

Scalable Enterprise Al Use-Case Implementation

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Scalable Enterprise Al Use-Case Implementation

From the Business Process to Proof-of-Value

Many companies struggle to scale Al projects into production, resulting in countless failed PoCs. This is often due to immaturity in one or more of the three layers of a complete Al strategy. Our implementation process draws on experience and lessons learned from countless customer projects. It addresses all layers of the AI strategy, increases your AI maturity and considerably reduces project risk. With a structured set of workshops, assessments, and iterative development based around 4 quality gates; positive business value and business alignment, existence of a usable data basis, existence of an Al operating model, and functional verification via prototypic implementation, we ensure that well-substantiated Al use-case candidates scale properly in an enterprise production environment

1. AI Use-Case Envisioning

Goal: Verify business value generation using AI in this use-case Target audience: Process owner & business departments ${\bf r}$ Effort: 1 or 2-day workshop / use-case



Business workflow

- Highlight the workflow steps:

AI Card Mapping

Work in groups:

Hypothesis

Hypothesis for using AI in the most relevant parts of the business workflow:

e.g. If we can automate text extraction from the

- Present the findings . Map the features on the Al
- cards to the steps in your business workflow

3. AI Platform, AI Operating Model & Architecture Check

Goal: Verify that cloud platform and app. architecture can scale to the performance requirements Target audience: DevOps Engineer, Software Architect, Network Engineer, Network Security Effort: Typically, 3 - 5 days depending on complexity of the application and environment



4. Prototypic Implementation & Verification

Goal: Create a prototypic implementation of the use-case to verify function and business value Target audience: Software Engineer, Poftware Architect, DevOps Engineer, Process Owner Effort: Typically, 10 - 30 days depending on complexity of the application and environment



2. Data Readiness for AI Assessment

Goal: Verify that data required for the use-case has an appropriate quality, format, & infrastructure Target audience: Data Engineer. Data Steward, Process Owner Effort: Typically, 2 - 5 days depending on complexity and number of data sources



Motivation



Many companies struggle to scale AI projects into production, resulting in countless failed PoCs. This is often due to immaturity in one or more of the three layers of a complete AI strategy. Our implementation process draws on experience and lessons learned from countless customer projects. It addresses all layers of the AI strategy, increases your AI maturity and considerably reduces project risk. With a structured set of workshops, assessments, and iterative development based around 4 quality gates; positive business value and business alignment, existence of a usable data basis, existence of an AI operating model, and functional verification via prototypic implementation, we ensure that well-substantiated AI use-case candidates scale properly in an enterprise production environment.

This offer

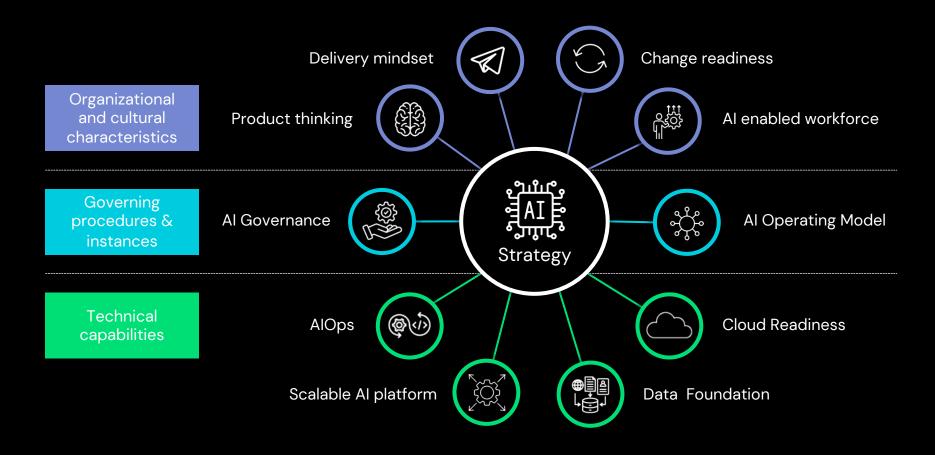


This offer is composed of four steps which are outlined in detail on the following pages:

- 1. Al Use-Case Envisioning:
 - An interactive workshop to ensure that the proposed use-case is aligned with the company strategy and will generate business value following implementation:
- 2. Data Readiness for Al Assessment:
 - A 2-5 day assessment to ensure that a data basis for the proposed AI use-case actually exists. We will assess aspects such as relevance of the data to the use-case, data quality, data security, and data usability.
- 3. Al Platform, Al Operating Model, and Architecture Check:
 - This is a 3-5 day assessment to ensure that the customer has sufficient maturity on the Azure platform to host an Al use-case, ensures that the customer has the basic attributes of an Al operating model and that the proposed architecture to the use-case is secure and scalable.
- 4. Prototypic Implementation and Verification:
 - This is a prototypic implementation of the defined AI use-case and is tested to ensure technical and business functionality in addition to the verification that the use-case will actually generate true business value for the customer.

An Al Strategy is composed of three key areas





1. Al Use-Case Envisioning



Goal: Verify business value generation using AI in this use-case

Target audience: Process owner & business departments

Effort: 1 or 2-day workshop / use-case











AI Card Mapping





Introduction

Input:

 Suggestion for using Al in a business workflow

Introduction from PRODYNA:

- Expectation management
- Overview: How GenAl works
- Introduction to AI design sprints
- Overview of today's scenarios

Business workflow

Split into work groups:

- Draw your business workflow, or process steps on the pin-board
- Highlight the workflow steps:
 - where time is lost
 - that are repetitive
 - Where errors occur
- Prioritize the problematic workflow steps

Work in groups:

- Explore the Microsoft Al cards
- Map the features on the Al cards to the steps in your business workflow
- Use the clusters of AI cards to identify the workflow steps that can be best automated with AI services.
- Prioritise the clusters according to your perceived business value

Hypothesis

Group discussion:

Present the findings

Output:

 Hypothesis for using AI in the most relevant parts of the business workflow:

e.g. If we can automate text extraction from the customer forms, we can save c.a. 8000 human hours of effort / year.

2. Data Readiness for Al Assessment



Goal: Verify that data required for the use-case has an appropriate quality, format, & infrastructure Target audience: Data Engineer, Data Steward, Process Owner

Effort: Typically, 2 - 5 days depending on complexity and number of data sources















Data Usability

Data Relevance

Data Quality

Data Security

Input:

 Concrete use-case suggestion for automation using AI Services

Clarification of:

- Contextual fit: Alignment with the specific goals of the project
- Timeliness: Does the data reflect the current state of the subject matter?
- Applicability: Is the data applicable to the specific context in which it is being used?

Clarification of:

- Accuracy: Does the data represent the real-world values it is intended to model?
- Completeness: Does the data include all information without missing values or gaps?
- Consistency: Is the data uniform across different datasets and time. Are data formats, definitions, and values consistent?
- Reliability: Is the data dependable and stable over time?

Clarification of:

- Confidentiality: Is the data accessible only to authorized individuals?
- Integrity: Can the the accuracy and completeness of data over its lifecycle be maintained?
- Availability: Are there measures to protect against data loss, and ensure resiliency?
- Compliance: Adherence to relevant laws that govern data protection like GDPR, or HIPAA.

Clarification of:

- Reachability: Is the data properly documented and in an appropriate format? Infrastructure approp?
- Understandability: Is the data structure, meaning and context clear?

Output:

- Findings and recommendations regarding all aspects of the data required for the use-case
- Clear 'Go', or 'No Go' for further development of the Al use-case.

3. Al Platform, Al Operating Model & Arch. Check



Goal: Verify that AI platform and app. architecture can scale to the performance requirements Target audience: DevOps Engineer, Software Architect, Network Engineer, Network Security Effort: Typically, 3 - 5 days depending on complexity of the application and environment















AI Platform

AI Operating Model

App Integration

App Scalability

Input:

 Concrete use-case suggestion for automation using Al Services

Clarification of:

- Al Infrastructure: Are necessary compute, storage, and networking resources provided?
- Compliance: Does the environment adhere to security and regulatory requirements?
- Data Management: Are services for data ingestion, storage, and governance provided?

Clarification of:

- Al Governance: Does a Responsible Al policy exist and what are the ramifications for this workload?
- Deployment & ML-OPs: What are the guidelines for model and artefact deployment?
- Monitoring: How will the model performance be tracked and issues such as model drift detected and addressed?
- FinOps: Can centralized services be used for cost optimization – e.g. TPU.

Clarification of:

- Backend Integration: Is the integration of other back-end systems e.g. SAP per API required?
- Data Synchronization: Do potential data sync problems need to be anticipated and mitigated?
- Security: Which authentication, authorization, and encryption measures need to be implemented?
- Resilience: How should errors be detected and handled.

Clarification of:

- Application Architecture: Is the suggested architecture suited to the performance requirements?
- Cloud Services: Do the suggested cloud services fit to the performance requirements?

Output:

- Findings and recommendations
- Clear 'Go', or 'No Go' for prototypic implementation of the Al use-case.

4. Prototypic Implementation & Verification



Goal: Create a prototypic implementation of the use-case to verify function and business value Target audience: Software Engineer, Software Architect, DevOps Engineer, Process Owner Effort: Typically, 10 - 30 days depending on complexity of the application and environment















Define

Develop

Evaluate

Document

Input:

 Concrete use-case for automation using Al Services

Clarification of:

- Implementation team
- Environment onboarding
- Write user stories & create Kanban board
- Responsibilities

Agile development:

- Implementation of the user-stories
- Create of deployment pipe-lines
- Iterative deployment to the target environments

Iterative testing:

- Does the prototype fulfil the technical requirements?
- Does the prototype fulfil the business requirements?
- Does the protype fulfil the performance requirements and how does it scale?

Documentation of:

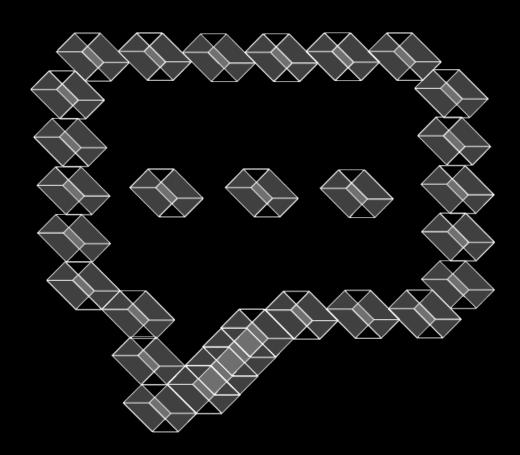
- Technical & business functionality
- · Business value fulfilment

Result:

Clear 'Go', or 'No Go' for further FULL product development of the Al usecase to production readiness.



Thank you! Any questions?





Please contact us!



Telephone +49 69 597 724 - 0



Email info@prodyna.com







