

A night cityscape with a network overlay of icons and lines. The background shows a city skyline at night, with the Petronas Towers prominently lit up. Overlaid on the city is a network of white lines connecting various icons: a smartphone, a shopping cart, a dollar sign, a cloud, an envelope, a pair of headphones, and a presentation screen. The icons are arranged in a circular pattern around the center of the image, with lines connecting them to form a network structure.

Learning from Data. Optimizing by Data. Managing by Data.



Time-series data is the new crude oil and the most valuable strategic asset for smart, data-driven businesses. It is the foundation for new, simpler, business oriented AI that drives cost savings, revenue optimization and new business opportunities.



Smart factories, cities, banks, retailers, devices, etc., collect vast amounts of time series data that offers invaluable monetization opportunities.

Time-series data is the fastest growing data type. According to IDC, by 2025 each person will interact with connected devices nearly every 18 seconds (4,800 interactions per day). Medical devices collect life saving data at 250 points per second. Industrial equipment collects failure preventing data at 20,000, 44,000 and even more points per second.



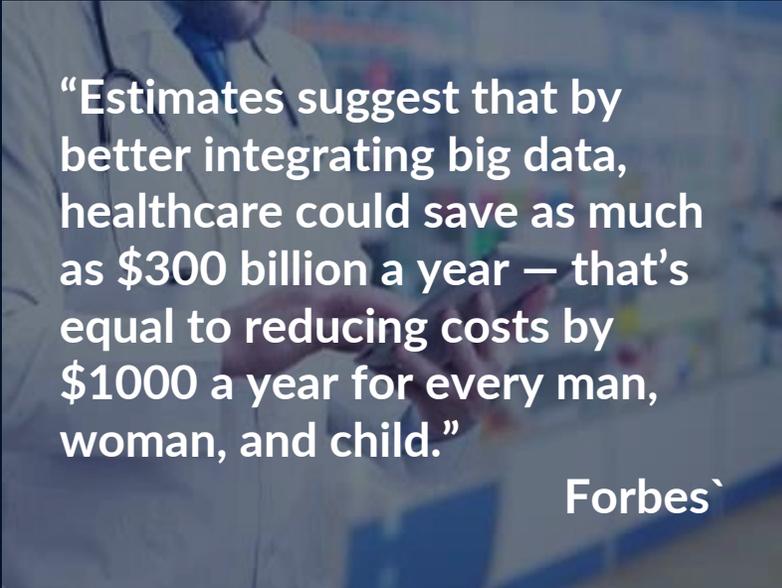
Despite its tremendous business value, Forbes estimates that less than 0.5% of all data is being analyzed and used to deliver business results.



A photograph of a retail clothing store with racks of clothes and a person in the background.

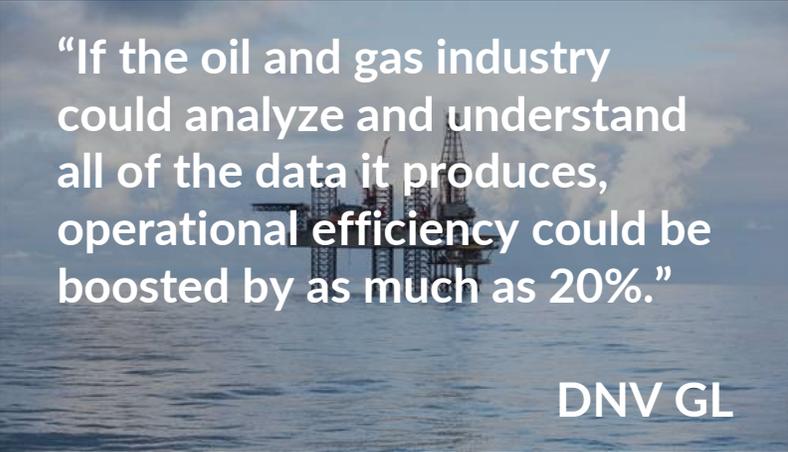
“Retailers who leverage the full power of big data could increase their operating margins by as much as 60%.”

Forbes

A photograph of a healthcare professional in a white coat, possibly a doctor or nurse, in a clinical setting.

“Estimates suggest that by better integrating big data, healthcare could save as much as \$300 billion a year — that’s equal to reducing costs by \$1000 a year for every man, woman, and child.”

Forbes`

A photograph of an offshore oil rig in the ocean under a cloudy sky.

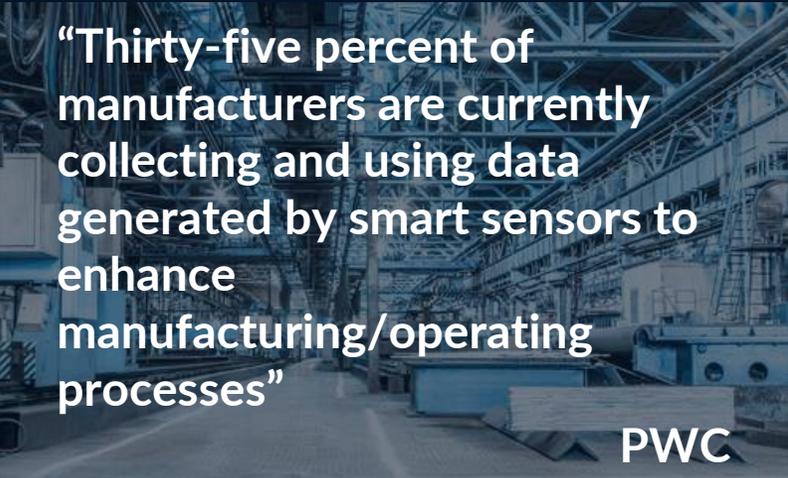
“If the oil and gas industry could analyze and understand all of the data it produces, operational efficiency could be boosted by as much as 20%.”

DNV GL

A photograph of a hand holding several coins, with a blurred background of more coins.

“When JPMorgan Chase & Co. analyzed 12.4 billion debit and credit card transactions, its research revealed a dramatic slowdown in the growth of everyday consumer spending from 2014 to 2015. That data shaped the company’s future strategies and offerings.”

Harvard Business Review

A photograph of a large industrial manufacturing facility with complex machinery and structures.

“Thirty-five percent of manufacturers are currently collecting and using data generated by smart sensors to enhance manufacturing/operating processes”

PWC



The intelligence gained from time series data will transform many industries and will create dominant digital giants who will gain large market share and enormous valuations.



What makes time series data so valuable? Time series data is like DNA data. The shapes and patterns in it reveal the causes and effects of all phenomena. Whether you are monitoring behaviors, operations, transactions, fraud or anything else, detecting the patterns allows you to optimize the managed outcomes.

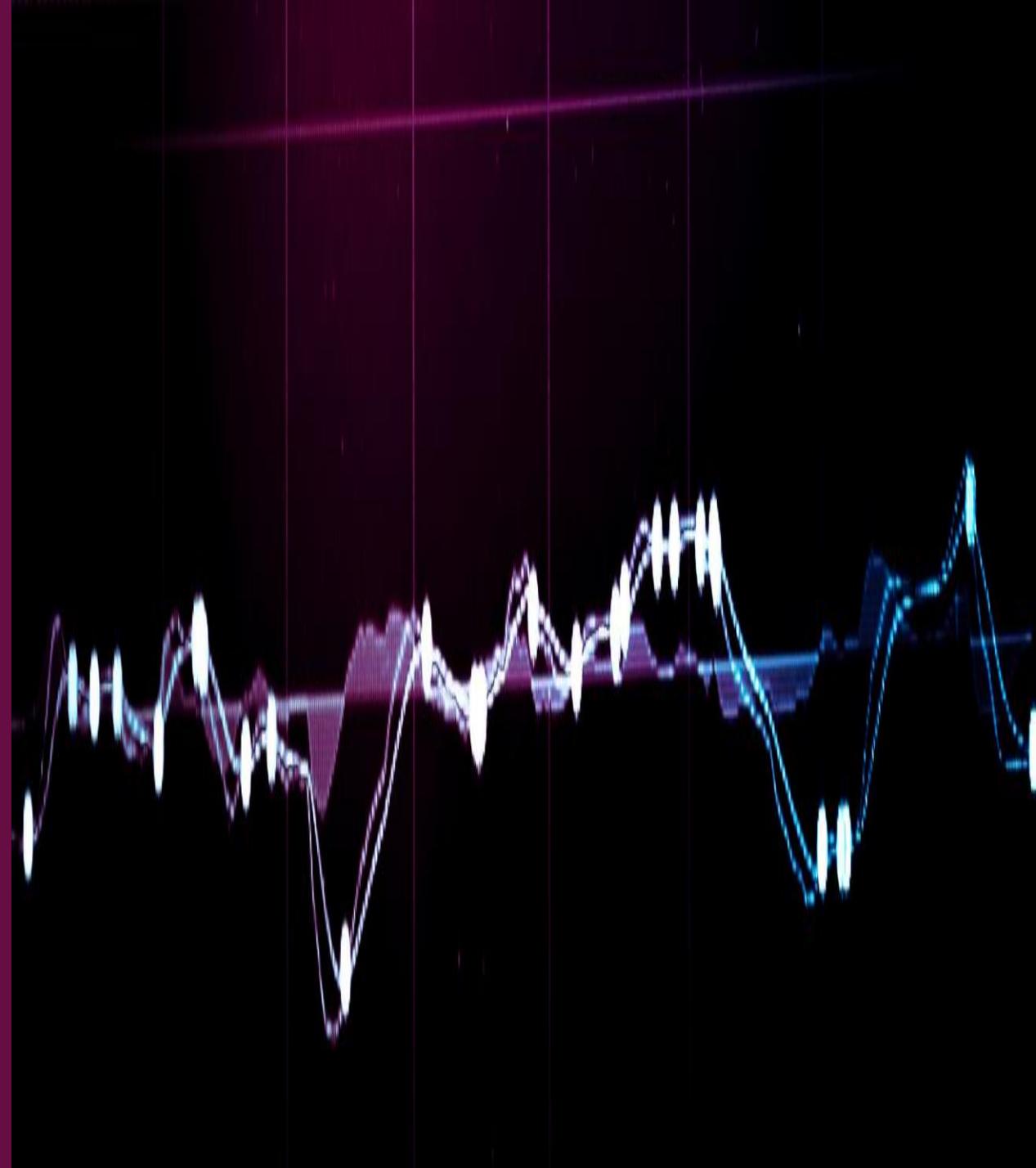


Nearly all data - sensor, machine, transactional, text, voice, video, image, biometric, etc., can be analyzed as time series data.

Why is it so hard to analyze, find patterns and monitor for patterns in time series data? Like DNA data, time series data captures the unique footprint of the individual unit – the patient, the consumer, the individual product sales, the operations of a machine, the conditions in a particular environment. How do you search for patterns across so many units?



As you start looking for sales patterns for particular product SKUs across different locations and promotions, the dimensionality increases exponentially and makes pattern detection and monitoring humanly impossible.





Motif Intelligence™, pioneered by Trendalyze, is a sub field of machine learning. It learns how similar or dissimilar are the shapes of patterns in time series data, and makes intelligent predictions and decisions based on a majoritarian voting about the similarities in shapes.



Motif Intelligence™ learns similarly to how we humans learn by distinguishing differences between shapes. Unlike machine learning and deep learning, it does not require large training data sets nor statistical or data science knowledge.

Motif Intelligence™ is simple to understand and use. Business professionals understand the meaning of the patterns that they see. They can also find similar patterns by just searching as they do on the web. Trendalyze is computationally efficient and scalable to pull the searches from any volumes of time series data.



Words are sequences of letters. Time series are sequences of measurements. Like a word, each motif has a meaning that calls to action the subject matter expert. A cardiologists diagnoses a heart condition on based on the shapes in the ECG chart. Motif intelligence helps professionals act on time series signals.



Trendalyze

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FILE HOME MOTIF SEARCH GRANULARITY INTERACTIVE EXPLORER SERIES ANALYSIS PERIOD ANALYSIS MONITORING & LIBRARY

Navigation Visualizations Selections Search Range Display

Search Results (Days) 1 of 1 pages (148 series)

Search

Abingdon / T_MEAN (1) Hawthorne / T_MEAN (2) Glen Mills / T_MEAN (3) Lynn / T_MEAN (4) Santa Margarita / T_MEAN (5) Huntington Station / T_MEAN (6) Pitman / T_MEAN (7) Williamstown / T_MEAN (8)

city

T_MEAN

ambient_mean

from_noaa_tmean

to_noaa_tmean

Motif Parameters

Motif: Abingdon / T_MEAN

Filters: city Abingdon

Interval: 18.03.2017.22:00:00.000

Number of points: 7

From: 2017-02-15 21:03:03 To: 2017-03-01 18:03:03

Min. offset Unit Max. offset Unit

Min. offset Days Max. offset Days

Within: city T_MEAN

| Rank | Time Series | Time | Distance | % PM |
|------|-----------------------------|--------------------------|----------|--------|
| (1) | Abingdon / T_MEAN | 2017-02-17T00:00:00.000Z | 0.0000 | 100.00 |
| (2) | Hawthorne / T_MEAN | 2017-02-17T00:00:00.000Z | 0.6804 | 100.00 |
| (3) | Glen Mills / T_MEAN | 2017-02-17T00:00:00.000Z | 0.6889 | 100.00 |
| (4) | Lynn / T_MEAN | 2017-02-11T00:00:00.000Z | 0.7287 | 100.00 |
| (5) | Santa Margarita / T_MEAN | 2017-02-22T00:00:00.000Z | 0.7358 | 100.00 |
| (6) | Huntington Station / T_MEAN | 2017-03-15T00:00:00.000Z | 0.7378 | 100.00 |
| (7) | Pitman / T_MEAN | 2017-03-17T00:00:00.000Z | 0.7426 | 99.99 |
| (8) | Williamstown / T_MEAN | 2017-02-17T00:00:00.000Z | 0.7455 | 99.99 |
| (9) | Metuchen / T_MEAN | 2017-03-22T00:00:00.000Z | 0.7455 | 99.99 |

Ask me anything

Call us to see
 Motif Intelligence™
 in action.



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