

BLOGPOST

Rapid Application Prototyping

RAPID APPLICATION PRTOTYPING

Introduction

Digital transformation has impact on customer expectation, employee needs and business processes in your company. Decision makers and managers are daily confronted with questions like

"How can we realize existing potential on digitalization?", "Who are our customers and what do they really need?" or "How can we efficiently address new customer needs and wants?"

With P3 Rapid Application Prototyping (P3 RAP) we have developed an efficient, user-based approach to methodically overcome these challenges.

Key of P3 RAP is the structured process to create digital solutions and make them touchable and testable in very short time frames, to have a solid base for the upcoming investment decisions.



P3 is an independent and international management consultancy, which offers technical and IT consulting as well as software development for numerous customers and industries.

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Uncertainty #1: User

You do not know if the user also sees the problem, how you can solve the problem in a user-friendly way or if the user accepts your solution idea.



Uncertainty #2: Technical Realization

You do not know if and how you can realize the solution approach within your technical framework.



Uncertainty #3: Profitability

You do not know if there is a business case behind the solution approach or how to inspire decision makers with your idea in order to get funding.

Bringing Digitization to life faster

When introducing digital products companies face several uncertainties. These can be the specific challenge of digitizing an internal business process, the repeated failure when addressing customers' needs with e.g. a mobile application or the elusive feeling that your digital solution is just not "right". In all these situations we are in an environment of significant uncertainty, which constitutes in the following questions:

- Which needs do my users have?
- How can I address those needs?
- Which technical constraints do exist and how can I nevertheless successfully realize my idea?
- Does my solution idea really have a profitable business case?
- Do I want to realize the solution myself or do I rather buy an existing solution on the market?

Many projects lack a sufficient, validated basis for decision making to answer those questions.



How can companies handle the uncertainties in the early phase of digital product development?

The multilayered dimensions of uncertainties are an exceptional challenge. Companies look for a methodical and structured approach to overcome those uncertainties. Classical approaches mostly lack flexibility and agility. Especially in the early phase of digital product development, it is key to create effective prototypes within short timeframe. These prototypes enable us to test and validate the corresponding hypotheses, and so create a basis for further development decisions. With P3 Rapid Application Prototyping (RAP) we offer a solution which will enable your company to come up with even more customercentric products and services at an even faster pace.

Bringing digitization to life faster

With P3 RAP we help you to bring ideas to live, test the user experience and validate the business potential of the solution in less than 6 weeks.

With **P3 RAP** we offer a methodology, which handles uncertainties in the early phase of the development of a digital product. Together with our customers we identify the best **solution approaches**, realize first **prototypes**, and create a **technical concept** as well as a **business case**. This all happens within **three design sprints** which means 3 to 6 weeks.





The P3 RAP approach assumes that when it comes to creating a successful digital solution you must consider the following key factors, whether you are a small business or a big corporation:

- 1. The Users and their needs
- 2. The existing IT infrastructure and technology
- 3. The business model and the realization plan

Paying attention to these factors during development is vital to making sure that the product delivers value added to the customer, that the technical concept aligns with the company specific IT- strategy and infrastructure, and that above all the solution creates business value for the company.

Bringing digitization to life faster

RAPID APPLICATION PROTOTYPING

User, IT & Systems and Business are the key pillars of P3 Rapid Application Prototyping and are analyzed with specific selected methods and tools to ensure a successful digital product.





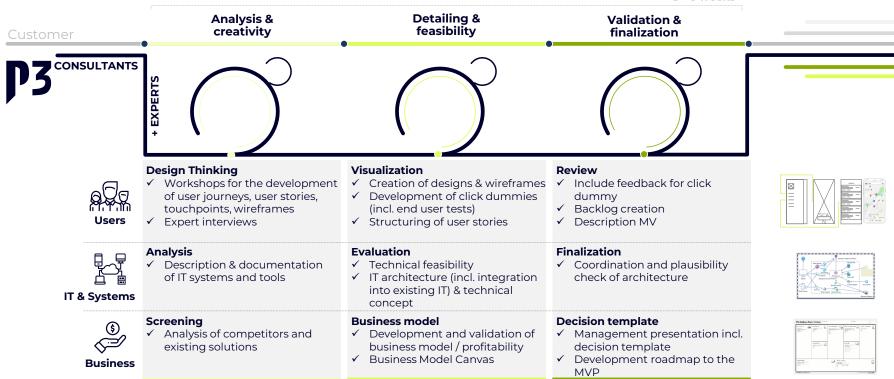


Business

Overview methods & results of each phase







Deep Dive User perspective

Adding value for the user is essential for developing a successful product. In the beginning we want to get a better understanding of the user. Thus, we conduct a design thinking workshop with all important project stakeholders and if possible, also with end users. It is the first tool to understand the specific problem/need, to develop hypotheses and furthermore explore the solution space. Using personas, customer journey mapping, story boards, and point of view methods, we analyze the problem deeply and search for the actual user needs and wants. Together with the workshop participants we generate creative solution ideas by using techniques like guided brainstorming or morphological boxes, making sure that the participants are not limited by too many constraints and assumptions. Then we start the prototyping by visualizing our ideas graphically for example with wireframes. In an iterative process these prototypes are the base for further discussion leading to additional ideas and improvements.





The findings and results of the design thinking workshop are used to develop designs, user flows and eventually click dummies (clickable prototypes with limited functionality). The latter make the ideas really come to live. With click dummies our project stakeholders and selected end users are able to test our solutions. The resulting feedback is very valuable as it serves as input for optimization in subsequent iterations. With this approach it is possible to quickly validate hypotheses and solution ideas or to identify wrong assumptions and to avoid investing in the wrong projects.



Deep Dive IT & Systems perspective

The elaborated ideas alone are worthless if they cannot be realized. Thus, it is necessary to involve your IT-experts from the very beginning not only to work on technical concepts but also to get themselves identified as part of the solution. This is especially true for big corporations. Together with your IT-experts we analyze existing IT infrastructure and the IT strategy of your company to make sure that the development of new digital products follow internal guidelines and utilizes existing resources. This approach and the early involvement of IT experts from your company is important to prepare an effective realization of the project and prevent the project from facing unexpected hurdles.

Of course, we also look for potentials and opportunities to adjust the existing infrastructure considering factors like e.g. responsiveness, scalability, accessibility. It is also an option to start from scratch following a greenfield approach.





When creating technical concepts, we always consider state of the art technology and trends and investigate if their usage could provide additional opportunities to increase the value of the product for both, your company and your customer.



Deep Dive Business perspective

The development, adaption and implementation of digital solutions always go along with investments while at the same time expected revenues are hard to estimate. Validation of profitability or a vision for a suiting business model justifying the investment is necessary. We are happy to contribute our knowledge and experience from many projects in application development and software implementation.

Together with your business experts we intensively analyze opportunities and risks of the project from a business perspective. We elaborate a clear picture of the product value added, identify sales channels and analyze value streams. Furthermore, we sketch a first potential development roadmap based on the wireframes, user expectations and technical concepts leading to an initial estimate of costs and expenditures for the development of a minimal viable product (MVP).





The findings are summarized in a management presentation and can be used to explain project results and decision options in the respective councils.



Summary

An overview of P3 Rapid Application Prototyping and what you get from it.

With P3 Rapid Application Prototyping we offer an approach for creating and detailing project ideas and solution concepts in a short period of time. After three design sprints within less than 6 weeks you have elaborated with your team and us a prototypical clickdummy with modern design, a sophisticated IT architecture incl. technical realization analysis as well as a development roadmap and a business evaluation. With this package you get your management to experience testable results in the early stage of development, get a feeling for the business opportunity and understand how we intend to realize the product.







Bringing digitization to life faster

RAPID APPLICATION PROTOTYPING

Are you facing the challenge to develop a digital solution? We are right at your side with P3 RAP!

Contact us anytime – we are looking forward to learning about your specific project and would be glad to collaborate with you.



CONTACT

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Key Facts



> 1.800 employees from over 40 nations



> **200 Mio. € Revenue** in 2023



For 24 years

we have been inspiring our customers with individual solutions - see for yourself:

<u>SW-Development</u> References





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