UNISYS

ADVANCED DATA ANALYTICS SOLUTIONS:

MACHINE LEARNING CAPABILITIES

HIGHLIGHTS

- Combines a comprehensive array of data analytic tooling

- Incorporates an algorithm layer that provides Data Science and an analytics toolbox to analyze, extract required details and insights into the underlying data

- Focuses on pattern recognition and is a method of data analysis that automates analytical model building

- The following machine learning packages are part of our platform:
  - Entity Extraction
  - Sentiment Analysis
  - Key Work Extraction
  - Concept Tagging
  - Taxonomy Classification
  - Data Preparation Routines

UNLOCKING THE VALUE OF YOUR DATA SETS TO MAKE SMARTER DECISIONS

Big data helps businesses leverage unprecedented floods of information for insight, value and competitive advantage. Unfortunately, the task of analyzing the sheer volume, variety and speed of this information can quickly overwhelm a typical in-house analytics team. It's a job made harder by the fact that most of this data – up to 80-percent, by some industry estimates – is unstructured, file-based and resistant to traditional analytic processes.

Meaningful insights and accurate predictions increasingly require the help of advanced "machine learning" systems that are automated, scalable and able to constantly assess and improve analytic processes with minimal human intervention. Companies succeed when they combine these machine learning capabilities with experts who know how to effectively leverage them for your specific business needs.

Thankfully, you can access these resources without the expense of recruiting an entire analytics team and building complex infrastructure from scratch. As part of our Advanced Data Analytics solutions, Unisys Machine Learning capabilities, bring a comprehensive array of data analytics tooling together with disciplined, enterprise-grade engineering approaches. All the while, our industry-leading experts in machine learning partner with you to understand your data, identify patterns and set up automated processes to keep the insights and value coming as you grow your business.

UNISYS MACHINE LEARNING OVERVIEW

Machines learning is a cutting edge field within computer science – a type of Artificial Intelligence (AI) that enables computers to constantly optimize and improve without human intervention. Using algorithms that iteratively draw lessons from data, Machine Learning systems identify patterns and find hidden insights without being explicitly programmed. Almost like an automated form of Data Mining, this ability to apply complex calculations dynamically and repeatedly on large data sets has fueled the growing field of Predictive Analysis – where companies are able to not just assess current conditions, but actually anticipate future circumstances and strategically position themselves accordingly.

UNISYS MACHINE LEARNING CAPABILITY

Our Advanced Analytics platform incorporates an algorithm layer of Data Science and machine learning processes that analyze and extract important details and insights from your underlying data. Unisys leverages its complete machine learning toolkit to enhance and develop new algorithms. This toolkit includes: Naive Bayes, Network Graphing, and Support Vector Machines. Such algorithms are the foundation for predictive advanced analytics. The system also generates prescriptive reporting – analytics that not just forcast future conditions, but actually recommend future actions – for maximum decision support.

Our interface layer lets you extract results either via Web Deployed Applications or programmatically through exposed APIs. It also provides a visualization layer that integrates D3 libraries as well as standardized analytic reports. We also develop specific APIs for users and applications in the Secure Cloud, with access both through the Hadoop file system and SQL interfaces.

WHY PARTNER WITH US

Few vendors offer an "as a service" analytics solution that's as comprehensive as ours. We offer a scalable platform – running in the cloud or on premise – along with skilled data scientists and subject matter experts working seamlessly with your teams to drive business insights and mission effectiveness. As your trusted advisor, Unisys brings 40+ years of experience across vertical markets (including commercial, financial services and government).

We understand your business and how analytics can best transform it to new levels of success.

HOW CAN WE ENGAGE WITH YOU?

As the nearby Figure illustrates, Unisys leverages Agile development principles to understand your data and work with you to develop and implement effective and appropriate analytics capabilities.
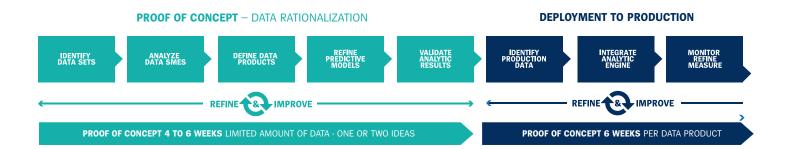
During the Proof of Concept (POC) phase, we partner with your staff to identify available data and get an overall understanding of your business needs and objectives. From this close collaboration, we develop machine learning algorithms to analyze your data and develop models.

Upon validating the POC, we move to the production phase, where we continue the Agile engagement process to expand and formalize the analytical framework. Along the way, we incorporate additional data and predictive models while continuing to monitor and refine the accuracy and integrity of the system and its results.

This dynamic and iterative process, helps clients use early insights to drive new questions and make new predictions from their data. Unisys remains a partner throughout this journey toward making your organization a solidly data-driven enterprise.

Contact Us at AdvancedAnalytics@unisys.com to connect with our experts. We'll help you implement affordable big data technologies for data-driven insights that deliver tangible business impact.

To find out more about how our solutions can work for you, please visit http://www.unisys.com/advanced-analytics

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PROOF OF CONCEPT – DATA RATIONALIZATION   **DEPLOYMENT TO PRODUCTION**

| IDENTIFY DATA SETS | ANALYZE DATA SMES | DEFINE DATA PRODUCTS | REFINE PREDICTIVE MODELS | VALIDATE ANALYTIC RESULTS | IDENTIFY PRODUCTION DATA | INTEGRATE ANALYTIC ENGINE | MONITOR REFINE MEASURE |

REFINE **&** IMPROVE   REFINE **&** IMPROVE

PROOF OF CONCEPT 4 TO 6 WEEKS LIMITED AMOUNT OF DATA - ONE OR TWO IDEAS   **PROOF OF CONCEPT 6 WEEKS** PER DATA PRODUCT

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