



# ARTIFICIAL INTELLIGENCE AI 101 FUNDAMENTALS FOR MANAGERS & EXECUTIVES

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Your workbook  
with templates, checklists, and summaries

## Preface

This workbook contains all the templates, exercises and worksheets from the entire course.

In this document, you will find:

- All downloadable worksheets and templates
- Checklists for analysis and definition of possible actions and changes
- Selected slides with key statements on important topics

**Important:** This workbook is not a "book to read", but a book that will guide you during the course to get the most out of it - by working on the assignments and doing exercises that will help you progress.

Some contents of the book are only understandable in connection with the corresponding video - so please watch the videos 😊

Of course, you can also find the respective documents for each video and download them underneath the corresponding lesson.

At the request of many course participants, we also offer you this compact and complete workbook with all documents.

It also serves as a reference and reference book, as you will find all of the most important slides and notes of the training here.

We have always included fields for notes, so you can capture important thoughts and insights.

We hope you like this workbook and if you have any suggestions for improvement, please contact us. Only through your feedback can we become better!

Please connect with your coach, Axel Rittershaus, on LinkedIn and get inspired and informed with his regular updates on AI and leadership:

<https://www.targetter.de/linkedineng>

Thank you very much!

Axel Rittershaus

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## Introduction

### The Pain of Not Understanding AI

In today's rapidly evolving business landscape, AI has become a pivotal force, reshaping industries and revolutionizing how organizations operate. Ignited by ChatGPT in early 2023, AI is THE topic any leader in any industry needs to prioritize.

As a leader, **not understanding the fundamentals of AI means missing out on key opportunities** to drive innovation, gain a competitive edge, and future-proof your business.

- Many employees and executives have a fear, that AI will destroy jobs.
- But the opposite is true as well. And even more relevant for you as a leader:
- **NOT engaging in AI projects will definitely destroy jobs - because competitors and new startups will use AI to disrupt almost any industry!**

Don't let your competitors leap ahead while you struggle to comprehend the AI revolution.

Our AI 101 fundamentals course provides a clear and concise understanding of AI's impact on leadership and your organization.

We cut through the noise and present the information in a simple, accessible manner, enabling you to grasp the concepts easily.

AI is much more than generative AI like ChatGPT, Dall-E, etc. and we cover all relevant areas!

### Benefits of attending the course for managers and executives

1. Comprehensive Knowledge Made Simple
2. No Technical Expertise Required
3. Learn at Your Own Pace
4. Real-World Business Examples
5. Alleviate the Fear of the Unknown
6. Strategic Decision-Making
7. Stay Ahead of the Curve

### Quick assessment: AI at your company?

With this quick test, you can determine the status of AI implementation in your company. These factors can have a significant impact on the employees' attitudes toward AI.

No.	In my company...	Estimation (1=no; 5=yes)				
1	All employees are involved in the implementation of AI	1	2	3	4	5
2	All employees are informed about the implementation or plans regarding AI and possible changes	1	2	3	4	5
3	The goals of implementing AI are well-defined and communicated	1	2	3	4	5
4	Successes and failures of AI initiatives and projects are transparently communicated	1	2	3	4	5
5	If AI-projects don't achieve their goals, AI is to blame	1	2	3	4	5
6	To implement AI an approach of taking small steps is applied	1	2	3	4	5
7	The employees' fears about AI are recognized and discussed	1	2	3	4	5
8	AI experts collaborate with domain specialists	1	2	3	4	5
9	An AI task force is employed to investigate, manage, and monitor the progress of AI	1	2	3	4	5
10	Employees do not feel threatened by the implementation of AI	1	2	3	4	5

#### Evaluation:

- For all questions you answered with 1-3, ask yourself if this is already or will become a problem to leverage AI at your company. If it is, define (now or very soon) first action steps you can take.  
Some questions might not be relevant at your company, so you can skip them.
- For all questions you answered 4-5: Congratulations – keep it up!

Topics we need to address:

## Relevant areas of AI for managers

AI is relevant in almost any area of business. The following areas should be considered by any manager interested in leveraging AI.

### 1. Decision-making based on data

Where could your decision-making be improved or supported by AI generating new insights into existing data. Pay attention to areas you currently struggle to get any insights out of data!

### 2. Developing product and business ideas

In which product or business areas could you/your organization benefit from new, unique, innovative ideas? It does not matter if you have any idea on how AI could support you, just list the areas where you might benefit the most.

### 3. Simplifying and automating existing processes

In which areas would your people/organization benefit massively from simplifying and automating processes? Even if you don't know, how AI could do it.

### 4. Reducing oversights and failures

In which areas does your organization see high(er) failure rates due to tiredness, lack of concentration, boredom, ...?

### 5. Reduce shortage of skilled workers

In which areas do you suffer from a shortage of skilled workers, where a reduction in administrative, routine jobs could assist your current workforce to achieve more?

## 6. Creating more convenience – making life easier

In which areas would more convenience make the life of employees or customers easier?

## 7. Your business/industry specifics

Your business or industry might have specific needs or opportunities leveraging AI. If you have some in mind, please write them down:

## AI terms cheat sheet

### Machine Learning

It simply means that a computer is using data to learn. Learning means, that it will improve itself.

For instance, machine learning would be applied to teach a computer to identify pictures of a cat. Through constant learning it will find its own way, to tell a cat from a dog, frog, or car. The underlying code would NOT be changed by a human programmer!

### Deep Learning

Deep learning goes deeper, no pun intended. Imagine an AI learned to identify a cat. Deep Learning would add an additional layer, for instance, to learn how to tell a domestic cat from a leopard. This is simplified, but it means that multiple layers collaborate to create one result. And each layer improves the result.

### Generative AI

Generative AI uses data from a multitude of data sources, understands their meaning, and can generate something new. The generated output is not a simple reproduction of existing data but rather a new creation, expansion, or synthesis of what the AI has learned. It can generate many output types, including text, images, videos, and audio.

### Hallucinating AI

In the context of AI, hallucination refers to generated outputs that may seem believable but are either factually incorrect or not relevant. Generative AI systems for example might make historical events up, which never happened. It nevertheless states it as facts so that it seems plausible for the reader.

### NLP - Natural Language Processing

NLP focuses on the interaction between computers and human language. It enables computers to understand, interpret, and generate output in human language in a way that is meaningful and useful. For instance, it understands the sentiment of a text, know that the name of a person represents a human being, and so on. Advances in NLP are crucial for the capabilities of generative AI systems.

### AGI - Artificial general intelligence

It refers to highly autonomous systems that possess intelligence like human intelligence - meaning 'general' knowledge. AGI systems would have the ability to understand, learn, and apply knowledge across a wide range of tasks and domains, demonstrating advanced cognitive abilities and reasoning.

AGI aims to mimic human-level intelligence and exhibit a broad spectrum of cognitive abilities. These could include natural language understanding, learning from limited data, reasoning, problem-solving, creativity, adaptability, and even consciousness.

## Implementing AI in your organization

Based on our examples and suggestions, what are your thoughts about the implementation of AI in your company?

('We should do more', 'I am worried about the jobs of my people, and mine', ...)

Who should be in charge of driving AI initiatives in your company?

What steps need to be taken to drive AI initiatives in your company?

What are the biggest challenges you see for leveraging AI in your business/organization?

### Dealing with employees' fears of AI

Some employees will have fears regarding AI.

Typical fears are:

- General fear of change
- Fear of not being able to cope with the unknown
- Fear of losing control if AI acts in a way we don't understand
- Fear of losing our job
- Fear of faulty AI systems with massive consequences
- Technophobia, fear of **any** technological progress

Your approach to address fears or reluctance in your employees' approach toward AI should consist of the following:

1. Identify and address the fears of your employees by inviting them to an open dialogue about it (make it clear that it's normal to have concerns about changes)
2. Transparently communicate the changes that might accompany the implementation of AI in your workplace
3. Make sure to have experts at hand who understand the best way to use AI in your company and who can help your people to understand how AI works and is used

Have you ever been in such a situation, where you saw that your employees were reluctant to implement AI or any other new technology? What did you do?

What would have helped you or what did you wish for back then?

What can you actively do to address and mitigate the fear of your employees?

What are **your fears** regarding AI you need to handle first?

### 'Self-test' on your openness to change

With this self-test, you can check your openness to change. This will give you an impression of whether it would be helpful to develop your handling of individual (change-related) factors further.

No.		Estimation (1=do not agree at all ;5=agree)				
	Generally...					
1	Change is good, even if it means leaving our comfort zone	1	2	3	4	5
2	Change does not mean that something has gone wrong	1	2	3	4	5
3	Change means there are new opportunities	1	2	3	4	5
	I prefer when...					
5	Everything is continually changing	1	2	3	4	5
6	I like to know in advance what will happen at work	5	4	3	2	1
7	I can avoid risks	5	4	3	2	1
8	I do not have to leave my comfort zone	5	4	3	2	1
9	I can take on new tasks that I have never done before	1	2	3	4	5
10	I am challenged by new arising methods and possibilities	1	2	3	4	5

### Evaluation

If you answered more than half of the questions with 4 and more points you are open to new changes and see them as an opportunity to grow.

If you answered with 3 or fewer points for half of the answers, be aware that you tend to feel more secure if changes do not happen that often or that quickly. That is completely fine! However, your possible reluctance to implement AI can also affect your employees' attitude towards the use of AI.

**Step 1: Score of 2 or 3**

Look at all the items you answered with 2 or 3 and answer the two following questions:

No.	What can I actively do to raise the score to 4 or even up to 5?	What would be negative consequences if the score drops to 1?

**Step 2: Score of 1**

Look at all the items you answered with 1 and answer the two following questions:

No.	What can I actively do to raise the score to at least 3 or 4?	What would be negative consequences if the score stays at 1?

### Approaching AI with an open mindset

1. Lead discussion around AI in a calm and understanding way
2. Understand fears and not take them personally. Accept that being scared is most people's default reaction toward anything new.
3. Assist your people in getting to know AI and understand what it means
4. Do not be afraid to ask questions
5. Discuss ethical questions related to AI with your people

How could your employees and you benefit from the implementation of AI?

What could be barriers to a successful implementation of AI in your company?

What could you do to ensure the success of the implementation and use of AI?

## Avoiding typical problems of AI projects

### Tips for approaching AI

1. Put safeguards in place to verify and challenge the recommendations of AI
2. Question the results of AI, but be aware that you might not understand everything
3. Use AI as a sparring partner, who gives you impulses and ideas for developments or changes in your company

Typical reasons for failing AI projects are:

1. Inappropriate selection of algorithms or AI systems  
Engage with experts to select the most suitable AI system or AI approach for your requests and projects. You might even combine multiple AIs to get the best result. But IF your AI project does not work, consider checking if the approach taken might contribute to the setback – and learn from it.
2. Fears and false expectations  
**Fears need to be taken out of the equation before starting an AI project.**  
Otherwise, it will have a negative impact on it. Expectations must be managed and should neither be too optimistic nor too pessimistic.
3. Insufficient or poor-quality data  
Almost all companies and organizations struggle with data quality. AI can be very useful to identify meaningful data.  
BUT if the data is flawed, AI will be flawed as well. Therefore, whenever an AI does not generate the results expected, **always look at the data or rules provided to the AI first to find out if the training of the AI based on this data is the root cause.**
4. Lack of domain expertise  
Training and providing feedback to an AI requires experts in the area the AI is supposed to assist. Without such expertise and feedback, especially in areas the AI cannot differentiate correct from incorrect itself.

Based on your experience, which mistakes does your organization/team/project take care of the most to avoid risking a setback with your AI project?

In case you ran an AI project, and the results were disappointing, which of the mentioned causes might have had an impact?

AI is not a technology topic, it's a leadership topic

What must be done within your team/company to get the leadership support required to drive and leverage AI initiatives and projects?

What specific steps can and will you personally take?

How will you measure the progress and success of AI initiatives you are responsible for?

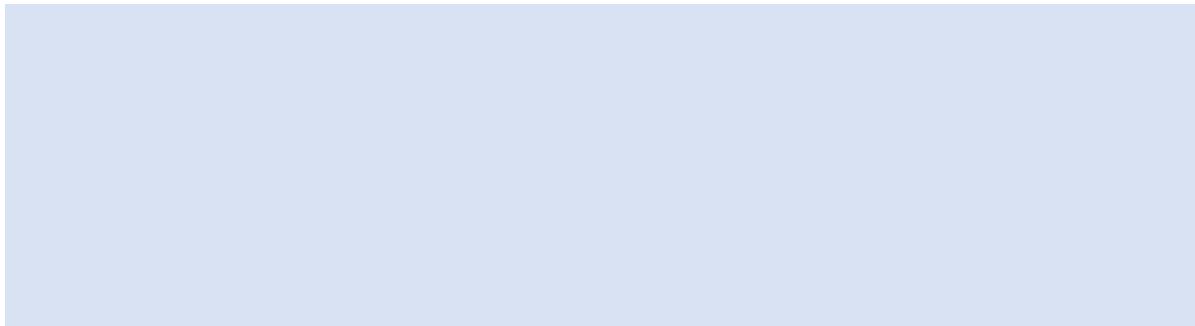
### Establishing an AI task force

Which departments and people should be involved in your AI task force?

How can you convince these people (& their managers) to enroll them in your AI task force?

What should be their first assignments?

What is your role going to be?



### Next management steps for your AI journey

1. Foster a company culture destined to make things happen, change things, dare to do new things, and get results in the end, rather than insist on power, internal politics, or counting the 'headcount' of people managed. It's not a zoo, it's an organization with human beings. And AI.
2. Foster a failure culture encouraging experimentation with new possibilities, which include AI, but also other things. BUT failure culture does NOT mean being stupid and breaking things for the purpose of breaking. It includes risk assessments, and making decisions on imperfect information, without thoughtlessly going all-in.
3. Regularly put everything to the test, particularly old and habitual thought patterns. This includes your best sellers, your cash cow, your signature products or services. Ask yourself: What can we do better. What can we do uniquely new, by means of new technologies like AI? Be curious! And brave.
4. Regularly get out of your familiar environment, together with your employees. For instance, go to your customers to see what is important to them. Just watch. Listen. And also go to where new ideas are generated. Ideas that may look like science fiction but could be the source of innovations you can implement soon. **You are one idea away from outstanding success!**
5. Build your future on the creativity of mixed teams. Mix age, origin, gender, areas of experience, and then add a pinch of AI - like fragrance manufacturer Symrise did.
6. Accept that innovation will always be met with fear. Take the dangers of AI seriously. But don't let that stop you from discovering and exploiting opportunities. Because if you don't, others will!
7. Establish or support your AI task force. Their job is not a side hustle, so give them budgets AND goals.

What are your most important learnings from this course?

What was most surprising or inspiring to you?

Other notes:

These people would benefit from this course, and I will bring it to their attention:

To recommend the course to others, simply share this link with them:

<https://www.targetter.de/AIMAGEUD>

Did you provide feedback to the course yet?

If not, please do so now 😊

Did you connect with Axel on LinkedIn yet?

Here is the link: <https://www.targetter.de/linkedineng>