

Lab 1: Product Vision Review and Refinement

Table of Content

Context and Motivation	1
Learning Objectives	1
Steps Overview	2
Starting Position (Baseline, Initial Position, dt. “Ausgangslage”)	2
Step 1: Review business goals and write product vision (30 mins)	3
Step 2: Elicit high-level functional and non-functional requirements (30 mins)	3
Step 3: Discuss which practices are eligible to refine the product vision (30 mins)	4
Summary and Conclusions	4
Concepts Revisited	4
Reflection and Call to Action	5
Repetition Questions	5
More Information	5
Frequently Asked Questions (FAQ)	6
References	6

Context and Motivation

We start our Collaborative Modeling (CoMo) journey with a review of an existing business goals, which could be the output of an [ideation workshop](#) that has just been held as part of a [design thinking](#) approach. We refine it into a *product vision*.

This is the first of seven labs that you can run through in a self-study, in a supervised exercise (“Übung”, typically 2x45 mins at OST) or in a moderated group work (workshop style). Your instructor will tell you what his/her choice is!

Hint: The seven labs are designed to be self-contained; they can but do not have to start with the results and solution to the previous one. The module description/syllabus called “CoMo Motivation and overview” lists the available labs and discussed the lab sequence (aka CoMo LL architecture).

Learning Objectives

The learning objectives of this first CoMo LL are:

- Having completed this lab, participants are able to explain what a product vision contains (with business goals coming out of a design thinking or other innovation management activity).
- By way of discussion and activation questions asked, lab participants also get an impression on how to communicate with business stakeholders about the digital realization of product visions (requirements, approach, solution building blocks, critical success factors).
- They become aware of the design questions, options, criteria that apply when beginning to refine and realize a product vision as a software product or service.

Steps Overview

This lab exercise has the following steps:

1. Review business goals and create a product vision statement that represents and refines these goals.
2. Elicit high-level functional and non-functional requirements based on the product vision.
3. Outline which practices are eligible to refine the product vision and elicit requirements from it (note: this outlook serves as a preview to Learning Labs 2 to 7).

Starting Position (Baseline, Initial Position, dt. “Ausgangslage”)

The business context of this lab is online platform shop engineering, selling, sharing and playing computer games in particular. Let’s assume that the following business goals have just been established in one or more business development or innovation management activities such as [design thinking](#) ideation or [learn startup](#):

“An online platform provider wants to target computer gamers and independent game developers. They should be able to find each other (i.e., gamers should find games and developers can learn about the gamers playing their games). Pricing should be fair for both sides and the platform wants to be profitable too. The provider envisions a sharing portal/platform for digital products that specialize on computer games that is fair and transparent about payments as well as easy to join, to use and to leave. The market leader and its runner-up have recently been confronted with complaints regarding gamer age and in-game purchases. The platform providers want to develop an innovative, novel dynamic pricing algorithm that leverages multiple sources, free of dark UI/design patterns that force players to stay online for irresponsibly long times or to spend more money than budgeted to be competitive.” (source: fictitious business modeling and innovation management document).

Step 1: Review business goals and write product vision (30 mins)

Task: Study the informal business goals in the Starting Position. Look for unique selling points, envisioned features (aka capabilities) and target audience in it. Convert this information into a more structured *product vision*. Use the following template:

For [target audience, ideal customer]
who(se) [wants and needs, requirements, problem to be solved]
the [product name]
is a [product category, application genre]
that [capabilities/characteristics, key benefits, reasons to buy it]
Unlike [competition, its products and their capabilities/characteristics]
our product [business goals and differentiation strategy, unique selling point, key differences]

Hint: The template is the [Moore template](#) from the product management, digital design and lean inception communities (reference: “[Crossing the Chasm, 3rd Edition: Marketing and Selling Disruptive Products to Mainstream Customers](#)” by Geoffrey A. Moore).

Questions: Think about and discuss the following:

1. Do you agree or disagree with the business goals in the case? Which other information would you expect?
2. When reading through your product vision, do you find it understandable, compelling, realistic? Do you see room for improvement?
3. Let’s assume that it is supposed to serve as starting point for business modeling and software design. Is any information missing?

Step 2: Elicit high-level functional and non-functional requirements (30 mins)

Task: Realizing the product vision will require additional software to be developed. Please identify 1-2 functional and 2-3 non-functional requirements for it.

Hints: Time boxing this step is perfectly fine! You might want to recapitulate what you learned about requirements engineering and user-centered design already (at OST, in “Lehre”, on the job). For instance, feel free to create one or more **personas** for each target audience member type. If you need a refresher or a new to the topic, the “Design Practice Reference/Repository (DPR)” features **User Stories**, **Use Cases** and SMART **non-functional requirements** elicitation; you may want to consult these artifact templates and activity descriptions (or ask the AI bot that you trust for advice and examples).

Questions:

- How hard was it to come up with meaningful, **SMART** requirements?
- Would you be able to estimate the effort for the realization of the epic now? If no, what is missing?
- Would you be able to staff a development team and get going? If no, what is missing?

Step 3: Discuss which practices are eligible to refine the product vision (30 mins)

Task: For each “no” answer in Step 2, please identify ways of closing the information/knowledge gap.

Hints: It is ok to give rather open, informal answers; pointers to topics in previous courses at OST are ok too.

Questions:

- What are the advantages of using an established practice rather than DIYing the next steps?
- Why does this learning lab emphasize collaboration so much?
- Which role do models have to play in all this according to your experience?

Summary and Conclusions

In this first lab, we reviewed and improved a production vision statement, and begun to leverage it for future analysis and design work.

Concepts Revisited

- Product vision and a seven-part Moore template for it (“For ... our product ... different from ...”) were covered in Step 1 of this lab.
- User stories and use cases (Step 2)
- Non-functional requirements aka software quality properties (Step 2)

- Design decisions, architecturally significant ones in particular (Step 2).

Reflection and Call to Action

Let's review and recapitulate what we learned in this lab.

1. Think about the benefit of templates in general and the Moore one in particular. Also think about potential drawbacks.
2. Try to write a second product vision in the Moore format, for instance for a thesis project.
3. Look for other templates and additional information about the lab topic, and compare it with the taught material.

Repetition Questions

1. Which elements comprise Moore's product vision template?
2. Which parts of the Moore template are particularly interesting from a business and software modeling point of view?
3. Which questions would you ask the product owner (or yourself if you are the product owner)?

More Information

Product vision and the Moore template are covered well online:

- In "[Product Vision](#)", Joel Spolsky reports that Jim Highsmith uses the Moore template in his "Design the box" approach and republished his article. The article originally appeared in the 23 August 2001 issue of Cutter Consortium's *Agile Project Management E-Mail Advisor*.
- "[Write the Product Vision](#)", by Paolo Caroli.
- The Moore template is also used in "Engineering Software Products" by Ian Sommerville (2020) (Sommerville 2016).
- "[How to Create a Strong Product Vision \(Examples and Templates Included\)](#)". The article features empathy maps that have four quadrants: says, thinks, does, feels.
- Template for Product Vision Board: <https://www.romanpichler.com/blog/the-product-vision-board>
- "Product Vision: How to Create One for Success in 2025", <https://productschool.com/blog/product-strategy/product-vision>

Many books and online resources about software engineering exist; for instance, the website of the Agile Alliance has a helpful [glossary](#). The "Design Practice Reference/Repository (DPR)" summarizes key practices and artifacts (Zimmermann and Stocker 2024).

“How to Create a Strong Product Vision (Examples and Templates Included)” features empathy maps that have four quadrants: says, thinks, does, feels. The article proposes to create an empathy map for each type of user when creating a product vision; empathy maps can also be created for other types of stakeholders.

For links regarding design thinking, please refer to Lab 0 “Introduction to Sample Case”.

Frequently Asked Questions (FAQ)

- *Do I have to start with a filled out product vision template?*

Answer: It is perfectly fine to start CoMo'ing with other business-level artifacts such as a business model canvas or a design thinking output (e.g., a paper prototype). Event storming can actually be used for “Big Picture Modeling” too; for this learning lab, we decided to feature its second use case instead, “Process Modeling” (the third is “Software Design”). Scrum and SAFe have a product vision notion too; watch out for teaching material by OST alumna Bärbel Bohr on this topic.

- *What if my business model and product vision are not stable yet?*

Answer: This is fine (and the rule rather than the exception in practice, actually). Iterate through the CoMo steps.

- *This lab merely seems to be a recap, it overlaps with what we learned in other courses. Why is that? What's next?*

Answer: You are right. Lab 1 warmed us up and set a common ground to start with the core CoMo practices in this learning lab: Domain Storytelling (Lab 2), EventStorming (Lab 2), Story Mapping and Splitting (Lab 4). Lab 5 is about Stakeholder Mapping and Value Impact Mapping (OST CAL contributions, R&D output 2022 to 2024). Lab 6 and 7 cover the handover to business-as-usual in software design, how to use the CoMo outputs from Steps 1 to 5 for traditional requirements engineering/analysis/elicitation, software architecture, domain, process and data modeling.

- *Where can I learn about 4L and other forms of retrospectives?*

Answer: Many online resources exist. Check out [FunRetrospectives](#), for instance.

References

Sommerville, Ian. 2016. *Engineering Software Products*. Pearson. <https://iansommerville.com/engineering-software-products/>.

Zimmermann, Olaf, and Mirko Stocker. 2024. *Design Practice Reference - Guides and Templates to Craft Quality Software in Style*. online: LeanPub. <https://leanpub.com/dpr>.