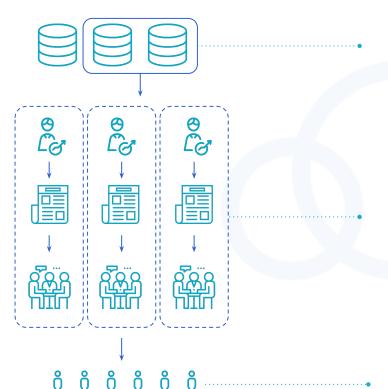


# **Data Science In Practice**

This is summary of Datanest Analytics Catalog

for better explanation or more complete catalog, you can contact us at hello@datanest.io

#### **Current state of data**



On a daily basis, companies are collecting massive amounts of data. These data are mostly being **kept** in **Silos** based on the technology being used.

Most of this data is **underutilized** and only being stored for monitoring.

**Reactive action** instead of proactive.

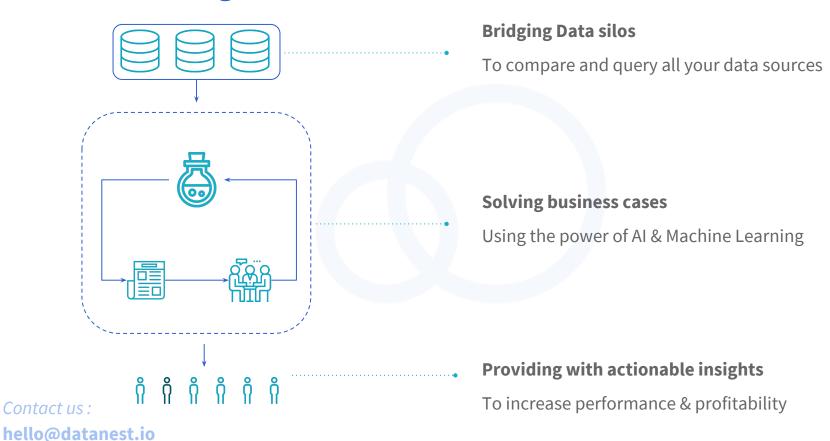
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Contact us:

# Solution?



## How to leverage it?



#### **Datanest Solutions**

#### **Data Exploration**

"Descriptive & Discovery"

To validate a business needs based on historical data.

#### **DS** as a Service

"All Included"

Model creation, infrastructure & maintenance

#### **ML Products**

"Pay as you go"

**Finance**: Truescore

**Retail & Logistic**: Order recommendation, dynamic pricing, inventory prediction



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#### **Data Science team**



- + Data Scientist
- + Data Engineer
- + System Architect

#### Infrastructure





**Data-Science as a Service** 

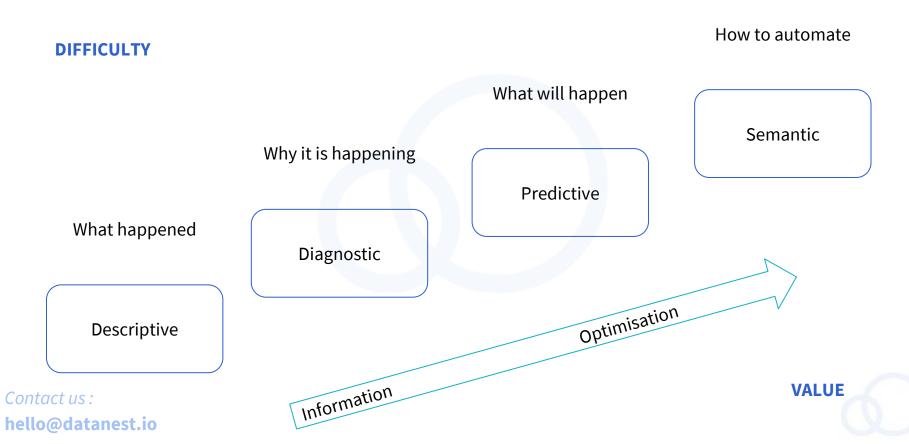
Contact us:

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# Steps on Data Science?



### **Datanest Data Science Stage**



### Level 1

# **Descriptive EDA**

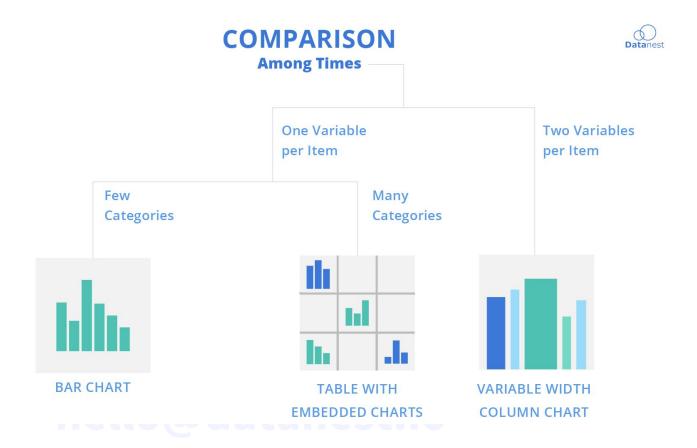
**Describe relation** 

**Describe composition** 

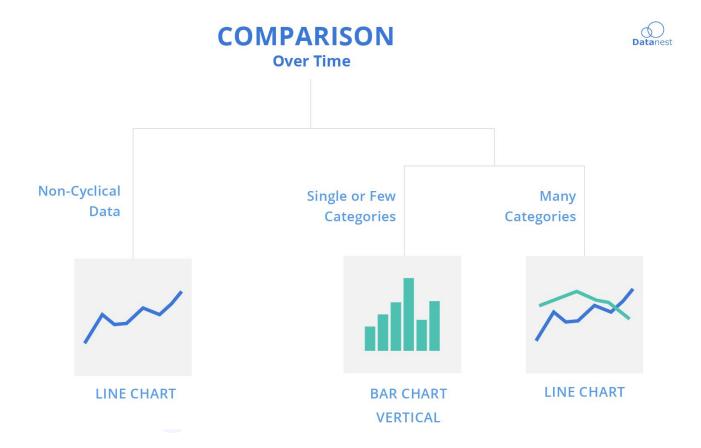
Compare

**Describe distribution** 

Composition Distribution Relationship



Composition Distribution Relationship



#### **Composition**

Distribution Relationship



**Data**nest



#### **Composition**

Distribution Relationship

#### **COMPOSITION**

**Changing Over Time** 

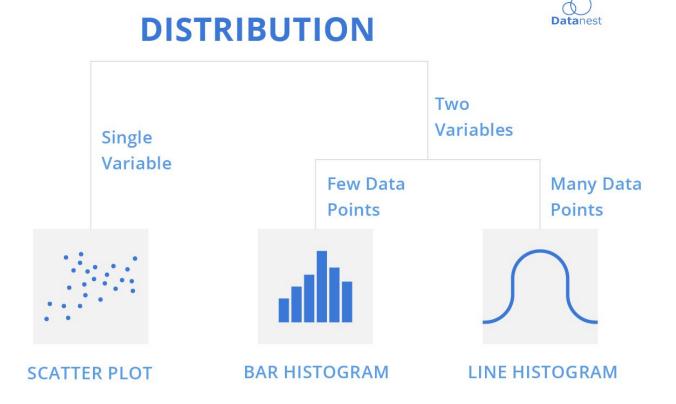




Comparison Composition

**Distribution** 

Relationship



Comparison Composition Distribution

#### Relationship



## **RELATIONSHIP**



### Level 3

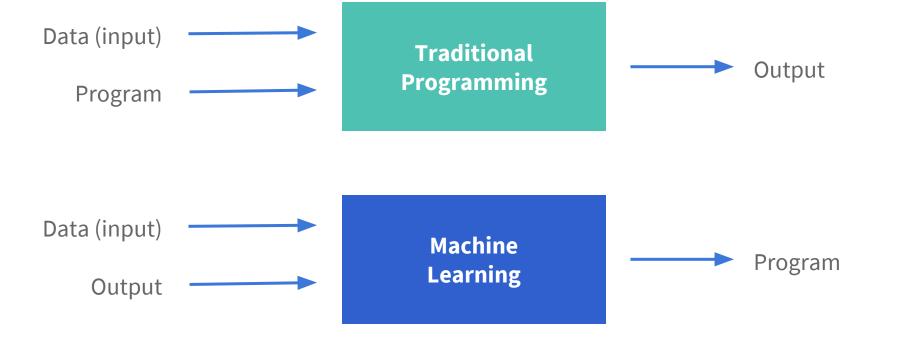
# Predictive Machine Learning

**Supervised** 

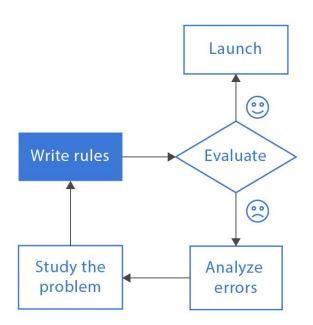
What is ML?

**Other Learning Types** 

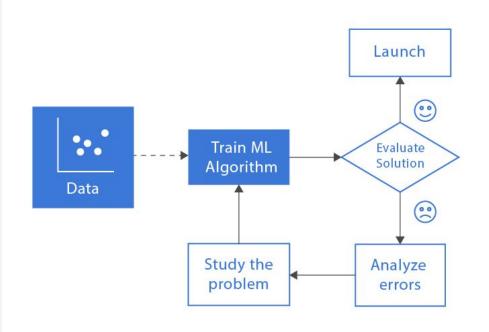
**Unsupervised** 







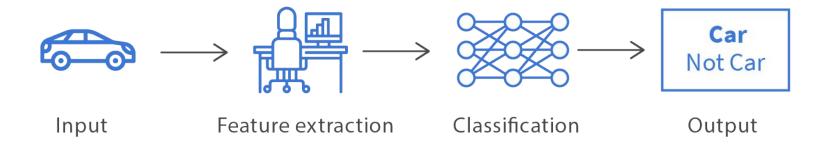
**Traditional Programming** 



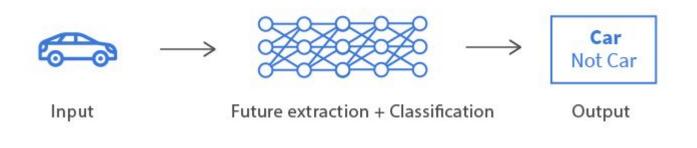
# **Machine Learning**

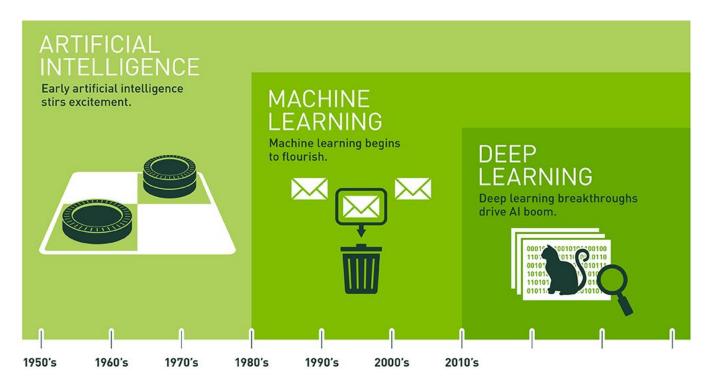


# **Machine Learning**



# **Deep Learning**

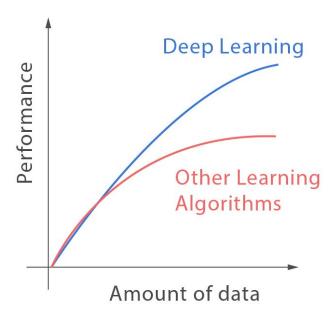




Since an early flush of optimism in the 1950s, smaller subsets of artificial intelligence – first machine learning, then deep learning, a subset of machine learning – have created ever larger disruptions.



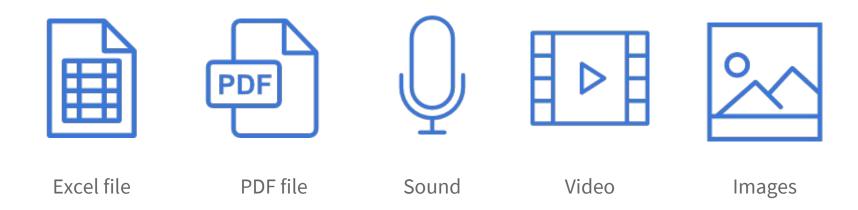
# Why deep learning?



How do data science techniques scale with amount of data?



# **Big Data?**





# How to Formulate Problem?



# **Supervised Learning**

What? Classification

When? Survival

How Much? Regression

How much at certain time? Time series

How much at certain time and place? Panel

For get industry tailored example you can contact us in **hello@datanest.io** 

# **Supervised Learning**

Where?	Geospatial
Where at certain time?	<b>Geospatial Time Series</b>
How Much?	Longitudinal
Multiple what?	Sequential
Why?	Network (Cause n Effect)

For get industry tailored example you can contact us in **hello@datanest.io** 

## **Unsupervised Learning**

Clustering

**Anomaly Detection** 

Association Rule, labelling each other

Decomposition



# **Other Learning Types**

Metric Learning

Learning to Rank

Learning to Recommend

Semi-Supervised Learning

Self-Supervised Learning Reinforcement Learning: Q-Learning

Reinforcement Learning: Multi-Armed Bandit

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