Neapolis University Pafos

NOT-SO-HUMAN RESOURCES
A JUST TRANSITION TO ORGANIZATIONAL SUCCESS

Presenter: Zach Anthis

CHR ASSOCIATION
Cyprus Human Resource Management Association
ANNUAL CONFERENCE 23 MAY 2024
Ktima Koushioumis Nicosia
Envisioning Tomorrow's Workplace
#HRForwardTogether
Deloitte.

WELCOME MESSAGE

Zach Anthis

Lecturer in Artificial Intelligence and Data Analytics (AIDA)

School of Economics, Business, and Computer Science

Neapolis University Pafos

PRESENTATION AGENDA

- Challenges in HRM
- AI and ML
- AI and the Workforce
- Tools and Applications
- JT Framework
- QnA

ICE BREAKER

CHALLENGES IN MANAGEMENT

A famous model depicting the key roles of managers.

MANAGEMENT

INFORMATIONAL

Monitor
Disseminator
Spokesperson

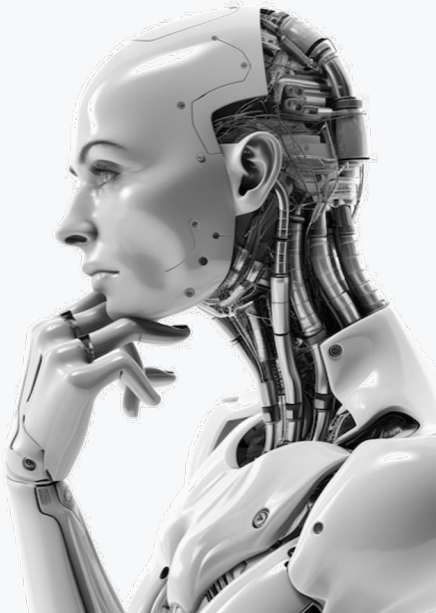
INTERPERSONAL

Figurehead
Leader
Liaison

DECISIONAL

Entrepreneur
Disturbance Handler
Resource Allocator
Negotiator

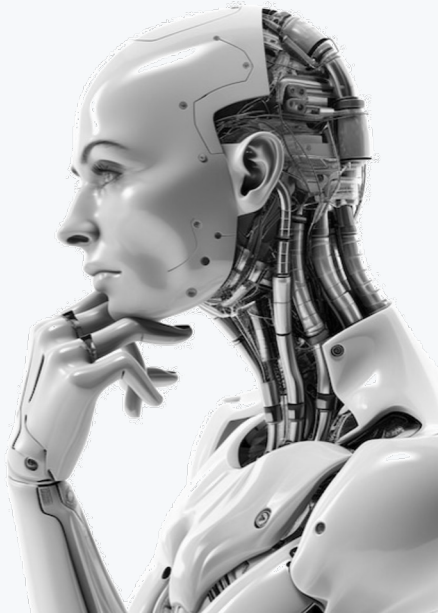
Source: Mintzberg, H. (1990)



CHALLENGES IN HR

A famous model depicting the key roles of HR managers.

Source: Ulrich, D. (1997)



A SHORT SURVEY

A quick interactive activity (getting to know each other).

LARGE BUSINESS USERS
>100 Employees

47%

MEDIUM BUSINESS USERS
50-100 Employees

65%

SMALL BUSINESS USERS
2-49 Employees

37%

HOME BUSINESS USERS
Self-employed

18%

WHY BOTHER

A macro-level perspective on the historical milestones for humanity.

SPEECH

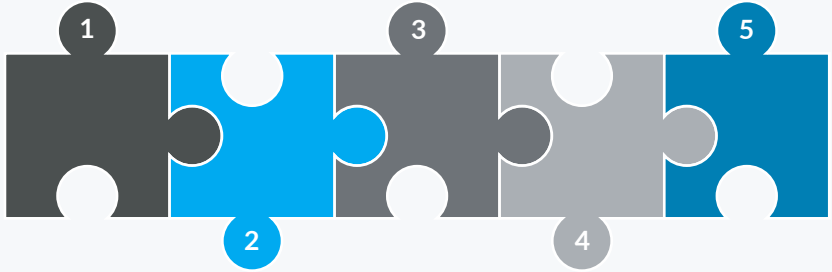
Marked the dawn of communication, enabling complex thoughts and ideas to be shared verbally.

TYPOGRAPHY

Accelerated the spread of information and ideas, ushering in an era of mass communication and literacy.

ARTIFICIAL INTELLIGENCE

Allowed machines to perform tasks that once required human intelligence, leading to advancements in automation, data analysis, and problem-solving.



WRITING

Preserved knowledge across generations and facilitated the development of organized societies.

TELCOM

Introduced global connectivity on a massive scale, offered immediate access to information and communication.

ARTIFICIAL INTELLIGENCE

But what is it?

WHAT IS AI

An attempt to define (machine) intelligence.

"AI is the science and engineering of intelligent machines."

McCarthy J. (1955)

"A machine would deserve to be called intelligent if and only if it could deceive a human into believing that it was human."

Turing A. (1950)

WHAT IS AI

An attempt to define (machine) intelligence.

SYSTEMS THAT ACT

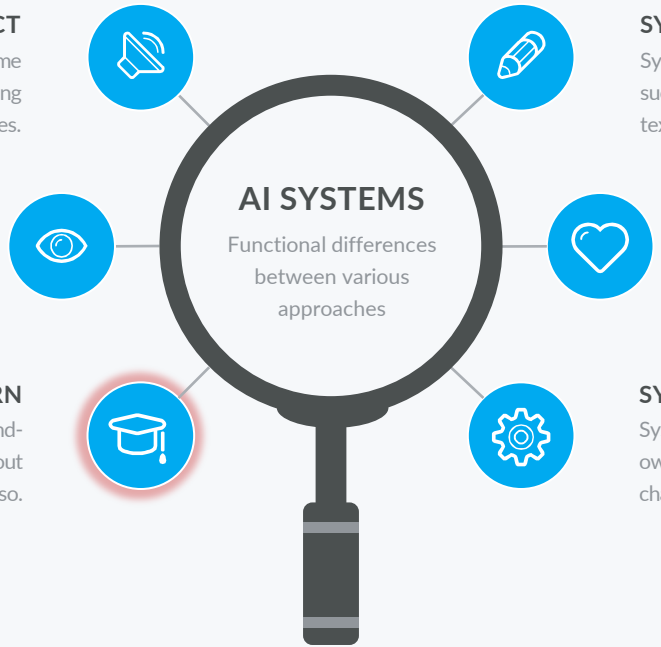
Systems that function according to some predefined script, often by following manually programmed rules.

SYSTEMS THAT PREDICT

Systems that analyze data and use it to produce probabilistic predictions (mapping of known to unknown information).

SYSTEMS THAT LEARN

Systems that predict with less hand-engineering and can master tasks without being explicitly programmed to do so.



SYSTEMS THAT CREATE

Systems that are able to generate content such as original writing (natural language text), code, audio, imagery, video, etc.

SYSTEMS THAT RELATE

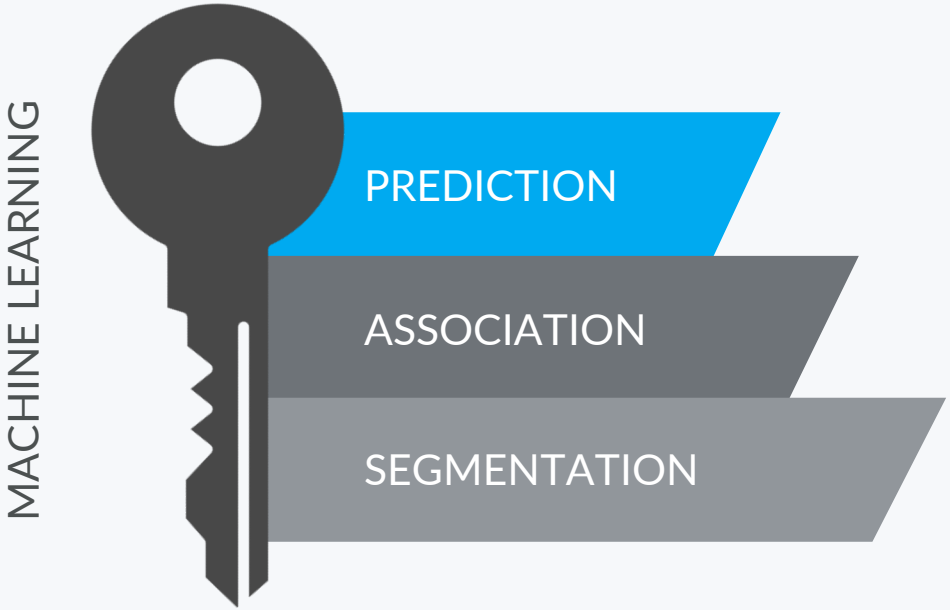
Systems that can extract and quantify emotional states from user text, voice, facial expressions, and body language.

SYSTEMS THAT EVOLVE

Systems that can dynamically change their own design and architecture to adapt to changing conditions in their environment.

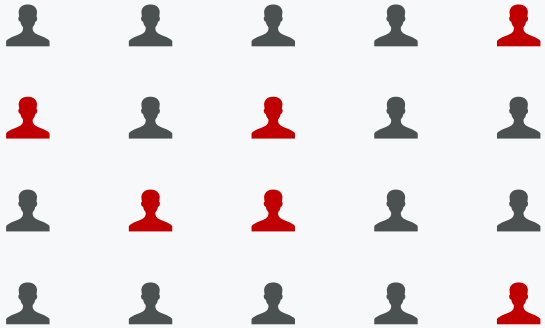
HOW MACHINES LEARN

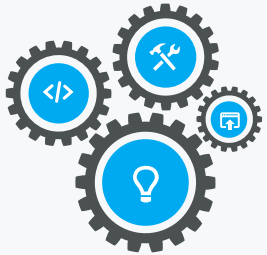
A brief description of ML-based predictive/prescriptive modeling.



EXAMPLE: PREDICTION

A trivia example of prediction (classification).





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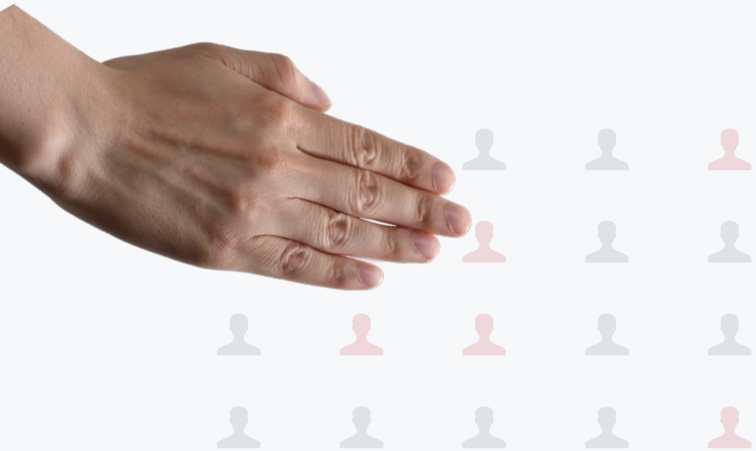

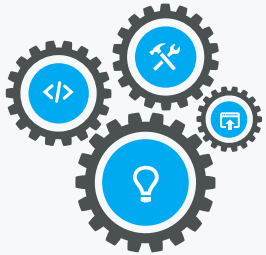

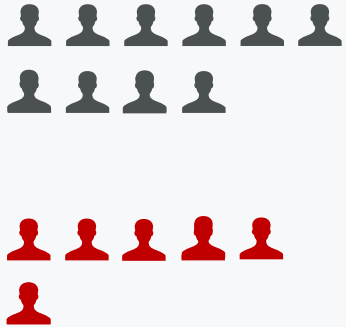

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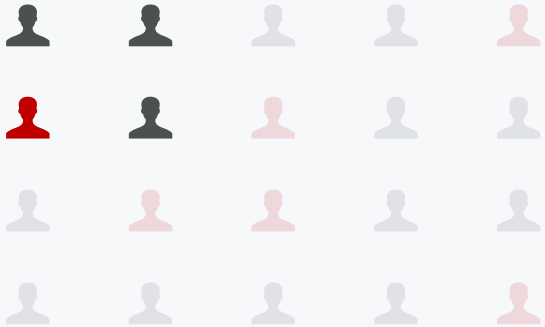

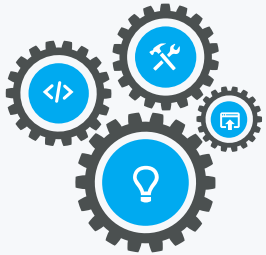

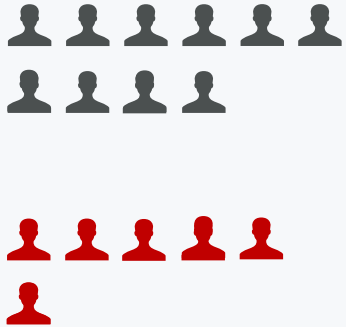

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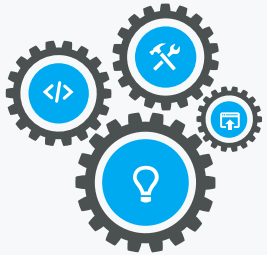
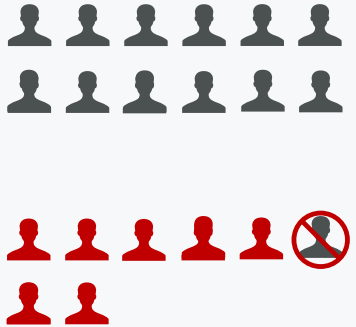
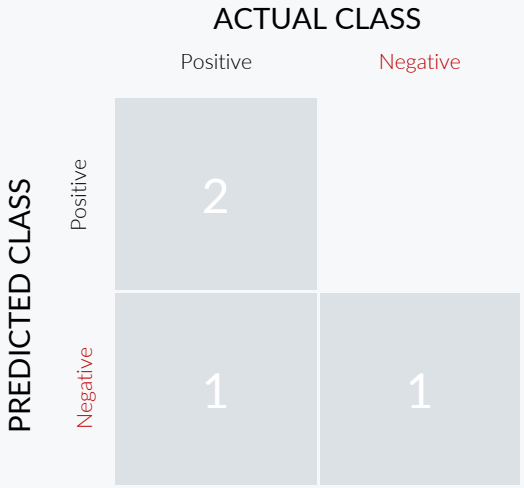




EXAMPLE: PREDICTION

Validating classifier(s) using the confusion matrix.



EXAMPLE: PREDICTION

Validating classifier(s) using the confusion matrix.

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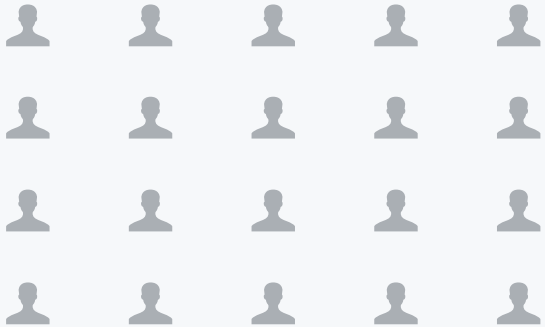
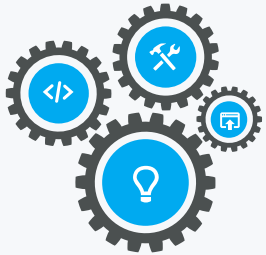
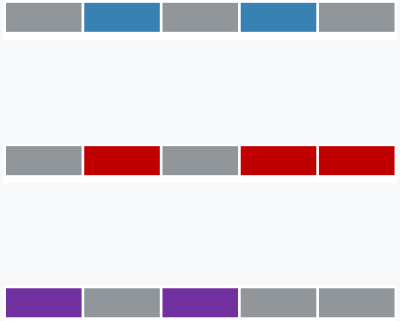
EXAMPLE: ASSOCIATION

A trivia example of association (rule generation).

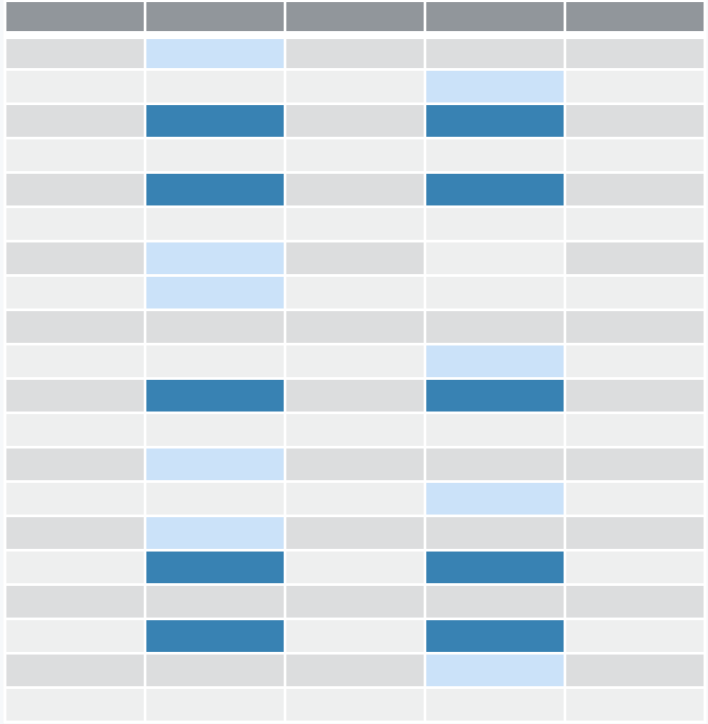






EXAMPLE: ASSOCIATION

Validating association rules using objective measures.



Support: 25%

Confidence: 50%

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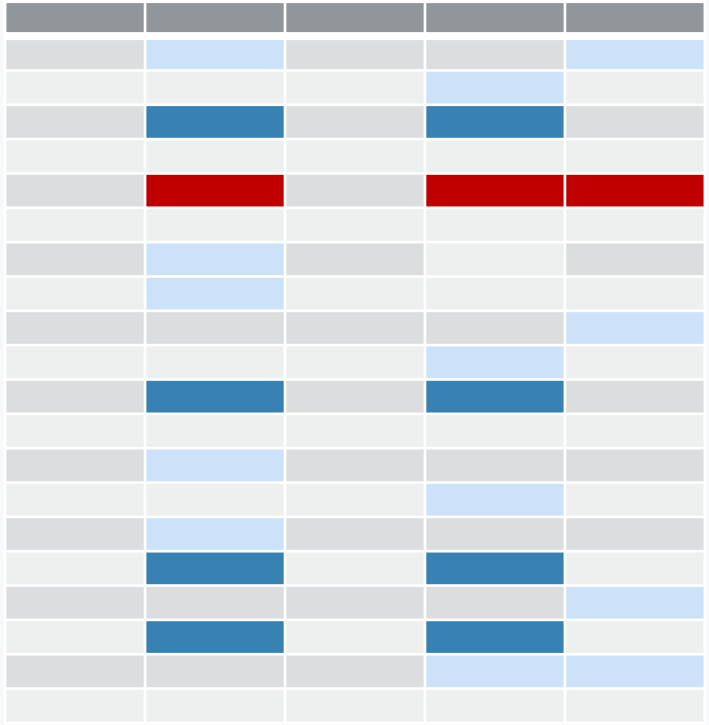

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Support: 0.05% Confidence: 20%

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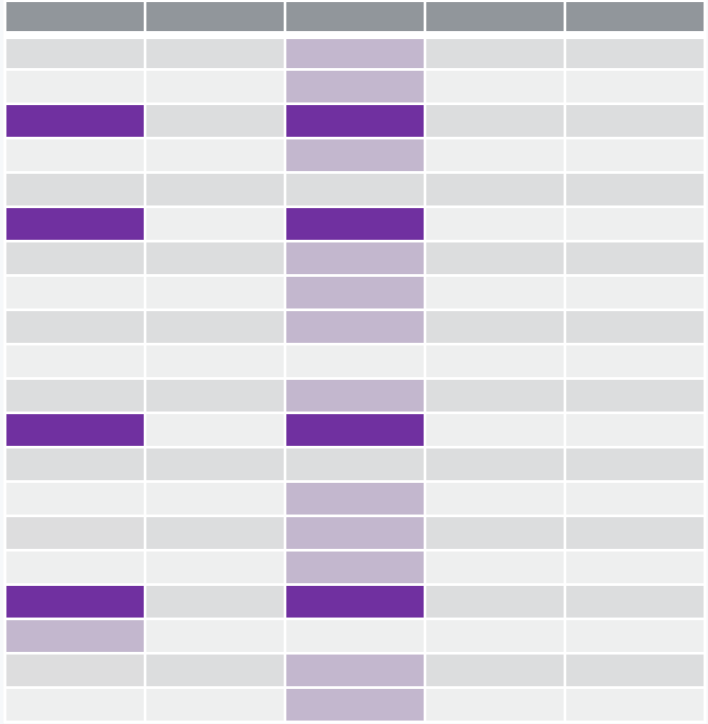


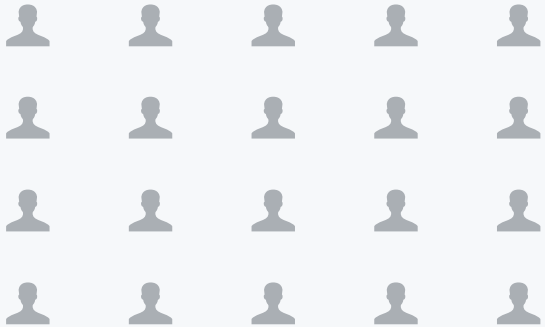
Support: 25% Confidence: 50%

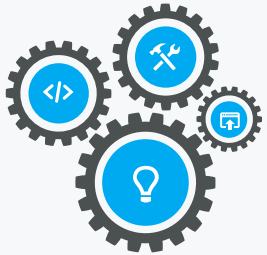
Support: 0.05% Confidence: 20%

Support: 20% Confidence: 80%

EXAMPLE: SEGMENTATION

A trivia example of segmentation (clustering).





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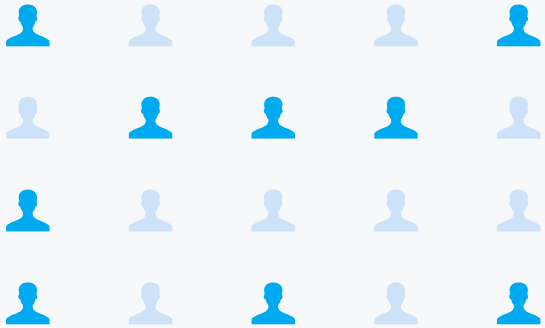

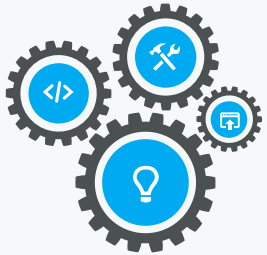

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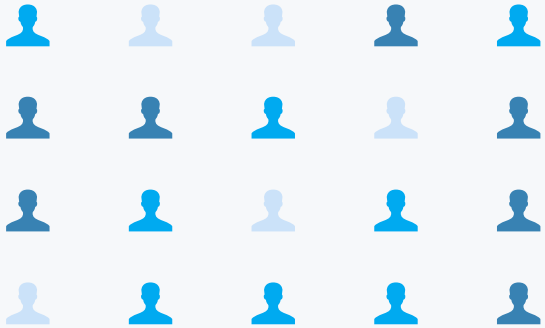

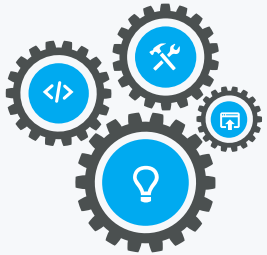

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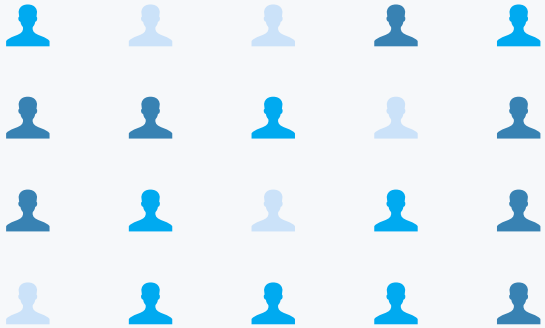
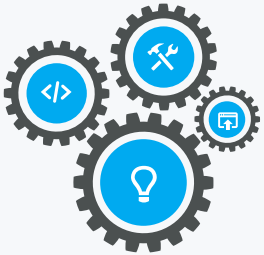
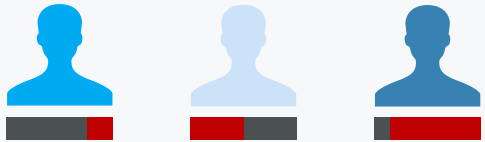
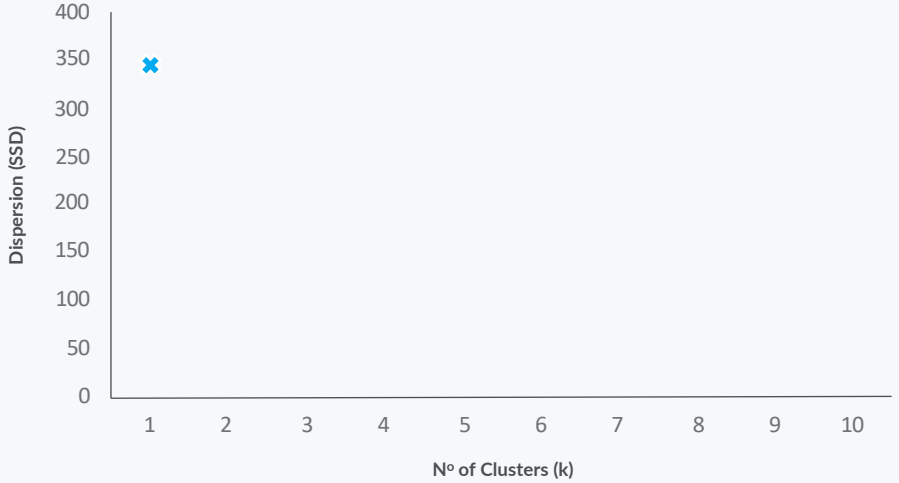






EXAMPLE: SEGMENTATION

Validating partition scheme(s) using the “elbow” method.



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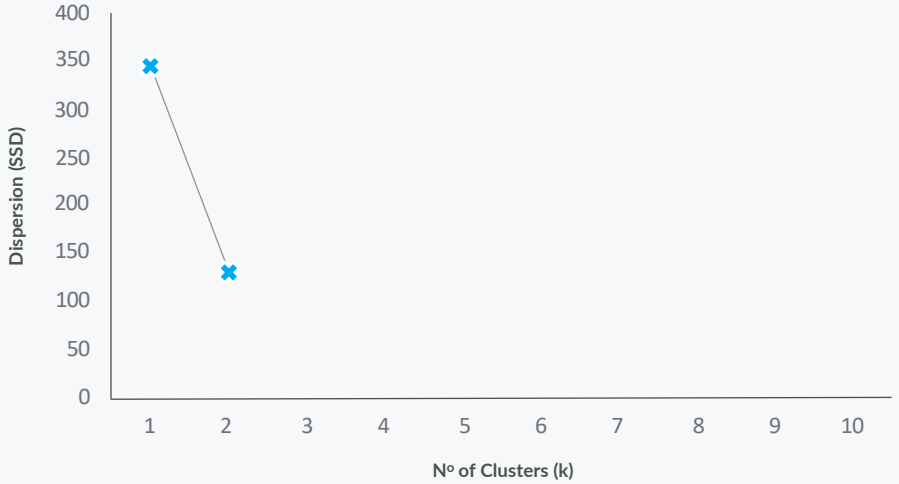

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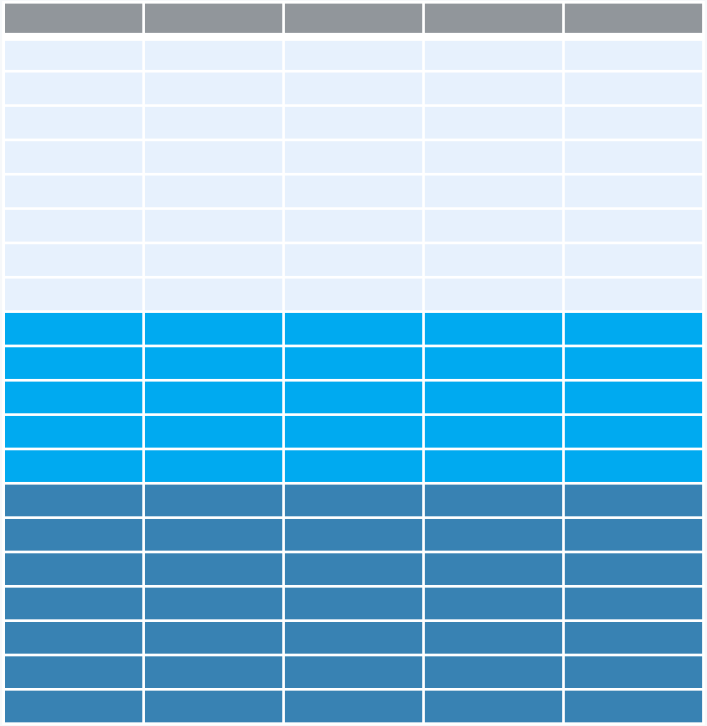

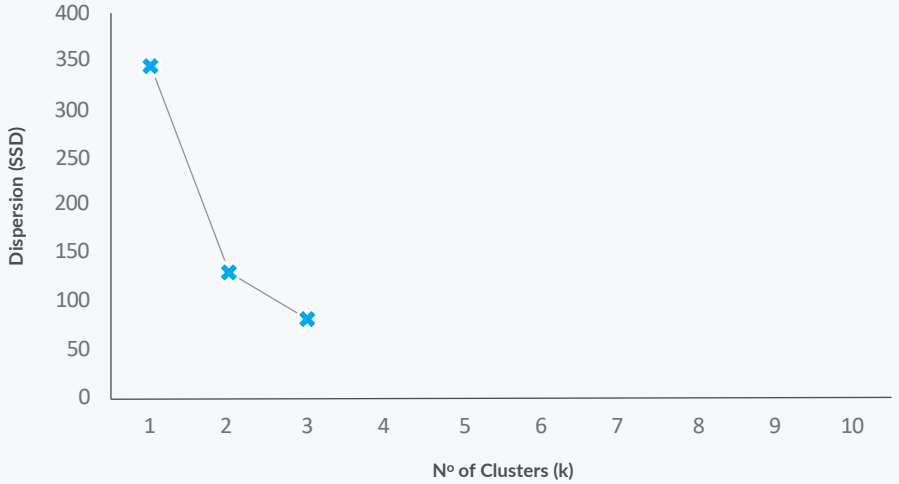

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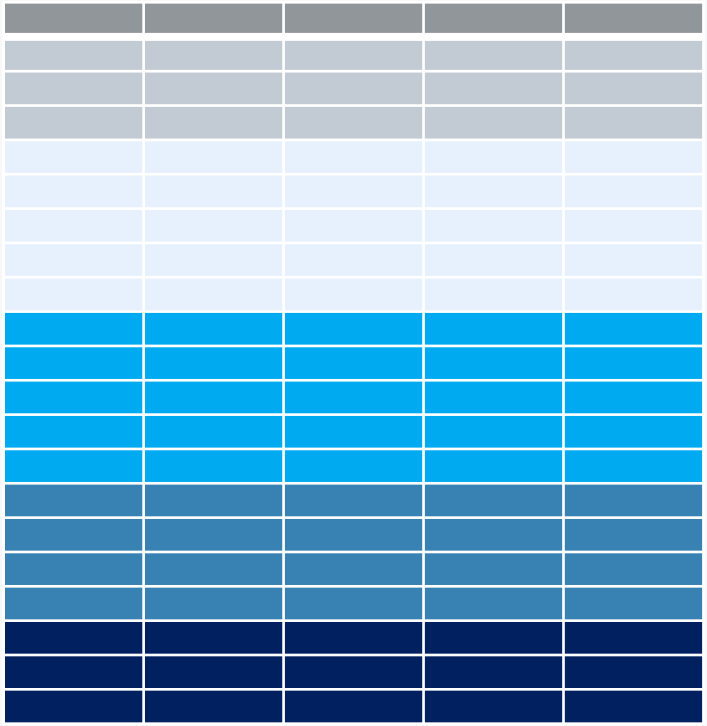

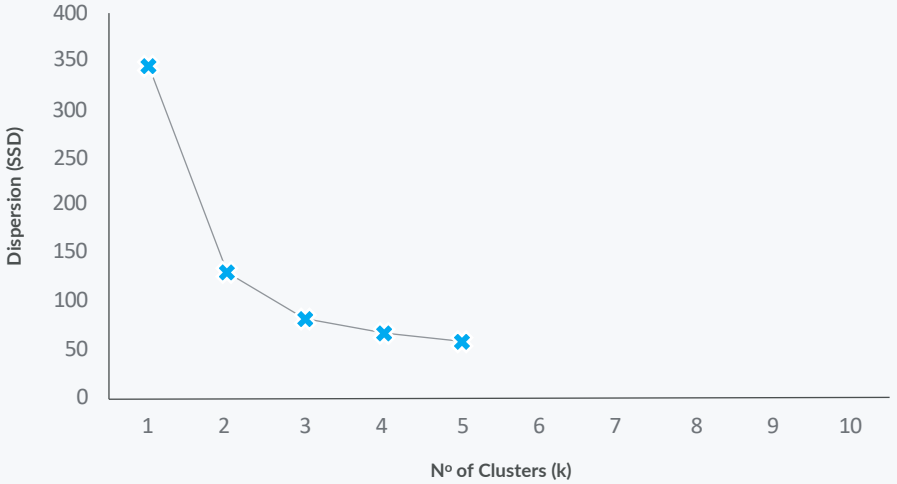

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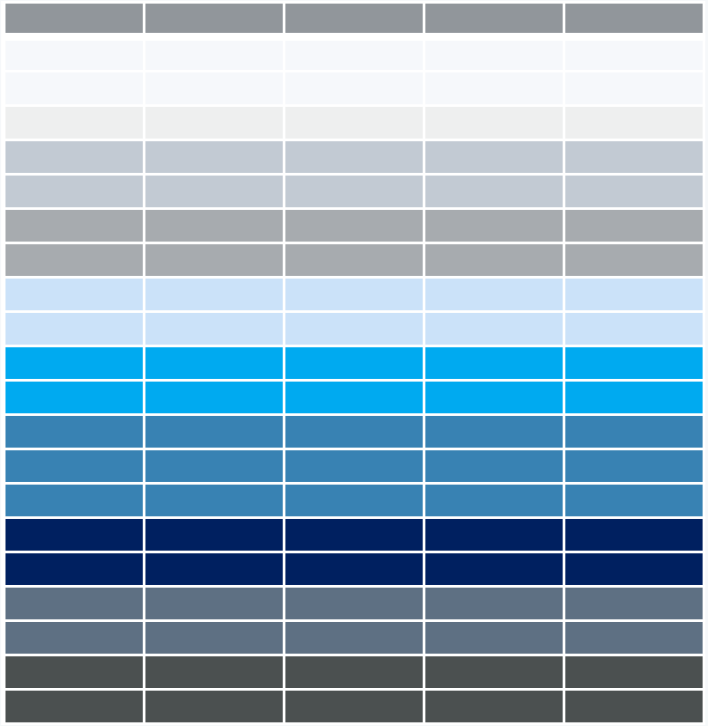
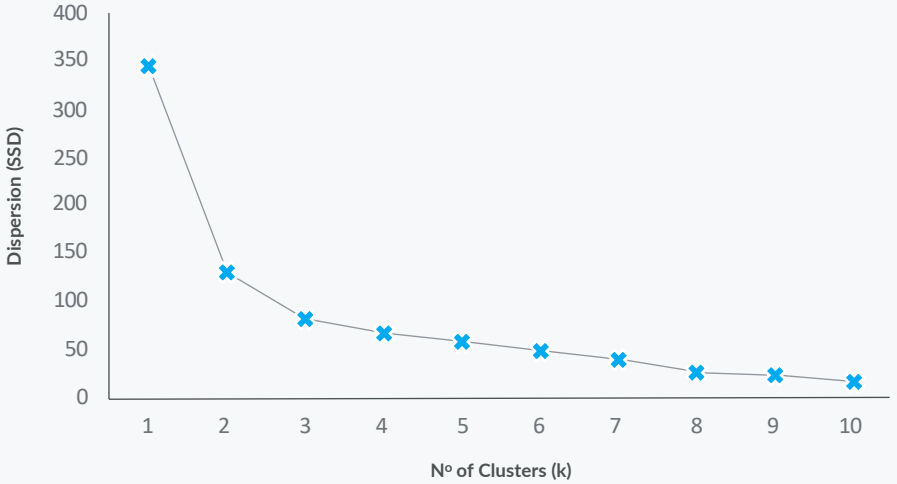


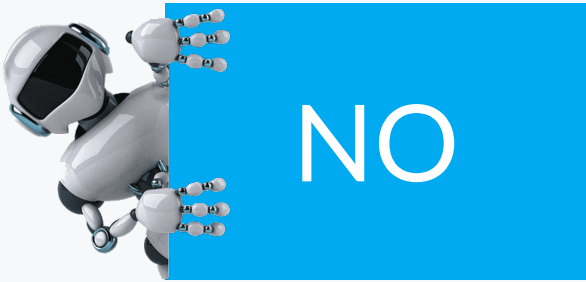


CAN MACHINES SELF-EVOLVE

An overview of where we stand in terms of self-training.

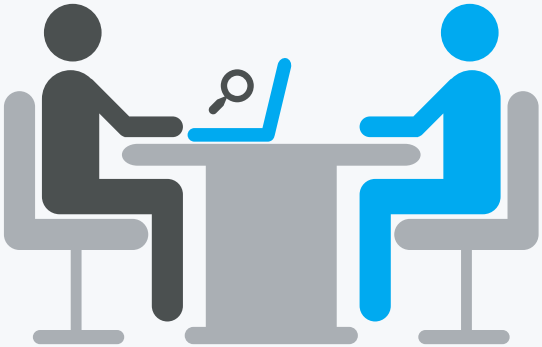
In order for a machine to be properly trained one still needs to:

- build the machine
- install it where it can perform its intended work
- define the way (algorithm) by which the machine will learn
- provide the machine with relevant knowledge
- evaluate its actions and/or decisions (performance)
- offer access to additional data for it to try and improve



CHANGES IN DEMAND

Shift in essential qualities and capabilities (soft skills).



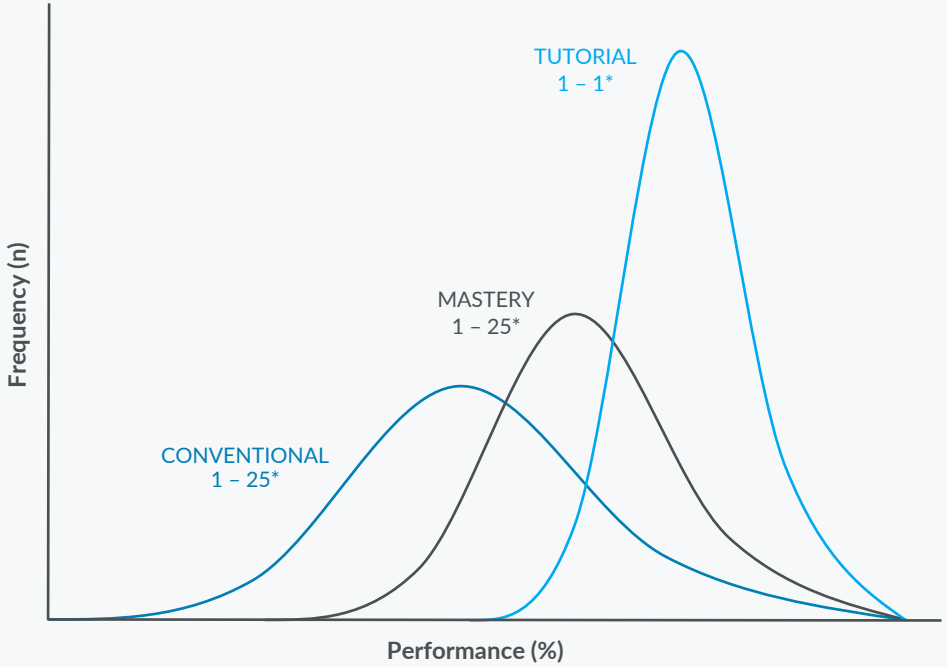
- AI and Machine Learning Specialists
- Sustainability Specialists
- Business Intelligence Analysts
- Information Security Analysts
- FinTech Engineers
- Data Analysts and Scientists
- Robotics Engineers
- Big Data Specialists
- Agricultural Equipment Operators
- Digital Transformation Specialists
- Prompt Engineers
- AI Trainers
- AI Auditors
- AI Ethicists

UPSKILLING REDEFINED

Transformation of professional training and ongoing support.

BENJAMIN BLOOM

Educational Psychologist



GENERATIVE AI

- ✓ Text
- ✓ Imagery
- ✓ Audio
- ✓ Video

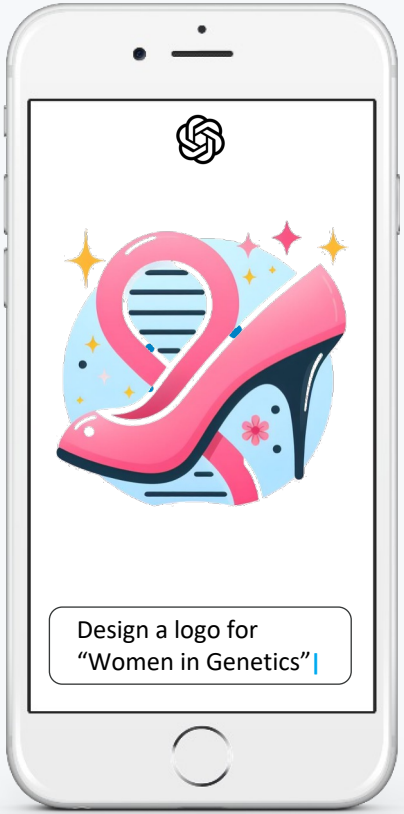
GENERATIVE AI

- ✓ Text
- ✓ Imagery
- ✓ Audio
- ✓ Video

MACHINE UNDERSTANDING

Some thoughts on understanding as a form of functionalism.

- ✓ Understanding is non-binary
- ✓ Understanding is where humans excel
- ✓ Understanding is over-rated



PROPOSED FRAMEWORK

A 3-step approach.

Gartner

STEP 01: PREPARE FOR AI ADOPTION

Drive organizational success by implementing AI in HR.

DISTINGUISH REALITY FROM MYTH

Understand what the technology can do, to be able to assess the potential use cases and benefits.

ESTABLISH AI POTENTIAL

See if it alleviates any functional pains or meets goals to perform better, faster and cheaper.

ASSESS AND SCORE

Evaluate solutions against key success criteria to determine if adoption should go ahead or not.

Source: Gartner (2024)

STEP 02: PLAN FOR WORKFORCE IMPACT

Tackle what AI implementation means for your workforce.

EXPECT SHIFTING OF ROLES

Expect headcount reductions and redesign jobs disrupted into smaller numbers of multiskilled roles.

RACE FOR PERFORMANCE

Anticipate increased performance expectations in newly configured roles and highly specialized jobs.

Source: Gartner (2024)

STEP 03: GET YOUR HR FUNCTION READY

Evaluate the risks and benefits of AI implementation in your HR function.

IMPROVE EFFICIENCY AND SUPPORT

Explore applications spanning across the entire HR function, such as talent acquisition, VoE, career development, learning, and HR service management.

ADDRESS DATA & PRIVACY CONCERNS

In the absence of clear assurances of privacy or confidentiality, issue clear HR guidance about potential risks, so that employees err on the side of caution.

Source: Gartner (2024)

INFORMATION ERA

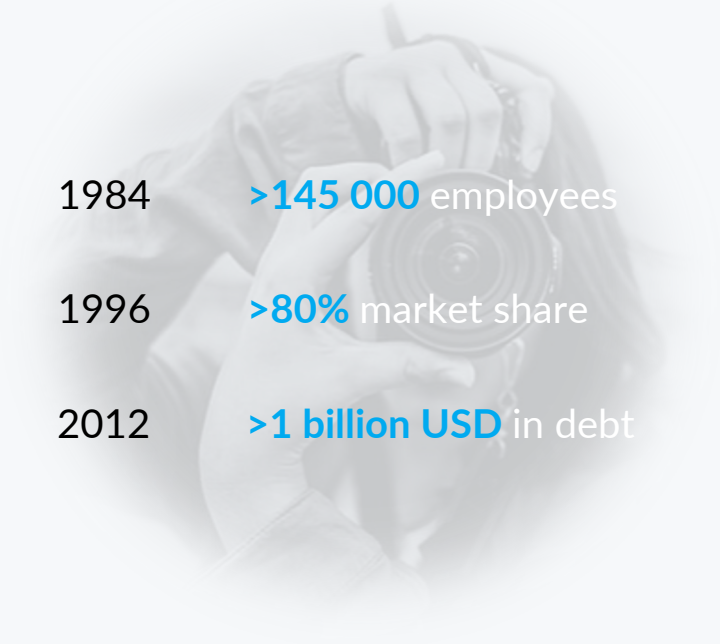
40 years

KNOWLEDGE ERA

<10 years

FAILURE STORY

The downfall of a giant who failed to see the digital picture.



1984	**>145 000** employees
1996	**>80%** market share
2012	**>1 billion USD** in debt

THANKS FOR WATCHING

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