

EPAM CONTINUUM

JIE LI
PORTFOLIO

EPAM
GLOBAL
RESEARCH
INSTITUTE

A woman with dark hair tied back is shown in profile, wearing a VR headset. The scene is lit with dramatic blue and red lights. A yellow hexagonal callout box is positioned near the headset, containing the text 'EPAM GLOBAL RESEARCH INSTITUTE'. The woman's face and the headset are highlighted by the lighting, creating a futuristic and immersive atmosphere.

JIE LI

Senior Consultant

Head of Research & Insights EPAM Netherlands

10+ years of experience in:

Research Methods: Surveys, Interviews, Usability Testing, Focus Groups, Card Sorting, Diary Studies, Contextual Inquiries, Field Studies, Heuristic Reviews, Market Research, Competitive Analysis, A/B Testing, Controlled Experiments

Tools: Userzoom, Contentsquare, Qualtrics, SPSS, R, Miro

Clients: British Telecom, Burberry, Baxter, Planet Payment, Roche, MyTheresa, Apple, TNO, Ziggo, Google, CoolInc, Honda

Areas of Expertise: Human-AI Experience, Extended Reality (XR), E-Commerce, Fashion & Retail, Banking & Finance, Telco, Healthcare, and Food & Beverage. Luxury Loyalty Program



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WORK & EDUCATION

WORK EXPERIENCE

2021-Present

Senior Consultant, Research & Insights EPAM

Consulting and managing research projects, covering tasks from client needs analysis and key question identification to research design, data analysis, and presentation. Delivering research services to diverse clients across industries.

2017-Present

Founder & Cake Artist, Cake Researcher

Crafting beautiful and tasty customized cakes and operating a boutique café for cake tasting and workshops.

2017-2021

Scientific Researcher, National Research Center for Mathematics and Computer Science (CWI)

Defining measurement metrics and controlled experiments to comprehend user behavior and interactions within immersive environments.

2012-2017

PhD Researcher, Delft University of Technology

Triangulating data gathered from ethnographic studies, focus groups, emotion sampling, and proximity sensors to quantify and forecast crowd movements, density, and emotions.

2010-2011

Researcher, Philips Research

Conducting interviews, focus groups, card sorting, and controlled experiments with consumers. Performing in-depth qualitative and statistical analysis to understand apparel perception under different retail lighting conditions.

2023-Present

**Guest Professor, Keio University Media Design
"Bits to Bites" Column Owner at ACM Interactions**

Supervising PhD students and researching user experiences with emerging technologies (XR, Spatial Computing, Generative AI). Writing three yearly research methodology articles as an ACM Interactions columnist.

EDUCATION

Ph.D. 2012-2017

Human Computer Interaction

Delft University of Technology

M. Sc. (Cum Laude) 2009-2011

Industrial Design Engineering

Delft University of Technology

B. A. (with distinction) 2005-2009

Industrial Design

Sun Yat-Sen University

CORE EXPERTISE



Scientific Research & User Experience Research

Tailoring research projects with appropriate methodologies and delivery timelines, aiding clients in making data-driven decisions through insightful reports and recommendations derived from comprehensive research.



Extended Reality (XR) & Immersive Technology SME

Actively publishing thought leadership articles and scientific papers covering topics such as XR, immersive technology & experiences, Human-Computer Interaction (HCI) Research Methods.



Human-AI Experience Research

Leading EPAM's Human-AI Experience (HAX) education material curation and publishing HAX research articles in top venues.



Fine Dining & Luxury Loyalty Program Design

Possessing extensive expertise in fine dining, food experience design, and luxury loyalty program design.

CASE STUDIES



Finance

Integrate Payment Solutions

Identify pain points and support the integration of five payment platforms by conducting stakeholder and user interviews, as well as performing user evaluations for the newly designed payment portal.



Healthcare

Support Self-Management of patients

Create diabetes patient personas and understand their "jobs to be done" through in-depth interviews. Provide design recommendations to support their self-management.



Sports

Optimize Live Sports Broadcasting Workflow

Conduct a field study at a MotoGP event to comprehend the workflows and pain points of live sports broadcasting. Design and test prototypes during real-life sports events.



Telecom

Evaluate New Brand Design and Prototypes with Users

Conduct a series of user research, including A/B testing, usability testing, card sorting, and workshops, to assist clients in redesigning and optimizing their diverse online platforms.



Mobility

Evaluate New Cockpit Design for Pontoon Boats

Conduct comparative driving tests, interviews and a focus group with Florida pontoon boat drivers, each of whom tested both a standard pontoon boat and one equipped with Honda's new cockpit.



Luxury Loyalty

Research for Decoding Loyalty Perspectives

Conduct research to enable CoolInc to tailor its services and customer engagement strategies to enhance loyalty and reinforce its status as a top luxury brand.

BUILD AN INTEGRATED PAYMENT PORTAL

The Challenge & My Role

Planet Payment is a rapidly expanding payment solutions company that has recently acquired 4 other prominent players in the payment industry. These companies each possess their own mature standalone payment products; however, they lack a comprehensive understanding of each other's offerings and do not share a common vision for Planet's future. The challenge at hand is to **consolidate these five payment products into a single integrated payment portal.**

I was **leading a research project** aimed at initiating the discovery phase of building an integrated portal for Planet Payment.



METHODOLOGY

I conducted **29 in-depth interviews**, including:

- 6 stakeholders who are senior leaders at Planet, possessing profound knowledge of Planet's products and strategies.
- 12 internal users who engage with Planet's products daily, such as support staff, developers, and account managers, and hold detailed insights into features and customer pain points.
- 11 merchants from diverse industries like travel, gastronomy, and hospitality, who actively utilize Planet's products.

Monday

Triage work: priority and non-priority

Tuesday

Help check transaction status, chargebacks

Wednesday

Helping research on reasons behind he declined transactions

Thursday

Coordinating the work across support management, delivery

Nick Brave

A quote
"Enable merchants to check their chargebacks, transactions, authorizations, or act as admin users to manage their users' permissions and credentials. This will make my life easier."

Unique attributes
Use the portal daily to assist merchants to do reporting, check the status of transactions, chargebacks.

What functions of the portal does he often use?

- **Research.** Review Planet Switch and PWeb, searching for trends and declines and reaching out to associations for explanations for the declines
- **Demos.** Doing merchant onboarding demos for Pweb, Mweb, iPay payment gateways
- **Support.** Handle the support requests from merchants, acquirers, sometimes gateways at different levels.
- **Communication channels.** Use 90% emails, 10% phone calls.
- **Verification.** Use Mweb to check whether a transaction is settled, help merchants check the chargebacks, the amount and the date
- **Privilege access.** Use Pweb daily to review transactions, verify funding, find / mark up information, reset / unlock users, **manage several to hundreds of user credentials at the same time**, access to bulk log, etc. Have a special privilege for security reset, which can make changes to merchants' accounts through the setup team.
- **File reports.** **File (complex) reports for merchants who find the reports available on the portal are not sufficient.**

I like

The functions that I like and motivate me to do my work

- **Mweb:** Transaction, chargebacks, account management are often used functions by support staff
- **Mweb:** Feel proud of the level of details in Mweb, merchants find it phenomenal
- **Mweb:** Have no limitation in terms of how many users every merchant could have
- **3C Portal:** Easy to be integrated into the merchant's PMS
- **3C Portal:** Good for terminal management, e.g., lists all the terminals, show whether they are connected to the terminal management services and how much time they are connected, and what software the terminal has

What steps does he often take to use the portal?

View the details of a transaction on Mweb

I don't like

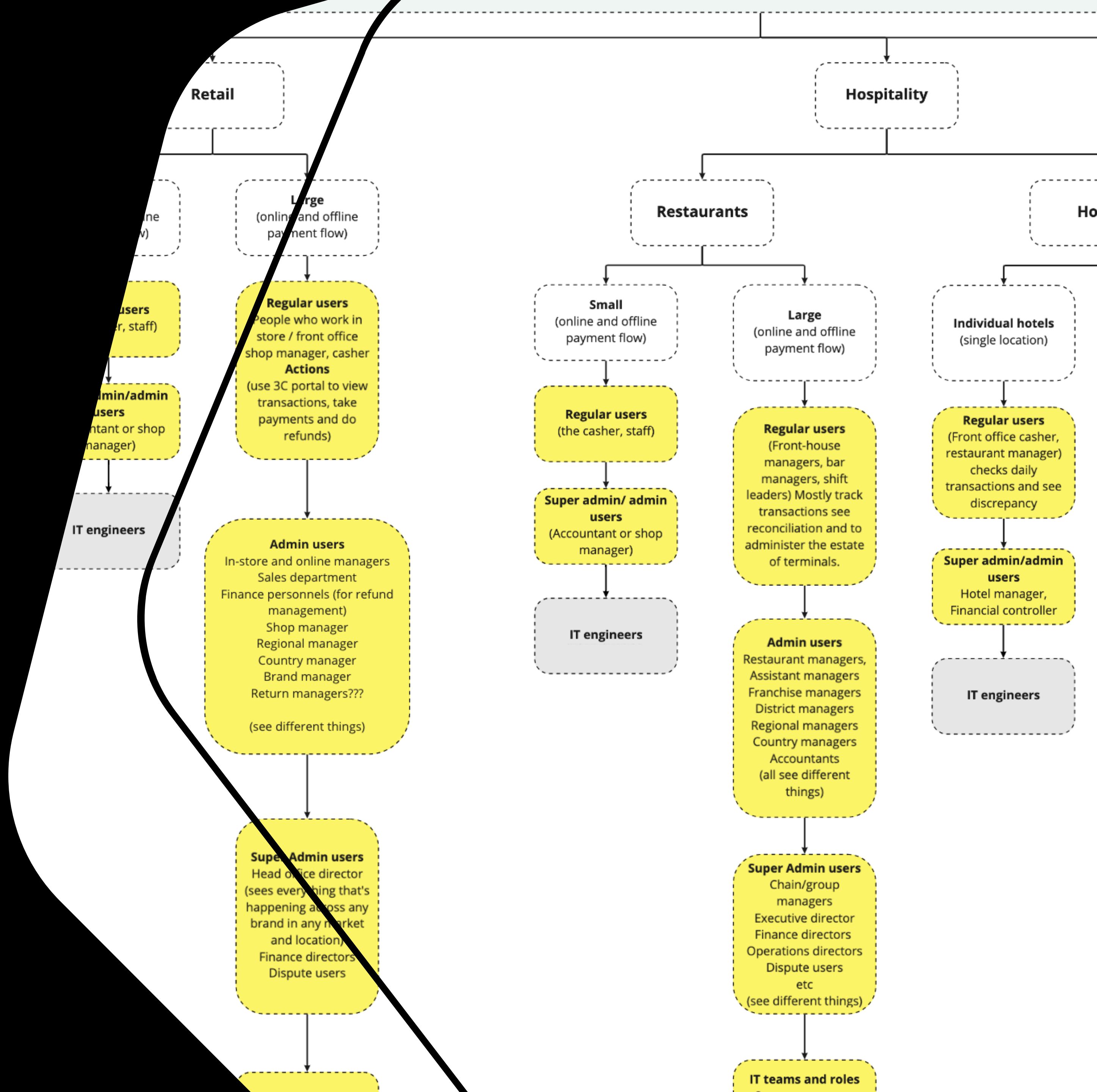
Barriers that make it difficult, frustrated to do my work

- **High workload.** Have to support merchants for functions that they could have been given access to (e.g., manage user profiles / credentials, do refund)
- **Limited support channels.** Support requests mainly come from emails, which increase the waiting time of merchants.
- **No direct link to gateways in Mweb.** It is annoying that you have to click at transaction detail, then you can see gateway ID, you have to manually copy paste the gateway ID and open a new window to paste
- **Unintuitive navigation.** It is hard to find out what kind of transaction is supported for each customers for DCC. "I need to dig in every customer, click a couple of times before I see a small icon of 'currency'."
- **Check currency set up on Mweb is difficult.** Need to navigate through multiple levels.
- **Limited transaction authorization history.** For authorizations, the range to check what happen with a transaction is currently 30 days. The support have to check month by month
- **Tedious onboarding.** The sales get the signed contract, then passes to the onboarding team, and then reach support to do the demo. We can reduce some steps in-between.
- **Scattered information.** Every month the support have to gather information manually from multiple places in the portal and put them in a centralized view for merchants.
- **Limited number of transactions in 3C portal.** 3C portal is not usable by quick service restaurants, which have high volume of daily

IMPACT

The research project helps Planet:

- **Build a robust research community** within Planet and foster a sense of ownership and empathy for user needs by involving a diverse team including product owners, UX designers, developers, UX copywriters, and data scientists in UX research.
- **Take proactive steps by anticipating user needs** and planning research strategically to align with long-term product success goals.
- **Embrace participatory design and development** by engaging a customer community in the product design and development phases.



2

LARGE MEDICAL DIAGNOSTICS COMPANY

DISCOVER DIABETES PATIENTS' NEEDS IN DEVELOPING COUNTRIES

The Challenge & My Role

Conduct a large-scale research study to uncover the unmet needs of People with Diabetes (PwDs) on MDI therapy (Multiple Daily Injections of insulin) across Brazil, China, and India.

This project held significance due to the uncharted nature of these markets, with its results shaping forthcoming products, services, and communication strategies within these regions.

My role involved leading in-depth interviews for the Chinese market and participating as a note taker and data analyst for other interview sessions.



2

LARGE MEDICAL DIAGNOSTICS COMPANY

METHODOLOGY

To attain a comprehensive comprehension of the markets, we adopted a mixed-method approach involving **67 remote qualitative interviews, diary studies, empathy maps, and secondary research.**

The analysis and synthesis of findings utilized the Jobs-to-be-Done framework, shedding light on both the functional and emotional requirements of PwDs.

Despite the intricacies of conducting research spanning various time zones, languages, and emerging economies, we successfully completed the project within a 4-month timeline.



2

LARGE MEDICAL DIAGNOSTICS COMPANY

IMPACT

CASE STUDY 2

The research project helps the client:

- **Highlighted unexpected user behavior** across the three countries and pivoted business goals.
- Triangulated data from multiple sources provided the client with **a comprehensive and nuanced view of the three markets**, encompassing cultural nuances and the behaviors of PwDs.
- The provided insights will guide the client in **implementing a go-to-market strategy** for these three markets.

	T1	
diagnosis		
symptoms before they become critical (<i>functional</i>)	●	
being misled by inaccurate sources of information		
lifestyle before diabetes (<i>functional</i>)	●	
fear of insulin being harmful		
fear of injections		
feeling like a 'sick person'		
free to enjoy a range of activities	●	
did feeling weighed down by toolkit	●	
feel proud of crafting own solution		
feel supported practically	●	
Feel supported emotionally	●	
Avoid feeling restricted by diet	●	
Avoid fear of hypos	●	
Gain insight into BSL fluctuations (<i>functional</i>)	●	
Feel treatment is unique to them	●	
hope they can live a long and healthy life	●	
result of prioritizing health over others (women mainly)		
burden to others		

● little ● Moderately ● A lot

The table above is based on a systematic

OPTIMIZE LIVE SPORTS BROADCASTING WORKFLOWS

The Challenge & My Role

Imagine you are watching a sports event at home, where you can customize the content displayed on your TV screen, access additional information on your mobile devices, and select camera angles to follow your favorite players. Enabling these experiences necessitates adjustments to the current live sports broadcasting workflow.

In this project, I served as a lead UX researcher, responsible for conducting research, analyzing data, and engaging key stakeholders, including the live broadcasting team, in the research process..



METHODOLOGY

I conducted a **three-day field study** on a BT Sports outside broadcasting truck at the MotoGP 2017 Silverstone racing event, resulting in over 70 pages of observational notes.

Additionally, I conducted **10 in-depth one-on-one interviews** with the live broadcast team and collected **24 hours of 360° video recordings** capturing the live broadcasting workflows.



IMPACT

- The research project helps the client **design a novel broadcasting platform** to enhance live sports broadcasting for customizable multi-screen TV programs.
- This newly crafted platform **underwent successful testing at Wembley Stadium** during the live broadcasting of the customizable FA Cup 2018 match to 10 households.
- The research methodology employed made **a significant contribution to the HCI field**, leading to the publication's recognition with the "Best Paper" award from ACM (Association for Computing Machinery).



4



EVALUATE NEW BRAND DESIGN AND PROTOTYPES WITH USERS

CASE STUDY 4

The Challenge & My Role

BT is undergoing a transformative shift in its brand design. The BT design team is in the process of replacing the existing design system with the Arc UI Design System for their upcoming digital brand identity.

As part of this initiative, they intend to assess the performance of the current design system and gauge the effectiveness of the new design facilitated by the Arc Design system.

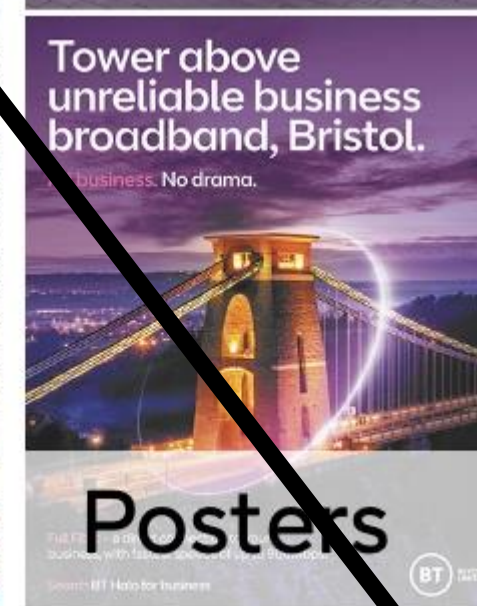
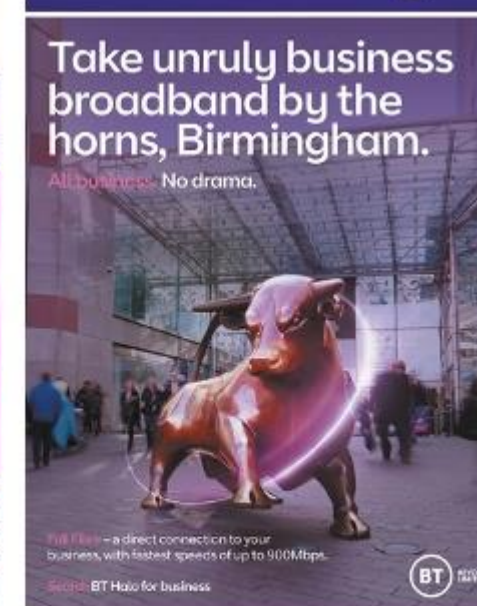
In this project, my responsibilities encompassed conducting various research activities such as **surveys and usability testing, analyzing the collected data, and collaborating closely with essential stakeholders**, including product managers from diverse BT offerings such as billing and order tracking.



Hub



Full Fibre



Phone Books

4 BT

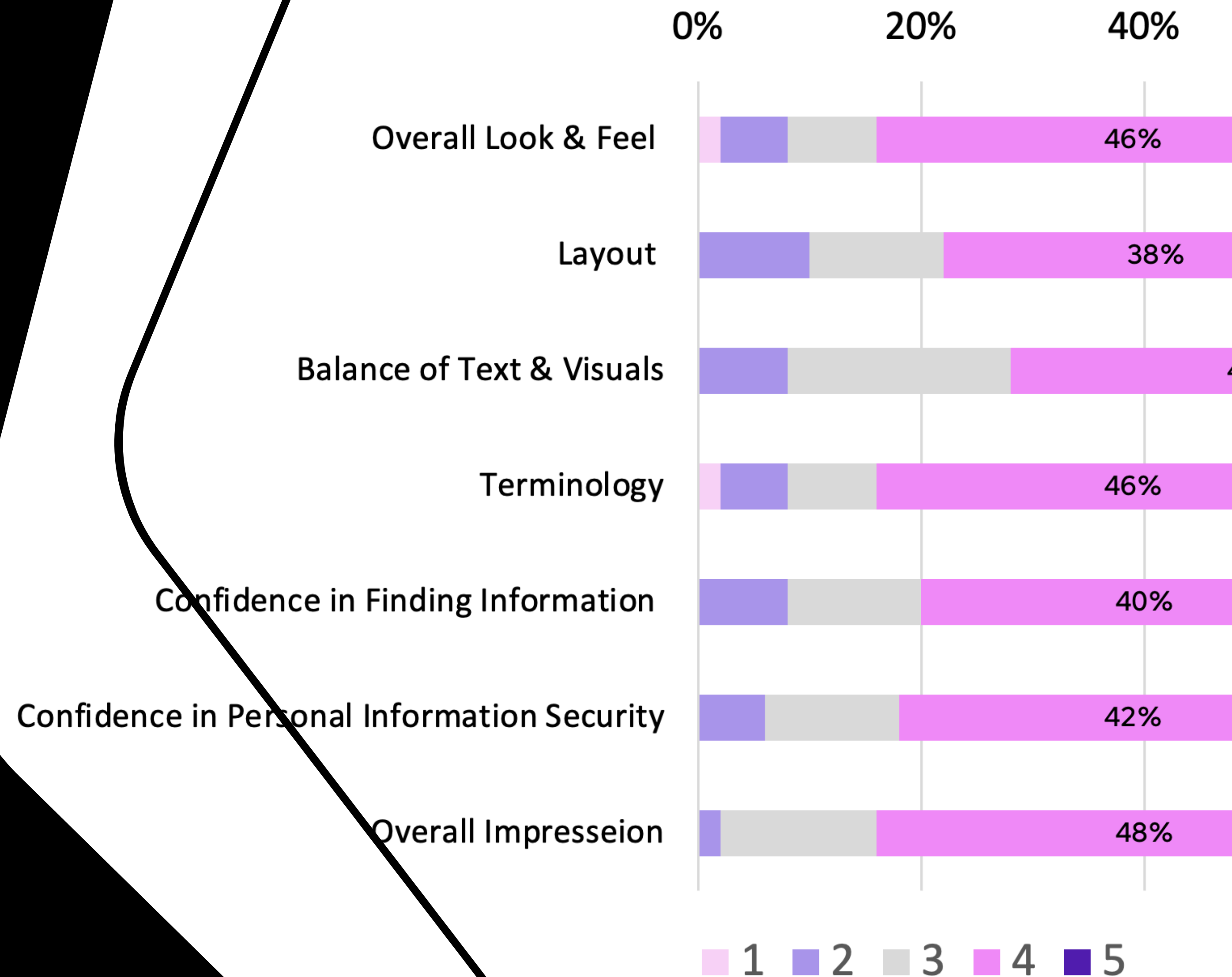
Overall Look & Feel of BT Website

IMPACT

The research project helps the client:

- **Benchmark the performance** of the current design
- **Compare the effectiveness and attractiveness** of the new design with the old design
- **Provide timely design recommendations** based on research data to support the digital product design of four design groups
- **Foster a shared understanding** of the new design and the voice of customers among designers, developers, product managers, and the broader BT team

CASE STUDY 4



5

**HONDA
MARINE**

EVALUATE NEW COCKPIT DESIGN FOR PONTOON BOATS

The Challenge & My Role

The pontoon boat is the most owned boat type in Florida, especially for family and water party activities. However, docking and trailering the pontoon boat can be challenging, even for experienced drivers.

Honda has designed and prototyped a new cockpit for pontoon boats with advanced displays and ergonomic seating to help drivers perform special maneuvers and have more comfortable driving experiences.

In this project, my task is to evaluate the usability and ergonomics of the cockpit concept, gain insights into its usability and effectiveness, and identify improvement opportunities through an in-person field study.



METHODOLOGY: COMPARATIVE DRIVING TESTS & INTERVIEWS

Boat Ride 1

Boat testing with the standard pontoon

In-Depth Interview & survey

for Boat Ride 1

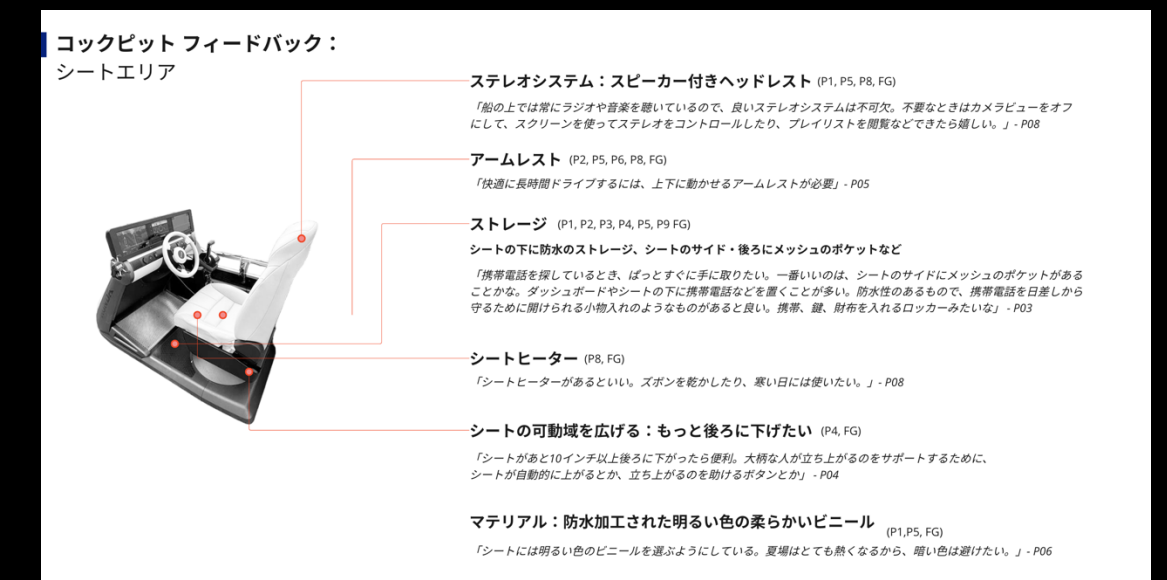
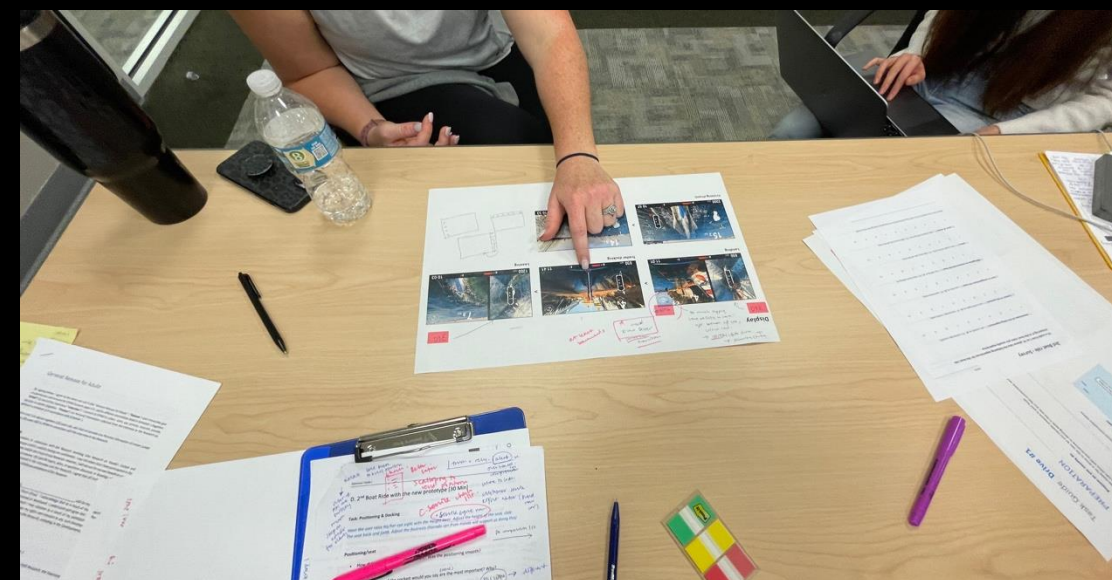
Boat Ride 2

Boat testing with the cockpit prototype

In-Depth Interview & Survey

for Boat Ride 2

Focus Group



Conduct Comparative Boat Driving Tests

Nine Florida pontoon drivers were recruited for comparative driving tests, testing both a standard pontoon boat and one equipped with Honda's new cockpit.

Conduct In-depth Interviews & Surveys Boat Test

After each boat test, a 30-minute in-depth interview was conducted with the participant to explore their boat driving history and habits, and their specific experiences with driving, docking, and trailering maneuvers. Additionally, a survey was designed to allow them to rate their experiences (e.g., docking/navigation, stress level, comfort) on a 10-point Likert scale.

Conduct a Focus Group Study

After the comparative boat driving tests, interviews, and surveys, four participants who participated in the boat driving tests were invited back for a 90-minute focus group study. The study prompted the participants to describe their driving styles, their envisioned ideal cockpit designs, ideal display designs, and their future ideal boating experiences.

Design Recommendations for the Cockpit, Display, and Future Boat Experiences

A list of detailed design recommendations was synthesized based on the study results, including recommendations for the cockpit display design, ergonomics of the seat and height of the displays, and the emotional, functional, and social needs for future ideal boating experiences.

IMPACT

The research project helped our client evaluate the cockpit design and provided detailed recommendations for the height of the display, display content, layout, and information navigation design, as well as the cockpit ergonomics design in terms of the armrest, seat adjustment, materials, and storage.

In addition, we provided future design recommendations for ideal boat experiences not limited to pontoons. These recommendations include prioritizing safety and comfort, enabling modular and customizable designs, and creating kid-friendly designs. They also support diverse outdoor activities and expandable spaces, among other features.

Mode Switching by Button

Button implementation for mode switching even if the touch screen stops working

If there are two or more modes, tap left or right to switch



Place a toggle button on the handle



Tap the button when there are two modes



Place a toggle button next to the display



Backup of Important Functions

Separate important boat information and controls to prevent a single point of failure. (Design to ensure that if one thing fails, the others do not go down). In particular, RPM, speed, and fuel gauge should have separate power sources or no malfunctions.

Optimizing Screen Size

Use a large display of 10 inches or more to improve the visibility of what is captured by the camera and ensure visibility in various situations (rainy weather, sunny weather, etc.).

Alert Warning

Use pop up alerts to highlight important notifications such as engine overheating and approaching vessels, and accurately convey to the user where and what they should be cautious about on the screen.



Ideal Boat Experience: P06 "Perfect"

A double-decker boat for family and friends

Double decker with a slide for kids
"My ideal day on the pontoon will include a double decker with a slide for my kids."

A freshwater shower and a restroom
"It should have a little restroom and a freshwater tank where you can freshen up and rinse the saltwater off you at the end of the day. I think it's a must."



DECODING LOYALTY PERSPECTIVES

The Challenge & My Role

CoolInc is a luxury and lifestyle hospitality company based in Saudi Arabia, focused on enriching the Kingdom's cultural and creative lifestyle by introducing world-class experiences.

Running a successful luxury loyalty program involves maintaining exclusivity and high service standards, which requires significant effort in personalization, cost management, and integrating both digital and physical experiences. Additionally, challenges include ensuring global consistency, protecting client privacy, aligning with the brand's values, and continually innovating to keep the program fresh and relevant.

My role is to conduct research is to understand from diverse perspectives, including Ultra-High Net Worth Individuals (UHNWI), Mass Affluent customers, and stakeholders, what defines a successful loyalty program for Cool Inc. This research will enable Cool Inc. to tailor its services and customer engagement strategies to enhance loyalty and reinforce its status as a top luxury brand



Stakeholder Workshops & Interviews

2 x in-person workshops was conducted with the C-level executives, head of quality guest experience, operation director, marketing director and the digital manager.

2 x in-person interviews were conducted with the VVIP manager and the restaurant manager of Spago.

Online Interviews with UHNWI

8 x online interviews were conducted with the UHNWI customer segment.

1 x online interview were conducted with one Emirates IO member who is not CoolInc's client

Online Interviews with Mass Affluent

8 x online interviews were conducted with the the Mass Affluent customer segment.

Humanique: Complementary AI Insights

In addition to research with stakeholders and customers, we also augmented our insights with Humanique, an LLM-supported AI research tool that complements the missing elements in human research insights. The output of Humanique has been validated by researchers.

IMPACT

The research has been instrumental in shaping CoolInc's loyalty program strategy by providing deep insights into the preferences and behaviors of Ultra-High Net Worth Individuals (UHNWI) and Mass Affluent customers. These findings have guided the design team in defining customer personas and user journeys, ensuring that the program addresses the specific needs of different customer segments.

By identifying key motivators, such as the desire for exclusivity and personalized service among UHNWIs and value-for-money benefits for Mass Affluent customers, the design team has been able to map out tailored experiences that enhance customer engagement and satisfaction.

Additionally, the research's emphasis on integrating advanced technologies, such as biometric recognition and NFTs, and leveraging social media for engagement, helps in creating detailed user journeys that are both seamless and highly engaging. This comprehensive approach ensures that CoolInc's loyalty program is not only attractive but also effectively fosters long-term loyalty and community among its high-value customers.

