Section of AI and Machine Learning under Digital Transformation

AI and Machine Learning are transforming how organizations do business, manage customer relationships and stimulate the ideas and creativity that fuel groundbreaking innovation

The era of AI is well and truly here – with huge implications for businesses across all sectors.

Overview

Digitalization trends continue to shape the world opening up new opportunities across a wide range of sectors. Artificial intelligence (AI) is considered a key driver of digital transformation that has the potential to introduce new sources of growth. Besides AI, the recent advances in machine learning and automation have created a whole new business ecosystem.

Artificial Intelligence is the ability of machines to perform tasks that normally require human intelligence using visual perception, speech recognition, decision making, and language translation. Machine learning is a branch of AI that enables computers to self-learn from data using advanced algorithms, understand patterns in large data sets, make predictions as they encounter new data using pattern recognition, and adapt independently.

Valoores AI is bringing about the next wave of the data journey as enterprises evolve from a manual, process centric data approach of dashboards, business applications and data stores to an automated, data driven approach using prescriptive and predictive analytics, and finally to an autonomous, AI- and Machine Learning driven approach.
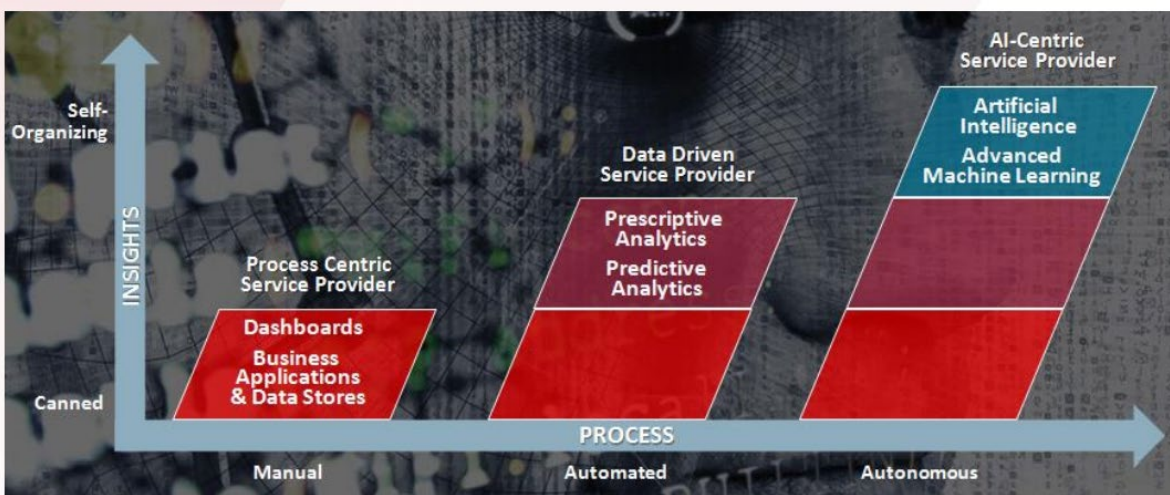

Figure 1. The Inter-relationships among Artificial Intelligence, Machine Learning and Analytics

By baking Valoores AI and Machine Learning directly into cloud applications, new tools can provide fast insights for decision making and improve digital business efficiency across enterprise functions as shown in Figure 2 below including:

- **Information Technology**: AI can be used to detect communications network vulnerabilities or anomalous user and device behavior and prevent security breaches
- **Finance and Procurement**: AI can optimize cash flow by expediting receivables collection, automating billing functions, enabling intelligent payment retry for failed recurring payments, anticipating collections challenges, detecting and acting on fraudulent transactions, and improving pricing recommendations
- **Supply Chain**: Predictive analytics and ML can be applied to IoT data to analyze device and machine signals, locations, and communications, ensure that they are performing optimally, and predict and prevent failure before it happens
- **Manufacturing:** AI can drive improvements by performing incident detection, root-cause analysis, and smart resolution within minutes in a connected factory
- **Commerce:** Natural language and deep learning capabilities can provide features such as dynamic tags and category pages that personalize search suggestions and blend search results with real-time offers.
- **Sales:** AI tools can provide next-step recommendations to close deals and optimize sales offers.

Figure 2. Potential of AI in Digital Business

Why Valoores?

Valoores is the leading provider of communications and cloud solutions enabling customers to connect, engage, and monetize their services. With Valoores, most organizations will accelerate their digital transformation with AI in the cloud:

- Robust, secure and integrated cloud platforms and network infrastructure
- Cloud, communications, AI, and ML expertise
- AI across all cloud services
- A complete suite of AI-enabled business applications
- AI-enabled network applications
- AI-enabled platform services such as management, security, and chatbots
- Best-in-class software-as-a-service

Valoores Business Value of AI

VALOORES AI services include customer and market insights that will refine personalization; driving sales and retention; back office and shared services automation to remove repetitive human tasks; finance and accounting streamlined to improve efficiency and compliance; analysis of unstructured voice and text data for specific functional use cases. In addition, businesses can leverage VALOORES AI services to transform supply chain, improve distribution model and route to market thereby improving operations in an efficient and effective manner. These sources are centered on decision support and AI augmentation. It is predicted that decision support and AI augmentation will deliver the highest benefit to businesses. Gartner estimates that AI augmentation will create $2.9 trillion of business value and 6.2 billion hours of worker productivity globally in 2021.

As organizations continue to accumulate large volumes of data, more and more data is left unprocessed. Manual processing of data can be laborious and time-consuming; thus, many organizations end up processing only a small portion of their data, thus leaving valuable insights within the large volume of 'unprocessed data' to waste. This is where VALOORES Machine Learning service comes into play as it offers organizations the opportunity to glean valuable insights from large volumes of data that would otherwise remain unprocessed and overlooked.

VALOORES Machine Learning algorithms can process extremely complex data at a rate that is exceptionally faster and more accurate than any traditional method. This outcome is especially beneficial to companies that process huge amounts of complex data and seek to identify peculiar patterns in situations related to customer churn, fraud and Money Laundering, sales forecasting and many more.

VALOORES Machine Learning has a way of bringing greater consistency to customer interaction.

It has 3 different categories for the models:

- Supervised Learning
- Unsupervised Learning
- Reinforcement Learning
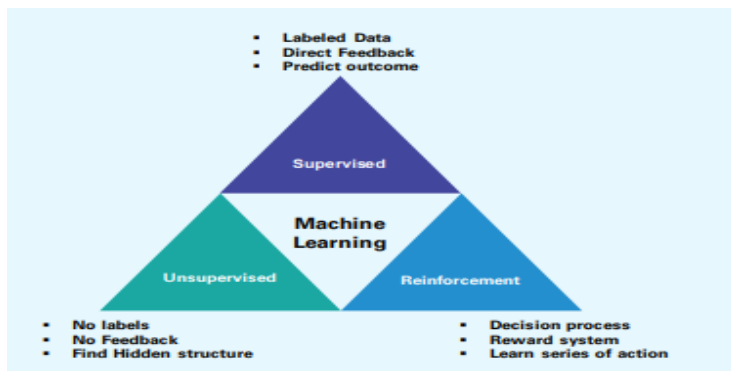
Valoores AI in all critical business functions

1. **Data expertise**:
- Identify and maintain high quality data sources, both internally and externally
- Ensure appropriate access to data sources
- Enforce enterprise security standards, controlling access to data, including encryption, monitoring, back-up and recovery
- Centralize data management processes

2. **Business Process**:
- Leverage AI, automation and D&A to improve productivity and build a competitive value chain Automate decisions that include recurring processes
- View analytics as a critical input in making operational decisions
- Go beyond reactive reporting towards accurate forecasting and insights

3. **Risk and reputation**:
- Involve all stakeholders in prioritization and scoping
- Ensure comprehensive evaluation and compliance with regulations
- Consider the impact of scope on external reputation and perception
- Embed cyber compliance and safeguards

4. **Workforce**
- Ensure the right capabilities to implement the technology, leverage data, and change business processes
- Implement transformed organization model through a strategic change management plan
- Define standardized performance metrics
- Consider implications of job changes on workforce

Valoores AI and Machine Learning services key features:

- Unlock, process, and utilize structured and unstructured data to predict customers' unique needs
- Automate real-time flagging and resolution of disruptions across the organization's ecosystem to avoid costly complications
- Enable a self-learning and self-optimizing business model with dynamic segmentation and real-time insights to deliver precision at scale
- Identify emerging criminal patterns through non-rule based, self-learning detection that uses advanced data mining, predictive analytics and pattern recognition
- Prioritize case investigations, lower false positive rates and increase rule targeting accuracy
- Maximize value per customer by pinpointing highly relevant products and offers for prospective
- Reach customers across channels by utilizing our universal decision engine, while driving higher levels of engagement by continually optimizing with AI