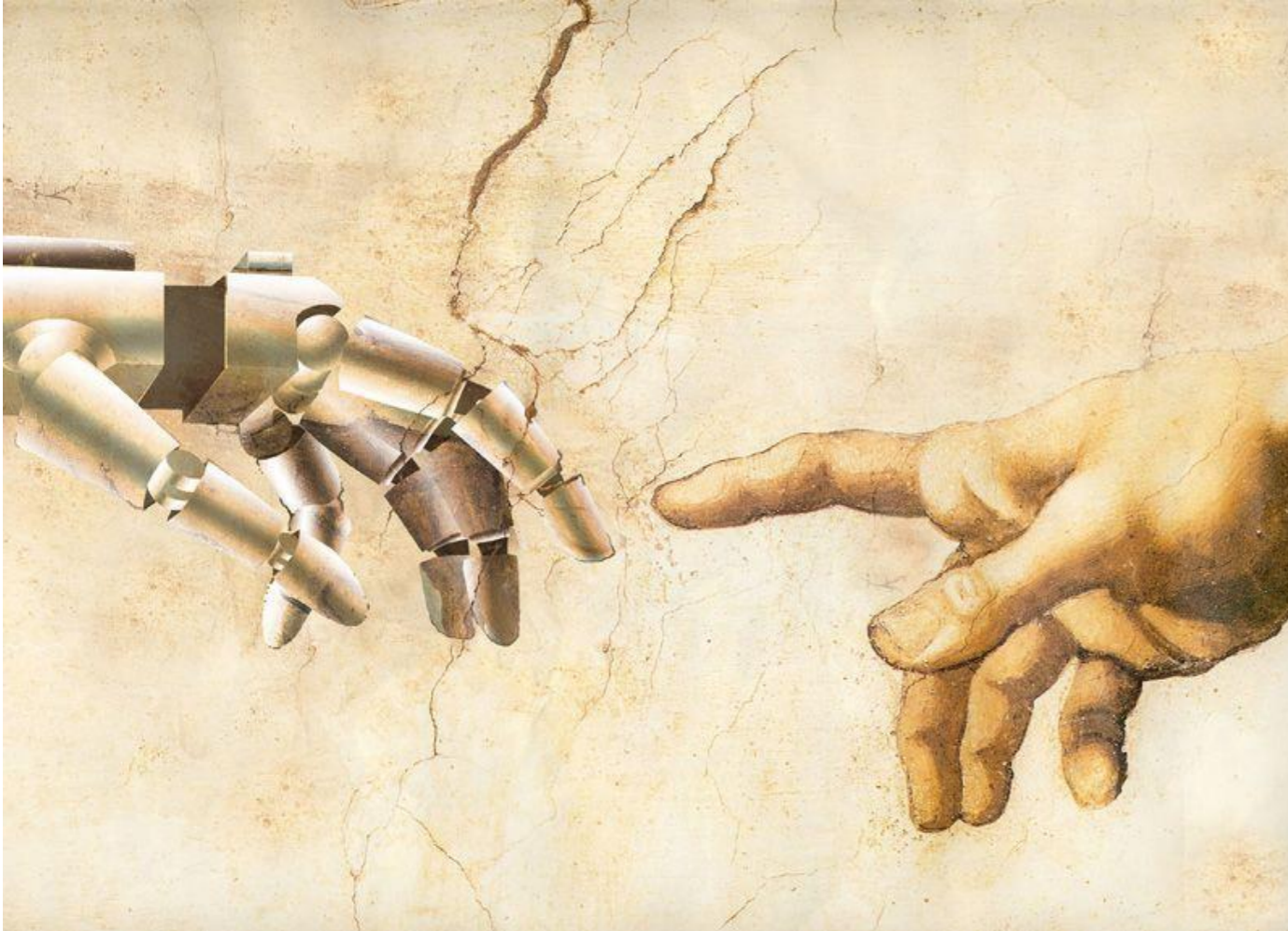




**ROBOTIC PROCESS AUTOMATION – QUICK PATH TO AI ADOPTION**



**AlphaFold** - predicts protein 3D structure based on their amino acid sequence

**AlphaZero** - beats world champions in chess, shogi and go

**GPT-3** - holds conversations, writes articles and even program code based on requests in natural language

**Facebook AI** - applies face recognition to petabytes of photographs

**Spotify AI** - provides recommendations based on your listening history

**Traditional industries** - ???



**RPA**

**Robotic Process Automation**

- Strictly formalized processes
- Structured data input / output
  - No human interaction



**IPA**

**Intelligent Process Automation**

- Processes with multiple deviations and variations
  - Unstructured data input/output
  - Human interaction

**UNIFORM INSTRUMENT** for process automation in different business-functions

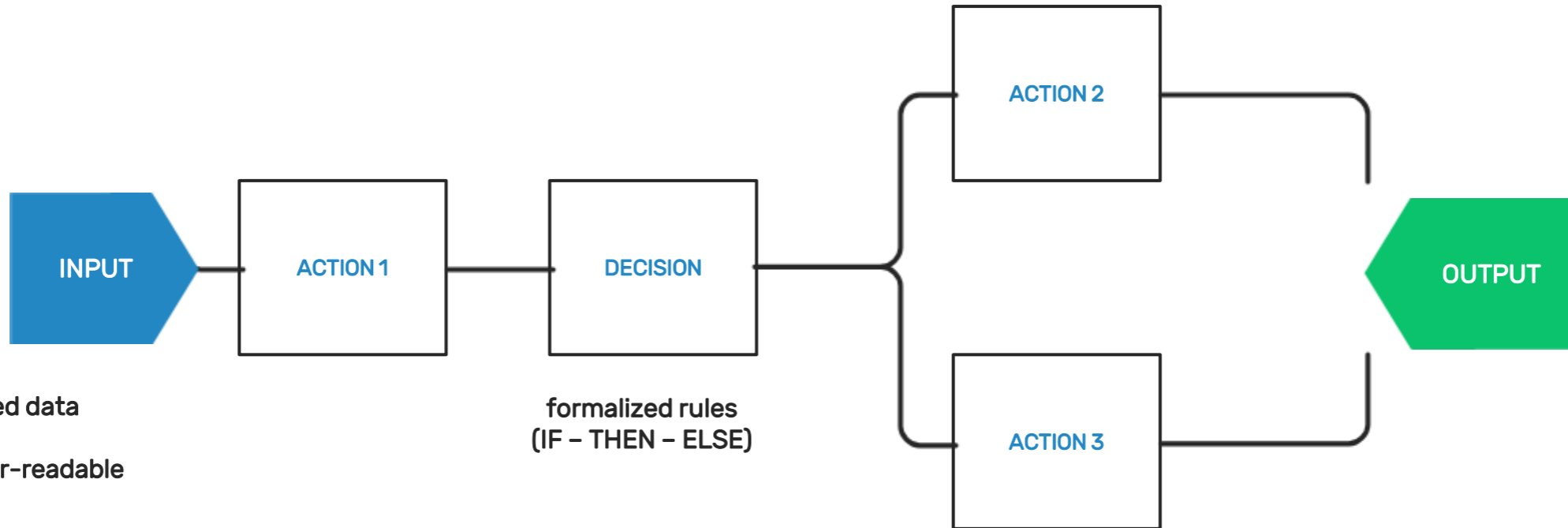
**WORKS 24x7** and scales performance in times of peak demand

**MINIMIZES ERRORS** and eliminates "human factors"

**FULL TRANSPARENCY** and logging on every step of the process

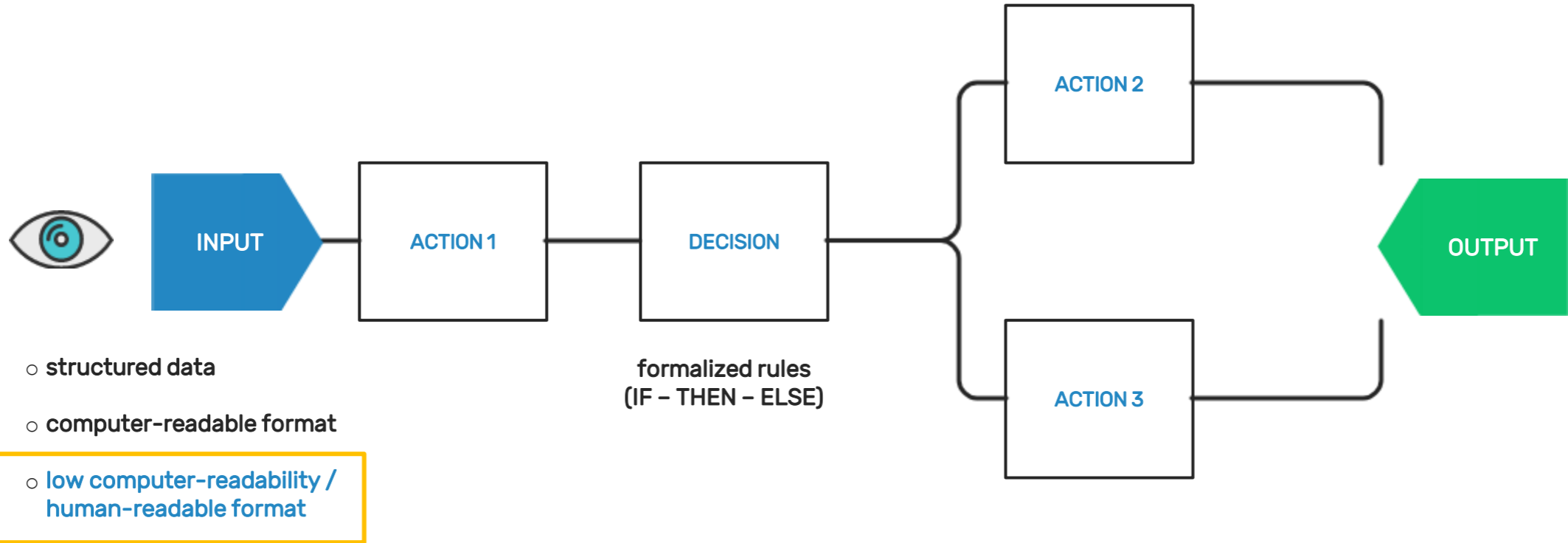
**SPEEDS UP** processes and overall performance

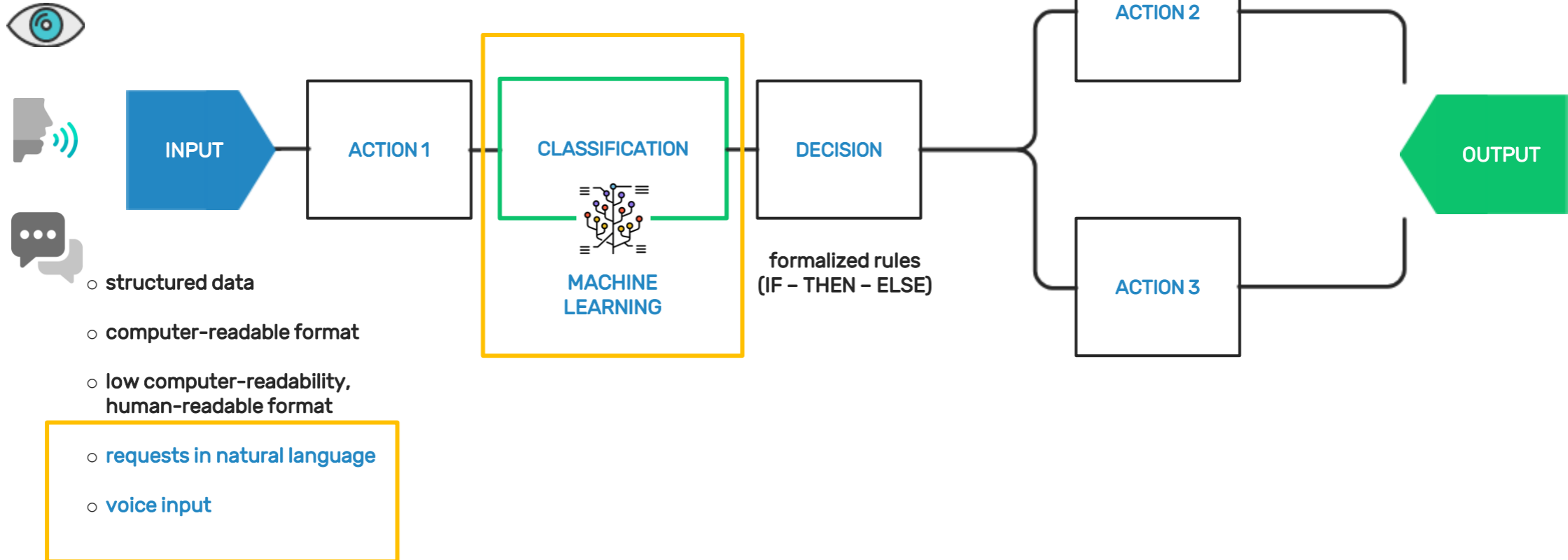
**AGILITY** and cross-functional applicability

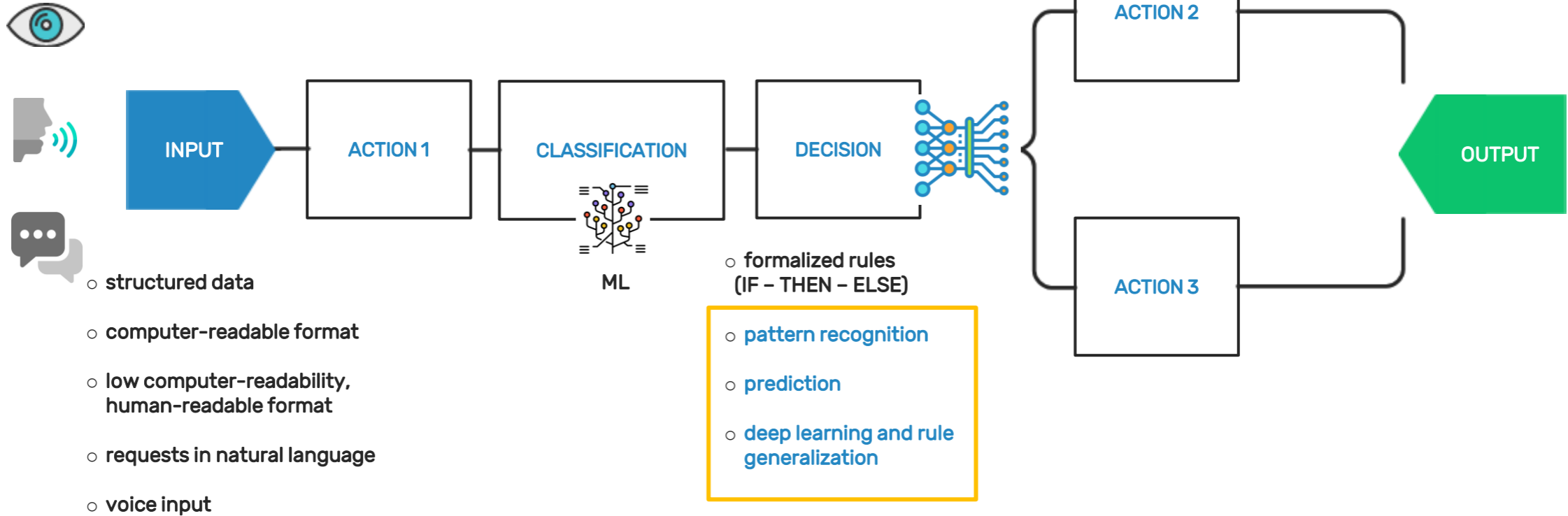


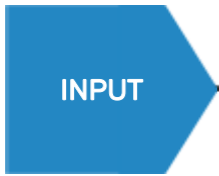
- structured data
- computer-readable format



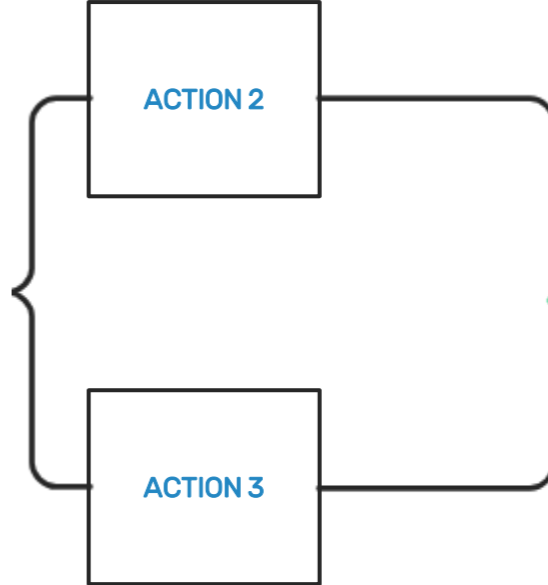








ML



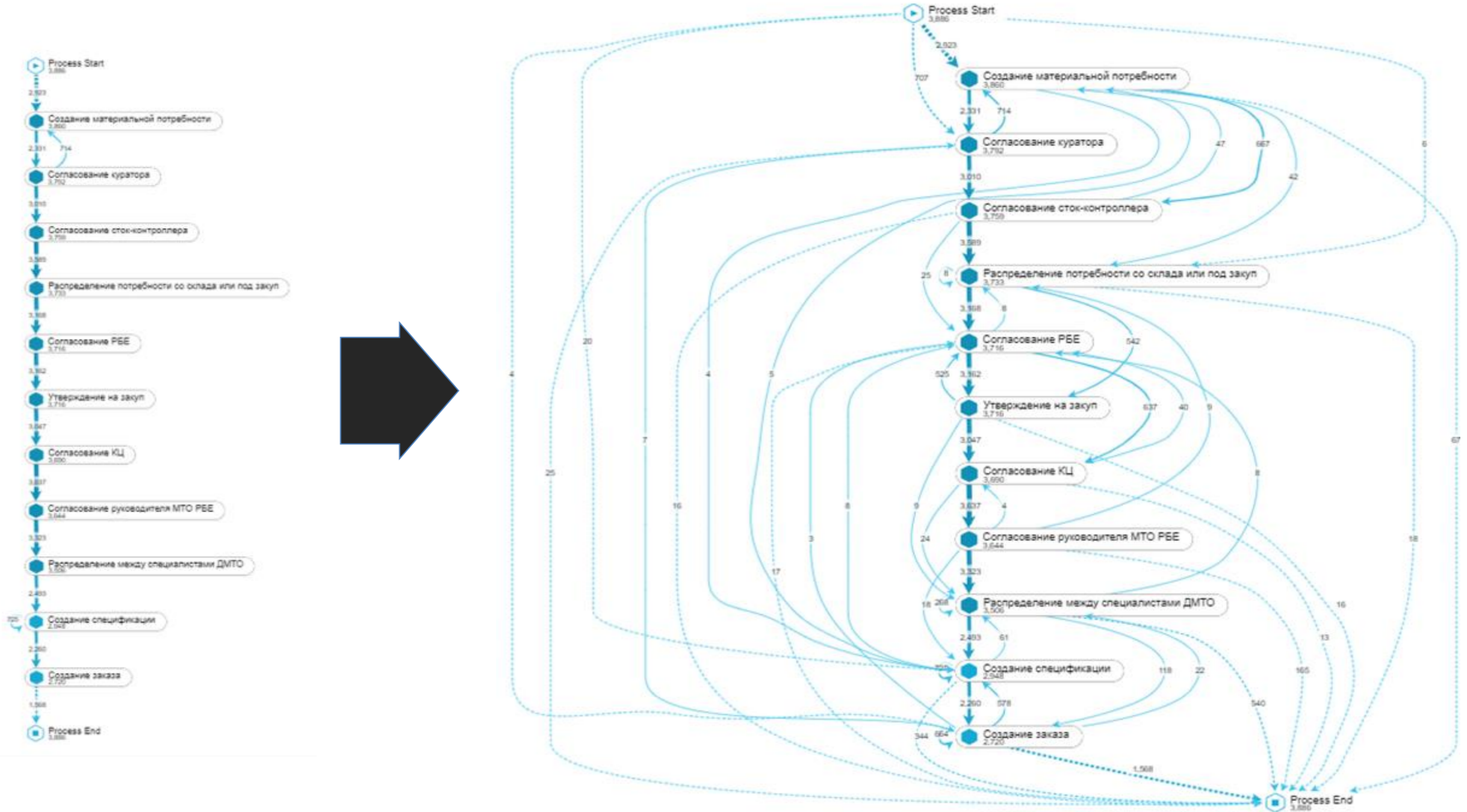
- structured data
- computer-readable format
- low computer-readability, human-readable format
- requests in natural language
- voice input

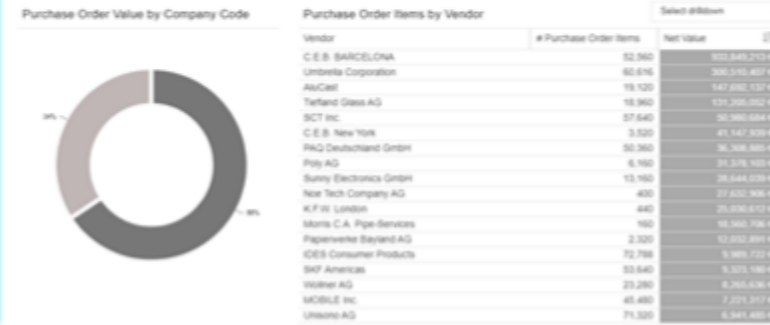
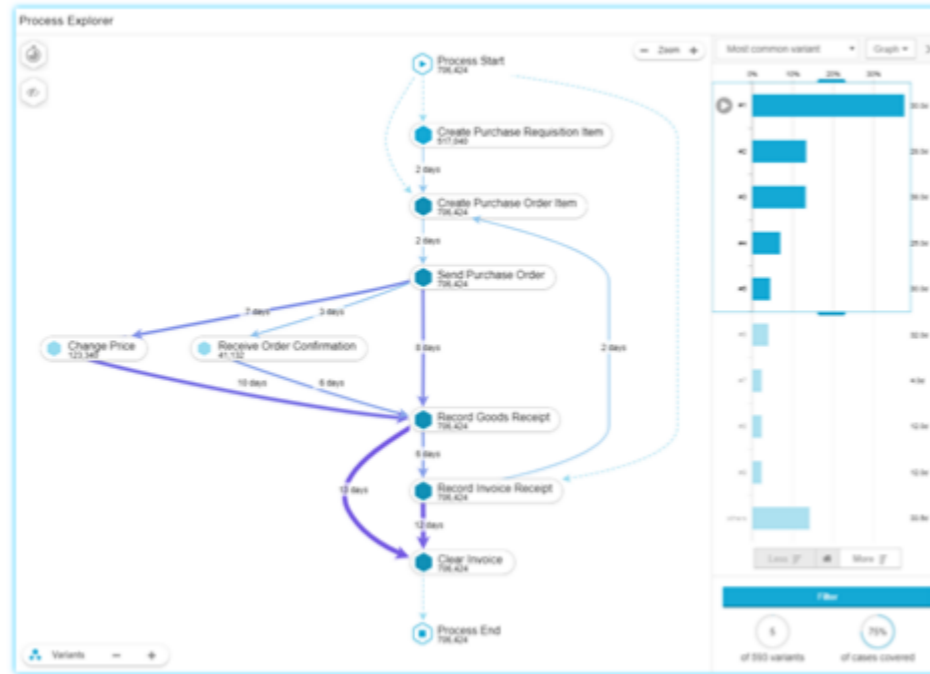
- formalized rules (IF - THEN - ELSE)
- pattern recognition
- prediction
- deep learning and rule generalization

- context description and explanation for provided output
- examples and annotations selected from knowledge bases and open sources
- counter requests and suggestions

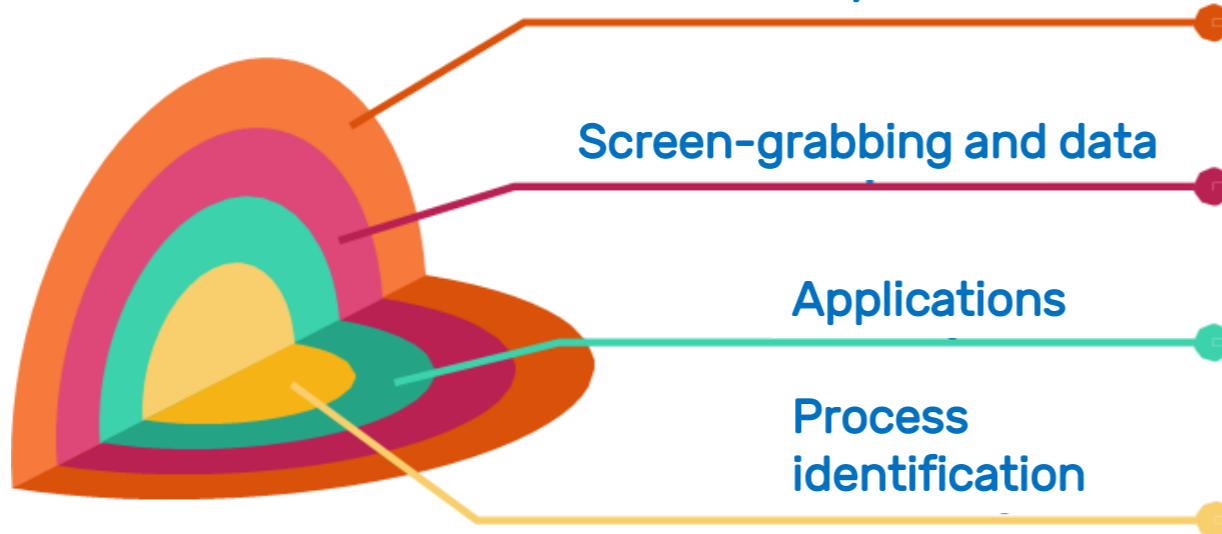




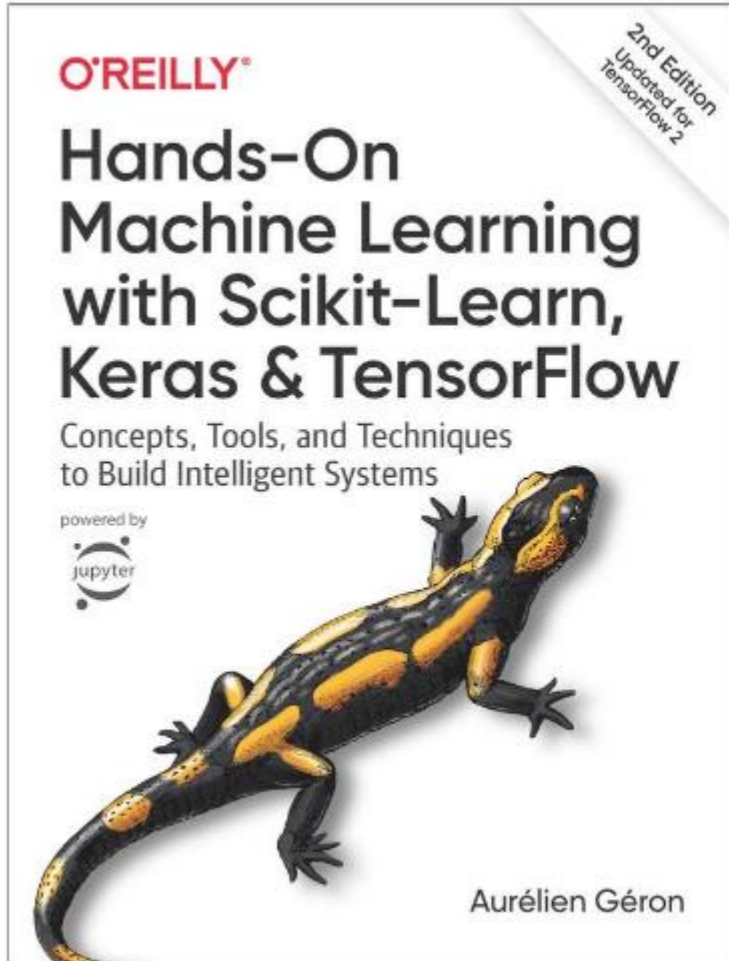




## Key-strokes



- Automatic data mapping based on «digital traces» and corporate Big Data
- Risk and scalability modeling
- RPA and general automation application assessment
- Anomaly and deviation analysis, root-cause analysis
- Notifications and preemptive measures (bottlenecks, deviations and etc.)
- KPI monitoring on process and individual employee levels



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Data quantity and quality are considered as key success factors in AI applications

Quality of data determines, in most part, AI application readiness for productive operation

Garbage in – garbage out

Low levels of acquisition, storing and machine-learning readiness for discrete production data

Lack of open-source data sets / banks in traditional / conservative industries

Lack of local specificity in open-source data banks

1

## START SIMPLE

Gradual increase in RPA presence and technological complexity in corporate processes

2

## DATA-DRIVEN VIEW OF PROCESSES

Decision-making based on deep insights in process execution picture, reconstructed by mining corporate Big Data

3

## CORPORATE BIG DATA

Development of corporate platforms that provide Big Data management from data collection and acquisition, to data preparation for machine learning and testing

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**THANK YOU FOR YOUR ATTENTION!**