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# Shaping Loyalty: Experiences from Design Research Practice

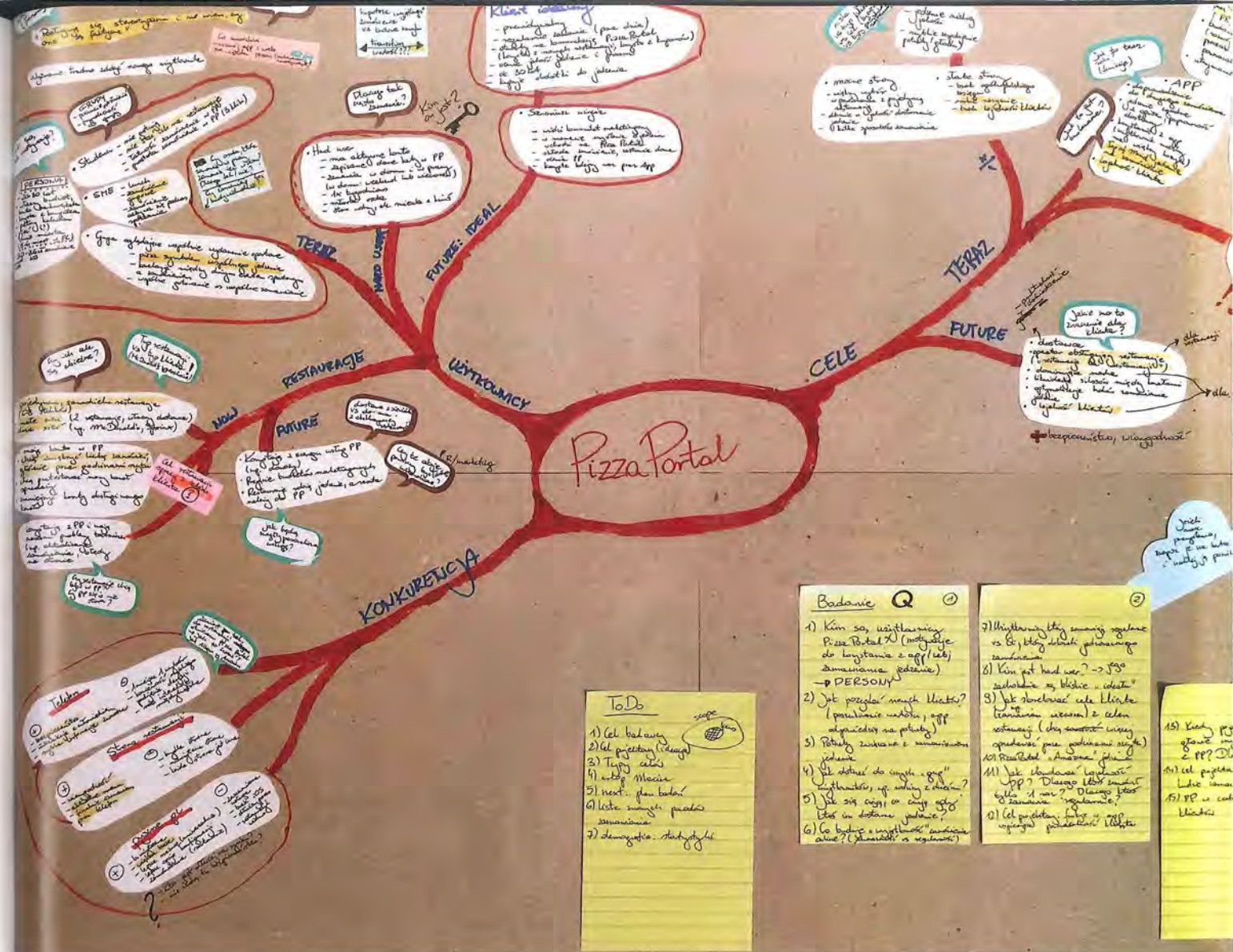


Figure 1. Interview results: A mindmap of PizzaPortal's needs and challenges. The three main branches of the mindmap cover present and future business goals of PizzaPortal, existing knowledge on their users and the company's main competition, as well as a description of an ideal future user. This mindmap let us narrow down the scope of the project.

## Insights

- The business community expects from design researchers actionable results that fuel innovation.
- Design tools structure and accelerate the integration of design research into business-service or product-development processes.
- Creating custom tools is crucial for accelerating, linking, and deepening various design-research and innovation activities.

It is an exciting time for design research. Many companies in the service sector (e.g.; healthcare, insurance companies) are striving to gain a competitive advantage by finding ways to improve the customer experience or by adjusting products or services to dynamically changing contexts of use. There is a need to step beyond the traditional way of developing products and services. Consequently, there is a perfect space for design researchers to step into: supporting the business community in understanding people in the context of their everyday lives to create products and services that respond to their needs.

To explore how companies can learn from the design research approach, we—a team of five design researchers

from Senfino, Tallinn University, and TU Delft—decided to share the process of our cooperation with PizzaPortal, an online food-delivery service operating in Poland. It is a part of the Delivery Hero Network, a global leader in the online food-delivery market that has more than 30 brands, partners with 300,000 restaurants, and operates in 53 countries.

The work presented here is the result of a five-month project conducted for PizzaPortal at the end of 2015. The client requested that we provide insights on the needs of PizzaPortal users and information about the contexts of users' interactions with a mobile application. In this article, we share our lessons learned in the project, mainly about our experiences using a card set during the process.

## GETTING OUT OF THE COMFORT ZONE

Since 2010, PizzaPortal has been developing a mobile application for online food ordering. The company fully embraced the new possibilities of mobile technologies but was struggling to provide satisfying user experiences within its application—specifically, delivering relevant content in the given context of use. Mobility drove PizzaPortal's need to come out of its comfort zone with regard to designing interactions and communicating with end users. We were therefore thrilled when PizzaPortal's product owner asked us to identify the needs of application end users. We took this as a practical opportunity to closely understand and examine our client's research needs.

First, we conducted an interview with the product owner (Figure 1). We asked the product owner about the company's challenges and development strategy, and about customers' experiences. It turned out that in marketing and design decision-making processes, PizzaPortal used market segmentation as a source of information in the design process. What was known about the application end users was mainly based on stereotypes; it did not show the actual behaviors and motivations of PizzaPortal's target audience, which made it difficult for them to gain a competitive advantage. At the same time, a concept of PizzaPortal's future and ideal users was set: loyal customers who spend the time to comment on their orders and build an emotional

relationship with PizzaPortal. This raised some questions: What does loyalty mean in the context of using the PizzaPortal service? What are the expectations of loyal PizzaPortal users? How should PizzaPortal satisfy these expectations (outside of just delivering users savory food)? We embarked on an investigation into the mechanisms that shape loyalty and the motivations of the application users, with the end goal of enhancing their relationship with the brand. By shaping loyalty we mean redefining it in such a way that it makes sense for both PizzaPortal and the target group, fitting both their motivations and needs at the same time. We aimed to provide PizzaPortal with a needs-based strategy for shaping users' loyalty through user experiences.



Figure 2. The example of PLEX Cards designed for brainstorming or creating scenarios. Each card presents a theory or insight crucial for designing for playfulness.



Figure 3. The results of desk research presented in the form of cards. The first card is a group divider card that introduces a given category (here: components of loyalty mechanisms). Two further cards summarize chosen theories on the levels of loyalty and loyalty indicators.

## LET'S PLAY A DESIGN RESEARCH GAME

Within our team, there was a varied understanding of *loyalty*, so we needed to verify our intuition and build a consensus around this notion. We started desk research by reading scientific literature in social psychology, marketing psychology, and interaction design, as well as food blogs, restaurant rankings, and food-ordering portals—all great sources of information on loyalty. We decided to use these insights and theories to inform our subsequent work on this project, making our research more focused on loyalty and applying the theoretical constructs on loyalty. This triggered us to explore different ways of presenting the most important insights from the literature to use as a source of inspiration in the PizzaPortal project—a point of reference while identifying mechanisms for shaping users' loyalty and during idea generation. Thus, we decided to explore the possibility of creating a design tool for shaping loyalty.

In design research, we practice synthesizing data into a form that can be used by the entire project team. Toward this end, we either create our own design tools or apply existing ones as a means to reach project goals. Such tools (e.g., personas) structure the discovery process and feed creative activities. Design tools support design researchers in uncovering deep insights, engaging the entire project team (including the client) and providing design-research deliverables in a concise, accessible format. Design tools can take the form of inspirational cards—for example, Inspiration Cards [1], IDEO Method Cards, or PLEX Cards [2] (Figure 2), which are all examples of tools that are used in a game format. Such cards facilitate communication in the design process, add focus, and foster playful and divergent thinking [3]. Furthermore, cards that provide structured sources of inspiration [3] can support the reuse of specific knowledge; for example, PLEX cards communicate concepts specific to designing for playfulness [2].

To optimize our desk research and assure the reuse of key theories, insights, and examples, we decided to build on the experiences of others [1,2] and work on our own tool, a card set for reusing loyalty-oriented knowledge (Figure 3). We created a collection of 109 cards. Each card touches on a

separate theme. It presents a title in the form of a question (e.g., How can we apply a principle of reciprocity?), a short answer to that question, an image to graphically enrich the information, and a reference. To get a macro perspective on loyalty, we printed out the entire collection of cards and categorized them using the affinity diagram technique. During this process, the six main categories for shaping loyalty emerged, for example, “strategies for developing brand identity.” Coincidentally, the physical form of the cards inspired us—it was a physical representation of our common knowledge on loyalty. To encourage further exploration, we enclosed the collection in a wooden box (Figure 4). The six categories were separated with dividers to structure the cards into groups and to facilitate browsing. We had created a card set for shaping loyalty.

## MAKING THE SHIFT FROM INTERACTIONS TO EXPERIENCES

Within the PizzaPortal project, we used the cards to change the client's approach toward development of the mobile application. Increasing user loyalty involves much more than designing smooth interactions, mobile trend analysis, or competitive analysis. The focus is on mechanisms that shape loyalty and designing for experiences. This shift was achieved by applying the cards, which primed, anchored, and structured our design-research process (Figure 5).

Our desk research informed us of the mechanisms that shape peoples' behaviors in the context of loyalty. We thus extended our perspective on the research problem. We took into consideration factors that were not under consideration at the beginning of the project, such as level of satisfaction, reciprocity rules, and false dilemmas (when a customer negatively judges a brand on a single experience).

**Priming effect.** In the interviewing and analysis phase, we conducted 12 interviews with active, loyal PizzaPortal users (six female and six male, ages 20 to 35). Because we adopted a generative design-research approach [4], we sensitized participants in the study before interviewing them [5]: One week before the interviews, we gave participants sensitizing booklets that were custom-designed for this project (Figure 6).



Figure 4. A card set for supporting reuse of knowledge on loyalty. There are instructions in the box lid on how to use the set. The group dividers for the six categories of cards are visible.

The booklets included a set of exercises concerning the participants' lifestyle and diet, the role that food plays in their life, their shopping decisions, and the different situational contexts of eating and ordering food using PizzaPortal's apps. The goal of sensitizing was to encourage participants to reflect on their needs, motivations, behaviors, and expectations with the aim of gathering insights for the design of PizzaPortal's apps.

Knowledge presented in the cards guided the design of the sensitizing booklets and was used in conducting the interviews. Knowing mechanisms that shape loyalty, we could design sensitizing exercises that focused on areas crucial for understanding the relationship between PizzaPortal and its users. Similarly, while interviewing users, we were sensitive to statements connected to loyalty or that indicated a relationship with the brand—cards were a source of secondary questions that had not been pre-planned in an interview schedule. Then we could ask precise follow-up questions and have a deeper understanding of the identified phenomena. For example, we asked users to define *loyalty*, and then requested that they give examples of their behaviors or qualities that signify their loyalty toward PizzaPortal. Then, to fully understand their relationship with PizzaPortal, we asked them follow-up questions based on the list of psychological factors influencing client loyalty.

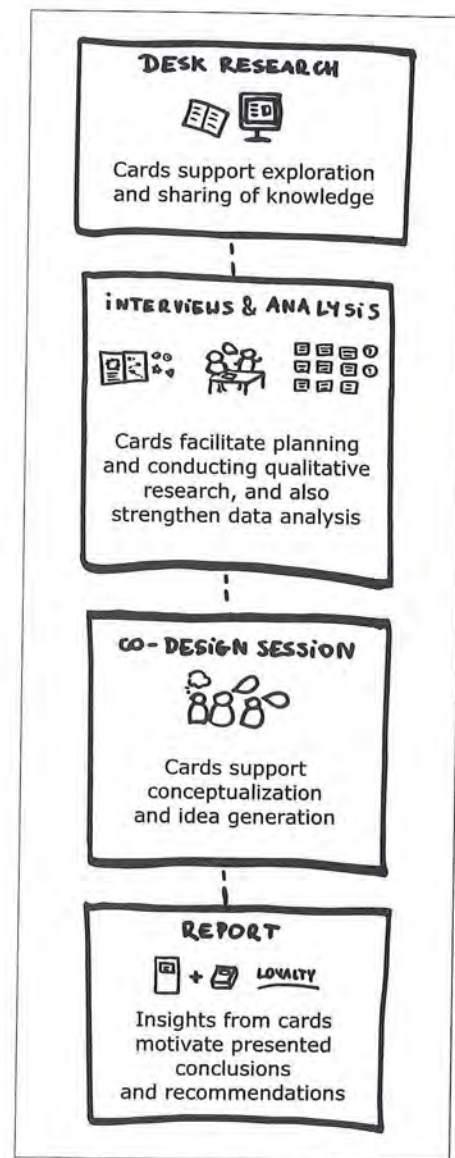


Figure 5. Application of card set in the design-research project. We present the changing role of cards across stages of the project.



Figure 6. “A little something about me”—sensitizing booklets included seven tasks for each day of the week.

Next, we applied the cards to strengthen the data analysis. We transcribed and categorized statements from the recorded interviews. The classification of the data, which was directed at studying particular behaviors of users (e.g., holiday-eating strategies), emerged naturally. Having the classification, we applied our design tool to conduct a diagnosis of PizzaPortal user loyalty, referring back to theories presented on the cards. For example, mechanisms behind satisfaction or customer engagement were applied to verify whether PizzaPortal users were satisfied and engaged. Therefore, we knew which solutions worked

well at PizzaPortal and which areas should be further developed. One of the biggest discoveries was that PizzaPortal users did not have a positive emotional relationship with the brand. Surprisingly, these users made at least one order per month, so PizzaPortal regarded them as loyal clients.

**Anchoring effect.** To generate concepts that would increase the loyalty of PizzaPortal users, we conducted a co-designing session with the company’s representatives. In the first part of the session we discussed the results of the desk research and the insights from interviews. During the discussion, we browsed through cards and referred to chosen mechanisms to motivate our conclusions. Furthermore, information from the cards brought understanding while specifying the behaviors and motivations that reflect customer loyalty. Next, these behaviors and motivations were used while defining the emotional and end goals of PizzaPortal personas. Additionally, using examples from the cards, we created a custom definition of *loyalty* for PizzaPortal:

*Loyalty to PizzaPortal means users’ faithfulness to PizzaPortal expressed in repeated orders as well as users’ emotional engagement with the brand that results from solutions provided by the PizzaPortal mobile application.*

It also was crucial to define the characteristics of loyal PizzaPortal users. This definition was applied as a design tool during idea generation (Figure 7). In this introductory part of the co-design session, cards anchored a discussion and helped define what PizzaPortal expects from its customers. It provided the background for idea generation as we



Figure 7. Co-design session in practice—defining core values of PizzaPortal. Venn Diagram sorting exercises combine business and user perspectives on PizzaPortal.

defined *loyalty* for PizzaPortal, set goals for PizzaPortal personas, and identified mechanisms for shaping loyalty that must be implemented in the PizzaPortal mobile application.

#### Structuring idea generation.

In the second part of the co-design session, we concentrated on generating ideas for boosting brand loyalty. We used cards as a source of inspiration for generating ideas for the PizzaPortal mobile application. We divided eight of the session participants into pairs (employees of PizzaPortal and design researchers). Each pair received a random subset of cards, PizzaPortal personas, and the definition of *loyalty* coined in the first part of the session. During this phase, participants had to concentrate on the goals of the personas while browsing the cards. The goal was to stimulate ideas for new functions and interactions in the PizzaPortal mobile application or marketing actions for boosting loyalty, as well as to provide a different perspective for creating a novel idea. The application of cards supported a discussion of loyalty mechanisms between session participants and increased their engagement in the process of generating novel ideas for shaping loyalty. Furthermore, the cards introduced various contexts and topics to the discussion, allowing participants to formulate ideas based on more than just their personal experience.

#### CONCLUSION

The goal of this article is to report on how a card-set tool can structure and accelerate the integration of design

research into business-service or product-development processes.

Design research strives to provide insights for building products or services that respond to human needs. Therefore, design researchers’ work needs to convey such insights explicitly. In business practice, there is also a necessity to relate design researchers’ work to the business context. We argue that creating custom tools is crucial for accelerating, linking, and deepening various design-research activities. The application of cards in the PizzaPortal project facilitated the acquisition and incorporation of knowledge on loyalty. The role of this set changed within the project. The cards supported planning qualitative studies and analysis of users’ insights, as well as discussion and structured idea generation.

Creating custom tools can be an approach to staging, informing, and structuring design-research projects. Such tools, however, have to fit the goals of a project. When creating the tools, it is necessary to take into account time, resources, budget, and team expertise. Such tools act as boundary objects [6].

The process of creating and using them helps to divide work among team members and support the transfer of knowledge. Tools also enable project teams to get different perspectives on the project and thus to spur innovative results.

It is crucial that design researchers take the lead in using tools within projects. Tools are means to achieve project goals, and design researchers are trained to use them. To appreciate the value of tools, business stakeholders have to be informed beforehand about the role of such tools and how they influence the process—speeding up, deepening, and linking different activities of design research into a coherent whole.

We recommend creating custom tools for each project. However, as the mechanisms of shaping loyalty presented in our cards were not specific to the food-ordering context, we naturally started to use the cards in other projects; the knowledge transferred well. It inspired us to extend our collection of cards. When we conduct desk research in other projects, we add new cards and new categories of cards to the primary collection. In this way, we develop our own knowledge base, which acts as a tool

for design-research projects.

The physical cards enclosed in a box encouraged browsing. We often came back to the chosen cards to refresh our memory or check a given piece of information. We argue that this would not happen if cards were presented in a digital form or in a booklet format.

We noticed that the chosen constructs and insights presented in our card set are rather universal and have already appeared in existing decks of cards. For example, the motivation to finish a major task is defined as a Completion in the collection of PLEX Cards [2]. It made us ponder why we preferred using our cards instead of existing solutions. We found that the process of building cards was crucial, as it established the underlying rationale in our minds. Then the cards worked well as a resource for recalling knowledge that had already been acquired. We conclude that design researchers who do not understand the rationale behind the card principles risk having a false understanding when using existing tools.

Contrary to our expectations, PizzaPortal representatives were not interested in using the cards on their own. Our tool is best suited for co-design work, and we argue that the role of design researchers is crucial for facilitating such a process. Business roles may lack the skills to use such tools unaided. PizzaPortal representatives took advantage of the knowledge presented in the cards during co-design sessions and then in the form of a written report (Figure 8), in which the identified mechanisms for shaping loyalty were applied to ascertain the loyalty of PizzaPortal users. The written report concluded with actionable results, and was thus a key tool for PizzaPortal representatives.

#### ENDNOTES

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Figure 8. “Loyalty—formula for PizzaPortal”—final project report presents insights from interviews provided with the suitable theoretical model or benchmark.