



# Requirements and Iterative Development

## **Lecture Objectives:**

- 1) Explain how prioritization occurs in iterative development
- 2) Explain what happens as business needs are analyzed
- 3) Define user stories ✓
- 4) Define development backlog ✓

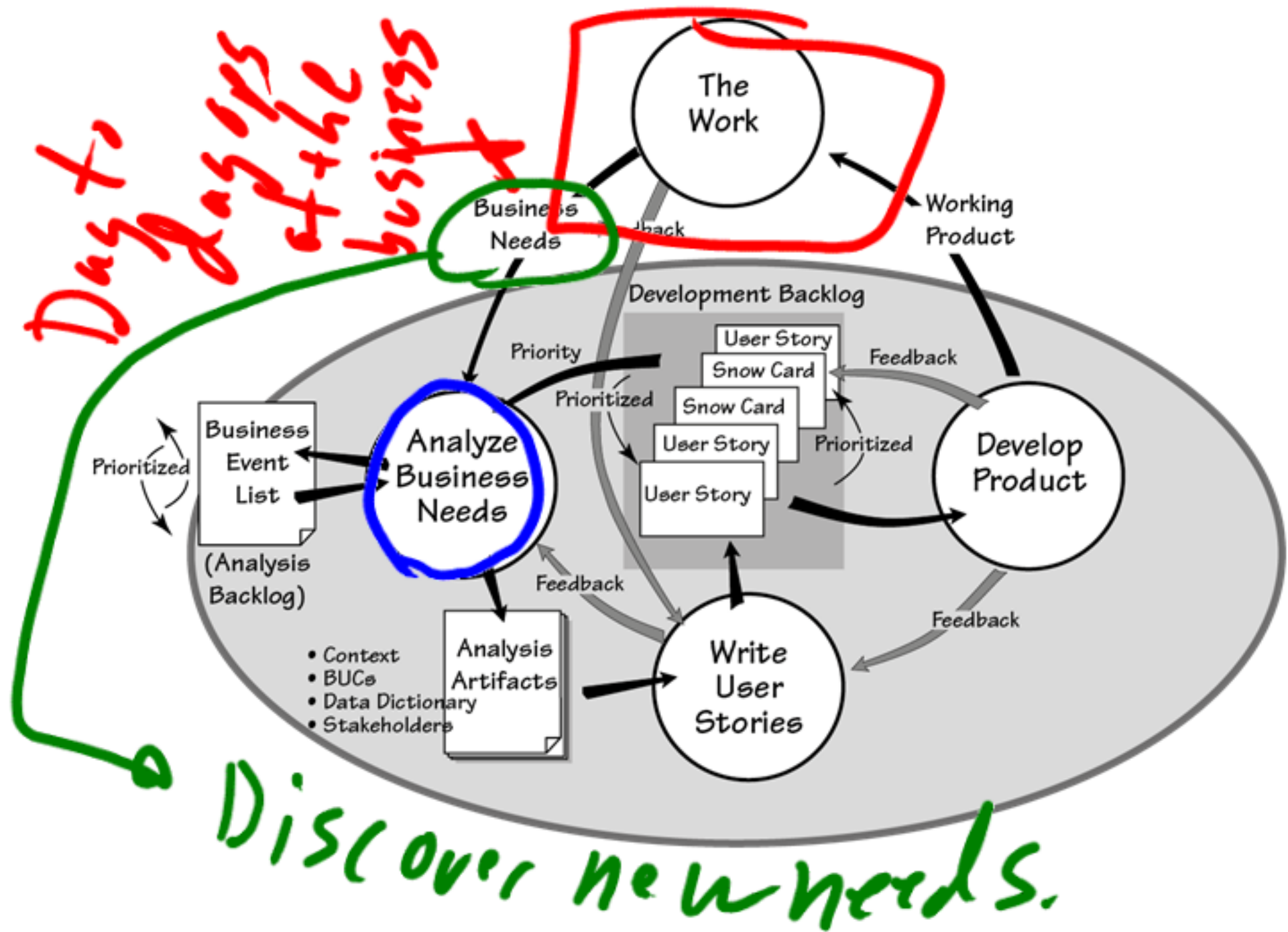
- What is the core idea of SCRUM, Crystal Clear, eXtreme Programming, Kanban, and other agile processes?

Agile processes

Rapid Feedback  
Rapid Development  
Adjustment

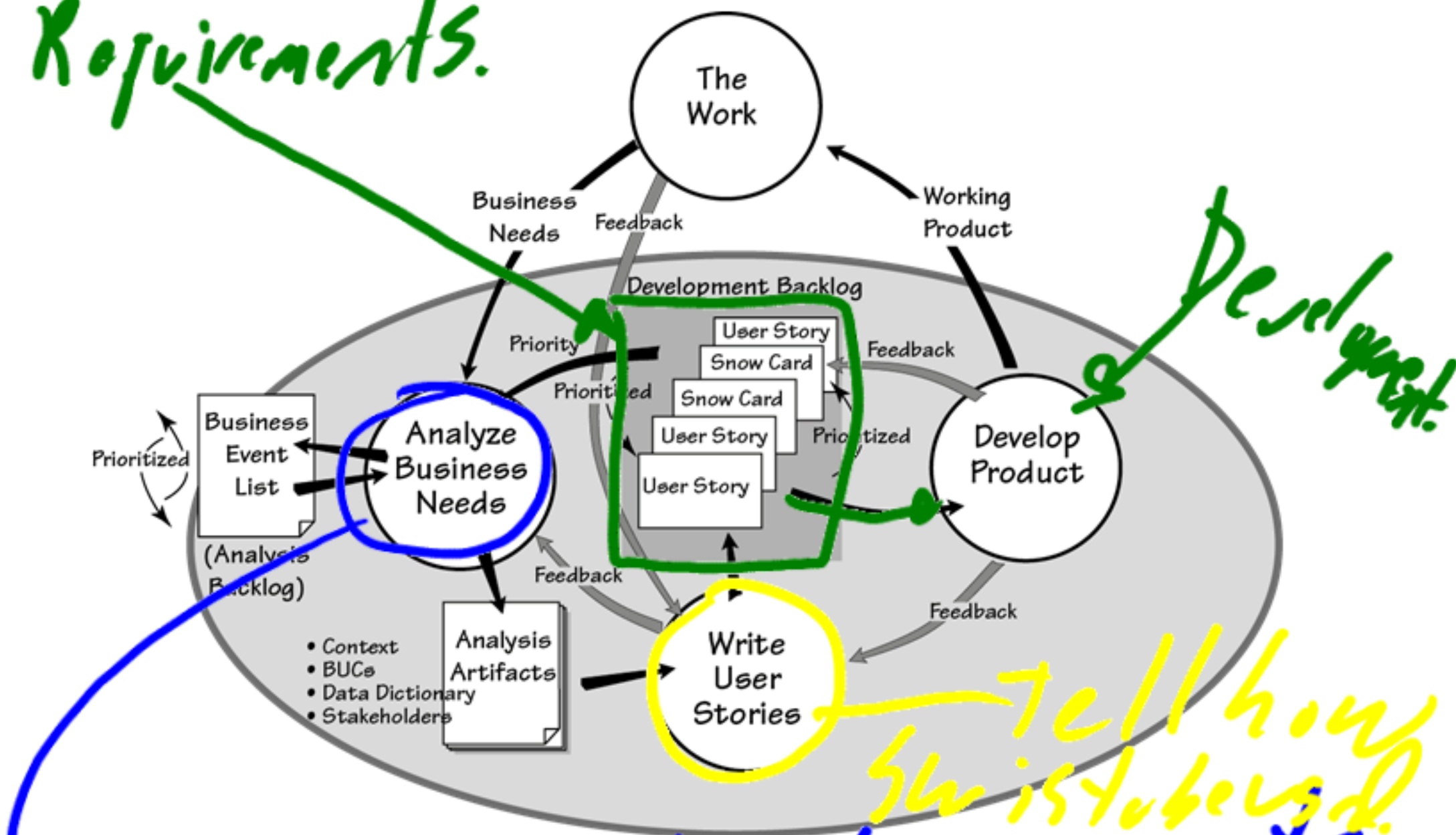
Iterative Development.

# Iteration in requirements



# Iteration in requirements

Requirements.



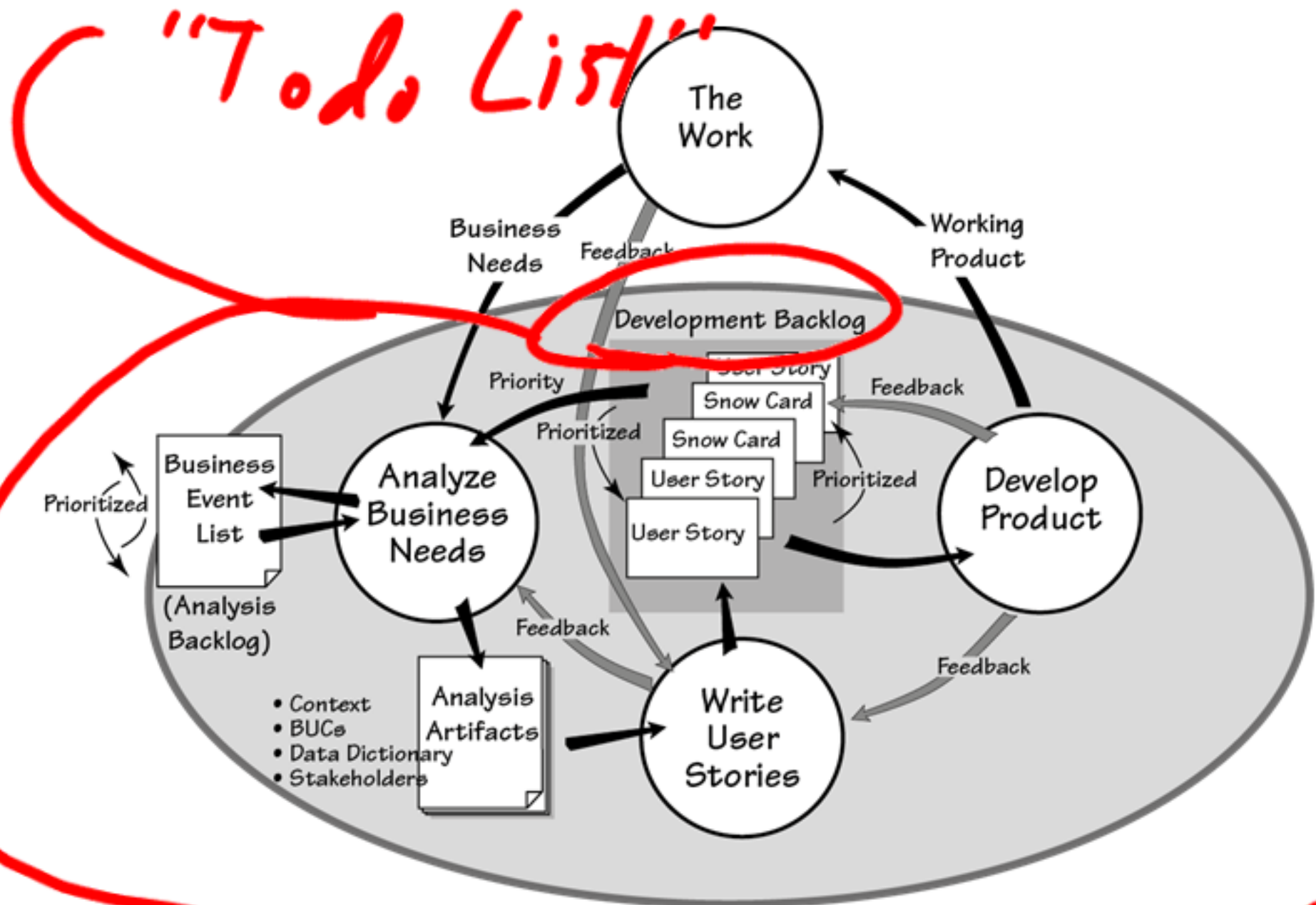
phone calls, interviews, etc. to determine what we need.

Tell how she is to be used.





# Iteration in requirements



*Prioritized list of incomplete requirements*

# Prioritization

- A continuous process in iterative development

We are always trying  
to figure out what is  
most important to  
DEV.

⇒ Change

# Business Needs analysis

- Continuous activity - *New Desires*
  - Gathers new needs for the ~~project~~ as the project is being worked on
  - Generates business event lists
  - Business event are added to the analysis backlog

*We are learning about our project.*

*User Stories*

- A user story is similar to a step in a business use case

*Not identical!*

- Example

*Person*

*Who uses the story*

*User stories*

*Actor*

"As an insurance adjuster I want a list of outstanding claims so that I can see my workload for the day."

*What*

*Why / reason*



# Writing a good user story

*The bank wants to prevent customers from unexpectedly overdrawing their bank accounts. The penalty for non-arranged overdrafts, while profitable, is causing disputes with customers who claim that they need a better way of monitoring their accounts.*

What can the product do for the user to satisfy the business intention behind this business use case?

⇒ Allow the customer to check their online balance.

Actor

- As a bank account holder, I want to check my balance online.

What

Why? Why is this important?

A first cut

- As a bank account holder, I want to be able to check my balance online so that I can access my daily balance 24 hours a day.

day.

Why?

Why would someone routinely be checking their balance?

⇒ Worried about ID theft?

⇒ Might be on a tight budget

SE3024 Course Requirements and Specification



Only need one reason, but if we have more than 1 may increase importance.

Improve

A better version

An even better version

- As a bank account holder I want to be informed if my monthly balance is projected to go to zero or below so that I can arrange for an overdraft.

Trending your account.

More advanced feature.



# Writing User stories

→ Innovation is important. If your stories are not innovative, then they probably are not providing any advance over what existed previously and, therefore, are probably not providing any real value to the business.

→ The innovation triggers should be used as a checklist when writing stories. They are bound to make your story better.

Source

• The real origin of the business event is important. Ask what was happening at the time of the event and try to get your product as close as possible to that point.

- Think of the essence of the problem. By looking at the real underlying need and not the guessed-at solution, you almost always make a better story.
- Think "above the line."

the real need underneath

As a [role], I want [feature]  
so that [reason].

User story form

User/Actor/etc.

Something the  
SW does.

Why

User Story #: 6.1

Event/BUC #: 6

Description: As a bank account holder I want to be informed if my monthly balance is projected to go to zero or below

Rationale: so that I can arrange for an overdraft.

Source: Discussion about BUC 6 with business and developers

Fit Criterion: Projected end of month balance = (balance on first day of month + monthly salary - sum of direct debits for current month)  
If Projected end of month balance less than or equal to zero produce warning for account holder

Customer Satisfaction: 3

Customer Dissatisfaction: 5

Dependencies: None

Conflicts: None

Supporting Materials: Overdraft rules 2012 supplied by business owner

History:

Volere  
Copyright © Atlantic Systems Guild

snow card and user story

Role

Feature

reason

where?

Supporting  
Details

Testability

Algorithm

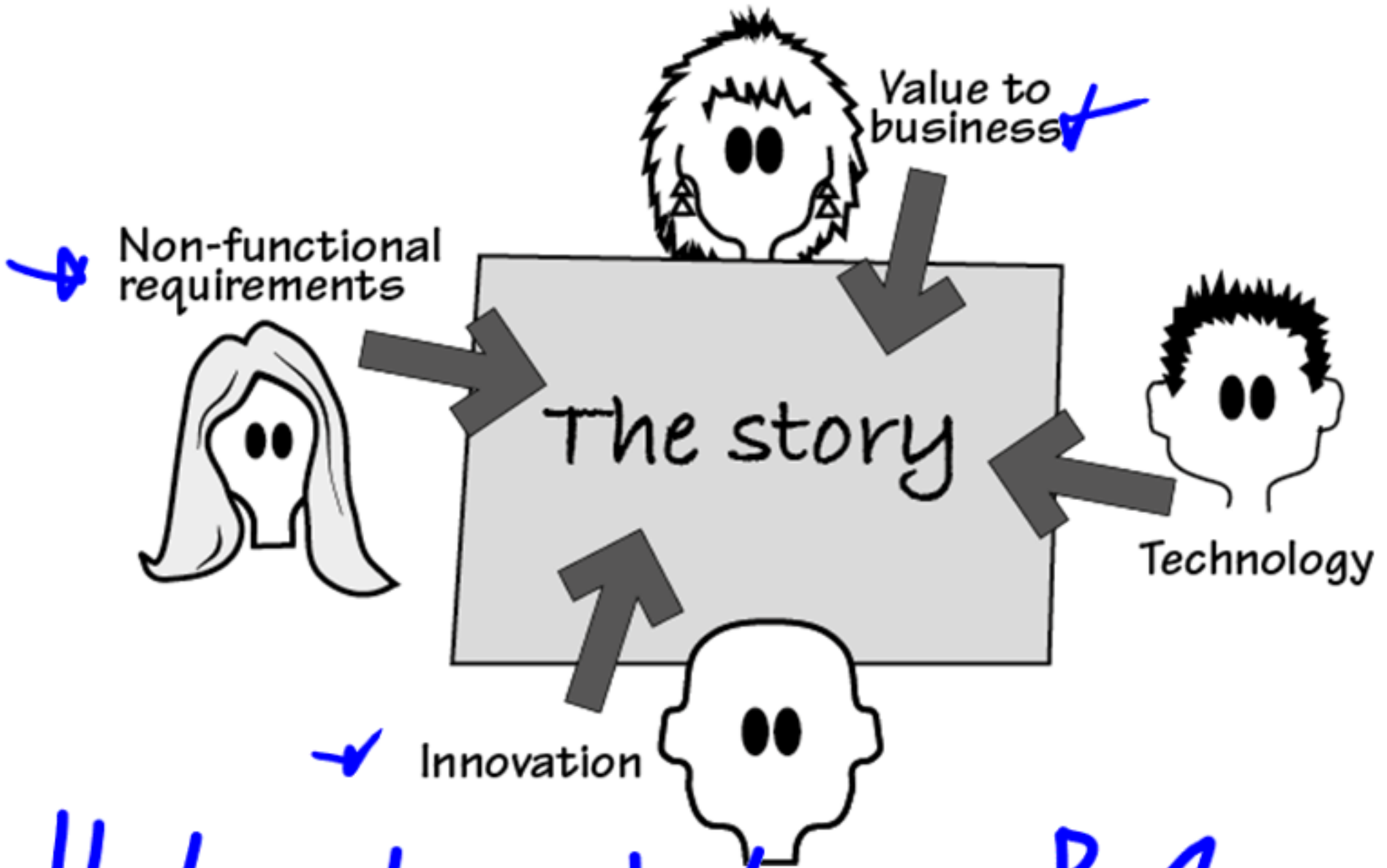
No conflicts  
w/ other  
Reqs.

Help in prioritization

What else  
Revision, needs to be done?



# User stories



Collaboration between BA,  
the Developer, and other Stakeholders.



# Iterative Development

- What do we need?

Both must be involved  
Domain  
Iterative Development

- Continuous integration of business and technical knowledge - *No "throw it over the wall"*
  - Subject matter expert
  - Technical solution experts
- Business knowledge
  - Most crucial part of the project
  - Product owner typically answers all business related questions *— some other tests/teams*
    - Very hard, and many orgs have abandoned this model
- Communication Knowledge
  - Neutral channels of communication
- Technical Knowledge - *Always required*  
*"No politics"*