

PORTUGAL

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# Scaling Scrum The First Challenges

João Barreiro  
Scrum Master & Agile Coach  
Nokia Siemens Networks



BACKLOG  
development and consulting

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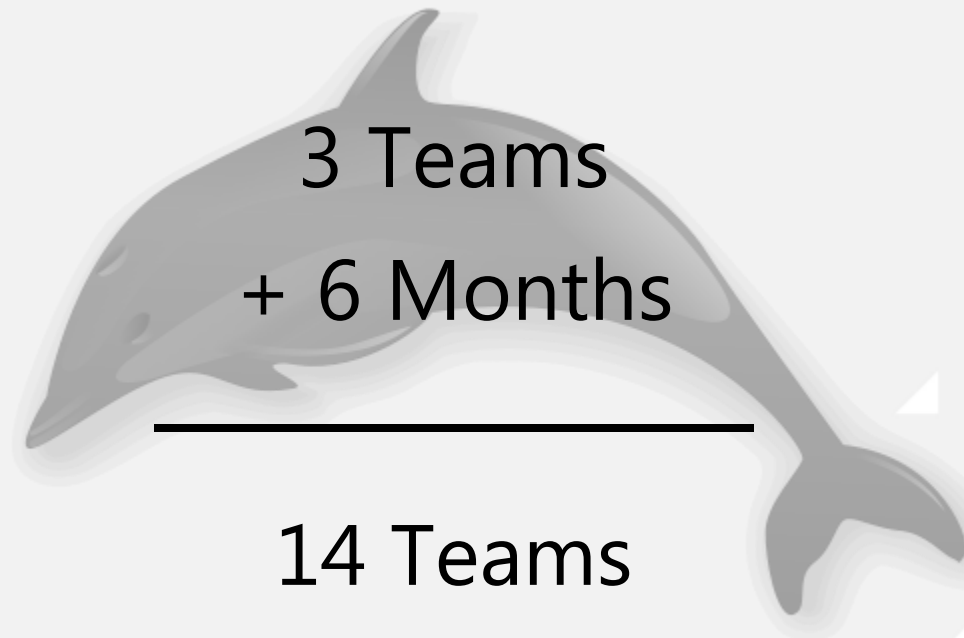


# The First Challenges

- Decision Making
- Knowledge Sharing
- Location



# NSN Project: Codename Dolphin





# ▶ **DECISION MAKING**

# Single Team Decision-making

For each set of related tasks

- Entire Team discuss **problems and solutions**
- Some Team members do some **research**
- Entire Team makes **key decisions**
- Some Team members do the **implementation**

# Multiple Team Decision-making

## Specialist Teams (part-time, virtual, temporary?)

- Discuss topics
- Perform research
- Take decisions (with input from outside the Specialist Team)
- Communicate decisions



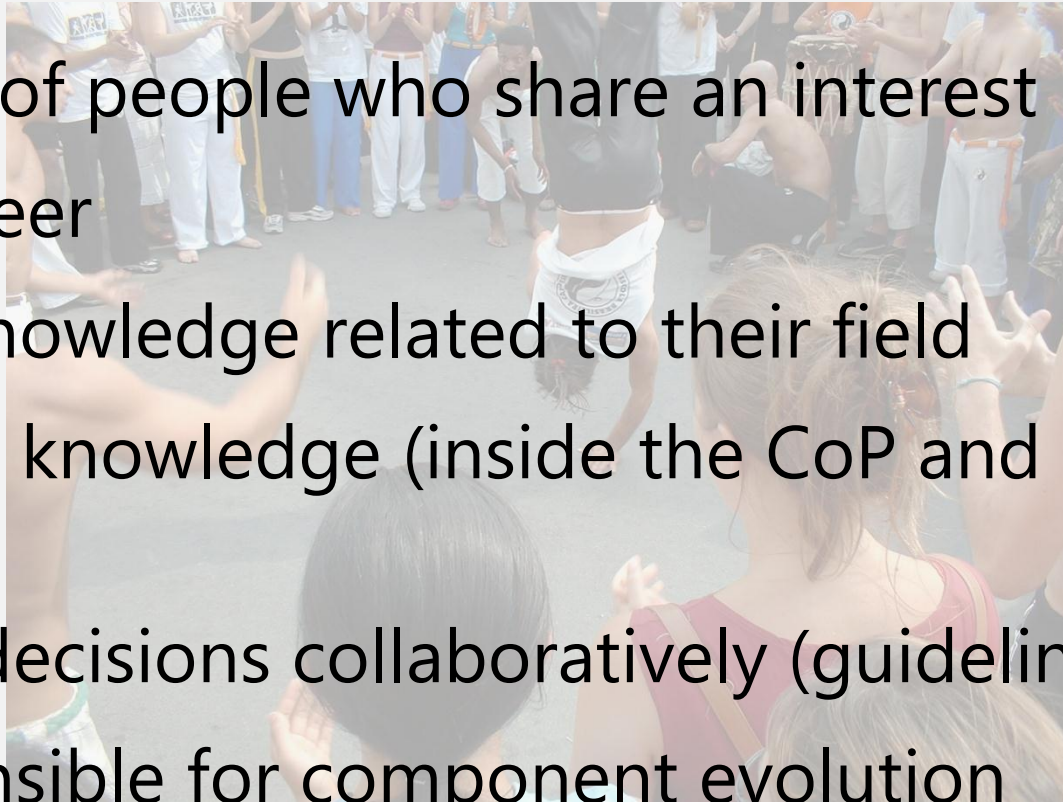
# Virtual Teams

- Root-cause analysis
- Communities of practice



# Communities of Practice

- Group of people who share an interest
- Volunteer
- Gain knowledge related to their field
- Spread knowledge (inside the CoP and to all Teams)
- make decisions collaboratively (guidelines)
- Responsible for component evolution



# Existing CoPs

- Usability
- Architecture/Design
- CI System



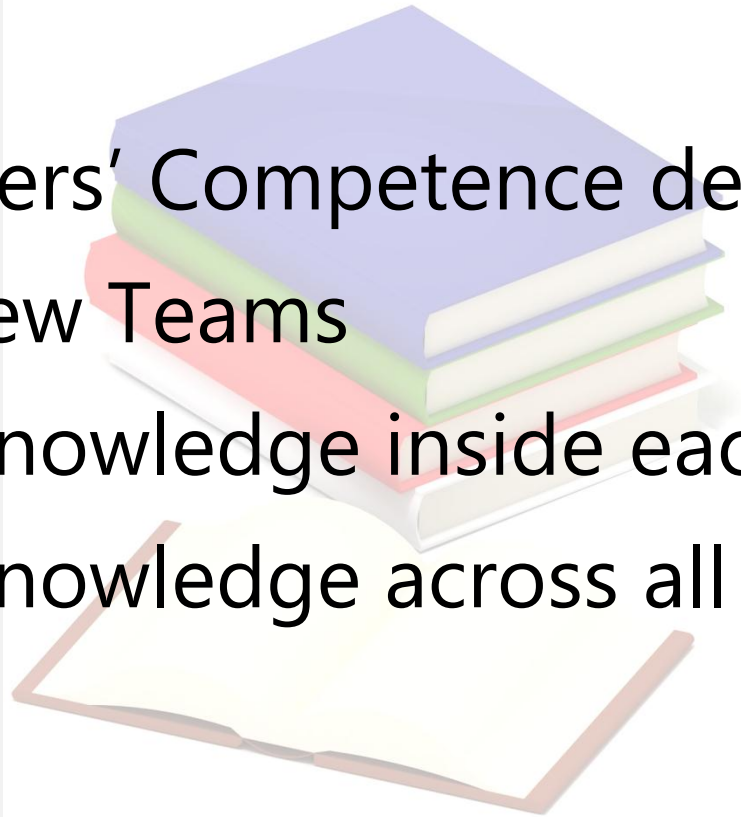
*ScrumMasters & Line Managers participate in CoPs to provide support*



# ▶ KNOWLEDGE SHARING

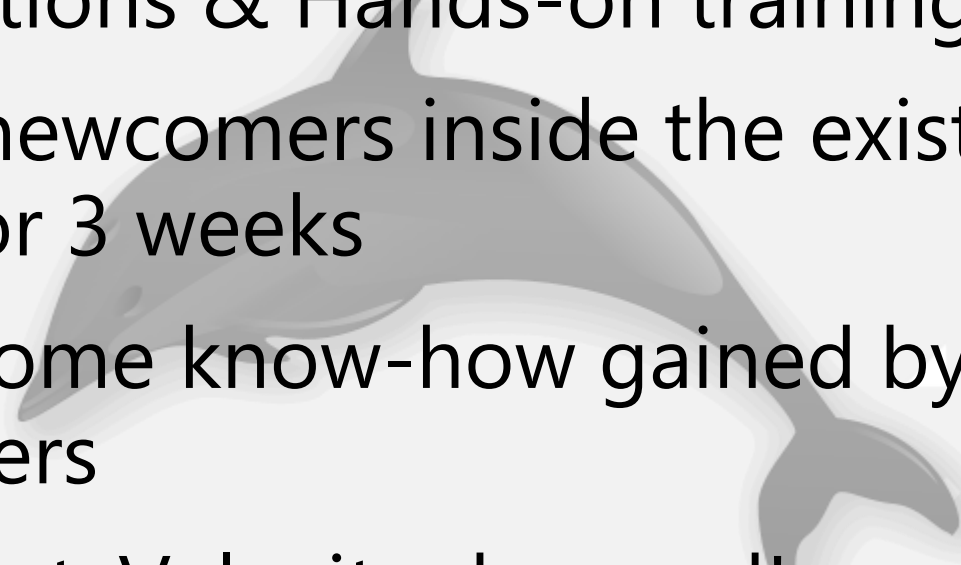
# Knowledge Sharing

- Newcomers' Competence development
- Create new Teams
- Spread knowledge inside each Team
- Spread knowledge across all Teams



# Competence Development

- Presentations & Hands-on training
- Include newcomers inside the existing Teams for 3 weeks
- Result: Some know-how gained by newcomers
- Side-effect: Velocity dropped!



# Create New Teams

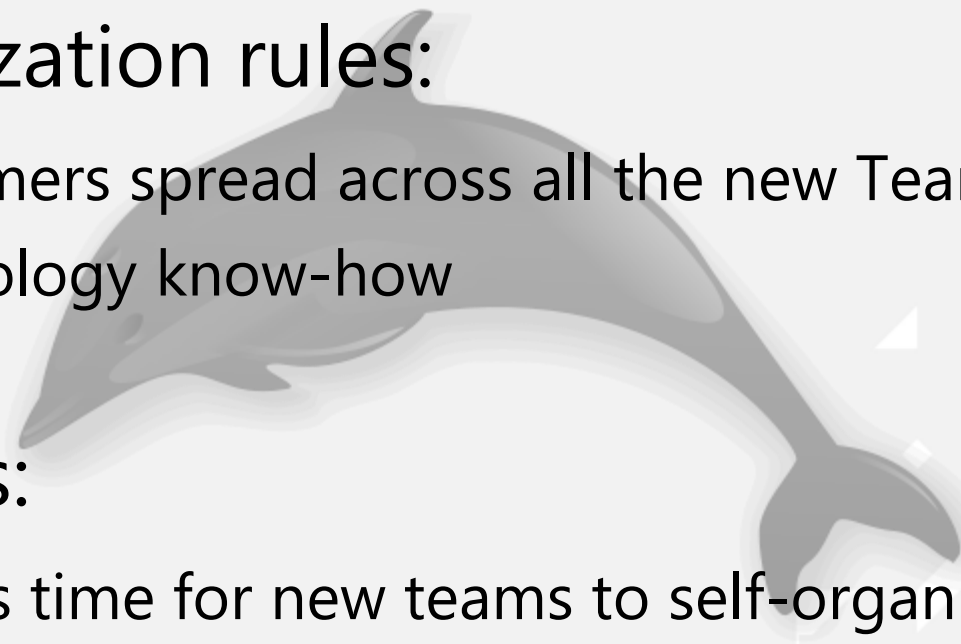
*Strong message about expecting the teams to be self-organized*

## Self-organization rules:

- Old-timers spread across all the new Teams equally
- Technology know-how
- 1 hour

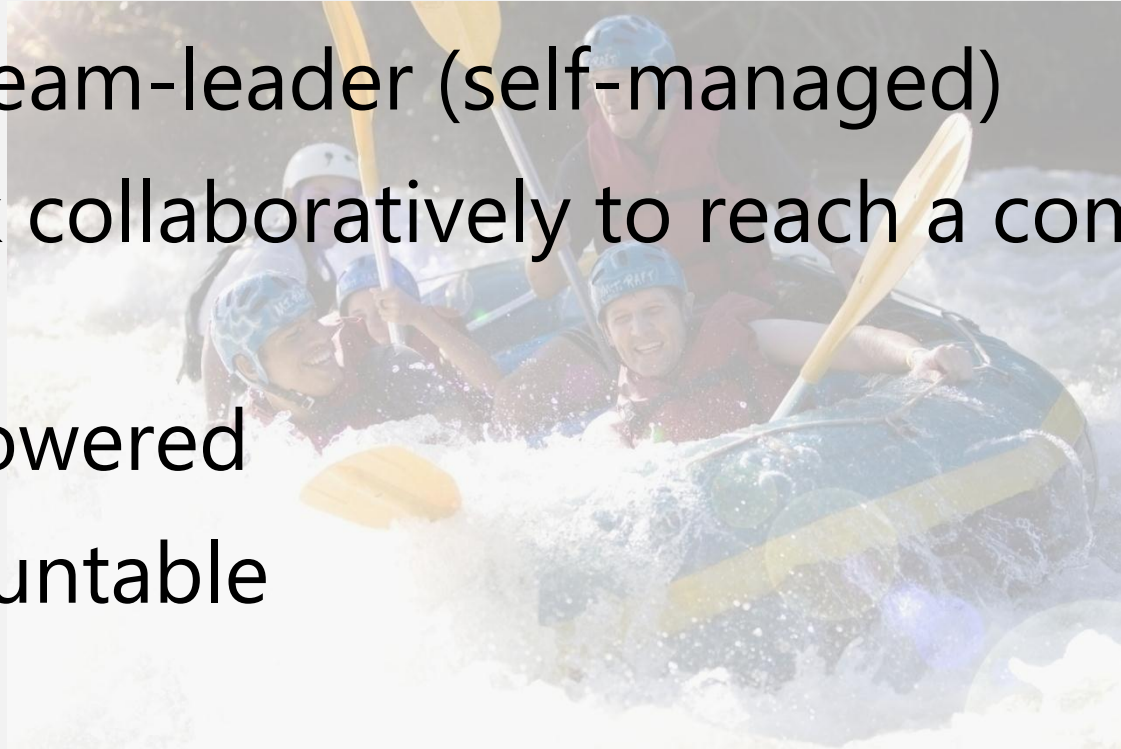
## Side-effects:

- It takes time for new teams to self-organize
- Velocity stays low



# Self-Organized Team

- No Team-leader (self-managed)
- Work collaboratively to reach a common goal
- Empowered
- Accountable



# Spread Knowledge inside each Team

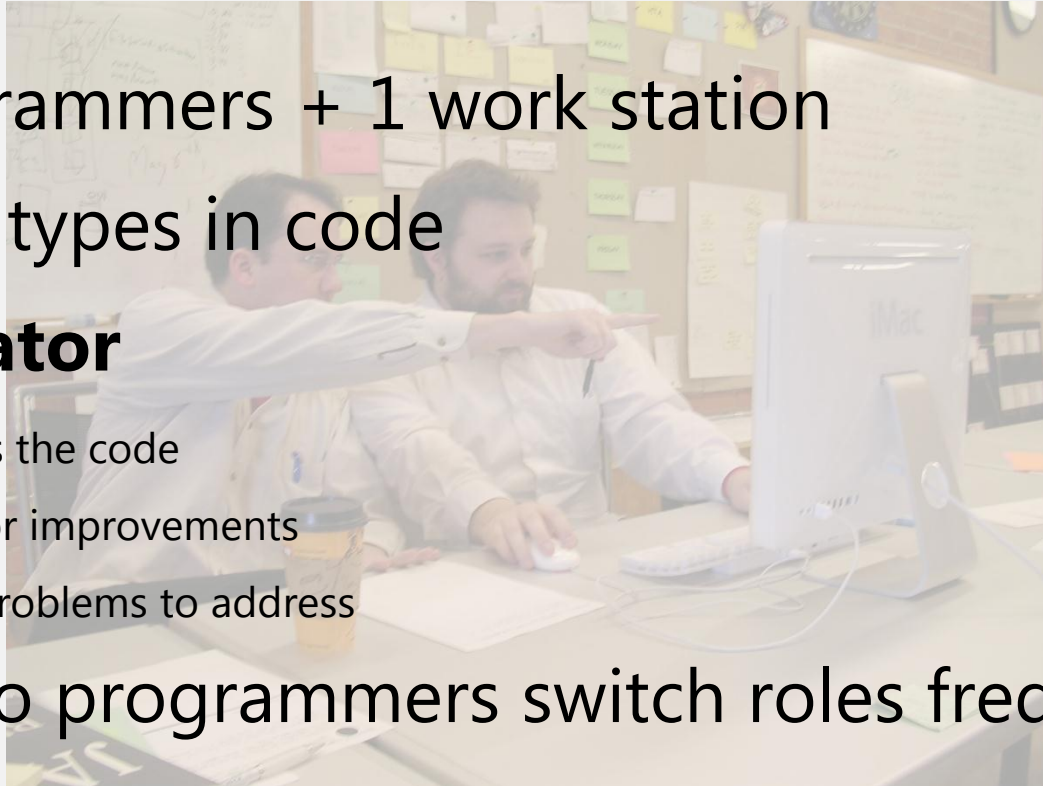
- Pair-programming encouraged

“Groups who practice pair programming report **faster learning** of both programming techniques and problem domain, as well as **faster code production** and **lower defect rates.**”

Alistair Cockburn

# Pair Programming

- 2 Programmers + 1 work station
- **Driver** types in code
- **Navigator**
  - Reviews the code
  - Ideas for improvements
  - Likely problems to address
- The two programmers switch roles frequently
- The pairs change frequently



# Spread knowledge across all Teams

- Communities of Practice
- Joint Product Backlog Refinement workshops
- Sprint Review



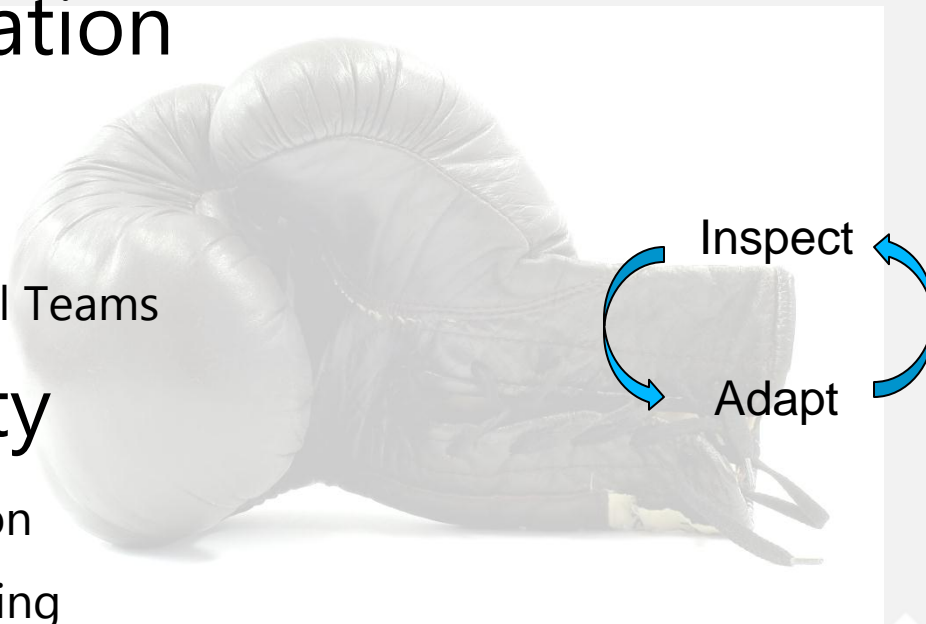
# Fighting Side Effects

## Self-Organization

- Small wins
- Retrospectives
- Not breaking all Teams

## Lower velocity

- Self-organization
- Pair-programming
- Communities of practice
- Solving impediments



# ▶ LOCATION



# Working Configurations

- Pair-work
- Side-by-side
- Opposite sides of a room
- Adjacent offices
- Different floors
- Adjacent buildings
- Different cities
- Different time zones



# Dolphin Working Configuration

## Before

3 Teams in 2 Locations

- Portugal (site-1): 1
- Portugal (site-2): 2

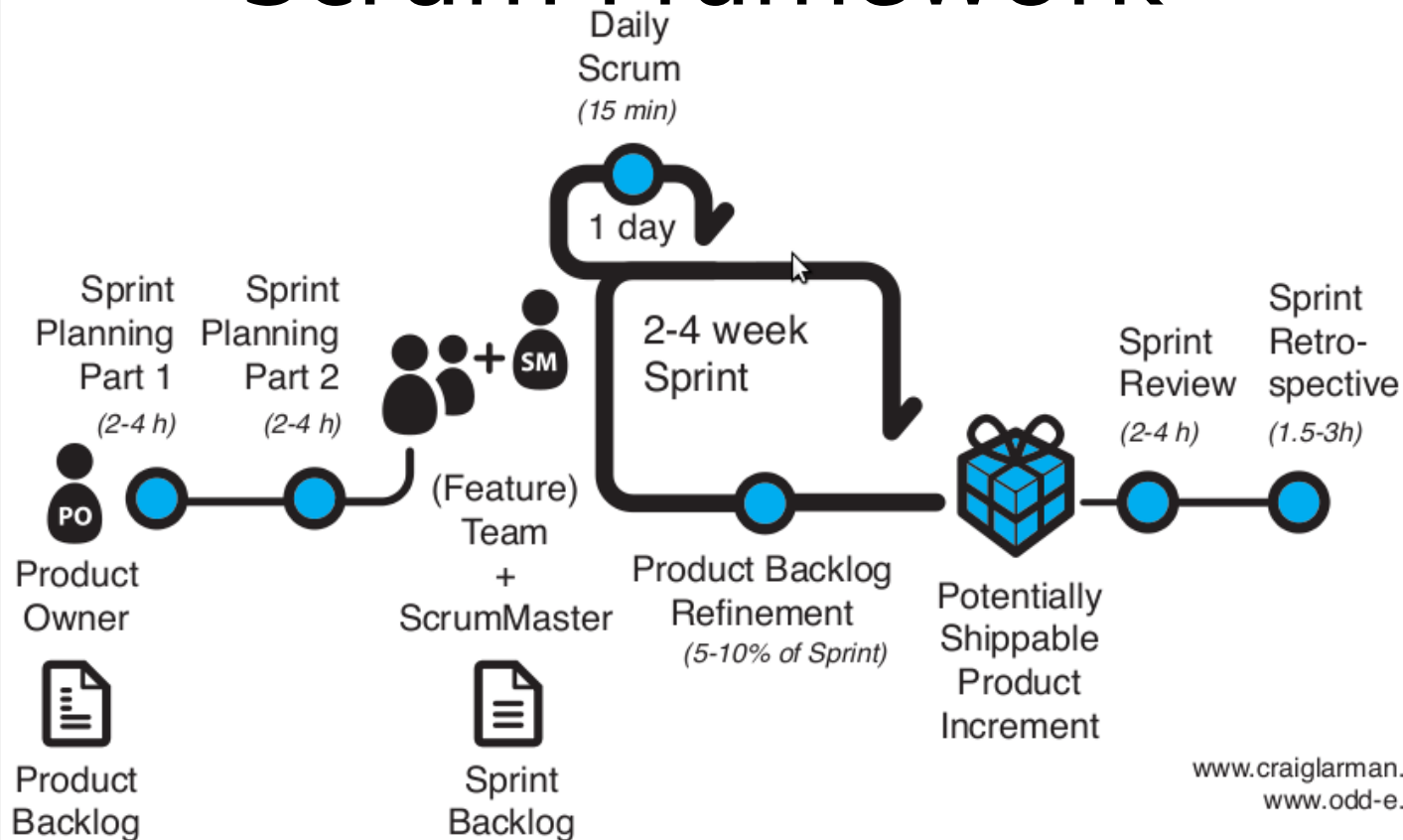
## 6 Months After

14 Teams in 4 Locations

- India: 1
- Portugal (site-1): 1
- Portugal (site-2): 5
- Poland: 6



# Scrum Framework



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# Conclusion

- Decision Making
  - Communities-of-practice
- Knowledge Sharing
  - Pair-programming
  - Communities-of-practice
- Location
  - Working configurations

# Feedback Form

Thursday 10

**João**

joao.barreiro@nnsn.com



# Scrum Gathering

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