Agile Project Management
PMI-ACP
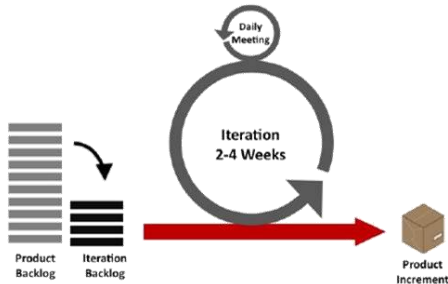# التدريب على مهارات
ممارس منهجية أجايل معتمد

Agile Project Management
PMI-ACP
التدريب على مهارات
ممارس منهجية أجايل معتمد

Positive Interaction
التفاعل الايجابي
KSA, Canada, Egypt, UAE

**Agile Project Management
and PMI-ACP Exam Preparation**

What is the problem of Waterfall model?

Project Fails

- Various public studies (Forrester, Gartner, World Bank, Standish Group) recently reported that between 81% to 84% of all IT project fail.
- 62% to 75% from other non-IT project fail

Course Objectives

By the end of this program, participants will be able to:
1. Learn the values, principles, and practices of Agile project delivery.
2. Form an Agile team and practice Agile leadership.
3. Deliver a business manifesto using Agile methodology.
4. Practice Agile methodologies in their work.
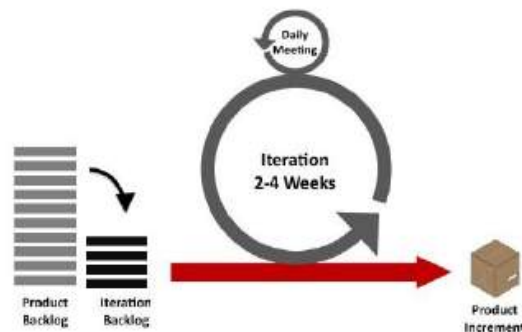5. Explore advanced topics in Agile methodology.

Training Models

- Model 01 Agile Project Delivery
- Model 02 Agile Team and Leadership
- Model 03 Agile Manifesto
- Model 04 Agile Practices
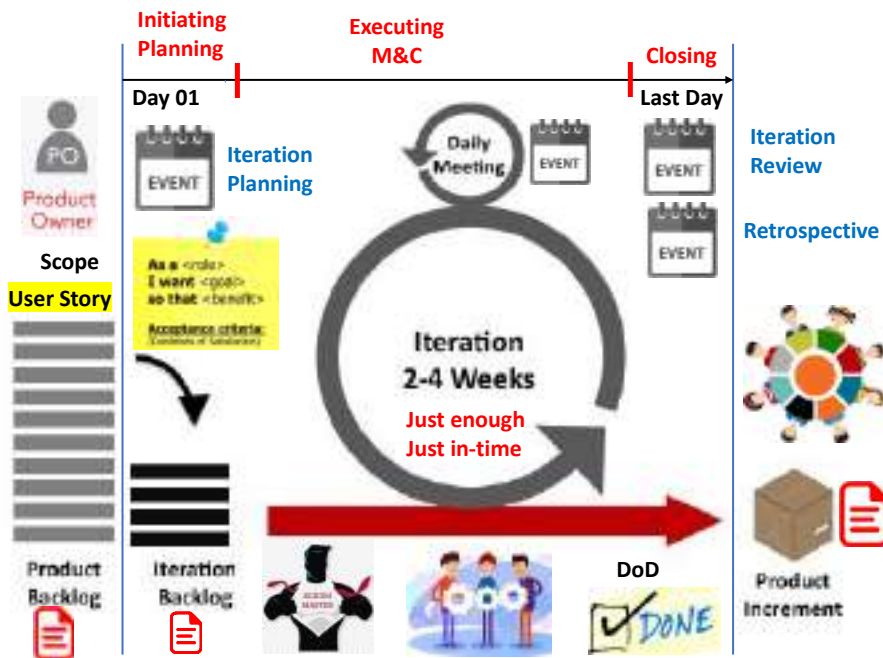- Model 05 Agile Advanced Topics

Model 01 Agile Basics
(Project Delivery)

Adaptive (Agile methods)

Events	Atifacts	Agile Team	
Iteration Planning	Product Backlog	Product Owner	
Standup Meeting	Iteration Backlog	SCRUM Master (Agile Coach)	
Iteration Review	Increment	Development Team	
Retrospective			

Cycles and Timeboxes

- Timeboxes allow for better telemetry over time
- Timeboxes create a sense of urgency
- Cycling the project through similar timeboxes provides progress measurements from one timebox to the next
- Teams gain more predictable measurements that can communicate expectations of cycle times, throughput, and velocity
- Organize work into release cycles and working time blocks

Project Delivery Stages

- Pre-project
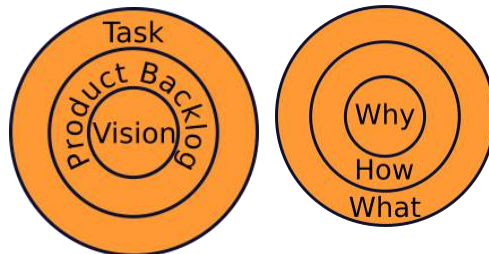- Delivery (incremental delivery)
- Post-project

Pre-project

1. Product vision
2. Stakeholders
3. User story and acceptance criteria
4. Innovation games
5. Story map (Product roadmap / product strategy)
6. Release planning

Product / Project Vision

- From Product Vision to Task (Why-How-What)
- What you are doing
- How you are doing it
- Why you are doing it

Vision statement

For *(target customer)* _____

Who *(statement of need or opportunity)* _____

The *(product name)* _____ **is a** *(product category)* _____

That *(key benefit, reason to buy)* _____

Unlike *(primary competitive alternative)* _____

Our product *(statement of primary differentiation)* _____

Elevator Statement

- **For** the Executive and Business Management Team
- **Who** needs to improve the timeliness and quality of decisions
- **The** Online BI Portal application project Will provide tools and reports for information-based decisions for all management levels
- **Unlike** our current reporting portal
- **Our new solution** will provide easy ad-hoc, drill down and on demand reporting of important indicators

The Elevator Pitch

- For [construction managers]
- who [need to track what type of work is being done on the construction site],
- the [CSWP*]
- is a [safety work permit system],
- that [creates, tracks, and audits safety work permits].
- Unlike [the current paper-based system]
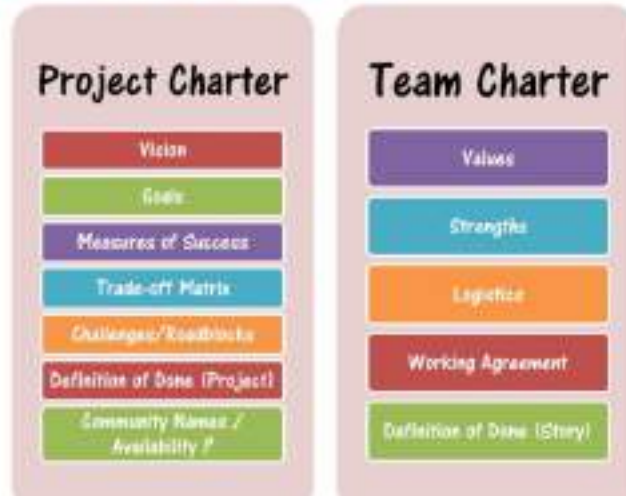- our product [is web based and can be accessed any time from anywhere].

*CSWP: Construction Safety Work Permit

Business Case: Three-Sentence Project Skinny

1. Who will do what for whom?	\<Team Name \> will \<build, design, develop, deploy, etc.\> a \<name of the project deliverable\> for \<name of customer organization for whom the deliverable is being created\>.
2. What will denote that the project is considered completed?	This project will be considered finished when the following has been completed: \<Task\> \<Task\> \<Task\>
3. Why are we doing this?	This project supports the \<name of organization's\> objective(s) to: \<Objective\> \<Objective\> \<Objective\>

What's in a Charter

Project Charter	Team Charter
Vision	Values
Goals	Strengths
Measures of Success	Logistics
Trade-off Matrix	Working Agreement
Challenges/Roadblocks	Definition of Done (Story)
Definition of Done (Project)	
Community Names / Availability ?	

Stakeholder

- Personas (quick guides or reminders of the key stakeholders on the project and their interest)
- Wireframe models (popular way of creating a quick mock-up of the product)

Personas

- Avatars (fictional character used to represent a specific user type designed to make the user real
- Typicaly include (behavior patterns, goals, skills, attitudes, motivation)
- Maybe role, profile, real user, composite or multiple users

Persona

- Name
- Main characteristics
- His goals
- What he likes
- What he dislikes

Meet The Superman	
Main Characteristics	**His Goals**
What he Likes	**What he Dislikes**

Sunny

Strong Influencer	Delivery on time
Visionary leader	Quality
Customer Experience	Slippage on time line
Look & feel	complicated process

Stakeholder Analysis

- Get the right stakeholders
- Cement stakeholder involvement
- Actively manage stakeholder interest
- Frequently discuss "done" looks like
- Show progress capabilities

Personas   Flowcharts   Scenarios

System maps   Process flows   Concept designs

Storyboards   Paper prototypes   Your own
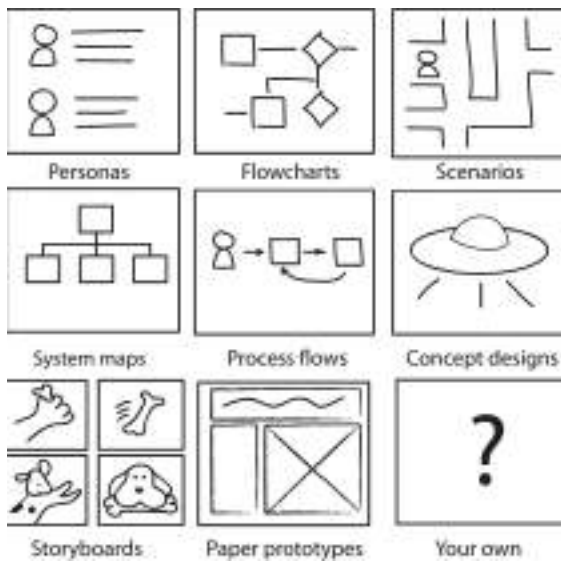
Stakeholder
Understanding

Wireframe Models

User Story

- As a <role>   who?
- I want   <functionality>   what?
- so that   <business benefit>)   why?

User Story

As a <role>
I want <goal>
so that <benefit>

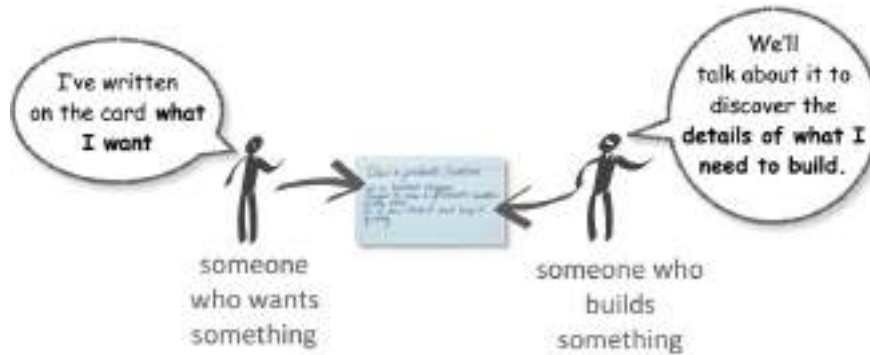**Acceptance criteria:**
(Conditions of Satisfaction)
...
...

As an Account Manager
I want a sales report of my account to be sent to my inbox daily
So that I can monitor the sales progress of my customer portfolio

Acceptance criteria:
1. The report is sent daily to my inbox
2. The report contains the following sales details: …
3. The report is in csv format.

Facilitate a Conversation

User Story

- *As a* customer,
  I want to withdraw cash from an ATM
  So that I don't have to wait in line at the bank

- *As a* traveler,
  I want to book my trip online
  So that I can mange my vacation anytime

User Story

- ***As a*** bank officer,
  I want to list all credit card transaction
  So that I can manage the bank commitments

- ***As a*** university student,
  I want to attend the course online
  So that I don't miss the course

User Story

- ***As a*** recruiter,
  I want to post new job
  So that applicants can find those jobs via search

- ***As a*** job seeker,
  I want to limit who can see my CV
  So that I can protect my privacy

User Story

- A brief simple requirement statement from the perspective of the user
- Documented, visible, having acceptance criteria

User Stories

- Stories get their name from how we use them, not how we write them
- The best documents use words and pictures to help recall our conversations, they don't replace conversations
- Stories aren't a different way to write requirements, they're a different way to work

Story-Writing Workshop

- Anyone can write user stories
- User story will go to the product backlog
- Product owner own the product backlog

User Story 3 Cs

Card

Conversation

Confirmation
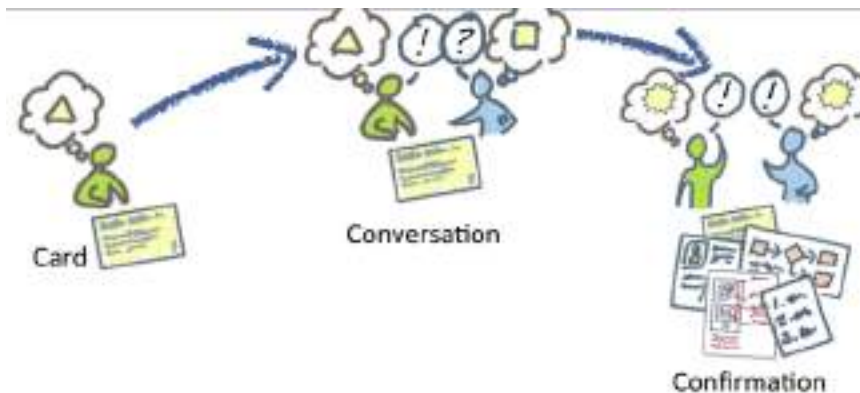
Why User Story?

- Shift focus from writing to talking
- Combine the strengths of both written and verbal communications
- User stories are comprehensible by both customers and developers
- User stories are the right size for planning
- User stories work for iterative development

Why not Specification?

- Assume everything is knowable in advance
- Time consuming and tedious to read
- Treat learning as "change of scope"

The Problem

- Communication problem
- Those who want the product must communicate with those who will build it
- Balance between business side and developers side
- Business side dominates ….. Functionality and dates mandated, reality, understand
- Developers dominates …. Technical jargon

User Story

- Something you can deliver and evaluate

Decompose

Don't Forget The Purpose

- The story text we write on cards is less important than the conversations we have

User Story Format

Ref		Priority
As a --------- who		
I want ------ what		
So that ----- why		
		Story Point

Product Backlog

Acceptance Criteria AC

- To explain the conditions that a specific user story must satisfy
- AC are often expressed as a set of statements; These statements should be:
  - Clear, so that everyone understands them
  - Concise, so that there's no ambiguity
  - Testable or verifiable
  - Focused on providing customer-delighting results

Acceptance Criteria Types and Structures

- Scenario-oriented (the Given/When/Then template)
- Rule-oriented (the checklist template)
- Custom formats

Scenario-Oriented

- Given/When/Then (GWT)
  - *Given* some precondition
  - *When* I do some action
  - *Then* I expect some result
- Behavior-Driven Development (BDD)
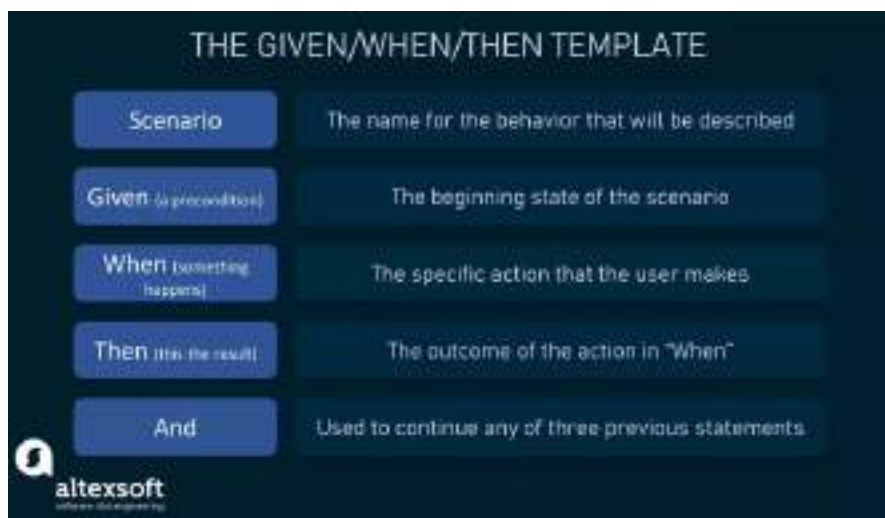
THE GIVEN/WHEN/THEN TEMPLATE

Scenario	The name for the behavior that will be described
Given (a precondition)	The beginning state of the scenario
When (something happens)	The specific action that the user makes
Then (the the result)	The outcome of the action in "When"
And	Used to continue any of three previous statements

altexsoft

User story

- As a user, I want to be able to recover the password to my account, so that I will be able to access my account in case I forgot the password

THE GIVEN/WHEN/THEN ACCEPTANCE CRITERIA: EXAMPLE 1

User story: As a user, I want to be able to recover the password to my account, so that I will be able to access my account in case I forgot the password.
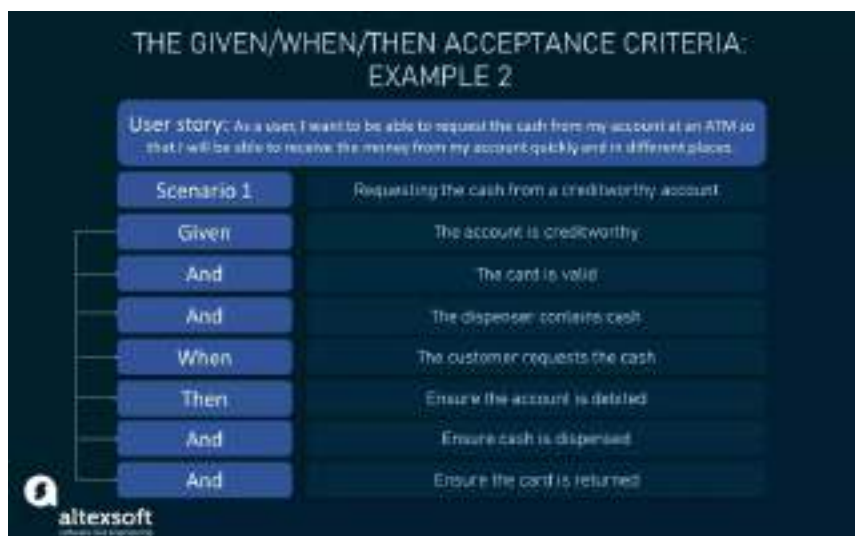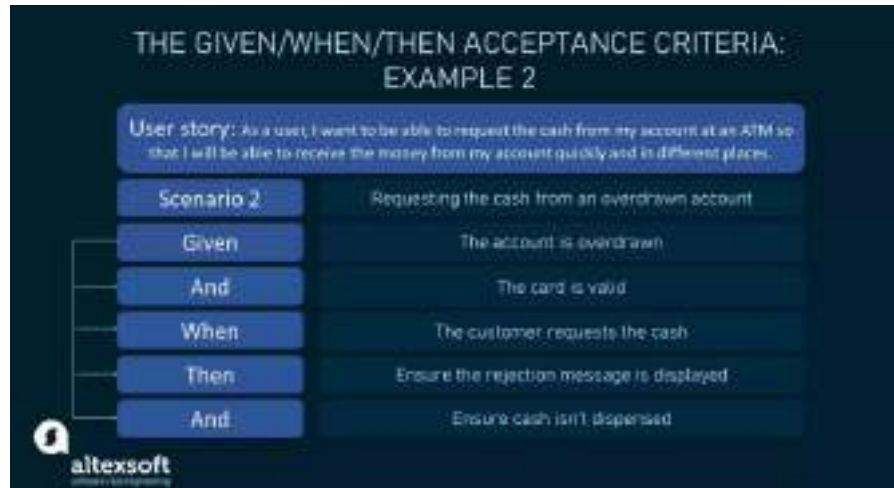
Scenario	Forgot password
Given	The user navigates to the login page
When	The user selects <forget password> option
And	Enters a valid email to receive a link for password recovery
Then	The system sends the link to the entered email.
Given	The user receives the link via the email
When	The user navigates through the link received in the email
Then	The system enables the user to set a new password

altexsoft

User story

- As a user, I want to be able to request the cash from my account at an ATM so that I will be able to receive the money from my account quickly and in different places

THE GIVEN/WHEN/THEN ACCEPTANCE CRITERIA:
EXAMPLE 2

User story: As a user, I want to be able to request the cash from my account at an ATM so that I will be able to receive the money from my account quickly and in different places.

Scenario 2	Requesting the cash from an overdrawn account
Given	The account is overdrawn
And	The card is valid
When	The customer requests the cash
Then	Ensure the rejection message is displayed
And	Ensure cash isn't dispensed

altexsoft

Rule-Oriented

- There is a set of rules that describe the behavior of a system
- Based on these rules, you can draw specific scenarios

User Story

- As a user, I want to use a search field to type a city, name, or street, so that I could find matching hotel options

AC

- The search field is placed on the top bar
- Search starts once the user clicks "Search"
- The field contains a placeholder with a grey-colored text: "Where are you going?"
- The placeholder disappears once the user starts typing
- Search is performed if a user types in a city, hotel name, street, or all combined
- Search is in Arabic and English
- The user can't type more than 200 symbols
- The search doesn't support special symbols (characters). If the user has typed a special symbol, show the warning message: "Search input cannot contain special symbols."
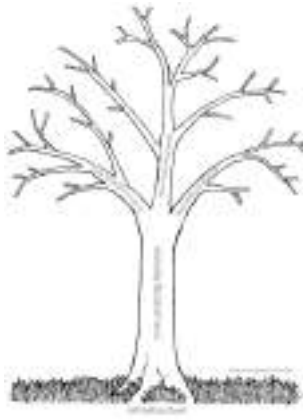
Innovation Game

1. Remember the Future
2. Shape the Product Tree
3. Sailboat
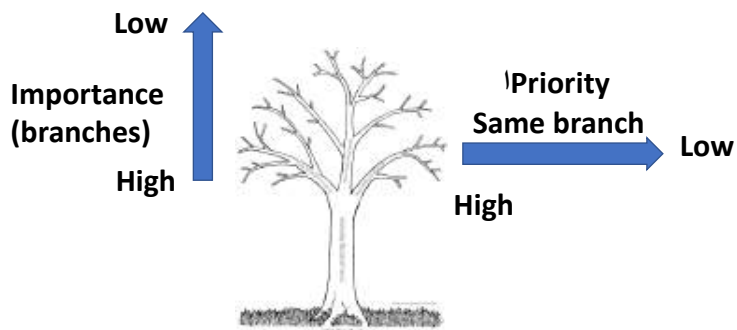4. Design the Product Box
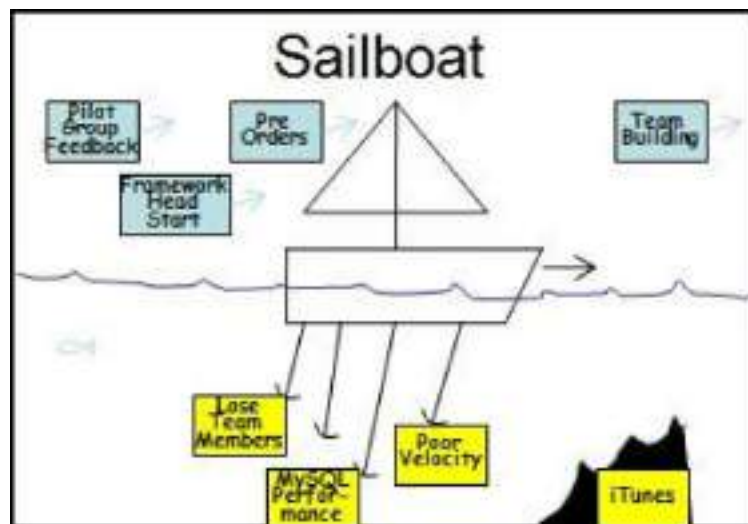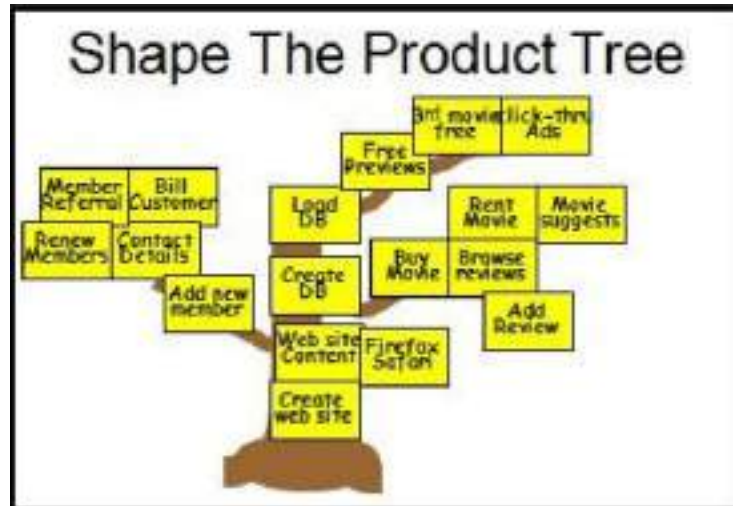5. Buy a Feature

Remember The Future
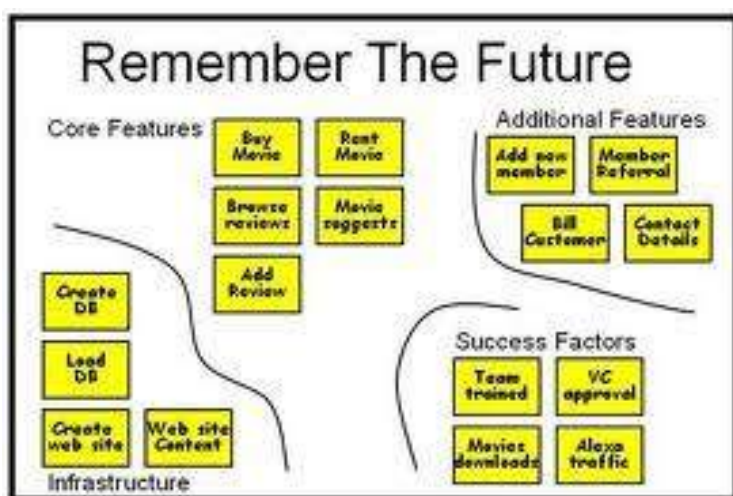
Shape the Product Tree

Shape the Product Tree

Vision/ Product Box

- An exercise where you take a small box and you market it only using the front and back of the box
- On the front, make sure you establish your key selling points and objectives
  - Why are we doing this?
  - What are we going to achieve at the end?
- On the back, is the product description
  - What are you going to get?

Vision Box

Create a figurative box that represents your product

Front of the Box
Product Name
Graphic

3-5 Key Selling Points or Objectives

Back of the Box
Product description
Features list
Operating Requirements

Example Vision Box

Front

- Product Name:
- Career Learning Center
- Selling Points:
  - Time saving registration process
  - Training from any location through mobile apps
  - Customized course recommendations ensure you'll only take relevant and valuable courses
  - Create a personalized development plan
  - Connect with instructors and peers for tips and ideas

Training on the go!

Example

Back

Product Description: The CLC is a web tool that allows users to research, compare, register for, manage and complete training courses customized to their job role and progression path.

Key Features:

- Read/write course reviews
- Cost comparison tools
- Course management tools
- Smart recommendations
- Mobile training

- Personalized development roadmap
- Collaboration tools
- One-step registration
- Course/test results reporting
- Easy certification process

The Construction Safety Permit System

Ideal for mine sites

Process permits faster!
Process permits safer!
Track people's time better!

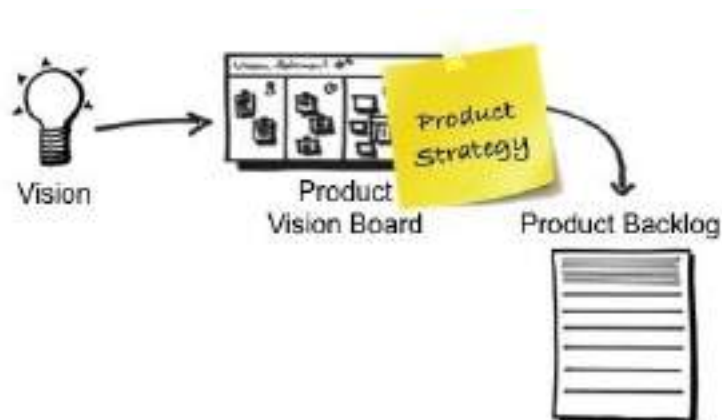Where you need it. When you need it.

Buy a Feature

Innovation Games

- www.innovationgames.com
- Innovation Games: Creating Breakthrough Products Through Collaborative Play

  Luke Hohmann

Story Mapping

- 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
- You may use persona sketches to describe the users
- Collaborative work – shared understanding

Story Mapping
discover the whole story

Jeff Patton
jeff@jpattonassociates.com
twitter: @jeffpatton

I wrote this book!

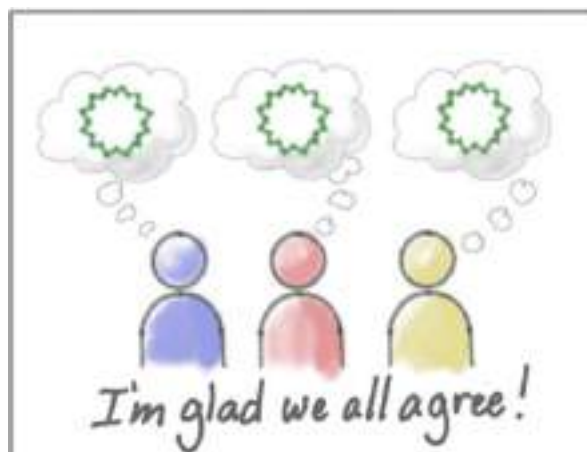Documents don't work the way you think they do

I'm glad we all agree.

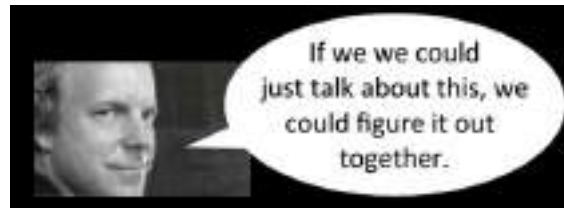## Shallow Discussion

Collaborations – Word & Pictures

when we say the same thing, we actually mean It

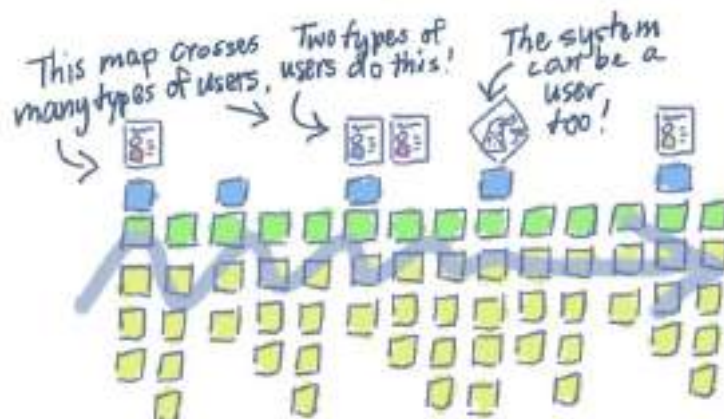# Kent Beck

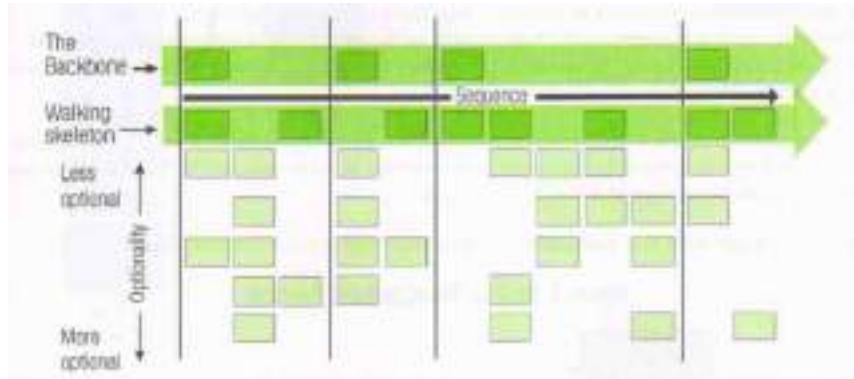- Stop exchanging documents, tell me your story

Effective story conversations build shared understanding

The best documents use words and pictures to help recall our conversations, they don't replace conversations

Story Map

Backbone

- Captures the high-level activities a user will accomplish while using the product

Apple TV

| selection | purchase | watch | social |

Select Movie

- Free text search
- Browse by genre
- Browse by recent addition
- Browse by most popular
- Browse by most popular by genre
- Browse by recent addition by genre

Story Map

Walking Skeleton

- These are the stories that will provide the user with the tasks that they can perform within the product – aligned to features and epics in the backbone

- Is a tiny implementation of the system that performs a small end-to-end function. It need not use the final architecture, but it should link together the main architectural components