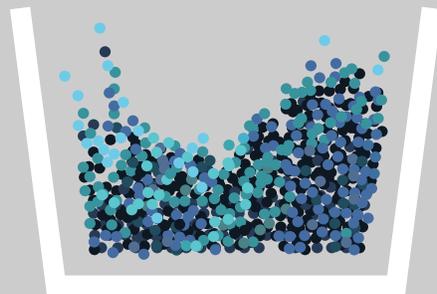


HARNESSING UNUSUAL DATA



AQUIOM

7Puentes 
Technology Group

The future

of business intelligence is in utilizing information, historical as well as predictive, to deliver insights and ultimately new levels of efficiency in terms of process automation.

3D Models

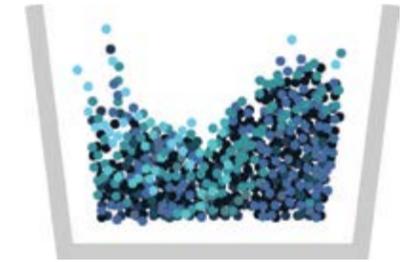
Speech Data
and Analysis

Data Collected
by Bots / Automation

Photos
Satellite Imagery

Augmented
Reality

VIDEO
ANALYSIS



Immense Scale and Scope of New Data

As datasets grow, the requirements for managing the data can change substantially.

Last year, more data was generated by all of the connected devices in the world than existed since the beginning of human history before that. The amount of data in the world is doubling.

In the future, you'll use an increasing number of data sources:

Your organization will collect more data, drawn from more devices and in more formats.

DATA MINING TECHNOLOGY

Data mining is the application of mathematical and statistical techniques to pools of data in order to uncover key indicators, mark relevancies, correlations and trends. We are discovering patterns in large data sets using technologies at the intersection of machine learning and database systems.

In the early days, we were able to look over our shoulders at historical data to determine what happened what worked in the past, what didn't, and why.

This is great, but it has limited scope. While you can learn from your mistakes, circumstances change, and knowing what happened last month is nowhere near as useful as knowing what's happening right now... or, even better, what's likely to happen tomorrow.

Success, requires the right skills, tools and insights to frame the questions, define the key data sets, define the criteria for contextual relevance and generally to make sense of it all.

What we are looking for is actionable insights. We want to measure what matters and frame that information in terms that are defined by rules-engines that learn over time.



The future of business intelligence is in utilizing information - historical as well as predictive, to deliver the whole picture.

WEB DATA EXTRACTION

Aquiom has unique solutions for the collection of data from the web. This includes portals, social networks, forums and practically any source on the internet.

We solve the last mile of the extraction pipeline, developing data that is ready to be used. Unstructured information becomes useful records.

ARTIFICIAL INTELLIGENCE

New levels of efficiency, compliance, accuracy and speed can regularly be achieved through data automation. Liberate human resources to focus them in more relevant aspects of the productive process. There are a range of application detailed here

DATA SCIENCE

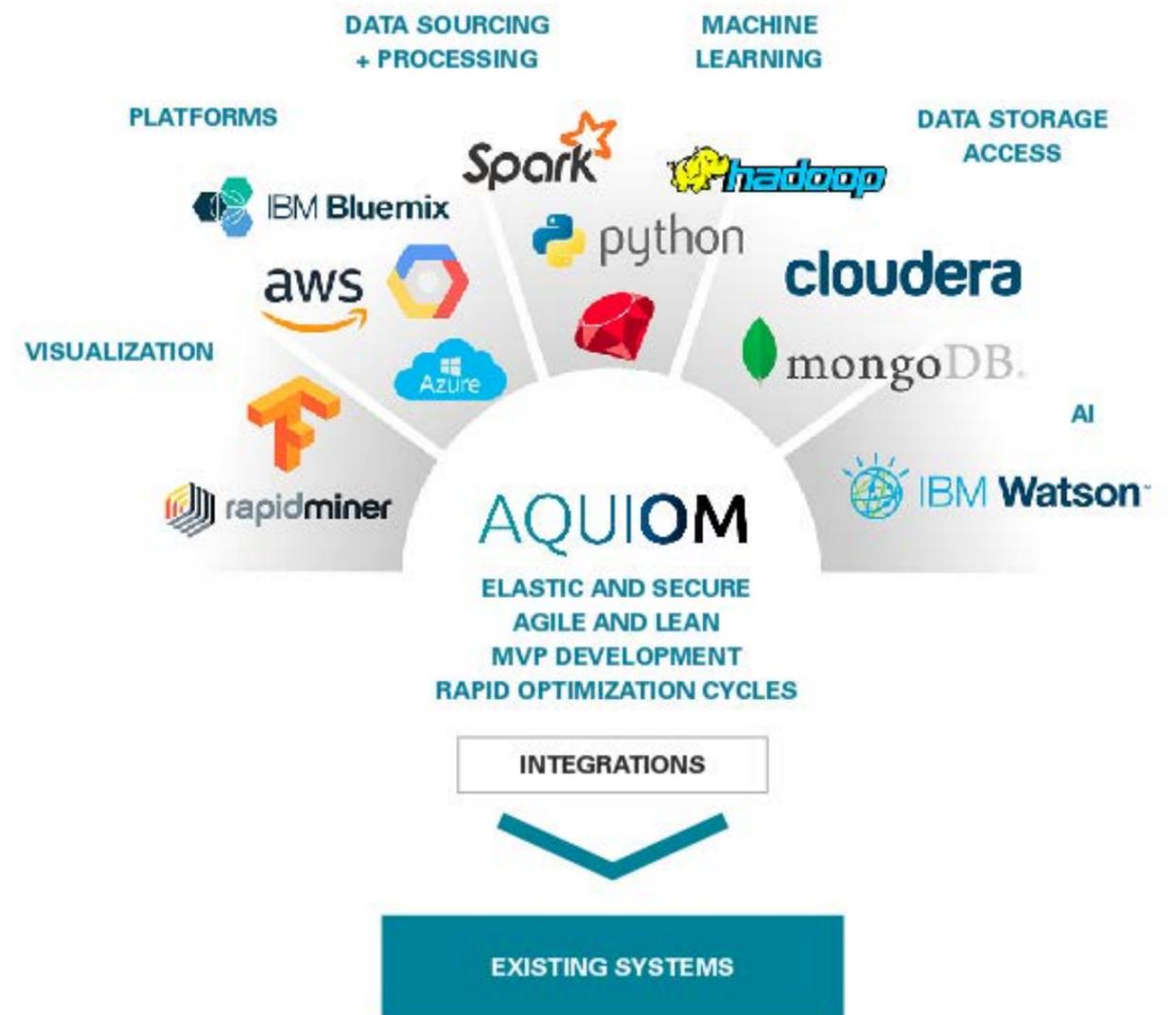
We register, analyze, interpret and manage storage of large volumes of information. We regularly improve our client's internal data organization and anticipate future usage.

MACHINE LEARNING

We develop systems that can learn to automatically identify complex patterns. Lead the digital transformation of your company and put innovation at the service of your business.

INTEGRATED TECHNOLOGIES

Data mining requires powerful programming languages in the hands of people who know how to use them. We have expert working knowledge of a wide range of the most prevalent languages and platforms. Aquiom can help in the selection of the most scalable choices for integration.





GOOD DATA IS THE START

Machine learning is the science of designing algorithms that are able to learn and act on their own data. From beginnings in data science for pattern recognition, machine learning has emerged to enable true predictive learning. Systems are able to respond to a range of situations even though not being explicitly programmed for each eventuality.

Our work centers around creating efficiencies, improving accuracy and reducing risk in ways that are automated, scalable and ultimately dependable.

What can be achieved ?

- New models of efficiency can be realized.
- Response to opportunities can be measured in minutes and seconds, rather than days and weeks.
- Predictive systems can identify and highlight important patterns and trends.
- Reports that used to require analysis can be delivered as dashboard visualizations, achieving contextual relevance at a glance.
- Business units can be united behind the effective utilization of shared data sets.
- Security, accuracy and compliance can all be optimized.
- Transaction speed can be improved at orders of magnitude greater efficiency, with systems that are secure and scalable.
- Human error can be replaced with uniform reliability
- People can be freed to focus on creating new opportunities and on high-value activities rather than mind-numbing repetitive actions and processes.

1

CROSS-ORGANIZATIONAL INTEGRATION

The need to integrate seamlessly with marketers, underwriters, financial analysts and other professionals will force machine learning platforms to do more than just pump out predictions - they will have to drive results.

2

COMPLIANCE

Reduce mistakes and human error by automating compliance. Systemization of rules-based actions and definition of mandatory compliance criteria.

5

SECURITY

Machine Learning helps to secure systems and processes by building models which can predict fraud or errors through anomalies and patterns in data and between behaviors of identities.

6

NETWORK EFFECTS

Applications of data intelligence can result in unexpected network effects and interconnectedness. The flow of data between offices, divisions, markets, partners and institutions can be harnessed in ways unforeseen and with orders of magnitude greater efficiency.

3

ACCURACY

Machines can perform repetitive tasks for an infinite amount of time. Machine Learning algorithms carry out rigorous data analysis and flawlessly execute on tasks, escalating decisions to humans when needed.

4

SPEED

The need to integrate seamlessly with marketers, underwriters, financial analysts and other professionals will force machine learning platforms to do more than just pump out predictions - they will have to drive results.

7

EFFECTIVE COST REDUCTION

Optimization of capital and personnel resources through automation. Executing repetitive tasks that are prone to errors, streamlining processes and effectively directing high-value tasks to the right people.

8

RELIABILITY

In financial services, trust is essential. Rules based systems and regulations are adhered to explicitly. Deviations are flagged and sequences of actions methodically followed. This is delivering reliability as rules-based standards.



RISK MANAGEMENT

Machine learning models are trained with sets of data used to predict the probability of fraud. Patterns and anomalies are detected moving forward based on all known points of reference. By comparing transactions against account history, machine learning algorithms are able to assess the likelihood of transaction being fraudulent or erroneous and to better predict outcomes with more granularity and relevance than just credit scores and static reports.

CUSTOMER SERVICE

Optimization of resources for customer service can be effectively optimized through machine learning. Beyond the universal utilization of automated phone support, we can find the points of frustration and direct the right responses - even beginning to anticipate situations where customer retention may be in jeopardy.

PREDICTIVE ANALYTICS

Following trends, patterns and flows of transactions can enable many levels of efficiency towards accurate, actionable predictive analytics. Knowing the likelihood of an event can impact investment timing, data utilization and optimize use of high cost personnel engagement.

AUTOMATED INTERACTION

Machine Learning technologies include functionalities that can be useful for developing custom process automation and digital assistants. Assessment of data, analytics capabilities, speech recognition and the ability to interact with relevancy is rapidly evolving. The ability to incorporate these efficiencies is evolving as a core capability in terms of a competitive landscape that increasingly dependent on streamlined low cost services.

CUSTOMER NETWORK SECURITY

Identifying suspicious network activity can be the most effective way to get ahead of critical network security issues. The power of intelligent pattern analysis, combined with big data capabilities gives machine learning technology an edge over traditional tools.

NEW PRODUCT OFFERINGS

Machine Learning technologies include functionalities that can be useful for developing custom process automation and digital assistants. Assessment of data, analytics capabilities, speech recognition and the ability to interact with relevancy is rapidly evolving. The ability to incorporate these efficiencies is evolving as a core capability in terms of a competitive landscape that increasingly dependent on streamlined low cost services.

LEADING EDGE TECHNOLOGIES

There are numerous platforms and systems that can be adapted to the unique needs of a specific business unit or initiative:

- Robo advisors
- Blokchain and hashgraph solutions for immutable data validation
- Alternate payment options
- Interconnections for global capital markets

ASSESSMENT OF CREDIT QUALITY

Aquiom has been a leader in technologies for the development of unique credit assessment systems for a number of leading financial services organizations. Where there is an initiative to address new markets, or find good credit risks which demand expansion of traditional credit risk criteria, we have solutions. From data gathering, processing, storage and analysis. We can architect and develop systems that scale and integrate effectively.



TARRIF MODELS

Design and development of a geographic and socioeconomic model for ascertaining levels for fair public service tariffs.



WEB CRAWLING

Comprehensive internet information retrieval system. Monitoring and maintenance



BIG DATA PROTOTYPE

Achieved results with a search engine and Cloudera search-based dashboard with 6 years of transactions from all customers from the bank.



ASSESSMENT

Introduction of prediction models for the local financial market. Analysis of geographic data.



WEB CRAWLING

Comprehensive internet information retrieval system for Equifax. Monitoring and maintenance



CREDIT SCORING/ ANALYSIS

Survey of information, design and development of prediction models, ranking of credit and data analysis



INFORMATION EXTRACTION/ ASSECSMENT

Design and implementation of Information Extraction and Automatic Parsing models. Automatic classification of emails.



CUSTOMER INTELLIGENCE: WEB

Design and preparation of a Customer Intelligence model: design of the event recovery model, lifecycle analysis, acquisition, activation, retention and churn.



AQUIOM

Collaborative Data Technology Partner

Aquiom is a collaborative technology partner, consulting in the areas of big data and machine learning applications. We augment and enhance your organization's data operations by bridging business process, data management and technology systems. Bring us into a new initiative and we will add value to your existing team and resources. We are most valuable when we can objectively examine the opportunities, problems and future initiatives facing your organization. We work to harness existing resources to realize the possibilities.

- Data Mining
- Unstructured Data Management
- Complex Data Integration
- Predictive Modeling
- Advanced Statistical Analysis
- Machine Learning
- Industry Specific Research
- Business Processes Analysis
- Embedded Analytics
- Data Visualization

Success, requires the right skills, tools and insights to frame the questions, define the key data sets, define the criteria for contextual relevance and generally to make sense of it all.



AQUIOM

KEY STAFF and FOUNDERS

- 10+ YEARS OF EXPERIENCE (FOUNDED IN 2007)
- 5 PARTNERS 20+ ENGINEERS AND SCIENTISTS
- PROJECTS IN ARGENTINA EUROPE and USA
- 6 PUBLISHED PAPERS
- 25+ ACADEMIC EXTENSION INITIATIVES AND SCIENTIFIC DISCLOSURES

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Technology Group



Charly Lizarralde

Co-Founder, Software Architect, President
Computer Engineering degree. More than 20 years of expertise in software architectures and AI systems. Cubika, J2EE, JEE, EDS, Java Developer Education: UBA



Ernesto Mislej

Co-founder. Professor, Masters in Data Mining, University of Buenos Aires (Argentina) for more than 10 years. Expertise in Data Science, Machine Learning, AI systems.



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Leonel Marino

Co-founder. Bachelor of Systems Analysis, Engineering and Business. Expertise in Business Development, web data extraction solutions.



David Shantz

Acting CMO and Account Liason for London and SF Bay Area. David has worked with early stage technology ventures and Fortune 100 companies including: First Data, Hewlett Packard, Arica IoT, Magnity Interactive, Morphic, Safeway, Velosant (taxware)

