COURSEWARE

AI Essentials & Basics Courseware

Reinier van den Biggelaar

Van Haren PUBLISHING

AI Essentials & Basics
Courseware

Colophon

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Publisher about the Courseware

The Courseware was created by experts from the industry who served as the author(s) for this publication. The input for the material is based on existing publications and the experience and expertise of the author(s). The material has been revised by trainers who also have experience working with the material. Close attention was also paid to the key learning points to ensure what needs to be mastered.

The objective of the courseware is to provide maximum support to the trainer and to the student, during his or her training. The material has a modular structure and according to the author(s) has the highest success rate should the student opt for examination. The Courseware is also accredited for this reason, wherever applicable.

In order to satisfy the requirements for accreditation the material must meet certain quality standards. The structure, the use of certain terms, diagrams and references are all part of this accreditation. Additionally, the material must be made available to each student in order to obtain full accreditation. To optimally support the trainer and the participant of the training assignments, practice exams and results are provided with the material.

Direct reference to advised literature is also regularly covered in the sheets so that students can find additional information concerning a particular topic. The decision to leave out notes pages from the Courseware was to encourage students to take notes throughout the material.

Although the courseware is complete, the possibility that the trainer deviates from the structure of the sheets or chooses to not refer to all the sheets or commands does exist. The student always has the possibility to cover these topics and go through them on their own time. It is recommended to follow the structure of the courseware and publications for maximum exam preparation.

The courseware and the recommended literature are the perfect combination to learn and understand the theory.

-- Van Haren Publishing

Other publications by Van Haren Publishing

Van Haren Publishing (VHP) specializes in titles on Best Practices, methods and standards within four domains:

- IT and IT Management
- Architecture (Enterprise and IT)
- Business Management and
- Project Management

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Topics are (per domain):

IT and IT Management

ABC of ICT
ASL®
CATS CM®
CMMI®
COBIT®
e-CF
ISO/IEC 20000
ISO/IEC 27001/27002
ISPL
IT4IT®
IT-CMF™
IT Service CMM
ITIL®
MOF
MSF
SABSA
SAF
SIAM™
TRIM
VeriSM™

Enterprise Architecture

ArchiMate®
GEA®
Novius Architectuur
Methode
TOGAF®

Business Management

BABOK® Guide
BiSL® and BiSL® Next
BRMBOK™
BTF
EFQM
eSCM
IACCM
ISA-95
ISO 9000/9001
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SixSigma
SOX
SqEME®

Project Management

A4-Projectmanagement
DSDM/Atern
ICB / NCB
ISO 21500
MINCE®
M_o_R®
MSP®
P3O®
PMBOK® Guide
Praxis®
PRINCE2®

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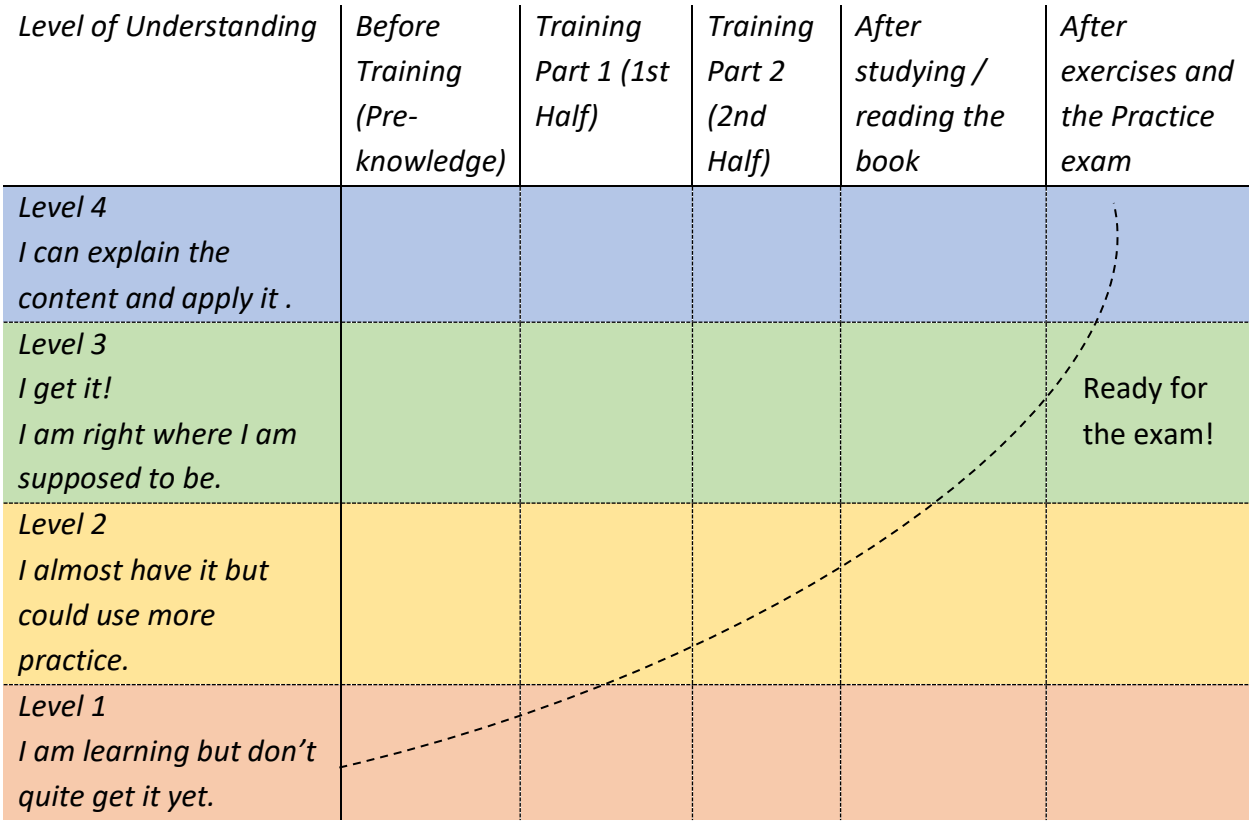
Self-Reflection of understanding Diagram

'*What you do not measure, you cannot control*.'' – Tom Peters

Fill in this diagram to self-evaluate your understanding of the material. This is an evaluation of how well you know the material and how well you understand it. In order to pass the exam successfully you should be aiming to reach the higher end of Level 3. If you really want to become a pro, then you should be aiming for Level 4. Your overall level of understanding will naturally follow the learning curve. So, it's important to keep track of where you are at each point of the training and address any areas of difficulty.

Based on where you are within the Self-Reflection of Understanding diagram you can evaluate the progress of your own training.



(Self-Reflection of Understanding Diagram)

Write down the problem areas that you are still having difficulty with so that you can consolidate them yourself, or with your trainer. After you have had a look at these, then you should evaluate to see if you now have a better understanding of where you actually are on the learning curve.

Troubleshooting

Problem areas:	*Topic:*
Part 1	
Part 2	
You have gone through the book and studied.	
You have answered the questions and done the practice exam.	

Timetable AI Essentials

Time table	Module	AI essentials EXIN BCS	AI Brevet Dutch AI Coalition AI for Business & Gov.	AI – Foundation EXIN BCS
Day 1 - part 1	Introduction and Agenda	✓	✓	✓
	Some history	✓	✓	✓
	Intelligence IQ and EQ	✓	✓	✓
	What is AI?	✓	✓	✓
	Machine learning Tom Mitchell	✓	✓	✓
	Algorithms	✓	✓	✓
	Examples of AI	✓	✓	✓
Day 1 - part 2	Use cases of AI, Enablers	✓	✓	✓
	Agents	✓	✓	✓
	Starting AI, what do you need?	✓	✓	✓
	Crisp DM framework	✓	✓	✓
	Challenges & Risks	✓	✓	✓
	Future of AI	✓	✓	✓

Syllabus
AI Basics certification exam

A NL AIC Certification that equips business professionals with essential AI concepts and understanding of its business applications.

Version 1.0

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Contents

Introduction

This syllabus outlines the knowledge that the candidate will be tested on during the Artificial Intelligence Basics Exam. It also provides suggestions for preparation and highlights the benefits of taking this exam. The AI Basics Certification is the basic certification level of the program.

What's covered in AI Basics Exam?

In this section, you'll find details on the structure of the AI Basics Exam and the subjects covered. This serves as a guide to help you prepare for the test.

The exam will assess your general knowledge in the following areas:

- **Data, and Generative AI Definitions:** This section establishes a common vocabulary, providing definitions for key terms. It enhances data literacy by covering the definition of AI, including generative AI (GenAI), and the core techniques in this field.
- **Applications of AI and Their Benefits:** Explore various AI applications, including generative AI models like text (GPT) and image, and their use of data, algorithms (AI recips) , and learning methods. Examples include key domains such as natural language processing, image and video generation, voice synthesis, and predictive analytics.
- **Techniques for Predictions, Algorithms, Machine Learning, and Deep Learning:** Learn about different levels of predictions, key algorithms, and learning approaches, including advancements in deep learning and neural networks. The exam will cover distinctions between various machine learning approaches, algorithms, and data preparation techniques.
- **Approach to Building and Assessing an AI Application:** Understand a modern framework for developing AI applications, using methodologies like CRISP-DM and Agile AI development. This includes the steps involved in building AI solutions and emphasizes the importance of evaluating trustworthiness and ethical considerations at each step.
- **Data Management for Trustworthy AI Applications:** Gain awareness of data dependencies and best practices for acquiring, preparing, managing, and ensuring the quality of data for AI applications. This section also discusses the impact of data biases and the challenges in maintaining fairness and transparency, especially in generative models.
- **Human and Machine**including the role of AI in augmenting human decision-making and the implications of advanced generative AI. This section also addresses concerns about job displacement, ethical use of AI, and the importance of human oversight in AI systems.
- **Risks, AI Regulations, Ethics, and Explainable AI:** Examine the risks and ethical challenges associated with AI, including the need for explainable AI (XAI) and compliance with emerging regulations like the AI Act. This part emphasizes maintaining public trust through transparency, accountability, and ethical AI practices.

The exam does not require:

- **Programming skills or specific toolkit knowledge**
- **Understanding the mathematical foundations of algorithms**

What is the the Netherlands AI Coalition

The AI Coalition Netherlands (AIC4 NL) is a public-private collaboration which aims to promote the responsible use of AI within the Netherlands. The coalition consists of government, business, educational institutions and communities working together to accelerate AI developments and to share and connect initiatives.

With the Human Capital Agenda (HCA), the AIC NL supports a set of initiatives which aim to raise awareness and capability in the field of AI in The Netherlands. This includes tertiary education at bachelor and masters levels, PhDs and lifelong learning. For more information and activities concerning the AI Coalition refer to the NL AIC website.

The Professional Certification Programme (described in this document) is part of the HCA and is aimed at providing recognised certifications for competency in AI. Whilst this may typically

be achieved by participants following short education paths, the focus of this certification is the competence of professionals as demonstrated by successfully passing an exam, based upon a syllabus issued by NL AIC. The Professional Certification Programme does not accredit training programmes, nor require that participants have followed a training programme.

This programme is therefore complementary to other tertiary education programmes which aim to develop a deeper understanding of AI, how it operates with underlying algorithms, approaches and specialist techniques.

Certification comparison

AI will impact our lives and our working environment. It is essential to develop an awareness of this impact and for those who wish to be proactive, to develop the basic al skills to take advantage of AI and understand its implications. These are steppingstones towards building experience or developing expertise by following in-depth programmes to acquire specialist skills. Therefore a number of certification schemes are available.

The table below visualizes known certification schemes and matched them in topic and difficulty, this certification is highlighted in Blue.

Level	Objective	Certifications	Contact hours
Awareness/ basics level	Understanding what generative AI is and the basics of prompt engineering.	EDF Generative AI.	+/- 8
Awareness/ basics level	Raise awareness of AI and its applications, risks and benefits.	AI Basics, a NL AIC Certification that equips business professionals with essential AI concepts and understanding of its business applications.	+/- 8
		EXIN/BCS AI Essentials (testing a more IT perspective of AI)	+/- 8
Foundation level	Able to identify applications for AI, build a simple model and be aware of how to assess the risks of AI. Able to make informed decisions on the use of AI.	AI Fundamentals, A NL AIC Certification for Business and Government (Known as the AI Brevet in the Netherlands).	+/- 20
		EXIN/BCS AI Foundation (this certification is known to be a bit more technical in nature)	+/- 24

The AI Basics Certification exam

You first need to have successfully completed the AI Basics exam to obtain the AI Basics Certificate. The exam procedure is explained in this section.

Practical information

You must pass a multiple-choice exam in which your knowledge of AI will be tested to obtain an AI Basics certificate. All exam candidates will get access to the online exam environment and will need to answer 20 multiple-choice questions within 30 minutes.

You must answer 65% of the questions correctly (or at least 13 of the 20 questions) to pass. Each question has precisely four possible answers where only one is the best answer.

You will receive the result immediately after the exam. (Digital) Access to your certificate will be given once you have passed.

Registration for the exam can be done by purchasing a participation certificate at www.vanharen.net.

Number of questions:	20
Time (minutes) for the exam:	30 minutes
% minimal passing grade	65%
Open/closed book:	Closed
Language:	English.
Exam format:	Online
Type of questions:	Multiple-choice
Are there also negative questions included in the exam? (for example: “which of the following is NOT a machine learning method”)	Yes. Candidates are advised to read the questions carefully.

Levels

The AI Basics Certification tests candidates at levels 1 and 2 according to the Bloom Revised Taxonomy.

Bloom Level 1: Recall & Retention
We test candidates on their ability to memorize factual information, to retain information by collecting, remembering, and recognizing specific knowledge. Knowledge includes facts, terms, answers, or terminology.

Bloom Level 2: Understanding
We test candidates on their ability to construct meaning from oral, written, or graphical pieces of information. This is done by interpreting, summarizing, distracting, comparing, classifying, predicting, or explaining the message.

Contact hours

The AI Basics Exam requires preparation, which means this is an investment in time for personal study and attention for the subject of Agile. You are completely free to do this in several ways.

Refer to the list of topics in this syllabus. Here you can see which subjects you will be tested on during the exam. The time it takes to prepare for the exam depends on your prior knowledge, experience, and training. You should consider that it will take you roughly anywhere from 4 – 16 hours. Commercially offered training sessions that prepare for the AI Basics exam tend to last 1 to 2 days.

Exam structure

The exam specifications describe the topics in the subject matter of the AI Basics exam, and their relative importance. Questions can be asked during the exam about the following subjects.

Module		Sub-module	Bloom-level	% exam question
1.	**What is AI?**	Defines human and artificial intelligence, examines Robert Dilt's logical levels, and links these to different types of AI and discusses the 4th industrial revolution.	1	10%
2.	**Managing Data for AI**	Covers basic data literacy, explores various types of data, describes the semantics and syntax of data and discusses privacy concerns and the deductive potential of data.	1	15%
3.	**Ethics, Risks and Trustworthiness**	Addresses the risks and ethical dilemmas associated with AI, including the need for explainable AI. Introduces EU ethical guidelines, the EU Act and the need to maintain society's trust in the use of AI.	1+2	20%
4.	**Predictions, Algorithms, Machine and Deep Learning**	Introduces the different levels of prediction, an overview of the main algorithms, the common problem types and generative AI modeling. Emphasizes which types of algorithms address which types of problems.	1+2	30%
5.	**Building and assessing an AI application**	Describes a basic approach to building a simple AI application. Describes the CRISP-DM methodology, highlighting the steps involved and increasing awareness of the business context and reliability assessment at each step.	1	25%

Learning objective

Module 1 What is AI?

Elements included in exam

- Importance of data, platform / data driven business models, 4th Industrial Revolution
  - Why is AI in an acceleration phase now – availability of data
  - What is "data driven" and how this impacts business models / ways of working

- Definition of Human and Artificial Intelligence (AI)
  - Robert Dilt's logical levels versus human thinking and existence
  - Use Dilt's logical levels as reference for cognitive taxonomy
  - Link Artificial Narrow, General, Super Intelligence to the Dilt's levels
  - Test using examples how far AI ascends the Dilt's levels

Module 2 Managing Data for AI

Elements included in exam

- What is data
  - Basic data literacy (Data, Information and Knowledge)
  - Types of data
  - Semantic and Syntax of data
  - Privacy and data
  - Awareness of the deductive potential that lies within data (e.g. GPS location)

Module 3 Ethics, Risks, and Trustworthiness

Elements included in exam

- General definition of ethics and awareness of ethical guidelines (EU Framework)
  - Ethical dilemmas
  - Human values versus use of AI and changes to humans, society and organisations
  - EU guidelines for trustworthiness of AI

- Aware of society concerns and objections to the use of AI
  - Concept of Universal Design (Design for all)
  - The European AI Act

Module 4 Predictions, Algorithms, Machine and Deep Learning

Elements included in exam

- Data Analytics
  - Descriptive, diagnostic, predictive and prescriptive analytics
  - Differences between explaining past and predicting the future

- Machine Learning
  - Learning from experience – Tom Mitchell definition
  - (Semi-)Supervised learning
  - Unsupervised learning
  - Reinforcement learning

- Common problem types
  - Classification
  - Regression
  - Time series forecasting
  - Cluster analysis
  - Anomaly detection
  - Association discovery

- Generative AI
  - Capabilities
  - Prompt engineering

Module 5 Building and assessing an AI application

Elements included in exam

- Goals and tasks of building an AI application
- Awareness of a generic approach (CRISP-DM) to building a model:
    - Business Understanding
    - Data Understanding
    - Data Preparation and validation
    - Modelling
    - Evaluation
    - Fit for purpose
    - Deployment / Presentation
    - Understanding pitfalls and risks at each stage of the CRISP-DM process. Awareness of key pitfalls: overfitting, underfitting, bias, low data quality, IT security

- Functionality, Software and Hardware
- Roles needed in an AI project team – domain expert / agile coach / mathematics / programming etc

Exam regulations

General rules

An AI Basics certification via the AI Consortium is an honorary title, and fraud is not tolerated. Your exam will be immediately rejected if fraud is found to have been committed during or after completion of the exam. As a result, you will not be reimbursed for your examination fees.

If you fail to pass the exam, you will not receive a certificate. This also means that you must purchase and take a new exam for your certification. Every candidate only gets one attempt per exam to succeed.

Sharing of exam questions is illegal

It is not allowed to share exam questions with others or make them public. This is a violation of the copyright and IP of the AI Consortium and Van Haren Learning Solutions. Doing so can lead to legal action by Van Haren Learning Solutions with potentially harmful consequences.

Feedback and questions

We have done our best to help you prepare for the AI Basics exam by publishing this syllabus.
We would like to know what you think of this syllabus and the exam. If you have any suggestions for us, we would love to hear from you.

Have fun and take your time preparing for the exam and good luck. Naturally, we also wish you lots of fun in putting what you've learned into practice!

Key terms and concepts

The AI Consortium has worked out several key terms, concepts, and definitions in the list below. You can use these definitions to support and clarify topics related to the exam. Pay attention! If you only learn these terms, then you are often not sufficiently prepared to pass the exam.

Term	Meaning
AGI	Artificial General Intelligence
AI	Artificial Intelligence
DP	Deep Learning
IoT	Internet of Things
IT	Information Technology
ML	Machine Learning
NLP	Natural Language Processing
NN	Neural Network
OCR	Optical Character Recognition

Artificial Intelligence Essentials

2024

Let's get to knows each other

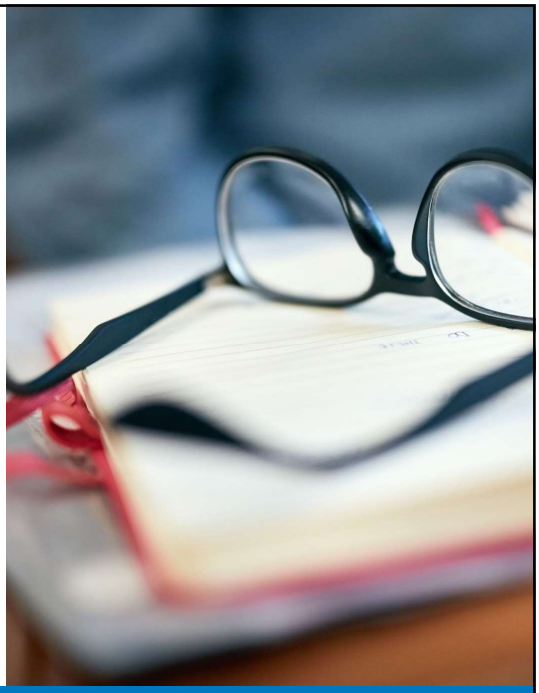
- Name
- Organisation
- Title/Role
- Experience
- Your objectives:
  - for the day
  - and beyond
- And one fun fact, but only if you want to share

Course approach

- Presentation, as the structure
- Exercises

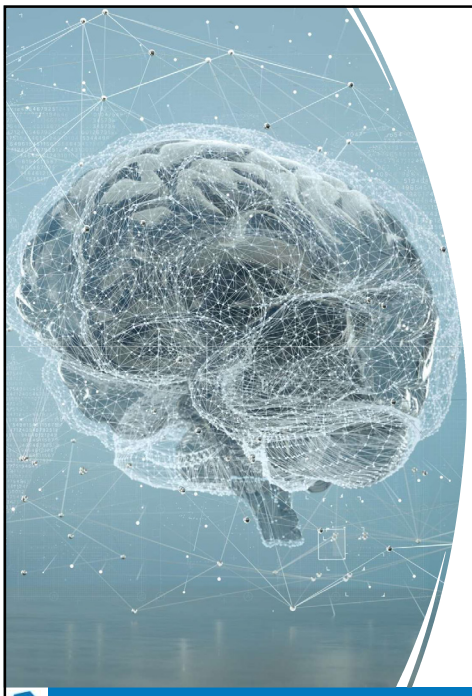
And very much stimulated and appreciated:

- Interactions
- Questions
- Discussions
- Experiences



Mapping exams & certifications

Level	Objective	Certifications	Badge	Contact hours	Syllabi	Practice exam
Awareness/ basics level 1	Understanding what generative AI is and the basics of prompt engineering.	**EDF Generative AI.** leverage ChatGPT for Business while comparing various generative AI means and the basics of prompt engineering.		+/- 8		In exam voucher
Awareness/ basics level 1	Raise awareness of AI and its applications, risks and benefits.	**AI Basics** a AI4NL Certification that equips business professionals with essential AI concepts and understanding of its business applications.		+/- 8	In delegate courseware	In courseware or exam trainer
		EXIN/BCS AI Essentials Testing a more IT perspective of AI, such as intelligent agents and mathematics.		+/- 8	Download exin.com/nl/technologies-software/exin-bcs-artificial-intelligence/exin-bcs-artificial-intelligence-essentials/	Online tool or exam trainer
Foundation level 1 & 2	Able to identify applications for AI, build a simple model and be aware of how to assess the risks of AI. Able to make informed decisions on the use of AI.	**AI Fundamentals** A AI4NL Certification for Business and Government (Known as the AI Brevet in the Netherlands).		+/- 20	In delegate courseware	In courseware or exam trainer
		EXIN/BCS AI Foundation (this certification is known to be a bit more technical in nature)		+/- 24	Download exin.com/technologies-software/exin-bcs-artificial-intelligence/exin-bcs-artificial-intelligence-foundation/	Online tool or exam trainer



Planning

- History of AI
- Definition of Intelligence
- What is AI
- Examples of AI
- Algorithms, Machine Learning, Deep Learning and LLM's
- Ethics & Trustworthy AI

The WHY of AI

Digital transformation is the fundamental rewiring of how an organization operates. The goal of a digital transformation should be to build a competitive advantage by continuously deploying tech at scale to improve customer experience and lower costs.

(as outlined in the new McKinsey book *Rewired: A McKinsey Guide to Outcompeting in the Age of Digital and AI* (Wiley, June 20, 2023)

What we mean by digital and AI transformation

Led by CEO and top team.

A digital and AI transformation is the **process** of developing

The source of competitive advantage. — **organizational and technology-based capabilities**

that allow a company to **continuously improve** — *It's never been done!*

its **customer experience and lower its unit costs;** — *Both matter.*

and over time sustain a **competitive advantage.**

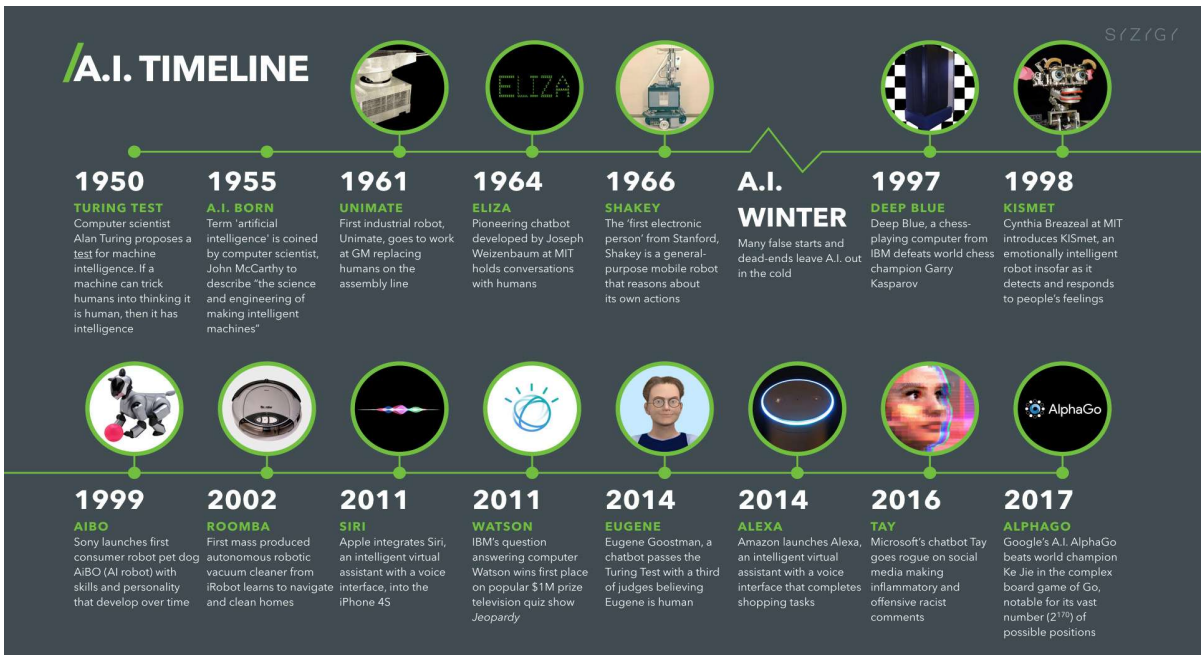
The finality.

Some history

History of Artificial Intelligence: Notable Milestones

- **Precursors**:
  - Myth and legend, by the 19th century AI became a regular topic of science fiction (Samuel Butler's "Darwin among the Machines" or Edgar Allan Poe's "Maelzel's Chess Player")

- **Birth of AI 1940s/1950s**:
  - **1940s**: Walter Pitts and Warren McCulloch analyze networks of artificial neurons that can perform simple logical functions (neural networks)
  - **1950**: Alan Turing publishes an important paper in which he speculates about the possibility of creating machines that think
  - **1951**: Christopher Strachey writes a checkers program that eventually achieved sufficient skill to defeat a respectable amateur
  - **1951**: Marvin Minsky, student of Pitts and McCulloch, builds the first neural net machine

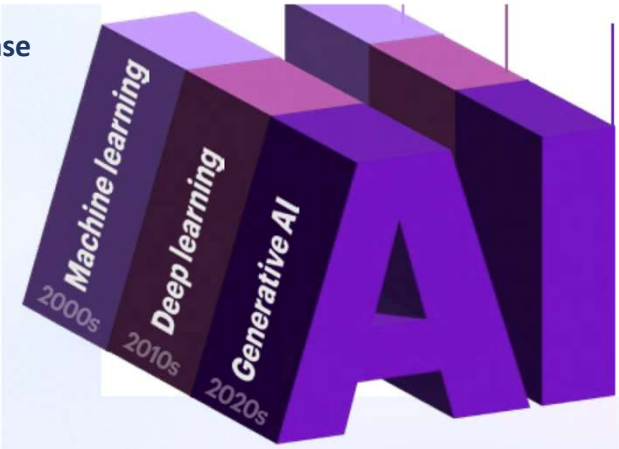


Garry Kasparov vs Deep Blue, 1997

A (r)evolution?

Machine learning: Analysis and prediction phase

Deep learning: Vision and speech phase



Generative AI: Enter the language-mastery phase

Source: Accenture

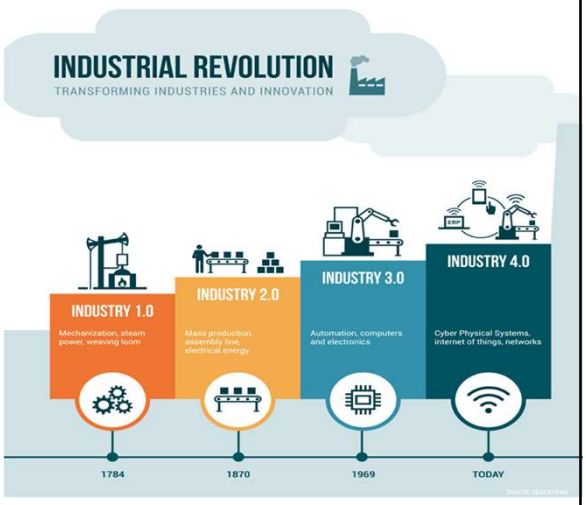
The industrial revolutions

- First: 18th and 19th centuries
  - Europe and US – steam engine, rural societies became urban and industrial.
- Second: 1870 to 1914
  - Electricity allowed mass production and technological advances such as the internal combustion engine, telephone and light bulb. *(combustion engine can be seen as third)*
- Third: 1980s
  - Digital and ICT (information and communications technology) are embedded into society; personal computers, internet and automation.
- Fourth: Today
  - Exploits the digital revolution and is disruptive, driven by AI, robotics, IoT (Internet of Things), plastic printing, nano-technology, bio-engineering.

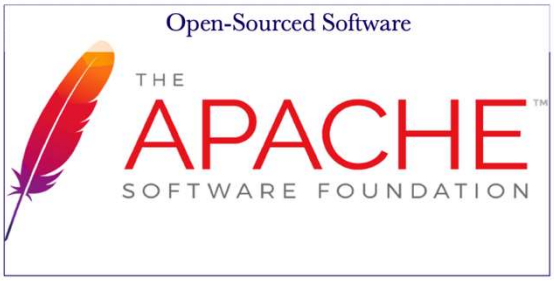
Named by Klaus Schwab – Founder of the World Economic Forum.
The Fourth Industrial Revolution is changing every area of our lives. ✅

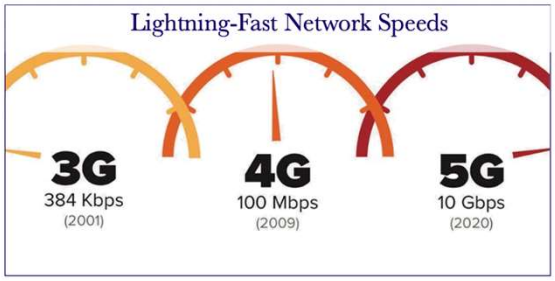
AI in an acceleration phase

- Klaus Schwab, founder and executive chairman of the **World Economic Forum** (WEF), author of The Fourth Industrial Revolution:
  - "**The convergence of the physical, digital and biological worlds** that is at the heart of the fourth industrial revolution offers significant opportunities for the world to achieve huge gains in resource use and efficiency." - Developments in various fields have enabled us to make significant technological progress
- The progress that AI has made is driven by **increases in computing power,** by the availability of **vast amounts of data, fast networks** and powerful **programming languages** as R and Python



Drivers of AI





So far, so good?
Any questions?

Intelligence:
- Human and artificial

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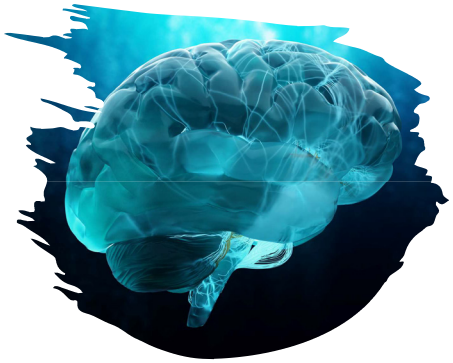
Tech definition of Intelligence

Intelligence can be defined as the ability to perceive or infer **information**, and to retain it as **knowledge** to be applied towards adaptive **behaviors** within an environment or context.



In computer science we call something that has this ability an **intelligent agent**.

- We will talk more about intelligent agents in Day 2.

Dictionary definition of intelligence

Human intelligence
is a mental quality that consists of the abilities to learn from experience, adapt to new situations, understand and handle abstract concepts, and use ✅ knowledge to manipulate one's environment.

- The Concise Oxford Dictionary: *"quickness of understanding; wisdom. The collection of information."*
- Cambridge International Dictionary of English: *"the ability to understand and learn and make judgements or have opinions that are based on reason."*
- Wikipedia: *Problem Solving, Reasoning, Self-Awareness, Creativity, Emotional Knowledge*
- Encyclopeadia Britannica: Learn from experience, understand and handle abstract concepts, manipulate our environment.

Evaluating Intelligence

- How do we evaluate levels of intelligence?

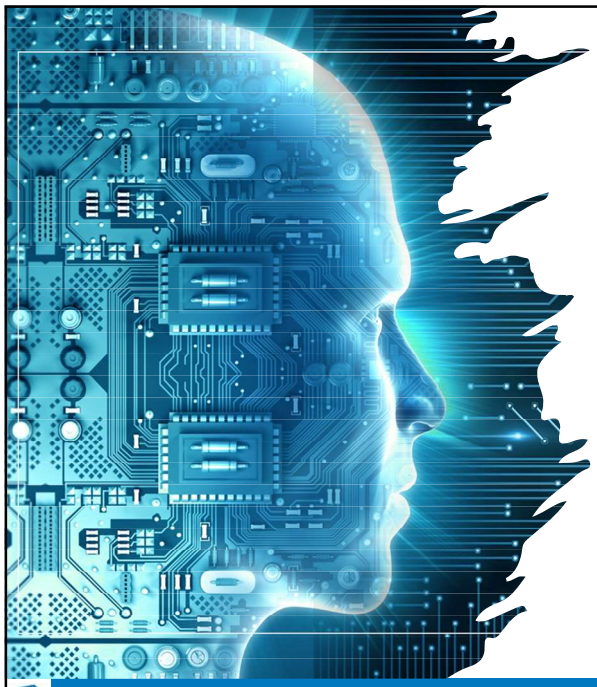
Robert Dilts:

Six logical levels of thinking or situation

Evaluating Intelligence

- **Robert Dilts neurological levels**:
  - Environment – perceive internal and outside influences
  - Behaviours – interaction with internal and outside environment
  - Capabilities – mastery of a task (/group of tasks) to attain a goal
  - Values & beliefs – evaluation of consequences in the context of the real world and why actions are beneficial/detrimental
  - Identity – self-governance of goals and reward structures
  - Purpose / spirituality – context of identity & lower levels in bigger systems

- Artificial intelligence can master a task to attain a goal, but **a computer has no beliefs, identity or purpose, no sense of context**



What is AI?

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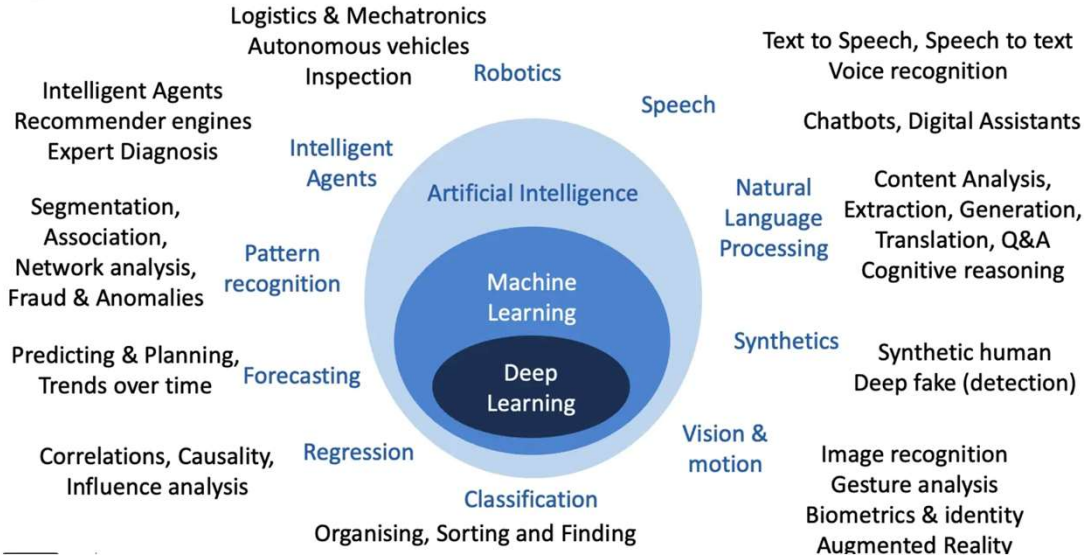
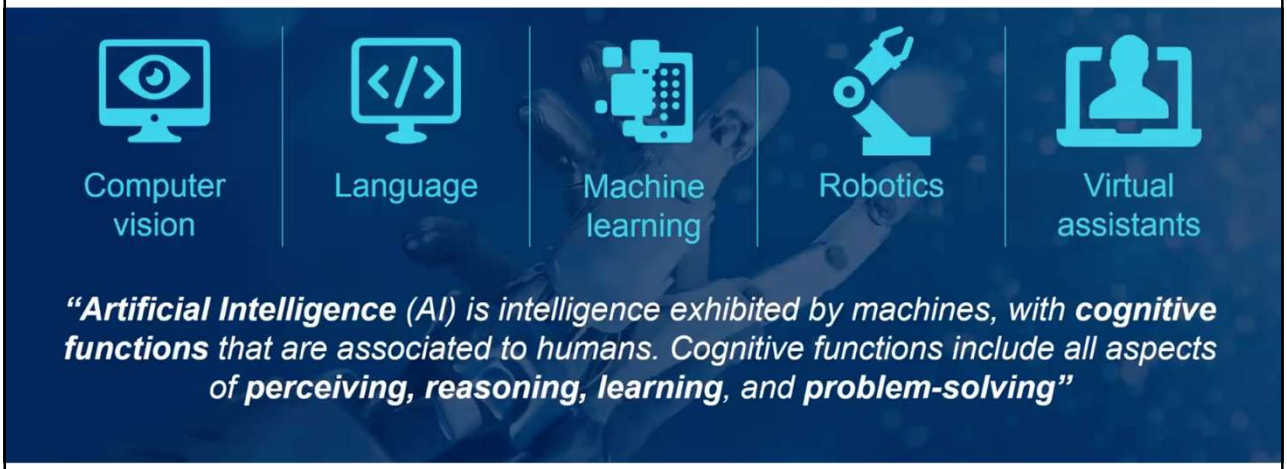
AI : Collection of many different applications



AI definition



Common features

Multiple definitions exist but common features in AI definitions are:

- **Perception of the environment**, including the consideration of the real world complexity
- **Information processing**: collecting and interpreting inputs (in form of data)
- **Decision making** (including reasoning and learning): taking actions, performance of tasks (including adaptation, reaction to changes in the environment) with certain level of autonomy
- **Achievement of specific goals**: this is considered as the ultimate reason of AI systems

Narrow AI – very successful today!

- Optimisation, e.g. parking aircraft at terminals using the least fuel!
- Spam filtering of emails
- Image recognition e.g. medical diagnosis
- Logistics e.g. route planning, smart motorways
- Natural language processing (NLP) e.g. chatbots, home assistants, smart homes

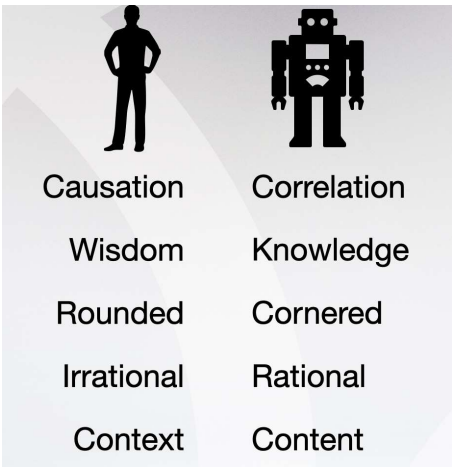
Benefits of AI

AI allows us to make

- decisions faster,
- more objectively
- based on more evidence (data).

AI is generally better than humans at:

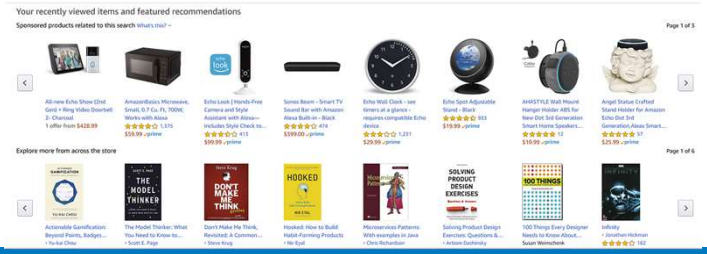
- Finding patterns in large amounts of data
- Performing a repetitive task (less error prone – because it does not get tired or bored)
- Remaining unaffected by emotions or external factors
- Speed

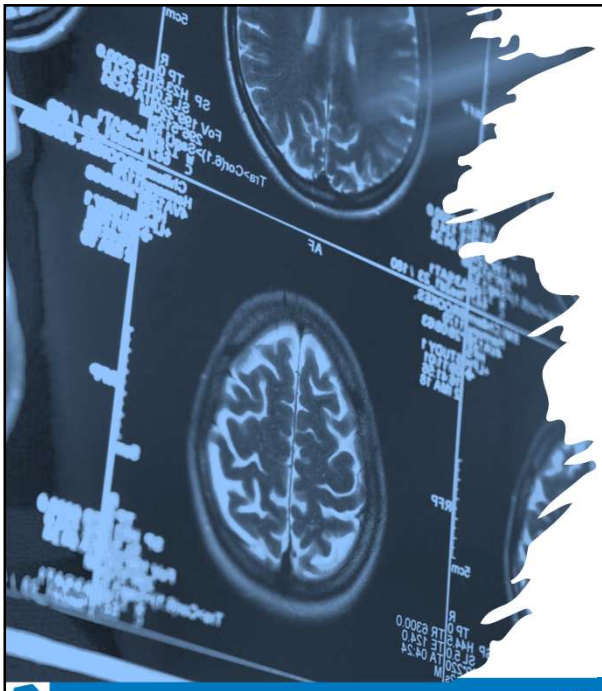


Assignment (15 min)

Background:
Amazon, one of the world's largest online retailers, has been a pioneer in using AI to enhance the shopping experience. A significant part of their success can be attributed to their sophisticated recommendation system.

Assignment:
Find a case of how amazon applied AI in its business. For this implementation find out how it works, the business impact, potential challenges or risks they might/could have faced and what led to its success.

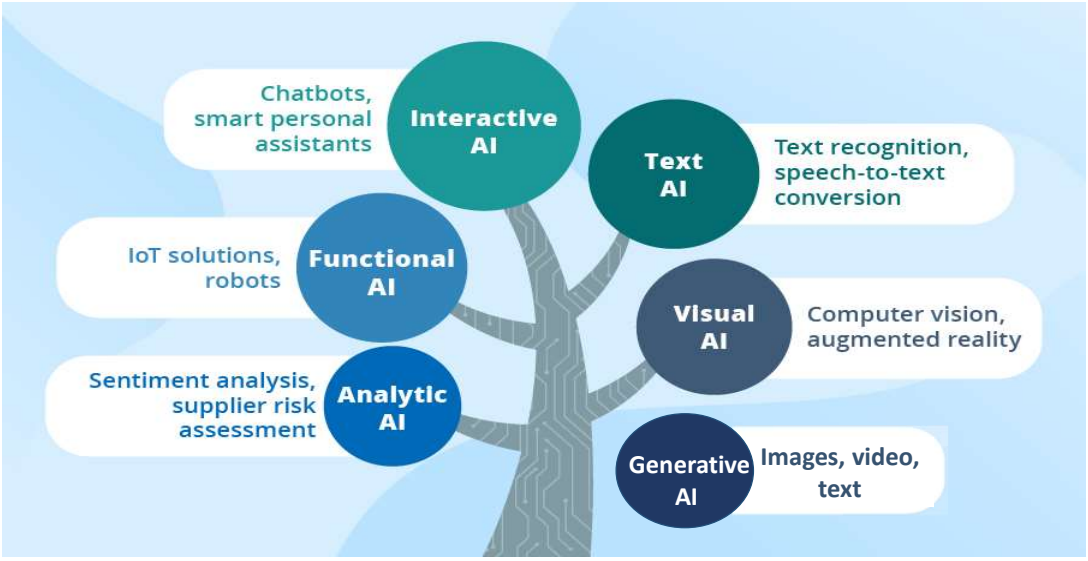




Examples of AI

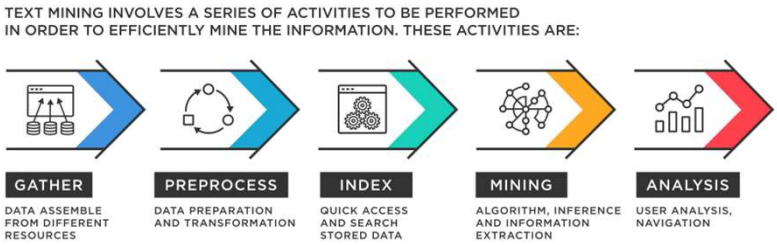
COURSEWARE

Examples of AI



Source SienceSoft, Alex Bekker

Text AI



Text mining and text analysis **identifies textual patterns and trends within unstructured data through the use of machine learning, statistics, and linguistics**.

By transforming the data into a more structured format through text mining and text analysis, more quantitative insights can be found through text analytics.

The goal is, essentially, to turn text into data for analysis, by means of the application of natural language processing (NLP), various types of algorithms, and analytical methods. The interpretation of the gathered information is an important part of this process.