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Improving Systems Development & Maintenance by Leveraging Use of ALM Solution in a State Institution

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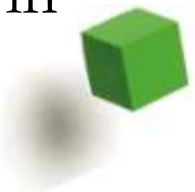
Development of Enterprise IT Systems is difficult

- Requirements are captured at different levels of physical and functional hierarchy
- Multiple external and internal stakeholders are continuously involved in negotiation
- Decisions are made in an environment containing technical uncertainty, semantic ambiguity and imperfect communication



Business Issues

- Lack of traceability

- Ineffective communication
  - Slow
  - Lacking context

- Lack of visibility into project status
  - Delayed decisions

Research Objective

To capture, analyze and evaluate the differences in change management between legacy processes and processes that leverage the use of an ALM solution in a state institution

Research Question

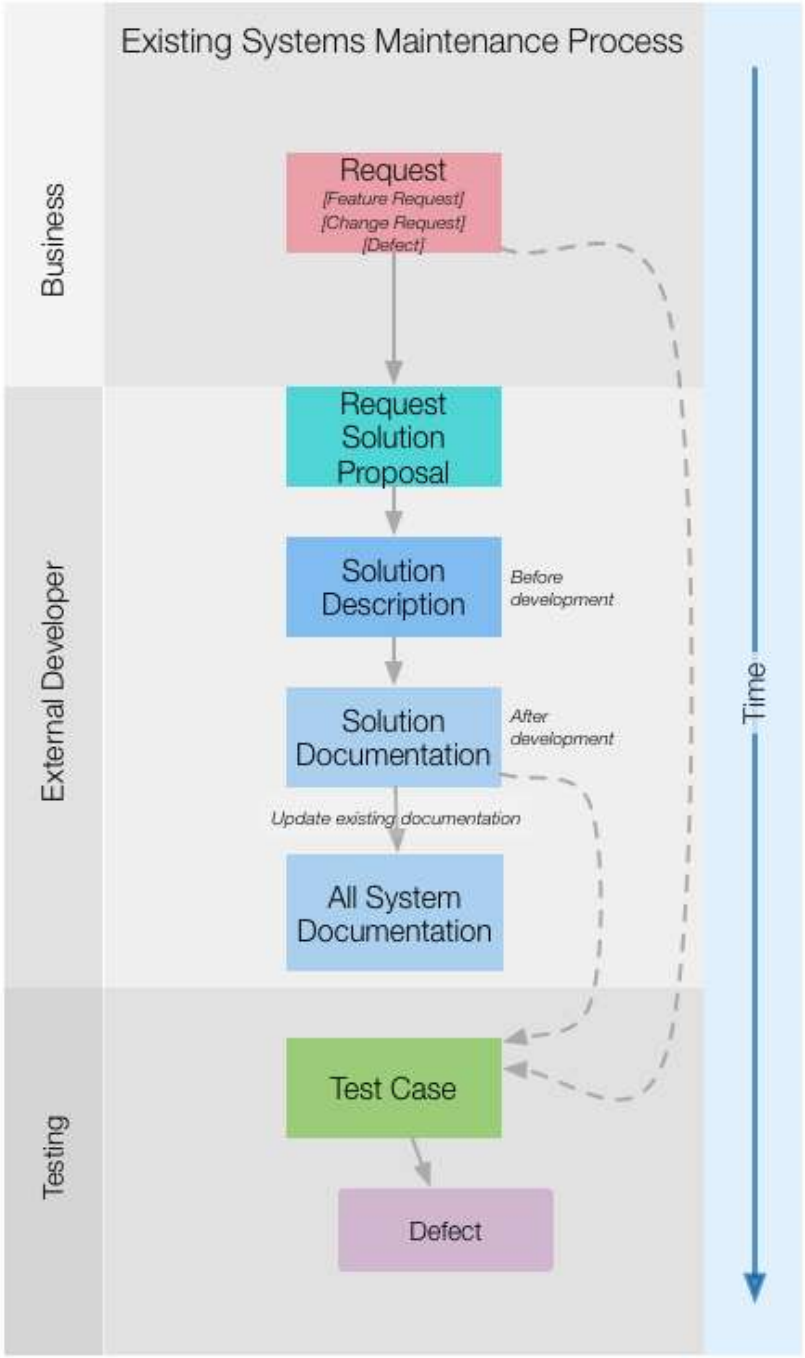
What are the differences in change management between legacy processes and processes that leverage the use of an ALM solution in a State institution for the maintenance of existing information systems?

Research Methodology

- Literature Review
- Case study
  - Process Discovery
  - Focus groups

Case Study

- State institution with several large IT systems
- Maintenance of the existing systems (Issue management and change & feature request management)



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Conceptual Model

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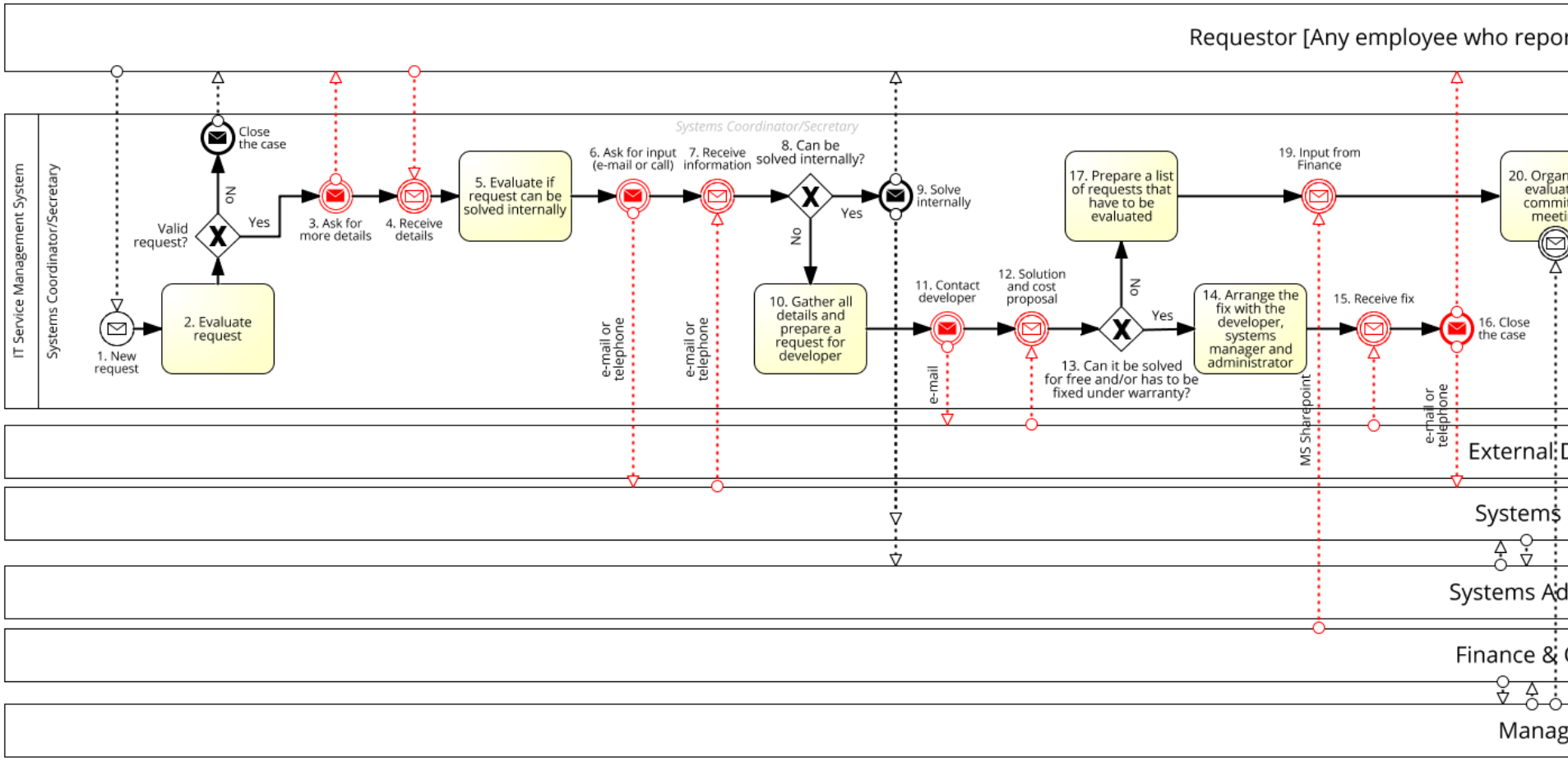
Results – Process Discovery



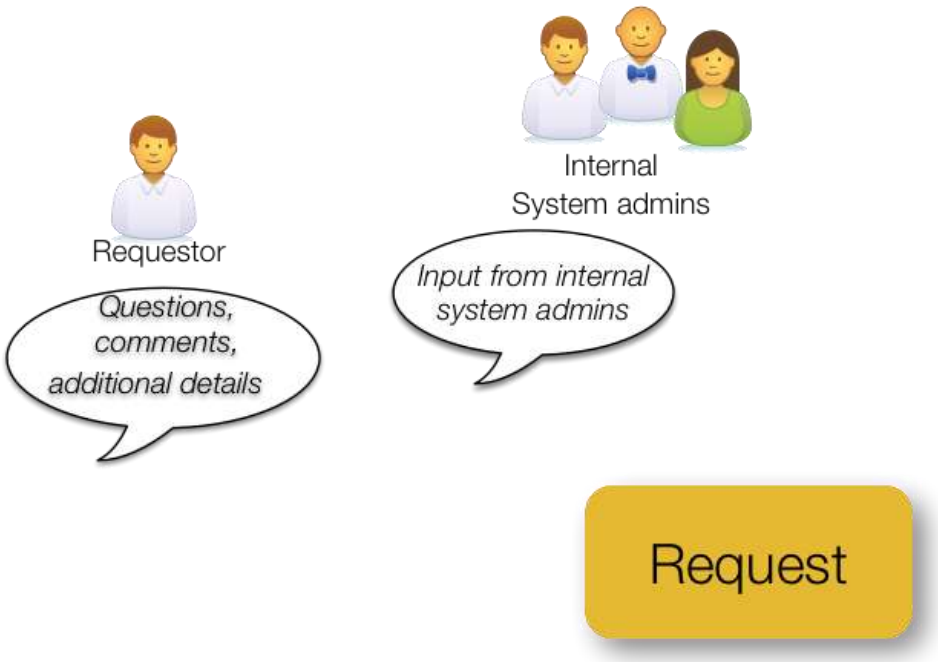
Results – Validation

Request

Results – Validation

Request

Results – Validation



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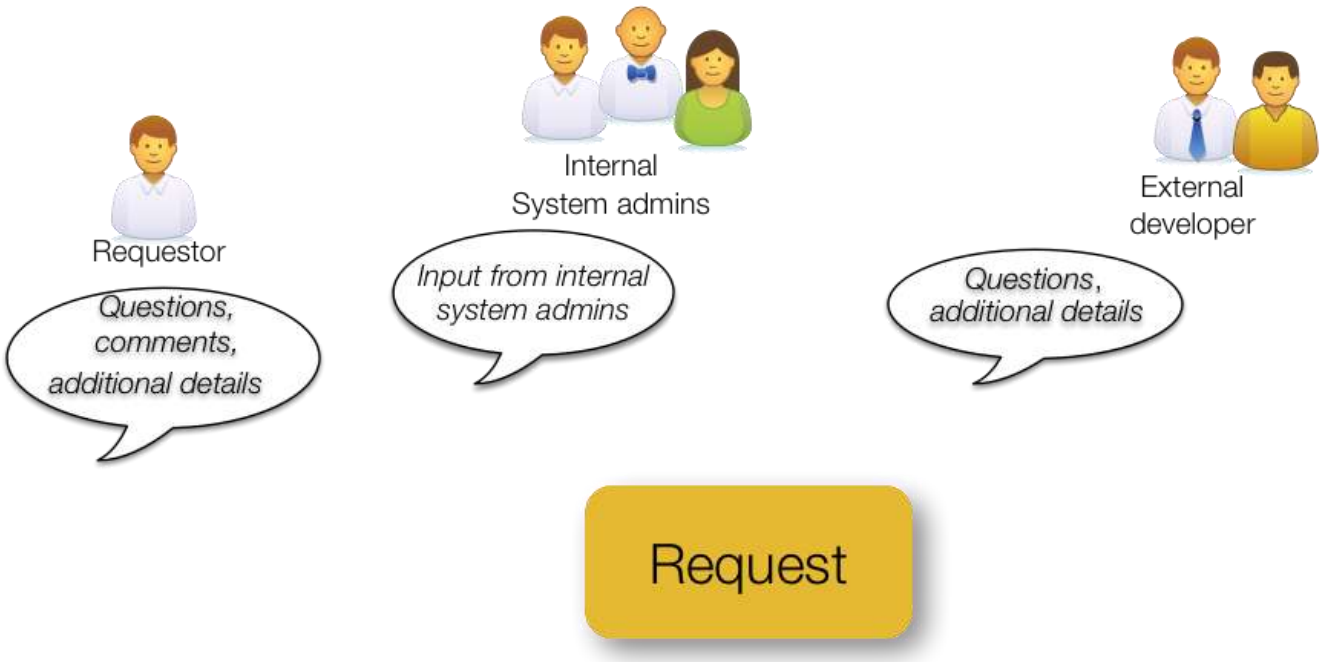

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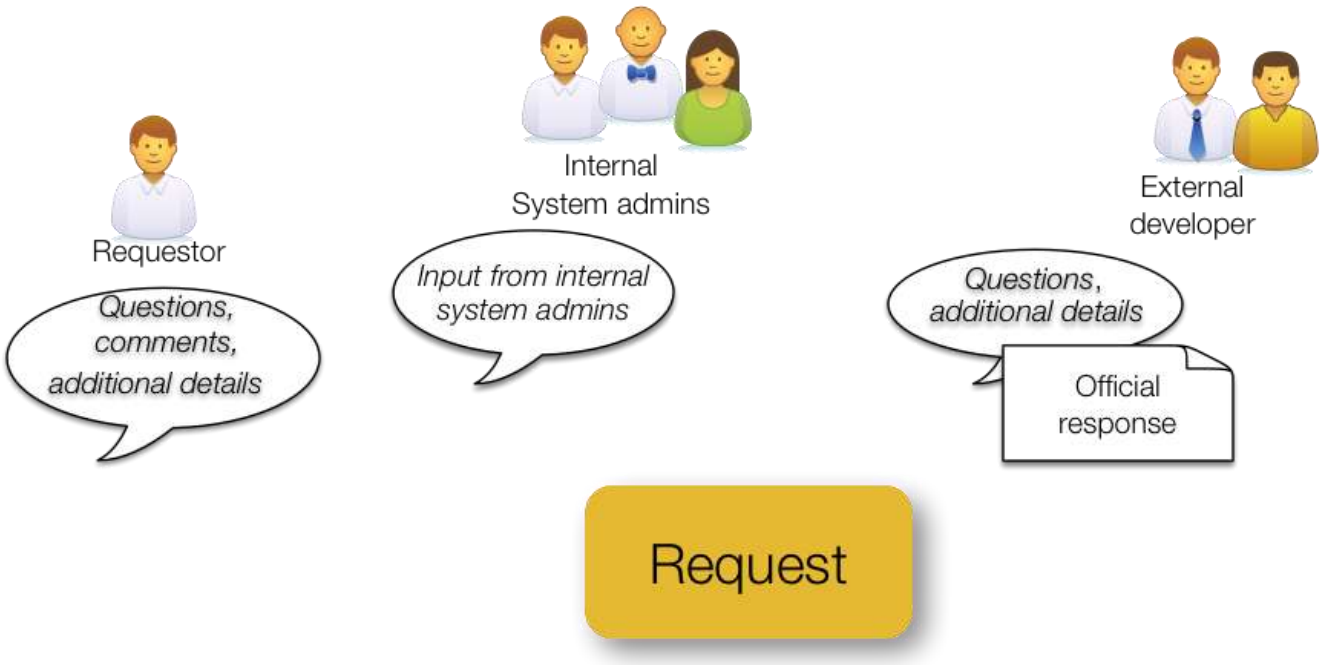

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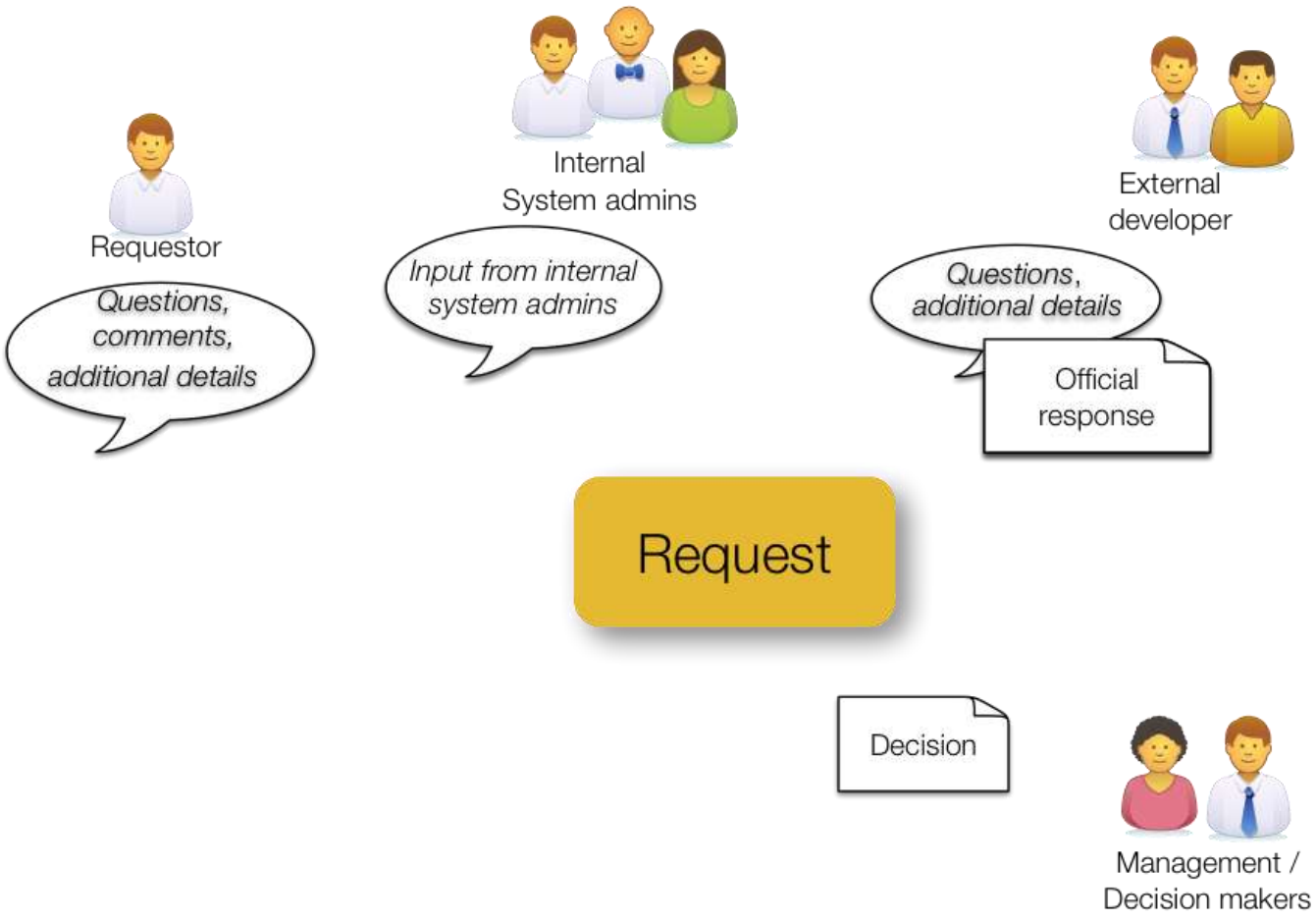

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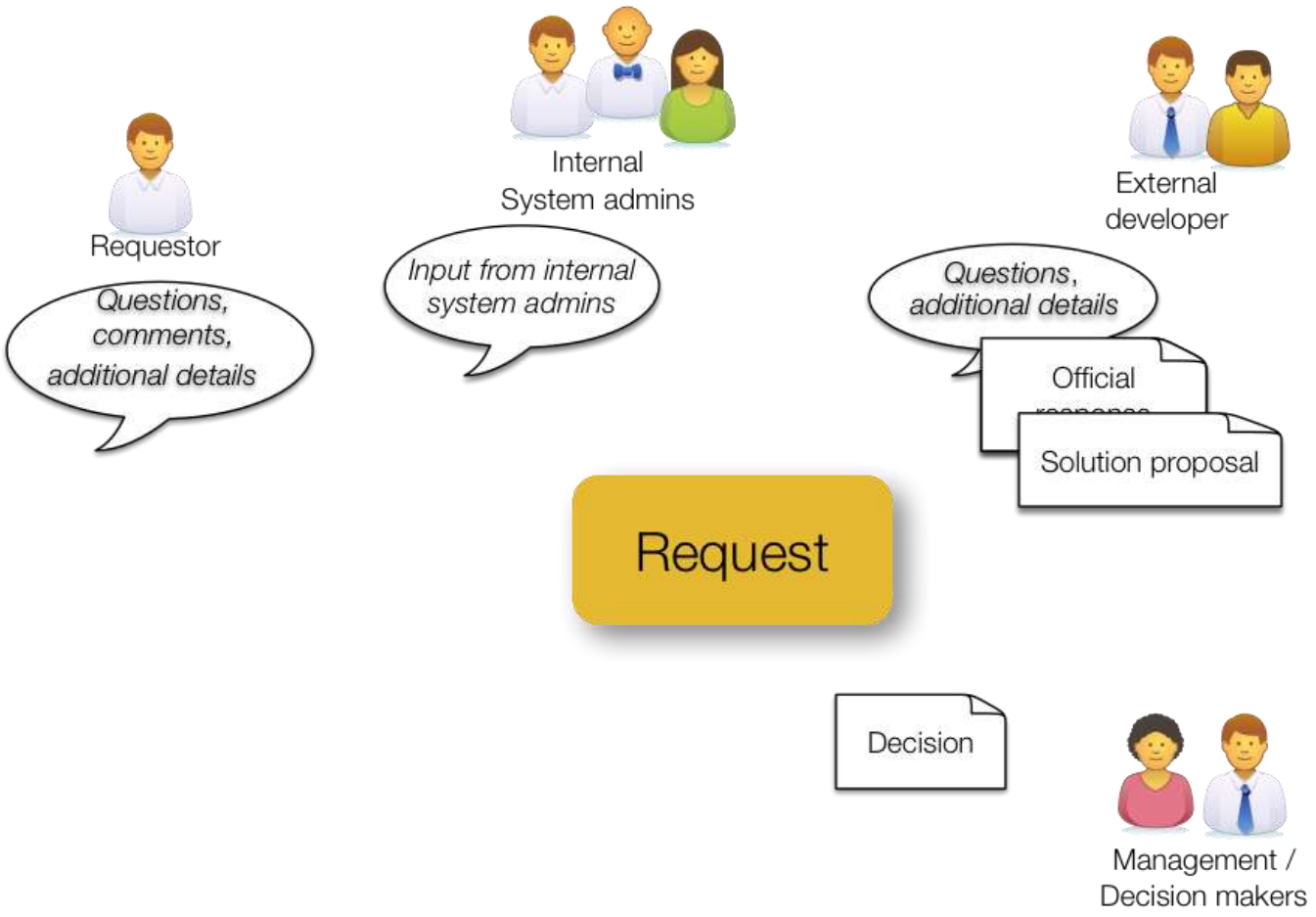

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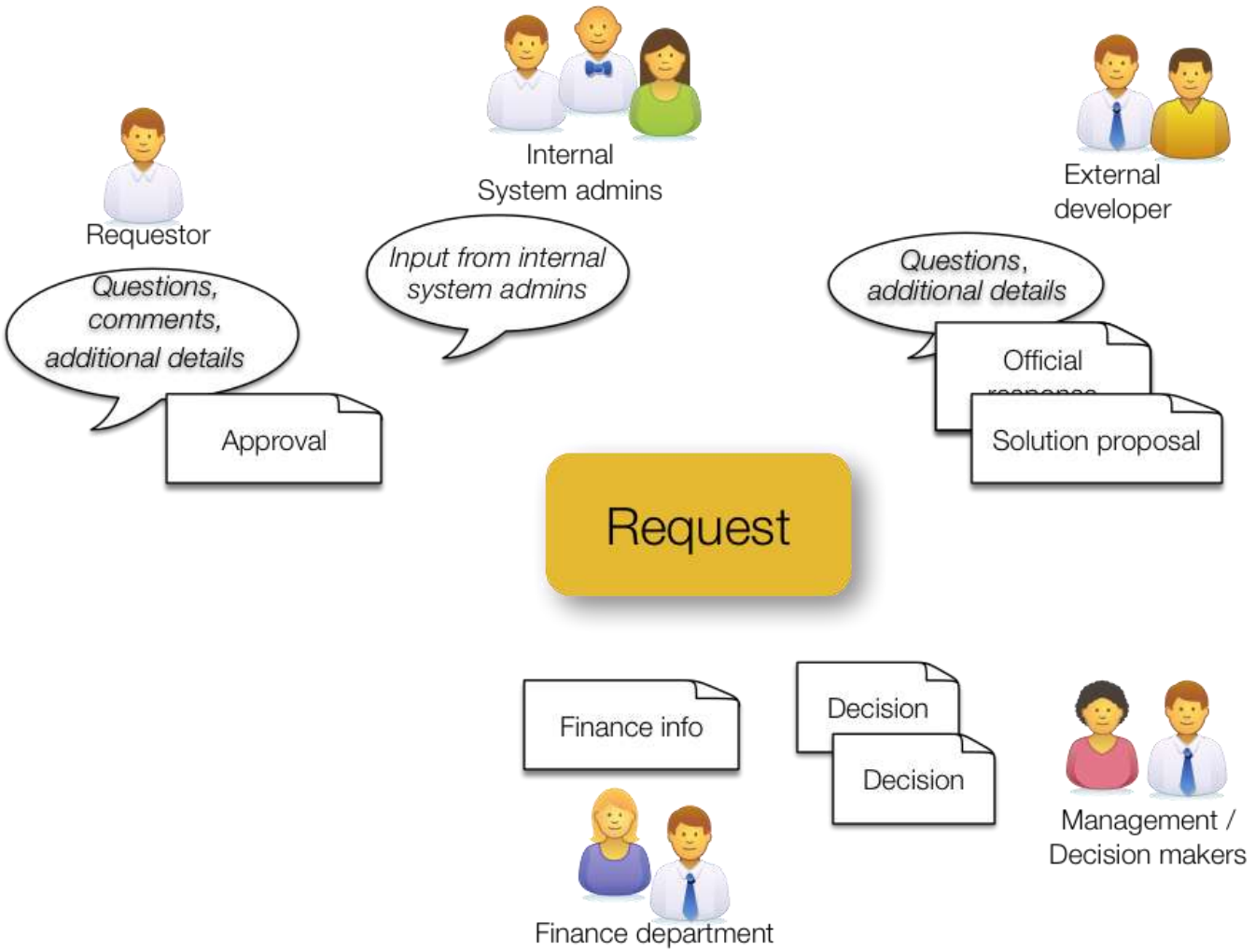

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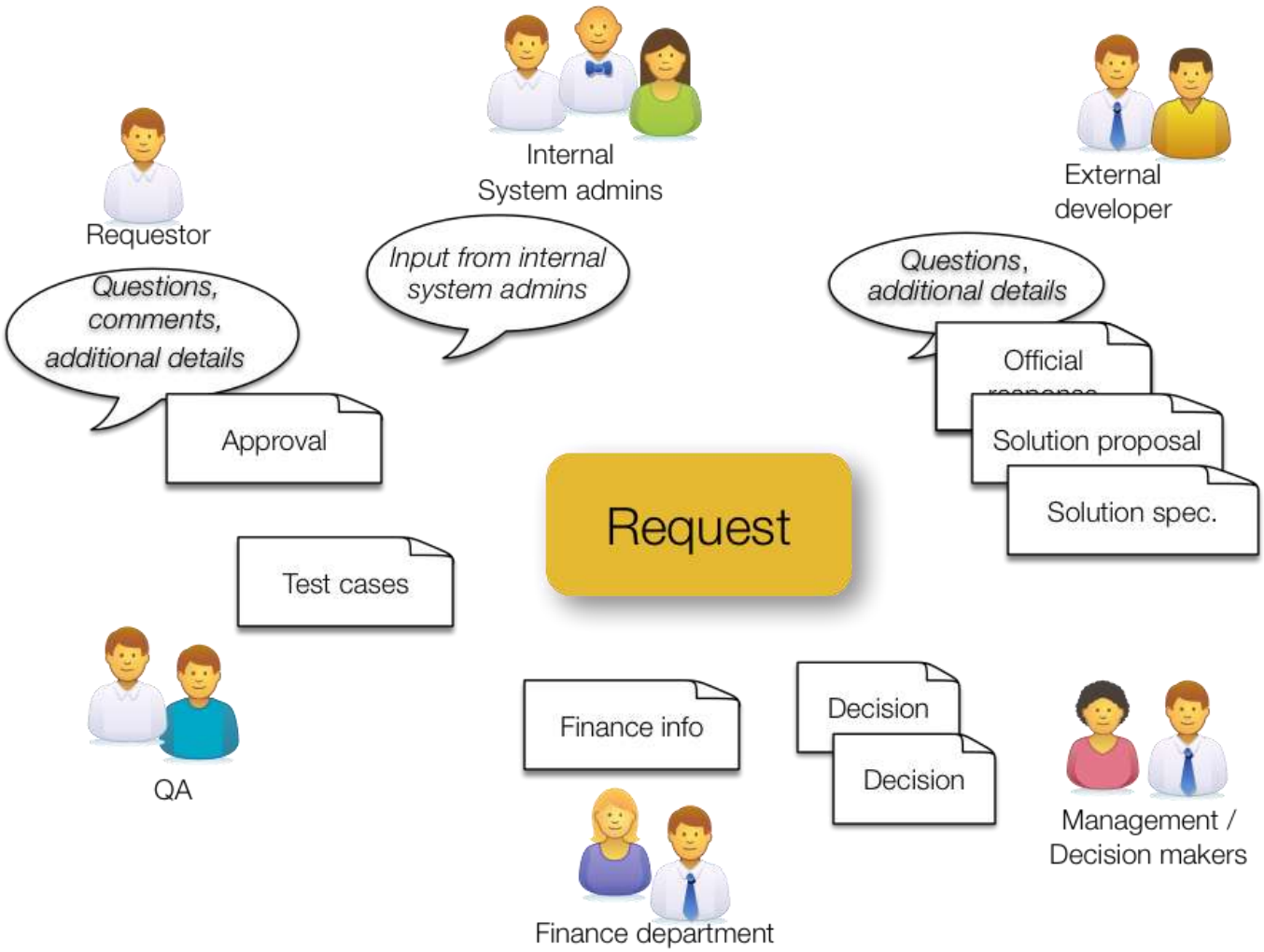

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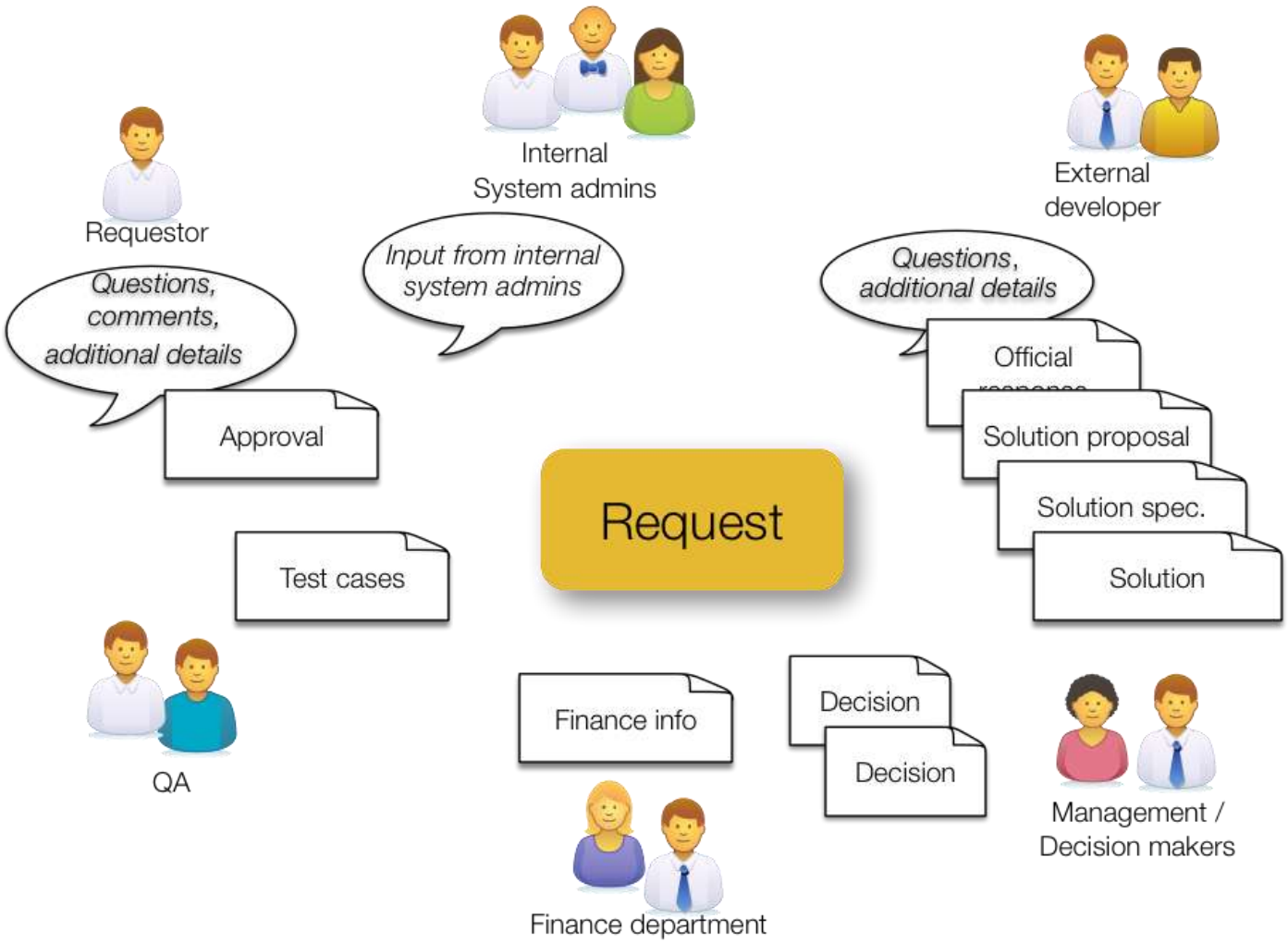

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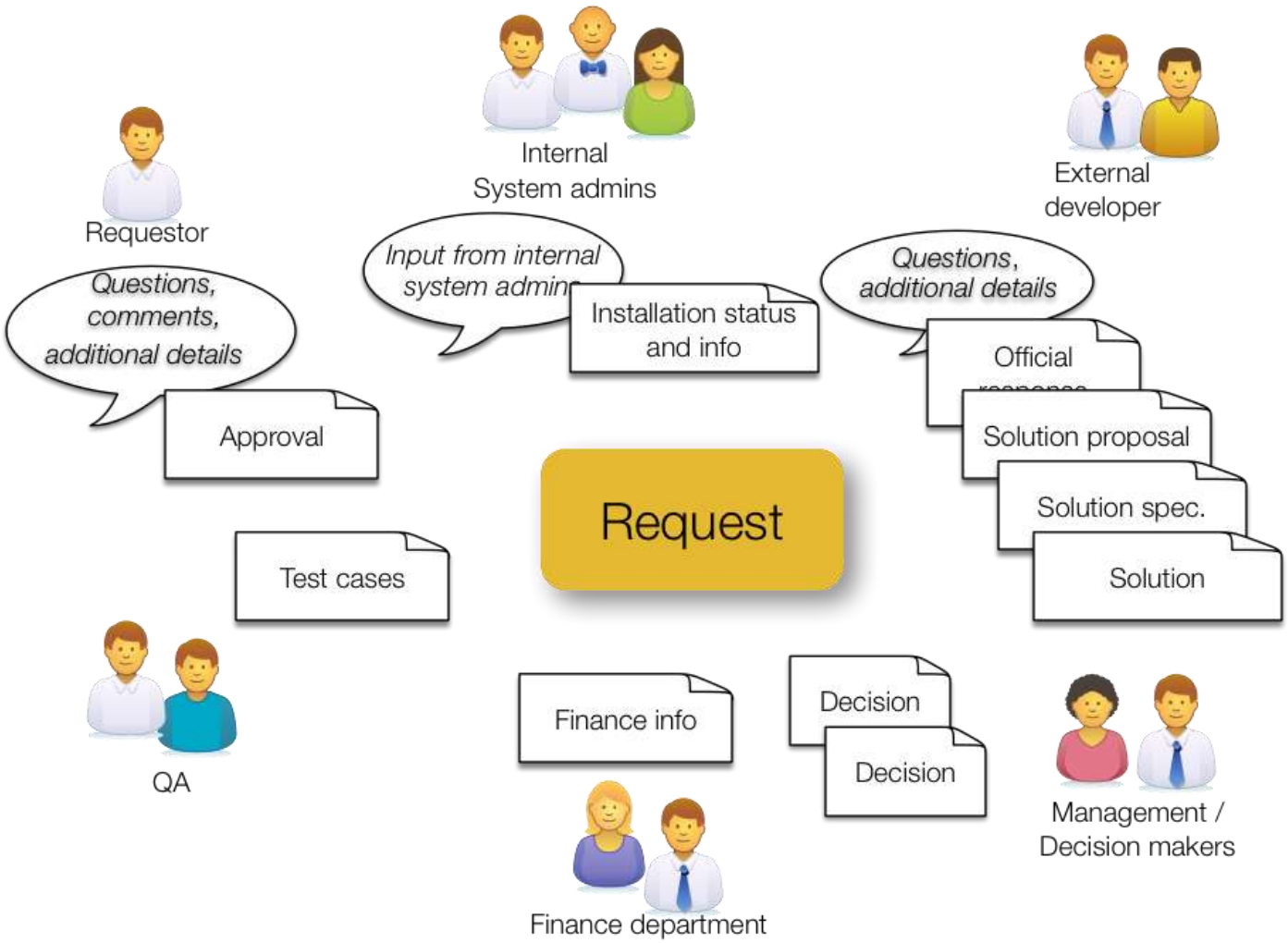

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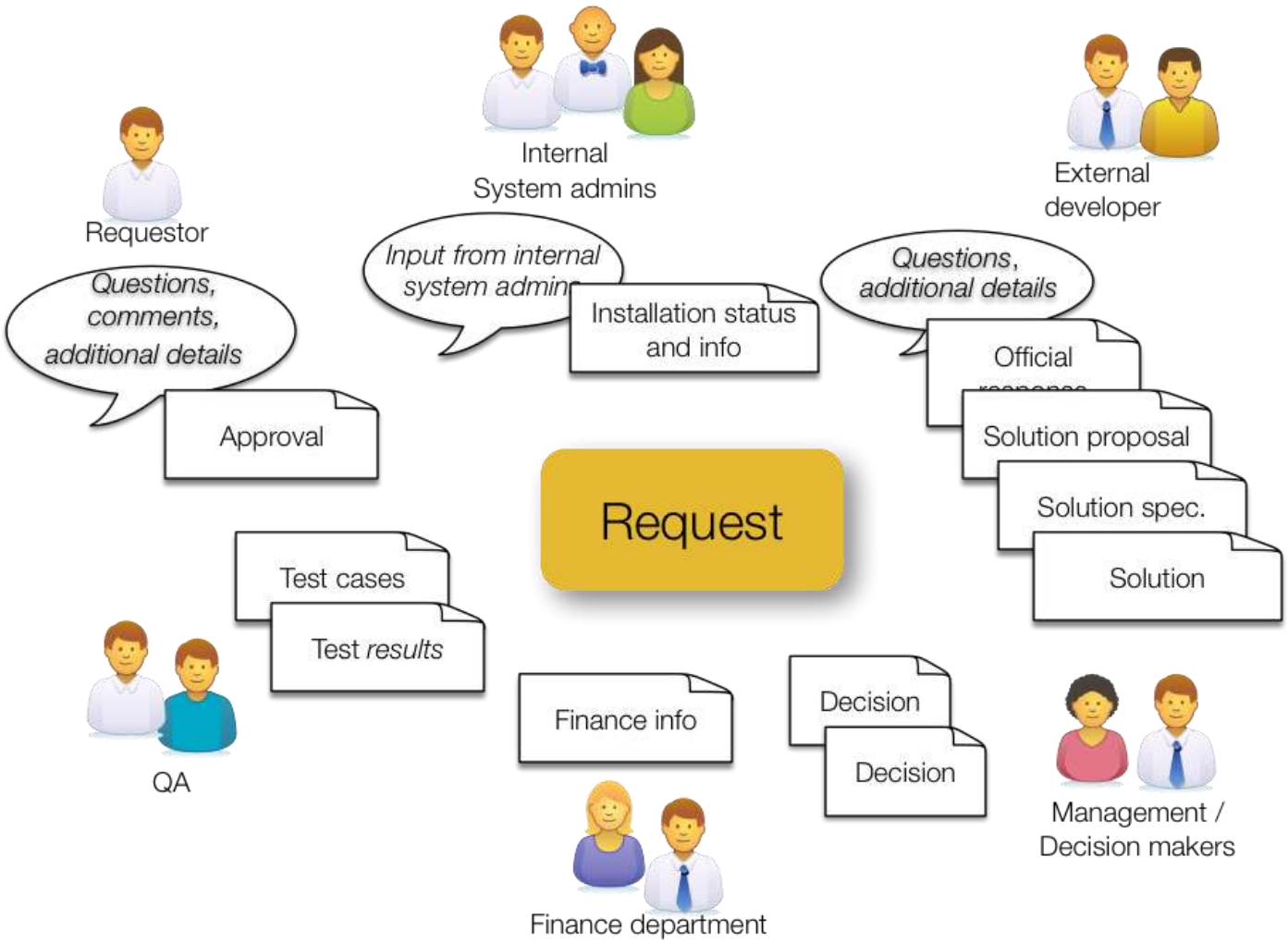

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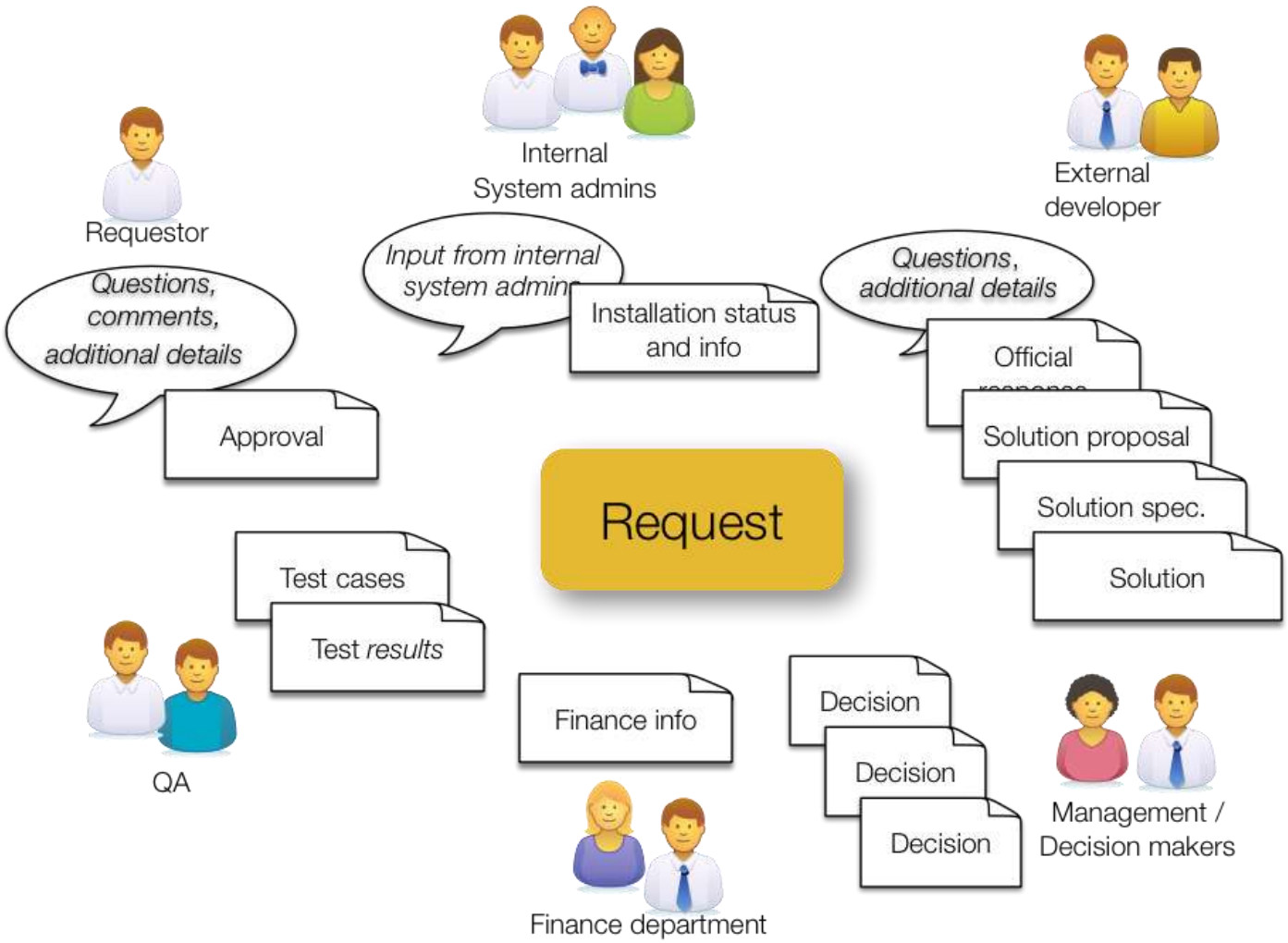
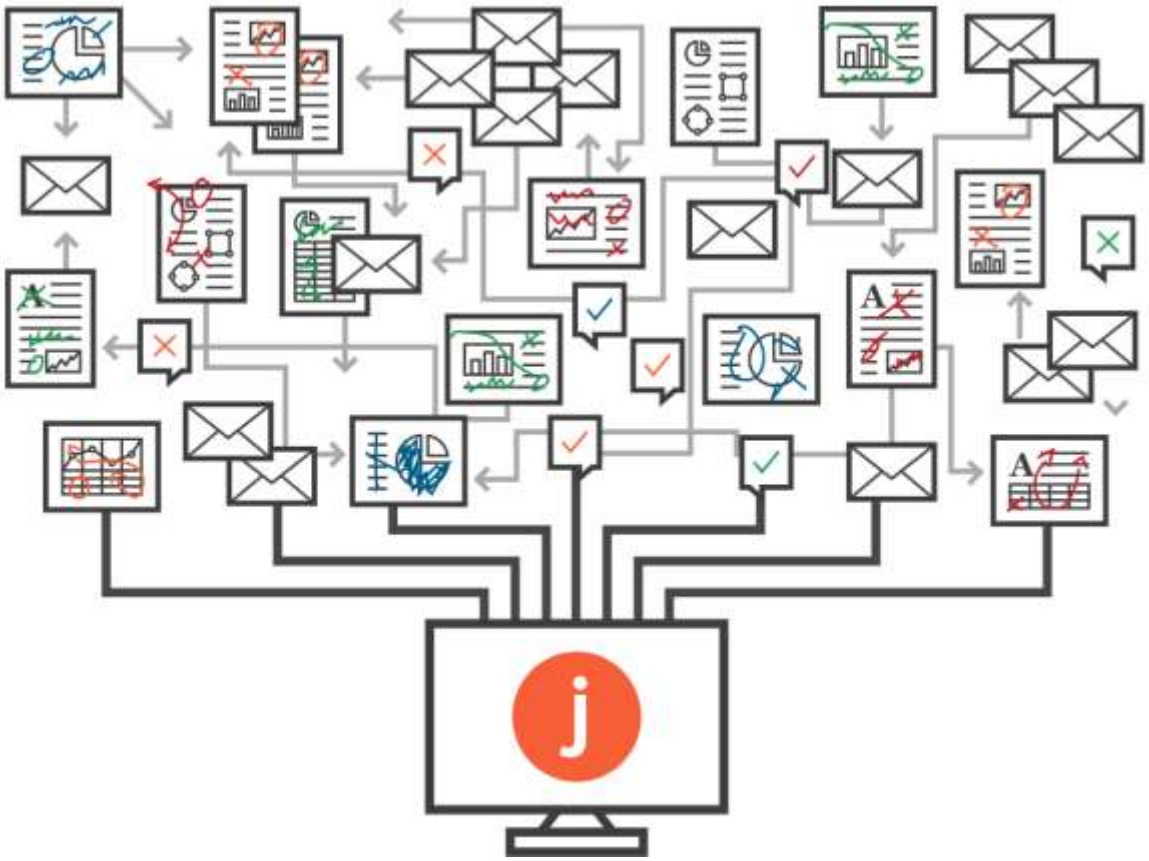
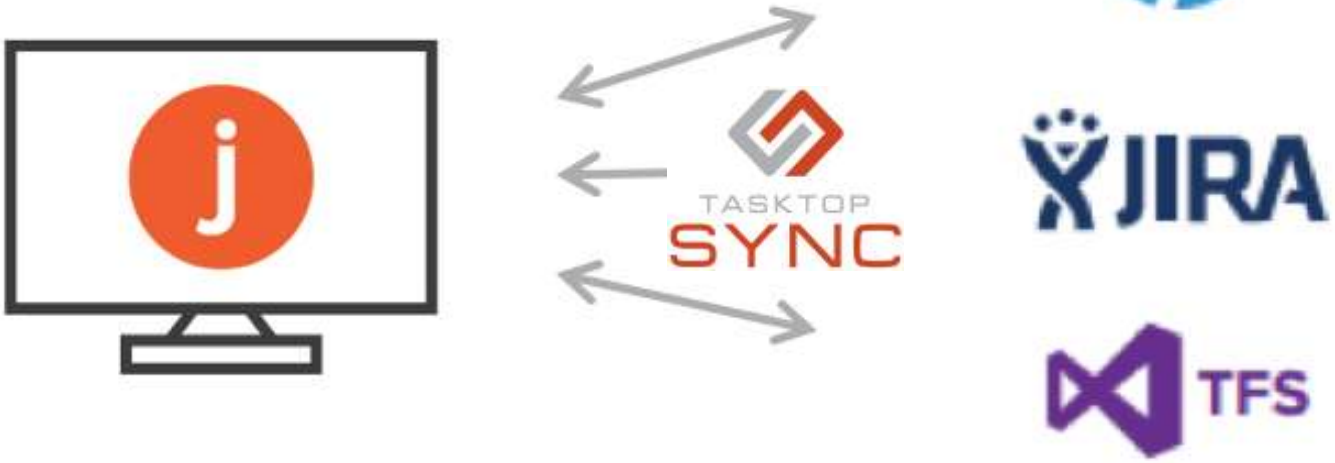
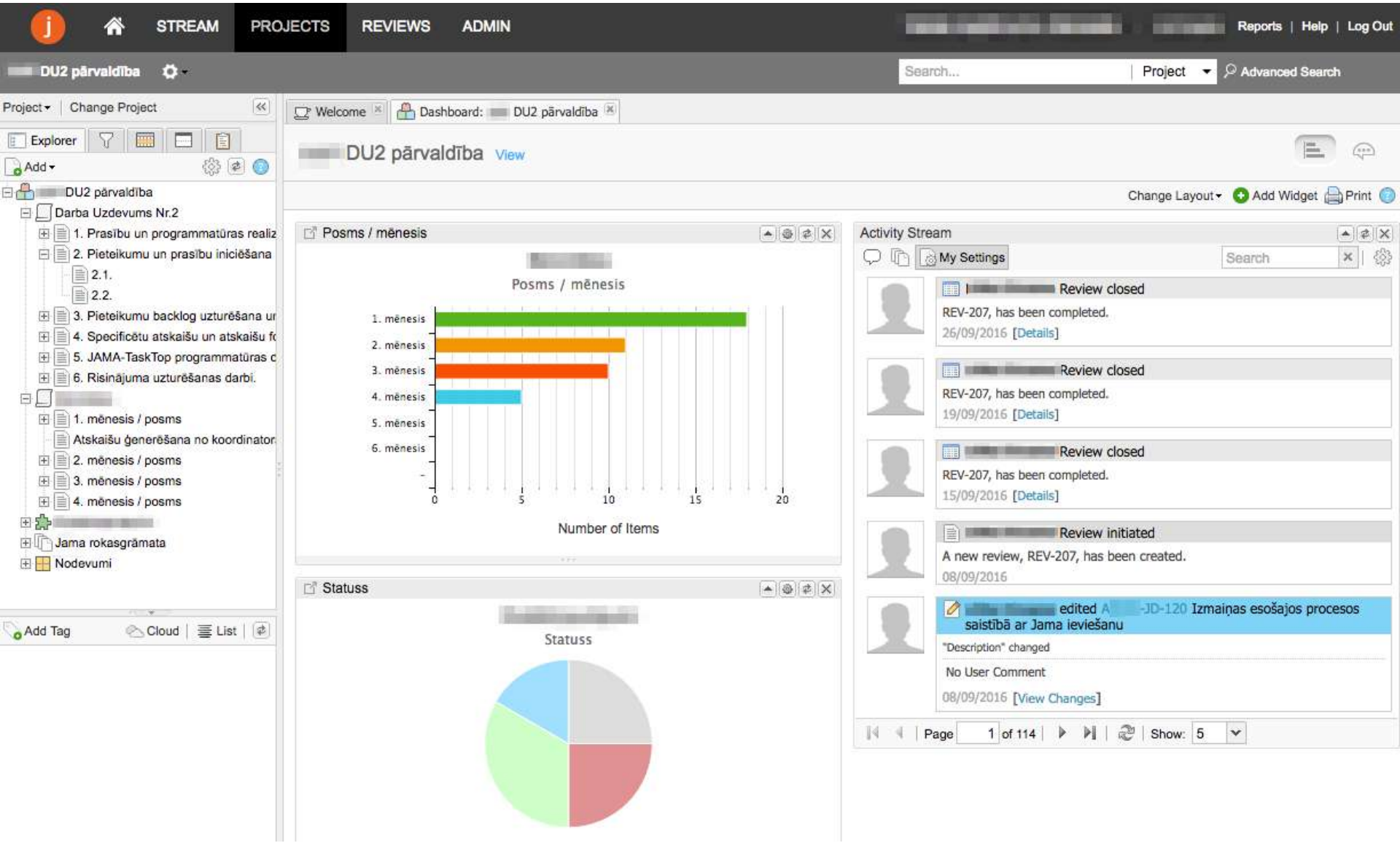


Single repository, dynamic exhange of information



Synchronised with the Developer's tool




STREAM
PROJECTS
REVIEWS
ADMIN
Reports | Help | Log Out
DU2 pārvaldība
Search...
Project
Advanced Search
Project | Change Project
Explorer
Add
DU2 pārvaldība
Darba Uzdevums Nr.2
1. Prasību un programmatūras realiz
2. Pieteikumu un prasību iniciēšana
2.1.
2.2.
3. Pieteikumu backlog uzturēšana ur
4. Specificētu atskaišu un atskaišu fo
5. JAMA-TaskTop programmatūras c
6. Risinājuma uzturēšanas darbi.
1. mēnesis / posms
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2. mēnesis / posms
3. mēnesis / posms
4. mēnesis / posms
Jama rokasgrāmata
Nodevumi
Add Tag
Cloud
List
Welcome
Dashboard: DU2 pārvaldība
DU2 pārvaldība View
Change Layout
Add Widget
Print
Posms / mēnesis
Posms / mēnesis
1. mēnesis
2. mēnesis
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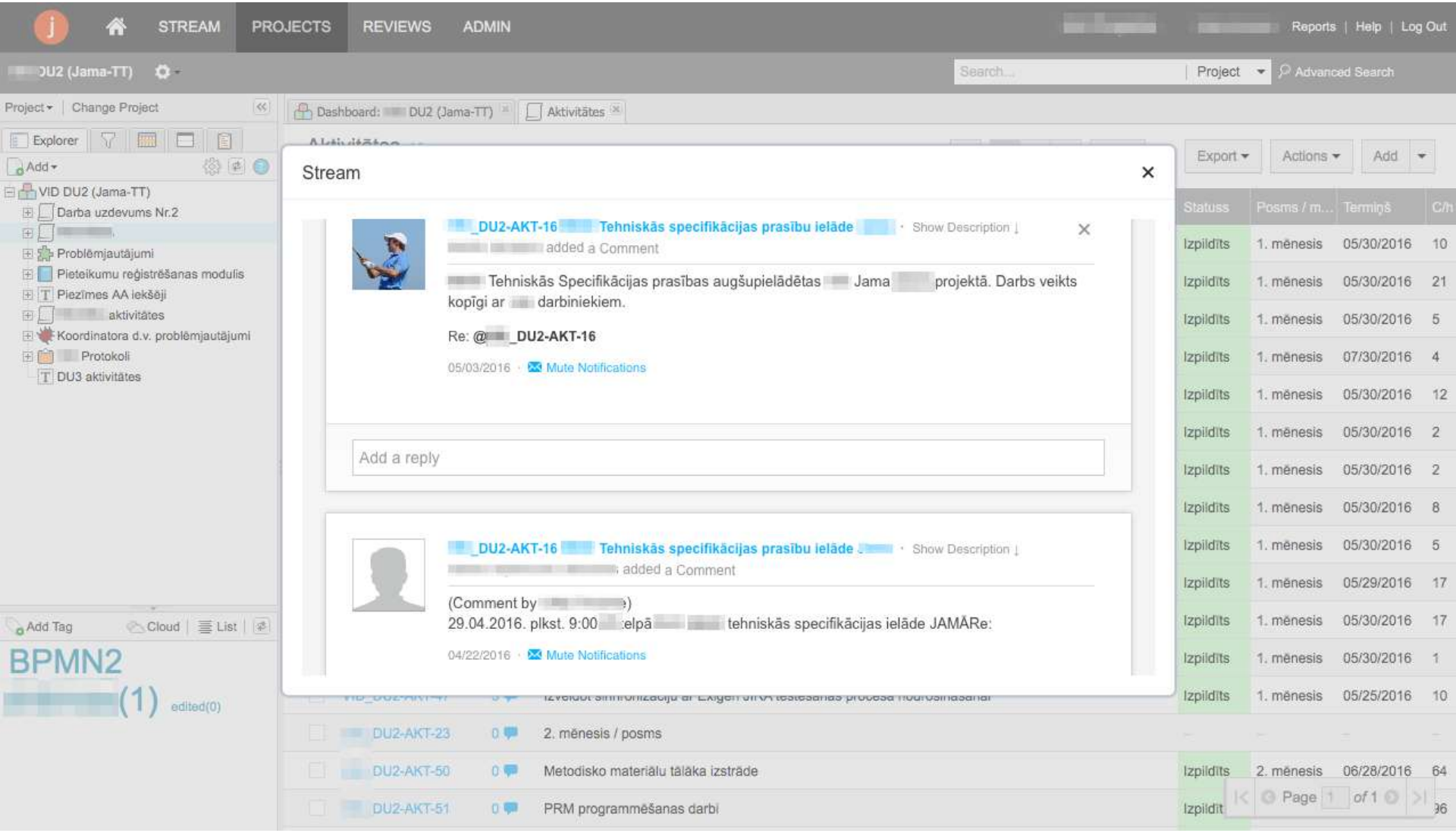
My Settings
Search
Review closed
REV-207, has been completed.
26/09/2016 [Details]
Review closed
REV-207, has been completed.
19/09/2016 [Details]
Review closed
REV-207, has been completed.
15/09/2016 [Details]
Review initiated
A new review, REV-207, has been created.
08/09/2016
edited A -JD-120 Izmaiņas esošajos procesos saistībā ar Jama ieviešanu
"Description" changed
No User Comment
08/09/2016 [View Changes]
Page 1 of 114
Show: 5


STREAM
PROJECTS
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ADMIN
Reports | Help | Log Out
Search...
Project
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Project | Change Project
Dashboard: DU2 (Jama-TT)
Aktivitātes
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Add
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Darba uzdevums Nr.2
Problēmjautājumi
Pieteikumu reģistrēšanas modulis
Piezīmes AA iekšēji
aktivitātes
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Protokoli
DU3 aktivitātes
Add Tag
Cloud
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Stream
_DU2-AKT-16 Tehniskās specifikācijas prasību ielāde
Show Description
added a Comment
Tehniskās Specifikācijas prasības augšupielādētas Jama projektā. Darbs veikts kopīgi ar darbiniekiem.
Re: @_DU2-AKT-16
05/03/2016
Mute Notifications
Add a reply
_DU2-AKT-16 Tehniskās specifikācijas prasību ielāde
Show Description
added a Comment
(Comment by)
29.04.2016. plkst. 9:00 elpā tehniskās specifikācijas ielāde JAMĀRe:
04/22/2016
Mute Notifications
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Izpildīts 1. mēnesis 05/30/2016 10
Izpildīts 1. mēnesis 05/30/2016 21
Izpildīts 1. mēnesis 05/30/2016 5
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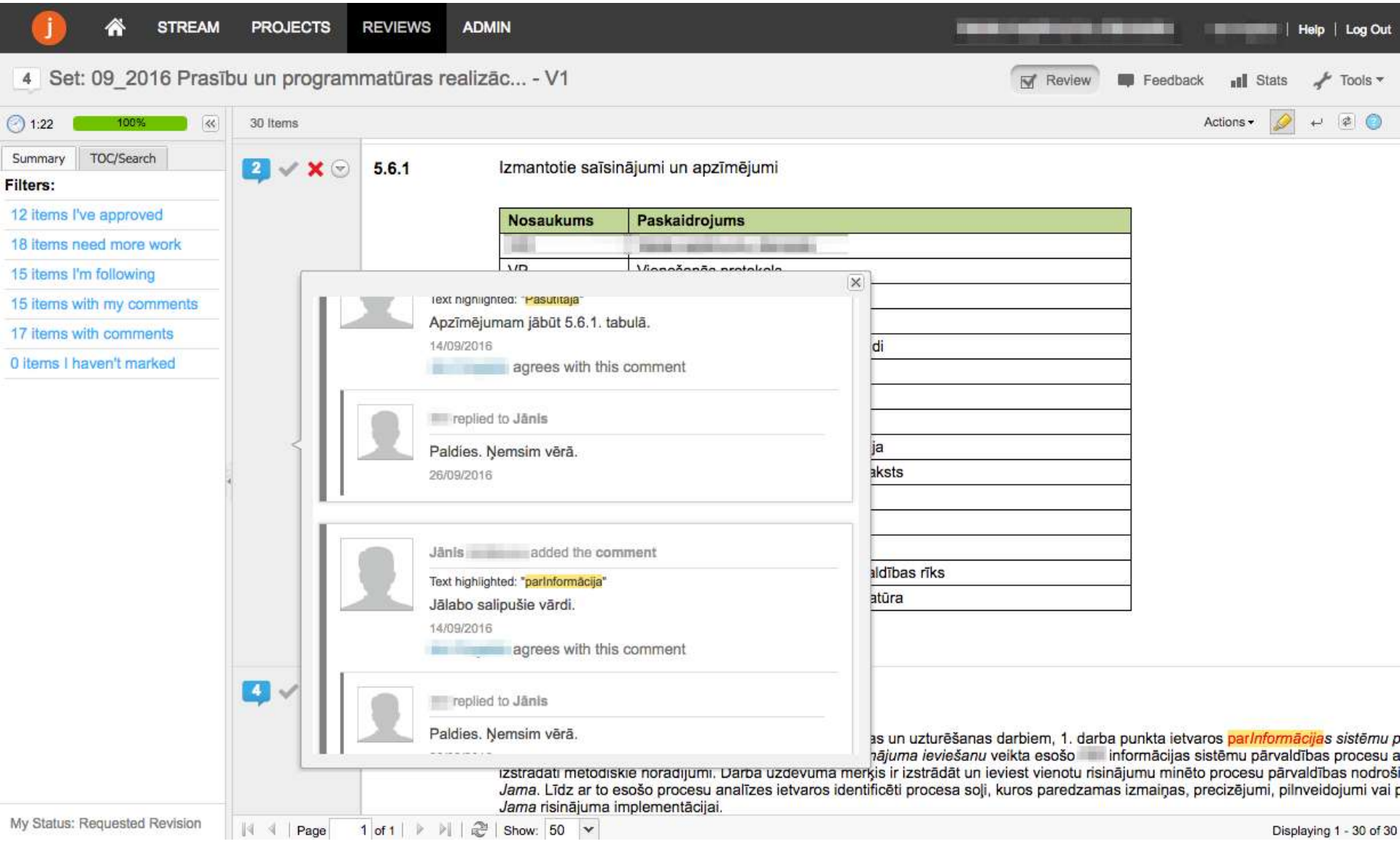
Izpildīts 1. mēnesis 05/25/2016 10
DU2-AKT-23 0 2. mēnesis / posms
DU2-AKT-50 0 Metodisko materiālu tāläka izstrāde Izpildīts 2. mēnesis 06/28/2016 64
DU2-AKT-51 0 PRM programmēšanas darbi
Page 1 of 1


STREAM
PROJECTS
REVIEWS
ADMIN
Help
Log Out
Set: 09_2016 Prasību un programmatūras realizāc... - V1
Review
Feedback
Stats
Tools
1:22
100%
30 Items
Actions
Summary
TOC/Search
Filters:
12 items I've approved
18 items need more work
15 items I'm following
15 items with my comments
17 items with comments
0 items I haven't marked
My Status: Requested Revision
5.6.1
Izmantotie saīsinājumi un apzīmējumi
Nosaukums
Paskaidrojums
Apzīmējumam jābūt 5.6.1. tabulā.
14/09/2016
agrees with this comment
replied to Jānis
Paldies. Ņemsim vērā.
26/09/2016
Jānis added the comment
Text highlighted: "parInformācija"
Jālabo salipušie vārdi.
14/09/2016
agrees with this comment
replied to Jānis
Paldies. Ņemsim vērā.
Page 1 of 1
Show: 50
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Discussion

RQ: What are the differences in change management between legacy processes and processes that leverage the use of an ALM solution in a State institution for the maintenance of existing information systems?

- Collaboration in context
- More focused communication
- Faster communication (Integrations)
- Central repository
- Faster reporting

Conclusions

A modern ALM solution like *Jama* can be adapted and used for maintenance of existing systems in a state institution

However

1) Identify processes (Prepare for bureaucracy)
2) Identify early adopters
3) Deploy in small teams
4) Deal with reluctance to change
5) Plan ahead

Further Research

- Quantitative measurements
  - Cycle times
  - Descriptive statistics
- Gather more qualitative input (Capture experiences)
  - Interviews
  - Focus groups
- *Evaluate this methodology for development of new systems*

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