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Requirements (BABOK)

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What is Business Analysis?

Business analysis is the practice of enabling change in an enterprise by **defining needs** and **recommending solutions** that deliver value to stakeholders.

Business analysis ultimately helps organizations to understand the needs of the enterprise and why they want to create change, design possible solutions, and describe how those solutions can deliver value.

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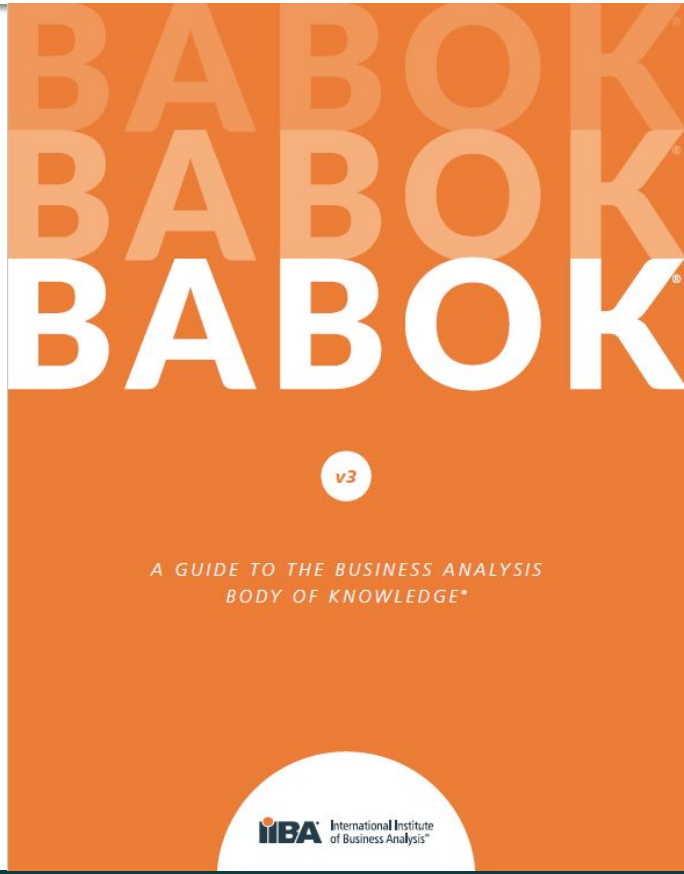
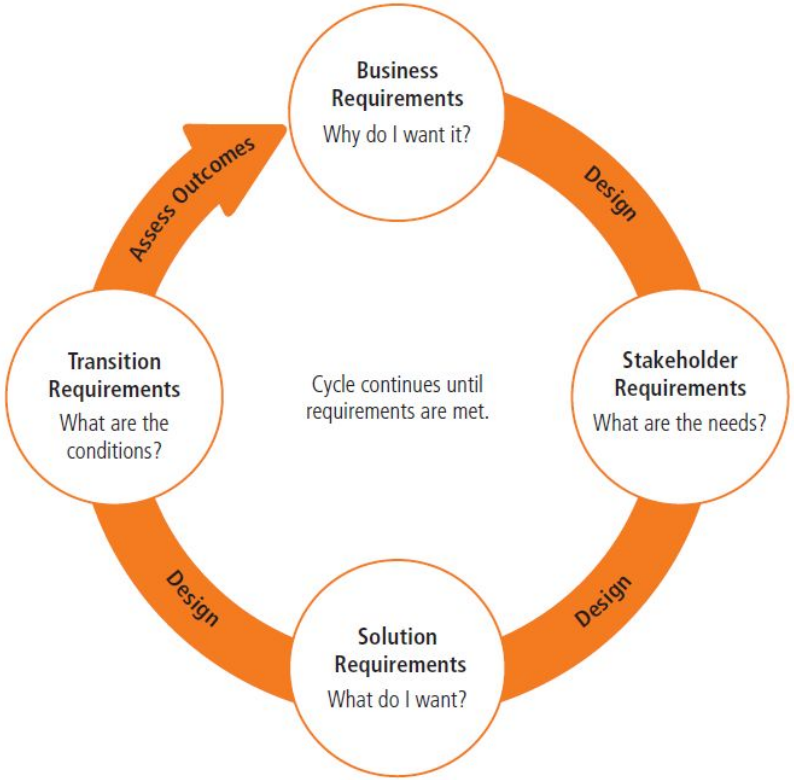


Requirements and Design Cycle

Regardless of the focus of the stakeholder, the importance of the role of the BA lies in continuously asking the question '**why?**'.

For example:

"Why is either the requirement or design necessary to provide value to an enterprise and to facilitate the realization of an enterprise's goals and objectives?"



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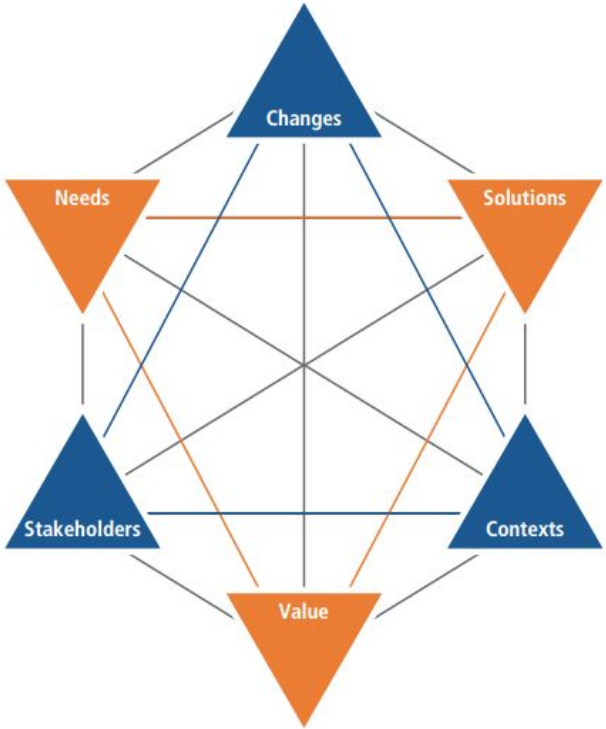
BUSINESS ANALYSIS CORE CONCEPT MODEL

The *Business Analysis Core Concept Model*™ (*BACCM*™) is a conceptual framework for business analysis.

It encompasses what business analysis is and what it means to those performing business analysis tasks regardless of perspective, industry, methodology, or level in the organization.

The core concepts can be used by business analysts to consider the quality and completeness of the work being done.



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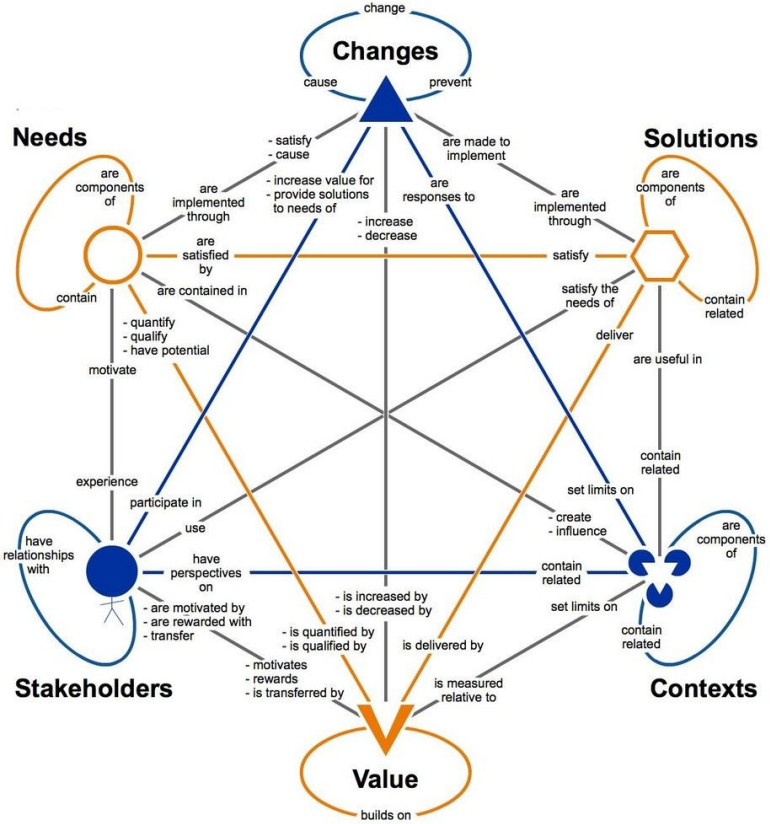
BUSINESS ANALYSIS CORE CONCEPT MODEL

While planning or performing a task or technique, business analysts can consider how each core concept is addressed by asking questions such as:

- What are the kinds of ***changes*** we are doing?
- What are the ***needs*** we are trying to satisfy?
- What are the ***solutions*** we are creating or changing?
- Who are the ***stakeholders*** involved?
- What do stakeholders consider to be of ***value***?
- What are the ***contexts*** that we and the solution are in?



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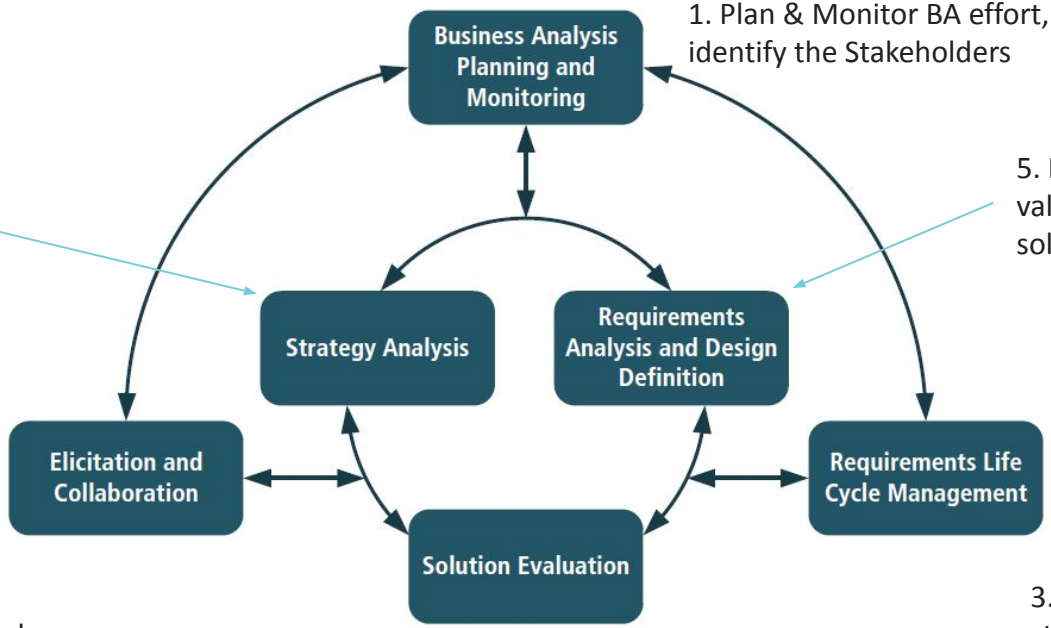
Relationships Between Knowledge Areas

Knowledge areas represent areas of specific business analysis expertise that encompass several tasks.



1. Plan & Monitor BA effort, identify the Stakeholders

4. Model the needs for change, the future state and change strategy

5. Detail the strategy, verify, validate, describe the solution characteristics

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2. Understand Stakeholders needs and concerns

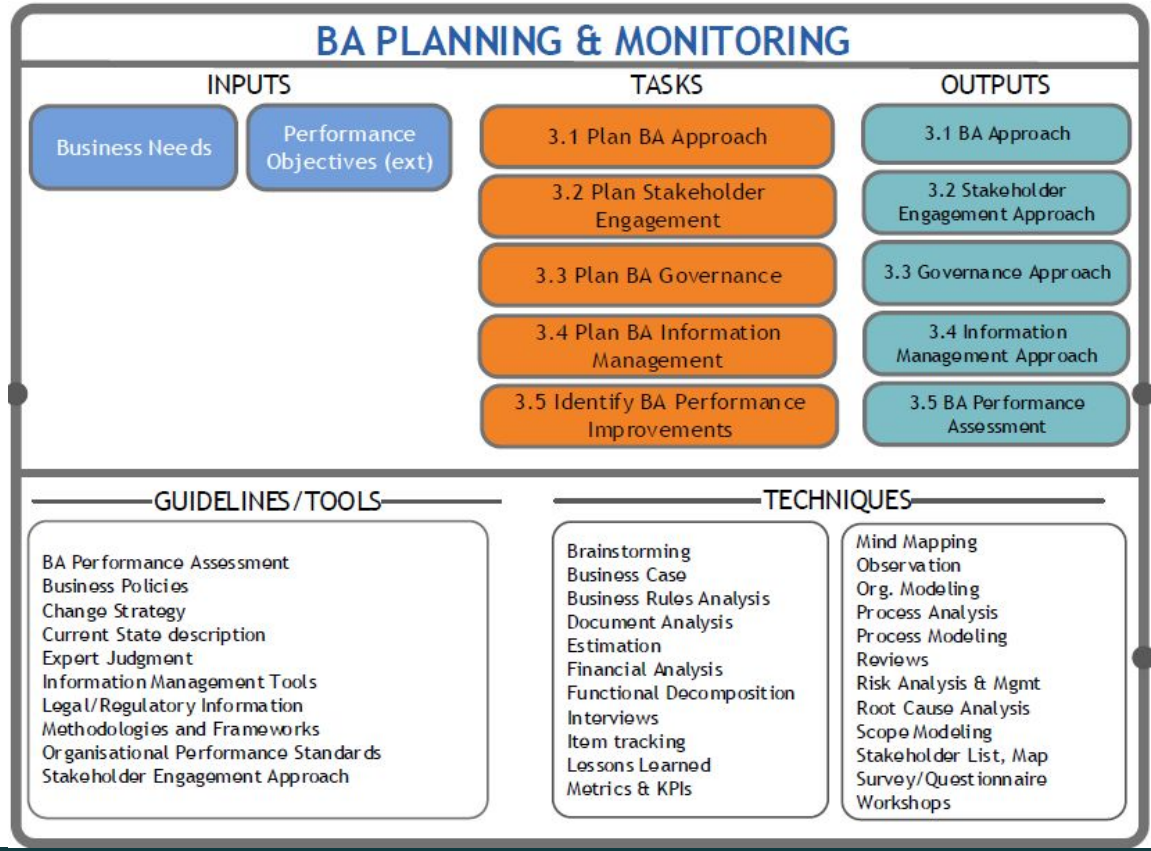
3. Manage & maintain the strategy, communicate and obtain consensus

6. Assess the performance & value of a solution, support the value realization

BA Knowledge areas

Business Analysis Planning and Monitoring: describes the tasks that business analysts perform to organize and coordinate the efforts of business analysts and stakeholders.

These tasks produce outputs that are used as key inputs and guidelines for the other tasks throughout the *BABOK® Guide*.

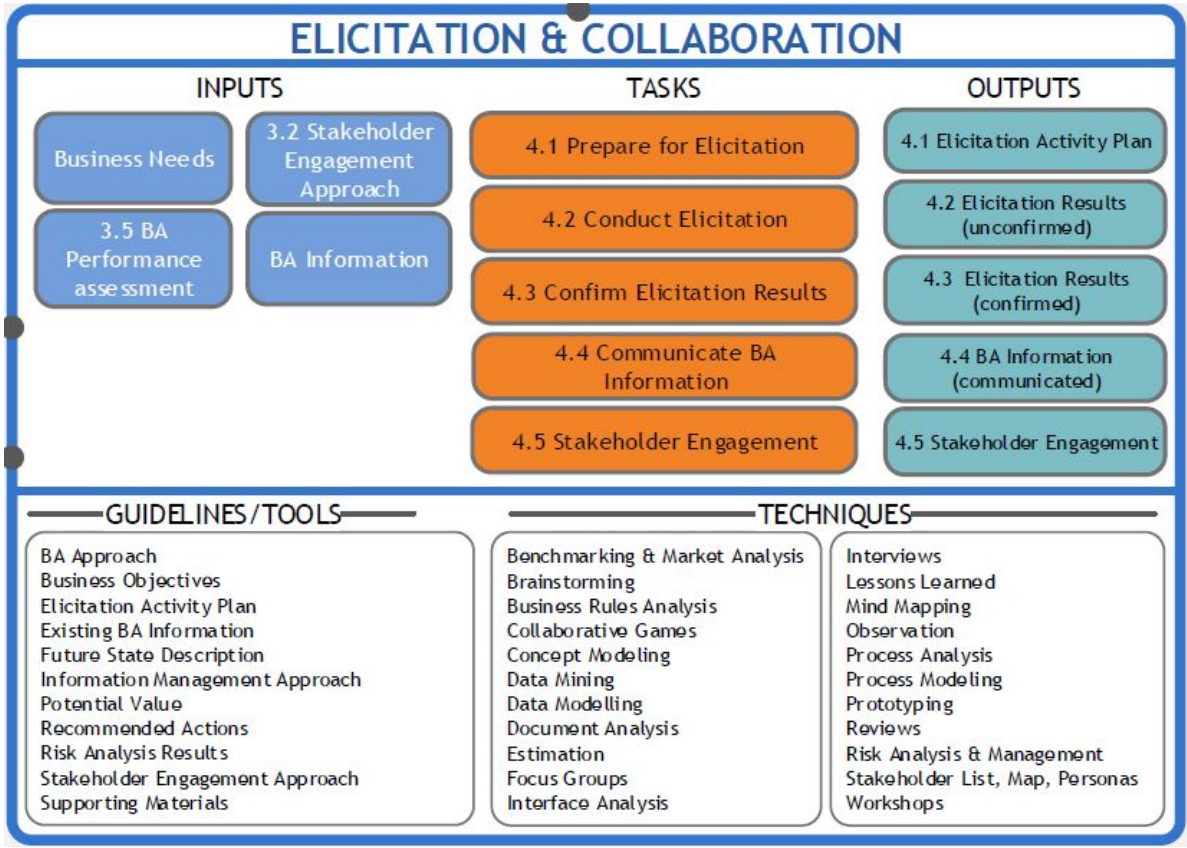


BA Knowledge areas

Elicitation and Collaboration:

describes the tasks that business analysts perform to prepare for and conduct elicitation activities and confirm the results obtained.

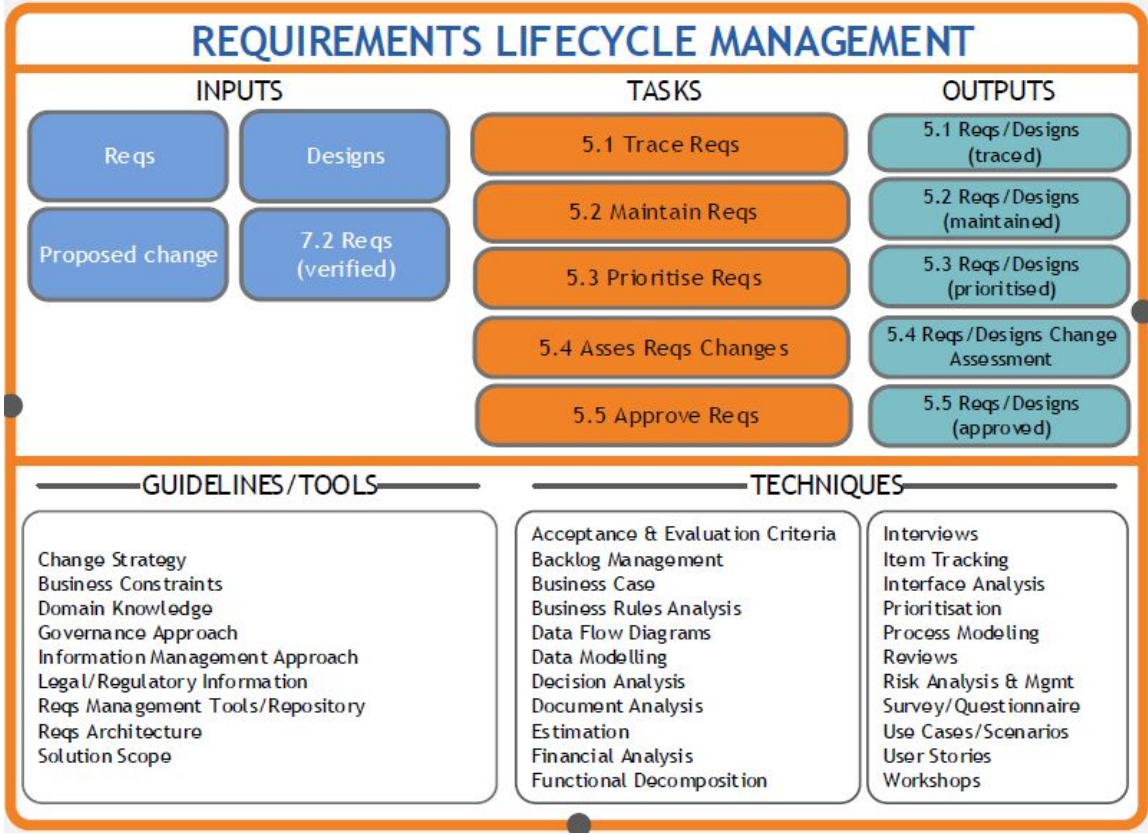
It also describes the communication with stakeholders once the business analysis information is assembled and the ongoing collaboration with them throughout the business analysis activities.



BA Knowledge areas

Requirements Life Cycle Management: describes the tasks that business analysts perform in order to manage and maintain requirements and design information from inception to retirement.

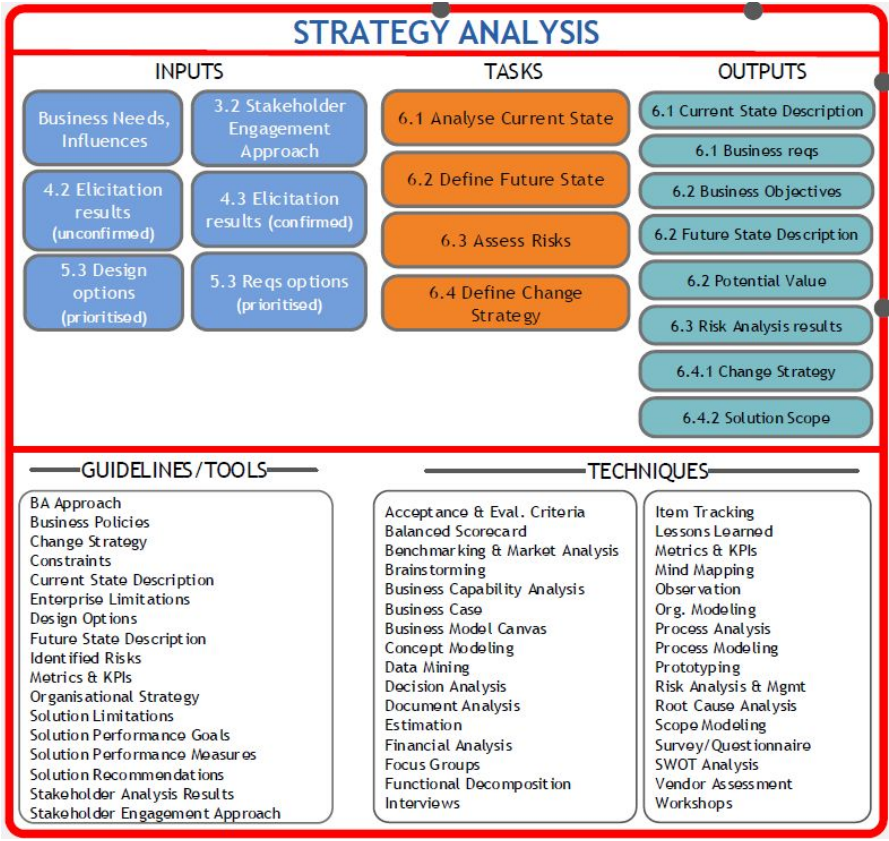
These tasks describe establishing meaningful relationships between related requirements and designs, and assessing, analyzing and gaining consensus on proposed changes to requirements and designs.



BA Knowledge areas

Strategy Analysis:

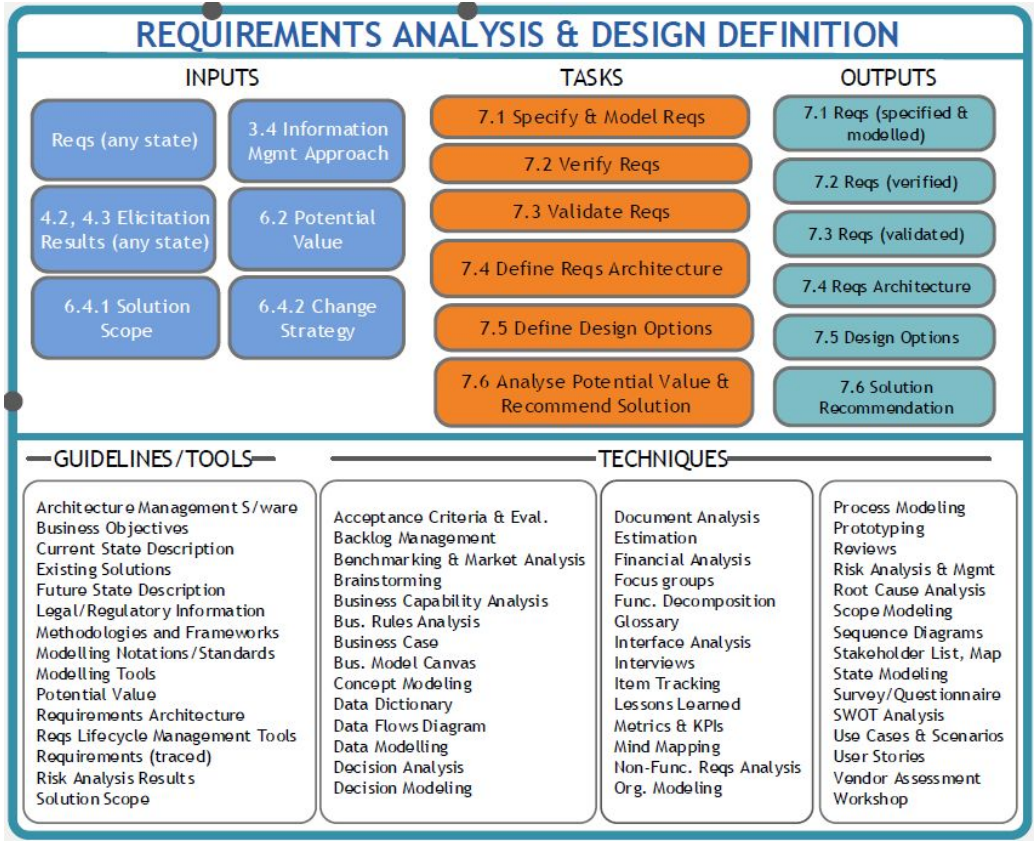
describes the business analysis work that must be performed to collaborate with stakeholders in order to identify a need of strategic or tactical importance (the business need), enable the enterprise to address that need, and align the resulting strategy for the change with higher- and lower-level strategies.



BA Knowledge areas

Requirements Analysis and Design Definition: describes the tasks that business analysts perform to structure and organize requirements discovered during elicitation activities, specify and model requirements and designs, validate and verify information, identify solution options that meet business needs, and estimate the potential value that could be realized for each solution option.

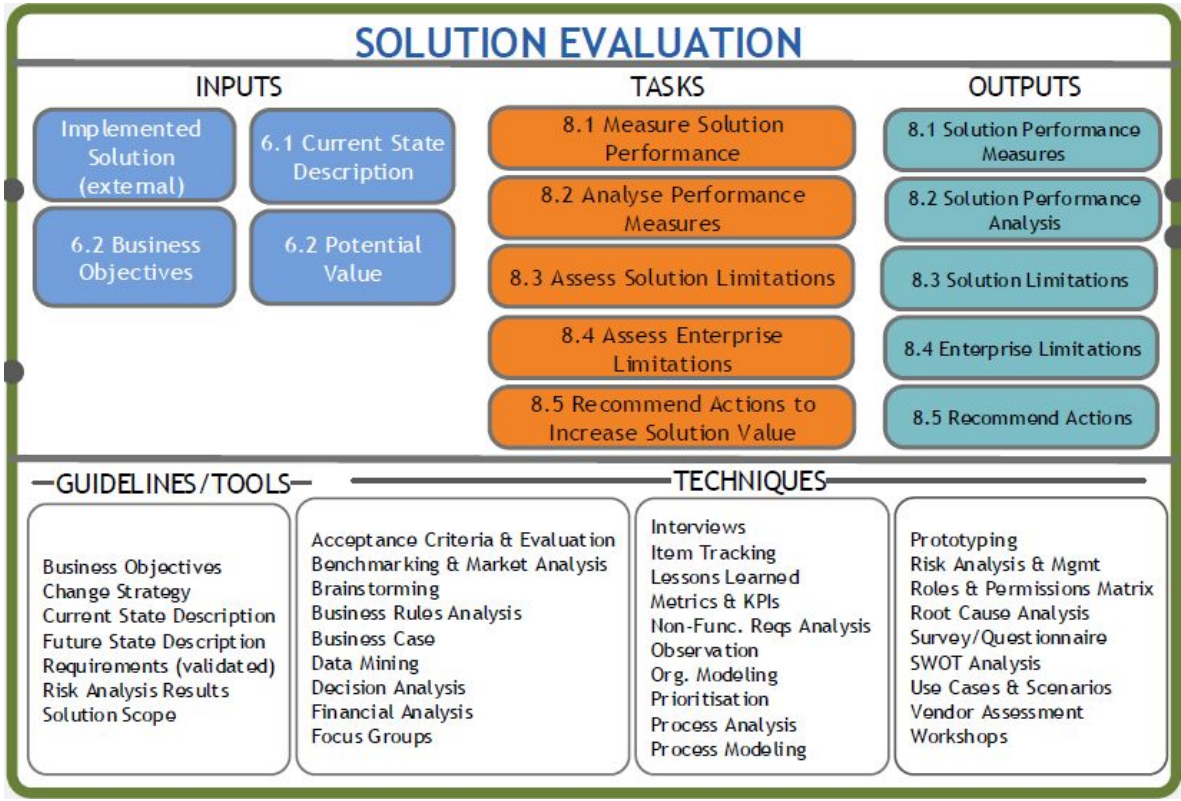
This knowledge area covers the incremental and iterative activities ranging from the initial concept and exploration of the need through the transformation of those needs into a particular recommended solution.



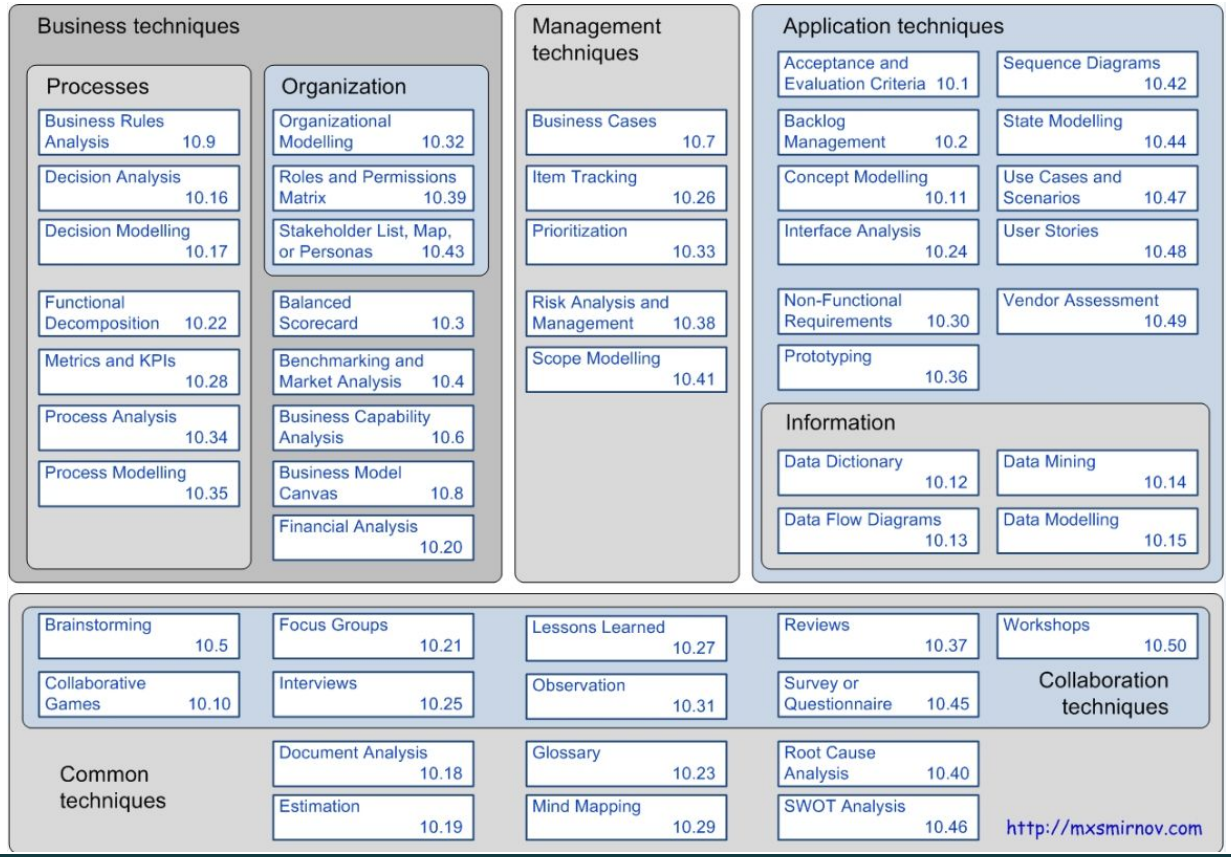
BA Knowledge areas

Solution Evaluation:

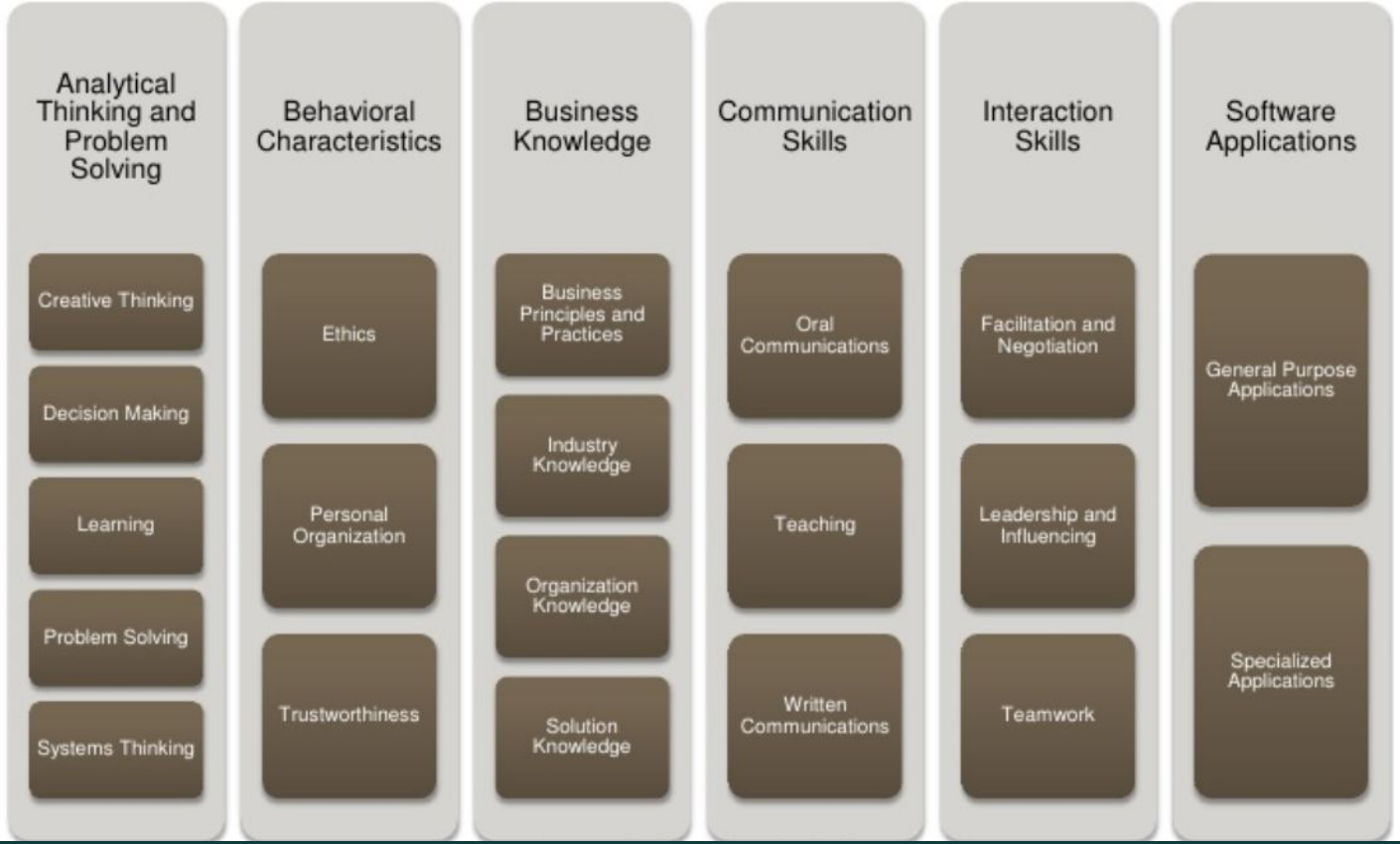
describes the tasks that business analysts perform to assess the performance of and value delivered by a solution in use by the enterprise, and to recommend removal of barriers or constraints that prevent the full realization of the value.



50+ BA Techniques

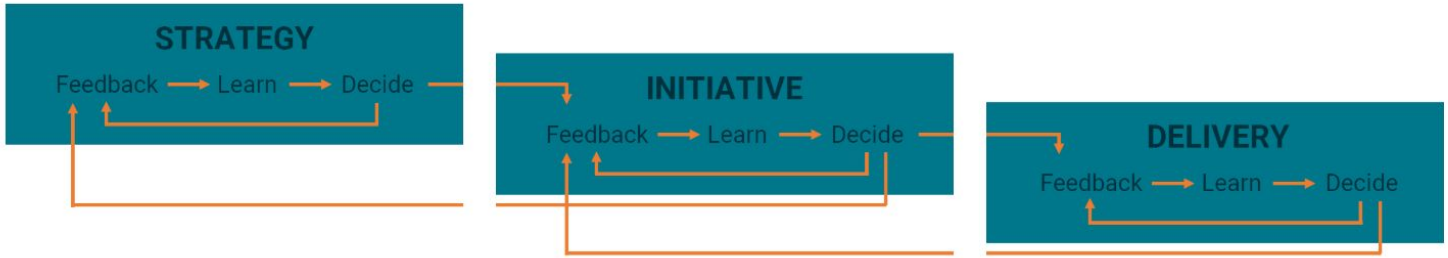


BA Underlying Competencies



Agile Extention

Agile Business Analysis Planning Horizons



Decisions that impact the entire organization

Business analysis practitioners operating at this horizon support decisions about strategy and the allocation of available resources in support of that strategy. Decisions made at the Strategy Horizon identify the products, services, and initiatives to which the organization allocates resources.

Decisions that impact a particular initiative

Business analysis practitioners operating at this horizon support initiative based decisions about how to create value with the resources available, as well as better understanding the needs of the stakeholders and the options available.

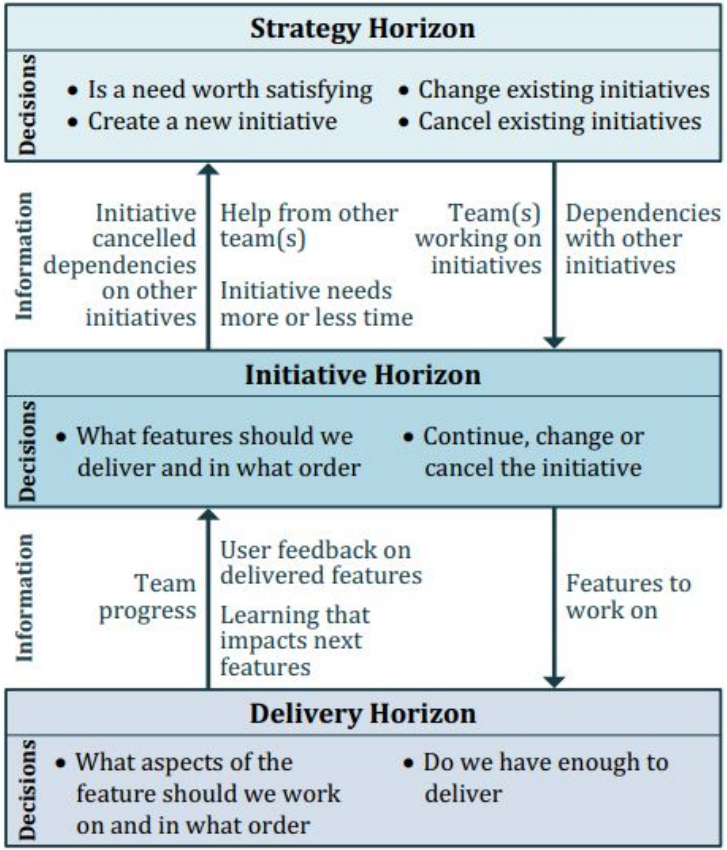
Decisions made regarding the delivery of the solution

Business analysis practitioners operating at this horizon work with the delivery team to understand how to best break down work, how to deliver and test the value the team is creating, and how to learn quickly from the work the team is doing.

The principles that guide agile business analysis are:

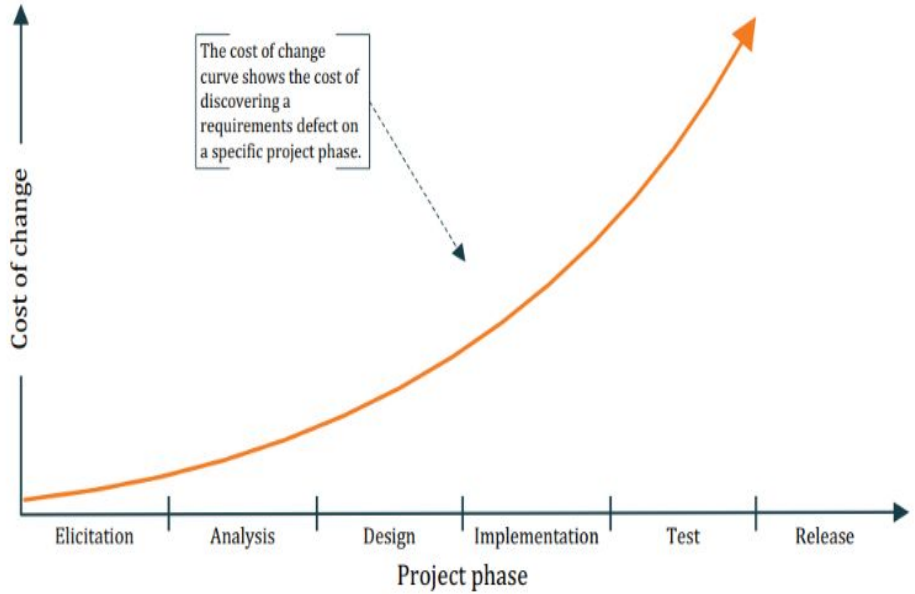
- See the Whole
- Think as a Customer
- Analyze to Determine What is Valuable
- Get Real Using Examples
- Understand What is Doable
- Stimulate Collaboration and Continuous Improvement
- Avoid Waste

Three Planning Horizon



Planning

- Predictive
- Iterative
- Adaptive



Technique

Context	Works well with internal teams	Works well with stakeholders external to the team
Communications	7.1. Backlog Refinement 7.8. Planning Workshops 7.9. Portfolio Kanban 7.14. Retrospectives 7.24. Visioning	7.15. Reviews 7.24. Visioning
Process Analysis	7.23. Value Stream Mapping	7.3. Impact Mapping
Product Management Refinement	7.6. Minimal Viable Product 7.10. Product Roadmap 7.11. Purpose Alignment Model 7.12. Real Options	7.5. Kano Analysis 7.6. Minimal Viable Product
Requirements Management	7.2. Behaviour Driven Development 7.4. Job Stories 7.13. Relative Estimation 7.16. Spikes 7.18. Story Decomposition 7.19. Story Elaboration 7.20. Story Mapping 7.21. User Stories	
Understanding your Customer	7.7. Personas 7.17. Storyboarding 7.22. Value Modelling	

Requirements Development in Agile

Requirements process

ELICITATION

- Practice of collecting the requirements of a system from users, customers and other stakeholders
- Include interviews, questionnaires, user observation, workshops, prototyping

ANALYSIS

- Checking requirements and resolving stakeholder conflicts
- Determine whether the stated requirements are clear, complete, consistent and unambiguous

DOCUMENTATION

- Documenting the requirements

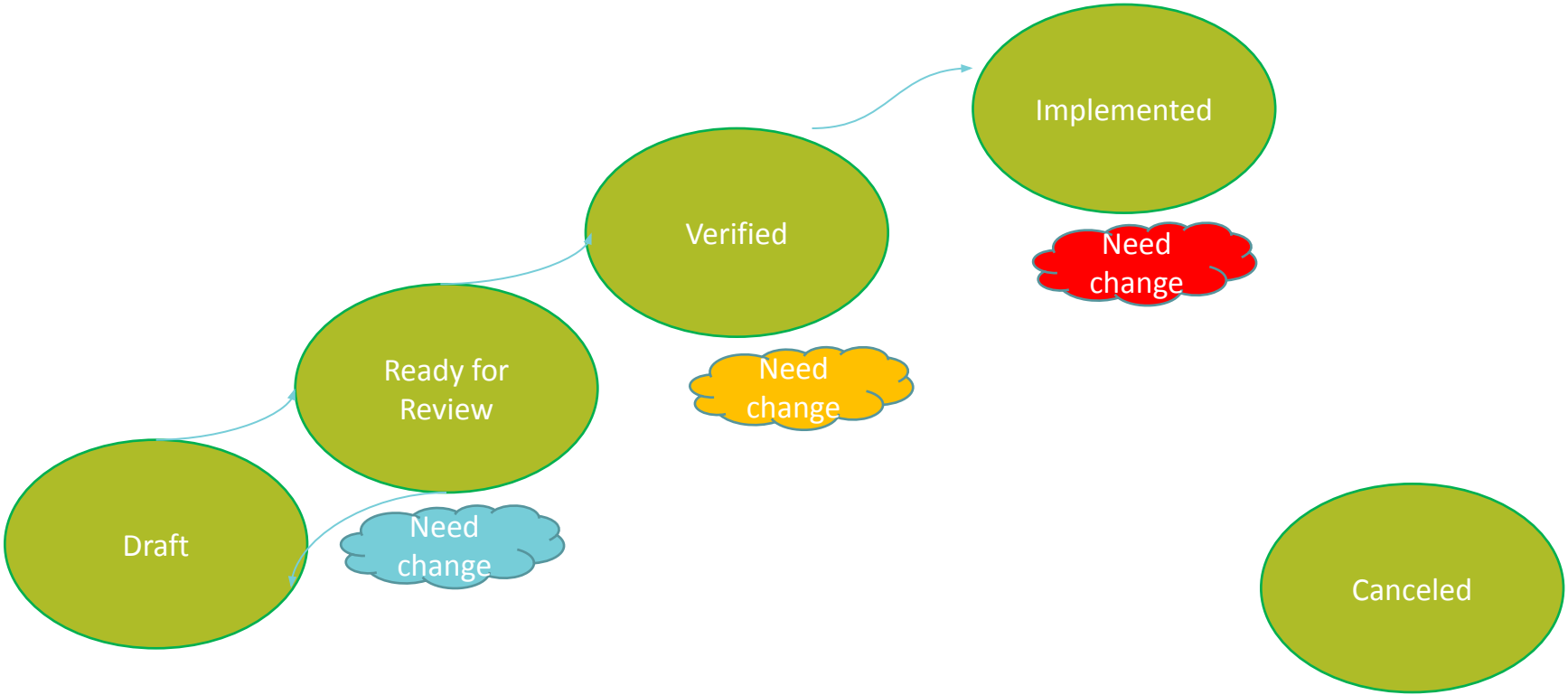
VALIDATION

- Ensure that all requirements support the delivery of value to the business, fulfill its goals and objectives, and meet stakeholder needs

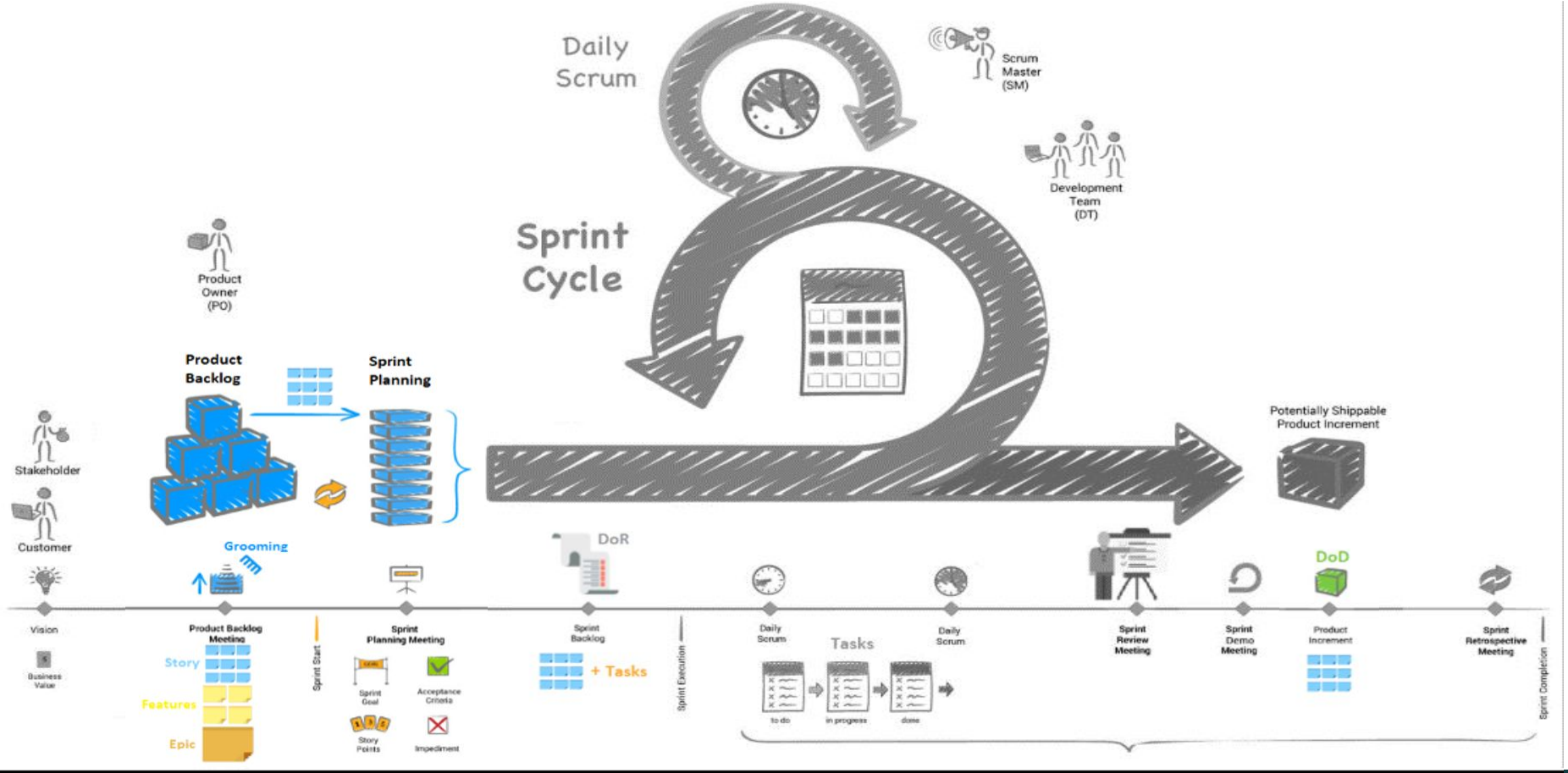
REQUIREMENTS MANAGEMENT

- **Change Management**
- **Requirements Tracing**

Requirements state diagram



BA in agile lifecycle



Product Vision

Vision	What is your vision, your overarching goal for creating the product?		
Target group	**Needs**	**Product**	**Business Goals**
Which market does the product address? Who are the target customers and users?	What problem does does the product solve? Which benefit does it provide?	What product is it? What makes it desirable and special? Is it feasible to develop the product?	How is the product going to benefit the company? What are the business goals? Which one is most important?

VISION: Travel to the moon

TARGET GROUP	NEEDS	PRODUCT	VALUE
Astronauts USA Government	Allow travel to outer space. Roundtrip transport to the moon with humans.	1. Roundtrip to the moon. 2. Human safe 3. Communication system between earth and starship.	Be the first country to put a man in the moon. Winning USSR in the space race

Product Vision v2

Product vision is a short statement which describes end goals, objectives and benefits of the product

WHEN First thing. Before product Backlog.

WHY Product vision is needed to ensure the product is moving in the right direction, strategies are aligned and that the development team spends its time creating the right product.

! Elevator test

"Can you explain your product in the time it takes to ride up in an elevator?" Moore (2006, p. 152). Passing this test ensures that your product vision is clear, engaging, and brief.

? Who owns vision?

Product owner. However everyone contributes towards the product vision.

? Can vision be updated?

Absolutely! Product vision should reflect current business conditions (market, budget, capacity etc.). However, constantly changing vision is an indication of a problem.

? Who updates vision?

Product owner together with stakeholders and the team.

Moore's product vision model

FOR: «target customer»

WHO: «needs»

THE: «product name»

IS A: «product category»

THAT: «product benefit. Reason to buy»

UNLIKE: «competitors»

OUR PRODUCT: «differentiation or value proposition».

Example

FOR a mid-sized company's marketing and sales departments

WHO need basic CRM functionality,

THE CRM-Innovator

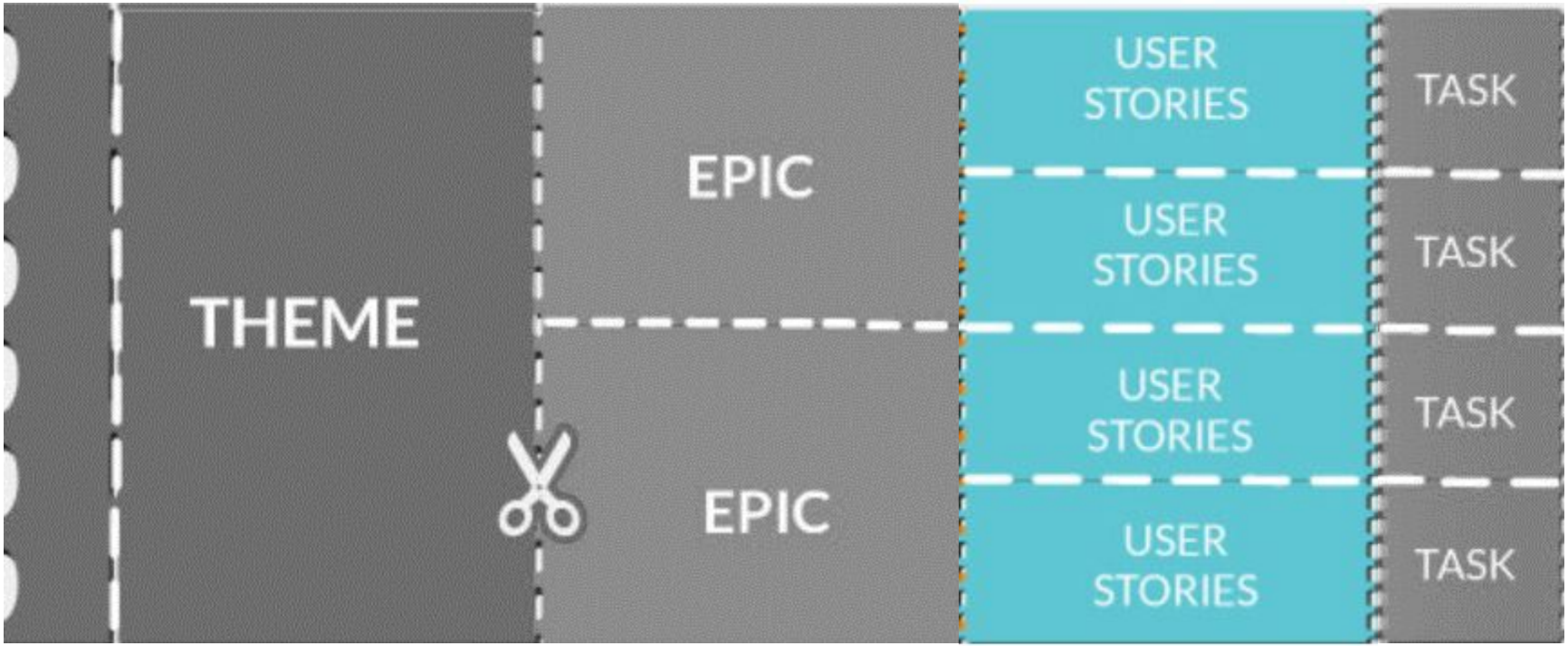
IS A web-based service

THAT provides sales tracking, lead generation, and sales representative support features that improve customer relationships at critical touch points.

UNLIKE other services or package software products,

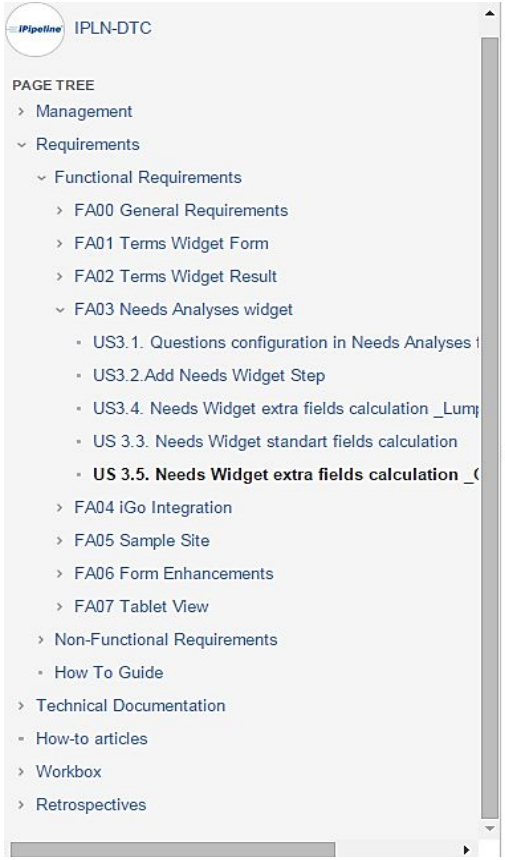
OUR PRODUCT provides very capable services at a moderate cost.

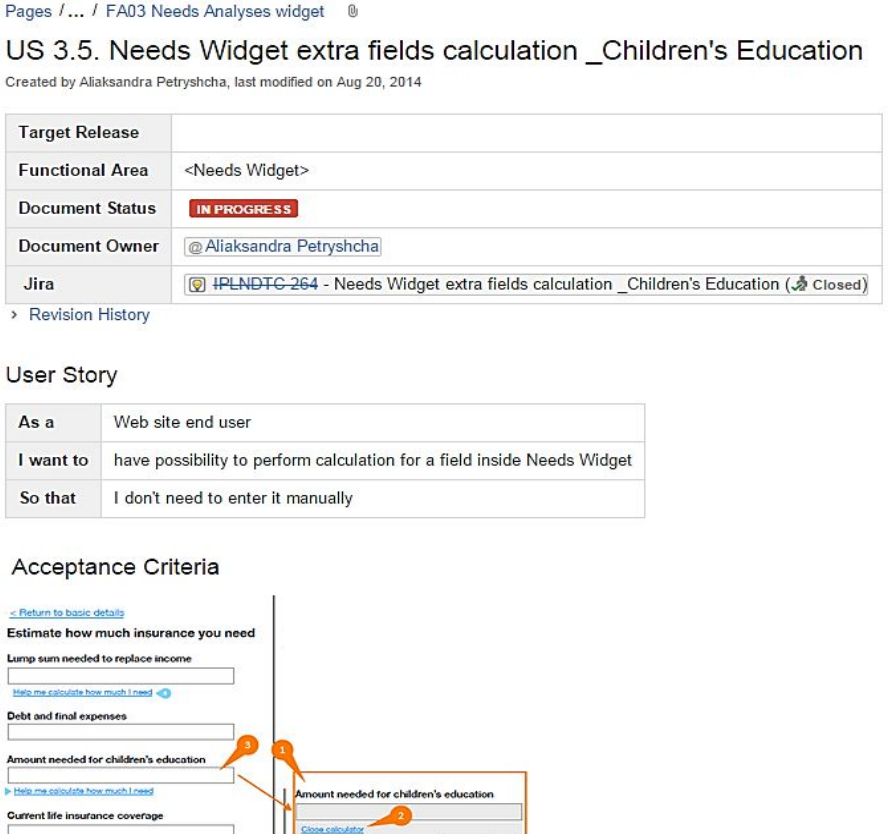
The basics of decomposition



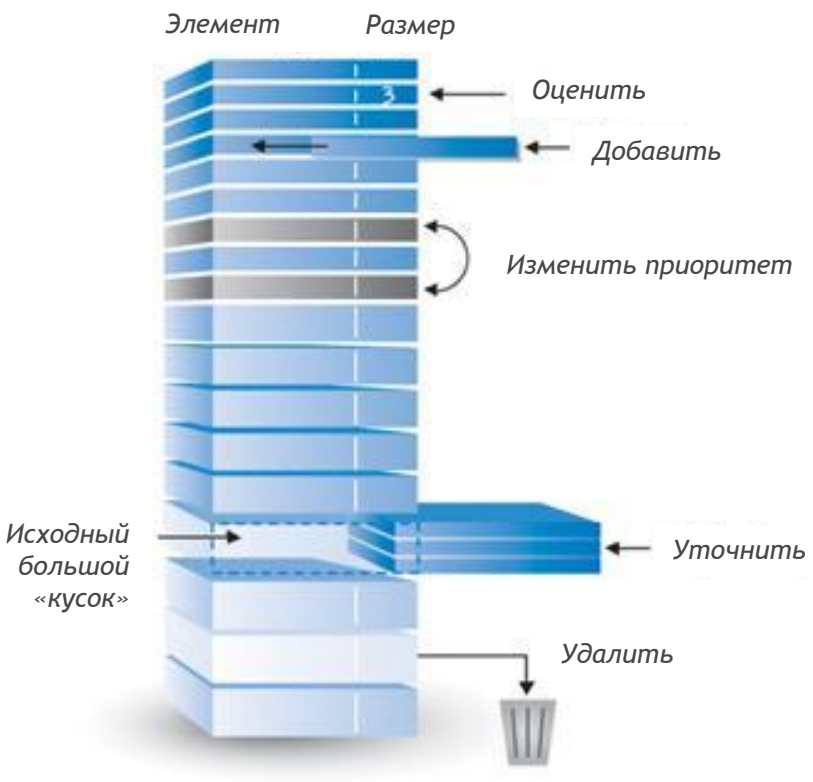
Результат декомпозиции. Пример

Example

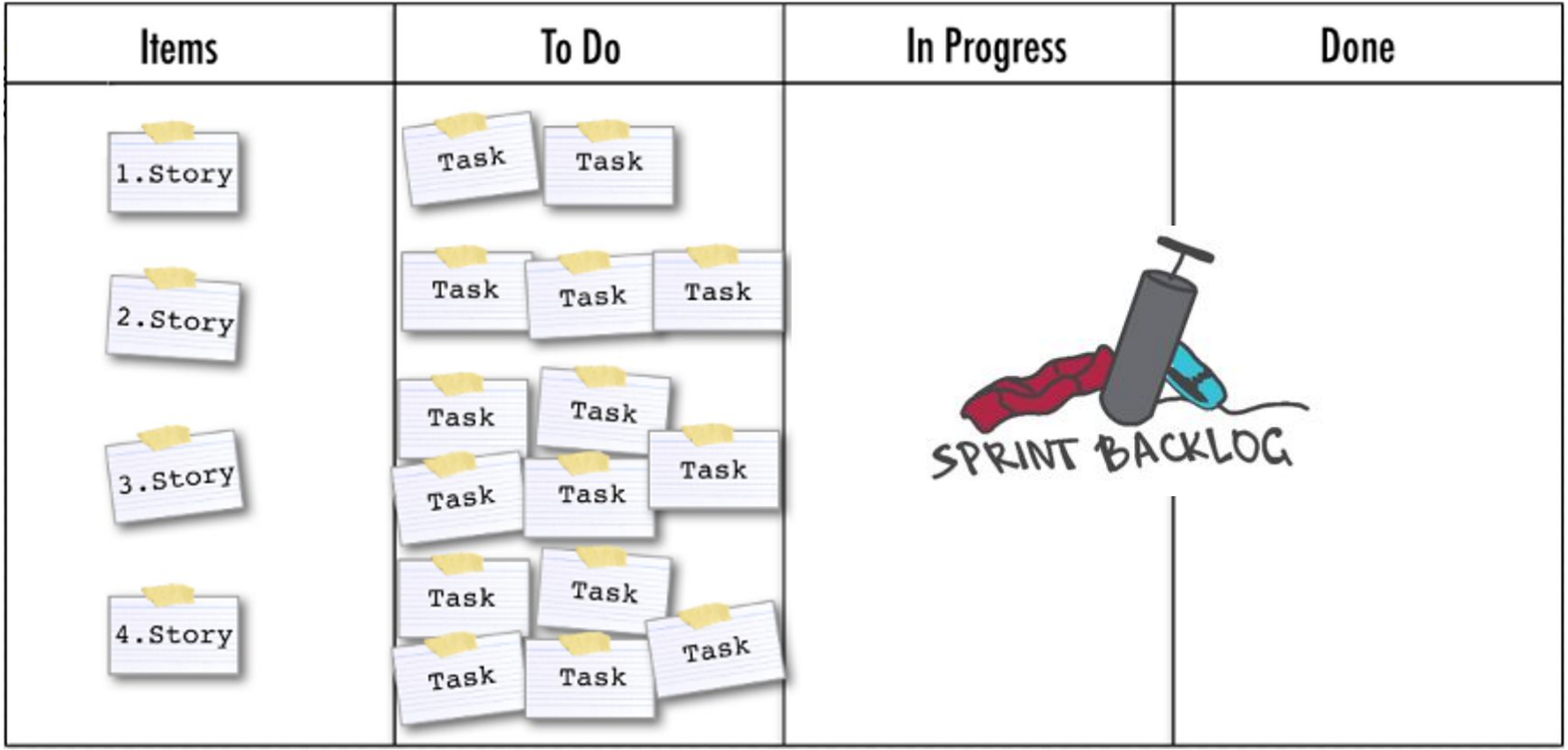

IPLN-DTC
PAGE TREE
Management
Requirements
Functional Requirements
FA00 General Requirements
FA01 Terms Widget Form
FA02 Terms Widget Result
FA03 Needs Analyses widget
US3.1. Questions configuration in Needs Analyses
US3.2.Add Needs Widget Step
US3.4. Needs Widget extra fields calculation _Lump
US 3.3. Needs Widget standart fields calculation
US 3.5. Needs Widget extra fields calculation _(
FA04 iGo Integration
FA05 Sample Site
FA06 Form Enhancements
FA07 Tablet View
Non-Functional Requirements
How To Guide
Technical Documentation
How-to articles
Workbox
Retrospectives


Pages / ... / FA03 Needs Analyses widget
US 3.5. Needs Widget extra fields calculation _Children's Education
Created by Aliaksandra Petryshcha, last modified on Aug 20, 2014
Target Release
Functional Area
<Needs Widget>
Document Status
IN PROGRESS
Document Owner
@Aliaksandra Petryshcha
Jira
IPLNDTC-264 - Needs Widget extra fields calculation _Children's Education (Closed)
Revision History
User Story
As a
Web site end user
I want to
have possibility to perform calculation for a field inside Needs Widget
So that
I don't need to enter it manually
Acceptance Criteria
< Return to basic details
Estimate how much insurance you need
Lump sum needed to replace income
Help me calculate how much I need
Debt and final expenses
Amount needed for children's education
Help me calculate how much I need
Current life insurance coverage
Amount needed for children's education
Close calculator

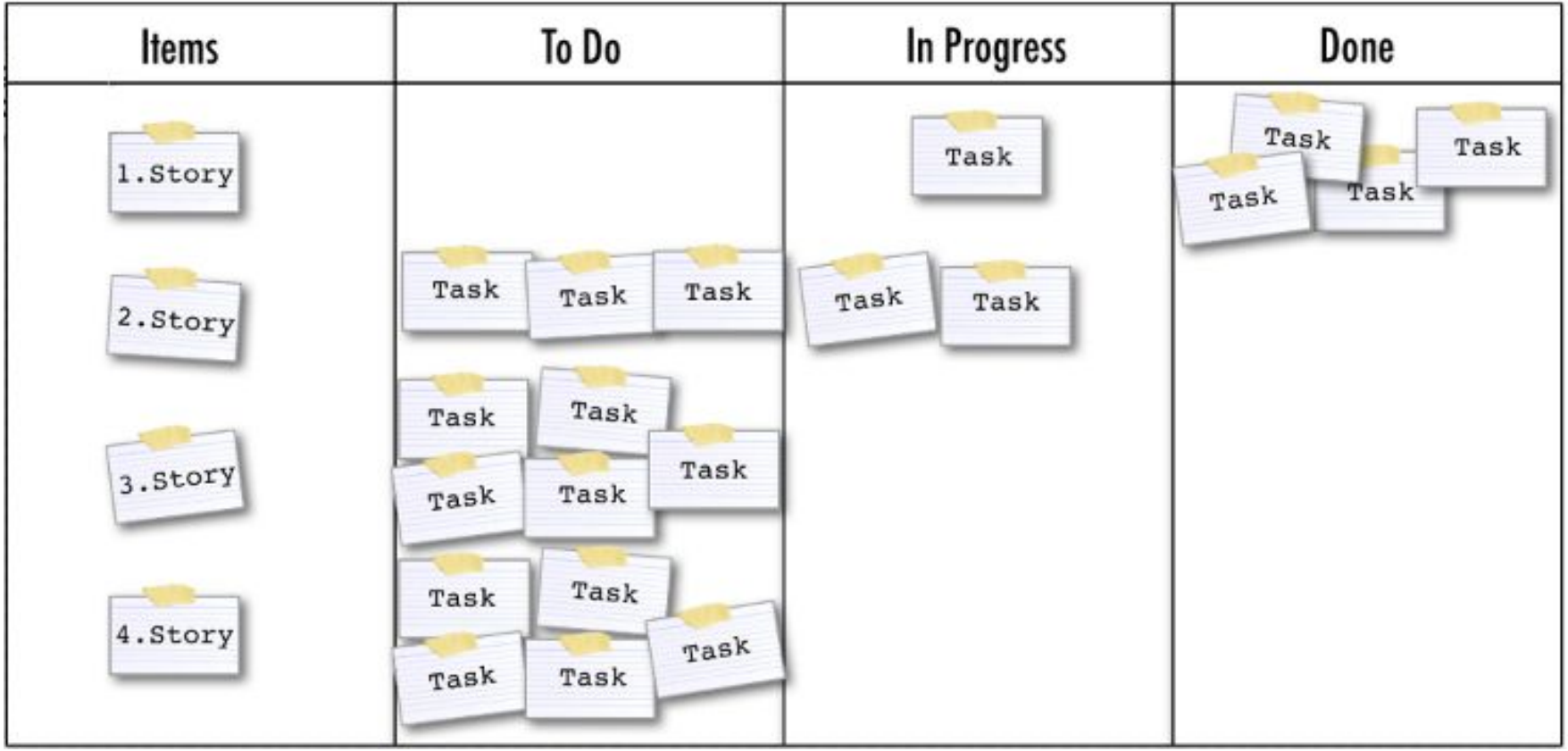
Product backlog



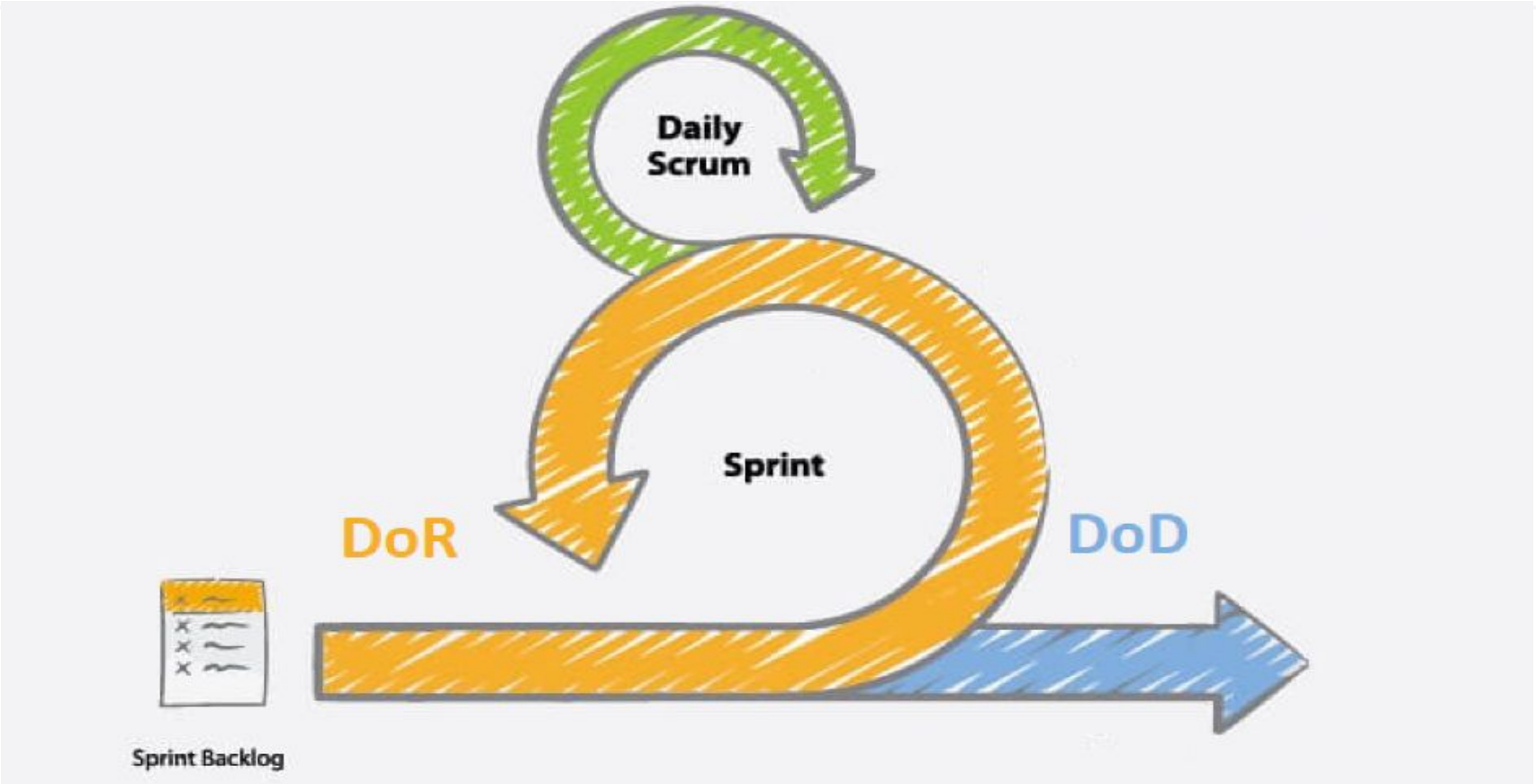
Sprint Backlog



Sprint lifecycle



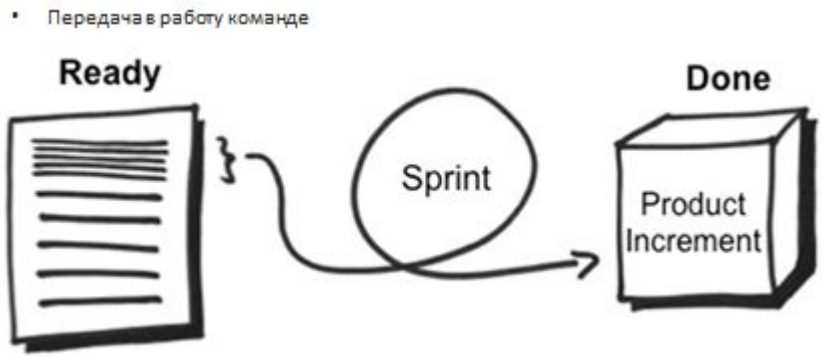
Sprint lifecycle



DoR. Пример

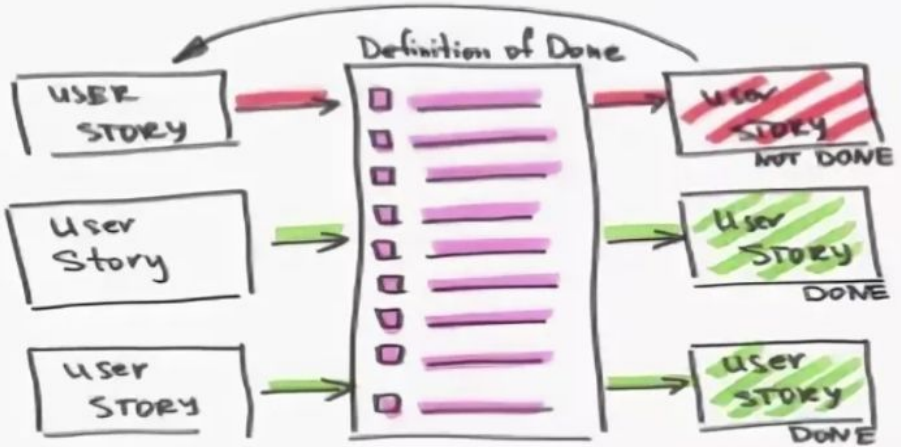
User Story

- User Story декомпозирована.
- Соответствует шаблону: Как, <роль/персонаж юзера>, я <что-то хочу получить>, <с такой-то целью>.
- Написаны ПО или согласованы с ПО критерии приемки.
- Написаны сценарии тестирования.
- У команды есть понимание, как реализовывать, и знания в предметной области.
    - Если нет, создаем связанный Spike.
- У команды достаточно технического опыта.
    - Если нет, создаем связанный Enabler на обучение.
    - Если нет, создаем связанную User Story (на часть, где компетенции команды недостаточно) на эксперта .
- User Story оценена/оцениваема.



Definition of done

Definition of done is a checklist of valuable activities required to produce complete software



Example

- All development has been completed
- Functionality has been tested by developer
- Unit tests have been completed
- New business functionality satisfies acceptance criteria in TFS*
- All features have been tested in IE8** and IE9**
- Regression tested in IE8** & IE9** test environment
- Code has been reviewed by another developer
- Story has been reviewed by product owner, and product owner has accepted all open issues, if any

! DoD per team

Definition of done is unique per team, although it might contain some elements which are required by the department, organisation or industry.

? Can DoD change?

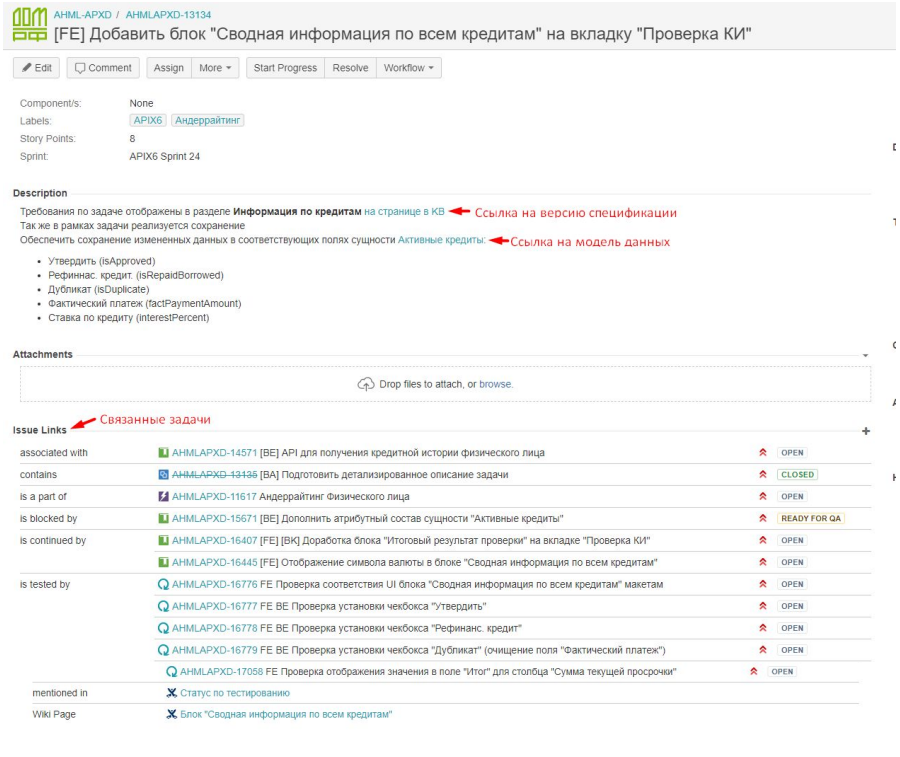
Definition of done may change over time as the team continues to build the product and learn from the process. Usually definition of done is reviewed by the whole team at one of the sprint events (i.e. sprint retrospective or sprint planning).

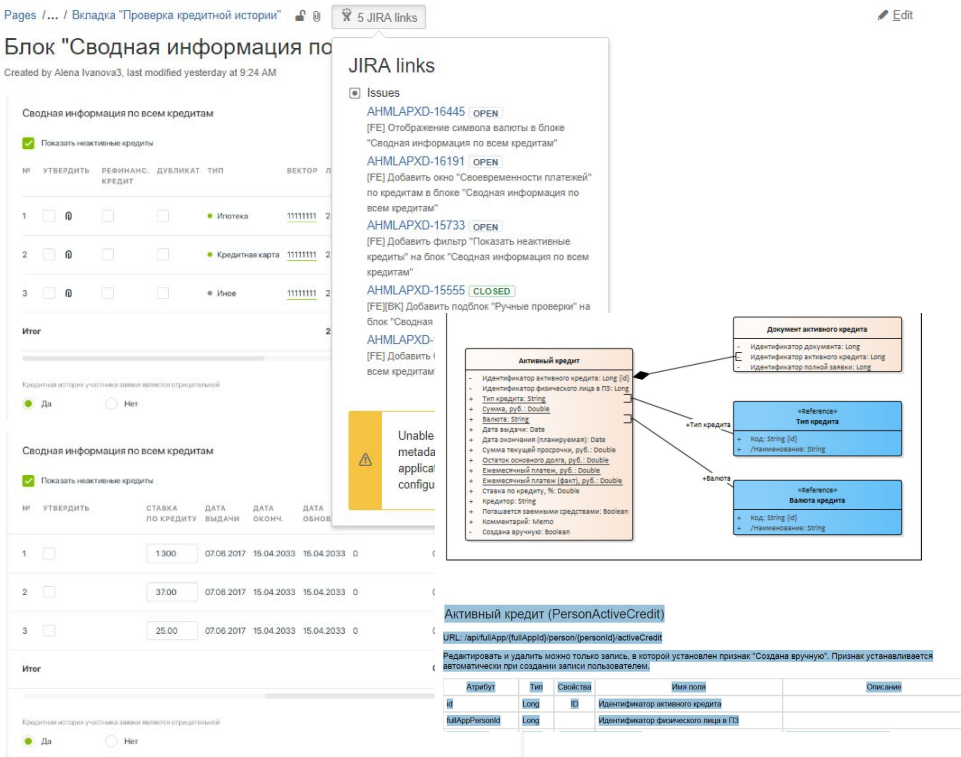
! Definition of done vs acceptance criteria

Definition of done is generic and applicable to all stories.

Acceptance criteria is specific and is different for different user stories.

Example


AHML-APXD / AHMLAPXD-13134
[FE] Добавить блок "Сводная информация по всем кредитам" на вкладку "Проверка КИ"
Edit
Comment
Assign
More
Start Progress
Resolve
Workflow
Component/s: None
Labels: APIX6 Андеррайтинг
Story Points: 8
Sprint: APIX6 Sprint 24
Description
Требования по задаче отображены в разделе Информация по кредитам на странице в КВ
Ссылка на версию спецификации
Так же в рамках задачи реализуется сохранение
Обеспечить сохранение измененных данных в соответствующих полях сущности Активные кредиты:
Ссылка на модель данных
Утвердить (isApproved)
Рефинанс. кредит. (isRepaidBorrowed)
Дубликат (isDuplicate)
Фактический платеж (factPaymentAmount)
Ставка по кредиту (interestPercent)
Attachments
Drop files to attach, or browse.
Issue Links
Связанные задачи
associated with AHMLAPXD-14571 [BE] API для получения кредитной истории физического лица OPEN
contains AHMLAPXD-13138 [BA] Подготовить детализированное описание задачи CLOSED
is a part of AHMLAPXD-11617 Андеррайтинг Физического лица OPEN
is blocked by AHMLAPXD-15671 [BE] Дополнить атрибутный состав сущности "Активные кредиты" READY FOR QA
is continued by AHMLAPXD-16407 [FE] [BK] Доработка блока "Итоговый результат проверки" на вкладке "Проверка КИ" OPEN
AHMLAPXD-16445 [FE] Отображение символа валюты в блоке "Сводная информация по всем кредитам" OPEN
is tested by AHMLAPXD-16776 FE Проверка соответствия UI блока "Сводная информация по всем кредитам" макетам OPEN
AHMLAPXD-16777 FE BE Проверка установки чекбокса "Утвердить" OPEN
AHMLAPXD-16778 FE BE Проверка установки чекбокса "Рефинанс. кредит" OPEN
AHMLAPXD-16779 FE BE Проверка установки чекбокса "Дубликат" (очищение поля "Фактический платеж") OPEN
AHMLAPXD-17058 FE Проверка отображения значения в поле "Итог" для столбца "Сумма текущей просрочки" OPEN
mentioned in Статус по тестированию
Wiki Page Блок "Сводная информация по всем кредитам"

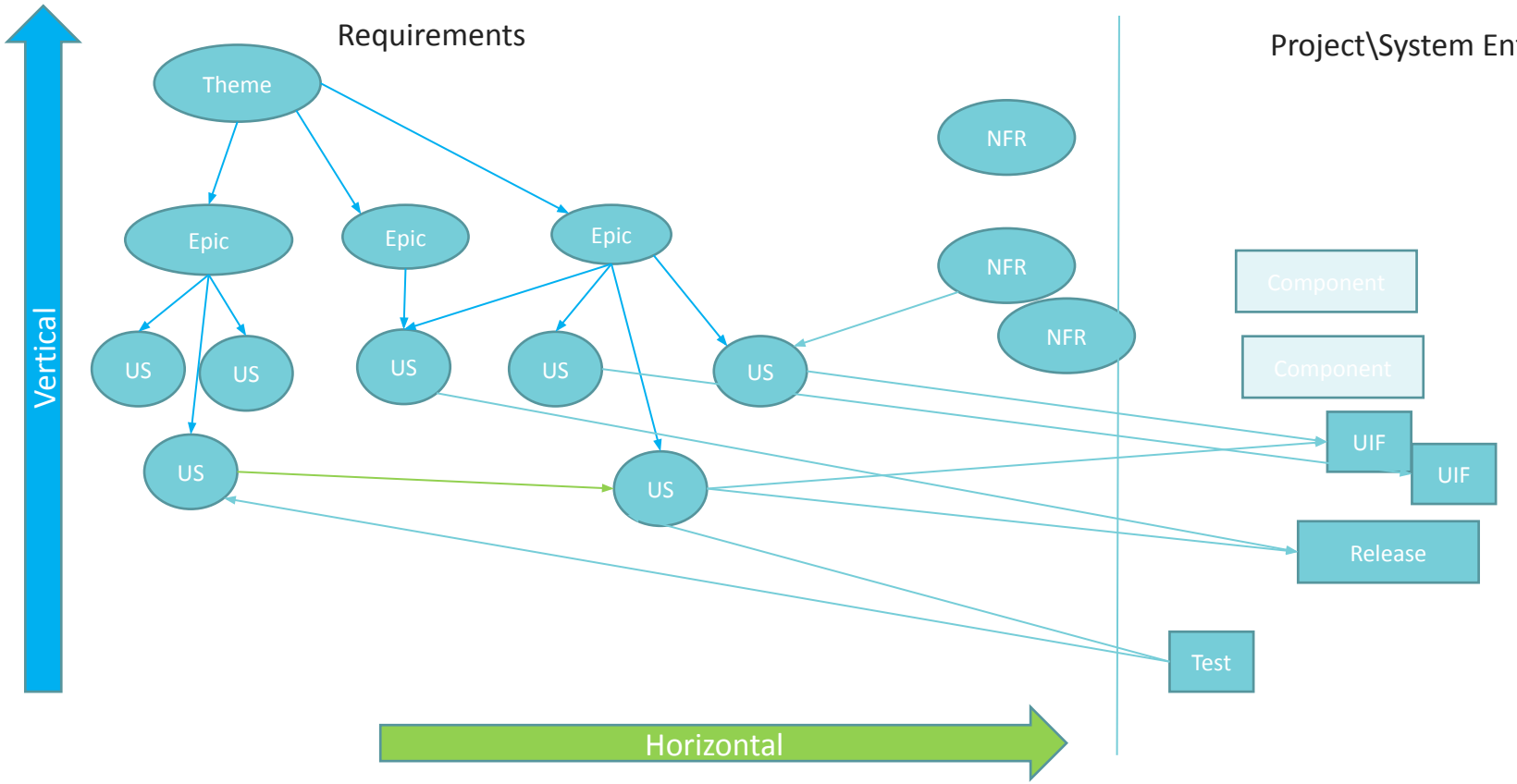

Pages / ... / Вкладка "Проверка кредитной истории"
5 JIRA links
Edit
Блок "Сводная информация по
Created by Alena Ivanova3, last modified yesterday at 9:24 AM
JIRA links
Issues
AHMLAPXD-16445 OPEN
[FE] Отображение символа валюты в блоке "Сводная информация по всем кредитам"
AHMLAPXD-16191 OPEN
[FE] Добавить окно "Своевременности платежей" по кредитам в блоке "Сводная информация по всем кредитам"
AHMLAPXD-15733 OPEN
[FE] Добавить фильтр "Показать неактивные кредиты" на блок "Сводная информация по всем кредитам"
AHMLAPXD-15555 CLOSED
[FE][BK] Добавить подблок "Ручные проверки" на блок "Сводная
AHMLAPXD-
[FE] Добавить
всем кредитам
Сводная информация по всем кредитам
Показать неактивные кредиты
Итог
Да
Нет
Активный кредит
Документ активного кредита
«Reference» Тип кредита
«Reference» Валюта кредита
Активный кредит (PersonActiveCredit)
URL: /api/fullApp/{fullAppId}/person/{personId}/activeCredit
Редактировать и удалить можно только запись, в которой установлен признак "Создана вручную". Признак устанавливается автоматически при создании записи пользователем.
Атрибут
Тип
Свойства
Имя поля
Описание
id
Long
ID
Идентификатор активного кредита
fullAppPersonId
Long
Идентификатор физического лица в ПЗ

Requirements Traceability. Definition

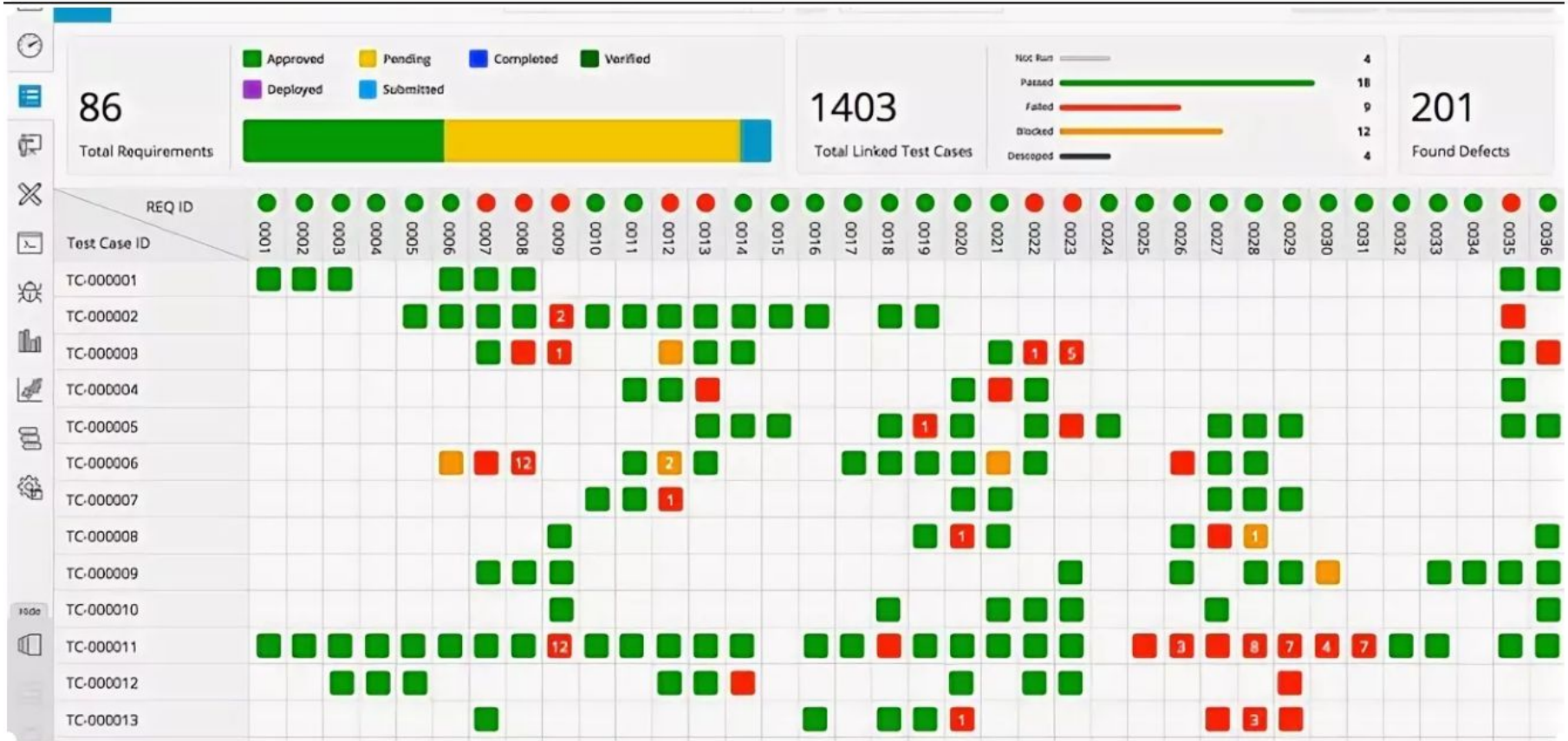
The PURPOSE of Trace Requirements is to ensure that requirements and designs at different levels are aligned to one another, and to manage the effects of change to one level on related requirements.

Per the **BABOK** v3.0.

Traceability Types



Requirements Traceability. Example



Контроль состояния требований

Наличие атрибутов

- Уникальный идентификатор
- Приоритет
- Статус
- Трудоемкость
- Дата создания требования;
- Номер его текущей версии;
- Автор требования;
- Ответственный за требование;
- Состояние требования;
- Происхождение или источник требования;
- Логическое обоснование требования;
- Используемый метод проверки или критерий тестирования приемлемости.