The Role of Customization Levels in Co-Creation and Co-Destruction of Customer Value

Author: Sven Schoot Uiterkamp
University of Twente
P.O. Box 217, 7500AE Enschede
The Netherlands

ABSTRACT,
Recent developments in digital customization have changed how people use e-commerce platforms. Customization increases customer satisfaction, especially in performance-based categories like racket sports. It can increase value, but it also increases the risk of destruction of value, especially when customers lack clear guidance or the customer journey is misaligned. This thesis explores how customization and support levels (low, moderate, high) affect customer value experience. Nine Shopify landing pages were made using a 3x3 experimental design. Participants were assigned to a persona type: Maximizer, Explorer, or Minimizer depending on their decision-making preference. Although results vary by persona, moderate customization with clear guidance enhances smoothness and decreases frustration during the process. Maximizers feel pressure under high customization, whereas Minimizers struggle with complex interfaces regardless of the support. The findings show that system interface, support and user characteristics shape the value. So, this thesis contributes to value paradox literature by showing how value co-creation and value co-destruction are shaped during interaction, depending on context and user type. It also recommends different interfaces for diverse customer profiles in future e-commerce platforms.

1. INTRODUCTION

Online shopping has seen significant transformation in recent years, particularly in the way consumers engage with products. People now purchase not only items, but also often want to personalize them to suit what they like. In sports like padel, this is getting increasingly common. These days, many players search for ways to personalize their rackets. From weight, to grip or shape. It makes sense as your performance and feelings on the court can indeed be significantly affected by the equipment you use. This shift towards personalization reveals how much more engaged consumers now are in determining what they purchase. This raises new questions about how value is created in this kind of online experience.

In particular when customizing choices are provided, in online environments the consumer often decides what the final product looks like and how it could be used for them. Customer participation in customizing does, however, not come without risk. Advanced online customizing brings not just chances for value creation but also the potential for value destruction. The idea of the value paradox, that is introduced by Echeverri and Skålén (2011), who argue that value co-creation and co-destruction can happen simultaneously inside the same interaction, captures this. While customers and businesses may aim to build value together, the process can also produce confusion, effort, or unmet expectations. Later work by Echeverri and Skålén (2021) reveals that this depends on how practices between customer and provider fit together. If there is alignment, value is created. If not, the value breaks down. These dynamics do not always happen instantly. Value co-creation and co-destruction, according to Keeling et al. (2021), might progressively show themselves when interaction patterns change. Laud et al. (2019) show how co-destruction can result from mismatched knowledge or skills, information or expectations. Lumivalo et al. (2024) go further, explaining that co-destruction occurs not only in the connection between individuals but also inside the individual depending on their personal views and expectations before, during, and after the service.

To understand how customers actually experience this value experience within the interaction, Sahhar and Loohuis (2022) offer a useful framework. They define three different types of customer value experience. The first experience is where everything flows naturally, and the customer barely thinks about it, because the process is as expected. They call it unreflective value experience. The second is where small interruptions appear, and the customer starts to question parts of the process (semi-reflective value experience). The third is where the interaction breaks down entirely and the customer becomes aware that value is being lost (fully reflective value experience). In digital customization journeys, this shift might happen when choices become unclear, when there are too many steps, or when guidance throughout the process is missing. The experience that started with high engagement can suddenly disappointing, or even frustrating.

Research on digital services clearly shows this in particular. While customizing sometimes stimulates innovation and customer interaction, Stojčič et al. (2024) show that it can also lead to bottlenecks including information overload or inconsistent experiences when systems are not effectively supported. As Dziewanowska and Kacprzak (2020) note, the same online environment that supports value can also cause anxiety. If guidance is weak, or the process becomes too complex, customers may feel more burdened than empowered.

According to Zhang, Lu, Torres, and Chen (2018), these negative experiences often lead to frustration and even brand disengagement.

In racket sports, a racket that a player uses can significantly affect their performance and mood throughout a game. Little details like the feel of the grip or the shape of the racket could have a significant impact. This is why in this case customizing is so important. However, it can often cause dissatisfaction and co-destruction when the customizing procedure is unclear, too complicated, or does not fit what the player expected. Even if it is technically correct, an uncomfortable racket might compromise confidence and performance. Poor customizing might result in regret, product returns, or even brand dissatisfaction and unhappiness. Too many choices can confuse and exhaust the user, while too few can reduce perceived control and limit satisfaction (Kalyanaraman and Sundar, 2006; Lee, Lee and Lee, 2012). That is why customization is more than just an extra feature in this kind of market. It is directly related to the performance of the product in actual conditions, hence the effects of a poor customizing experience become much more serious.

Higher happiness, more involvement, and long-term loyalty can all follow from a well-designed customizing process. And poor design can backfire and cause value to be destroyed instead of created.

Echeverri and Skålén (2021) precisely address in their framework of interactive value formation (IVF)(Appendix 1) this. According to their model, value is continuously formed and re-formed through interaction. From selecting options to watching previews and getting confirmation, every touchpoint in the customizing process provides a moment when value may either be co-created or co-destroyed. In e-commerce, customizing turns into a critical point of interaction. Rather than merely a feature, this strategic element can affect the complete client experience. De Bellis et al. (2019) stress even more how exactly people regard the process as either useful or overwhelming depending on how customization is presented and supported, by means of guided steps, visual previews, or even feedback.

Particularly as more individuals started shopping online both during and following the epidemic, online customizing has evolved quickly in recent years. Many brands added personalizing features to satisfy growing demand, but in doing so, they sometimes paid more attention to providing choices than to how consumers really feel about those choices. Many customizing paths are thus still poorly planned, especially for technical or performance-based products like rackets. Although studies have indicated that customizing can improve happiness and engagement, we still do not fully understand how various degrees of customizing, in terms of complexity, number of options, and available guidance, influence the balance between value co-creation and co-destruction. This becomes especially crucial in circumstances when customer performance, confidence level, and ease of integration of the product into daily activities directly depend on its fit. Although more choice usually results in increased value, current research indicates that this link is significantly more delicate in existing systems. Too much choice can overwhelm users, while too little can limit their sense of control, especially when they lack product expertise or clear preferences (Zhang et al., 2018; Kalyanaraman & Sundar, 2006).

This study intends to close this gap by analyzing how different levels of customization mediate the experience of value co-creation and value co-destruction in the context of online racket sports e-commerce. It emphasizes how athletes experience customization during their e-commerce journey and how the structure of the customizing process shapes their satisfaction or frustration.

Accordingly, the main research question is: **How do different levels of customization mediate value co-creation and value co-destruction in personalized e-commerce for racket sports?** The following subquestions will also help one investigate this topic:
- What role does customization play in shaping value co-creation and value co-destruction in racket sports e-commerce?
- How do customers perceive and respond to different levels of customization, and when do these experiences result in co-creation or co-destruction of value?
- In racket sports e-commerce, what design techniques enable e-commerce platforms to balance customizing to improve value creation and lower value destruction?

This study of the literature enables me to see how customization influences the value customers experience when online buying. Value develops via the interaction between consumer and platform, it is not fixed (Echeverri and Skålén, 2021). Sahhar and Loohuis (2022) show that this value can shift depending on how the customer experiences and reflects on the process. By focusing on customization level, I look at when personalization creates satisfaction, and when it causes confusion or frustration. The aim is to understand what kind of customization actually works in online racket sports retail, and when it might backfire.

Though I am not looking for the ideal setup, I want to know how structure, choice, and guidance affect the experience. Existing theories are used to see what is already known and where gaps remain. I am especially interested in whether there is a certain level that works best, so that it is not too much and not too little. I also consider how lack of guidance or choice overload influences the client's mood. More personalizing does not necessarily translate into improved experience, in my opinion.

In theory, this is a relevant topic, but in practice as well. For online sports retailers, it is important to know how customers experience customization. It provides value if it helps one to feel in control. On the other hand, if it gets too vague or too much, frustration and value loss may follow. With better design of customizing, perhaps, this study clarifies this, increases usability, and enhances value.

2. LITERATURE REVIEW AND HYPOTHESES
2.1 Customization in E-commerce

The ability to customize goods has changed the buying behavior of people on the internet. Little adjustments to a product can significantly affect performance, comfort, and confidence. In our case, rackets, customization becomes really crucial. It lets players change elements like weight, balance, or grip to meet their playing style. This goes beyond just thinking about design or style. It is about making the product fit the particular person.

Still, customizing is not always positive. It relies on the organization, the number of options given, and the degree of support during the process. According to Kalyanaraman and

Sundar (2006), too many choices might overwhelm consumers and too few can make them feel limited or not in control. Customers who perceive a sense of control while customizing report more satisfaction, according to Lee, Lee, and Lee (2012). This implies that the general experience is much influenced by the arrangement of customizing.

The platform's design also counts. Clear visual previews, guided processes, and useful feedback assist consumers to feel confident in their decisions and enjoy the process (De Bellis et al., 2019). If that support is missing, the experience can quickly become frustrating, and that will lead to value being destroyed.

Not every consumer customizes for the same reason. Customizing could be functional (to increase performance), aesthetic (for the looks), or identity-driven (to express uniqueness or group belonging), according to Lei et al. (2021). These different reasons also influence people's reactions to the whole process.

Senanayake and Little (2010) describe that customization can happen at different stages, such as during design, production, or post-production. The complexity of the experience depends on these several elements as well as the degree of customer involvement. Luyen et al. (2021) call this 'customer intensity', that is, the time and effort the customer puts into the process. When the intensity becomes too high, the chance of a negative experience increases.

Customers often feel under pressure when there are several poorly structured options, according to Wang et al. (2021). However, that overload effect decreases when the options they coudl choose from match their needs or expectations.

Customizing only works, then, when companies can provide it with no loss in speed, quality, or cost. Wang (2021) notes that this requires flexible processes and modularity that let for variation without complexity issues. In racket sport products, finding that balance is important. Although consumers desire something personal, they also expect the process to be straightforward and effortless.

2.2 The Experience and Co-creation/Co-destruction of Value

Customers in online customization are participants in producing value rather than passive receivers of it. Many times, this relationship between the customer and the platform is characterized as value co-creation. Value thus comes from the customer's involvement, decisions, and experience during the process as much as from the company. Customers who are emotionally involved in the customizing process can feel more satisfied, as Dziewanowska and Kacprzak (2020) describe since they feel more connected to the finished product.

Still, not every customization journey results in a positive outcome. Customizing can cause irritation, uncertainty, and even regret, according to Zhang et al. (2018) when consumers feel unsupported or when their expectations are not met. This is called value co-destruction, and it happens when the process generates more effort, uncertainty, or stress than actual value. Sahhar and Loohuis (2022) help to explain why this happens by describing three types of value experience. In an unreflective experience, everything runs smoothly and the customer does not need to think too much. In a semi-reflective experience, small disruptions start to appear and the customer becomes slightly more aware of the process. In a reflective experience, the client becomes totally aware that something is going wrong as the flow breaks down

completely. The more reflective the experience gets, the more likely value is being destroyed instead of created.

This view is supported by the work of Echeverri and Skålén (2021), who argue that value is continuously formed throughout the interaction, not at a single point. Value co-creation and co-destruction are also shown by Keeling et al. (2021) as usually happening side by side rather than as independent events. A customer can start out feeling engaged but gradually shift into dissatisfaction when too much effort is required or when small issues are not resolved.

Wu et al. (2022) add that the outcome depends a lot on how the customer feels during the process. If the experience is enjoyable and there is enough support, small problems might go unnoticed or accepted. But if the customer already feels pressure or effort, even a small interruption can be enough to transform the experience into something negative. This shows the vulnerability of the real-time value formation process.

Sandberg et al. (2022) explain that customer interpretation of value is mostly shaped by their emotional reactions. Positive feelings like confidence or curiosity support co-creation, while negative emotions like confusion or frustration can lead to co-destruction. These emotions are shaped by both what happens during the process and by what the customer brings to the experience, like expectations from the past or thoughts about the outcome.

Journée and Weber (2014) also agree that value is experienced rather than something delivered at the end of the process. It can shift moment by moment, depending on how the customer feels, what they see, and how much sense the process makes to them.

All of this points to the same idea. Value is not fixed, it is shaped in the moment, during the interaction. It depends on the expectations of the customer, the reality as it is, and the level of support they get during the process. In a process like customization, where the customer is asked to take an active role, this experience becomes even more important.

2.3 Customization within Value Co-Creation and Co-Destruction

Although customizing might enhance the consumer experience, it also runs the danger of confusing or frustrating the customer. What Echeverri and Skålén (2011) call 'the value paradox' captures this dual character. They explain that depending on the way interactions between the customer and the service provider turn out, value co-creation and value co-destruction could occur simultaneously. Regarding online customization, every stage of the process, from choosing features to receiving feedback, may either increase or decrease value. Customizing is not therefore always a positive thing. It depends on how the customization process is structured and experienced.

Echeverri and Skålén's (2021) Interactive Value Formation (IVF) model shows that value is continuously changed by interaction rather than produced at one time. Small moments during the customization journey, such as unclear instructions, unexpected options, or weak feedback, can shift the experience from co-creation to co-destruction. Meierhofer and Heitz (2021) found that there is no single ideal level of customization. If the process asks for too much effort or becomes overwhelming, customers may feel more stress than satisfaction. Their model shows that both value creation and value capture depend on how well the customization journey is designed across different stages.

Sahhar and Loohuis (2022) explain that as customers move from unreflective to reflective experiences, they become more aware of the process. If that reflection brings up friction or doubt, the experience becomes more negative. This shows that value

destruction does not always happen suddenly but can build gradually through moments of misalignment.

Poor design also plays a role. De Bellis et al. (2019) show that when customization interfaces are not clearly guided or do not offer visual feedback, users lose their sense of control. Wang et al. (2021) add that too many unstructured options can cause overload. When customers feel that the effort required outweighs the benefits, they may lose trust in the process. Wu et al. (2022) support this by showing that co-production becomes risky when the experience creates stress or feels unsupported, even if it is meant to involve the customer.

This is especially important in performance-related products like racket sports, where users rely on the product to match their specific needs. A customization process that leads to a poorly fitting product cannot only lower satisfaction but also affect performance and confidence. Li et al. (2022) found that when high customization is offered without the right support, users often experience more frustration than value. Lumivalo et al. (2024) explain that value destruction is not always visible right away. It can happen in different ways, such as emotionally, practically, or over time, especially when expectations do not match outcomes.

Even small details in design can influence the outcome. Sandberg et al. (2022) show that emotional responses such as frustration or disappointment shape how value is felt. Prasetyo and Alhaq (2024) show that when customization platforms lack structure or feedback, users disengage. These moments of friction shift the customer out of the experience, and instead of creating value, the process starts to take it away.

All of this supports the idea that customization is not automatically a source of value. It is a touchpoint where value is formed, but also where it can be lost. Whether the experience ends in satisfaction or regret depends on the structure of the process, the emotional response of the user, and the interaction between the two: the design of the process and the user's emotional response.

2.4 Different Customer Types in Customization

Every customer does customizing in different ways. Some people feel confident and in charge even if the platform or product is precisely the same, others become confused or even frustrated. It really depends on what kind of person they are, how they make decisions, and how much help they need during the process.

There is quite a bit of research showing how these differences work. Bavolar (2023) explains that people have different decision-making styles. Some are what he calls maximizers: they want the best possible option and often feel unsure or regretful when there are too many choices. Others are satisficers. They are happy with "good enough" and feel less stress from decision-making. Schwartz (2004) shows that maximizers, in particular, are more likely to feel disappointed after customizing, even if the end result is decent.

Neves and Reis (2018) point out that people also differ in how they approach customization itself. Some want to be in full control and decide every little thing. Others prefer a guided journey with previews, help, and clear instructions. If that help is missing, some customers are fine with it, but others quickly lose their way. Joergensen et al. (2014) support this by showing that not every customer wants the same depth of customization. Some are happy with just a few simple changes, while others want more control and complexity.

Because these kinds of differences matter, it helps to group customers into types. That makes it easier to understand and

explain how each type reacts to customization. These types are called personas. They are not exact profiles, but more like simplified versions of real users, based on patterns from the literature.

For this research, three customer types are used to better understand what happens during customization:

- The **Maximizer** wants to stay in complete control and have many choices. Though they are more vulnerable to overthinking and feel pressure, they also want to make the best decision. They rapidly move to semi- or fully reflective value co-destruction when there is no support or clarity. Even small moments of misalignment can lead to frustration (Bavolar, 2023; Schwartz, 2004).

- Although the **Explorer** likes customizing, they do not like to do it by themselves. They need guidance, visual feedback, and clear steps. If that is in place, they feel engaged and move toward value co-creation. On the other hand, if that support is missing, or the setup is too unclear, the process can shift into co-destruction (Neves & Reis, 2018; De Bellis et al., 2019).

- The **Minimizer** prefers things to be quick and easy. They do not want to be overwhelmed with options or forced to overthink. Their best fit is low customization options and a clean, well-structured interface. But when the process gets too complex or unclear, they disengage and the experience often shifts into value co-destruction (Joergensen et al., 2014; Lee et al., 2012).

These three types help show why the same customization experience can lead to value co-creation for one person and co-destruction for another.

2.5 Theoretical Framework and Hypotheses

This section brings together the main concepts and builds a general framework to explain how value is created or destroyed during online customization. The framework shows how three key factors interact with each other: customization level, support, and customer maturity. Value is not fixed. It is formed step by step during the interaction between the customer and the platform (Echeverri & Skålén, 2021). Some customers enjoy this process, while others may find it confusing or frustrating. This depends on how complex the customization is, how much support is provided, and what kind of customer is using it.

Customization is not always a good thing. When there are too many choices, customers can feel overwhelmed. When there are too few, they may feel limited (Kalyanaraman & Sundar, 2006; Lee et al., 2012). Research shows that a moderate level of customization often works best. If the process is too simple or too complex, people start to doubt their decisions or lose interest (Zhang et al., 2018; Wu et al., 2022). Support helps shape this experience. When users receive previews, step-by-step guidance, or clear feedback, they feel more confident and involved (De Bellis et al., 2019). Without support, things can break down. High customization with low support often leads to confusion (Li et al., 2022). When effort becomes too high, people may start to disengage (Luyen et al., 2021).

Not everyone needs the same level of help. Some customers are more experienced or confident. Others need more support. This is where customer maturity comes in. It helps explain why some people move toward value co-creation while others end up in value co-destruction.

These ideas lead to the following hypotheses:

H1: A moderate level of customization increases the likelihood of an unreflective value experience and value co-creation.

H2a: A low level of customization increases the likelihood of a semi-reflective value experience that leads to value co-destruction.

H2b: A high level of customization increases the likelihood of a semi-reflective value experience that leads to value co-destruction.

H2c: A reflective value experience can happen immediately when there is misalignment in the process.

Support can help reduce this risk. It makes the process smoother and gives the customer more confidence. De Bellis et al. (2019) show that clear guidance and feedback reduce confusion. Li et al. (2022) found that strong support lowers the risk of value loss. Luyen et al. (2021) add that when the process takes too much effort, people are more likely to feel stressed or disappointed. Therefore:

H3a: A well-supported customization process strengthens the relationship between moderate customization level and unreflective value experience and value co-creation.

H3b: A well-supported customization process weakens the relationship between low and high customization levels and semi-reflective value experience and value co-destruction.

H3c: A well-supported customization process reduces the likelihood of a reflective value experience, both by preventing escalation from semi-reflective states and by softening the impact when the process feels overwhelming right from the start.

H3d: Moderate support helps prevent reflective value co-destruction but does not fully boost unreflective value co-creation.

Together, H3a, H3b, and H3c show how support can influence how the experience shifts. Sahhar and Loohuis (2022) explain that value experience is not fixed but moves through stages. Sometimes, small doubts build up into full breakdowns (H2c). But reflective value loss can also happen right away when things start off confusing or unsupported (H2d). What I add here is that support can help people stay in the flow, make things feel smoother, and lower the chance that things turn negative.

The figure below shows how customization level, support, and customer maturity interact to shape value experience. It also reflects the value paradox from Echeverri and Skålén (2011), where co-creation and co-destruction can happen at the same time. The outcome depends on how the customer deals with the structure and support of the system.
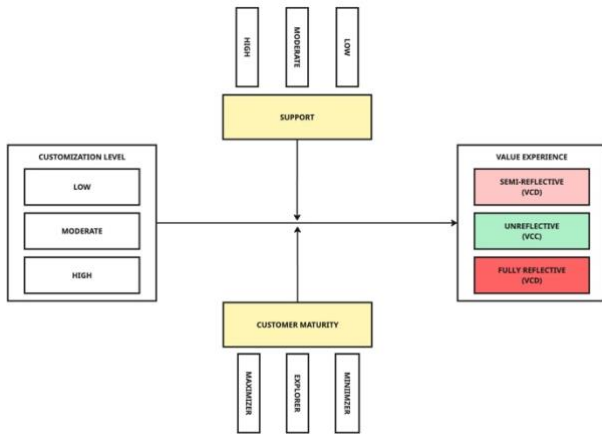
Figure 1. Main framework: Customization, Support, and Customer Maturity

This figure shows how the level of customization influences the value experience. That experience depends on how much support is given and what kind of customer is using the system. More mature users like Maximizers respond differently than those with less experience, like Minimizers. The level of support can be low, moderate, or high, and this shapes how people move through the process.

2.6 Persona Scenarios

Even though the structure of the customization process is the same for everyone, the way customers respond is not. Some people like having many options, others want help, and some just want it simple and fast. In this section, I look at three types of customer maturity to show how different personalities can lead to totally different experiences.

2.6.1 The Maximizer Scenario

Maximizers want the perfect result and aim for complete control. They want to get the best out of it and enjoy considering all of the options. However, this could backfire. Too many options, unclear steps, or lack of guidance often lead to stress or regret. The process feels not good enough for them, even if the outcome is satisfactory. Schwartz (2004) and Bavolar (2023) show this group is more sensitive to experience pressure and disappointment. The experience frequently shifts to value co-destruction if support is lacking (Park & Kang, 2022). Good support reduces this risk and helps them stay in the flow.
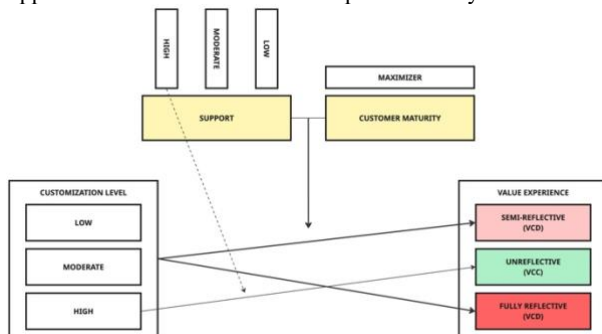

Figure 2. Maximizer scenario:

This framework shows how the Maximizer responds to different customization levels. Only when customization is high and support is strong, the experience stays unreflective and leads to value co-creation. Without strong support, Maximizers quickly shift to semi- or fully reflective experience and value co-

destruction. Even small issues in the process can cause doubt or regret.

2.6.2 The Explorer Scenario

Explorers like to customize, but they do not want to do it completely alone. They need support along the way, like tooltips or visual previews. When the process is clear and guided, they feel more confident and enjoy it (Neves & Reis, 2018; De Bellis et al., 2019). But if that support is missing, they start to doubt themselves and the experience can shift from value co creation to semi-reflective value experience and value co-destruction (Park & Kang, 2022).
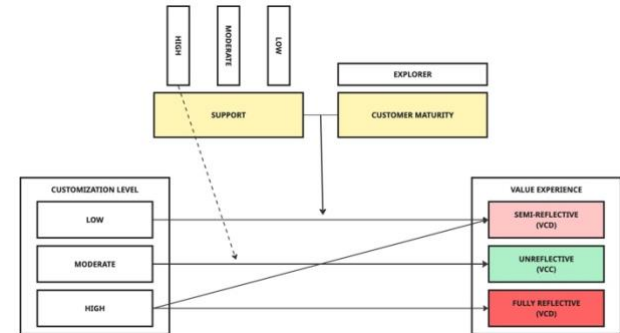

Figure 3. Explorer scenario. This framework shows how an Explorer reacts to different levels of customization. They enjoy moderate customization when supported, which leads to value co-creation. Without support or with too many or too few options, the experience can shift to value loss. Support helps them stay in the flow and prevents frustration from growing worse.

2.6.3 The Minimizer Scenario

Minimizers want it simple. They like quick decisions and clear steps. When there are too many options, they get overwhelmed or lose interest (Joergensen et al., 2014; Lee et al., 2012). If support is strong and the options are clear, they are satisfied. If not, they feel stressed or check out (Park & Kang, 2022).
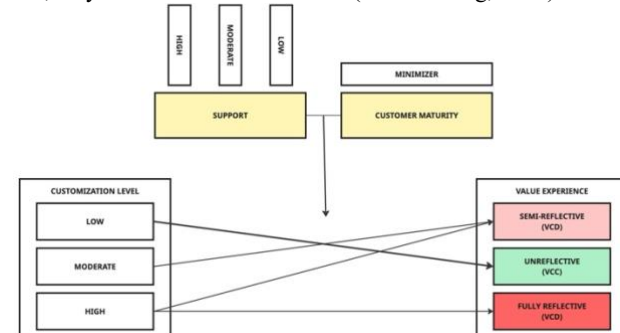

Figure 4. Minimizer scenario. This framework shows how the Minimizer responds to customization. They prefer low effort and a simple journey. Low customization works well for them. High customization often leads to frustration or overload. Support helps prevent value loss and makes the process smoother.

3. METHODOLOGY
3.1 Research Design

This study follows a deductive research design. Based on theories about customization, value co-creation, and value co-destruction, specific hypotheses were developed and tested. Deductive research fits this goal, because it tests how known concepts behave in a new setting (Coetzee & Monti, 2018). The method is

quantitative and focuses on measuring effects in a structured way.

To make it realistic and close to actual customer experiences, an online scenario-based experiment was chosen. The experiment takes place in an e-commerce setting, since online shopping is where product customization often happens today. Racket sports were chosen as the product category, because the product (a racket) directly affects performance, which makes value experience during customization especially important.

3.2 Experimental Design

The study uses a between-subjects design. Every participant is randomly assigned through a redirect link that gives random landing pages to the participants, see Appendix 4. Every participant gets one of the nine experimental conditions. This random assignment helps make sure that differences in outcomes come from the customization setup, and not from personal differences (Field, 2018).

Independent Variables:

- Customization Level
- Low: no options to choose from
- Moderate: 5–6 customizing options
- High: 10+ customizing options

- Support (Moderator)
- Low support: no help or guidance at all
- Moderate support: tooltips, reviews and an AI chatbot
- High support: tooltips, step-by-step guidance, action photos, reviews, FAQ and an AI chatbot.
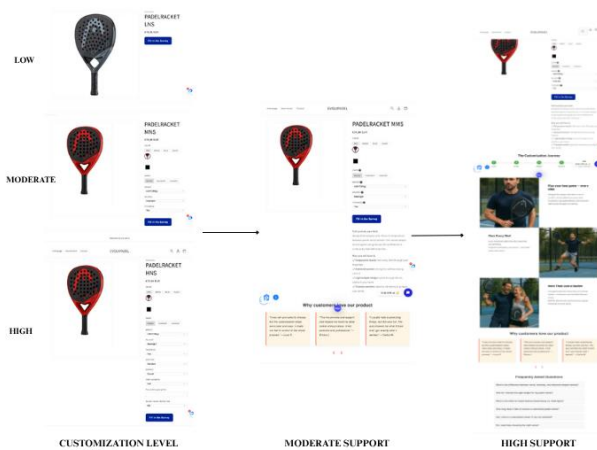

Figure 5. Conceptualization of the experiment (Appendix 4.)
This figure shows different landing pages based on the levels of customization and support. On the left, low, moderate, and high customization levels are presented without support. In the center, the moderate customization level is combined with moderate support. On the right, the same customization level is shown with high support. While only moderate customization is visualized with different support levels in this figure, in the actual experiment, all three support levels were implemented across each of the three customization levels, resulting in a 3×3 experimental design.

After the customization task, participants complete a survey about their experience. Their answers are used to measure value co-creation, co-destruction, and their persona type.

3.3 Data Collection

To bring the scenarios to life, nine landing pages were built using Shopify. Each one represents a different version of the customization experience, based on the 3×3 design. Participants are recruited through convenience sampling, mostly through my personal and academic network. Most are familiar with online shopping. When the customization task is completed, they click on the 'Fill in the survey' button that redirects them to a survey.

Each participant follows these steps:

1. Assigned randomly on one of the nine landing pages. (Appendix 4)
2. Complete the customization task.
3. Click on the 'Fill in the Survey' button
4. Answer three questions to determine which persona they match most.
5. Answer survey questions about the customization experience and the support they got.

Persona Assignment: Participants were assigned to a persona (Maximizer, Explorer, Minimizer) based on the highest score on three persona questions in the survey. If two types had equal scores, the one with the highest single value was selected.

3.4 Measures and Operationalization

Customization Level:
Customization level will be manipulated by presenting participants with different numbers of options and levels of complexity during the customization process. In the low customization condition, participants will have no customization options. In the moderate customization condition, participants will be offered a moderate number of structured choices (5 or 6). In the high customization condition, participants will face many choices (10+). This manipulation is based on earlier work on customization and choice overload (Kalyanaraman & Sundar, 2006; Lee et al., 2012).

Support:
Support will be operationalized through the availability of system guidance during the customization process. In the high supported condition, participants will see tooltips, receive step-by-step guidance, and good instructions about the different customization options. For the moderate support level the participants get less guidance than the high level and in the low support level condition, none of these assistance features will be available. This approach is based on the work of De Bellis et al. (2019).

Customer Value Experience:
Customer value experience will be measured through the answers from the questions of the survey the participants will fill in after the customization process and is adapted from existing value co-creation and value co-destruction scales (Yi & Gong, 2013; Zhang et al., 2018), and extended based on the conceptualization by Sahhar and Loohuis (2022). The questions capture different stages of value experience, including unreflective value experience and value co-creation (e.g., "I enjoyed the customization process"), semi-reflective and value co-destruction (e.g., "I felt small moments of confusion during the customization process"), and full reflective value experience and value co-destruction (e.g., "I felt frustrated with the customization process"). All items will be measured on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree).

Perceived Support:

The perceived level of support during the customization process will be measured through three questions adapted from De Bellis et al. (2019), such as "The website provided clear guidance during customization" and "I received helpful feedback during the process," using a 7-point Likert scale.

Manipulation Checks:

To validate the effectiveness of the manipulations, participants will answer three manipulation check questions: the perceived number of options, the perceived complexity of the task, and the perceived level of support.

Control Variables:

Participants will indicate their experience with online shopping and the importance they place on racket sports equipment. These will be included as control variables to adjust for background differences.

4. FINDINGS

This section presents the main results of the experiment. Because the primary goal of this study was to explore how different levels of customization and support affect value experience in online customization, the experiment was designed as a **scenario-based test**. As such, the focus lies on identifying patterns and testing hypotheses in a controlled setup, not on generalizing to a large population.

The number of participants is relatively small. This was a deliberate choice based on the experimental nature of the study. Rather than aiming for statistical generalizability, the goal is to gain exploratory insights into how customers respond to different customization journeys and to evaluate whether the theoretical hypotheses hold in practice.

Despite the limited sample size, the results provide a valuable indication of how value co-creation and co-destruction may occur, depending on the design of the customization process and the type of customer involved.

4.1 Data Collection

A total of 12 participants completed the experiment, distributed across the nine landing pages and assigned to a persona type based on their responses. Table 1 shows the number of participants per persona:

Persona	Count
Minimizer	2
Explorer	6
Maximizer	4

Table 2 shows how participants were spread across customization and support levels:

Customization	Low	Moderate	High
Low Support	1	1	1
Moderate Supp.	2	1	4
High Support	1	1	1

4.2 Manipulation Check

To verify whether the experimental conditions were perceived as intended, participants rated the perceived number of options, perceived complexity, and perceived level of support. The results show a consistent pattern:

- Participants in the high customization conditions reported higher scores for perceived options and complexity.

- Participants in the high support conditions gave higher ratings for support clarity and helpfulness.

This confirms that the experimental manipulations worked as designed.

4.3 Value Experience Across Conditions

Table 3 presents average values per persona-condition combination:

Customization	Support	Persona	Smooth/Easy	Complexity	Confusion	Frustration
LOW	LOW	Minimizer	3.0	2.0	3.0	1.0
LOW	MODERATE	Explorer	5.0	1.0	5.0	1.0
LOW	MODERATE	Maximizer	4.0	1.0	1.0	4.0
LOW	HIGH	Explorer	2.0	1.0	2.0	1.0
MODERATE	LOW	Explorer	5.0	4.0	5.0	4.0
MODERATE	MODERATE	Explorer	3.0	3.0	3.0	3.0
MODERATE	HIGH	Explorer	2.0	2.0	2.0	2.0
HIGH	LOW	Maximizer	5.0	5.0	5.0	5.0
HIGH	MODERATE	Minimizer	5.0	6.0	5.0	5.0
HIGH	MODERATE	Maximizer	3.0	4.0	3.0	2.0
HIGH	MODERATE	Explorer	4.0	5.0	4.0	4.0
HIGH	HIGH	Maximizer	3.0	4.0	3.0	3.0

These results show large variation depending on both the structure of the customization journey and the persona type of the user. Some early patterns include:

- **Moderate customization with moderate or high support** often leads to moderate enjoyment but not necessarily high co-creation.
- **High customization with low support** creates high levels of confusion and frustration, particularly for Maximizers.
- **Explorers** respond well to moderate or high support but show signs of confusion in both low and high customization levels.

5. DISCUSSION

The outcomes of the experiment are discussed in this section. This is in line with the theoretical framework and hypotheses. The aim was to explore how different levels of customization and support affect value co-creation and co-destruction in personalized e-commerce experiences. Even though the sample size is small, which is reasonable for experimental testing, some patterns were found supporting our hypotheses.

5.1 Key Findings

These findings directly respond to the central research question by showing how different levels of customization mediate value co-creation and co-destruction, adding, depending on both the level of support and the persona involved.

The participant data shows meaningful variation in how customization level, support level, and persona type shaped value experience. Some hypotheses were confirmed by the results, while others were not supported by the data.

- **H1: Not supported**, Moderate customization did not result in high smoothness or low confusion. This was mostly because of the Explorers, that give moderate to high levels of confusion

- **H2a: Supported**, Low customization participants showed clear signs of semi-reflective or even full reflective value experiences.

- **H2b: Supported**, High customization participants consistently showed moderate to high confusion, with smoothness scores mostly between 3 and 5. This reflects semi-reflective value experiences where complexity and doubt emerged during the process.

- **H2c: Supported**, Participant 4 also illustrates an immediate reflective value experience due to misalignment between system and expectations, despite receiving high support. This supports the idea that value co-destruction can happen quickly if the starting point is poorly matched to the user.

- **H3a: Not supported**, The one participant in the Moderate customization + High support condition (Participant 7) reported low smoothness and high confusion, suggesting that support did not enhance value creation in this case.

- **H3b: Not supported**, Participants who received High support in either Low or High customization conditions (Participants 4 and 12) still experienced moderate to high confusion, suggesting support did not reduce co-destruction in these extremes.

- **H3c: Not supported**, Even under High support, reflective or semi-reflective experiences occurred, particularly when the customization level was poorly matched to the persona.

- **H3d: Supported**, Participants in Moderate support conditions showed semi-reflective value experiences without escalating into fully reflective breakdowns. This suggests moderate support may stabilize the experience but does not necessarily create unreflective value.

5.2 Theoretical Contributions

This study adds to the Interactive Value Formation (IVF) theory by showing that value co-creation and co-destruction don't just depend on the interaction itself, but also on the person who is experiencing it. While IVF focuses mostly on what happens between people and systems during a service, my results show that personal characteristics of the user, like how someone makes decisions or deals with choice, also play a major role. Even when the steps are well-explained and the experience is in a clear line,

outcomes can still go in either direction depending on the user's mindset.

The research also builds on the idea of value reflection introduced by Sahhar and Loohuis (2022), which talks about how people reflect on value during and after an experience. My persona-based approach is helping to link that theory with measurable patterns in digital environments. For example, Maximizers can fall into fully reflective value experience more easily when the system overwhelms them, while Explorers are more likely to stay in the unreflective value experience if the support is there. This shows how reflection levels and interface design can interact.

In addition, the study supports what Lumivalo et al. (2024) suggested about internal breakdowns of value, where something can feel wrong even if technically everything works. This adds an emotional and psychological layer to the IVF model. I also used Laud et al.'s (2019) idea of resource mis-integration to explain how even useful support can go wrong when it doesn't match what the user needs at that moment. So, you can say it is the right support at the wrong time

From a customization point of view, the findings extend De Bellis et al.'s (2019) research on interface matching. Their work looked at cultural fit, while mine zooms in on personal traits. I show that cognitive fit and design structure need to be aligned for value creation to happen, and that misfit can quickly lead to frustration and therefore destruction of value.

Lastly, this study relates to Keeling et al. (2021) by viewing value formation as something that unfolds over time. Even in short digital experiences, value can shift based on small moments, like a confusing choice or a helpful tooltip. Putting this together, I offer a framework that combines personas, support level, and customization level. It helps explain how different people experience the same service in very different ways and adds depth to how IVF is understood in digital environments.

5.3 Implications to Practice

The results of this study show that using a one-size-fits-all customization journey does not work, because each persona interacts differently with complexity and support. For real-life digital platforms, this means they need to rethink both the structure of customization and how they guide users through it.

Instead of forcing all users through the same steps, platforms should either. (1) Let users choose a preferred journey type, for example, a "Quick Mode," "Guided Mode," or "Full Control Mode" or (2) track data to automatically place users in the right flow. This can be implemented by behavior-based routing or through advertisements data tracking, by detecting if a user hovers, backtracks, or skips instructions.

For Minimizers, design should focus on clarity and simplicity: fewer steps, default settings, and clean layouts. A good example could be a "recommended bundle" or "quick start" button that skips optional steps. Explorers benefit from systems that guide them but still allow freedom, like showing a visual progress bar and surfacing alternative options as suggestions. Maximizers, who often hesitate or compare deeply, need structure. They benefit most from side-by-side comparisons, optional tooltips, and previews, but these features should not interrupt flow unless they do interrupt it themself.

Platforms should also actively monitor signals that indicate possible co-destruction. These could include hesitation (long pauses), confusion (back-and-forth clicks), or early exits. When these patterns are detected, the system could automatically simplify the interface or offer soft intervention like a pop-up tip or fallback menu. This kind of dynamic guidance ensures the experience stays on track.

A/B testing different flows for different personas, based on your user data is another concrete step. This helps validate which approach creates more value for each group and avoids relying purely on assumptions. Over time, this allows companies to build flexible frameworks that feel personalized, even if the backend is still the same.

In short: platforms should stop thinking in terms of one "best journey" and start thinking in terms of matching journeys. This is not just about making things easier, it is about preventing value co-destruction and boosting co-creation and therefore customer retention. The design of a customization system should not just allow flexibility, it should respond to it in real time.

5.4 Limitations and Future Research

This study offers valuable insight into how customization and support influence customer value experiences, but there are several limitations that need to be acknowledged. First, the number of participants was limited due to the experimental setup. While this is acceptable for exploratory testing, it reduces the statistical strength of the findings. It also meant that not every persona appeared equally across all conditions, making it harder to fully compare the effect of customization and support within each group.

Another limitation lies in how the personas were constructed. Based on just three survey questions, each participant was allocated a persona that helps to simplify probably more complicated behavioral patterns. Sometimes participants rated almost exactly the same across two persona types, indicating that actual consumer behavior might not fit into clean categories. Future research could investigate more complex forms, even while the three personas helped shape the variations in how people perceive customization. Deeper knowledge of these user groups would come from more thorough approaches like validated psychological instruments or interviews.

The persona effect also limited how confidently we could support the hypotheses. While patterns were visible, it became clear that how a person responds to customization is strongly shaped by their persona. A setup that leads to value co-creation for one customer may lead to confusion or doubt for another. This interaction between system design and customer type deserves more attention in future work.

It would be especially valuable to follow customers over time to see whether these persona types remain stable or shift as people gain more experience with customization. To understand frustration or uncertainty as it happens in a real setting, researchers can look at user behavior, like pausing, going back, or quitting the process, instead of just using survey answers. Designing interfaces that fit each persona, a clear, simple path for Minimizers, an enjoyable guided adventure for the Explorer, and a complex configuration panel for Maximizers, is another interesting option. Testing these against a standard design would show whether persona-driven interfaces truly improve the value experience.

Finally, it would be interesting to look at how persona behavior differs across cultures or sports categories. A Maximizer in one country may approach customization differently than one elsewhere, and players of different sports may have different tolerances for complexity and effort. Exploring this would help platforms make better design choices in different markets.

In short, while this study gives an important first look into the role of customization levels and support levels in value experience, it also shows how much more there is still to learn, especially when it comes to personal differences in how people make decisions, engage with systems, and interpret the value of their own involvement.

6. CONCLUSION

This thesis explored how different levels of customization and support influence customer value experience in online racket sports e-commerce. The findings show that moderate customization combined with strong support generally led to more positive experiences, but the impact varied depending on the type of customer.

Personas like Maximizers, Explorers, and Minimizers responded very differently to the same setups. What worked well for one group could lead to frustration or confusion for another. This shows that value is not only shaped by the system, but also by the person using it.

Customization, then, is not just a technical process but a personal journey. For it to create value, it needs to match the user's mindset and be supported in the right way. Future platforms should consider adapting the experience to different user types to avoid value destruction and enhance satisfaction.

7. ACKNOWLEDGEMENTS

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8. Appendix

Appendix 1. IVF System
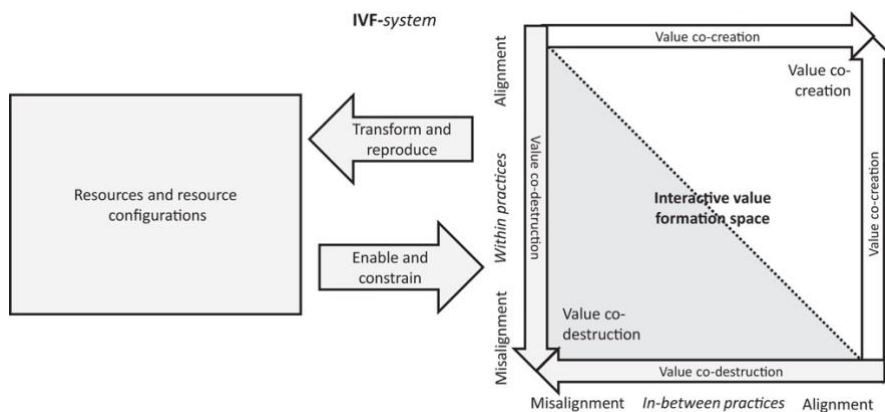
Appendix 2: Survey used after the customization experiment:

Persona Check:

- I like to choose between many options before making a final decision.

- I prefer having clear guidance and examples when I customize something online.

- I get overwhelmed when there are too many customization options.

1. Manipulation Check
(Scale: 1 = strongly disagree, 7 = strongly agree)

- I felt that the number of customization options was large.

- The customization process felt complex.

- I received useful support and guidance during the customization process.

2. Customer Value Experience
(Scale: 1 = strongly disagree, 7 = strongly agree)

- The customization process felt smooth and easy. (Unreflective Co-Creation)

- I felt small moments of confusion during the customization process. (Semi-Reflective Co-Destruction)

- I felt frustrated with the customization process. (Reflective Co-Destruction)

3. Perceived Support
**(Scale: 1 = strongly disagree, 7 = strongly agree)**

- The website provided clear guidance during customization.

- I received helpful feedback during the customization process.

- The customization options were explained in a clear and understandable way.
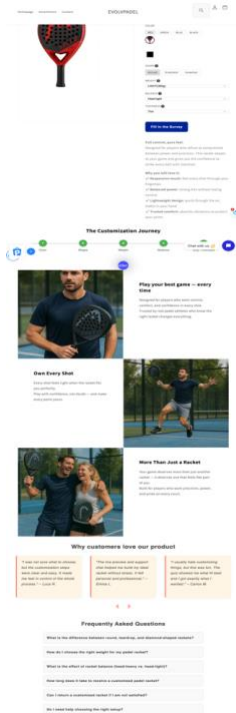
4. Control Variables

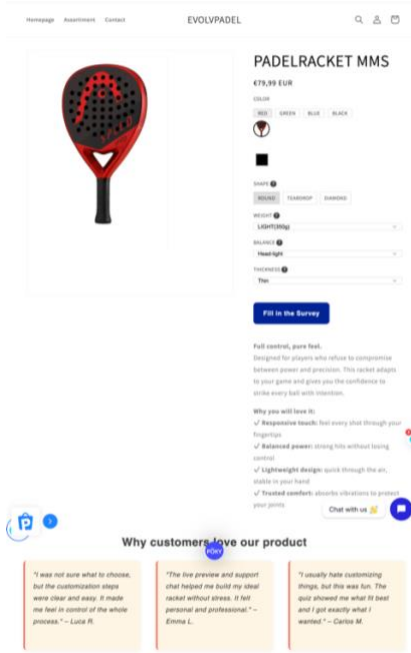How experienced are you with online shopping? (1 = no experience, 7 = very experienced)

How important is racket sports equipment for you? (1 = not important at all, 7 = very important)

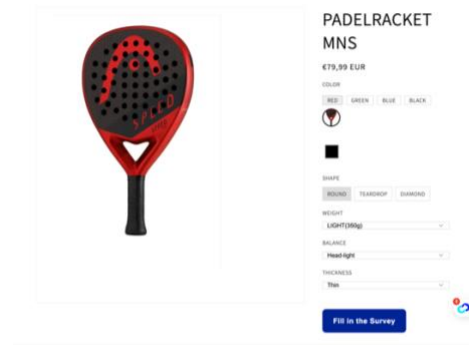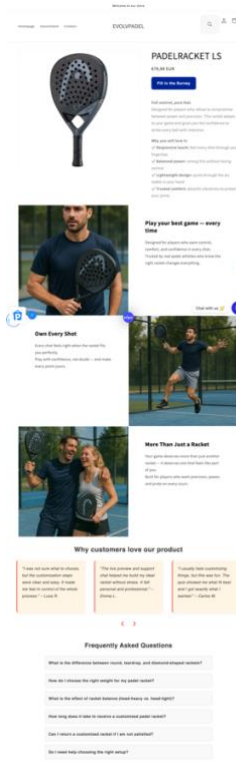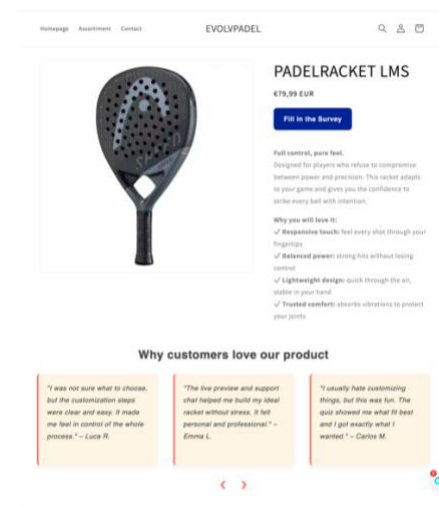## Appendix 3: Landingpages used in the experiment:

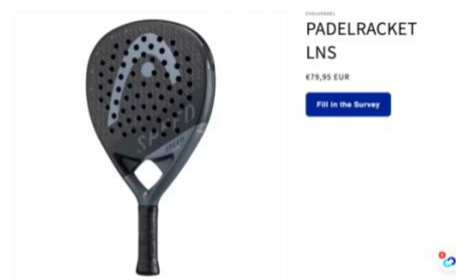

1.

2.

3.
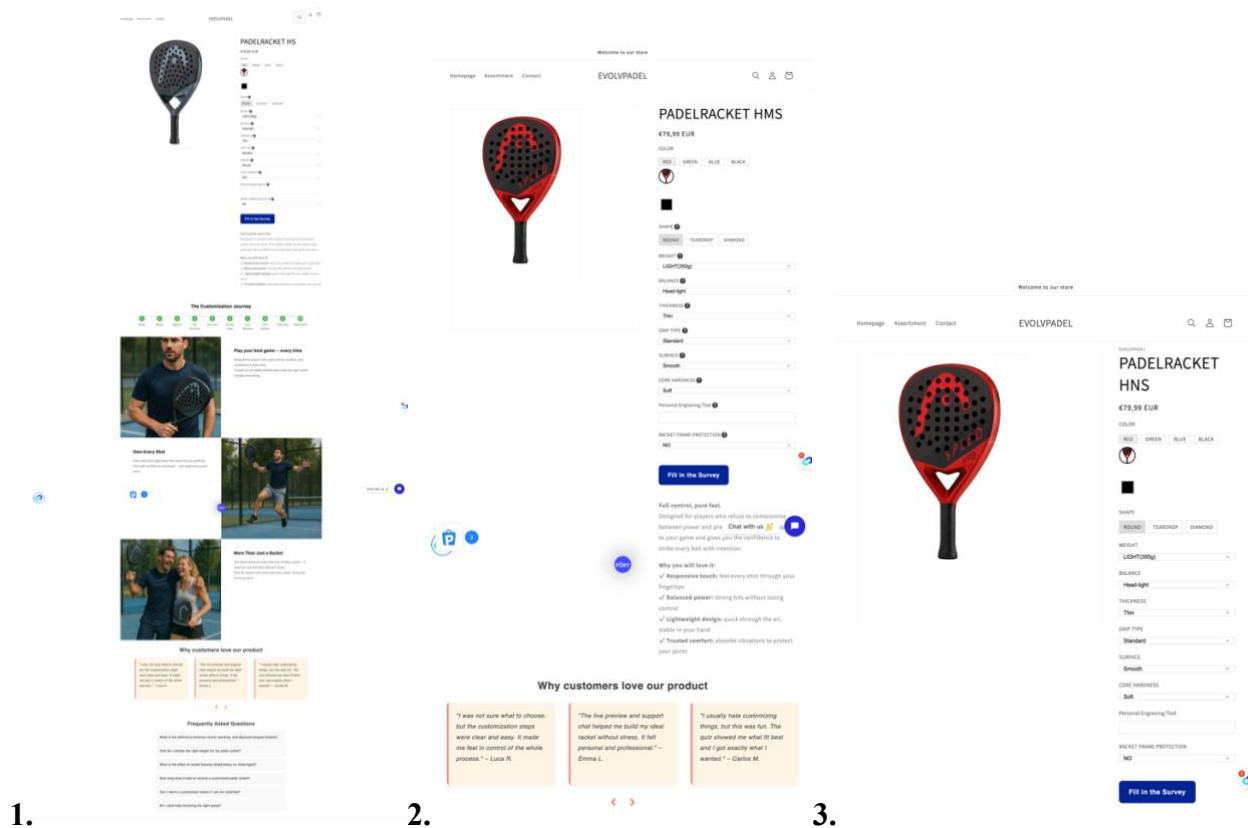
4.

5.

6.

7.

8.

9.

Landingpages:

1. High Customization – High Support
2. High Customization – Moderate Support
3. High Customization – No Support

4. Moderate Customization – High Support
5. Moderate Customization – Moderate Support
6. Moderate Customization – No Support

7. Low Customization – High Support
8. Low Customization – Moderate Support
9. Low Customization – No Support

Appendix 4: Conceptualization of the Experiment

CUSTOMIZATION LEVEL
(without support)

MODERATE SUPPORT

HIGH SUPPORT