Software.Process.Management
software processes that fit your business needs

Wie ein guter Schuh, der passt
Requirements-Tools agil einführen

Handout-Version

Dr. Andreas Birk, Software.Process.Management

12. März 2019, REConf 2019, München

Software.Process.Management
software processes that fit your business needs

Software.Process.Management

Consulting house, based in Stuttgart, Germany

Network of senior software engineering experts

We help organizations to optimally align their software processes with their business goals

pd7.group

Member of pd7.group, one of the largest providers of ISPMA certification trainings on software product management

Dr. Andreas Birk

Founder & Principal Consultant

How software development & IT contribute to business success

Requirements Management, Agile Adoption, Software Product Management

Co-editor of the comprehensive, up-to-date directory of requirements tools at MakingOfSoftware.com/list-of-rm-tools

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http://makingofsoftware.com/list-of-rm-tools

List of Requirements Management Tools

by Andreas Birk and Gerald Heller

Looking for a tool that can support your requirement
finding one.

This September 2017 version of our requirements ma
shows that the requirements tool market is currently
details check out the notes at the end of th

Our List of Selected RM Tools

(in alphabetical order)

ALM Enterprise / Quality Center Enterprise (12.55) by
Scope: RM, Testing, Project Management, Issue Man

CA Agile Central (version info not public) by CA Technologies
Scope: RM, Agile

Complete List of RM Tools

(in alphabetical order)

by Accompa, Inc.

y Pluron Inc.

ocus

gile42

dates) by agosense GmbH

na! Labs
nt

Aligned Elements (2.4) by Aligned AG
Scope: RM

Example Requirements Tools

ALM / Quality Center, Micro Focus
codeBeamer ALM, Intland Software
Dimensions RM, Micro Focus
Helix RM, Perforce
IBM Rational DOORS Next Generation, IBM
Jama Connect, Jama Software
Jira Software, Atlassian
Polarion Requirements, Siemens
…

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Introduction of Tool-Based RM: Two Approaches

Staged Evaluation & Introduction of Requirements Tool

“Plan-Based”

Evolutionary Introduction & Optimization of Requirements Tool

“Agile”

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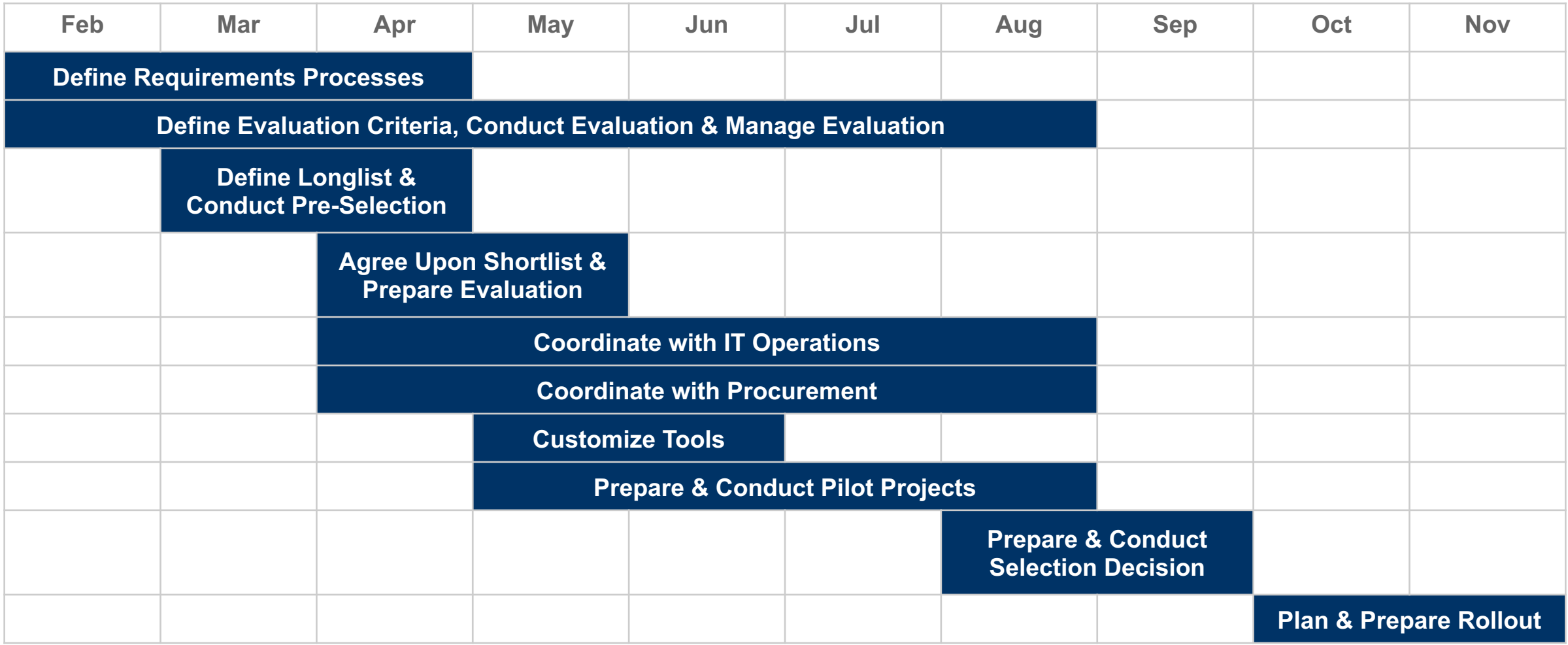
Typical RM Tool Evaluation Approach



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Shortcomings of Plan-Based RM Tool Introduction

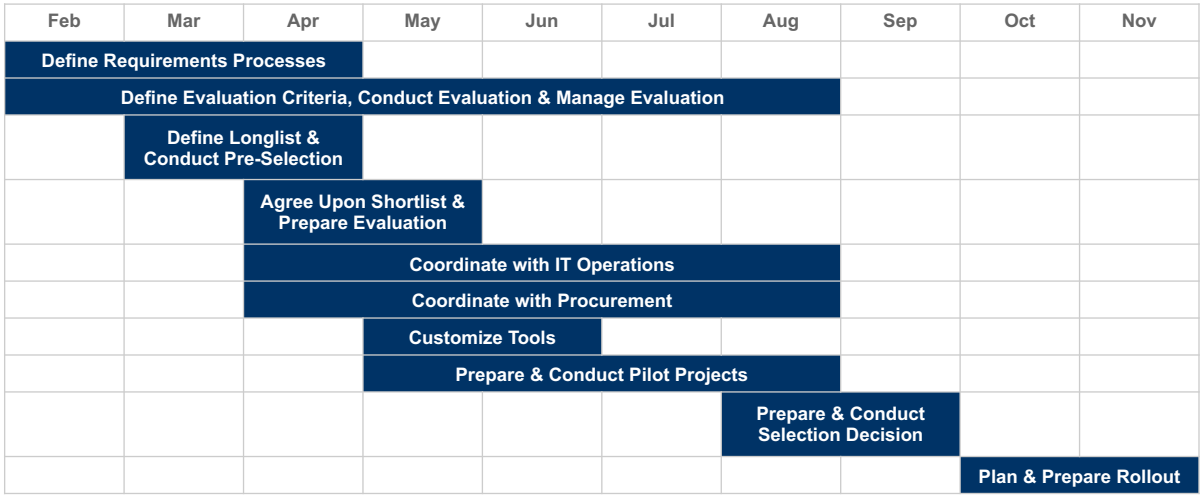
Long lead time until monetization of results

No harvesting of low-hanging fruit

Upfront process definition often biased by previous practices

Upfront process definition often doesn't take advantage of tool features

Capabilities of tool-based RM solution can hardly be assessed based on tool features alone



Predefined evaluation criteria often degrade during tool usage

High overhead of planning and, quite often, re-planning

Staged approach does benefit little from ongoing learning and gained experiences

Tool-based RM solution often doesn't tap the full potential of advanced RM practices

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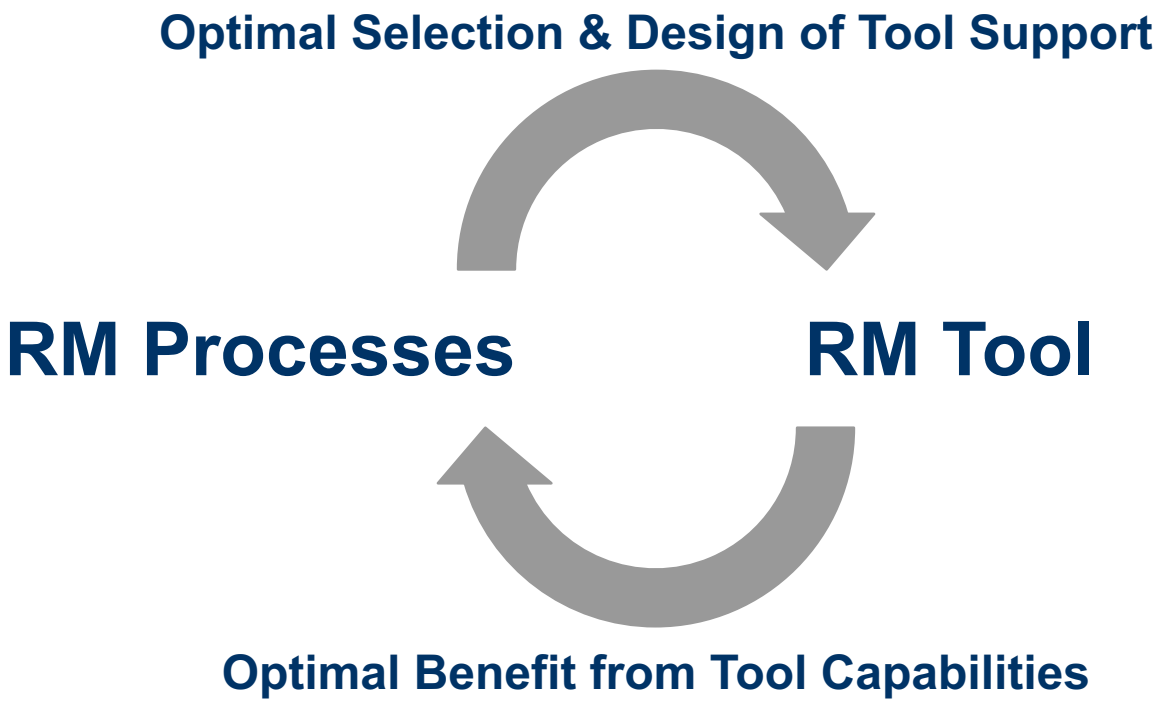
RM Solution = RM Processes + RM Tool



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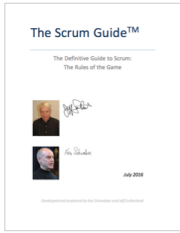
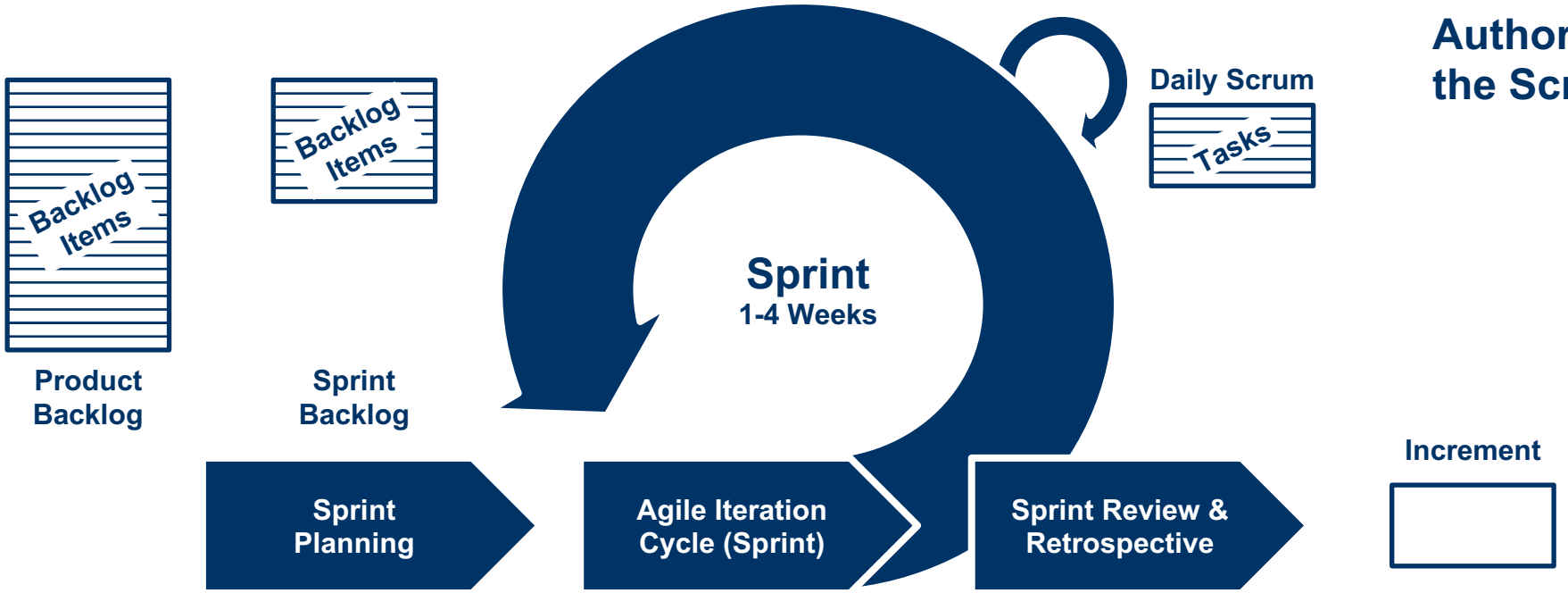
Scrum



Sutherland & Schwaber (2017)

Scrum Guide (Nov 2017 Version)

Authoritative reference of the Scrum method



Source: J. Sutherland and K. Schwaber, "The Scrum GuideTM: The definitive guide to Scrum: The rules of the game," Scrum.org and ScumInc., Nov. 2017.

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Value

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Value

Create value!

Stakeholder(s') value(s)

Continuous flow of (fast) results

Incremental steps & stages

Iterative cycles, activities & learning

Driving change & improvement

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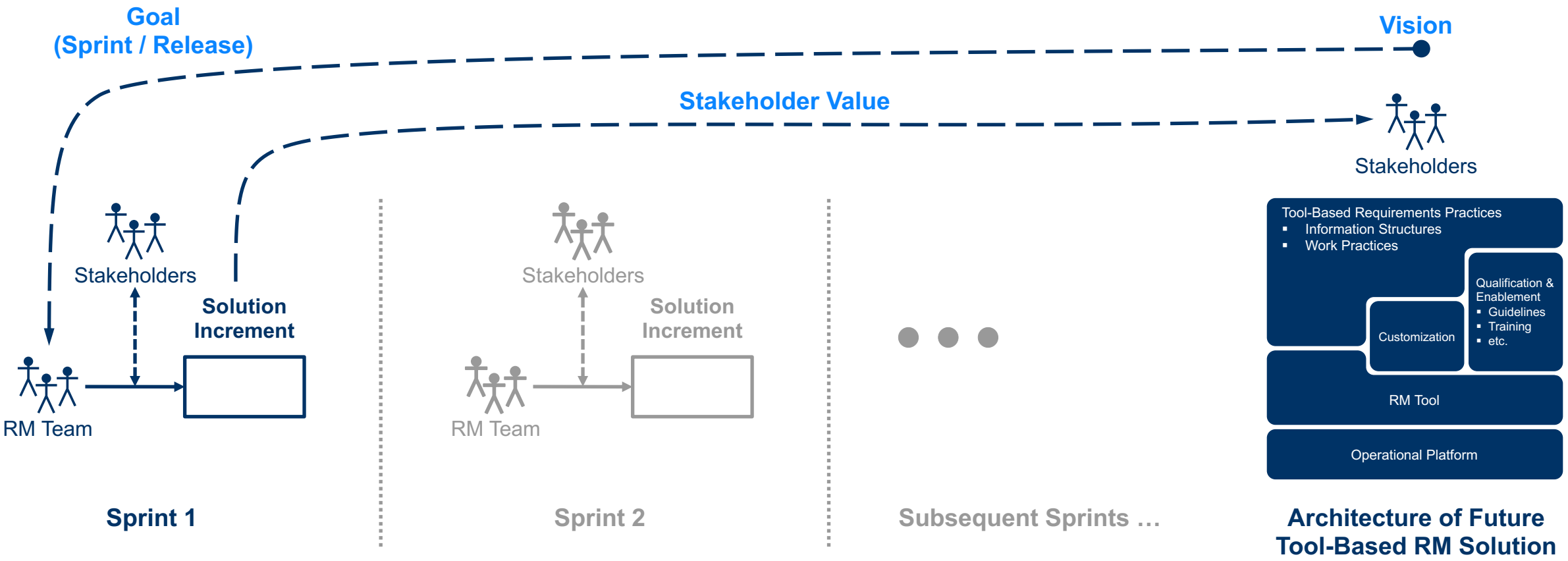
Steer Agile Projects by Vision, Goal & Value



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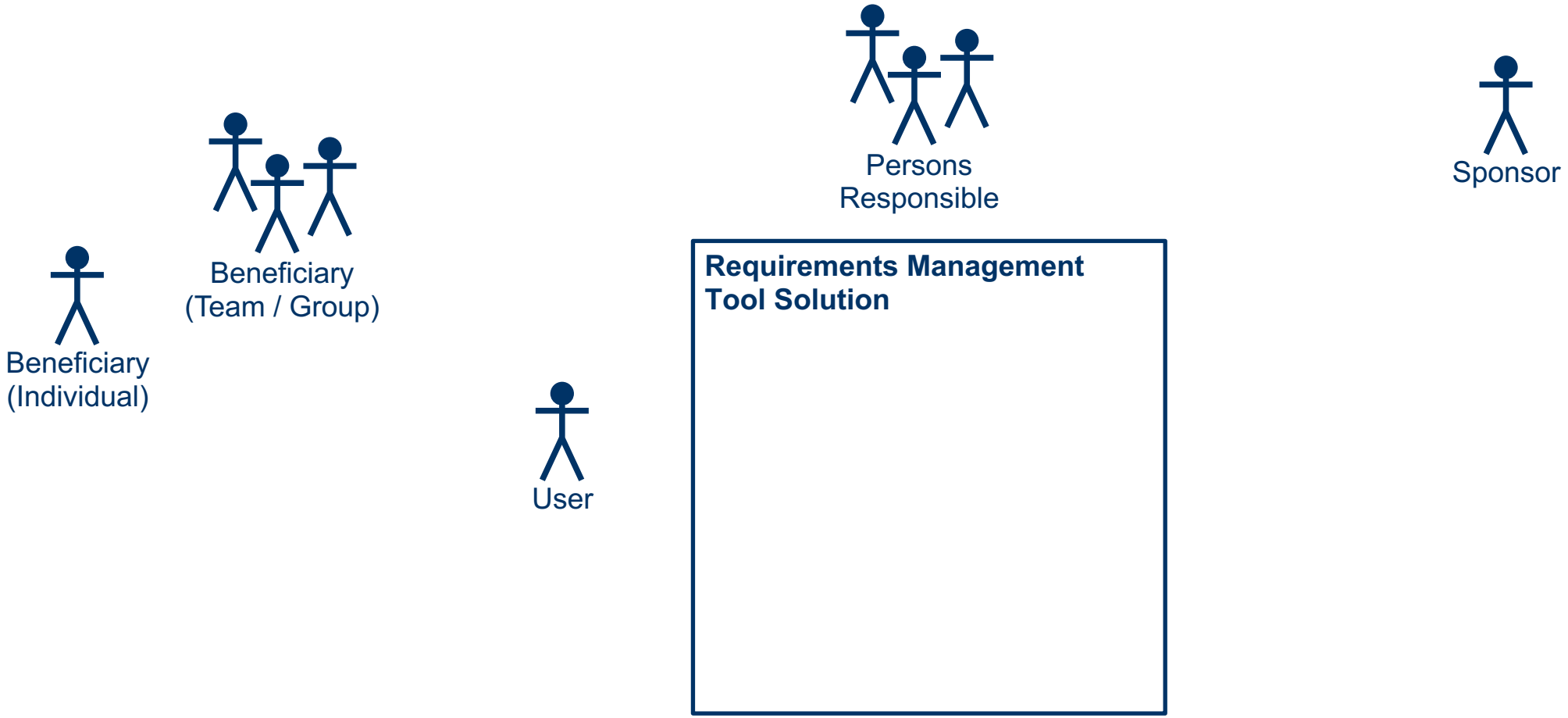
RM Tool Stakeholder Map

Generic Stakeholder Map of Abstract Roles for “Tool-Based RM”



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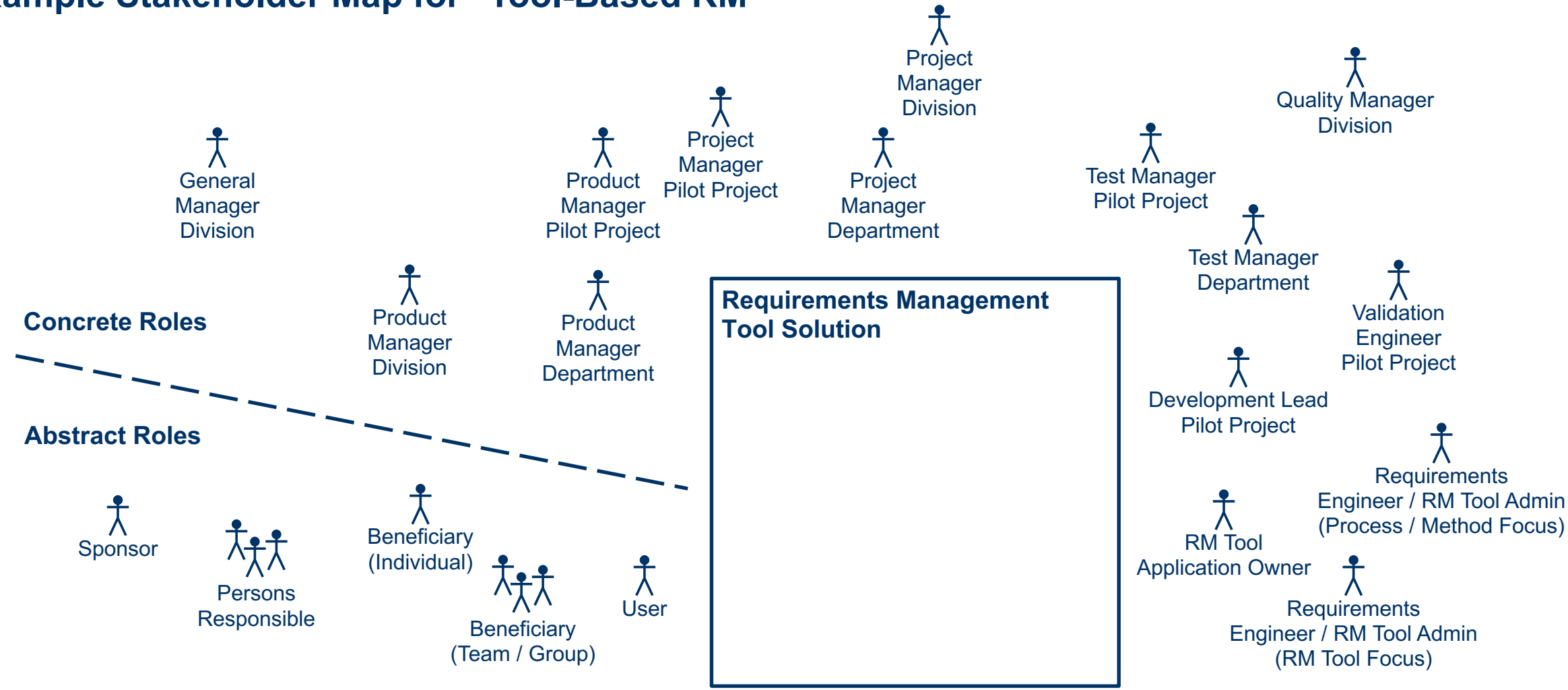
RM Tool Stakeholder Map

Example Stakeholder Map for “Tool-Based RM”



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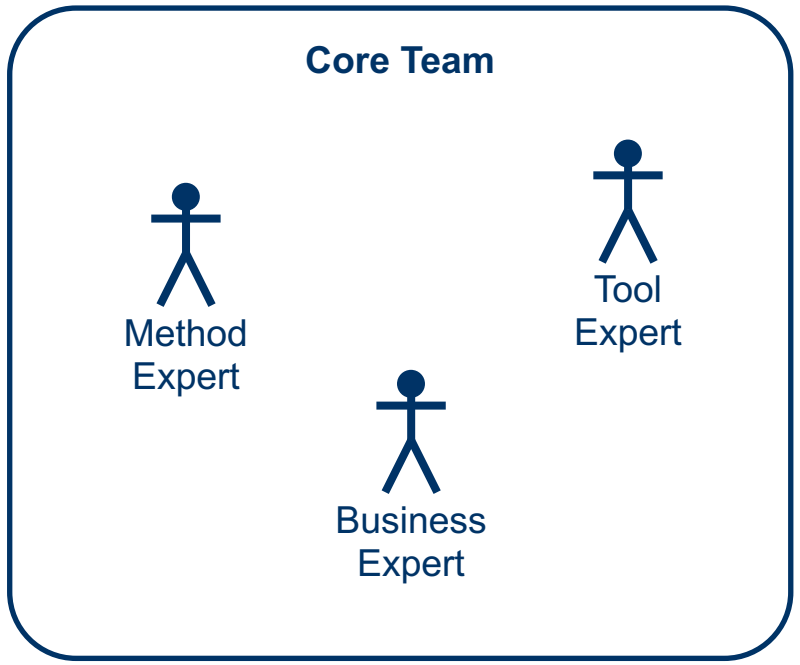
Form Cross-Functional Core Team



Work with three roles from the very beginning:

Method Expert	Design RM approach
Tool Expert	Decide about tool customization
Business Expert	Input needs and opinions of users (in this case: requirements engineers, business analysts)

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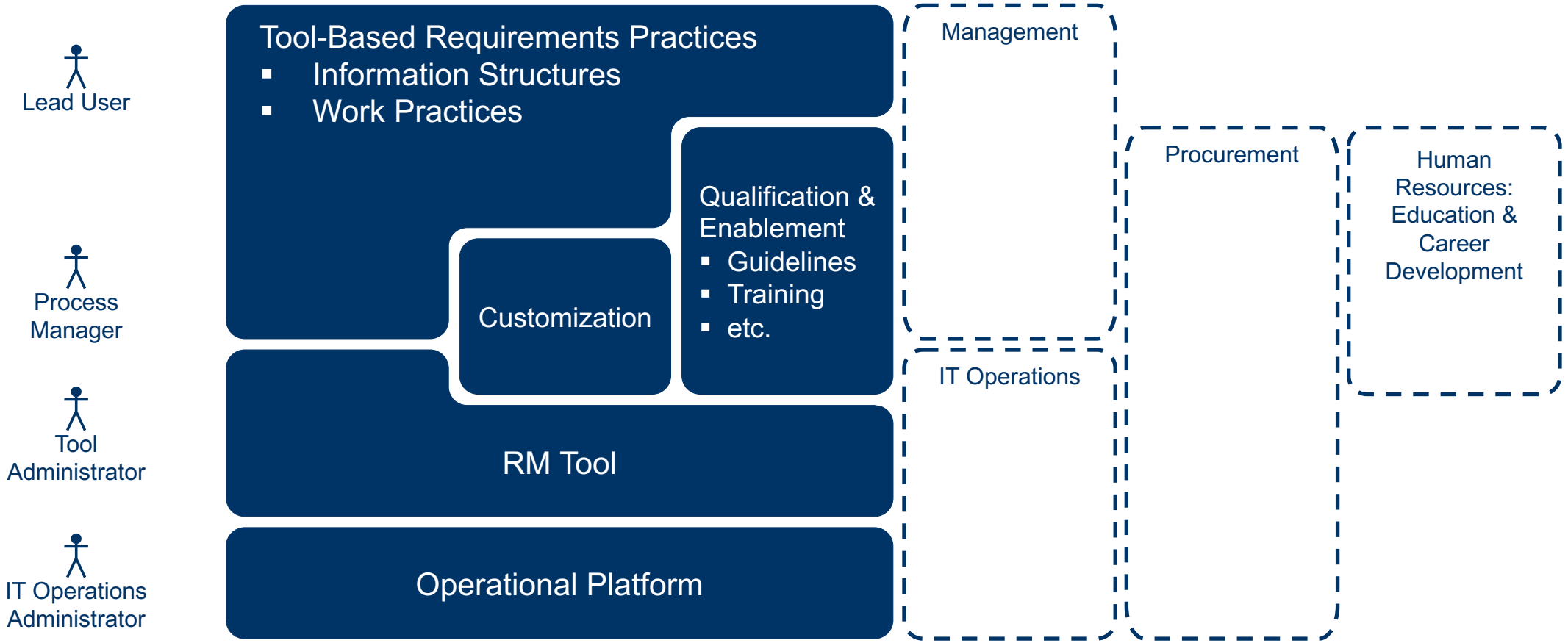
Target Image for Planning Tool-Based RM



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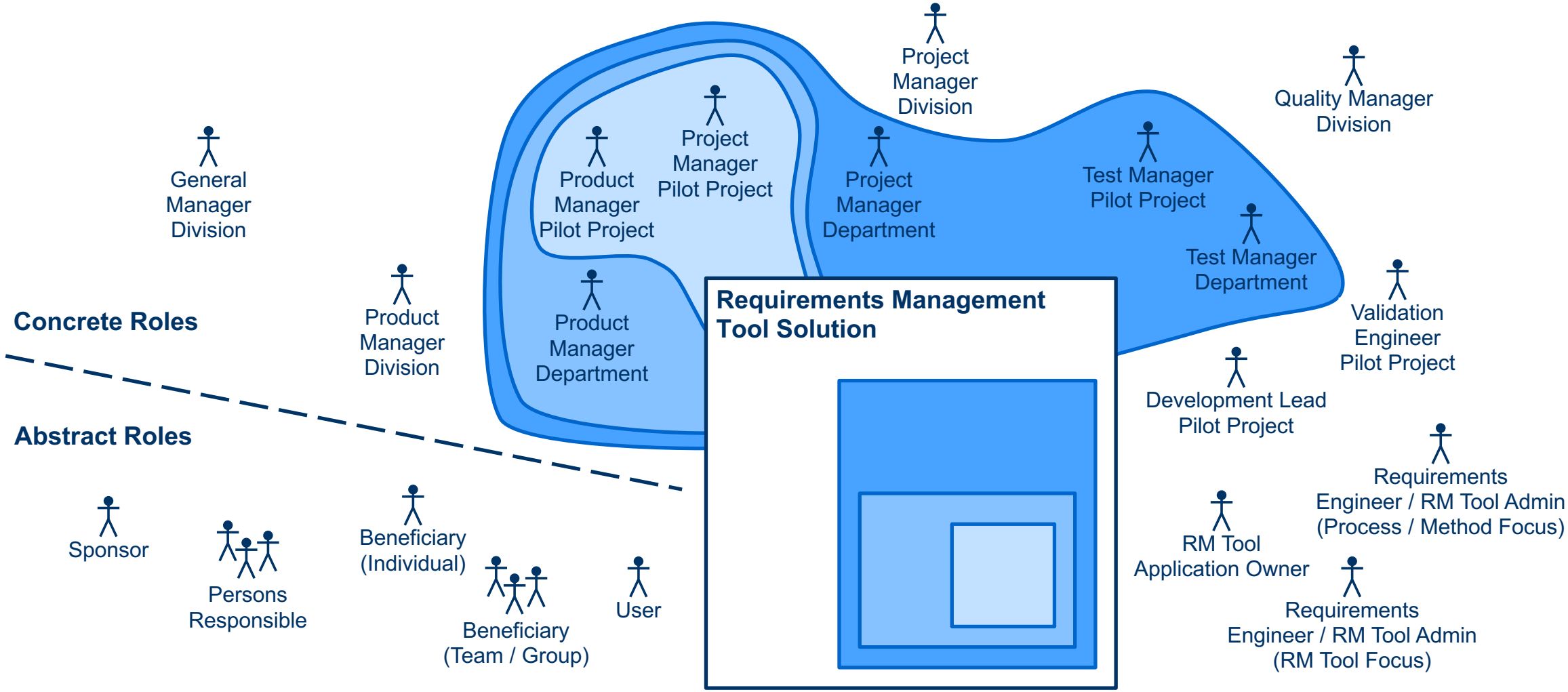
Incrementally Build RM Tool Solution



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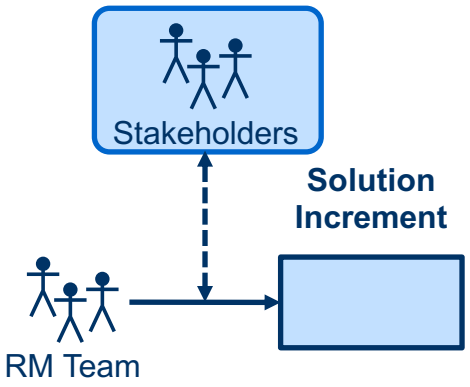
Incrementally Build RM Tool Solution: Agile Sprints

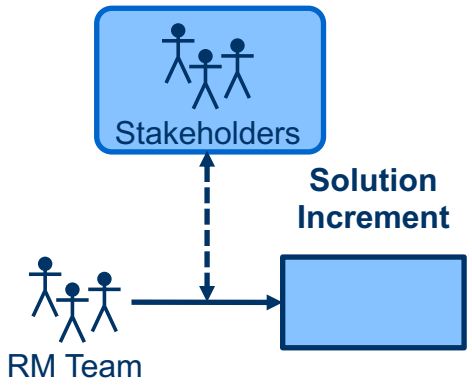
Sprint Goals

Market Requirements for Product Managers in Pilot Project



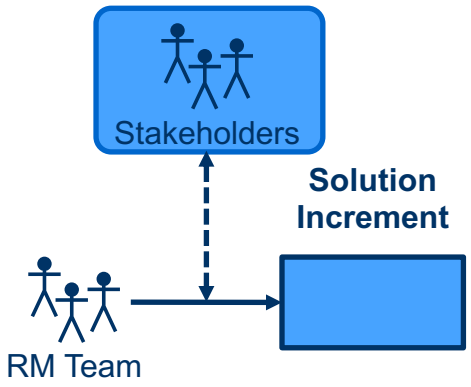
Sprint 1

Market Requirements for Product Managers on Department Level

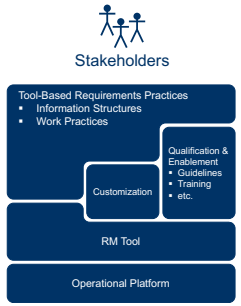


Sprint 2

Acceptance Tests in Pilot Project and on Department Level



Sprint 3



Vision

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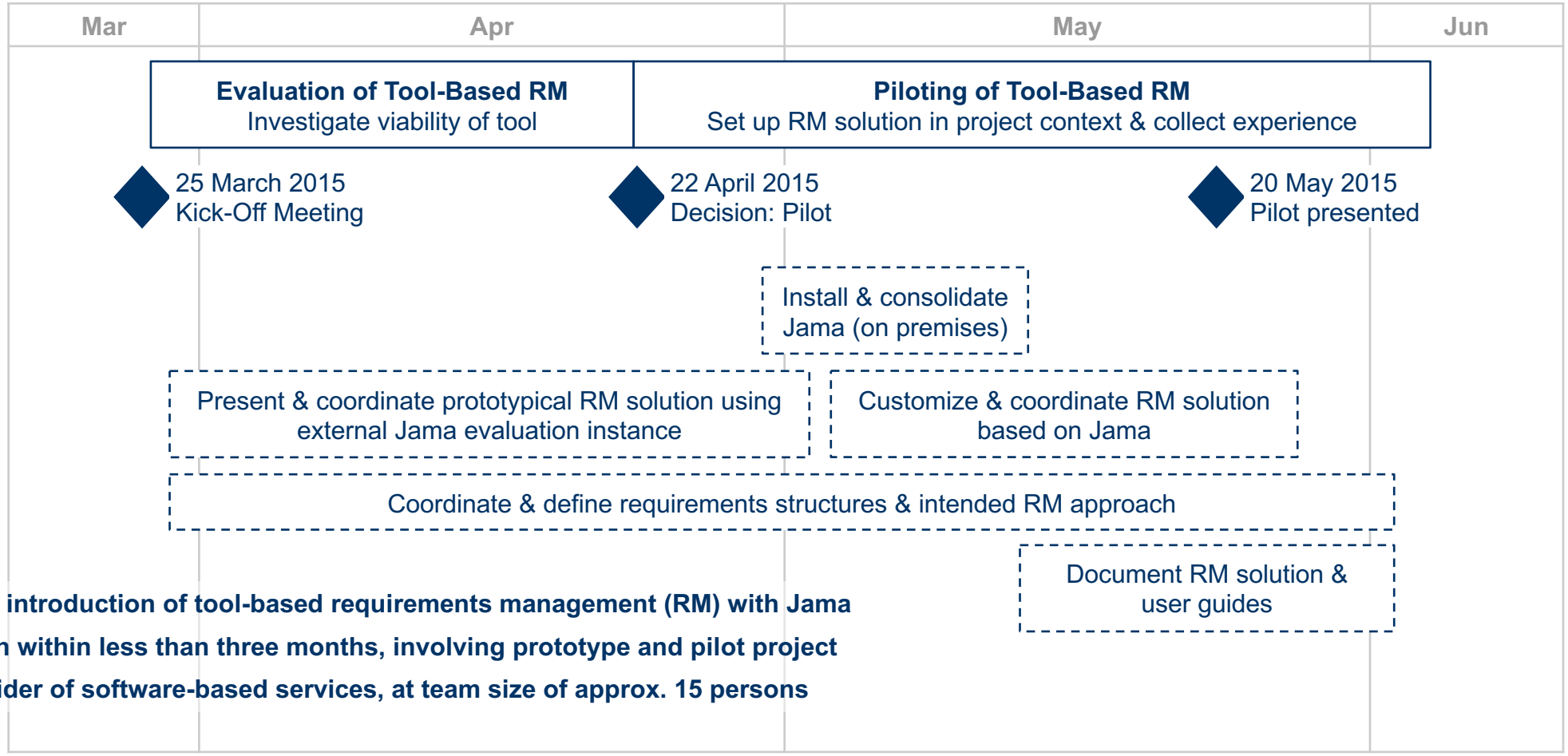
Case Study: Prototype (Evaluation) & Piloting „RM with Jama“



Evaluation and introduction of tool-based requirements management (RM) with Jama

Rapid approach within less than three months, involving prototype and pilot project

Project at provider of software-based services, at team size of approx. 15 persons

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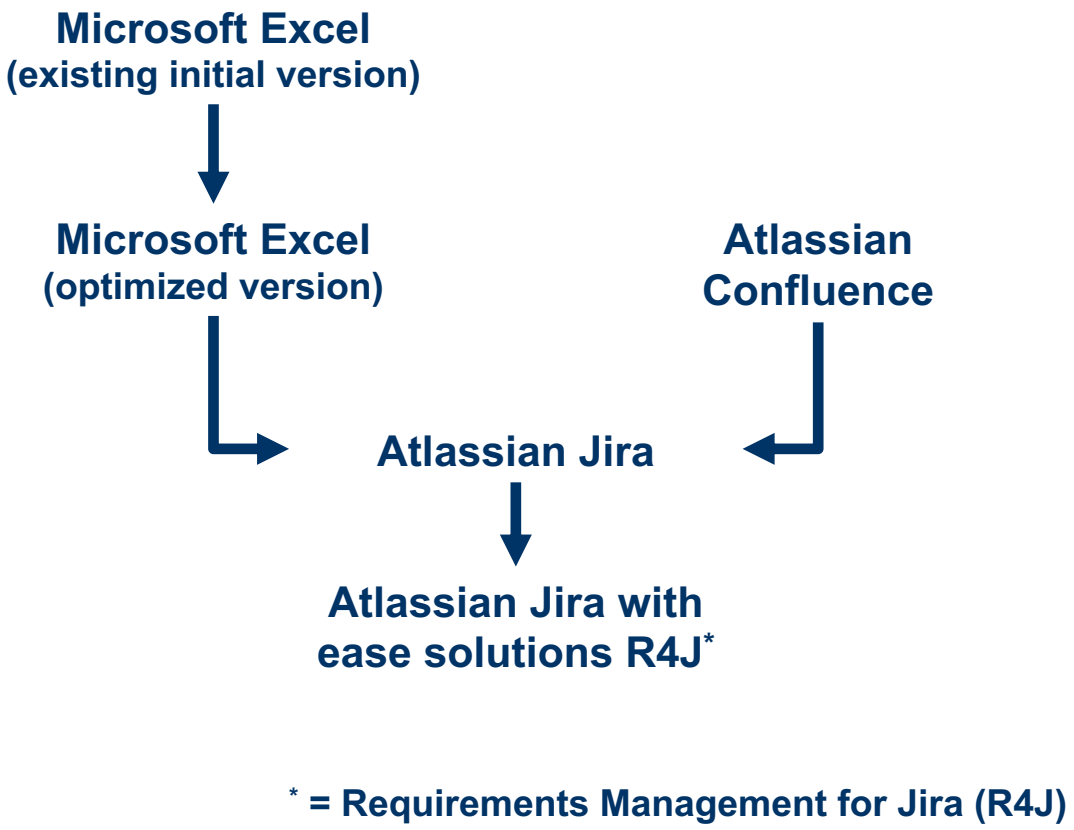
Case Study: Gradually Evolve RM Practices along with Increasingly Powerful Tool Support



Case study environment: Introduction of tool-based RM during an early phase of a large bidding/RFP and development project

The project initially had documented requirements using Microsoft Excel

In a first step towards tool-based RM practices, requirements structuring in Microsoft Excel was extended and enhanced

In parallel, additional requirements information was started to be documented in Atlassian Confluence

Subsequently, Atlassian Jira and add-on product Requirements Management for Jira (R4J, by ease solutions) were introduced, and requirements practices were further enhanced using this tool support

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Experience: Agile Board Makes Activities around Tool-Based RM Visible across the Organisation

Displaying sprint planning and progress using an agile board makes activities on tool-based RM visible across the organization

This helps drawing attention to tool-based RM, which otherwise might easily become second-class citizen

Scrum Board by Barcoo, CC BY 2.0
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Benefits Observed

Achieve relevant results fast

Focus activities and link them with direct value

Support and engage key stakeholders very rapidly

Ensure quality of tool selection

Ensure design of tool-based RM solution

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Challenges to Be Mastered

Break down the work into valuable, workable sprints

Achieve understanding and support of agile approach

Attain stakeholder collaboration

Secure visibility at sponsors

Manage pull from too many stakeholders simultaneously

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Thank you!

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