Shaping Loyalty: Experiences from Design Research Practice

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 the design-research process.
- Design researchers must step beyond the traditional way of understanding people in the context of their everyday lives to provide satisfying user experiences.

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: 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. We asked the product owner to provide insights on the needs of PizzaPortal’s users and the company’s main competition, as well as a description of an ideal future user. This map helped us to narrow down the scope of the project.

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. 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.

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 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.

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 end users. We took this as an 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 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.

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 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.

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 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.

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 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.

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 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.

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 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.
Let's Play a Design Research Game

Within our team, there was a varied understanding of loyalty, so we needed to clarify our intention and build a common ground from 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—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, Inspirational Cards [11], IDEO Method Cards, or PLEX Cards [24] (Figure 3), 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 towards development of the mobile applications. Increasing user loyalty involves much more than designing smooth interactions, mobile usage, or customer 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 less functional, social, condition, reciprocity rules, and false dilemmas (when a customer negatively judges a service competitive, or the brand on a single experience).

Priming effect. In the interviewing and analysis phase, we conducted 12 interviews with active, loyal PizzaPortal users (five female and six male, age 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).

For 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.

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 sequence. 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.
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 a co-design tool to 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 felt 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.

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 satisfaction. Next, the behaviors and motivations were used while defining the emotional and end goals of PizzaPortal participants. 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 was also 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 were discussed, a discussion helped define what PizzaPortal expects from its customers. It provided the background for idea generation as we 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 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 activities are needed 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 to 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 suit the goals of a project. When creating the tools, it is necessary to take into account time, resources, budget, and expertise. Such tools act as boundary objects [6].

The process of creating and using them helps to close a gap between the company and design researchers’ work. Furthermore, the process can be facilitated by a co-designing session with the company’s representatives. The 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.

**REFERENCES**

3. Skowronska, J., Szymczyk, A., and Lauzon, D. How a service-oriented perspective can help us to understand the role of user-generated knowledge, which acts as a tool for design-research projects.

The physical cards enclosed in a box encouraged browsing. We often came back to the cards to refresh our memory or check a given piece of information. We argue that this should not happen if cards were presented in a digital form or in a booklet format. We noticed that the chosen contracts 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 should have 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-designing projects. We recommend creating custom tools for each project. However, as the chosen constructs and insights presented in our card set are rather universal and have already appeared in existing decks of cards, the tools for each project. When creating the tools, it is necessary to take into account time, resources, budget, and expertise. Such tools act as boundary objects [6].

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

The process of creating and using them helps to close a gap between the company and design researchers’ work. Furthermore, the process can be facilitated by a co-designing session with the company’s representatives. The 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.

**REFERENCES**

3. Skowronska, J., Szymczyk, A., and Lauzon, D. How a service-oriented perspective can help us to understand the role of user-generated knowledge, which acts as a tool for design-research projects.

The physical cards enclosed in a box encouraged browsing. We often came back to the cards to refresh our memory or check a given piece of information. We argue that this should not happen if cards were presented in a digital form or in a booklet format. We noticed that the chosen contracts 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 should have 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-designing projects. We recommend creating custom tools for each project. However, as the chosen constructs and insights presented in our card set are rather universal and have already appeared in existing decks of cards, the tools for each project. When creating the tools, it is necessary to take into account time, resources, budget, and expertise. Such tools act as boundary objects [6].

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

The process of creating and using them helps to close a gap between the company and design researchers’ work. Furthermore, the process can be facilitated by a co-designing session with the company’s representatives. The 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.

**REFERENCES**

3. Skowronska, J., Szymczyk, A., and Lauzon, D. How a service-oriented perspective can help us to understand the role of user-generated knowledge, which acts as a tool for design-research projects.

The physical cards enclosed in a box encouraged browsing. We often came back to the cards to refresh our memory or check a given piece of information. We argue that this should not happen if cards were presented in a digital form or in a booklet format. We noticed that the chosen contracts 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 should have 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-designing projects. We recommend creating custom tools for each project. However, as the chosen constructs and insights presented in our card set are rather universal and have already appeared in existing decks of cards, the tools for each project. When creating the tools, it is necessary to take into account time, resources, budget, and expertise. Such tools act as boundary objects [6].

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

The process of creating and using them helps to close a gap between the company and design researchers’ work. Furthermore, the process can be facilitated by a co-designing session with the company’s representatives. The 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.