

# Object oriented analysis and modeling

## Project initiation

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M-255

# Reasons to start a project?

- We have a great idea and it will make us a lot of money!!!
- Many of our customers want this feature.
- A customer wants us to build it.
- It would speed up our internal processes and we see no good existing alternative.
- It seems cool
- ...

# Key questions

- Should we do it?
- How to do it?

# Should we do the project?

The project is well defined, the solution is well understood.

- Suggests waterfall-like process
- It is hard to imagine business analysis without iterations and get everything right.
- The customer is always right? Probably a good idea to follow.
- Risks: customer takes risk associated with bad requirements, we take risk associated with development.
- Fixed cost contracts

# Should we do the project?

The project is well defined, the solution is NOT well understood.

- Suggests iterative process
- The customer is always right?
- Customer cannot know what he wants without seeing costs.
- A cooperation with customer is probably necessary to maximize benefits for both sides.
- Agile.
- Agile contracts (e.g. fixed man/hour rate).
- The decision what to build still primarily on the the customer, but he should decide after we produce a HONEST plan/estimate, including risks.

# Should we do the project?

The project is well defined, the solution is NOT well understood.  
(cntd.)

- Good idea is to start with feasibility study that requires a limited amount of resources (It is good idea to have a separate contract for this).
- It is the work for most experienced people from both the customer and SW company as a bad assessment can cause serious losses (to one or to both sides).
- Risk: we can partially accept risk associated with bad estimates.
- Risk mitigation is attained by honest estimates, most valuable features first principle and the ability of halt the project.

# Should we do the project?

My customer knows what he wants to attain, but the project is NOT well defined.

- Suggests iterative process.
- Starts with feasibility study.
- Business analysis is a significant part of the process.
- Project goals on business requirements.
- The customer mostly has some idea how to attain them.
- The customer is always right? No.
- Agile.
- Tight cooperation with the customer required.

# Should we do the project?

My customer knows what he wants to attain, but the project is NOT well defined. (cntd.)

- Agile contracts, risks and rewards shared.
- Risk mitigation is attained by honest estimates, frequent delivery, ability of both sides to halt the project.
- LEAN startup ideas may be (partially) applicable.

# Should we do the project?

I have a great idea. Who is the customer?

- If you believe that and you have the necessary resources, you probably should start it.
- The whole risk is on you and (the investors).
- Investors and developer decide whether they believe the idea.
- LEAN startup.
- What is a MVP that can be used to test your idea?
- Test hypotheses, pivot, learn, pirate metrics.

# How to do it?

The project is well defined, the solution is well understood.

- Do it. You know what to do.
- Reusability. Less coding, more configuration. Refactorization.
- LEAN (you may need much less information to initiate project)

# How to do it?

Feasibility study, Project initiation

- (Try to falsify basic assumptions)
- Identify major aspects of the projects
- Get the principal requirements (of all types!!!) / Basic business analysis
- Create a project "skeleton"
- Setup project infrastructure

More or less in both cases a iteration is required, you may merge the two steps.

# What are the concerns of project initiation

## Prince2 : Project Brief (mostly stuff for managers)

- Project Definition. Background, objectives etc.
- Outline Business Case. Describing the reasons why the project is needed.
- Project Product Description. The description of the end deliverable of the project.
- Project Approach. Defining the choice of solution.
- Project Management Team Structure.
- Role Descriptions.

# What are the concerns of project initiation

Prince2 : Prince2 : Project initialization document (A lot of stuff for architects, designers, ect.)

- What the project is aiming to achieve.
- Why it is important to achieve it.
- Who will be involved in managing the process and what are their responsibilities.
- How and when the project will be undertaken.
- Background, explaining the context of the project, and how we have arrived at the current position of requiring a project.

# What are the concerns of project initiation

## Prince2 : Prince2 : Project initialization document (cntd.)

- Project Definition, explaining what the project needs to achieve. Under this heading will be:
  - project objectives
  - defined method of approach
  - project scope what is included and what not
  - project deliverables and/or desired outcomes
  - exclusions
  - constraints
  - interfaces
  - assumptions
- Project organization structure, detailing who is going to be involved and what their responsibilities are.

# What are the concerns of project initiation

## Prince2 : Prince2 : Project initialization document (cntd.)

- Communication plan, describes how the project stakeholders will be kept informed during the project.
- Project quality plan.
- Project controls, laying down how control is to be exercised within the project, and the reporting and monitoring mechanisms.
- Business case, covering the estimated costs, risks and benefits. The Business Case will require regular review.
- Initial project plan. The plan will be reviewed and further developed at regular intervals during the project.
- Risk register containing details of the identified risks so far. The Risk Register reviewed at regular points.

# What are the concerns of project initiation

[Agile Project Initiation](#) (the same link, second part of the post)

- Find/Write Project Brief
- Form the team
- Initial Plan (includes Risks and Issues)
- Initial Requirements
  - High level requirements for the entire project
  - Detailed Requirements for Timebox One
- Initial Infrastructure (see the link)

# What are the concerns of project initiation

Other approaches

- Nine Steps to Start a Software Project

# Business analysis

- OO aproach applicable
- Ideas and tools are similar to domain analysis.

# Modeling and visualization

- Business analysis - various diagram applicable, make sense to add domain specific **profiles**