

DESIGN THINKING PROTOTYPING CARD SET

Xternalize

Making ideas and moods tangible

Xplain as is

Understanding the initial situation

Xploit

Testing critical functionalities

Xperience

Testing with a user perspective

Xplain to be

Developing a future scenario

Design Thinking Prototyping Cards



Your prototype is not the representation of your idea. It is much more. Our Prototyping Cards are designed to help you uncover what prototypes can do for you.

This set consists of 36 prototyping cards. On each card there is a brief text that explains the specific prototype. At the bottom of every card, you will find an estimation of how long it might take to design this prototype & how it can help you to learn within your project.

The 36 different prototypes are classified into five differently colored categories. Each category represents one intention that you might pursue with your prototype.

We believe prototyping is an act of learning. Different prototypes can foster different learning experiences. The more you know about your intention the more satisfying will be the prototyping experience. We encourage you to take a minute to reflect on your intention before you start prototyping. After defining your intention, you may choose one of the prototypes of this color to start with. Nevertheless, feel free to be inspired by other prototypes from other categories. Take a deep breath, step back and consider the following questions with regard to your project:

Xplain as is

Have you understood the special context of your project? Are you familiar with the situation of your targeted customers? Xplain prototypes can help you to develop a common understanding of the needs and problems you are addressing.

Xploit

Are you already aware of the usefulness of your idea but you do not know whether critical functionalities will work the way they need to work? The xploit prototypes will address your questions on whether your idea is technically feasible or viable from a business point of view.

Xternalize

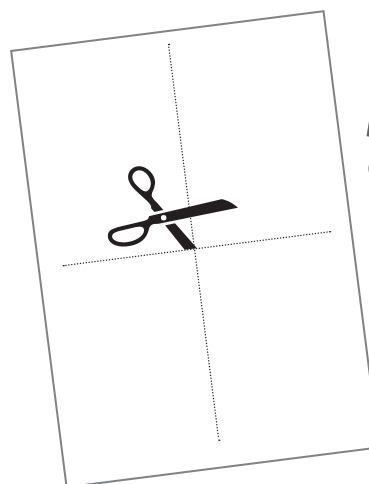
Is your team having a similar vision about the design challenge? Do you want to put associations and first ideas into concrete shapes and pictures? The conversion of implicit knowledge into explicit makes it easier to discuss your ideas as a team.

Xperience

Are you aiming for feedback from your users? Do you want to understand whether your idea is desirable or of high usability? Xperience prototypes have been designed in order to test ideas with users and customers.

Xplain to be

Do you want to demonstrate why your idea might be a valid value proposition for your client or your company? Do you need feedback from your management? The xplain to be prototypes will set the stage of how a future will look like in which your user will be able to take advantage of your idea.



Now cut out the cards and start prototyping.

Have fun!

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Xplain as is



EXPLAIN AS IS

Improvised Roleplay

Are you still in the first stages of a project and looking to understand users needs? Then assign each other different user roles or points of view and play out aspects of your problem. If you like you can replay a scenario again with swapped roles. This form of role play is especially useful for gaining new perspectives on your current questions.

- ⌚ Less than 1 hour
- ✓ Play through & discuss service

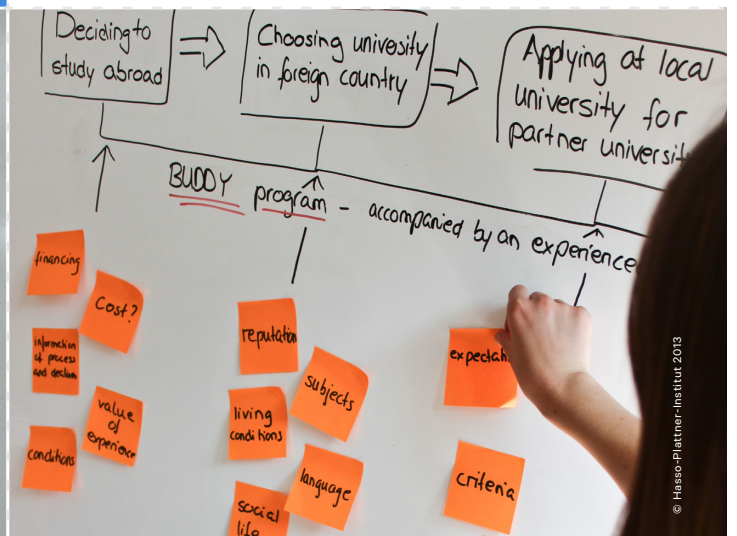


EXPLAIN AS IS

Stakeholder Map

So who is actually working for whom? A Stakeholder Map takes all the people in a company or a project and shows you their relationship to each other. Let your client give you a list of the stakeholders, or research them yourself. A Stakeholder Map reduces complexity and visualizes the tapestry of intersecting relationships making it easier to grasp and analyze the needs of your users.

- ⌚ 4 hours
- ✓ Analyze connection networks



EXPLAIN AS IS

Process Map

To be understandable, procedures need to be visualized. It doesn't matter whether you want to consider management processes, organizational structures or data bases. Using the Process Map shows you all the essential flows of information and participants as well as their interactions. Simulating all the sequences shows the whole process making it more understandable while improving communication with your customers.

- ⌚ 4 hours
- ✓ Visualize & understand processes



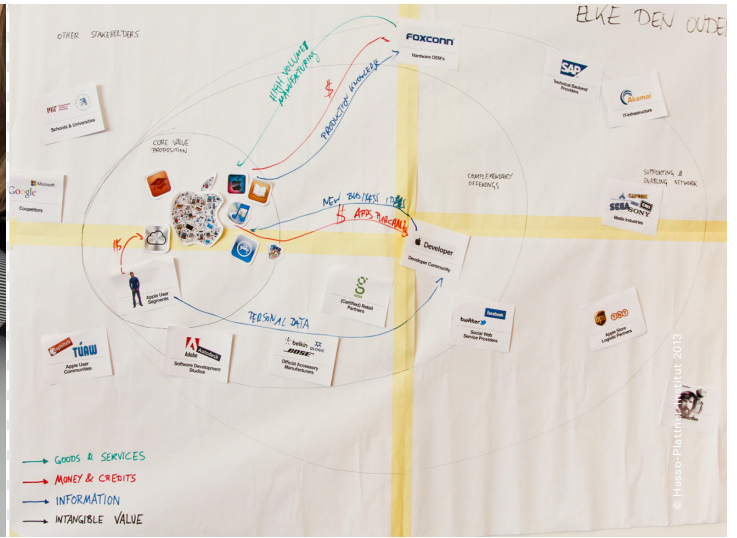


EXPLAIN AS IS

User Product Box

Here the users get to be creative. Ask your users to take a box and turn it into the packaging of the product they desire. It should show off all the important parts of the product: A picture, slogan and features. Afterwards the various user groups get to show it off as if they were at a convention trying to sell their box. The other users are potential customers. Let yourself be inspired by other people's ideas and wishes!

- 4 hours
- Get inspired & find needs

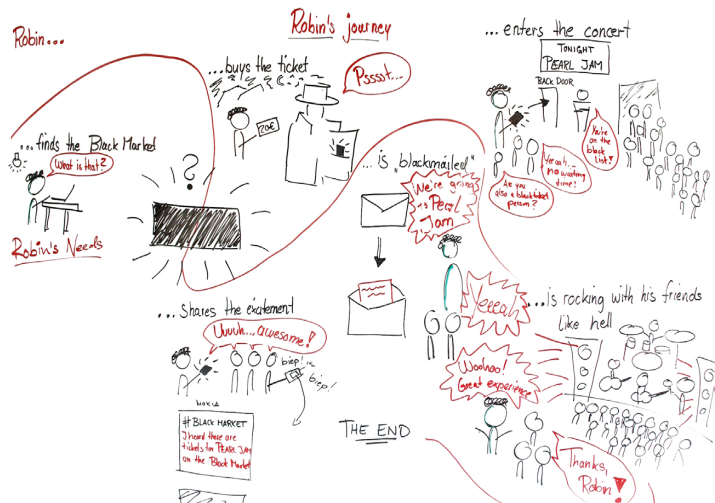


EXPLAIN AS IS

System Map

It's all connected: A System Map visualizes the architecture of a problem with all its individual elements. Usually you draw bubbles and then write phrases inside them. The complexity of IT-systems can be depicted as service systems when you implement subsystems.

- 4 hours
- Analyze & visualize systems



EXPLAIN AS IS

Customer Journey Map

You're not sure where the interface is between the relevant product or service and your customer? Draw up a plan showing each step of the service process and note all the connections and interactions between the user and the existing service. Now the succession of actions required to gain certain experiences or reach certain goals should become visible. The user's needs and any shortcomings of your service are much clearer.

- 4 hours
- Visualize & play through services





EXTERNALIZE

News of the Future

Write a newspaper article that describes your concept. This is a way for you to outline the vision of your product or service as well as its surrounding scenario without getting lost in details. Your article should consist of text and photo as well as a date and headline. This is a simple way to share your idea and its impact with others and to get a discussion going.

- ⌚ Less than 1 hour
- ✓ Share & discuss your vision



EXTERNALIZE

Team Product Box

You and your team explain a product idea with the help of its fictitious packaging. You decorate a box with informative pictures, a slogan and a description of the product's features. The feature list can be vague at first. The goal is to merge various ideas and concepts of your team. This method also helps you make your ideas more understandable. Both to your teammates and to others.

- ⌚ Less than 1 hour
- ✓ Make ideas clear



EXTERNALIZE

30 Seconds Sketch

Quick and dirty: Doing 30 Seconds sketches puts your ideas on paper in a fast and uncomplicated manner. The short amount of allocated time stops you from getting lost in details. This gives you an effective tool to visualize and discuss a large quantity of diverse ideas in your team.

- ⌚ Less than 1 hour
- ✓ Generate many ideas





EXTERNALIZE

Group Sketch

You want good ideas to come swiftly in your team? There is strength in numbers. Get your team together; don't sit on your own pouring over a piece of paper. Take a big sheet of paper or a board on the wall and together, draw your ideas in a simple manner. You can complete and correct each other's ideas. Not only does this offer a basis for discussion, it's also fun and a great exercise for team building.

- ⌚ Less than 1 hour
- ✓ Get a basis for discussion



EXTERNALIZE

Letter to Grandma

"Dear Granny..." By writing a letter to your grandmother the project's goals or the relevant content for the project will become clearer. Make sure to focus on the essentials, using only a few sentences and making it comprehensible just as if your grandmother would read it. The Letter or a Postcard is helpful at the beginning of a project. It helps you to think about how to communicate your vision.

- ⌚ Less than 1 hour
- ✓ Concretize vision & find core idea



EXTERNALIZE

Idea Panorama

How to nourish the creative process: The Idea Panorama illustrates the initial ideas for your future project or service. You demonstrate the central ideas with simple pictures, photos or sketches. Arrange the images in a corresponding order and add buzzwords. This will promote the creative process in your team and help plan the next design activities.

- ⌚ Less than 1 hour
- ✓ Work on many ideas



EXTERNALIZE

Solution Image

Leave a lasting impression! A Solution Image is a single image representing the intended use, the experiences gathered through implementation or the visual interface of your project or service. Solution Images are perfect for giving an instant overview of your concept. The emphasis is put on the main aspects of the idea; making comparisons easier and stimulating discussion on the concept.

- ⌚ 2 hours
- ✓ Communicate the overall impression





EXTERNALIZE

Just Play Prototype

You might be stuck in a certain mode of your project or losing your energy. Then just let yourself go and build whatever you want to build with the materials at hand. It doesn't have to refer to your project. One team member starts with whatever he finds lying around. Then the next person adds something to your building and so forth. In this way wishes and ideas regarding your project can come to the surface without great discussions.

- ⌚ Less than 1 hour
- ✓ Play through & discuss service



EXTERNALIZE

Moodboard

An image says more than a thousand words: A Moodboard is a compilation of images, text and materials. The Moodboard is an excellent medium for communicating the atmosphere and multi-sensory qualities of your coming product, service and space. The concise visual impression being given, conveys moods and emotions in a quick and easy manner.

- ⌚ Less than 1 hour
- ✓ Communicate mood & emotions



EXTERNALIZE

Paper Model

You want to test ideas of shapes, sizes and proportions without resorting to huge amounts of work? Then make a paper model. It can be very rough or very detailed. All you need is paper, scissors and glue.

- ⌚ 2 hours
- ✓ Check proportions & form



EXTERNALIZE

Advertising

Create a fictional print ad, radio spot or flyer. What is your idea called? What is the slogan? Which mood would you like to evoke? One possibility is to make a collage from magazine clippings as well as handwritten copy and drawings. That way the entire team can contribute.

- ⌚ 2 hours
- ✓ Communicate mood





EXTERNALIZE

Rough 3D Prototype

Take objects that you have lying around (mugs, flowerpots, books) and materials you can easily shape (cardboard, foam, cloth). Combine them into something that roughly shows your idea. It is all about creating a physical and abstract representation of your core concept. Details can be figured out later. It's a really good way to show the conceptual progress of your project.

- 🕒 Less than 1 hour
- ✓ Communicate core idea



xperience



EXPERIENCE

User Integrated Roleplay

This form of roleplay involves user participation. Users are integrated in various prepared usage or service scenarios by the team. This method is ideal for the initial testing of the features that you have come up with. This way you can directly collect user experiences and develop solutions based on the reactions and feedback of the users.

- 🕒 4 hours
- ✓ Play through & discuss service

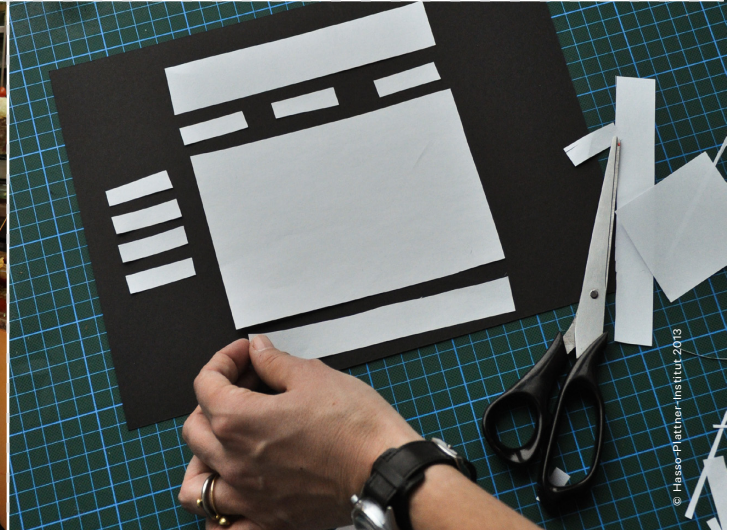


EXPERIENCE

Service Wizard of Oz

For this prototype either you or your team simulate a service, as if it really existed. You may pretend that it is now possible to eat an 18th-century-dinner in a snack bar. Let your users interact with your new service in the real world and observe directly how they behave.

- 🕒 Days
- ✓ Test services easily



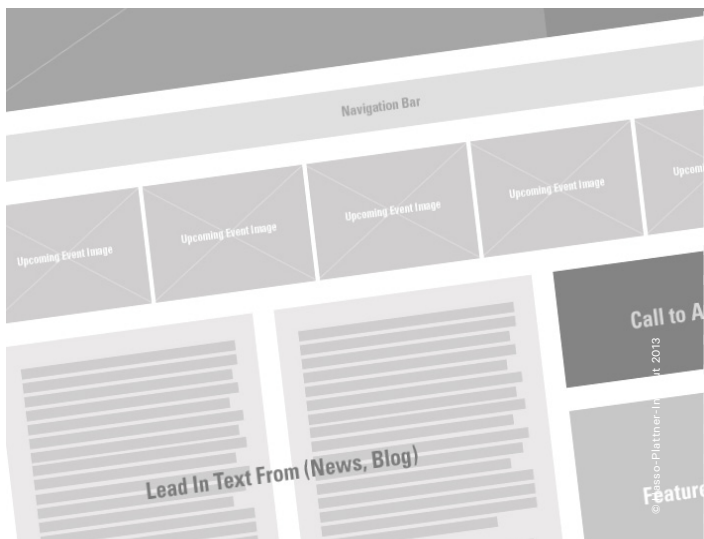
EXPERIENCE

Paper Wireframe

The Paper Wireframe is a quick and easy version of wireframing. For this method you plan the content, layout and links of your website or software using rough sketches. This method is ideal for the early project phases since you can iterate quickly through lots of design changes. Besides visualizing your information architecture you can also start testing usability.

- 🕒 4 hours
- ✓ Illustrate layout & functions



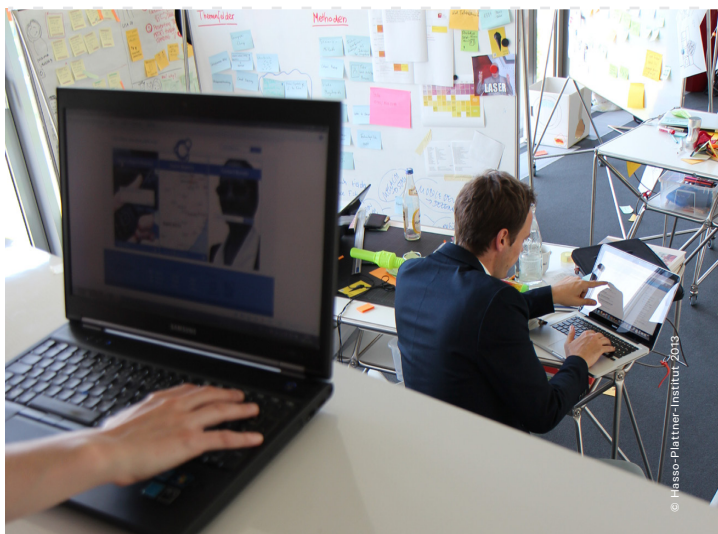


EXPERIENCE

Digital Wireframe

Is your idea a website or piece of software? This means you can create representational page examples. These ought to include the layout and look of the interface and navigation elements. It should also make clear how these interact. Certain software suites allow you to include interactive elements. With these you can, for example, show off your website or software to others and discuss the navigation concept with users.

- 🕒 4 hours
- ✓ Illustrate layout & functions



EXPERIENCE

Click Dummy via Wizard of Oz

Advanced enough technology can be magic! For this prototype one of you becomes a wizard that makes services happen that otherwise would be performed by a computer. The wizard sits in a separate room from the user simulating the system. For example answering emails. Abracadabra! The great thing about this method is that you don't have to spend time building a real back-end.

- 🕒 Days
- ✓ Observe & test interaction



EXPERIENCE

Digital Click Dummy

You would like to know if your user gets your website or application concept? You can use presentation tools to quickly create digital Click Dummies. Create a rough layout using boxes and text frames and use links between slides to emulate the basic functionalities. Users can click their way through the program for testing without further explanation.

- 🕒 4 hours
- ✓ Observe & test interaction



xplain to be



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EXPLAIN TO BE

Informative Roleplay

When you are trying to convey a vision or concept it can be very effective to act it out. To do this you should create a rough script for your scenario. Leaving room for improvisation can make things more interesting. Feel free to use any props or costumes that you think could help capture the mood you wish to convey. Go crazy! This type of roleplay is useful when you don't have a tangible object. It allows you to show how your solution works in a vivid and memorable way.

🕒 2 hours

✓ Communicate idea & context

HPI



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EXPLAIN TO BE

Photo Storyboard

You can use photos to better demonstrate the idea of how the user will interact with your prototype. Order the images in a row as a story strip would be. Usage, treatment and possible interactions with the customer will become clearer. You can take your own photos or use pictures from the Internet. Your Photo-Storyboard is also a perfect tool for communicating with your team.

🕒 2 hours

✓ Define & communicate use case

HPI



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EXPLAIN TO BE

Comic Storyboard

Having difficulties envisioning the user in your freshly developed solution? Then it's time to create user scenarios as visual prototypes. Just use pictures and sketches with a comic character or create new ones digitally. This will lead to a detailed understanding of product usage and treatment. Your graphic story is also a perfect tool for communicating with your team.

🕒 Less than 1 hour

✓ Define & communicate use case

HPI



EXPLAIN TO BE

User Story Map

Tell the whole story of your product! User Stories express requirements related to software and service development. Mostly they appear in the form of short sentences: "As (Persona) I want to (feature) so that (value)." By User Story Mapping you collect various User Stories among different user tasks and activities, that define your product (or service) solution. The generated map clearly demonstrates the range of functions and is particularly suitable for large and complex systems.

🕒 8 hours

✓ Capture functions & find missing parts



EXPLAIN TO BE

Video

This prototype is a sensation for your customers or even a whole community. Create a storyboard together, then decide if you are going to act out the script yourselves or if it should be animated (we can also recommend dough and playmobil figures). Videos can tell a captivating story about your intended solution that can be shared and re-used.

🕒 8 hours

✓ Tell & share the ideas story



EXPLAIN TO BE

Service Blueprint

The company becomes a stage. But what will be put on? And what's going on backstage? The Service Blueprint is an extended version of the Customer Journey Map. It shows visible touch points between user and service and invisible interactions such as backend operations and technical processes.

🕒 1 hour

✓ Visualize processes & get overview





EXPLOIT

Critical Function Prototype

Sometimes you don't need to test the complete package. Discuss especially critical features with your client. Then develop prototypes to test exactly these functions in realistic usage scenarios. You can test how it feels to walk around in a safety suit without having all functionalities and materials ready. Critical function prototypes help you to learn more about the feasibility or viability of an idea that has already proven to be desirable for users.

- 🕒 Days
- ✓ Test critical functions

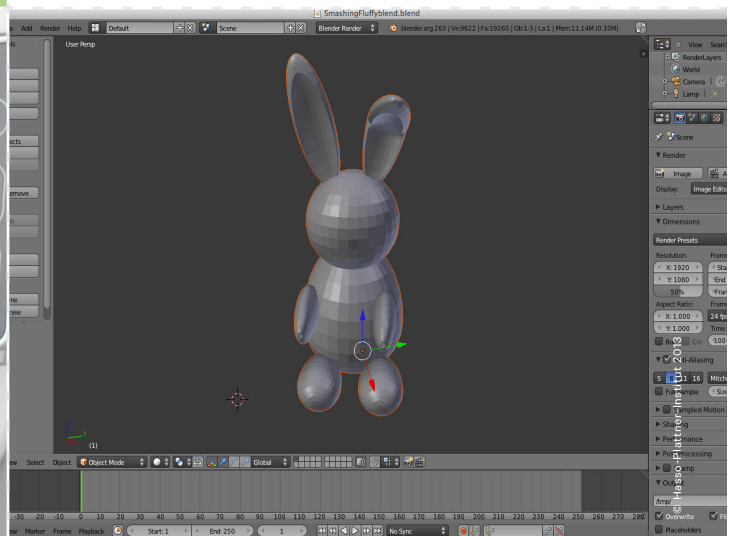


EXPLOIT

3D Prints

A digital model (CAD) of your product will serve as a basis for a 3D print, but also you will need to have access to a 3D printer that can create your object by layering plastic, paper or other materials (wool, cellular tissue, chocolate...). This quite refined prototype really demonstrates the “look and feel” of your product and tests its reception with users.

- 🕒 Days
- ✓ Test formal details



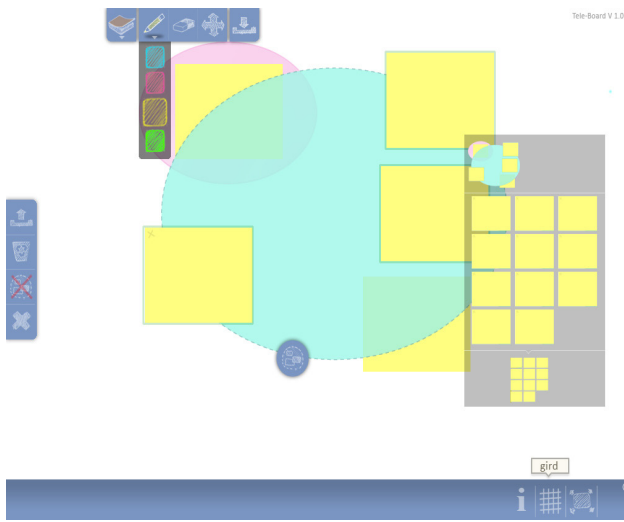
EXPLOIT

CAD Model

CAD stands for computer aided design and it has essentially replaced the drafting board. With CAD software you can create a digital version of your product, usually in 3D. If your product has to survive certain forces or if it uses certain materials with specific properties you can save time and money by running computer simulations to test it.

- 🕒 Days
- ✓ Work on fine details





EXPLOIT

Alpha Version

An Alpha Version lets you gather feedback regarding the basic functionalities of a piece of software. This version of the software will still contain bugs and won't have the entire set of features but it runs and can be tested by users and other third parties.



EXPLOIT

Beta Version

Your software is pretty much perfect? Just a few kinks left to iron out? Then risk it and let your users give this version a go. This way you'll receive valuable feedback on the essential features of your software product. All the features might not be completely finished in this version, but you can officially launch the program making it available to users in good conscience.

- 🕒 Days
- ✓ Work on fine details

HPI



EXPLOIT

Pre-Production Prototype

Do you have to test if your product is feasible? Build a product just like you might later find in the shops. Use the real dimension, solutions, functionalities and materials. This forces you to understand the materials, production means and safety aspects, environmental guidelines etc. With the completion of this prototype you should be confident in knowing what it will take to make your product a reality.

- 🕒 Weeks
- ✓ Early feedback for software

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- 🕒 Days
- ✓ Make it real

HPI



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Your Feedback

We hope our 36 cards inspired you in your prototyping activity. However, we see the Card Set as a prototype itself as it does not lay any claim to completeness. Thus we believe that your feedback may help us to learn even more about prototyping and the way our Card Set may best serve the community. We would therefore appreciate your comments and feedback, positive stories as well as criticism. We also appreciate photos or videos from your team activities.

Please send us an E-mail:

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Acknowledgement

We like to thank Prof. Dr. Hasso Plattner, founder of the HPI, Prof. Dr. Christoph Meinel, president and CEO of the HPI and Principal Investigator of our research project, Dr. Timm Krohn, CEO of the HPI Academy for the tremendous support that we received.

Many people worked on this Card Set in the different stages of the project. We want to thank:

Birgit Jobst, Jan Schmiedgen, Raja Gumieny, Lutz Gericke, Matthias Wenzel, Anja Perlich, Claudia Koch, Elias Barrasch, Ingmar Cramers, Anton Reinig, Anja Wölbling, Josephine Moritz, Birga Schlottmann, Johannes Mayer, and Jochen Gürtler.

Thank you for your manifold contributions and support!

Eva Köppen & Holger Rhinow
Potsdam, January 2014