Generative AI Project Planning Toolkit

This project planning toolkit guides you through the key stages of implementing AI solutions in your business. They help structure your thinking and ensure you address critical aspects of AI implementation.

Start with the Problem Canvas to clearly define your challenge and what success looks like. Use the Solution Component Canvas to outline potential approaches and evaluate whether to build, buy, or reuse existing solutions. The Data Processing Canvas helps you assess data requirements and complexity of AI processing needed.

As you progress, use the Risk Canvas to identify and quantify potential issues, then define appropriate guardrails using the Guardrails Canvas. Finally, the Business Case Sheet helps evaluate costs, benefits, and timeline to make informed decisions about implementation.

In the following, you will find the different canvases with a short explanation of the content that is expected, followed by empty copies of them that you can use for your projects. These templates work best when used together, creating a comprehensive framework for moving from initial idea to successful AI implementation.

While this overview provides structure, you'll find detailed guidance on using each template in chapter 6 of my book Making Sense of Generative AI.

In other chapters, you will learn how LLMs and image generating AI works, and how you can optimize them to meet your needs. Further, I explore applications on how companies create value in real-life already today, together with challenges you will meet during implementations. A final chapter discusses how the future of AI might unfold and how it will likely transform our businesses.

Get it on Amazon HERE
or from any other
leading bookstore

Problem Canvas

Present

Current Situation:	*How do things work today?*
Pain Points:	*What makes the current way of working inefficient or frustrating?*
Stakeholders:	*Which persons and teams are involved?*
Time Scale:	*How often does the situation occur?*

Challenge Name:

Future

Target Situation:	*In a perfect world, how would a good situation look like?*
Success Measure:	*How can you quantify progress toward the ideal target state?*

Context

Data Involved:	*Which data, information, documents are involved? What data is expected by users and by the AI?*
Dependencies:	*On which IT systems, events persons, etc. does the overall process depend on? Which other processes depend on it?*
Risks:	*Do you see potential negative impact when resolving this challenge?*
Open Questions:	*What aspects are still unclear, and who can answer them?*
Time Scale:	*To the best of your knowledge, is it rather a quick-win or a longer running initiative?*

Data Processing Canvas

Data Usage

Data Source: *Where does the data come from? What is the content of this data?*

Data Target: *How will the AI provide its results? What content will the AI deliver?*

Specific Language: *Will you process domain-specific terminology? How important is it to be precise about words and formulations?*

Data Transformation: *How is the AI expected to process the data?*

Impact Estimate

Content Complexity: *How challenging is the content that gets processed?*

Availability of data: *How much and which exemplary data can you provide? How good is the data quality?*

Transformation complexity: *How is the data transformed by AI? How complex does this appear? How many different tasks are performed?*

Solution Component Canvas

General

What:	*What does the solution do?*
Why:	*What problem does it solve?*
Alternatives:	*What are alternative approaches, if any? Why are they dis-favored?*

Make, Buy, Re-Use

Buy:	*What are potential vendors? What do they charge?*
Make:	*What would be the efforts to build it? Who would be needed for how long?*
Re-Use:	*Are there re-usable solutions in the company? Efforts and costs to adapt it?*
Strategic Relevance:	*Are the capabilities provided of strategic relevance to the business strategy?*
Decision:	*Buy, make or re-use? What are the reasons?*

Technical Dependencies

Infrastructure:	*Where does the solution run? What capabilities are needed?*
Integrations:	*To which other IT systems will the solution communicate?*
Operations:	*Which efforts occur for monitoring the system, keep it working and main-training it?*
Stakeholders:	*Who needs to be involved due to these dependencies?*
Open Questions:	*Which questions are unclear, and who can answer them?*

Solution Name:

Risks Canvas

General

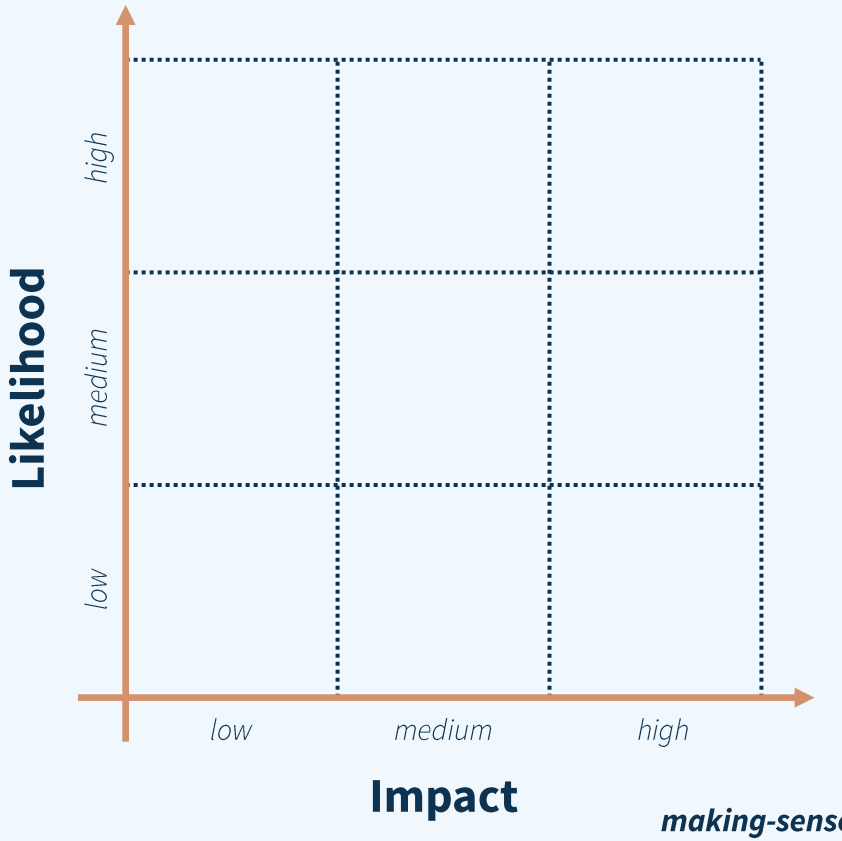
Scenario:	*Describe what happens?* *Describe why this would be negative?*
Likelihood:	*How likely is this going to happen?*
Impact:	*How large would be the negative impact?*
Comments:	*Comments, reasons for taking the estimates on likelihood and impact?*

Risk Name:

Mitigation

What:	*Options to mitigate the risk?*
Costs:	*How expensive would the mitigation be?*

Use this matrix to visualize and prioritize your identified risks. Plot each risk based on two factors: how likely it is to occur and how severe its negative impact would be. Risks in the upper right quadrant (high likelihood, high impact) need immediate attention and mitigation strategies. Work your way diagonally down-left, addressing medium-high risks next. This visualization helps you focus resources on the most critical risks first.



Guardrails Canvas

Requirements

Critical Behavior:	*What malicious ways can users try to access harmful content or bypass the AI? Which undesired behavior to prevent?*
Risk Addressed:	*What is the most harmful, wrong or confidential information that could be provided through data sources to the AI?*
Performance Requirements:	*What technical limitations are needed to ensure stable systems? How would they impact users?*
Compliance Needs:	*What kind of harmful, wrong or confidential information could be provided by your AI or application?*

Implementation

Type of Guardrail:	*How can you assess correctness of content? Which input, output and processing controls to apply*
Priority:	*How critical is the implementation of this guardrail, compared to others? What is the impact if this guardrail fails*
Requirements:	*What data, systems, processes need to be in place ? Which stakeholders need to be involved?*
How to test:	*Through which quality measure will you verify that this guardrail works as intended? How to test for potential bypasses?*

Guardrail Name:

Business Case Canvas

Value Creation

Type of Value:	*Efficiency gains, quality improvements, new capabilities and revenue streams?*
Details:	*How exactly and where is value created?*
Efficiency Savings:	*Current and target process costs, times per year someone runs the process?*
Quality Gains:	*How and how much is quality improved?*
New revenues:	*Number of esteemed customers, benefit for customers, payment model, etc.?*

Metrics

Break-even:	*At which point will the returns/ value created be higher than investments?*
Return-on-Invest:	*How much value is created compared to investments after 1 year?*
Unexpected risks:	*What are likely events that can increase the costs?*

Cost Analysis

Development:	*One-time costs*
Infrastructure:	*One-time costs*
Operations:	*Recurring costs*
Maintenance:	*Recurring costs*
Support, training:	*Recurring costs*
Risk Buffer:	*How much funding should be planned as buffer for unexpected events?*

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Empty Canvases

Problem Canvas

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Pain Points:

Stakeholders:

Time Scale:

Challenge Name:

Future

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Success Measure:

Context

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Dependencies:

Risks:

Open Questions:

Time Scale:

Data Processing Canvas

Data Usage

Data Source:

Data Target:

Specific Language:

Data Transformation:

Impact Estimate

Content Complexity:

Availability of data:

Transformation complexity:

Solution Component Canvas

General

What:

Why:

Alternatives:

Make, Buy, Re-Use

Buy:

Make:

Re-Use:

Strategic Relevance:

Decision:

Technical Dependencies

Infrastructure:

Integrations:

Operations:

Stakeholders:

Open Questions:

Solution Name:

Risks Canvas

General

Scenario:

Likelihood:

Impact:

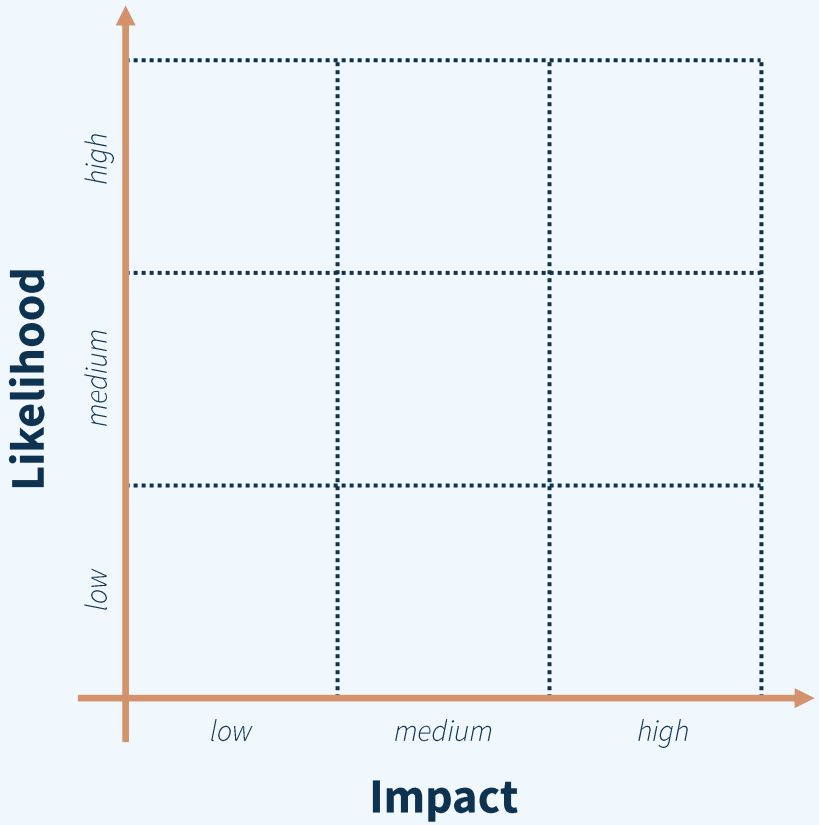
Comments:

Risk Name:

Mitigation

What:

Costs:



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Guardrail Name:

Business Case Canvas

Value Creation

Type of Value:

Details:

Efficiency Savings:

Quality Gains:

New revenues:

Metrics

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