

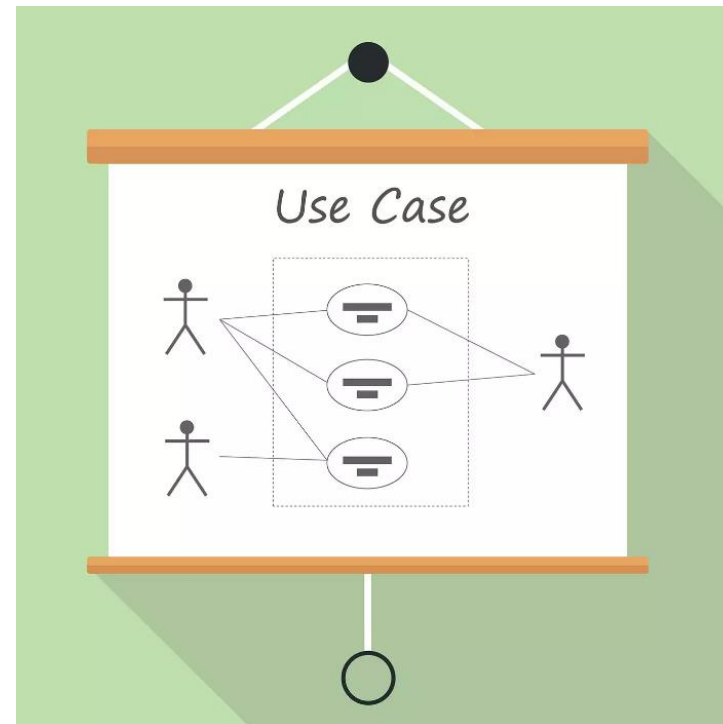


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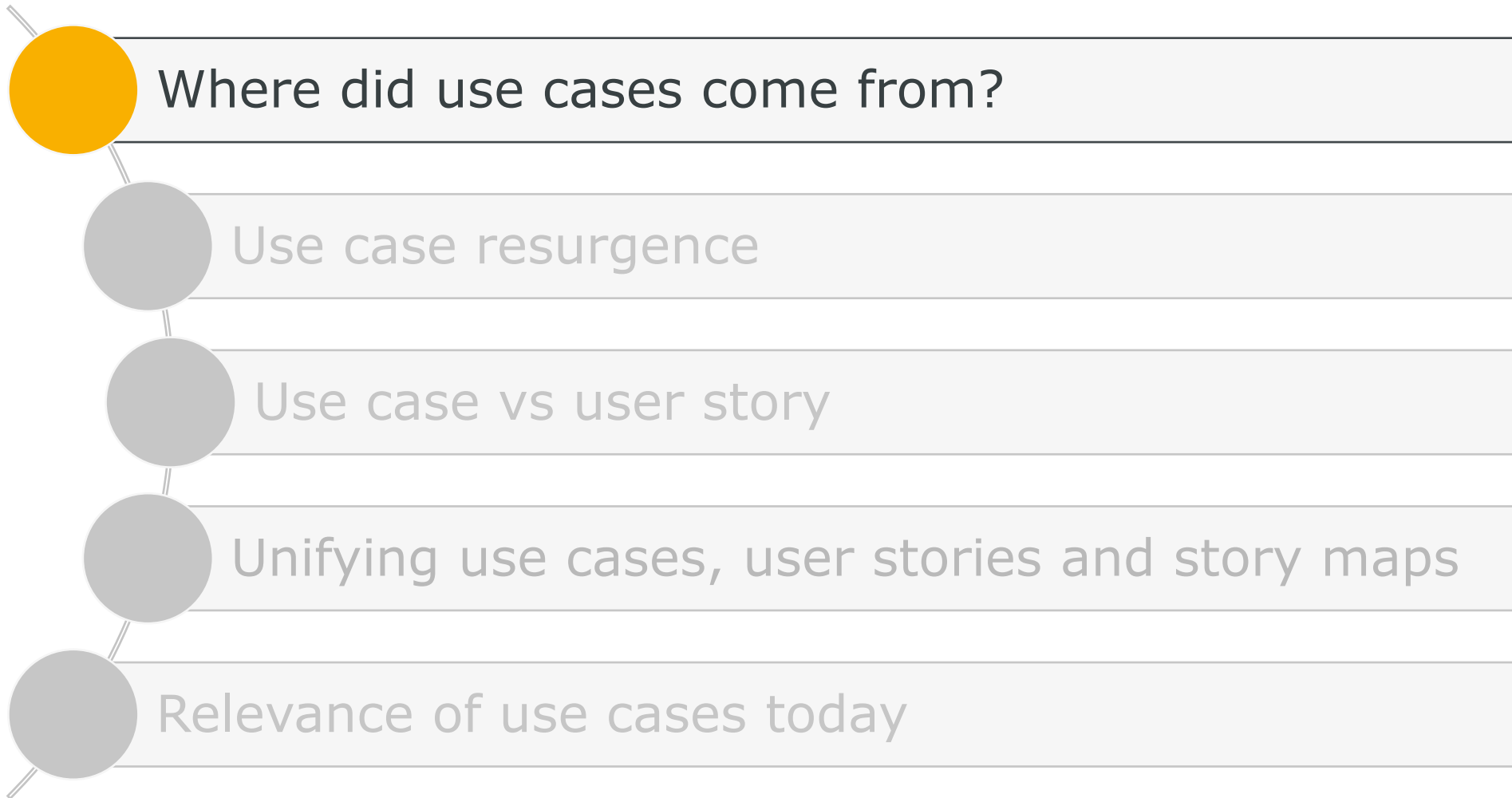
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So, you think you know use cases?



By Lyn Girvan,
CMC Partnership Consultancy Ltd

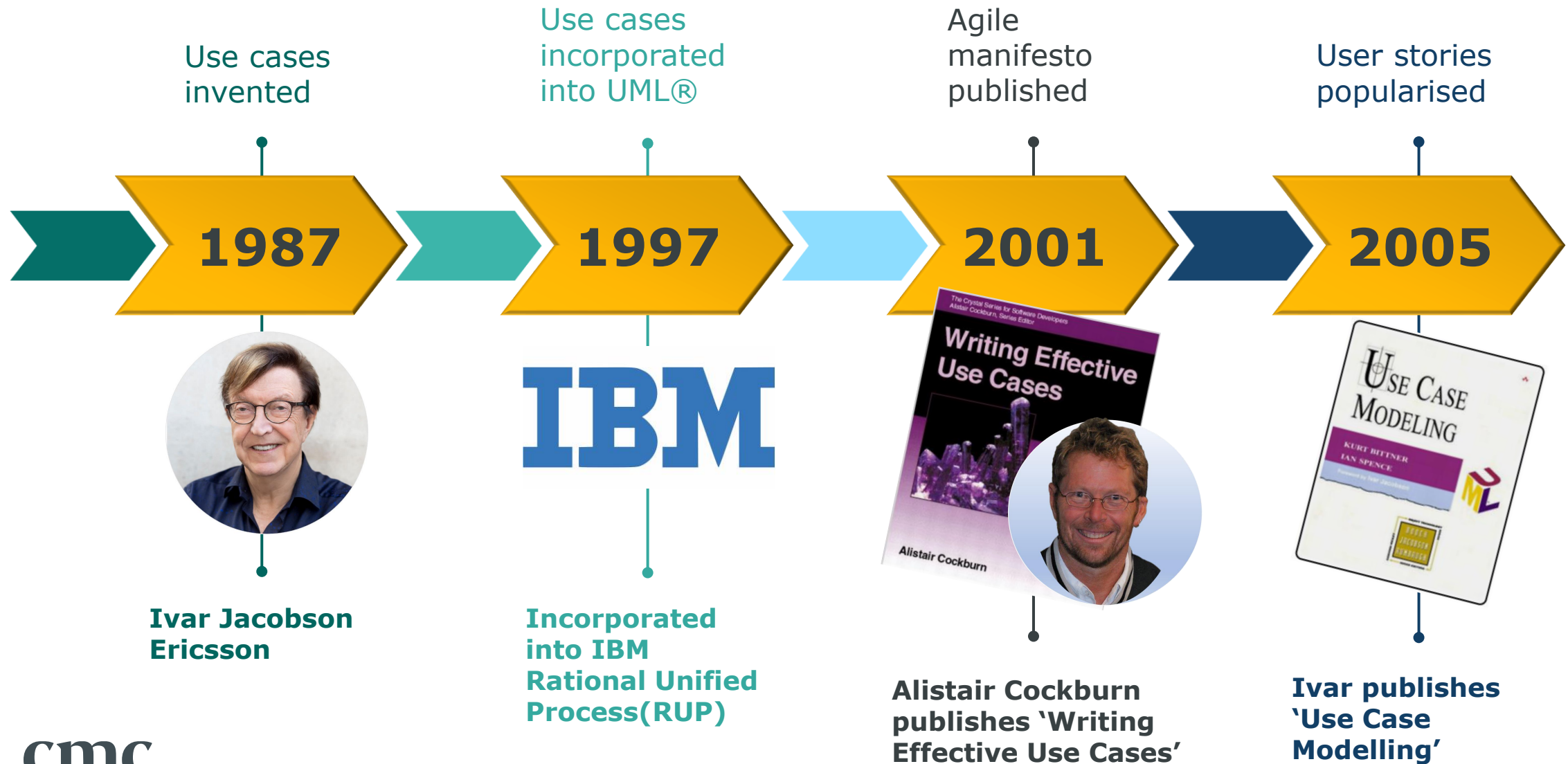


So, you think you know use cases?

How many of you use 'use cases' in your BA work?

How comfortable are you explaining what a use case is?

Use case history



Why use cases have fallen out of favour



Over complicated use within UML

- Use cases were full descriptions, models etc.



The Agile Manifesto:

- Documentation not needed
- No more big upfront requirements
- Use cases too complicated



Popularisation of user stories

- Backlogs contained user stories
- No need for broader context
- User stories are all that is needed

Use case myths



Use cases are the same as user stories



Use cases are models as in use case diagram



Use cases aren't detailed enough

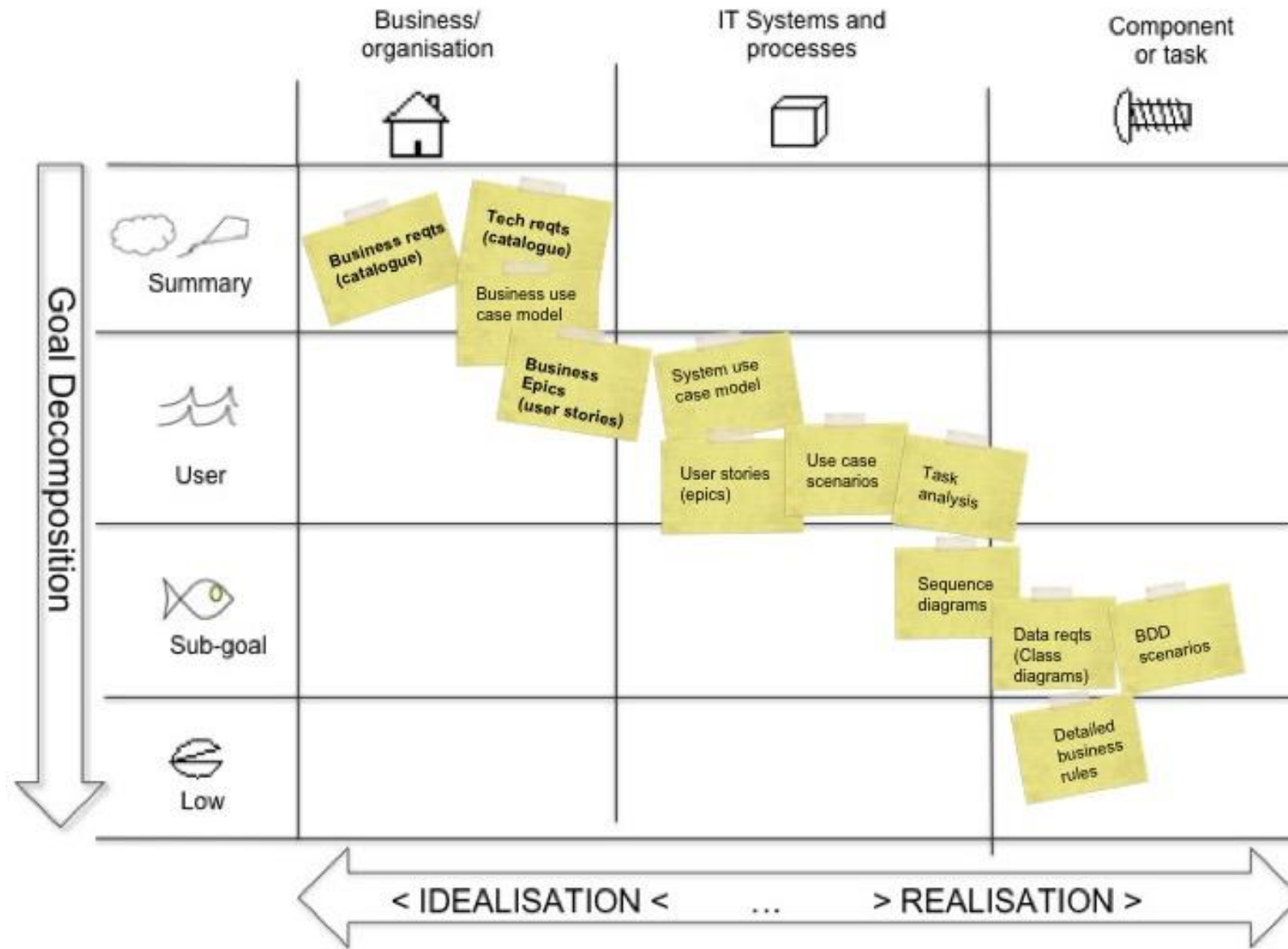


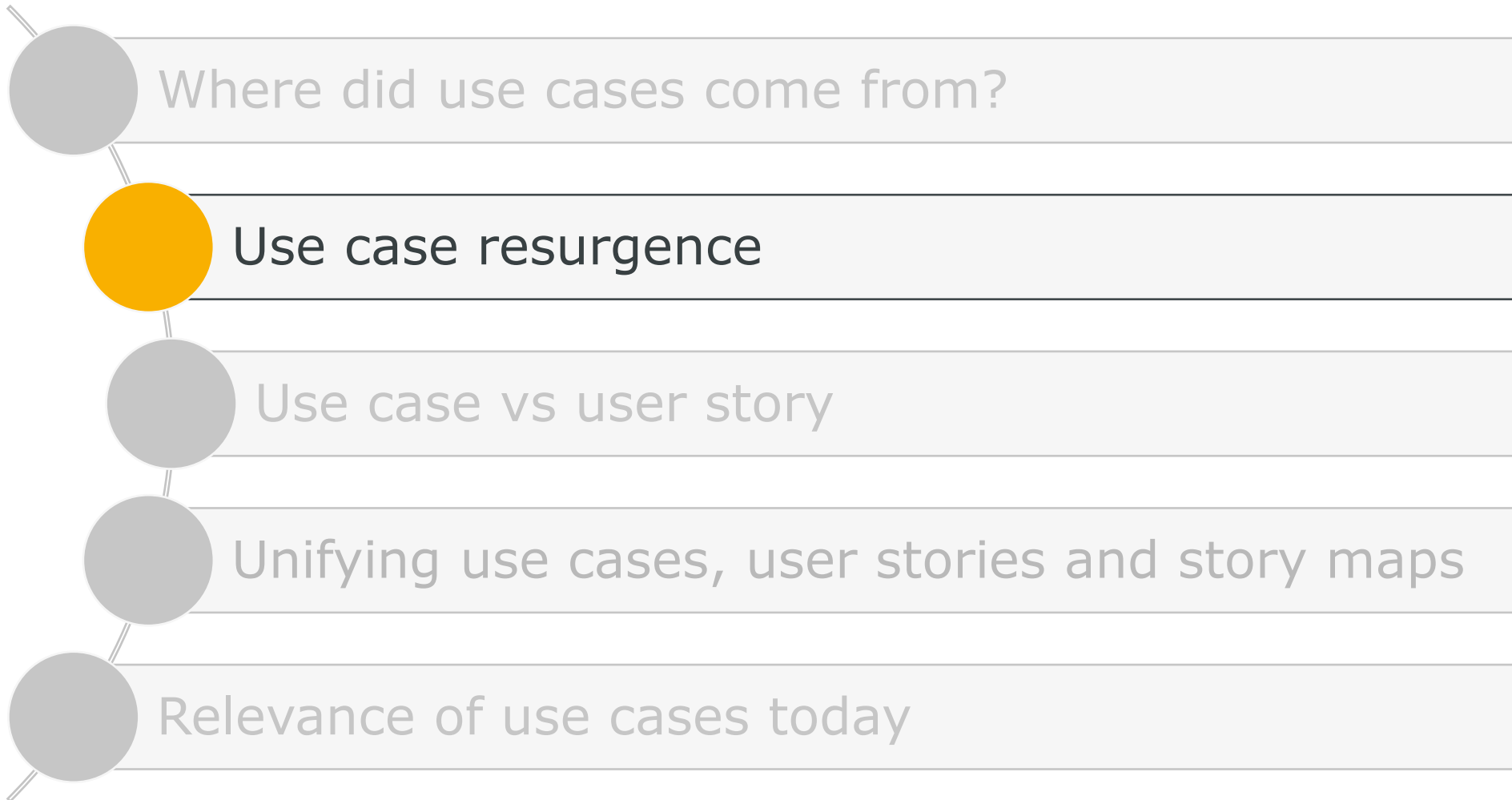
Use cases are workflow scenarios



Use cases aren't agile

Different techniques can be deployed at different levels





Use case foundation



Alistair Cockburn



Ivar Jacobson



2023 – ACMQueue article published by Ivar and Alistair

2024 – Use case foundation agreement published



“Use Cases are Essential”
ACM Queue

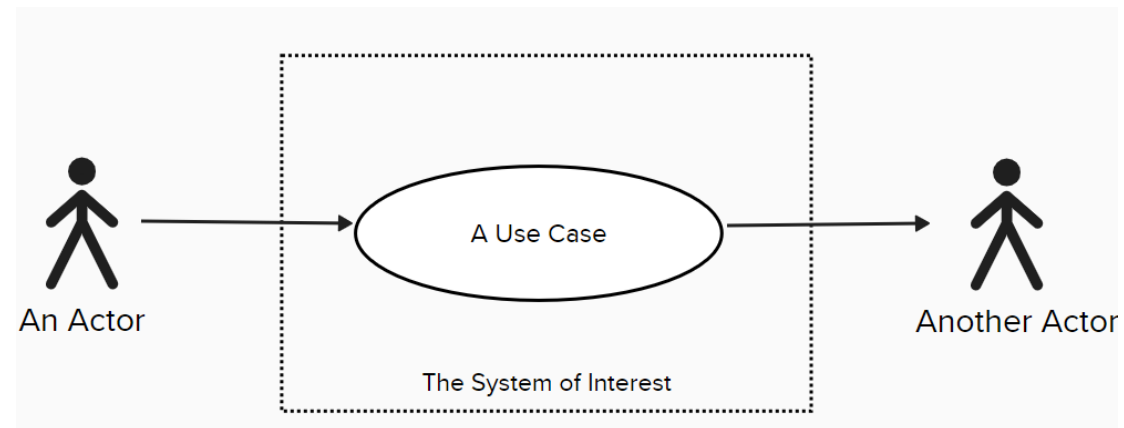
Use case foundation

The use case foundation definition:

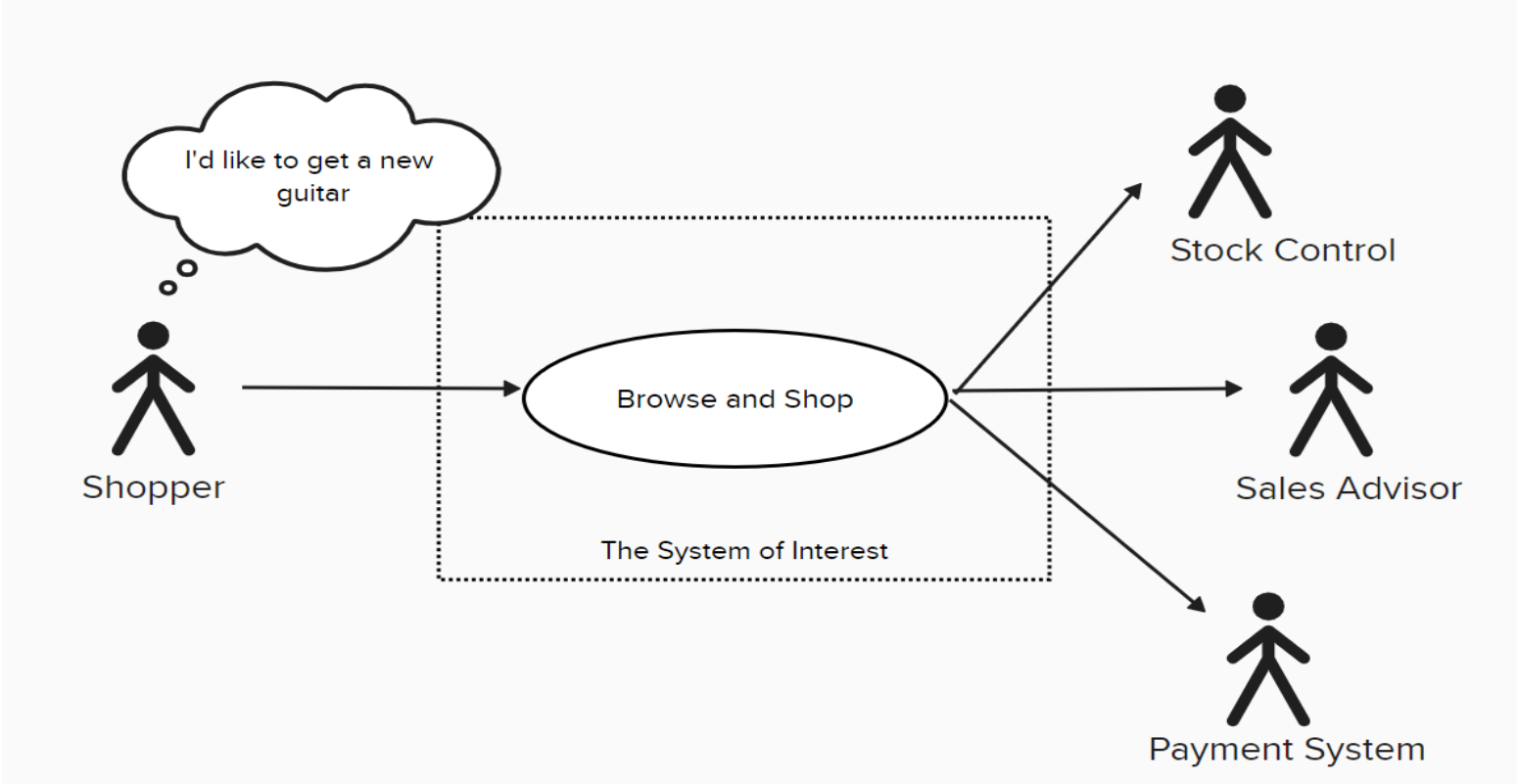
“A use case is all the ways of using a system to achieve a goal of a particular user”

Core concepts:

1. A system of interest
2. A primary actor with a goal
3. A flow of events (there will be several)
4. A use case to collect those flows



Use case foundation



Primary Actor

System of Interest

Supporting Actors

Simple use case example

Primary Actor : Shopper	Help the shopper to find the most suitable product to meet their needs and then help them purchase it.
Basic Flow The use case starts when a shopper indicates they would like to find a product. <ol style="list-style-type: none">1. Browse products2. Select products for purchase3. Provide payment details4. Provide delivery details5. Confirm purchase The use case ends.	Alternate Flows Alt1 – Keyword search for products Alt2 – No products selected Alt3 – Invalid payment details Alt4 – Review stored payment and delivery details Alt5 – Invalid delivery details Alt6 – Product out of stock Alt7 – No purchase confirmation Alt8 – Payment system unavailable Alt9 – stock control system unavailable Alt10 – Quit shopping with no purchase Alt11 – Shopper stops responding Alt12 – Shopper needs expert advice



Question time

How many of you use user stories, use cases or both?

Use case vs user story

User story

Tells one story

Name one scenario only

Can be about any topic

Can be fragments of any size, on any topic - they have no "shape"

Are requests for conversations, also useful tokens for tracking movement through your system

Decompose forever

Are intended to be discussed, developed and discarded

Use case

Provides the whole story

Collect scenarios

Only about behavior, not data, security, performance, UI

Have a shape, telling a story from beginning until completion, with variations

Can serve as requirements

Don't decompose below what the shape supports

Are intended to be read and shared across the organisation

Use case vs user story

Use case

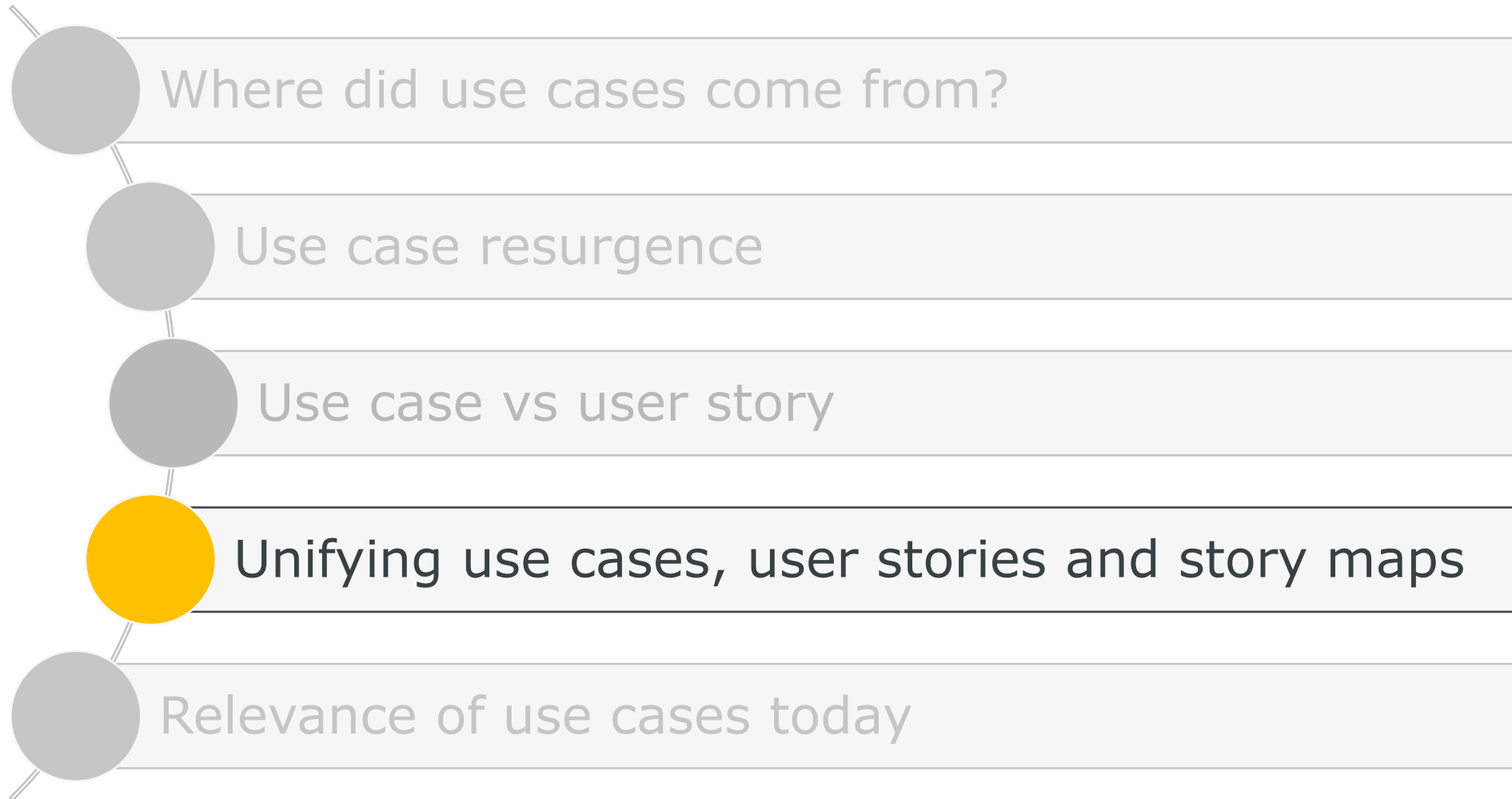
- Can be formal or informal
- Can be kept to document system
- Includes all the ways of using a system to achieve a user goal
- Contain flow if system interaction

Primary Actor : Shopper	Help the shopper to find the most suitable products based on their needs and then help them purchase them.
Basic Flow	Alternate Flows:
The use case starts when a shopper indicates they would like to find a product.	Alt1 – Keyword search
1. Browse Products	Alt2 – No products found
2. Select Products for Purchase	Alt3 – Invalid product
3. Provide Payment Details	Alt4 – Review product details
4. Provide Delivery Details	Alt5 – Invalid contact details
5. Confirm Purchase	Alt6 – Product not available
The Use Case ends.	Alt7 – No purchase completed
	Alt8 – Payment failed
	Alt9 – stock out
	Alt10 – Quit search
	Alt11 – Shopper logged out
	Alt12 – Shopper cancelled search



Formal
 User story
 As a [role], I want [feature], So that [benefit]

Instructions	5
Registrar	Priority
Following instructions to be sent to course delegates	
Booked course delegates have to attend the course	
Originator	Size
Sue Brown	13
Course registrar	

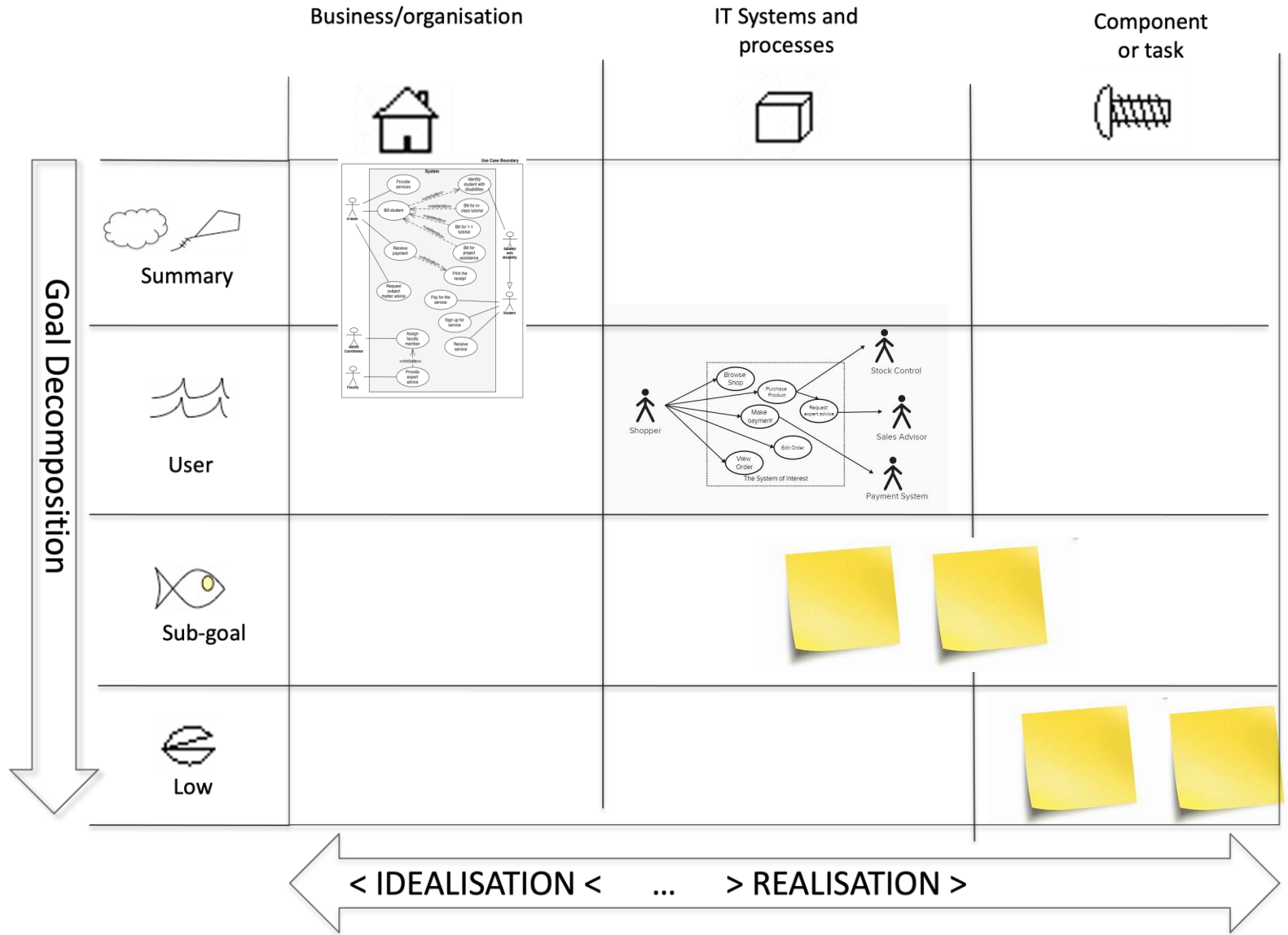


Unifying user stories, use cases, story maps



"Use Cases have structure and cease to be useful if at too low a level, whereas user stories can decompose forever" – Alistair Cockburn 2024

Level of understanding



A simple kite example

Primary Actor: All	Use case level: Kite	Track library usage
Main success scenario <ol style="list-style-type: none">1. Every morning the supervisor logs on to, and resets, the Library Tracker App2. Library worker logs on to the app and registers to app that a patron has entered or exited the library3. At the end of the day the guardian logs off the app BR1 – No more than 100 people allowed in library at any time		Alternate flows Alt1 - Supervisor forgets to reset app Alt2 - Library worker forgets to register patrons Alt3 - Notification to server fails Alt4 - More people leave than enter Alt4 - Battery/server fails Alt5 - Fire alarm goes off (crowd exit) Alt6 - Count exceeds max allowed (BR1)

A simple kite example

Primary Actor: All	Use case level: Kite/business level	Track library usage
<p>Main success scenario</p> <ol style="list-style-type: none">1. Every morning the supervisor logs on to, and resets, the Library Tracker App2. Library worker logs on to the app and registers to app that a patron has entered or exited the library3. At the end of the day the guardian logs off the app <p>BR1 – No more than 100 people allowed in library at any time</p>		<p>Alternate flows</p> <ul style="list-style-type: none">Alt1 - Supervisor forgets to reset appAlt2 - Library worker forgets to register patronsAlt3 - Notification to server failsAlt4 - More people leave than enterAlt4 - Battery/server failsAlt5 - Fire alarm goes off (crowd exit)Alt6 - Count exceeds max allowed (BR1)

Users

A map tells a story about a type of person doing something to reach a goal. Make sure to include them in your map along with a little information about them.

Try using lightweight persona sketches to describe your users.

User Tasks

User's tasks are short verb phrases that are the basic building block of a map. If I ask you what you did earlier today when using email, you'll likely respond with tasks like:

- Read an email message
- Respond to a message
- Mark a message as spam

Goal-Level

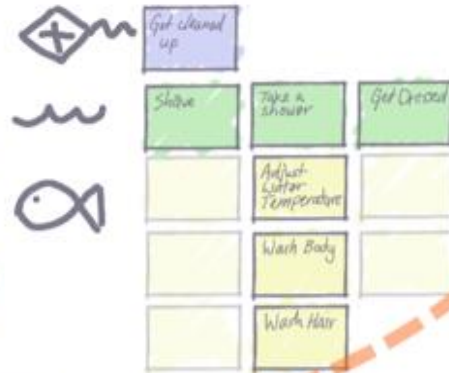
The actions that users take in order to reach their larger goals have a goal level themselves that's tied to user behavior.

Summary: lots of tasks done in support of a bigger goal.

Functional: I'd expect to complete this task before taking a break.

Sub-Functional: smaller things done in support of a bigger tasks.

As you read across tasks in the backbone, check to make sure that tasks are of a similar goal level.



Activities

Activities organize tasks done by similar people at similar times to reach a goal. For your email software activities might include:

- Going through my inbox
- Configuring my email client
- Organizing messages into folders

Backbone

Activities and tasks at a higher goal level give the story map its structure. The backbone is arranged in a narrative flow. Smaller sub-tasks, details and variations hang down to form the ribs connected to the backbone.

Release Slice

Use a tape line to identify slices of tasks that users might use your software for to reach their goals. The smallest number of tasks that allow your specific target users to reach their goal compose a viable product release.

Use release slices to identify small experiments, minimal viable product releases, or a "walking skeleton" version of your product.

Identify the target outcomes of your slice in a sticky note or card to the left of the slice.

Narrative Flow

The left to right axis in a story map is organized in the order you'd tell the story about your user to someone else.

Of course any specific user might choose to do different things in a different order. Use conversation to explain the details and variations.

If you're looking for the precision of a workflow model, flow chart, or UML model, then a story map isn't your best choice.

A story map will take lots of conversation to use effectively. But then that's the purpose of stories.

Details, Details...

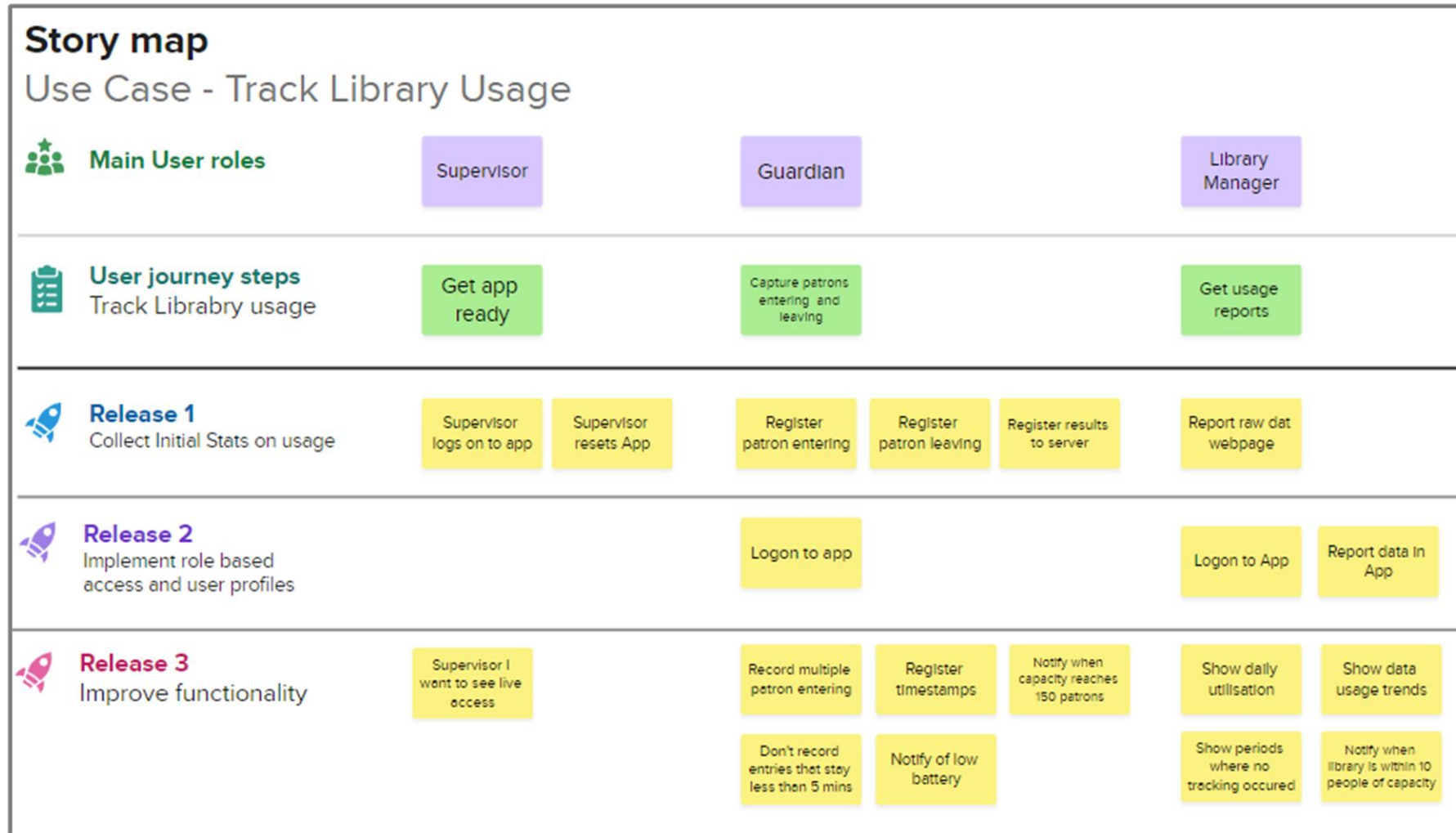
Break down high goal level tasks into:

- Sub-tasks
- Alternative tasks
- Exceptions
- Details

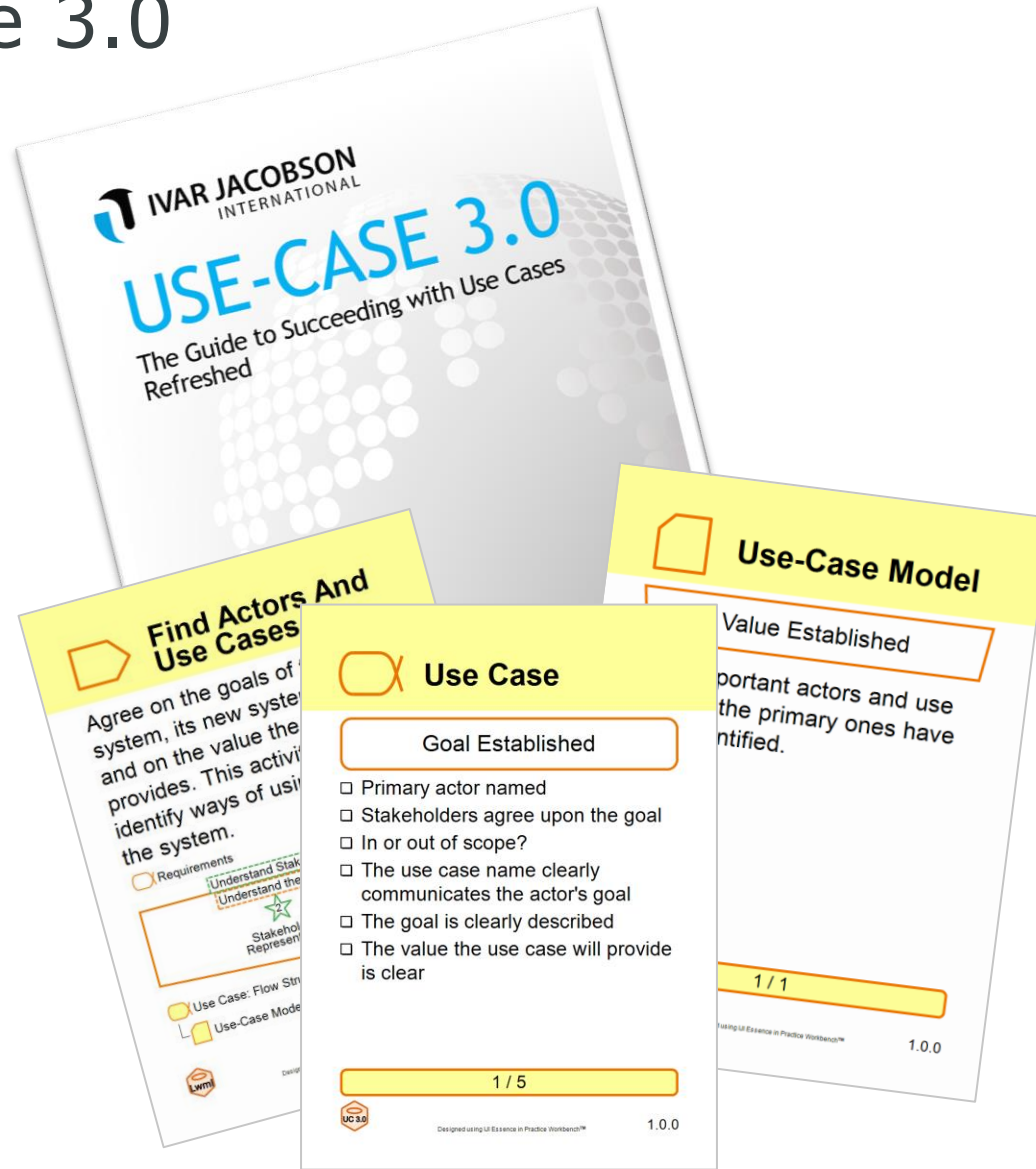
Down in the details of the map, it's OK to include details about what UI might look like or what the system might do in the background.

User Tasks make great story titles!
Write short verb phrases on cards or stickies. Use them later as your story titles. If you use the story template to write descriptions, the task fits nicely right after "I want to," the activity fits nicely right after "so that..."

Example story map from use case



Use case 3.0

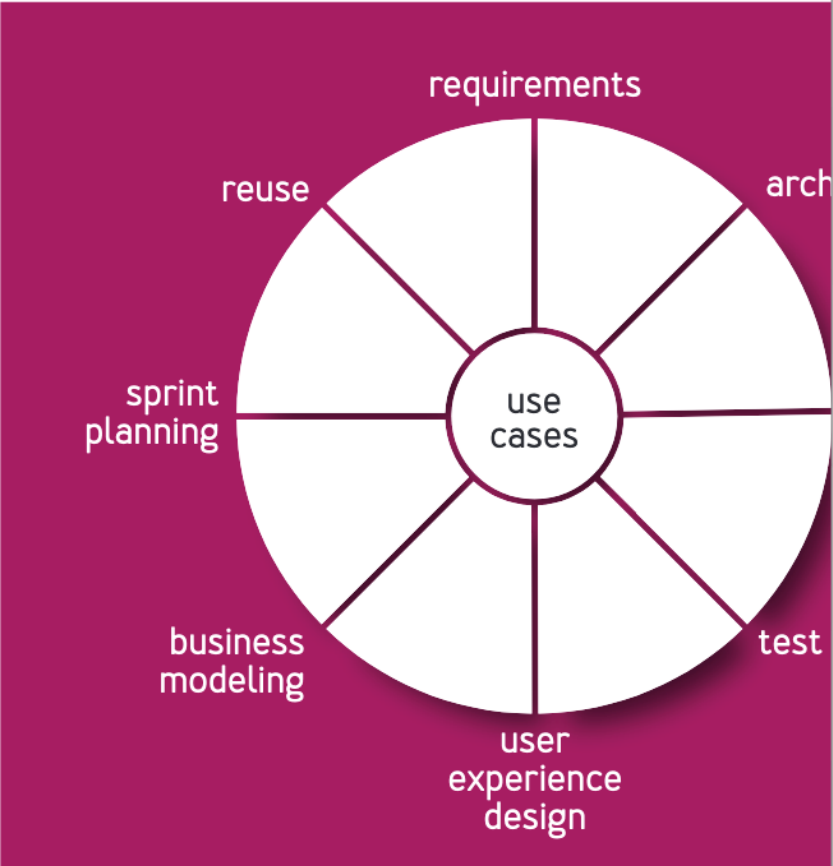


Use case slices





Relevance of use cases today



Use-Case 2.0 The Hub of Software Development, I

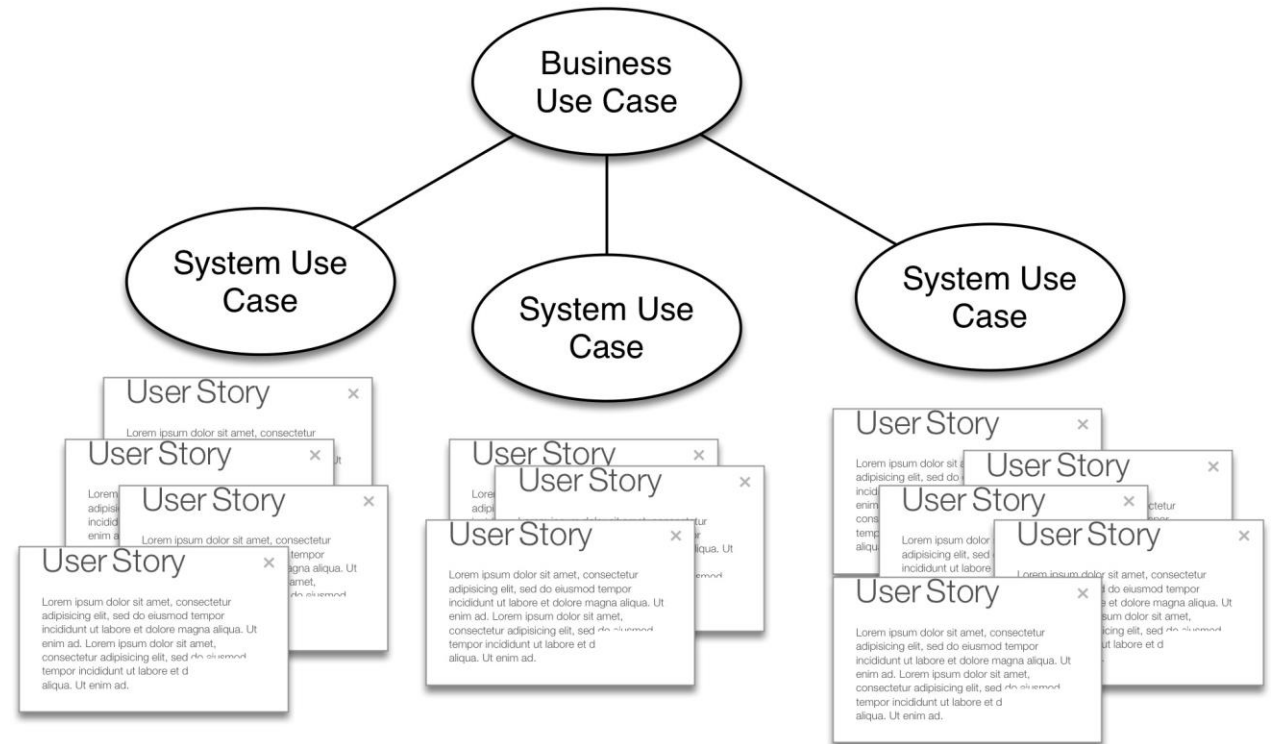


Use cases provide context to requirements

Confetti



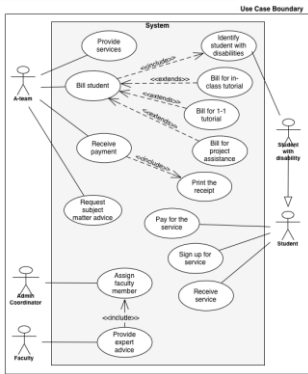
Structure



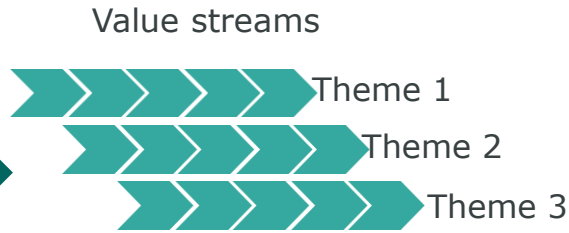
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Relevance of use cases today

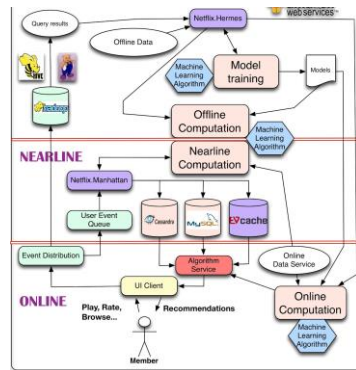
Business use case model



Represented as

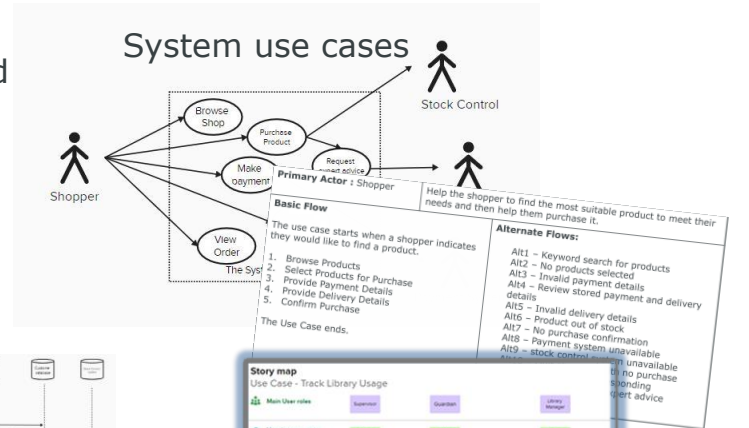


System architecture



Provides technical architecture/enablers

Functionality described through



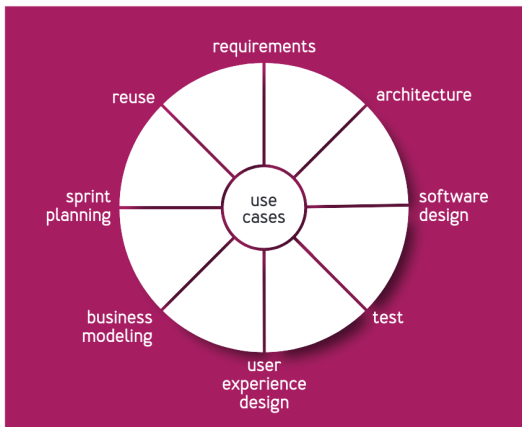
UI informed through



UX/CX informs architecture

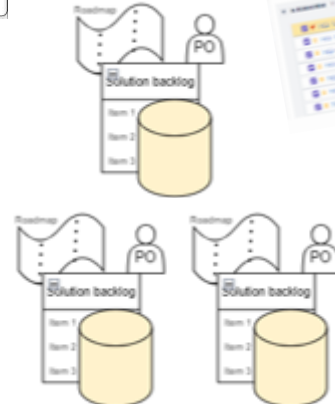


Informs test scenarios



Defines backlog work items

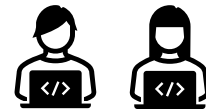
Development teams



User testing



Working software



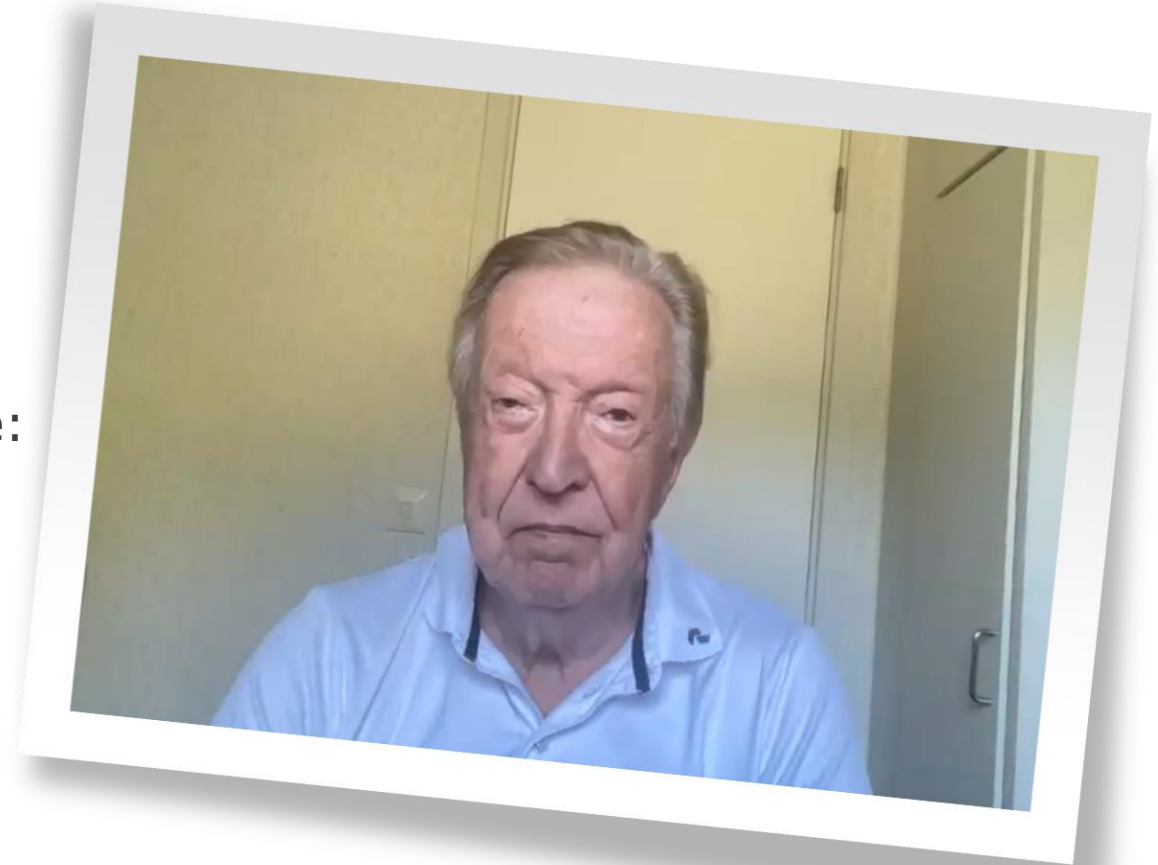
Relevance of use cases today

Use Cases still used today to describe:

- Internet of things
- Self-driving cars
- Big data

Use cases should be the best friend of BA because:

- Translate product functionality into a language developers and testers understand
- Integrate with other techniques
- Fill a hole not filled by other practices
- Help understand the big picture



So, you think you know use cases?

How likely are you to use 'use cases' in your BA work now?

Get in touch...



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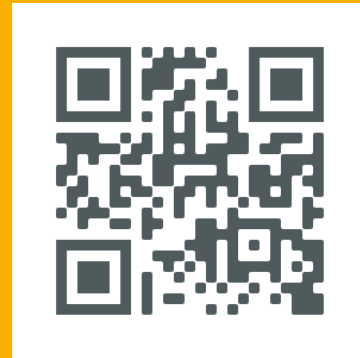


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- Use Cases are Essential – with Alistair Cockburn - Essence for Agility MeetUp: <https://www.youtube.com/watch?v=QqKcuXB8PDo>
- Use Cases or User Stories...or both with Mike Cohn - Essence for Agility MeetUp: https://www.youtube.com/watch?v=lwVo8G_5li4
- Use Cases or Story Maps....or both? – with Jeff Patton - Essence for Agility MeetUp: <https://www.youtube.com/watch?v=Y2Rs9rGVwGY&t=8s>