

HEAD: Padel Design and Innovation Challenge

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1. Introduction

Padel is experiencing rapid global growth, with over 25 million active players now spread across more than 90 countries, particularly in regions like Europe, the Middle East, and Asia (Strategic Market Research, 2024). However, alongside this momentum are some persistent barriers related to financial accessibility, and confidence in equipment selection. Which is why when HEAD, a global leader in racquet sports, posed the challenge—“How might we increase the popularity of padel worldwide as cost-effectively as possible?”—our team recognized an opportunity to create a meaningful impact.



An estimated **4.5+ million total padel rackets were sold in 2023** at an average price of 130€. However, 2023 was also a year marked by an **imbalance between supply and demand**

Figure 1. Average market price of padel racquets sold in 2023

From early user consultations, a consistent theme emerged. While people were curious about padel and eager to try it, many hesitated due to the overall expense of the sport, including court rental fees, club memberships, and equipment. Compared to more established and accessible sports like football or tennis, padel can appear disproportionately costly. For instance, in the UK, hiring a padel court can cost between £20–£40 per hour, often higher than traditional tennis courts, which may be free or subsidized in public parks (LTA, 2023). On top of that, the cost of a racket, ranging from £100 to £300 (see Figure 1), represents a significant financial commitment for players who are still exploring the sport.

According to users, specifically beginners and amateurs, investing in a racquet felt like a premature decision, particularly without the opportunity to trial options to help them understand their personal preferences. Moreover, racquet trial opportunities were limited across the board; most clubs offered basic racquets to rent, and few retailers allowed demoing or testing before purchase. Players often made purchases based on guesswork or

appearance, only to find the racquet didn't suit their needs, leading to frustration and reluctance to invest again.

This gap, between interest and investment, became the foundation of our research and design direction. It also aligned with established theory: Everett Rogers' Diffusion of Innovations identifies trialability, the ability to test a product before adoption, as a critical factor influencing whether users commit to a new idea or product (Rogers, 2003). Without that trialability, even the most promising products can struggle to gain traction.

To approach this challenge, our team adopted the Double Diamond framework developed by the UK Design Council (2005) as seen in Figure 2.

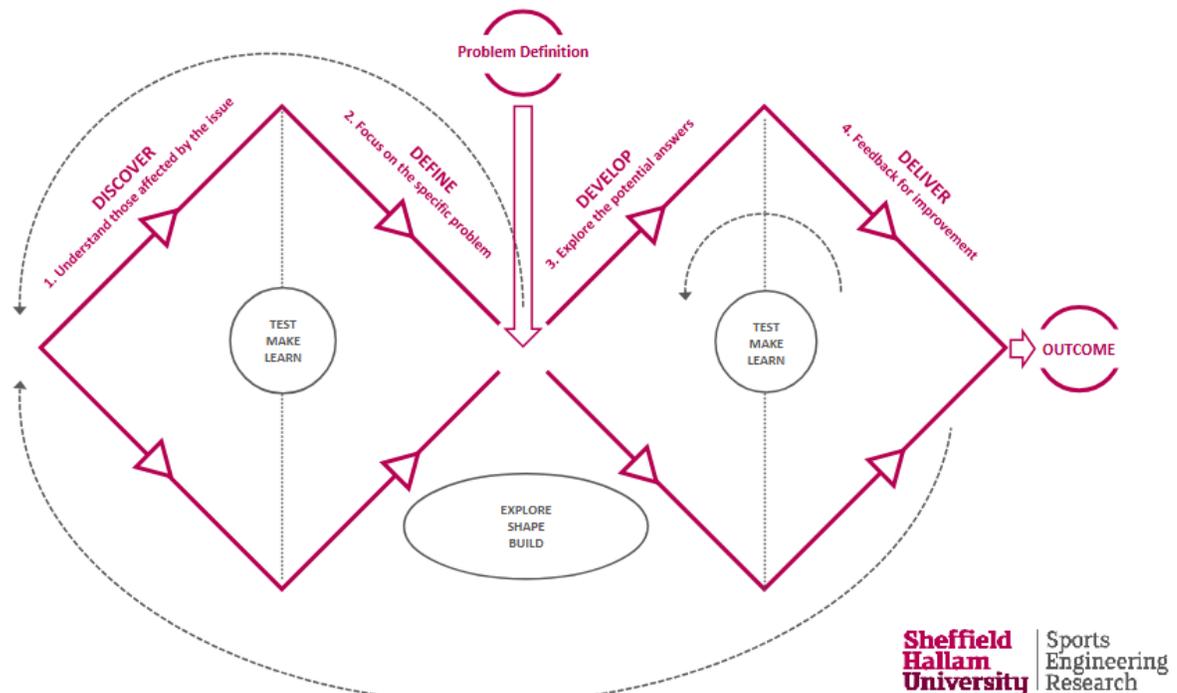


Figure 2. Double Diamond framework

This widely used model provides a clear process for navigating complex, open-ended design challenges. By guiding us through cycles of divergent and convergent thinking, first to understand the problem deeply, then to explore and refine solutions, the Double Diamond ensured our decisions were grounded in real user needs and opportunities for innovation.

Using this framework, our user interviews consistently pointed to the pre-purchase experience as a pain point with high potential for intervention. Players wanted to explore different racquets in their own time, compare features, and develop confidence in their choice, without committing to a full-price purchase up front. Drawing inspiration from try-before-you-buy models in automotive, apparel, and tech industries (Kumar & Reinartz, 2016), we began to explore how a similar approach could be applied to padel. This led us to our core research question:

How might we improve the pre-purchase experience to make padel racquets more accessible for amateur players?

This question allowed us to focus our work on a critical and actionable area. Rather than trying to grow the sport in abstract, we sought to improve one tangible part of the player journey: the decision to invest in equipment. By reducing risk, improving product confidence, and offering flexibility, we believed we could open the door to more players adopting and staying with the sport and ultimately increasing global popularity.

This portfolio documents our journey through this challenge highlighting the insights we gathered from users, the concepts we developed and refined, and the final solution. At its core, this project demonstrates how thoughtful, user-driven design can make padel more accessible, and how a well-designed experience can be just as important as a well-designed product.

2. Discover

Our journey began with a commitment to fully understand the world of padel; its culture, accessibility, and adoption challenges, before attempting to design any solutions. To do this, we immersed ourselves in the sport from multiple angles. This was essential to empathize with both players, and to identify the systemic and emotional barriers affecting padel's growth, particularly among amateur players.

2.1 Immersion In the Sport

We approached this phase with the mindset of a newcomer, allowing ourselves to experience padel as beginners. We attended local clubs, participated in beginner sessions, played matches, watched live games and online tournaments, and engaged in casual conversations with players on and off the court. This firsthand exposure allowed us to connect directly with the sport's pace, learning curve, and social nature.

What became evident was padel's unique appeal; Unlike tennis or squash, padel is easy to pick up and forgiving for beginners. The game rewards positioning and timing more than brute force or advanced technique, making it approachable across age groups and skill levels. This aligns with one of our earliest and most consistent findings: padel is inherently inclusive. As we immersed ourselves further, the contradiction between how easy padel is to play and how financially taxing it can be to access became clear.

2.2 Initial Research Findings

Through informal conversations, observations, and early secondary research, we began mapping out the broader ecosystem surrounding padel. This included regional growth patterns, cost structures, accessibility challenges, and equipment availability.

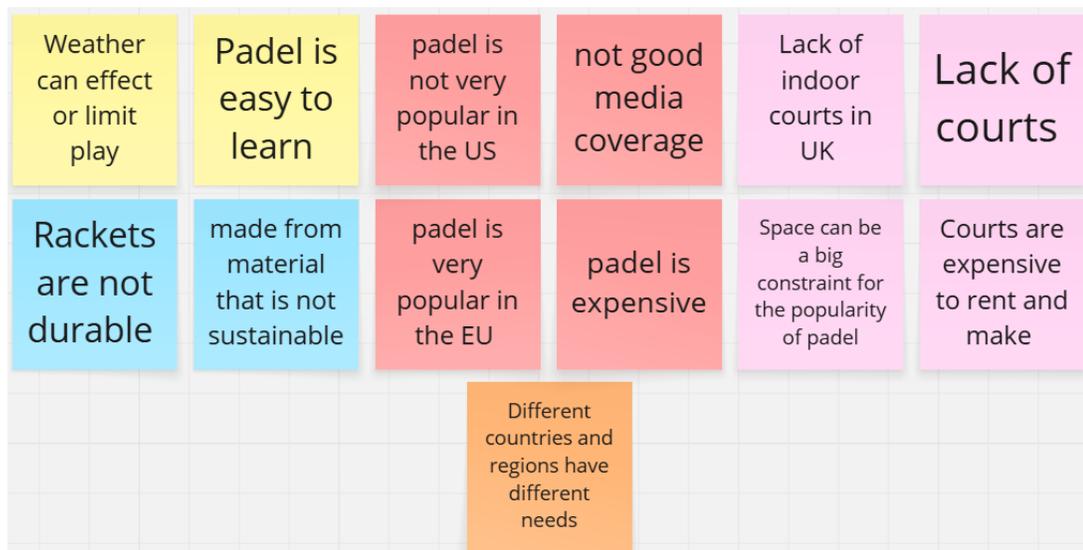


Figure 3. Initial research findings

To visually consolidate this early insight, we captured our observations in a sticky-note map as seen in Figure 3, which helped structure our understanding of the sport's current landscape. Key themes included:

- *Padel is easy to learn*, and it's social in its doubles-based format.
- *Padel is highly popular* in Europe, particularly in Spain, Italy, and Scandinavia, and is rapidly growing in the UK and US.
- *Lack of courts* (especially indoor or weather-resistant ones) was consistently cited as a major barrier with weather, space constraints, and high build costs limiting expansion.
- *Padel is expensive*. Both court rentals and equipment are cost-prohibitive for casual players, especially compared to other sports with lower barriers to entry.
- *Media coverage is limited*, meaning that outside of active player circles, the sport has low visibility.
- *Racquet durability and sustainability* were mentioned as concerns, particularly by players who felt the quality did not justify the cost over time.

While many of these challenges were systemic, what stood out most was the lack of structured touchpoints for new players. Most people we spoke to had used either a borrowed racquet or used a generic rented racquet when they first started playing and felt there was little to no support in choosing a racquet that matched their needs. So, while the sport felt welcoming in play, it was unapproachable in preparation.

2.3 Understanding Context Through Comparison

We also explored analogous sports and industries to better understand how others manage new user onboarding and equipment access. For example, skiing and cycling offer rental and demo services, reducing financial risk and helping users build confidence before investing. These comparisons suggested that the problem with padel might not lie in the sport itself, but in how it's accessed, particularly through the lens of equipment.

3. Define

In the define stage, our team synthesized the insights gathered during the Discovery phase to refine our original design challenge:

“How might we increase the popularity of padel worldwide as cost-effectively as possible?”

As a group, we felt the design challenge was very broad, so using a combination of insight mapping, thematic analysis, and “How Might We” (HMW) reframing techniques to guide us, we redefined the design challenge into something more manageable. These tools also helped us identify patterns, identify gaps in knowledge, and ultimately transform our original design challenge to address a specific pain point.

3.1 Identifying Gaps and Unknowns

While we discovered helpful insights, there were still unanswered questions critical to framing a focused design solution. We created a “What don’t we know? (WDWK)” list and stakeholder map to guide our next steps. Key WDWK questions included:

- What challenges do players face during gameplay?
- Can racquets be refurbished?
- What budgets do beginner, amateur, and advanced players typically have?
- What would enhance the experience for both players and club owners?
- What support do beginners lack?
- Would a club be open to a subscription model for racquet distribution?

3.2 Further Research and Stakeholder Engagement



Figure 4. Mapping our stakeholders

Using our stakeholder map (Figure 4), we conducted additional interviews with clubs in the UK (Padel4All, Ecclesall Lawn and Tennis Club) and the US (Reserve Padel),

as well as with players of varying skill levels. These follow-up interviews allowed us to refine our understanding and validate earlier findings. We then created a second insight map based on new information and a few of the notable insights included:

- Many beginners prefer renting racquets initially rather than purchasing.
- Some clubs offer tiered rental options depending on skill level.
- High entry costs, status concerns, and accessible rental options often deter early staged players from buying racquets.

3.3 Reframing the Challenge

With our refined insights, we moved into HMW reframing to identify actionable opportunity areas.



Figure 5. All HMW questions

We developed and iterated several HMW questions, ultimately narrowing them down to four:

1. How might we introduce padel to new audiences?
2. How might we reduce the cost of entry into the sport?
3. How might we improve how it feels to hit the ball?
4. How might we make padel kits more aesthetically appealing?

Initially, we identified the high entry cost of padel as the primary barrier we wanted to address. Our team began exploring the idea of designing a more affordable and durable racket aimed at newcomers. However, after early investigations into materials,

manufacturing methods, and user expectations, it became clear that creating a cheaper racquet without compromising on performance or sustainability was not feasible. Moreover, there wasn't a strong enough demand for this solution, prompting us to reconsider our direction.

With this insight, we returned to our HMW questions for another round of ideation. Through this process, we uncovered a new, more compelling insight: the pre-purchase experience itself posed a significant barrier for players. The lack of demo services and the common frustration of buying multiple expensive racquets without satisfaction highlighted a clear opportunity. This realization led us to refine our design challenge around this critical issue.

How might we improve the pre-purchase experience to make padel racquets more accessible for amateur players?

This question, combined with insights into current racquet purchasing behaviors, helped us approach the challenge from a fresh perspective since many beginner players tend to rent racquets directly from their club until they feel confident or committed enough to invest in one. And when they do make a purchase, it's often a top-tier or mid-range racquet—usually without a clear understanding of what best suits their playing style or skill level.

Drawing inspiration from analogous business models, such as NUULY—a clothing rental service that lets customers rent items with the option to purchase—we began to explore a similar approach in the padel space. This research, combined with our initial insights, allowed us to reframe our design question and an initial prototype concept.

4. Develop

Once our team refined the focus of our design challenge, we arrived at the concept of a flexible subscription service that allows players to trial HEAD racquets before committing to a purchase. This idea emerged from a widespread issue among amateur padel players, many of whom struggle with the high cost of racquets and the lack of information needed to make confident buying decisions. By enhancing the pre-purchase experience, our solution not only addresses a financial concern but also improves player satisfaction. Ultimately, improving the pre-purchase experience for players could encourage greater participation in padel, both in the UK and globally.

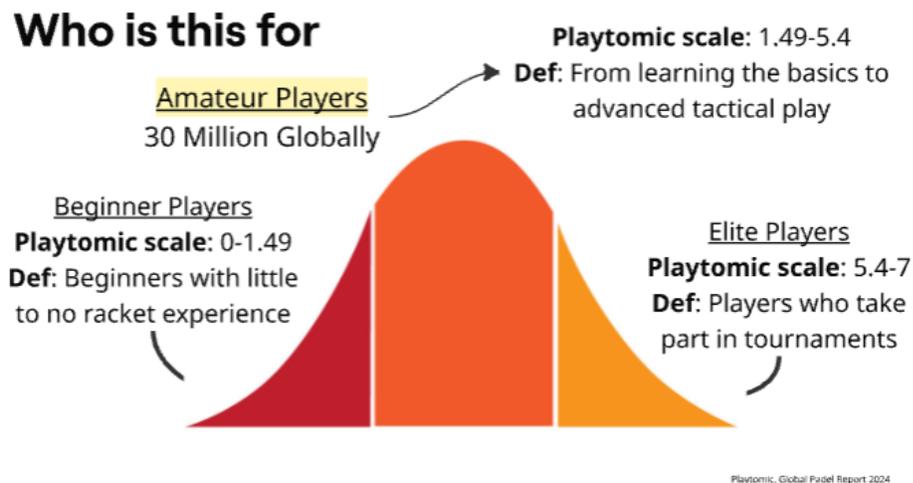


Figure 6. Normal distribution of players this service is targeting

This pain point is especially prominent among amateur players, a group that comprises of around 30 million people globally (Platomic, 2024). This player range categorizes a wide range of skills levels—from players who’ve taken a few lessons and play occasionally, to those with solid technical ability and strong tactical awareness who compete regularly (Playtomic, 2024). While we believe our service appeals to the extremes of beginners and elite players, we chose to focus the target market of this service on the amateur player segment (Figure 6).

4.1 Initial Prototype

With a clear understanding of our pain point and a focus on amateur players, we began developing our flexible subscription model into an initial prototype. Our first concept featured a tiered subscription structure, offering users a choice between three plans: Basic, Recreational or Premium (Figure 7). Each plan was tailored to match a specific skill level: Basic for beginners, Recreational for amateur, and Premium for advanced or elite users.

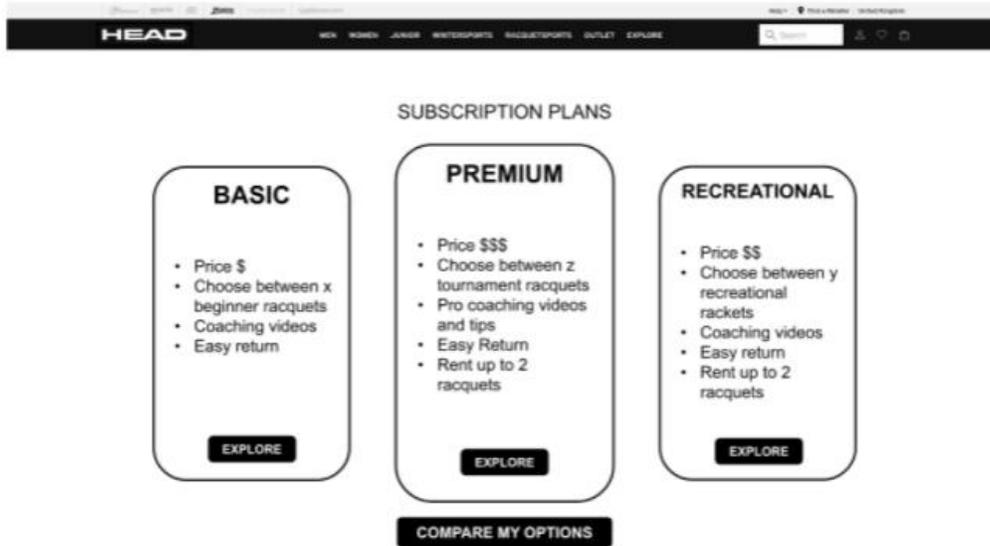


Figure 7. Three-tiered subscription plan

Each tier included a predetermined number and variety of racquets to demo each month, with pricing scaled accordingly. Racquets would be shipped directly to customers in a reusable bag or box with a prepaid return label. At the end of the rental period, players could choose to purchase a racquet at a discounted price, return it, or try a different one. All plans also would come with access to free coaching videos.

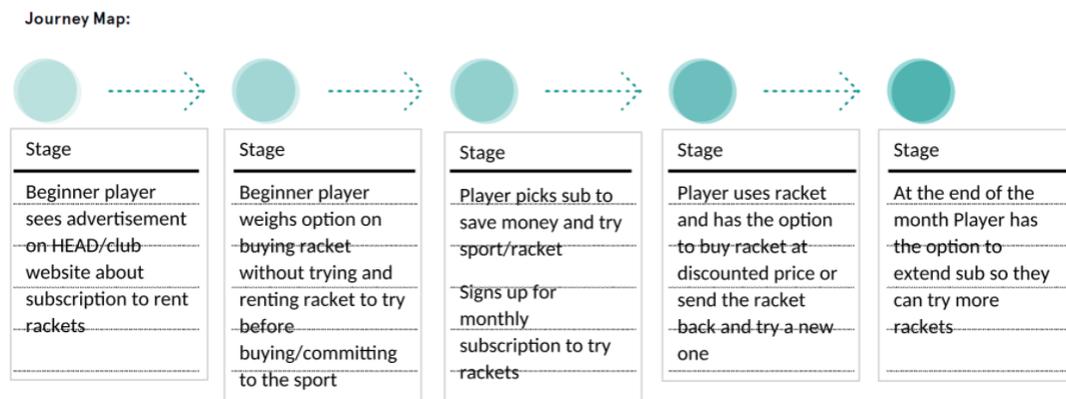


Figure 8. Journey map of an amateur player finding the subscription service

To better understand our initial prototype, we created a journey map (Figure 8) outlining the user's steps in discovering and using the service. This helped inform future user interviews and offered insight into optimizing the website's design.

4.2 Initial Prototype User Feedback

To validate our initial idea, we conducted user interviews with seven different players with different ability levels (Figure 9). To visualize the experience, we built a mock website simulating the service in action.



Figure 9. Summary of user interviews for initial prototype

Across the board, players affirmed their frustration with the current process of selecting a new racquet and were very interested in this service. The user interviews gave us a lot of new insights and ideas for our next iteration and the summarization of the interviews can be seen in Figure 9.

We realized that our initial tiered rental model was limiting. Instead of restricting users to specific plans, it made more sense to let them choose any racquet they wanted to demo. This insight emerged from feedback—many amateur players expressed interest in trying both intermediate and advanced racquets, rather than being confined to just one category.

Another key finding across all skill levels was confusion around racquet descriptions and metrics. Regardless of brand, users often found the terminology unclear, highlighting an opportunity to improve how we present racquet specs to support better decision-making.

Interviewees also showed strong interest in having a personalized space within their account—a “personal archive”—where they could rate racquets and the service while keeping track of everything they demoed. This would act as an archive of past rentals, helping users reflect on their experiences over time.

Additionally, several users were excited by the idea of purchasing gently used racquets at a discount, specifically ones that had been demoed and returned by others.

4.3 Iteration of Initial Prototype

With those insights in mind, we iterated our prototype and redefined our demo structure. The updates to the demo service were the following:

- Player pays to rent up to eight racquets for one month (one minimum).
- Players have access to any racquet (across all levels and price ranges).
- Extend the time to demo the racquets for another month.
- Racquets are delivered to the players’ doorstep and in a reusable bag with prepaid return label.

- Discount or incentive on their future HEAD racquet purchase when they demo.
- Feedback forms to track racquets each player has demoed in personal archive.

The updated service also aimed to capture the most valuable aspects of online tennis forums—specifically, integrating authentic player reviews directly into product descriptions, along with clearer, more informative metrics and descriptors for each racquet.

We introduced a new secondhand marketplace feature, allowing users to purchase gently used racquets returned by others. To support initial racquet selection, we incorporated an AI-powered padel racquet quiz. Additionally, feedback collected from users’ “personal archives” would now be used to suggest future racquets based on individual preferences and past ratings.

We also enhanced the coaching video content, adding targeted drills and usage instructions to help players get the most out of each demo. These drills were designed to highlight the unique technological features of each racquet, allowing users to better understand how different specs translate into performance.

With this second prototype, many of the core issues were addressed. However, some aspects still required refinement, and further testing with a new group of users was necessary. We developed a new more detailed website demo and revised our interview framework to surface the remaining gaps. Some of the key areas we explored included:

- What metrics matter most in product descriptions? (e.g., power, control, spin, durability)
- How effective is the website demo set up? What can be improved?
- What would a player pay to use this service?
- How can we design a shipping bag to protect the racquets and make it easy to transport?
- How will the discount be activated? Can it be stacked?
- How should the experience involve once players have the racquet in hand?
- What support should be included during the demo period?

4.4 Iteration of Initial Prototype

After speaking with an eight-person amateur/advanced user group and conducting four additional individual interviews, we obtained all the feedback we needed to make our final solution. This round of feedback was predominantly focused on website organization and the questions mentioned in the previous section.

Participants suggested reorganizing the padel racquet catalog and offered feedback on refining the performance metrics. There was strong interest in a second-hand marketplace, as well as an app synced to the demo for rental reminders and push notifications. Players also liked the idea of personal profiles with an archive of previously rented racquets and the ability to publish reviews. Most agreed that a rental price of £20–25 per racquet was reasonable.

We also developed a more detailed journey map outlining each website page and the user's step-by-step path from initial discovery to racquet purchase. This map is included in Appendix A.

5. Deliver

5.1 Market Positioning

Though common in sports like tennis and skiing, where players can test gear before buying, our service is a novel innovation in the padel world. Moreover, the current padel rental services that exist tend to be limited within a shop or a club leaving an opportunity for an online try before you buy service. Although HEAD may face some competition from in-person retailers, their location-based advantage is limited. The proposed HEAD demo model offers superior benefits, including access to a wider range of racquets, future purchase discounts, free coaching content, demo videos, and experience tracking. The service will be exclusive to HEAD, helping drive traffic and sales through their website, one of the brand's key strategic goals.

5.2 Key partners

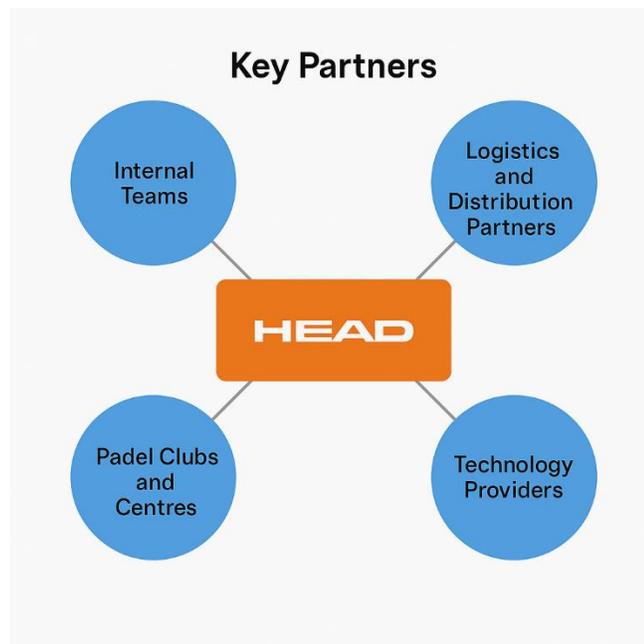


Figure 10. The key partners that will be involved in the service

For the service to be a success several key partnerships are essential. The first and arguably most important of these being HEAD's internal teams. Product development teams will need to iterate and adapt racquets, and their designs based on user feedback and new technologies, e-commerce and digital teams will need to ensure the rental service is implemented into HEAD's existing web infrastructure in a smooth, seamless manner. Marketing and customer service teams will need to support customer engagement and retention.

Reliable logistics and distribution partnerships are essential to ensure a seamless and easy delivery and return of padel racquets. These partners will become increasingly

important as the service scales, but particularly so if the service scales on an international level.

A good partnership with tech providers is also essential to ensure a smooth user experience and a robust feedback collection process. These partnerships will enable HEAD to not only gain actionable insights from customer feedback but also discover customer preferences and industry trends and patterns, both of which can inform future product development and racquet design.

If customers would be able to pick up and return rented racquets at their local padel clubs, making strong partnerships with these venues would be essential to ensure a smooth return process.

5.3 Value Propositions

The service offers players the opportunity to try the racquets before you buy, based on feedback from both players and HEAD's padel finder quiz, therefore, providing confidence in choosing the right racquet to buy for the player as decisions can be made based on experience. The service gives players access to the whole range of HEAD padel racquets, as well as providing access to the newest racquet technologies on the market and any prototypes HEAD decide to offer using this service.

The service also offers value to HEAD, as their sales and profit margin should improve upon racquet purchase, due to the service encouraging more traffic directly through HEAD's website, therefore increasing their profits. The service also provides so much value from the information provided by the customers using the service about the racquets, as it can inform future racquet designs and innovations. As the service is the first of its kind in padel, it gives HEAD a first-mover advantage in a rapidly growing sport, positioning HEAD as key innovators within the market.

6. Final Solution

The final solution we came to is a “Try-B4-U Buy Demo” service where players pay a set price to rent between one and eight racquets for a month. The price is fixed depending on the number of racquets the player rents. Players would be able to try any racquet within HEAD’s range as the price of the demo is entirely dependent on the number of racquets rented.

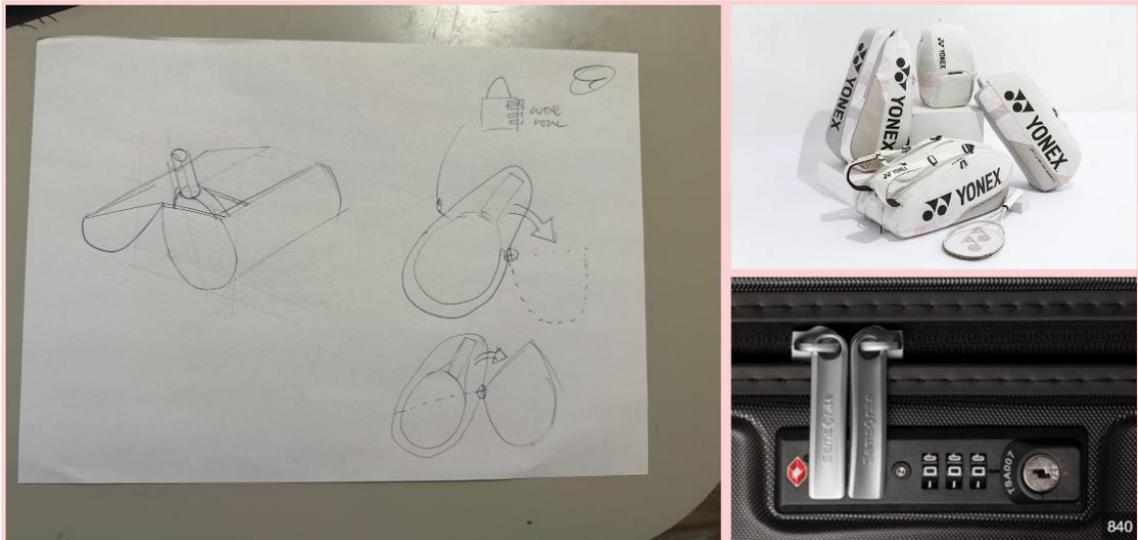


Figure 11. sketches and analogues inspiration for the delivery bag

Racquets are delivered to the user’s doorstep in a reusable, discreetly designed backpack with padded slots for racquet protection and a lock for safety measures. Once the racquets arrive at the door, customers will use a code they received in their account to unlock the bag.

During the rental period, players can extend at any time and at the end of the month, the players simply apply the return label and either drop off to approved locations or schedule pick up.

At any time during the rental, players can fill in feedback forms, rating the racquets on specific metrics in their personal archive which has all their previous rentals.

Upon return of the rental, if a racquet is damaged the user will not get charged. However, if one of the racquets is not returned, the player will be charged the full retail price of the racquet.

6.1 Website Demo

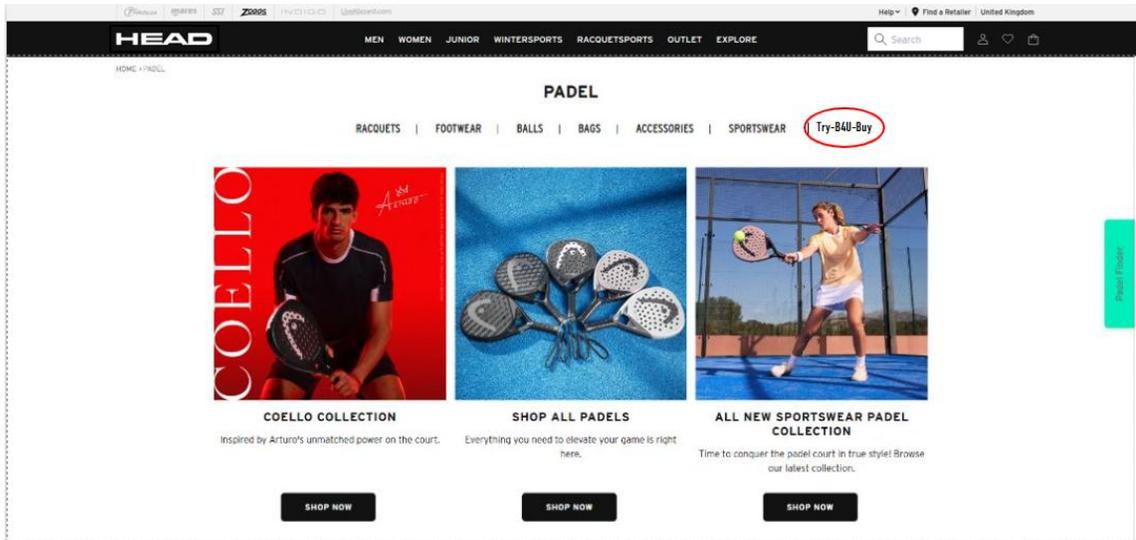


Figure 12. HEAD's website homepage

This is HEAD's home page, in the top right, circled in red, we have added a tab to navigate to the Try-B4-U Buy service. After clicking on this the customer will be taken to the introduction page.

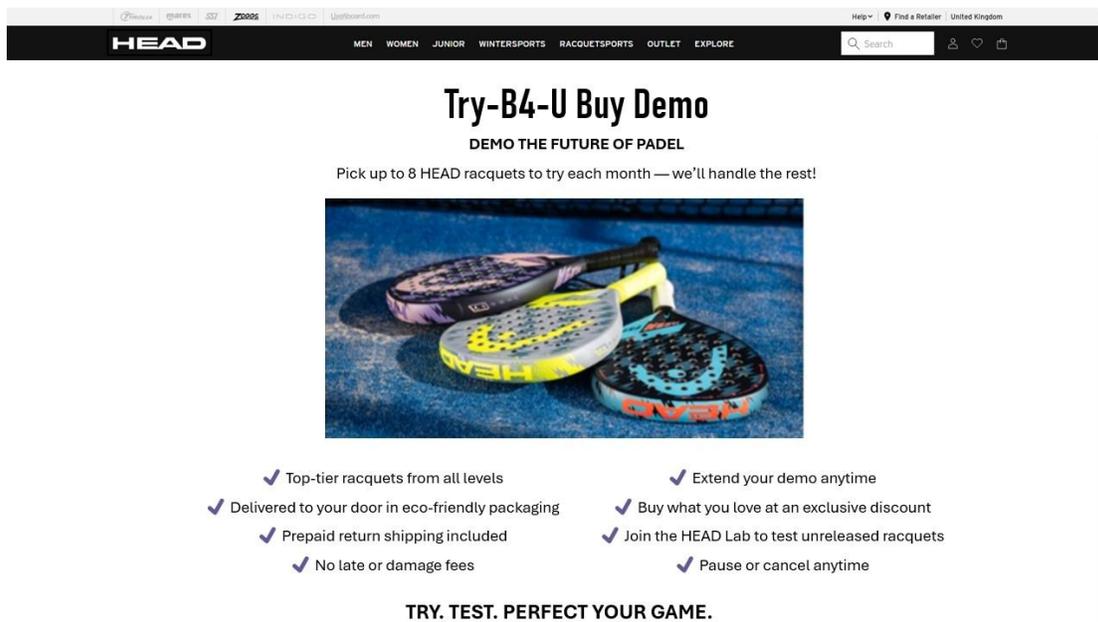


Figure 13. Page one

This page explains what the service is, how it works along with some of the key features. After scrolling the customer will see the racquet pricing pyramid.

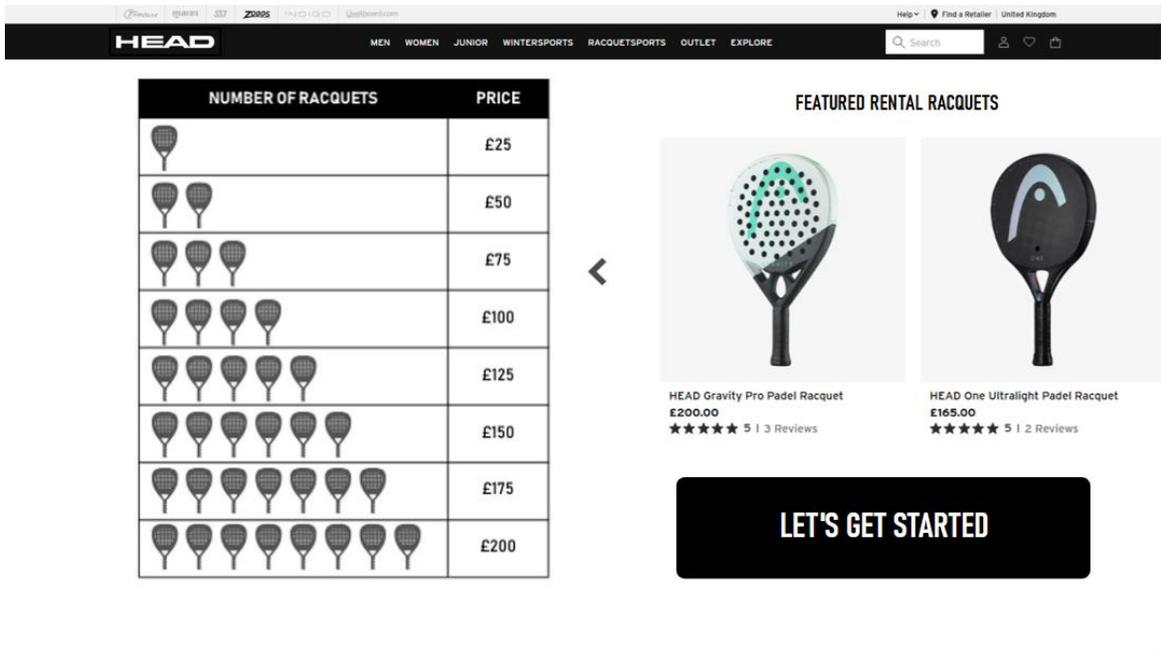


Figure 14. Page one continued

This page displays the racquet rental pyramid (prices are placeholders) as well as some featured racquets and the let's get started button, which when pressed takes the customer to the account creation portal.

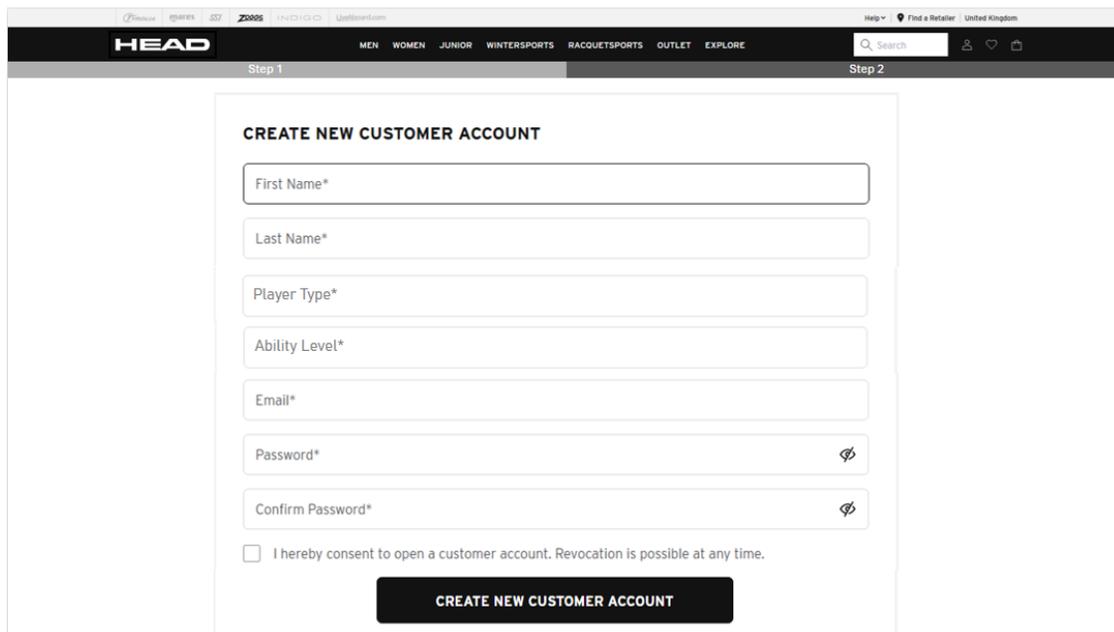


Figure 15. Page two

Within this portal, customers will fill in their personal information as well as player type and ability to make their player profile helping HEAD with product creation and the service to populate racquet suggestions.

Next, the customer will be guided to either take HEAD's AI padel finder quiz or begin shopping for all padels available for rent.

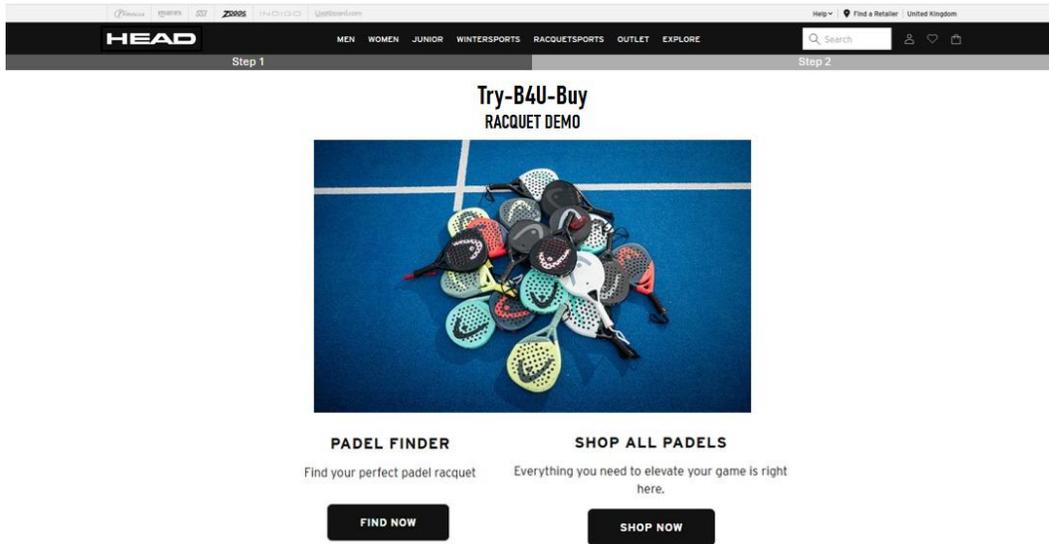


Figure 16. Page three

After the customer has either completed the padel quiz or just begun looking for racquets, they will be shown the “racquet catalogue” where all the available racquets are broken into sections based on their preferences and rental history (will look different for different customers and player profiles).

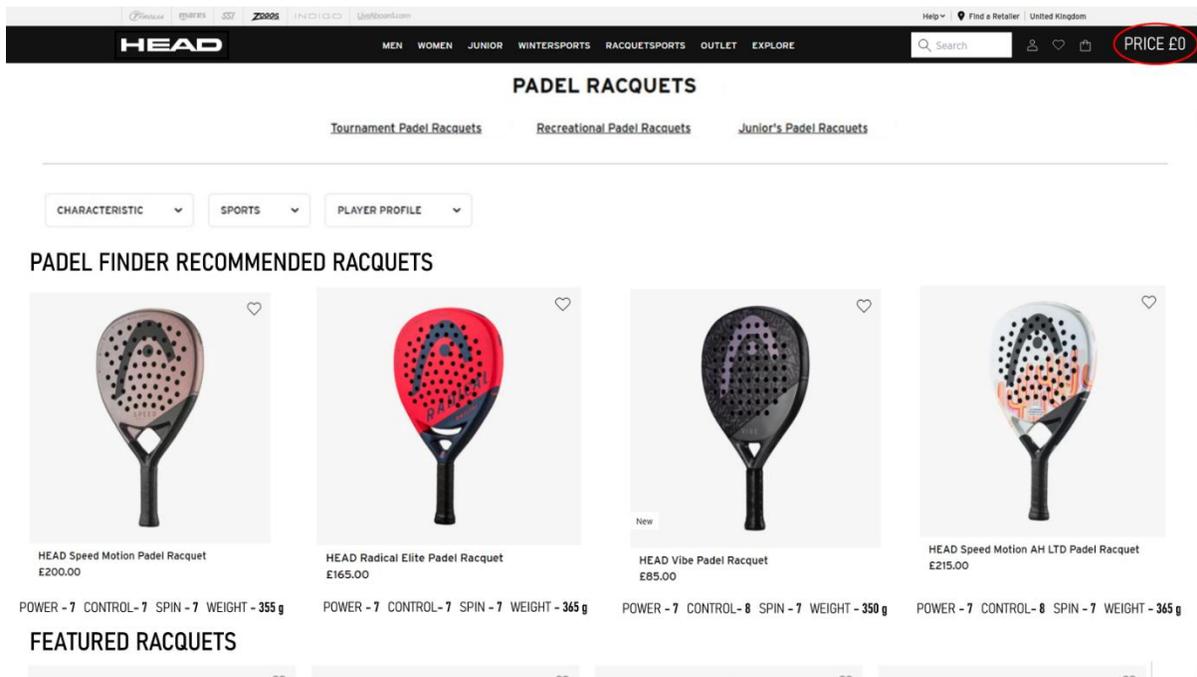


Figure 17. Page four

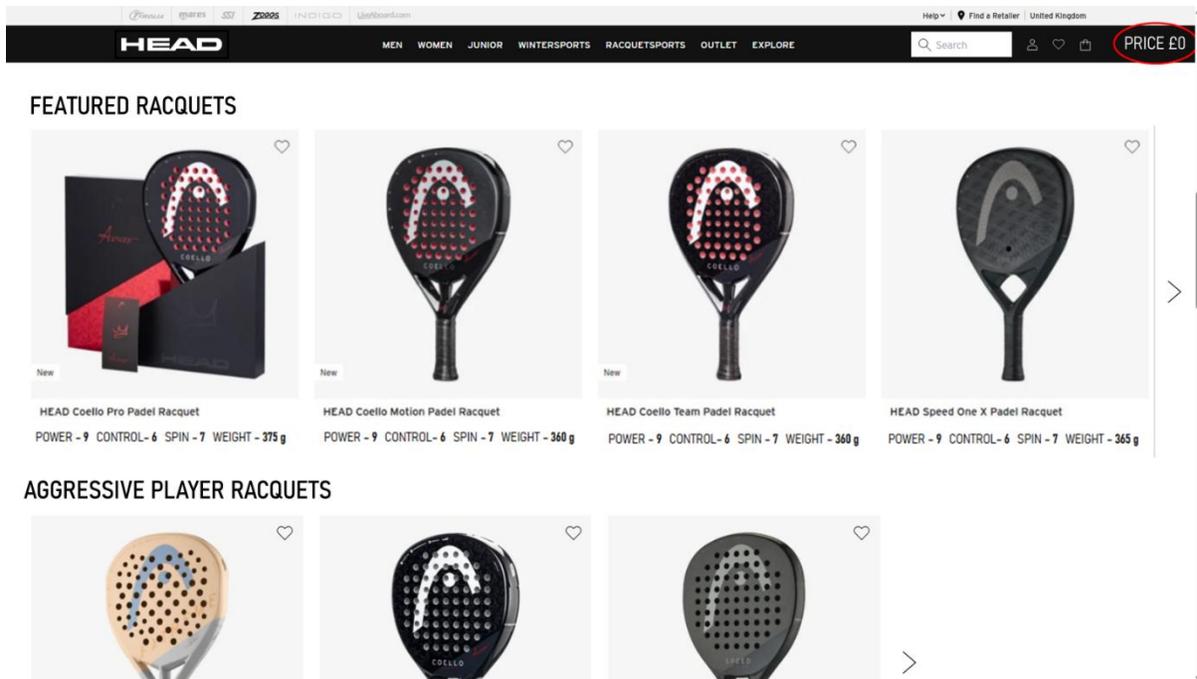


Figure 18. Page four continued

Upon clicking on a racquet the customer is interested in; they will be taken to the racquet description page. This page displays all the details, reviews, metrics, and additional images of the racquet. From this page the customer has the option to add to the basket or compare it to another racquet.

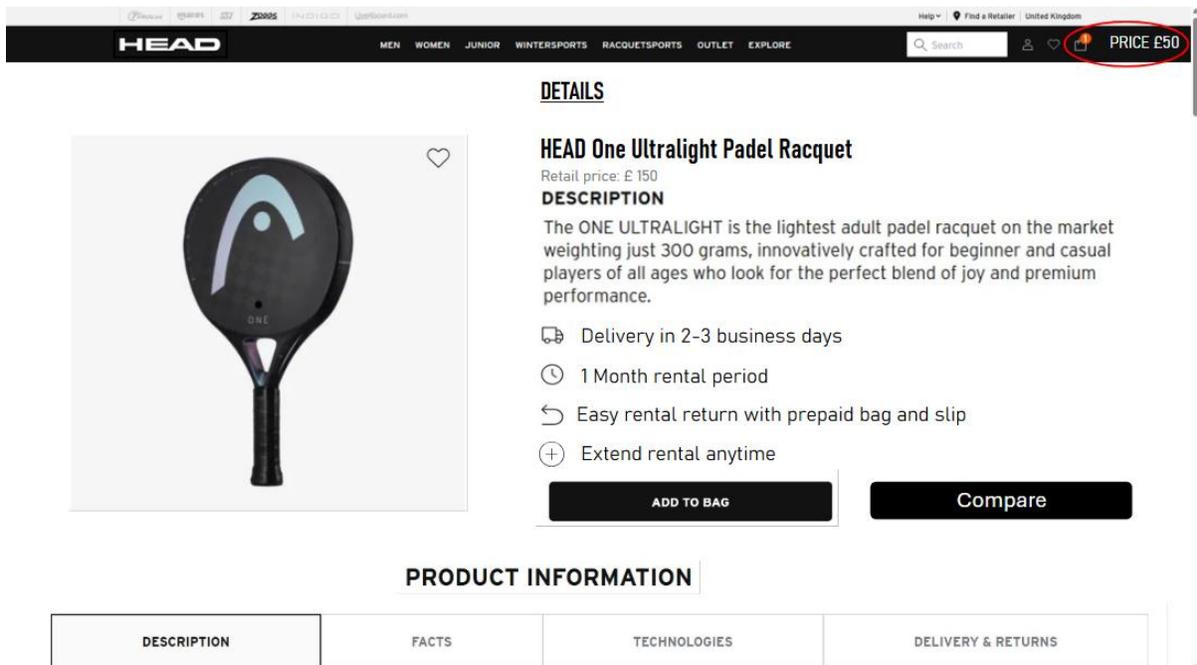


Figure 19. Page five

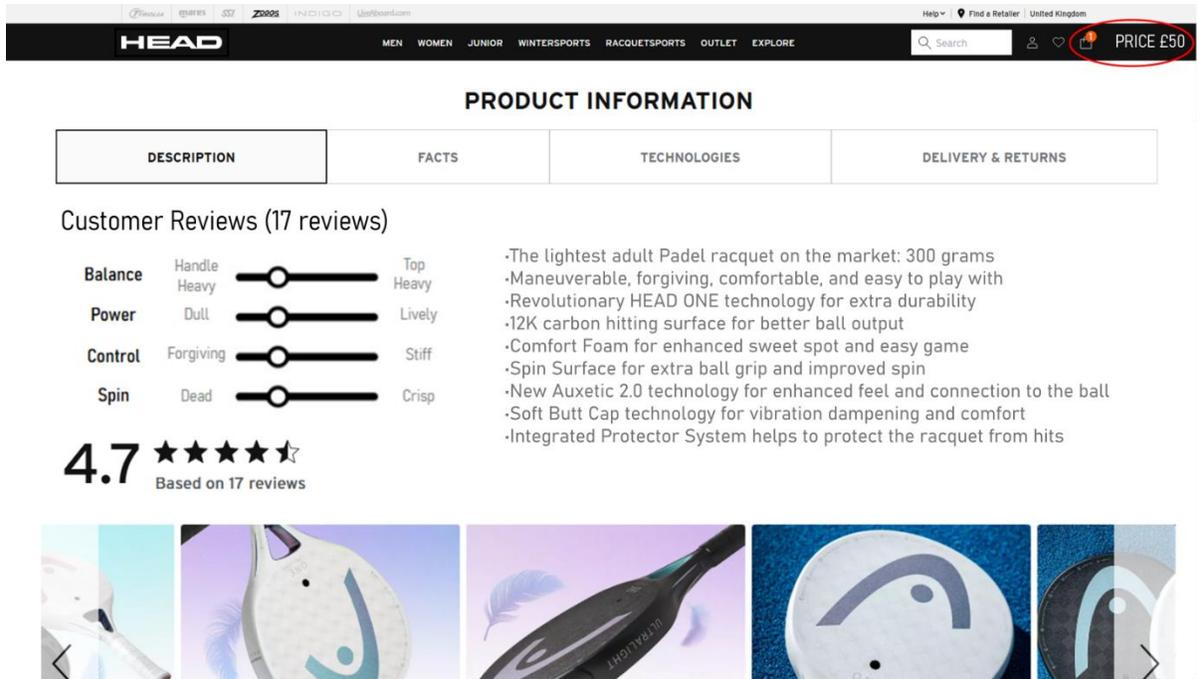


Figure 20. Page five continued

If the user wants to compare two racquets, they will be guided to the next page. The comparison feature will show the different rates for the performance metrics for the user to gauge.

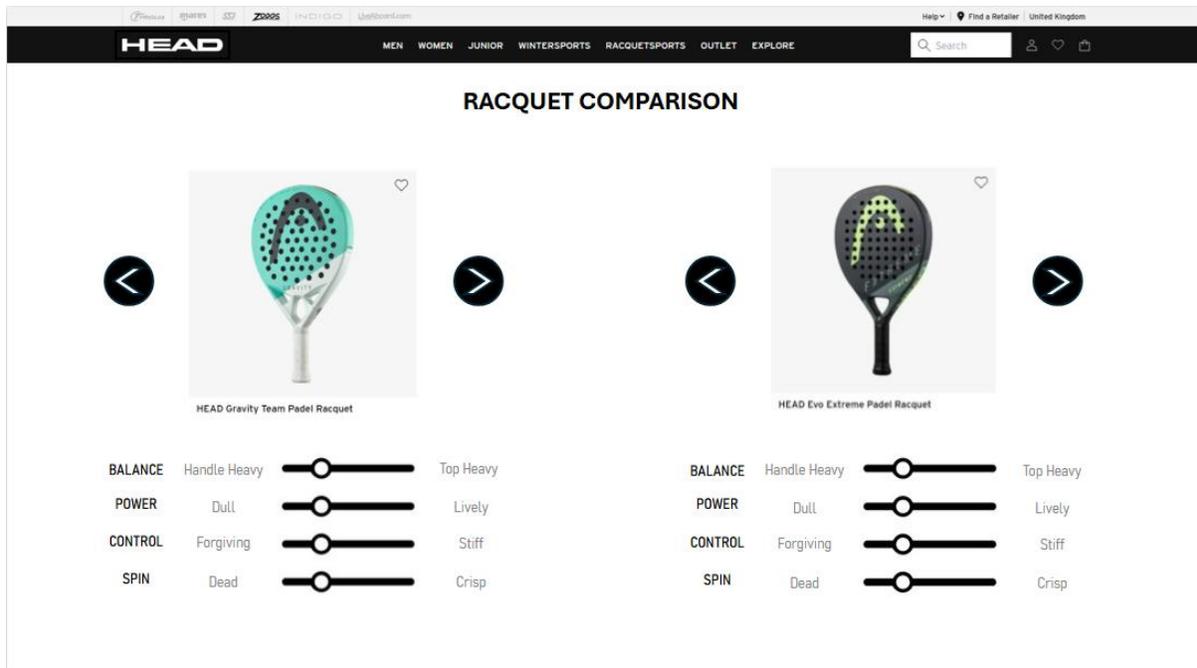


Figure 21. Page six

The player also has access to an account page where they can view their active rentals, as well as gain access to guidance on how to demo the racquets to get the most of

their rental along with coaching tips. Here they can also access HEAD's very own secondhand racquet market. As well as viewing their previous ratings of racquets.

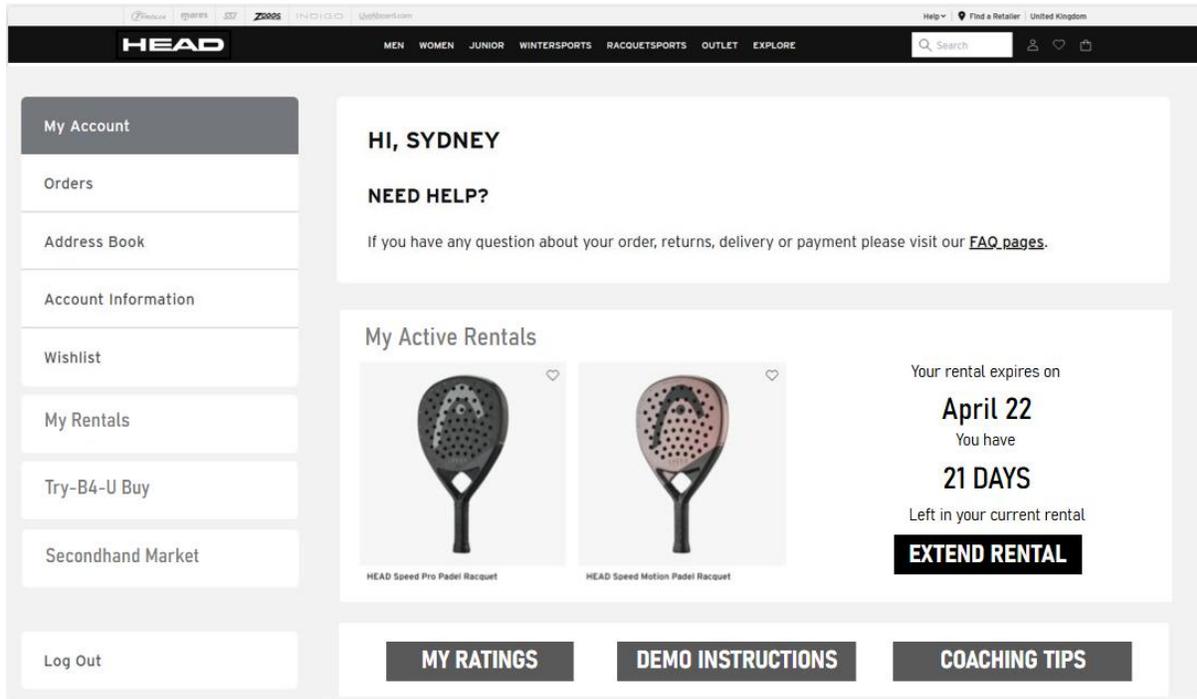


Figure 22. Page seven

Players will have the opportunity to extend their rental from this page as well as viewing their previous ratings of racquets.

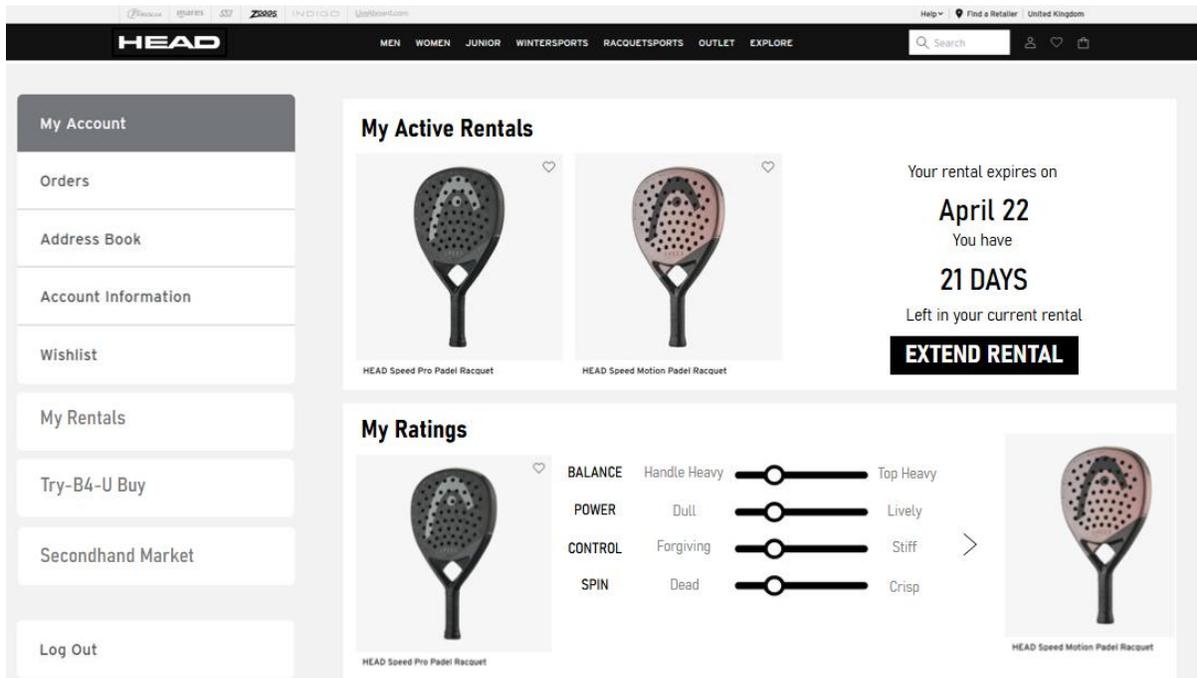


Figure 23. Page seven continued

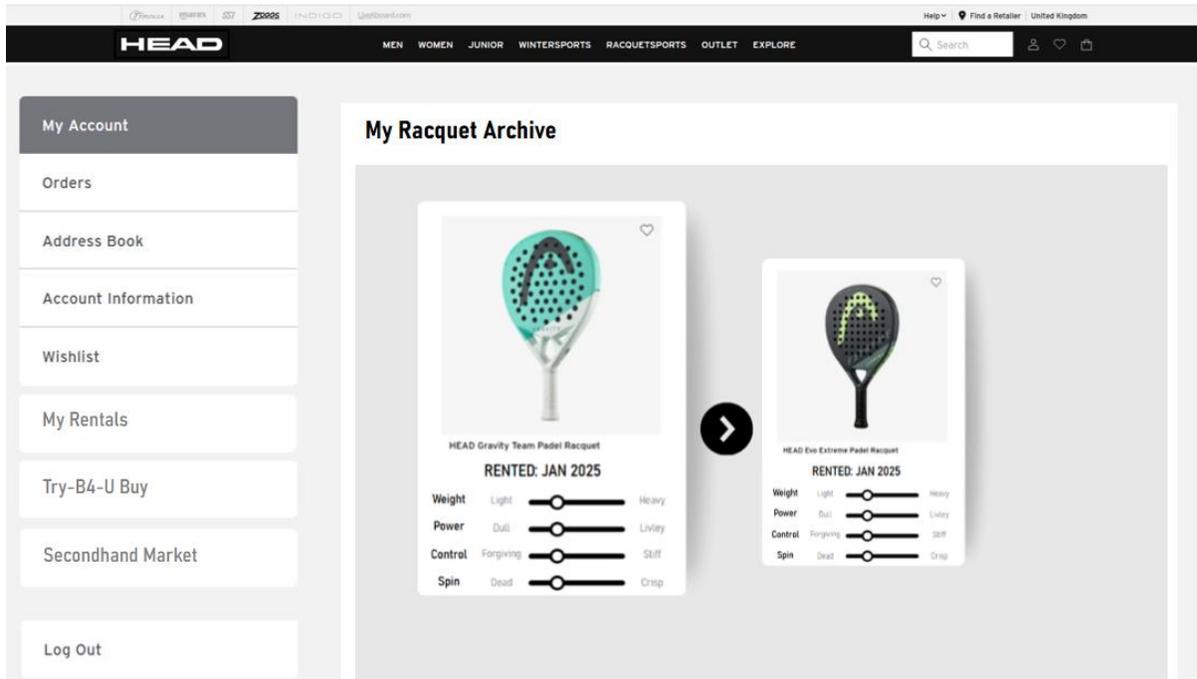


Figure 24. Page seven continued

This page shows the racquets that the customer has previously rented, they can go back through and click on each racquet to view the details and their ratings of each racquet they have rented.

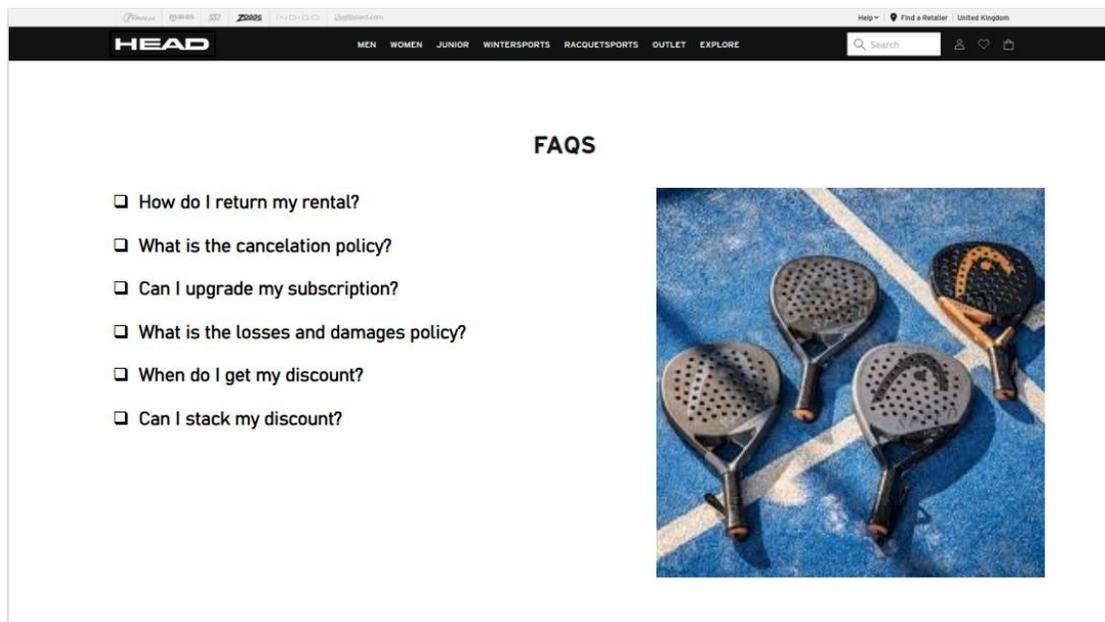


Figure 25. Page eight

Here is the frequently asked questions (FAQs) page, where each question will be hyperlinked to an answer.

The screenshot shows a feedback form on the HEAD website. The form is titled "Give us your Thoughts!" and contains five questions:

- 1. Which Racket have you been using ?** A dropdown menu is shown with options: Alpha Pro, Gravity (highlighted), Delta Elite, and Speed Pro.
- 2. Rate Your Racket !** Four sliders are provided for rating:
 - Balance:** Handle (left) vs. Top Heavy (right)
 - Power:** Dull (left) vs. Lively (right)
 - Control:** Forgiving (left) vs. Stiff (right)
 - Spin:** Dead (left) vs. Crisp (right)
- 3. What did you like?** Three horizontal lines for text input.
- 4. Would you Recommend this Racket ?** Three radio button options: Yes, No, and Maybe.
- 5. Any other comments?** Three horizontal lines for text input.

A large black "Submit" button is located at the bottom right of the form area.

Figure 26. Page nine

Figure 26 shows the feedback form players will be asked to fill out via email upon their rental period ending, customers will be able to view their ratings from this form at any time and will help HEAD suggest racquets for the customer in the future, as well as use the information gathered to develop and innovate future racquets.

Word Count: **4,382**

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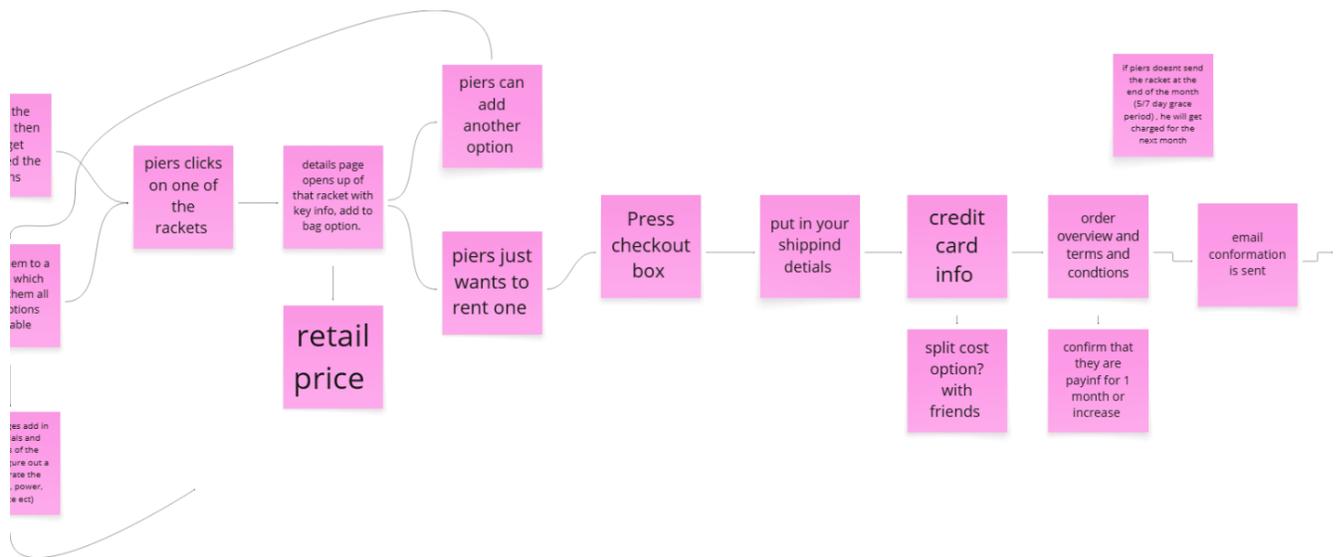
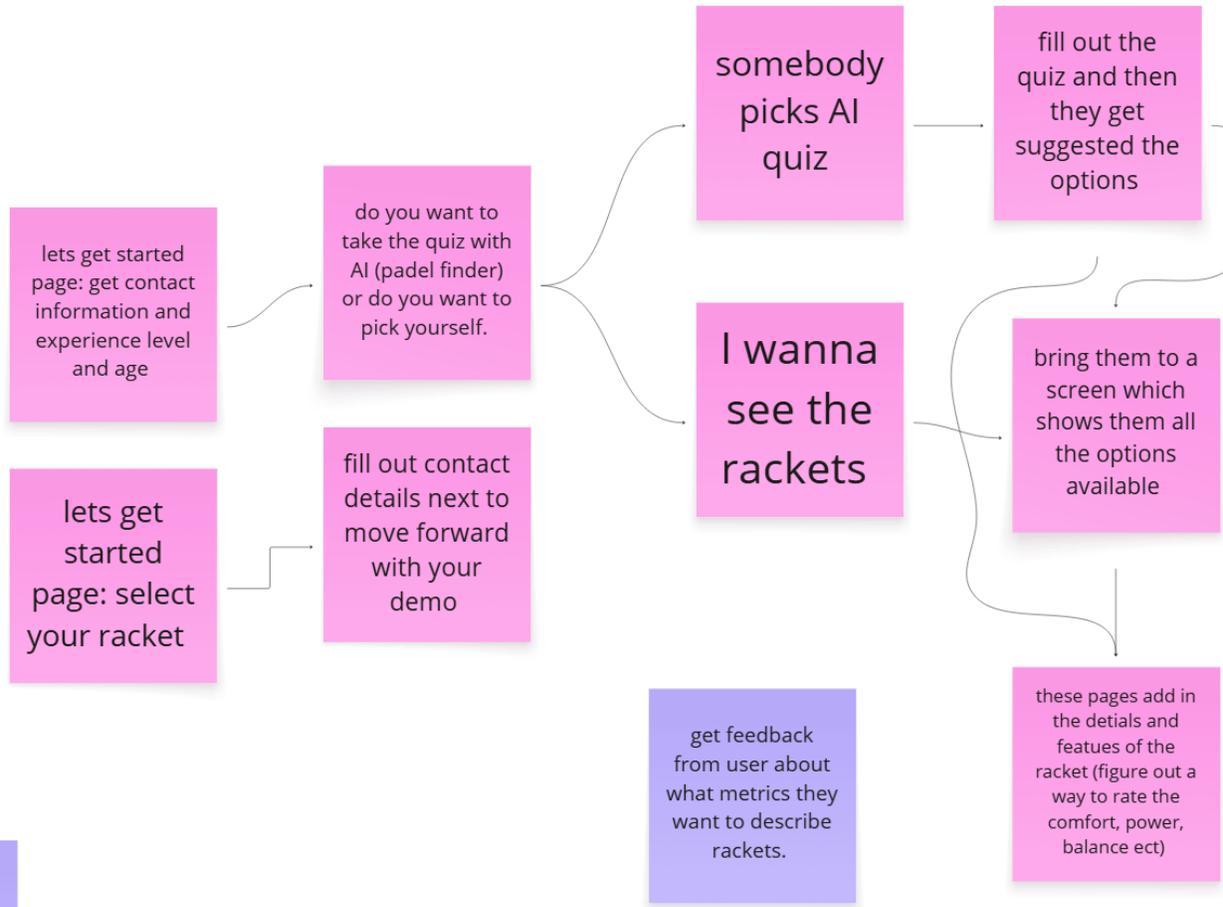
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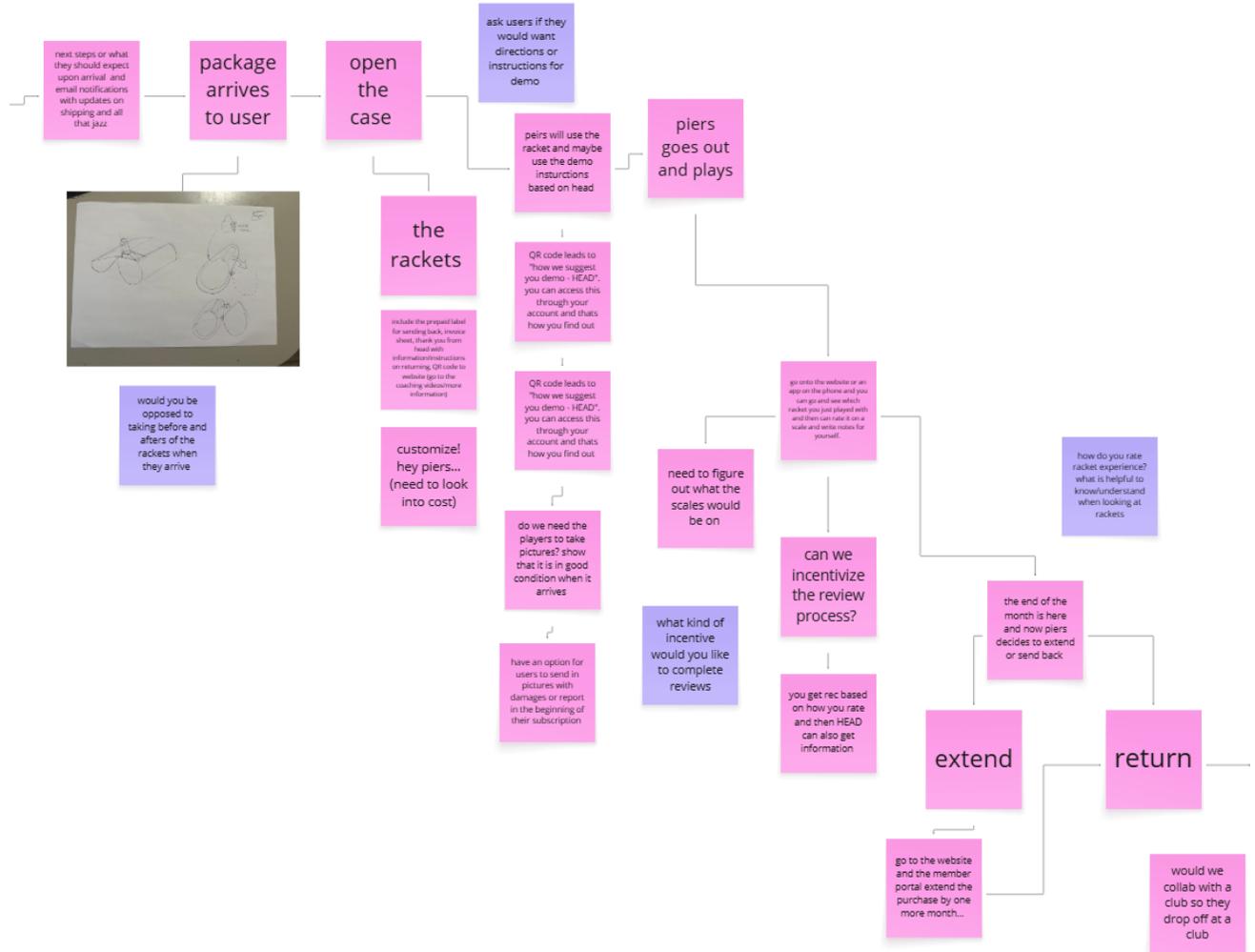
Appendix A

A. Detailed Journey Map

User journey: Amateur







what's the most convenient way you have returned something online.

drop off the package at a store or potentially pick up

piers drops off his package at a store/club (drop off location)

he gets an email confirming that his packaging is on the way back

at the end once they returned have them fill out a survey about the experience

MARKETING: repeat the cycle or they buy

could we collab with amazon? another courier service?

email with discount or tie it to the account so that once they send it back you get it (active once the package is in transit)

give recs based on feedback form for those who want to try more

Appendix B

Miro Board link: https://miro.com/app/board/uXjVLR_ovKY=?share_link_id=715324531129