Use cases for mining industry:

Wipro HOLMES™ for IT:

- Alert management

- SOP management

- Cognitive user experience

- DIY for IT service

- Classification and assignment of tickets

- Application health monitoring

- Testing services automation

- Deployment and release automation

Wipro HOLMES™ for business:

- Cognitive search

- Know your vendor

- Unstructured data extraction and classification

- Assistive decision making

- Automation anomaly detection

- Curated knowledge applications

- Compliance checks

- Predicting equipment failure

Key differentiators

Business outcomes for clients:

- We focus on the technologies and how they impact the specific use-cases of clients while disruptively enhancing their outcomes.

- Our lean, outcome-focused approach towards intelligent automation helps to simplify, unclutter and automate while improving targeted outcomes in terms of velocity-productivity and efficiency, cost effectiveness, and user experience.

Technology strategy

- As a platform/product/solution/framework

- Co-create contextually best-fit solutions for specific client scenarios and outcomes

As-a-Service

- Integrates easily with and supports third party solutions such as WorkFusion, Automation Anywhere and Blue Prism

- Offers clients the flexibility in choices based on the importance of their information and intelligence assets and also their governance, risk and compliance needs

- Enables legacy systems to integrate with the enterprise cognitive layer

- Offers automation as a service to support any automation and AI point solutions that clients may have already invested in, including Watson

People strategy

- Early investments, senior leadership commitment and concerted efforts in creating a skill-pool of automation designers, automation architects and automation managers for our clients' most-in-demand automation needs

Process of engagement and partnership

- Consultative partnership approach with flexible pricing, gain-share on outcomes

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 160,000 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**