

# *Adoption of AI in ICT Procurement contracts*

MSc Research Project Presentation

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# *Agenda Overview*

- 01 Objectives
- 02 Methodology
- 03 Problem investigation
- 04 Use cases
- 05 Problem Statement
- 06 Proof of Concept
- 07 Project Timeline
- 08 Validation



## Objectives

- To support the process of drafting answers for bidder questions
- To support the generation of a final information notice for tendering processes.



## Scope of the Study

- It focuses on the documentation that the procurement team at GEANT published on the Official Journal of the European Union (OJEU).
- This publication includes all public sector tenders that exceed a certain financial threshold as per EU legislation

# *Research Method*

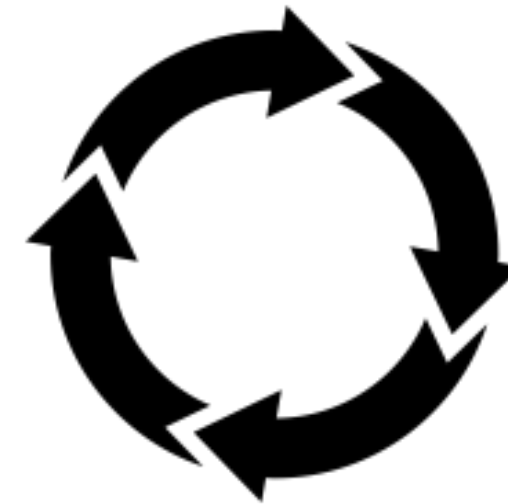
## **Design Cycle**

### **Implementation**

How successful has  
been?

### **Validation**

Would these designs  
treat the problem?



### **Problem investigation**

What process must be  
improved? Why?

### **Design**

Design one or more  
artifacts that could  
treat the problem

# *Problem Investigation*

## **Use cases at Géant:**

We identified three use cases, and we selected one use case based on complexity, pain points, resources and time.

- Case 1: Draft contract AI assistant
- Case 2: AI System for Crafting Award and Regret Letters for bidders
- Case 3: AI Tender Query Assistant

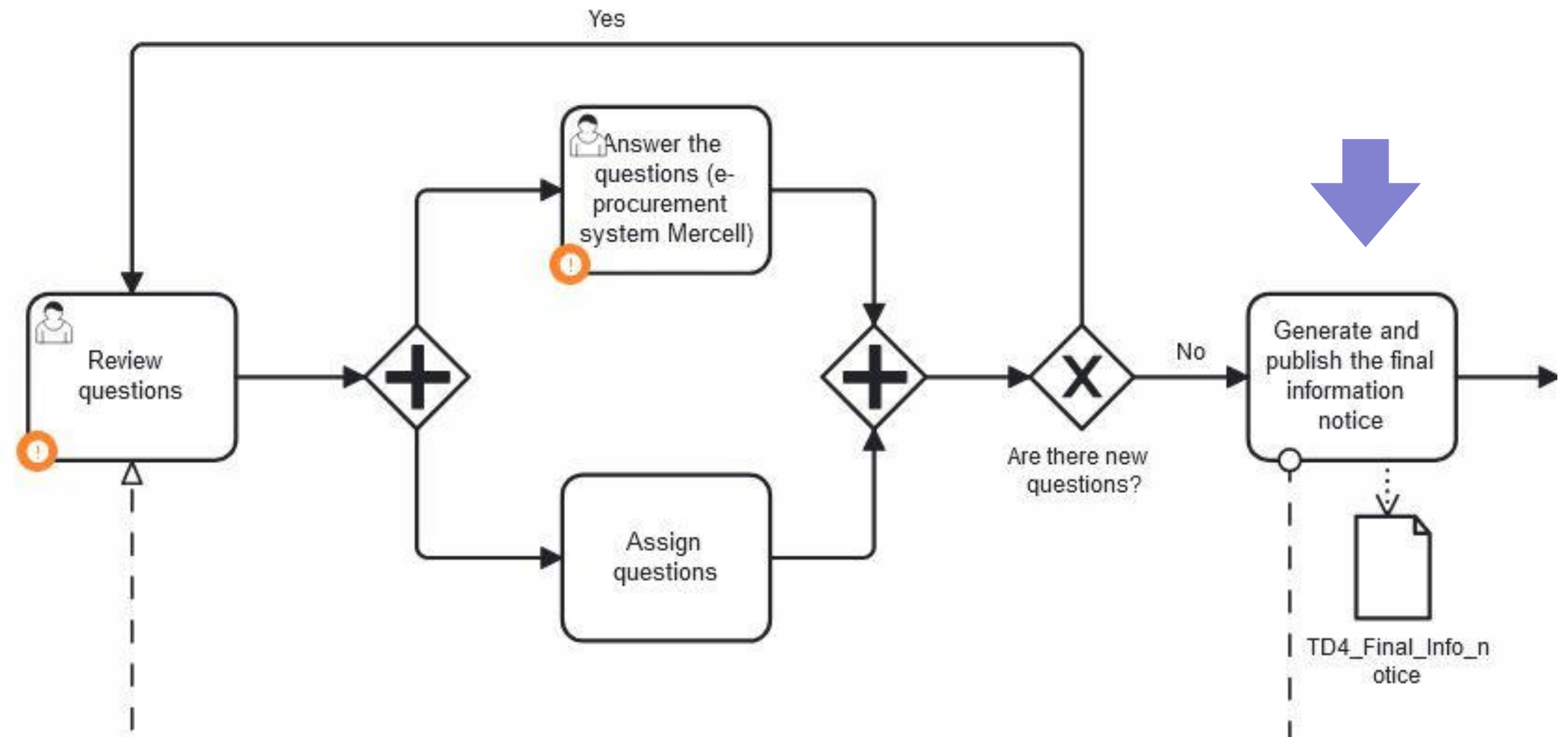
# Title: AI Tender Query Assistant

## Description

- Draft accurate and comprehensive answers.
- Provide detailed explanations of the reasoning.
- Automatically cite relevant sources, such as clause numbers.

**Status:** Selected

*Use Case 3*



# *Problem Statement*

- The tendering process involves numerous time-consuming tasks, with managing the Q&A of lengthy tender documents being particularly challenging.
- The procuring team can become overwhelmed by the volume of clarification questions, leading to delays and potential errors.
- Additionally, if bidders are given less time, the quality of their responses could diminish, potentially impacting sponsors.



# Question example

Annex 3: Article 30. Termination and notice of termination

We would like to **add** to this article that any discounts granted for entering into the agreement for a specific duration will be forfeited retroactively in the event of early termination.

Source: Terms and Conditions for IT contracts

# Proof of Concept

## Description

1. Input question
2. Retrieve context using similarity analysis from the documents
3. Answer generation:
  - Intend of the question
  - Impact Analysis
  - Recommendation

## Version 01: AI Tender Query Assistant

**AI Tender Query Assistant**

Question

Retrieved Context

Generated answer

**Run**

# Proof of Concept

## Description

1. Input question
2. Retrieve context: question vs articles using similarity analysis
3. Answer generation:
  - Summary of product / service
  - Intend of the question
  - Impact Analysis
4. Decision

## Version 02: Tender Query Assistant

### AI Tender Query Assistant

Question	Product / Service
<input type="text"/>	<input type="text" value="Description of what the service is about"/>

**Step 1: Retrieve Context**

Intend of the question	Semantic Similarity
<input type="text"/>	<input type="text"/>
	<input type="text"/>
	<input type="text"/>

**Step 2: Generate Answer**

Impact Analysis

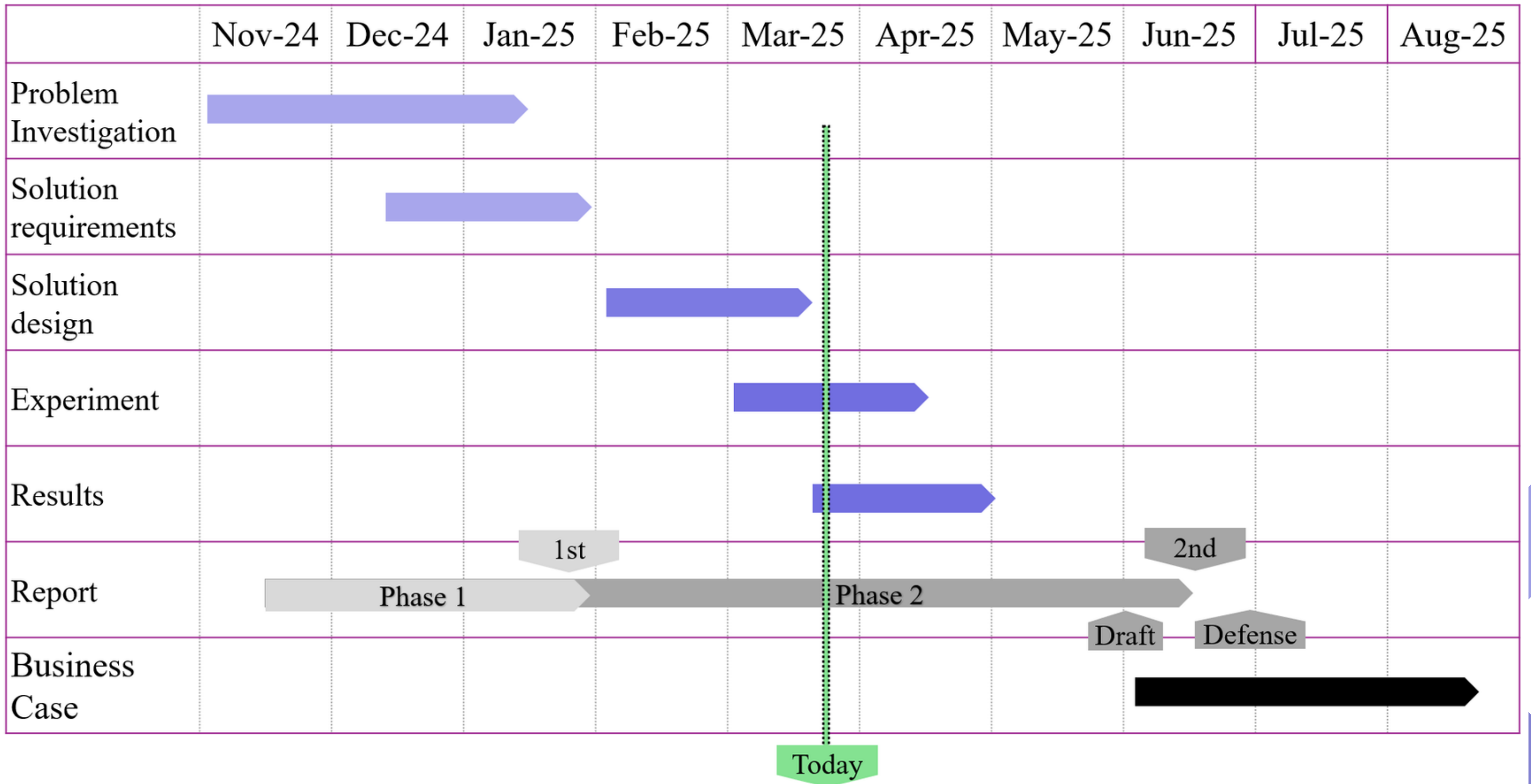
**Step 3: Decision**

# Validation

- The objective is to validate the prototype accurately generates information that is useful for the readers to write a final answer to a bidder question.

<b>Validation Criteria</b>	<b>Purpose</b>	<b>Score</b>
Retrieval	Checks whether all relevant document chunks were identified	1-5
Impact Assessment	Evaluates whether the response effectively explains the practical consequences of the proposed changes	1-5
Completeness of the task	Checks if all tasks, collectively, assist the user	1-5

# Project Timeline





*Thanks!*

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