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AI och Business Technology


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Digital Architecture, Business Technology

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An aerial night photograph of a city, likely New York City, showing a dense grid of streets and illuminated buildings. A large, white, stylized number '1' is overlaid on the left side of the image, partially obscuring the city lights.

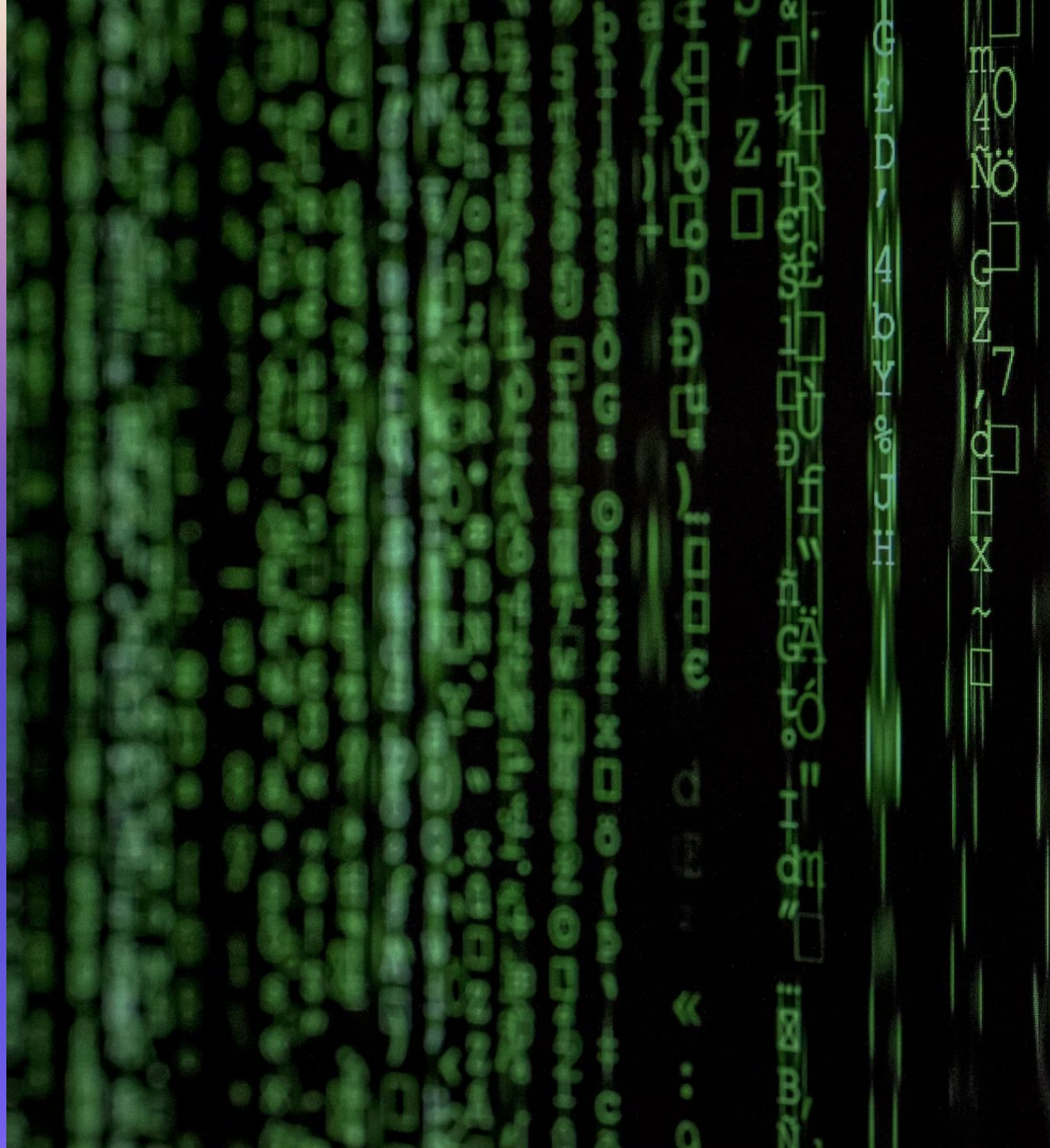
1

What's AI?

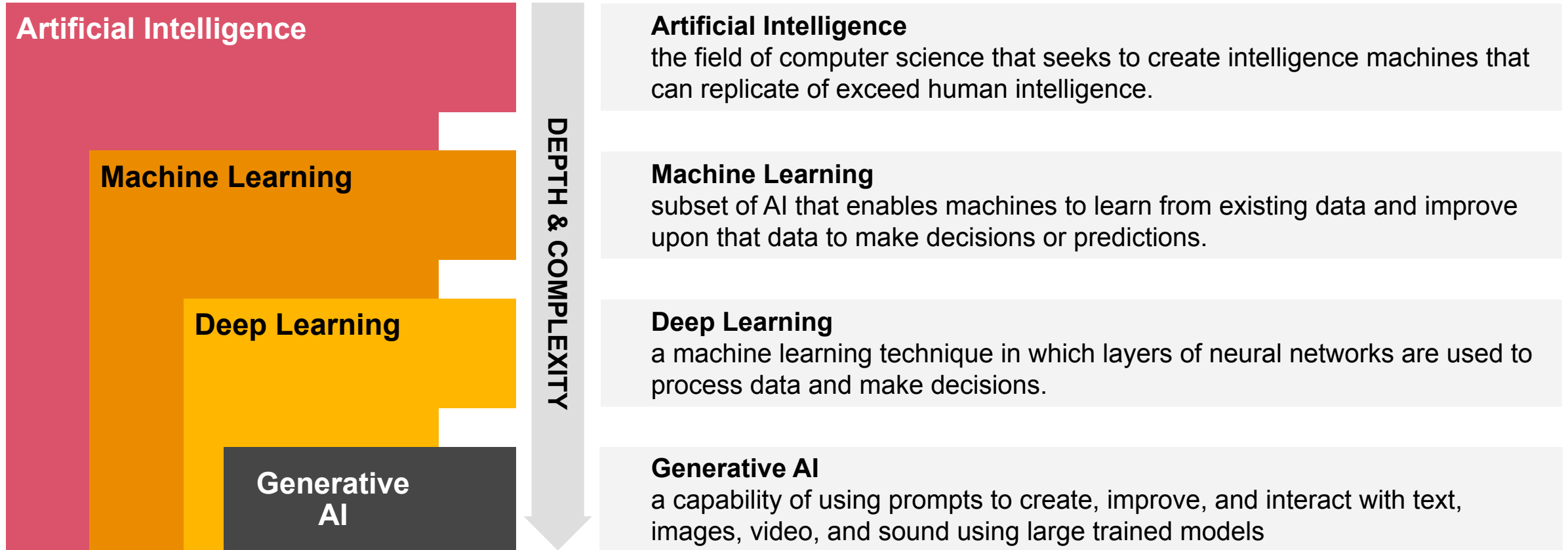
Definition of Artificial Intelligence (AI)

AI is typically known as a systems ability to mimic human cognitive functions...

...such as perceiving, learning, interacting with the environment, as well as problem solving and creativity*



AI is a umbrella term that includes many sub components



Natural Language Processing (NLP) - The study of enabling computers to understand and process human language.

Neural Networks - A type of machine learning model inspired by biological neurons

Convolutional Neural Networks (CNN) - A type of neural network used primarily in image recognition tasks.

Generative Adversarial Networks (GAN) - A pair of neural networks that generate new data resembling a given dataset.

What is Generative AI?

Generative AI is a subset of Deep Learning that involves training a model to generate new data that is similar to the training data it was given. This type of AI can be used to create art, music, text and even entire virtual worlds, among other applications.



ChatGPT

Prompt

I'm having trouble getting my xbox to turn on.

Response

There are a few things you can try to troubleshoot the issue... ..

Prompt

Thanks! That worked. What games do you recommend for a 14-year-old?

Response

Here are a few games that you might consider :

Codex

Prompt

Table customers, columns =
[CustomerId, FirstName, LastName,
Company, Address, City, State,
Country, PostalCode]

Create a SQL query for all customers
in Texas named Jane query =

Response

```
SELECT *  
FROM customers  
WHERE State = 'TX' AND  
FirstName = 'Jane'
```

DALL E

Prompt

A ball of fire with vibrant colors to show
the speed of innovation at our media
and entertainment company

Response



Midjourney

Prompt

Happy giraffe sits on toilet with
newspaper black and white







www.midjourneyai.ai

“

GPT

***Generative Pre-trained
Transformer***

ChatGPT is a Large Language Model (*LLM*)

Pitfalls of LLMs

Bias	LLMs are often biased towards generating stereotypical responses
No citing of Sources	LLMs for the most part cannot accurately cite sources.
Hallucinations	LLMs will frequently generate falsehoods when asked a question that they do not know the answer to. Most of the time they will confidently give a wrong answer.
Math	LLMs are often bad at math. They have difficulty solving simple math problems, and they are often unable to solve more complex math problems
Prompt Hacking	Users can often trick LLMs into generating any content they want.

Data is the key that unlocks the potential in Artificial Intelligence

Data management serves as the cornerstone for ensuring data accessibility, thereby facilitating the deployment of advanced analytics and artificial intelligence.

Process

Governance & ownership

With clear governance and ownership, data has to be well defined and integrated from multiples sources with validation rules to ensure quality from collection to visualization.

Technology

Data native platforms

The business is supported by modern platforms that support data sharing and collaboration with a high degree of automation.

People

Data culture

Upskill and empower people so they can work proactively and effectively with data to increase performance. A culture change from reporting on what has happened to predicting the future.

Data

A single source of truth

Successful organizations have standard definitions and have a defined data model, eliminating silos between business functions and data sources

Accessible & Trusted Data

Reliable, consistent, comprehensive, and reusable data optimizes value by allowing users to concentrate on deriving insights for present situational awareness, future forecasting, and the implementation of advanced analytics and artificial intelligence.

Advanced Analytics & AI

Accessible and high quality data provide our clients with the ability to apply advanced analytics and AI.

An aerial night photograph of a city, showing a dense grid of streets and illuminated buildings. A large, white, stylized number '2' is overlaid on the left side of the image, partially obscuring the city lights.

2

Considerations

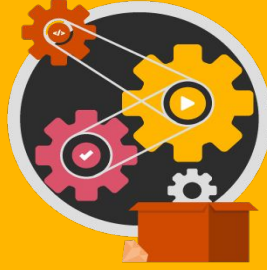
With the use of Artificial Intelligence in your business, new risks follows that needs to be addressed

The use of AI in our business requires a Responsible AI adoption, making sure that you are complying with regulatory requirements and mitigating risks.

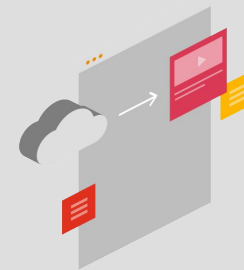
Not thoroughly reviewing your AI outputs can result in inaccuracies, compliance violations, breach of contract, copyright infringement, erroneous fraud alerts, faulty internal investigations, harmful communications with customers and reputational damage.

Examples of risks

Security



Privacy



Regulatory compliance



Fairness



Bias



Robustness



What is Responsible AI?

A framework to accelerate your organisation's AI innovation to deliver positive impact



Legal compliance

- A **proactive** approach
- Monitor the **global** legal landscape
- Regulation ≠ say NO to everything

DON'T DO BAD



Risk management

NIST AI RMF

- **Govern:** Risk management culture
- **Map:** Contextualize risks
- **Measure:** Assess and analyse risks
- **Manage:** Prioritize and acted upon

DON'T DO STUPID



Open the black box

- **Internal trust:** tech and business
- **External trust:** customer and brand
- How to build trust?

DON'T HIDE



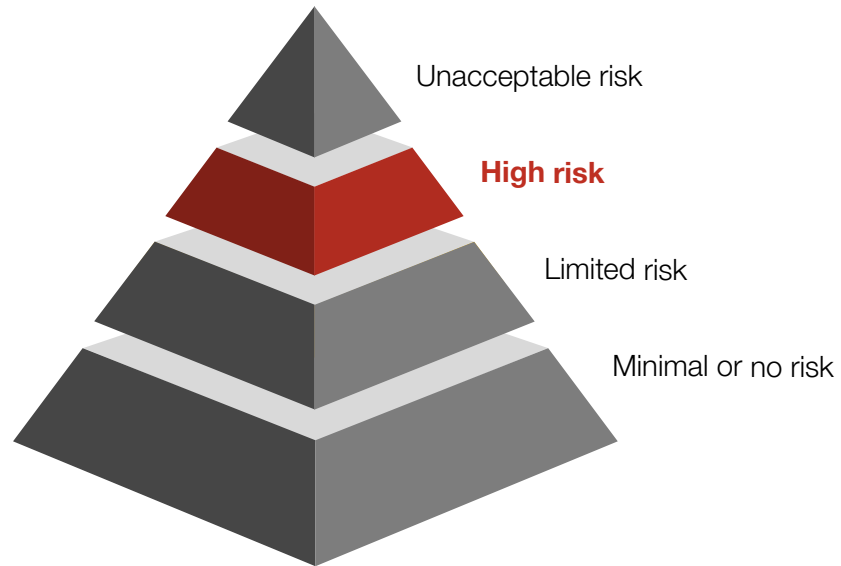
Positive social impact

- Responsible AI as part of **ESG**
- Fulfill the **social responsibility**
- **Positive impact** to the planet and society with AI!

DO GOOD

AI regulation is coming

Is your business ready for the forthcoming EU AI regulation?



The EU AI Act takes a risk based approach

Examples* of AI legislation

EU

- EU AI Act
- General Data Protection Regulation (GDPR)

USA

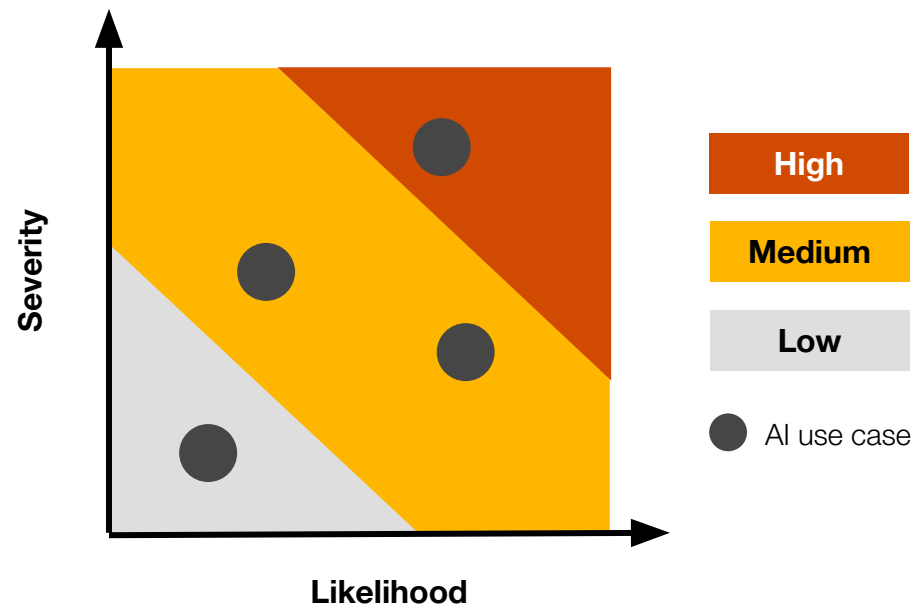
- California Consumer Privacy Act (CCPA)
- Algorithmic Accountability Act (AAA)
- AI Bill of Rights

**non exhaustive, there are many ongoing initiatives around the world*



AI risk management

From use case risk assessment to lifecycle management



Examples* of AI risk management frameworks

- NIST AI Risk Management Framework
- ISO/IEC 23894:2023
- EIOPA AI use case impact assessment

**non exhaustive, there are many ongoing initiatives around the world*



Open the black box

From explainability to transparency



Regulation



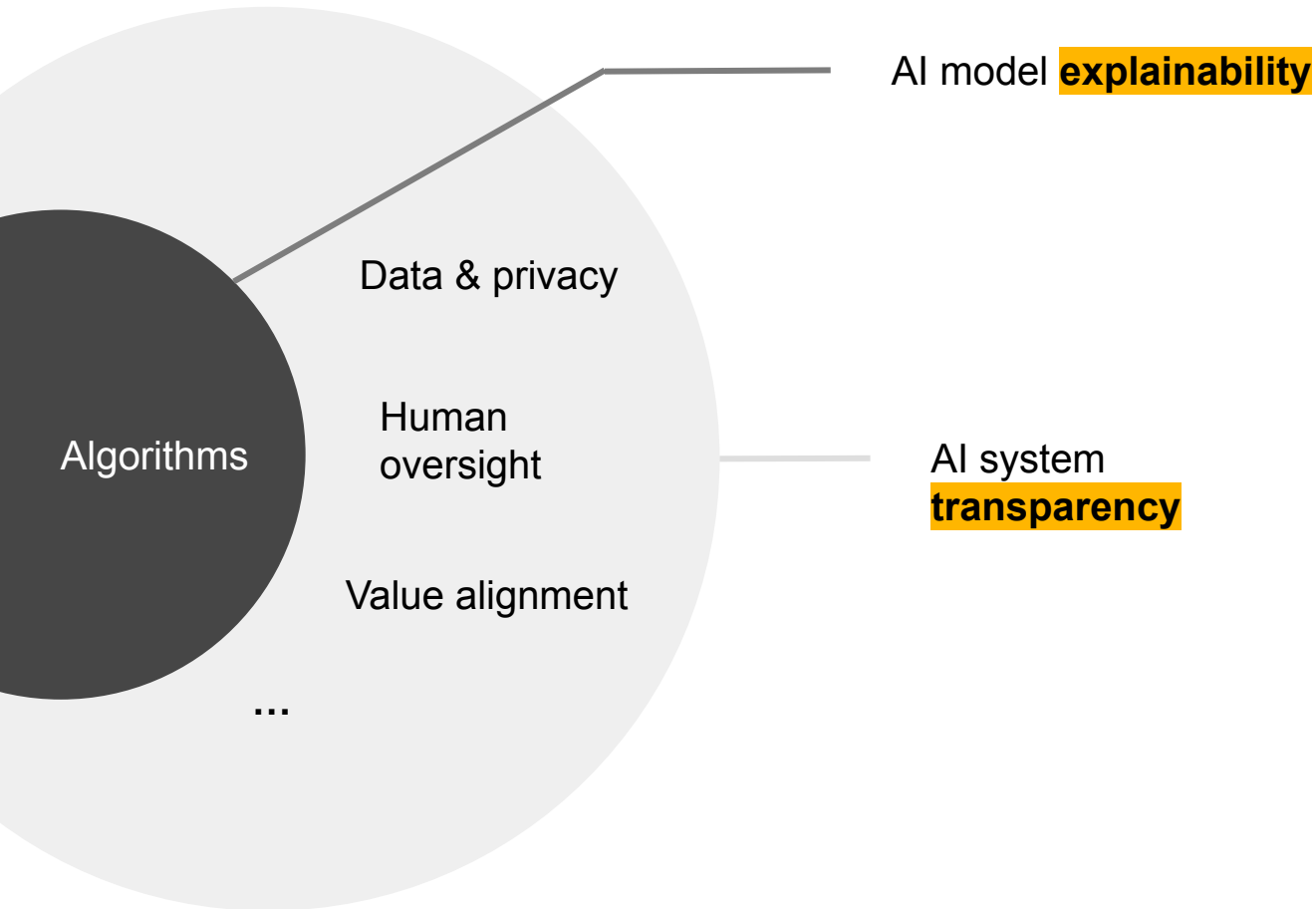
Risk management



Open the black box



Positive impact



Leverage AI to delivery positive impact at scale

Capability, business value, and social impact



Regulation



Risk management



Open the black box



Positive impact



Amplify positive impact through responsible AI

Achieve your strategic goals and social responsibility



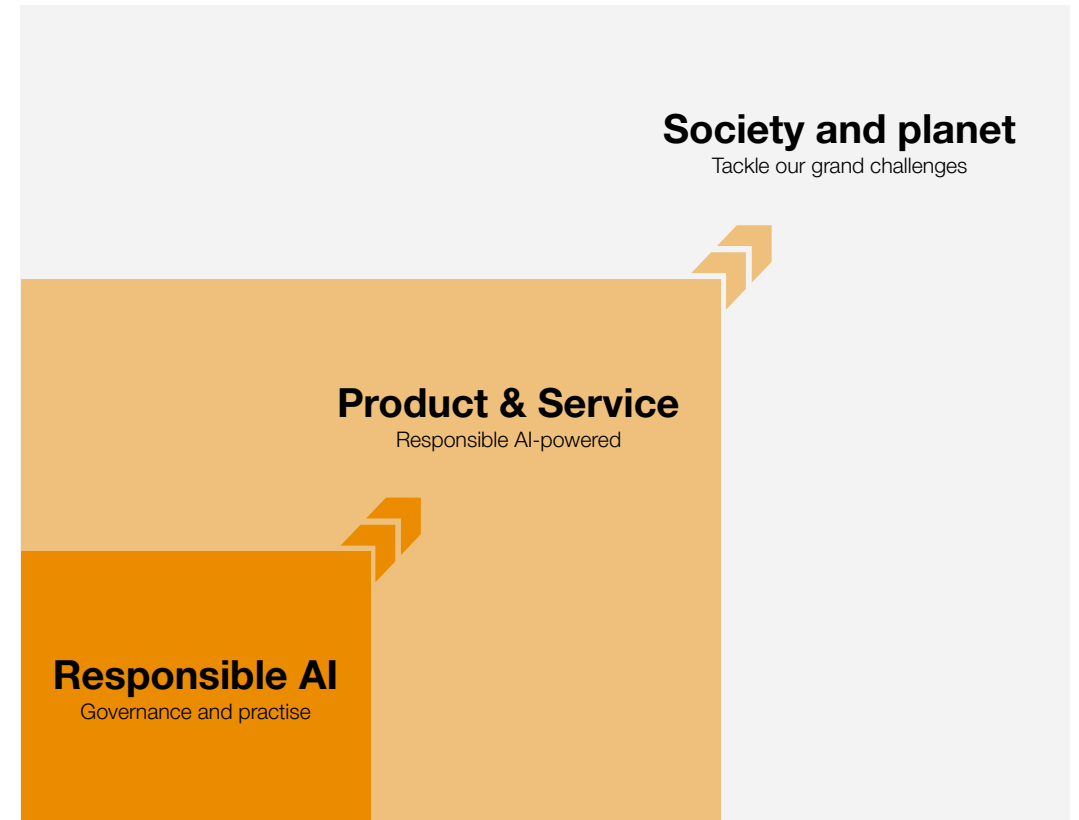
Empower product and service with responsible AI

Deliver business value to the customer



Responsible AI as a part of digital capabilities

Build responsible AI into your digital and AI transformation



An aerial night photograph of a city, showing a dense grid of streets and illuminated buildings. A large, white, stylized number '3' is overlaid on the left side of the image, partially obscuring the city lights.

3

When to start with AI

When should I consider AI?

When you have...

- Done your homework with IT & data basics
- Thought about legal and risk implications
- No simpler solution available

...and your opportunity is characterized by

- Repetitive Tasks
- Data-Intensive Processes
- Scalability
- Pattern Recognition
- Decision Support
- Automation of Routine Tasks



Tack!



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