





Time Series

Time series and geo time series: a disruptive approach in detecting weak signals in security and cybersecurity



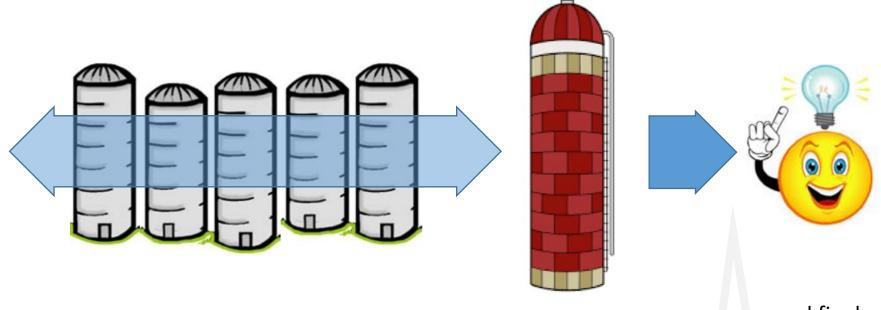


Traditional data management based on structured content





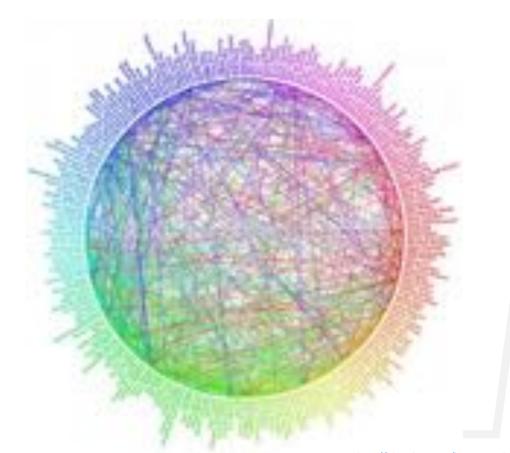
Traditional data analytics: from silos to business intelligence



Data Warehouse ... and finaly comes the intelligence



The dream of semantic web





Big data: A buzzword

	Data catogorio	Databases	Big data issues	Ratio in organisations		
	Data categorie			2000	2015	2030
#1	Data from major companies databases	Relational SQL	Business Intelligence	94%	70%	5%
#2	Data from documents, social networks, videos	NoSQL	Content data analytics, semantic	3%	25%	40%
#3	Data for Sensors, Meters measures	NoSQL Time Series	Maths, statistics, signal processing	1%	2%	40%
#4	3D Modeling	Structured Géospatial	Geospatial navigation	2%	3%	15%

ITEMS / Cityzen Data



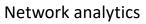
Security: A major concern with Social Media





Security and cybersecurity on the same way







Telecom analytics



Security check analytics





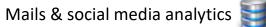


Smart phones analytics

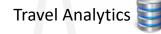


Banking analytics



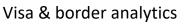






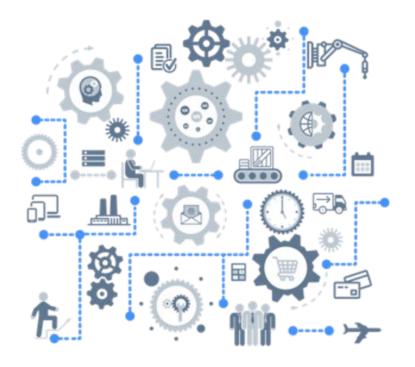








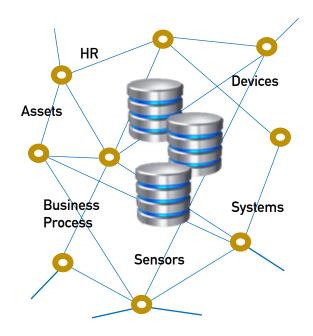
Time series: a new generation of databases that come from sensors/iOT data



Key data is time

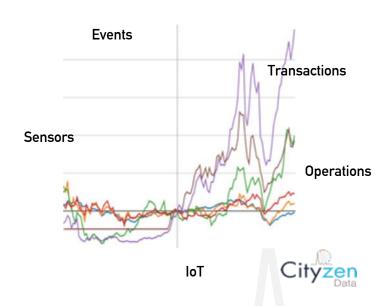


A disruptive way from transactions to flow



IT architecture driven by transactions (today)

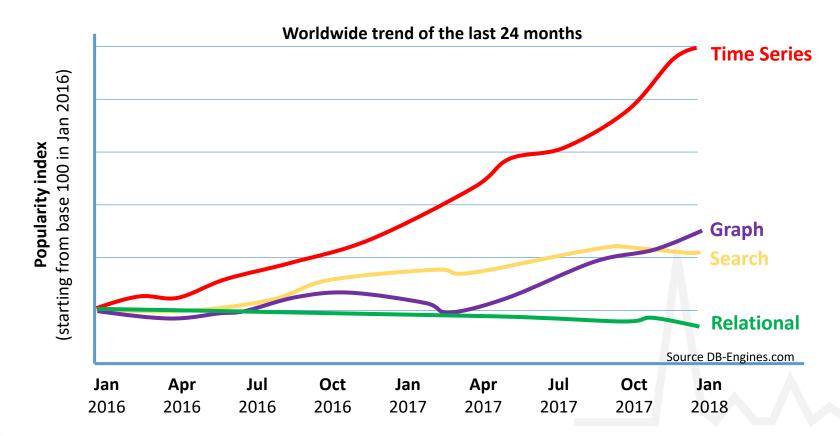
Rigid business applications & databases



IT architecture driven by stream of events

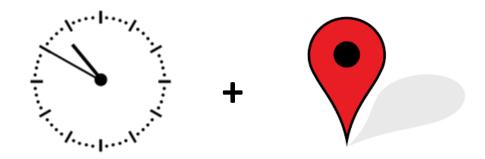
Flexible and scalable architecture

The rise of time series





Time Series & Geo Time Series ® with Warp10



A disruptive architecture for sensor data in which all data defined by time+location

A horizontal approach to analyse





Business Application

Predictive

Statistics, pattern detection, machine learning, correlations, anomalies detection ...



W2A710

Data synchronisation

Data filtering

Data cleansing

Data transmission

Things / Sensors



A stack based language dedicated to time series analytics

A library of **800** functions

From summary statistics to advanced signal processing, machine learning & Artificial intelligence



Time Series: the link from Big Data to Artificial Intelligence

Disruption comes from:

1/ Deep data history

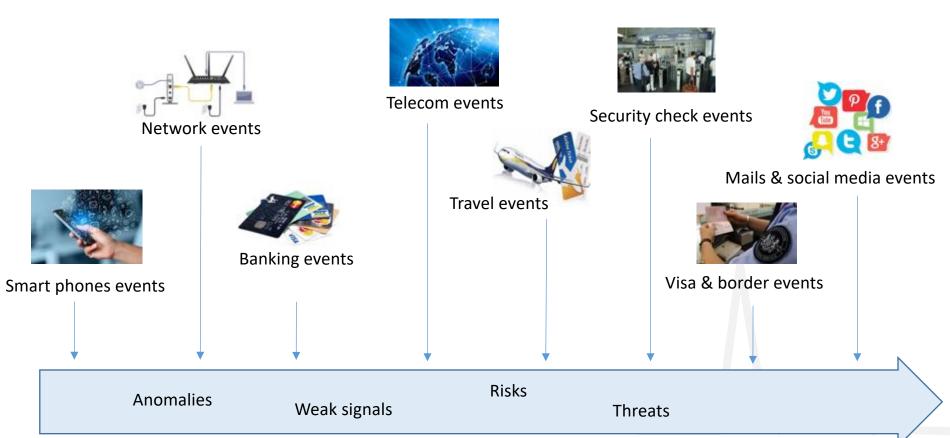


2/ Very large number of data sources

Energy, industry 4.0, connected cars, telecoms, internet
Billions x billions measures / day



Security and cybersecurity on the same way



A universal reference independant from applications

Applications Services

Horizontal or integrated Rules & Governance

Time Series Data infrastructure

« Minority report » risk exists. The way to prevent it is have different stakeholders on data infrastructures and applications







Warp10

www.warp10.io



