

Software Engineering II: Project Organization and Management

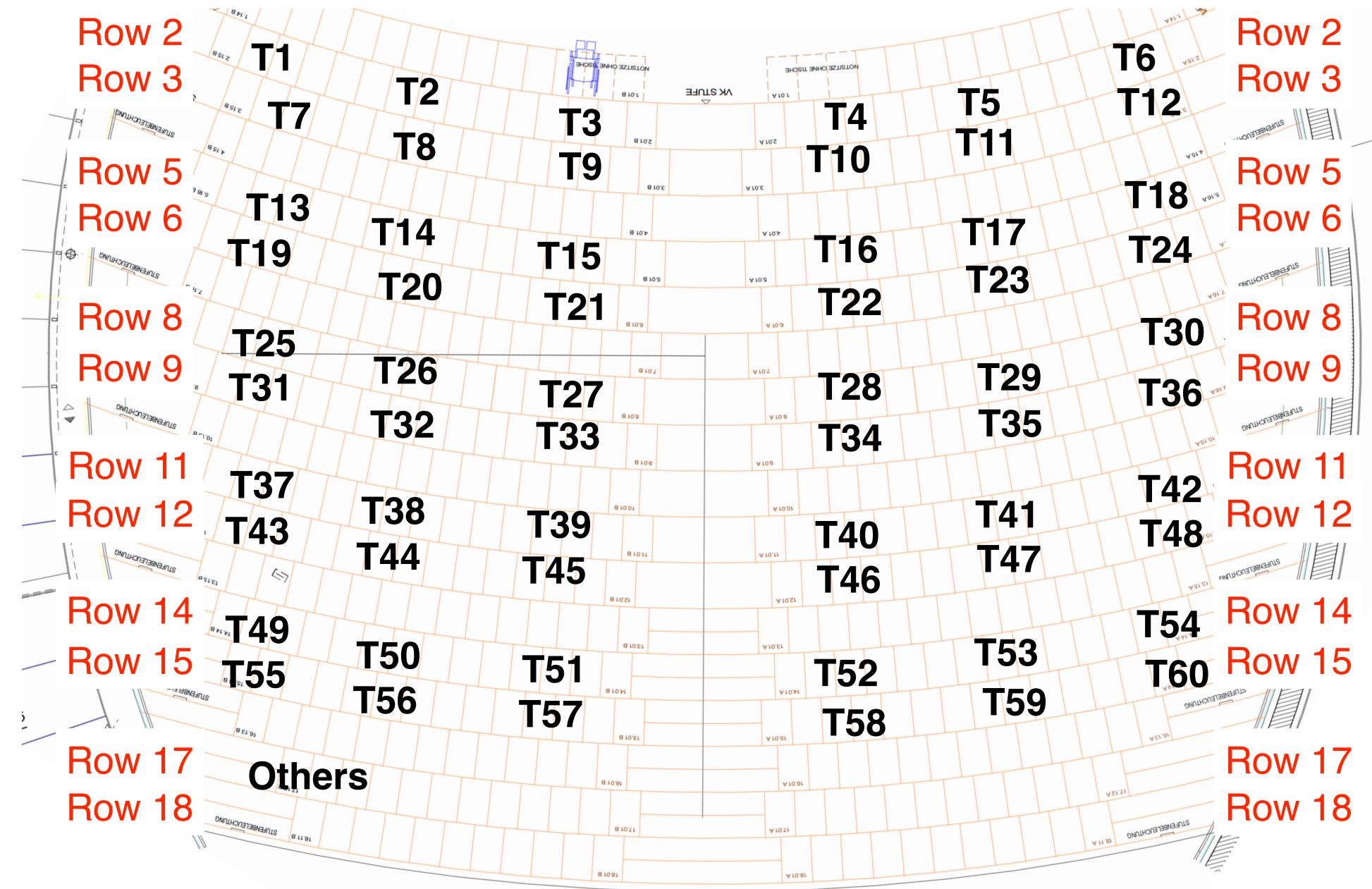
Exercise 10 - Global Project Management

Yang Li

10 July 2015

Seating during Exercises

- Take a seat next to your team members, because we sometimes have team exercises in class
- Leave every third row (1, 4, 7, 10, 13, 16) empty, so that the tutors can walk through these rows and help you



Exercise Status, Impediments, Action Items

	Type	Description	Tool	Deadline
Status (Finished)	Team	Demo Scenario, Demo Script and Video of the demo	Confluence	July 10
	Team	Continuous Delivery	Bamboo HockeyApp	July 10
Impediments	→ Q&A meeting! Wednesday 10:30 - 11:30 in 01.07.014			
Action Items (Future)	Team	Sprint 5 Review Meeting	Confluence	End of Sprint 5
	Team	Agile Contract	Confluence	July 17

~ July 17
(depends on
your team)

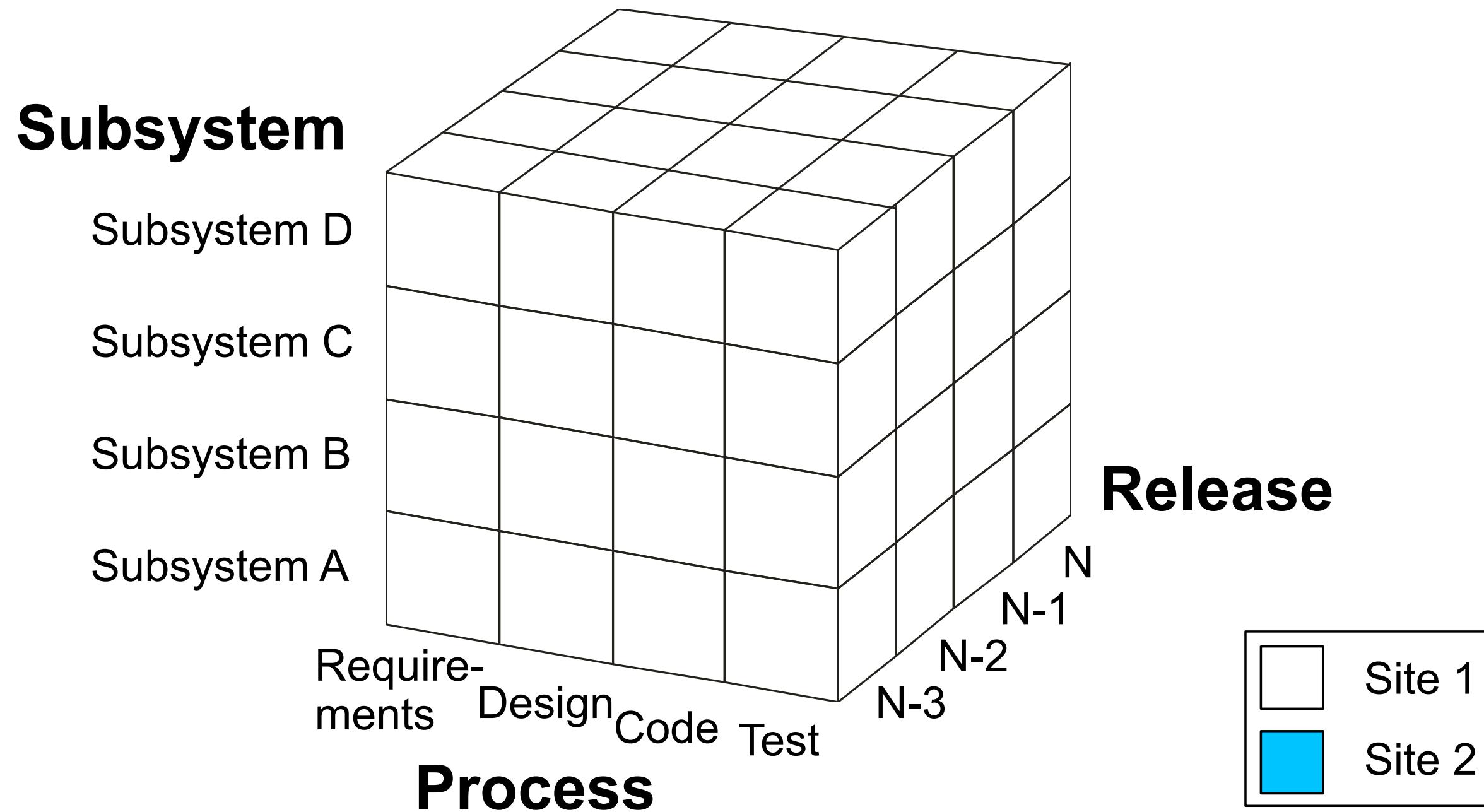
→ <https://confluencebruegge.in.tum.de/display/POM15EXAMPLE/POM+Work+Products>

Outline

→ Global Project Management Refresher

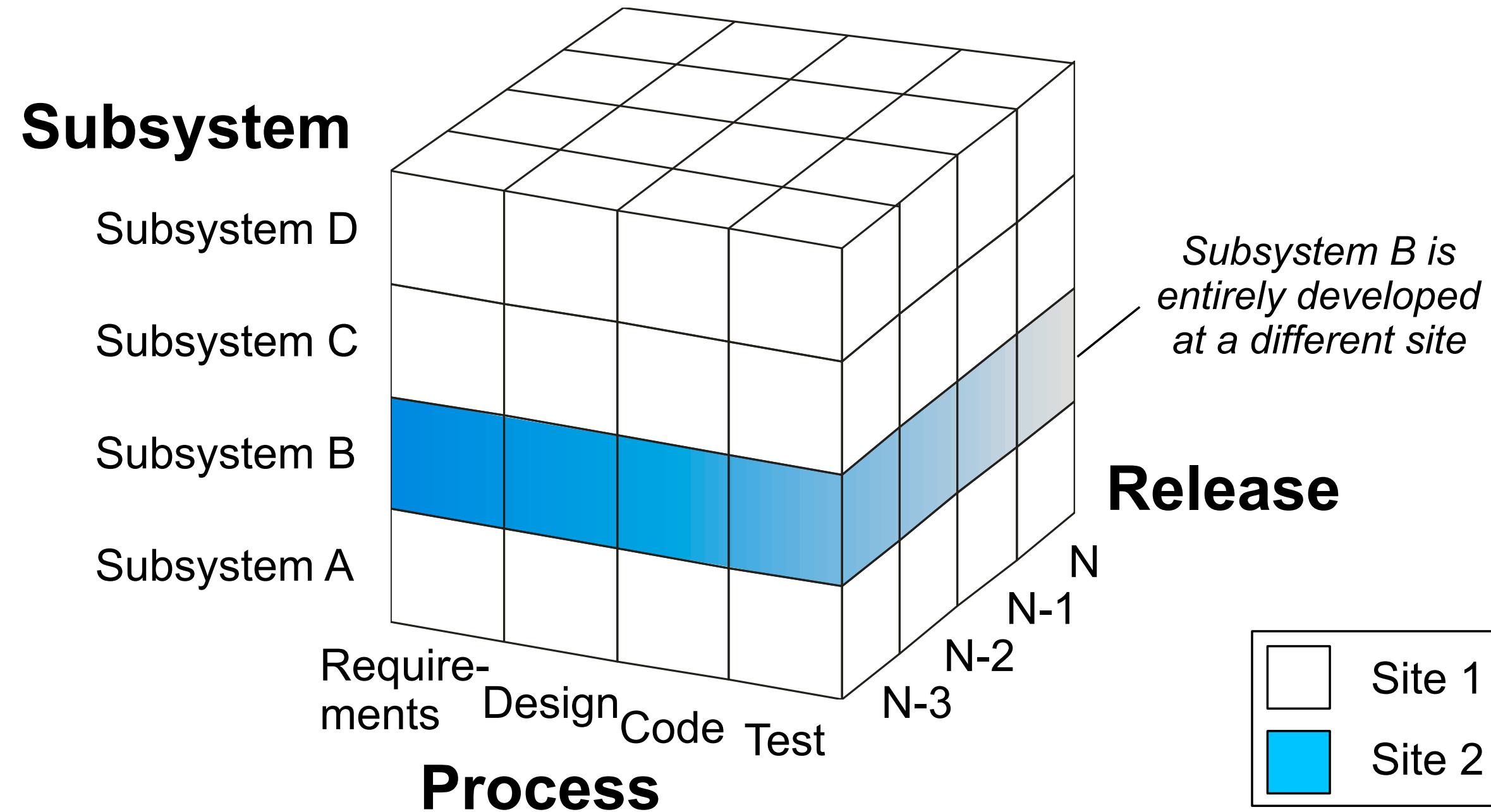
- Exercise: Play out live scenarios
 - Scenario I: Define Responsibilities
 - Scenario II: Introduce Pricing Model
 - Scenario III: Scale up the Business

Dimensions of Organizational Models



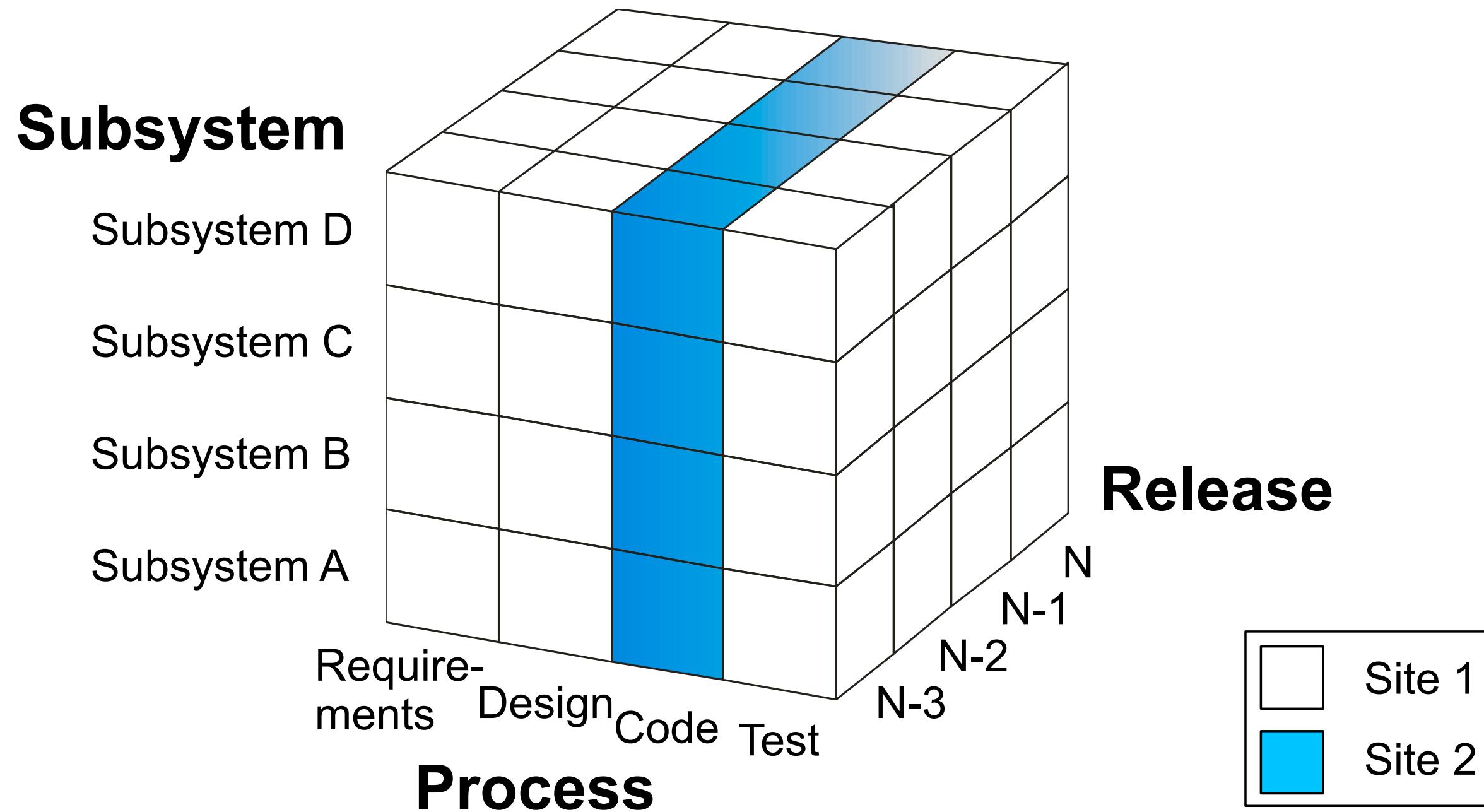
Source: James Herbsleb, Presentation at OOP 2006 [6]

Separate by Subsystems



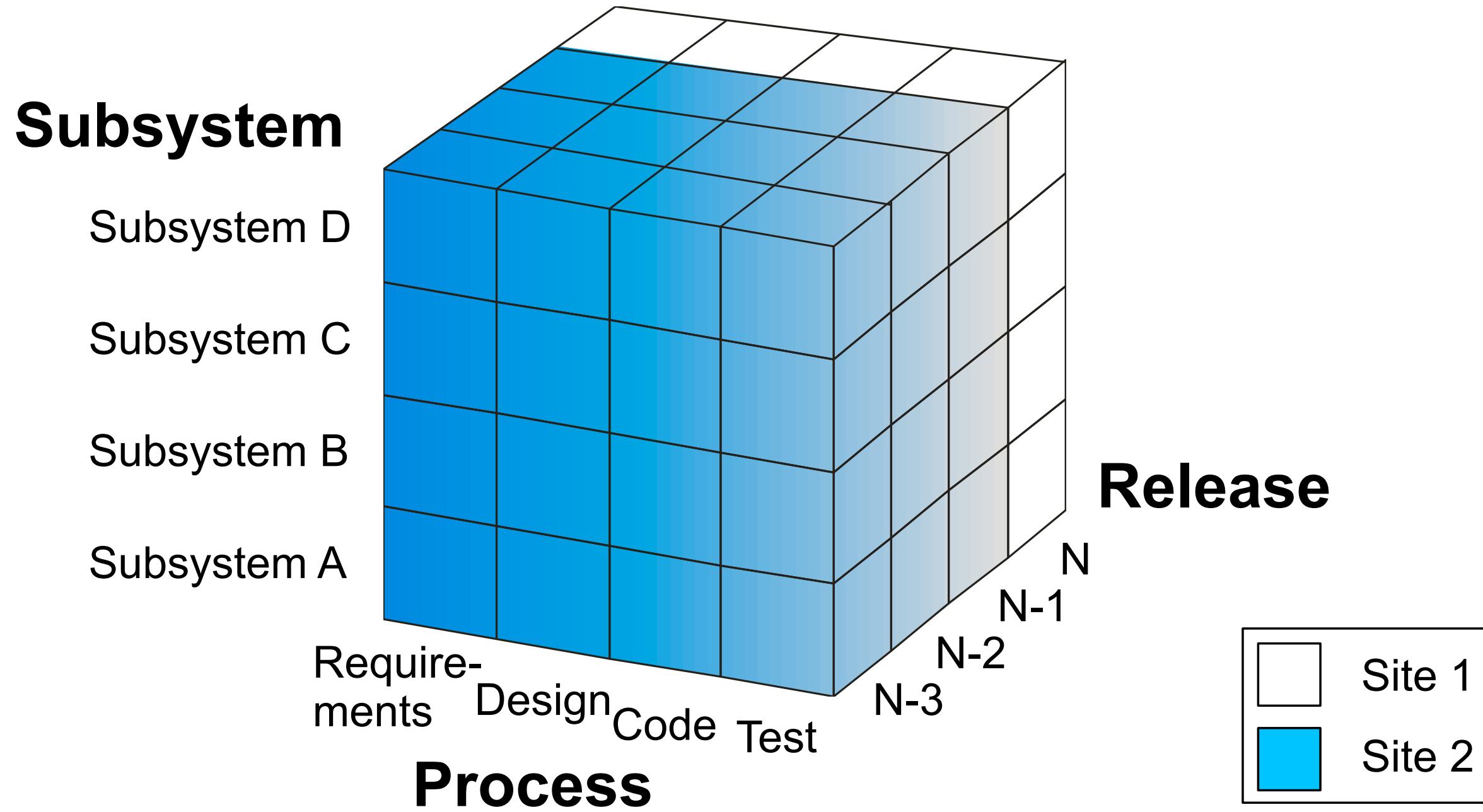
Source: James Herbsleb, Presentation at OOP 2006 [6]

Separate by Process Steps



Source: James Herbsleb, Presentation at OOP 2006 [6]

Separate by Releases



Source: James Herbsleb, Presentation at OOP 2006 [6]

GSE Checklist

Communication

- Open, regular communication
- Building trust through personal contact
- Effective use of communication media

Organization

- One global team
- Clear processes and responsibilities
- Common goal

Requirements

- Clear and precise requirements
- Common understanding
- Proactive clarification

Architecture

- Optimized to reduce dependencies
- Low coupling
- High cohesion

Time Management

- Proactive management of time difference
- Flexibility regarding work times
- Leveraging increased number of office hours

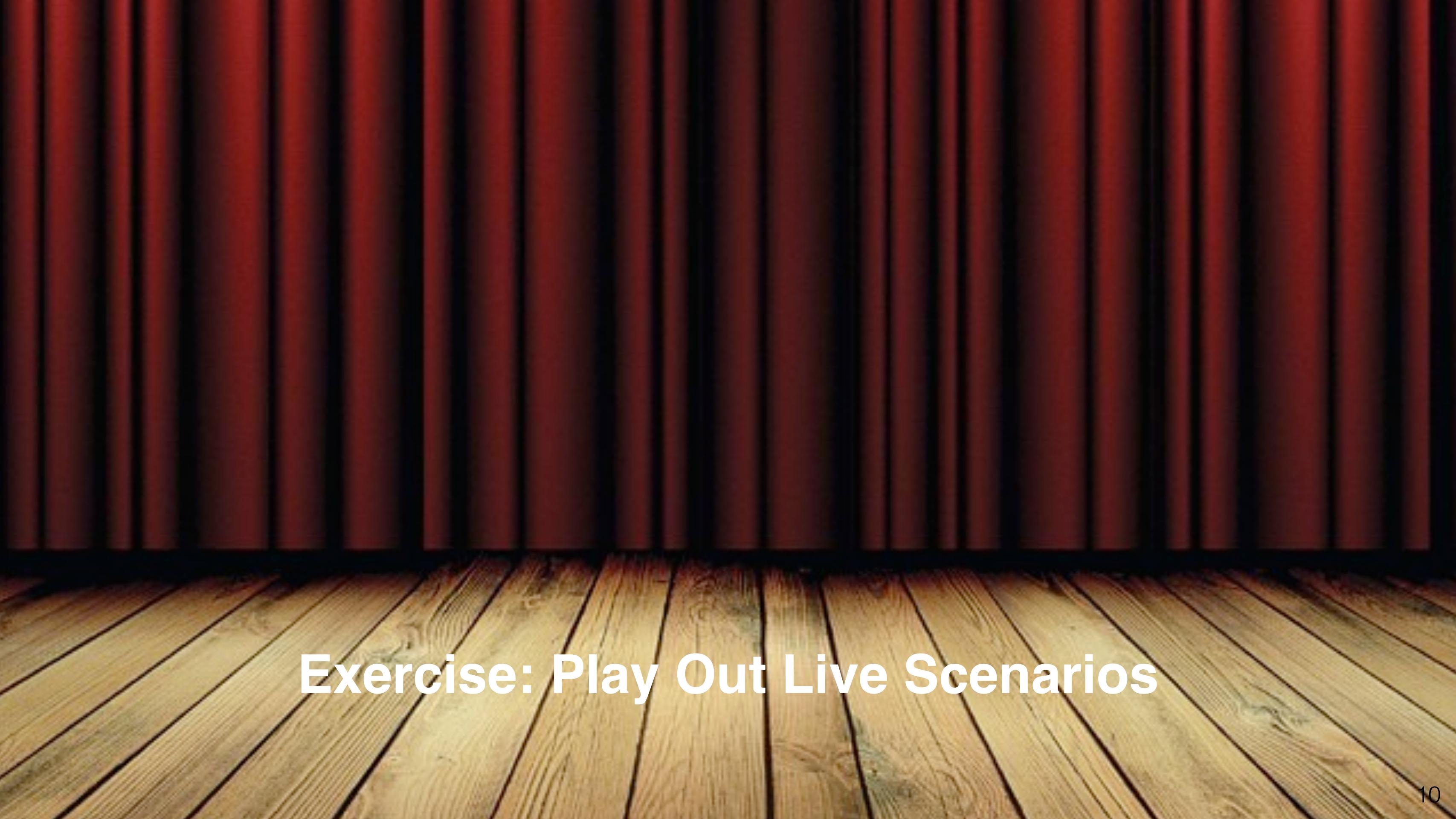
Culture & Language

- Culture awareness
- Respect for culture and values
- Consideration of linguistic differences

Employees

- Selecting the right team members
- Preparing employees for their tasks
- Coaching and mentoring

Source: C. Lescher , R. Lochner [8]

The background of the slide features a photograph of a stage. The floor is made of light-colored wooden planks. In the background, there are red theater curtains. The lighting is dramatic, with the stage area being brighter than the surrounding space.

Exercise: Play Out Live Scenarios

Prologue

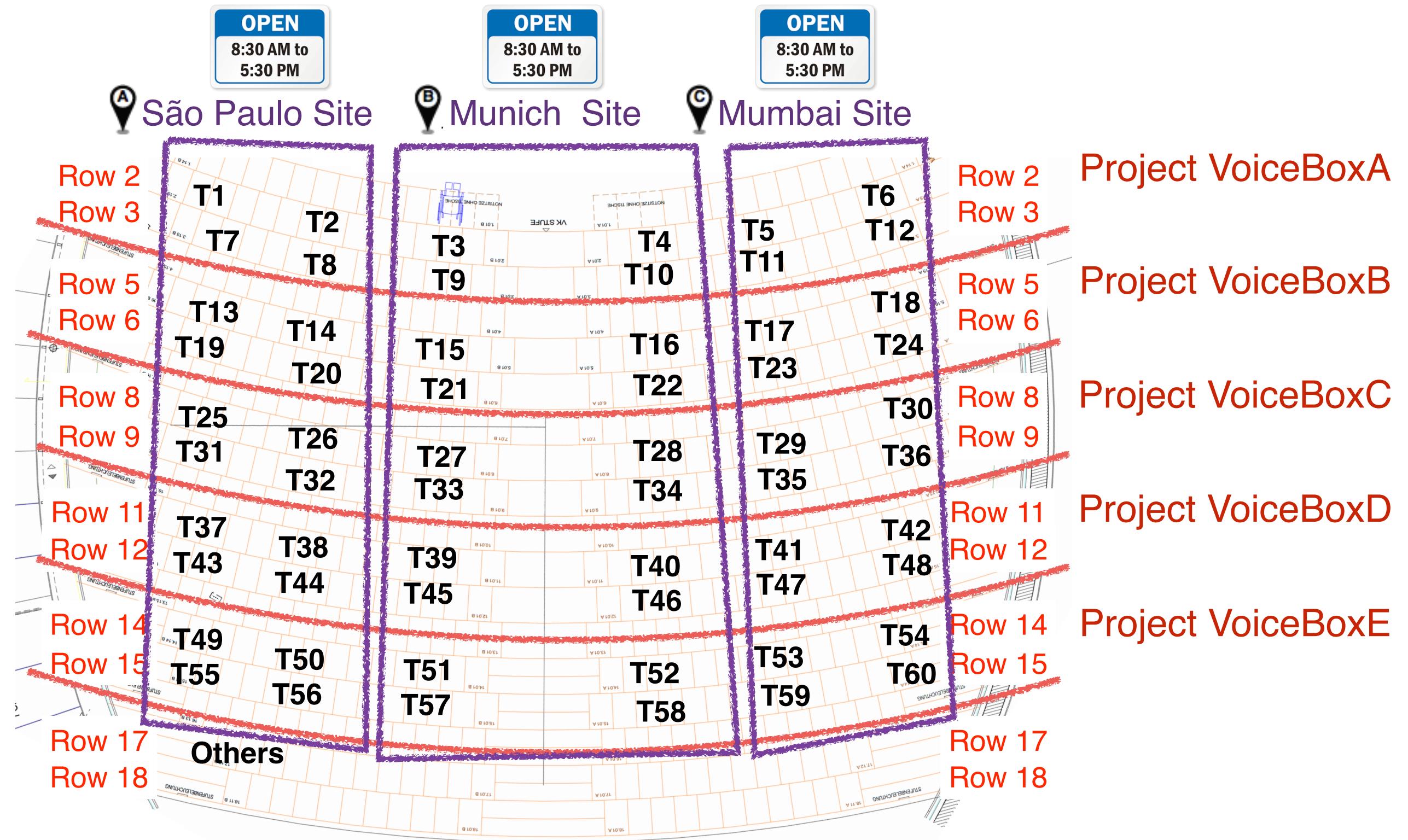
Project **VoiceBox** was just initiated. The goal of the project is to integrate an existing product, *Dropbox*, with a new feature, *voice control*.

To gather domain expertise in the new voice control technology, your company recently acquired the supplier company *POMVoice* in **São Paulo, Brazil**.

The main development sites are in **Munich, Germany** (your home location) and **Mumbai, India**.

While the team in Munich has rich knowledge about Dropbox features and previous development, the team in Mumbai are good coders but inexperienced with Dropbox.

Project Organization: Five Global Projects

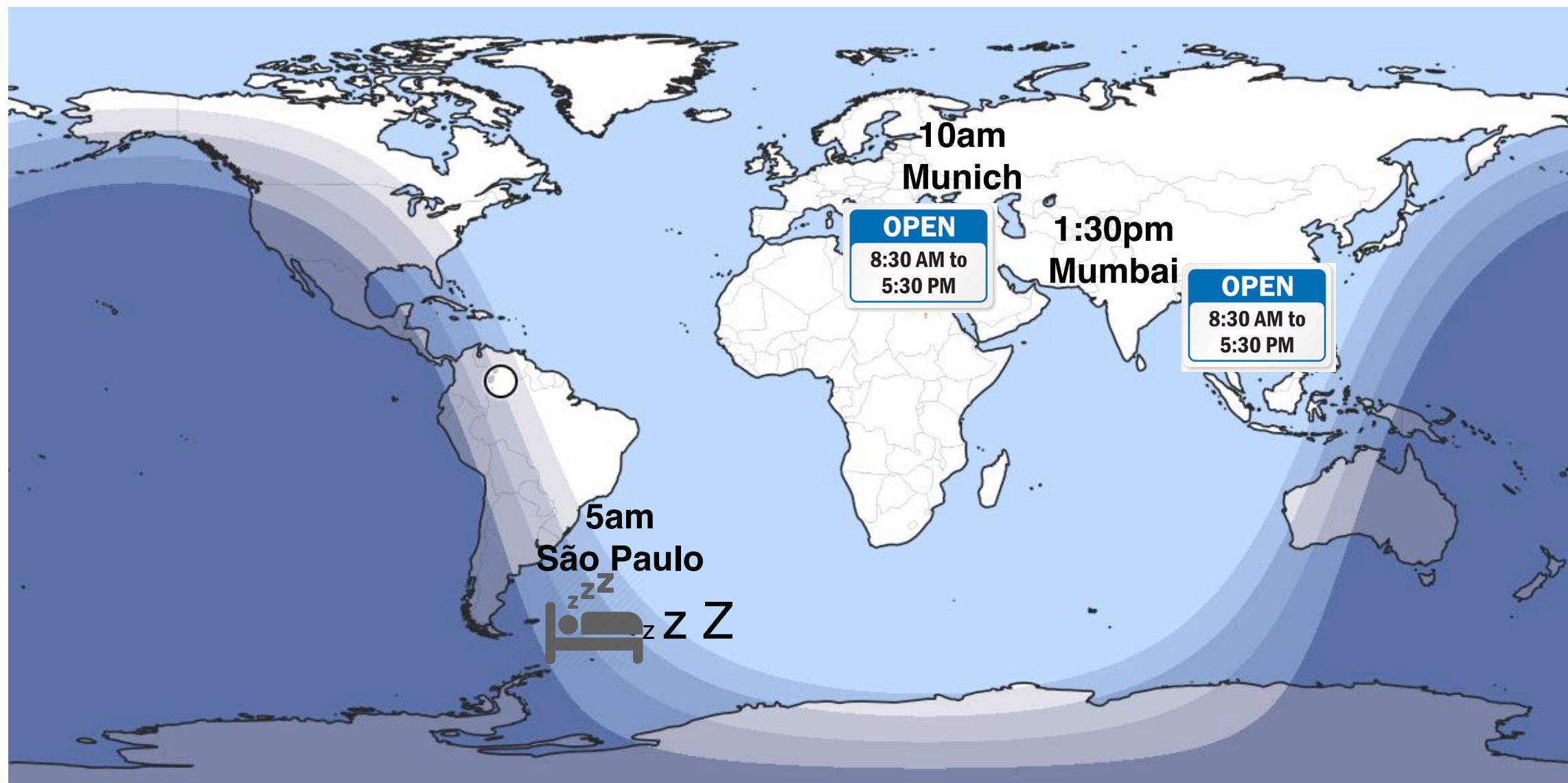


WBS and Deliverables

- Scenario 1: Define responsibilities
- Scenario 2: Introduce a Pricing Model for POMVoice
- Scenario 3: Scale Up the Business
- Deliverables
 - Requirements specification
 - High-level architecture design
 - Responsibilities

Scenario I: Define Responsibilities

Duration:
20 min in reality
= 4 Hours in the
given scenario



At the headquarter in Munich, the team first specifies the requirements.

Afterwards, the Munich team arranges a meeting with the Mumbai team to discuss the requirements, architecture, and the responsibilities of each site. Open questions to the São Paulo site are listed.

Tasks

- **Munich:**



- Specify early requirements for VoiceBox.
- Provide information about existing architecture of Dropbox.
- Organize meetings.
- Lead other sites to refine requirements, architecture and responsibilities.

- **São Paulo:** z z Z

- Read the provided materials about POMVoice.
- Prepare yourself to be the POMVoice experts.

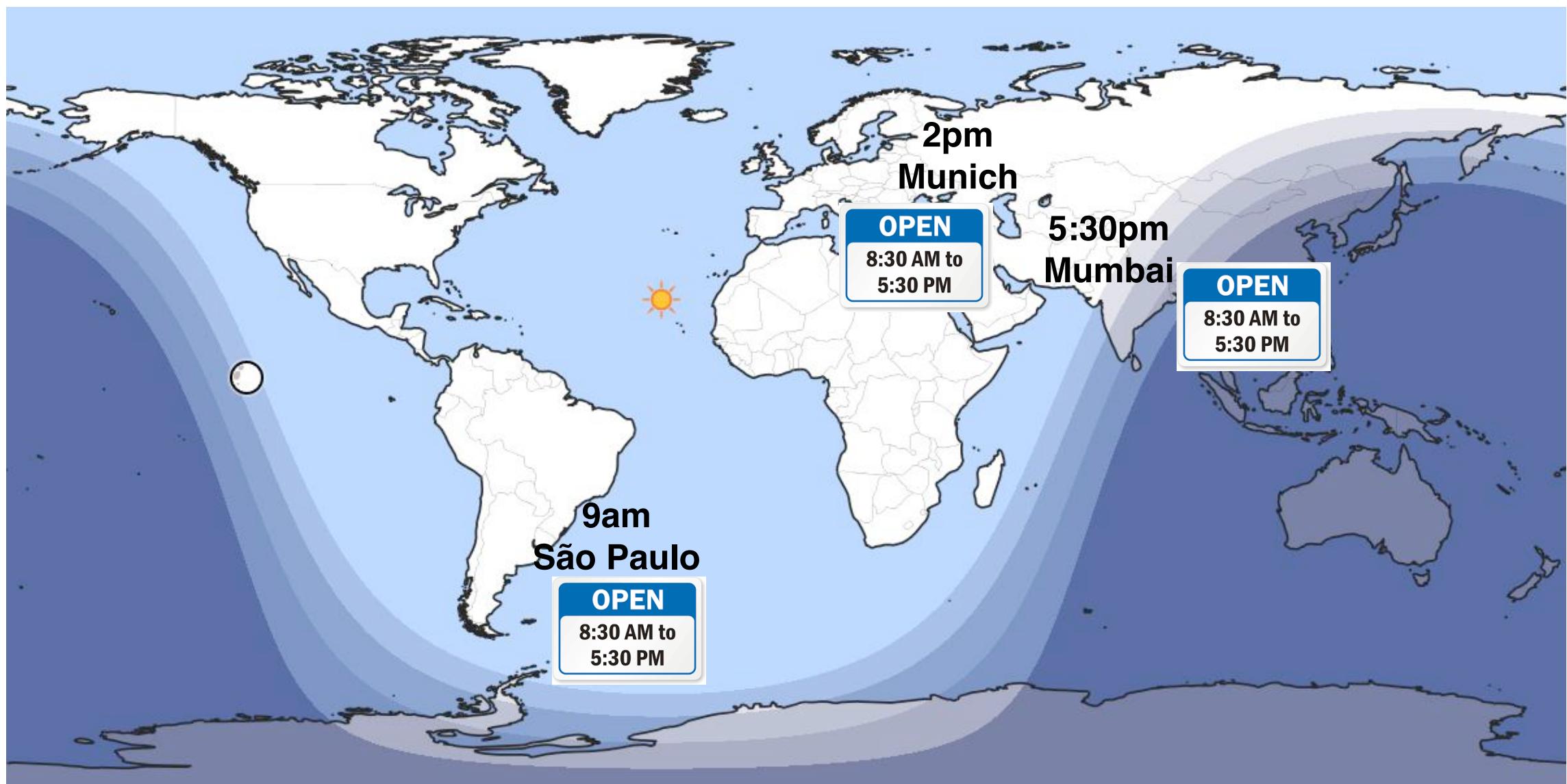
- **Mumbai:**



- Read the provided programer's guide of POMVoice.
- Give input about how to integrate POMVoice into the current product.

Scenario II: POMVoice Pricing Model

Duration:
20 min in reality
= 4 Hours in the
given scenario



The São Paulo site receives the questions and answers them right away. The pricing model of POMVoice is also introduced. The requirements, architecture and responsibilities are refined based on the new information about POMVoice. Be careful, the office hour at the Mumbai site is about to end.

Tasks

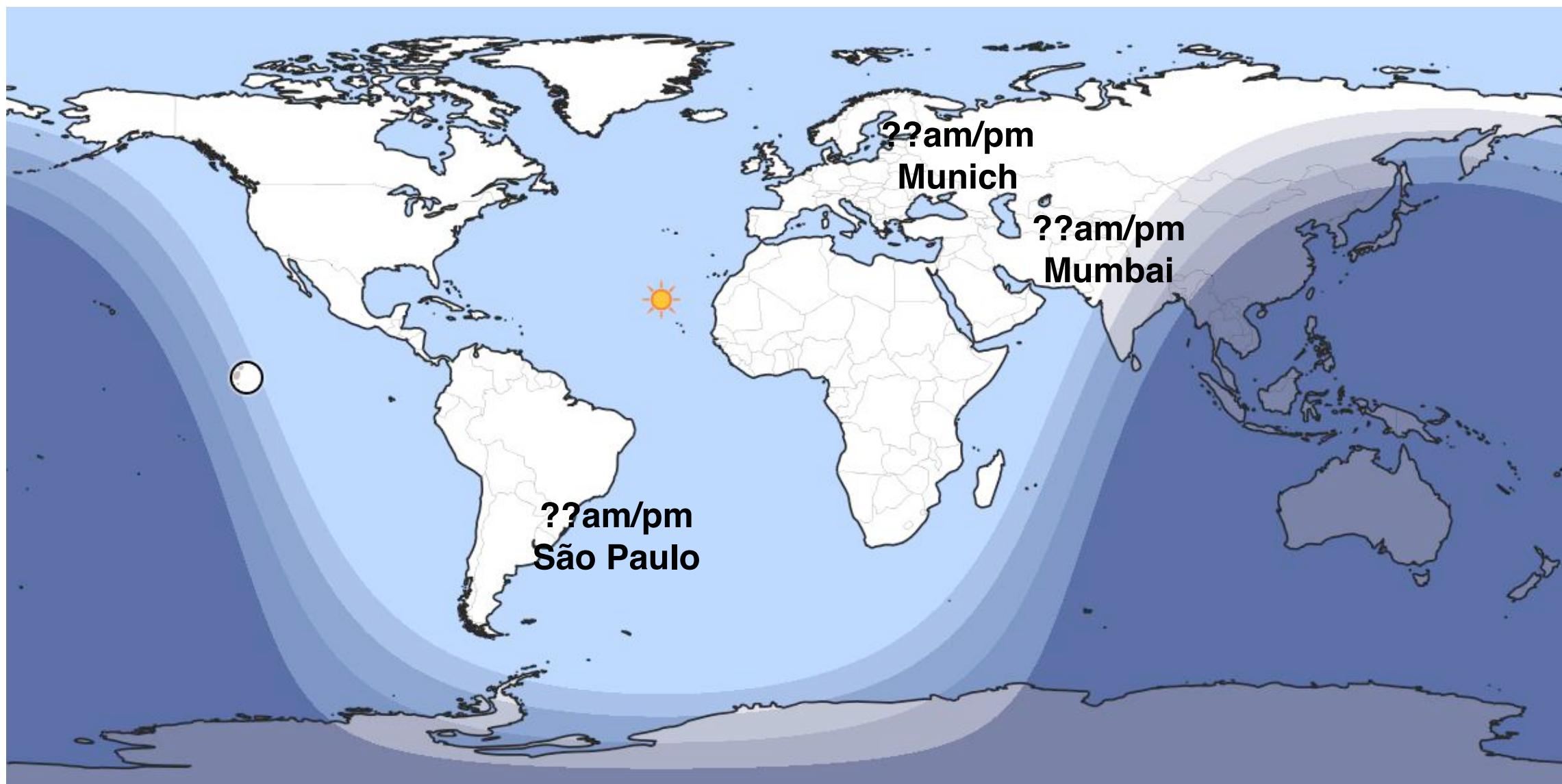
- **Munich:**

 - Make business decisions of VoiceBox.
 - Provide information about existing architecture of Dropbox.
 - Lead other sites to refine requirements, architecture and responsibilities.
- **São Paulo:**

 - Answer the questions about POMVoice.
 - Introduce the POMVoice Pricing Model.
- **Mumbai:**
 z Z Z
 - Give input about how to integrate POMVoice into the current product.

Scenario III: Scaling Up

Duration:
20 min in reality
= 4 Hours in the
given scenario



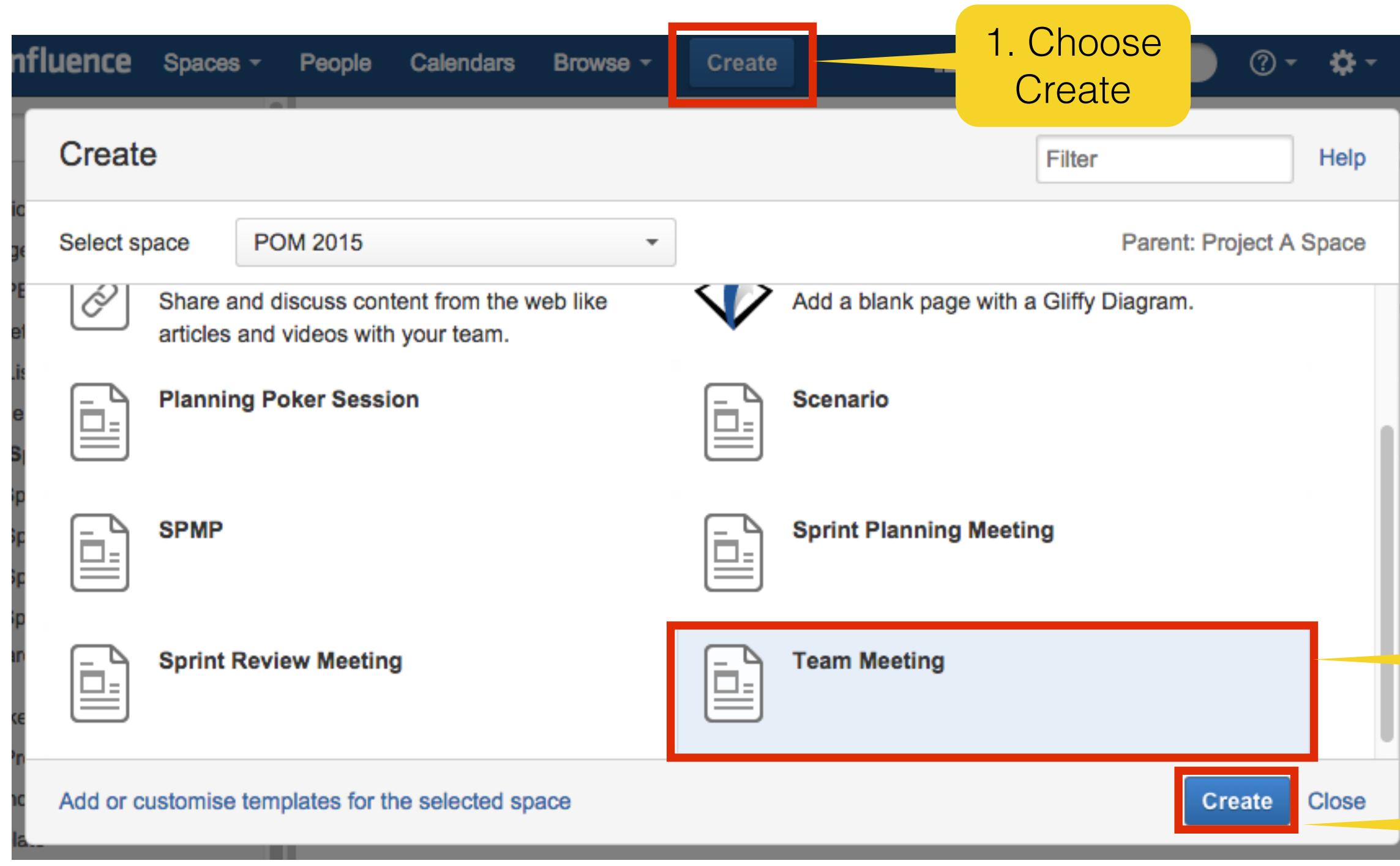
After the previous meeting. The Munich headquarter identified new requirements for VoiceBox to support the increasing business. Define a time slot to hold a meeting. In this meeting, you address the new requirements into the development. Refine the requirements, architecture and responsibilities.

Tasks

- **Munich:**
 - Schedule a meeting with other sites.
 - Address new requirements.
 - Make business decisions of VoiceBox.
 - Lead other sites to refine requirements, architecture and responsibilities.
- **São Paulo:**
 - Answer the questions about POMVoice.
- **Mumbai:**
 - Give input about how to integrate POMVoice into the current product.

Constraints

- You may not leave your site.
- Exception: each project has one and only one liaison from the Munich site, who can travel to the other development sites. He/she can talk to the developers only during local business hours.
- You can select your own communication mechanism (phones, skype, and chat), but you can respond only during local business hours.
 - Use your Confluence Space to document meetings and deliverables
 - Confluence/GSE Exercise/Project {A,B,C,D,E} Space
- You may request to get extra hours after usual business hours (talk to the tutors)



Best Project Award

- **Committee:** Bernd Bruegge, Yang Li, Stephan Krusche, Mariana Avezum, Ciprian Lucaci, Diane Xhymshiti
- **Criteria:**
 - Refined requirements, high-level architecture design and defined responsibilities delivered in Confluence
 - The deliverables are clearly described
 - Minimal extra hours
 - Effective communication
- **Winner:** tba

A vibrant red carpet leads towards a series of bright stage lights and silhouettes of photographers holding cameras. The scene is set against a dark background with lens flare effects.

Red Carpet and Interview Time

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10 Rules for Successful GSE Projects

- Plan the distribution deliberately
- Start locally and grow globally
- Carefully select employees and prepare them for their tasks
- Establish a common goal
- Further the exchange of employees
- Provide a suitable IT infrastructure
- Define clear communication structures and a global escalation path
- Utilize time zone differences
- Pay attention to clear requirements and domain knowledge
- Use an iterative process and foster continuous improvement

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