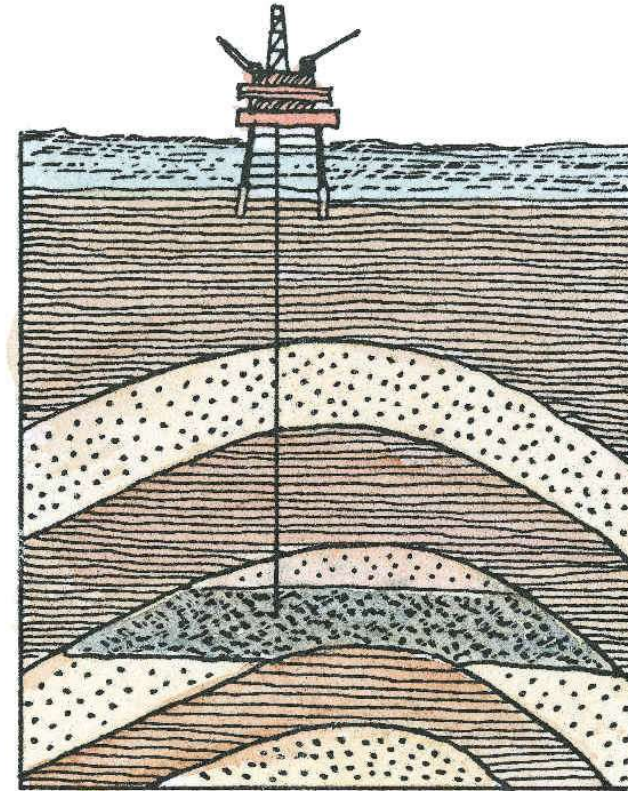# Inception

Is there a project in there?

What's the vision, scope & business case?

Analogy from oil business

1. Decide if there is evidence (business case) to justify exploratory drilling

2. If so, do measurements and exploratory drilling

3. Provide estimates …

Inception is like step 1: a feasibility study

Another analogy: consulting with a doctor to do exploratory surgery

Is inception the same as requirements analysis?

Inception objectives

- Establish vision, scope and business case
  - Vision: What do we want?
  - Scope: What do we include and *not* include?
  - Business case: Who wants it and why?
- Determine primary scenarios as Use Cases
  - Completeness not necessary, maybe just 10%
- Estimate feasibility and risks
- Start defining terms in a glossary. Why?

Example vision & business case (Larman, p. 102)

Introduction

We envision a next generation fault-tolerant point-of-sale (POS) application, NextGen POS, with the flexibility to support varying customer business rules, multiple terminal and user interface mechanisms, and integration with multiple third-party supporting systems.

Business Case

Existing POS products are not adaptable to the customer's business, in terms of varying business rules and varying network designs (for example, thin client or not; 2, 3, or 4-tier architectures). In addition, they do not scale well as terminals and business increase. None can work in either on-line or off-line mode, dynamically adapting depending on failures. None easily integrate with many third-party systems. None allow for new terminal technologies such as mobile PDAs. There is marketplace dissatisfaction with this inflexible state of affairs, and demand for a POS that rectifies this.

Brief format Use Case (Larman, p 63)

- A story of an actor using a system to meet a goal

Process Sale: A customer arrives at a checkout with items to purchase. The cashier uses the POS system to record each purchased item. The system presents a running total and line-item details. The customer enters payment information, which the system validates and records. The system updates inventory. The customer receives a receipt from the system and then leaves with the items.

Glossary (exceprt from Larman, p. 115)

Term	Definition	Format	Aliases
item	A product or service for sale		
Payment authorization	Validation by an external payment authorization service that they will make or guarantee the payment to the seller.		
UPC	Numeric code that identifies a product. Usually symbolized with a bar code placed on products.	12-digit code of several subparts	Universal Product Code

Inception is lightweight

- Artifacts such as use case model should only be partially completed (10-20%)

- Purpose is feasibility investigation

- Quick prototypes may be useful – why?

- You know you don't understand inception when it takes more than "a few" weeks, or when estimates or plans are expected to be reliable, etc.

- When will you complete inception for your projects? What artifacts will you develop?

Inception

- Envision the product scope, vision, and business case.
- Do the stakeholders have basic agreement on the vision of the project, and is it worth investing in serious investigations?
- The purpose of inception stage is not to define all the requirements.
- The Up is not the waterfall and the first phase inception is not the time to do all requirements or create believable estimates or plans.
- That happens during elaboration.

How long is the Inception phase can be?

- The intent of inception is to establish some initial common vision for the objectives of the project, determine if it is feasible, and decide if it is worth some serious investigation in elaboration. It can be brief.

Inception artifacts

Artifact[ ]	Comment
Vision and Business Case	Describes the high-level goals and constraints, the business case, and provides an executive summary.
Use-Case Model	Describes the functional requirements. During inception, the names of most use cases will be identified, and perhaps 10% of the use cases will be analyzed in detail.
Supplementary Specification	Describes other requirements, mostly non-functional. During inception, it is useful to have some idea of the key non-functional requirements that have will have a major impact on the architecture.
Glossary	Key domain terminology, and data dictionary.
Risk List & Risk Management Plan	Describes the risks (business, technical, resource, schedule) and ideas for their mitigation or response.
Prototypes and proof-of-concepts	To clarify the vision, and validate technical ideas.
Iteration Plan	Describes what to do in the first elaboration iteration.
Phase Plan & Software Development Plan	Low-precision guess for elaboration phase duration and effort. Tools, people, education, and other resources.
Development Case	A description of the customized UP steps and artifacts for this project. In the UP, one always customizes it for the project.