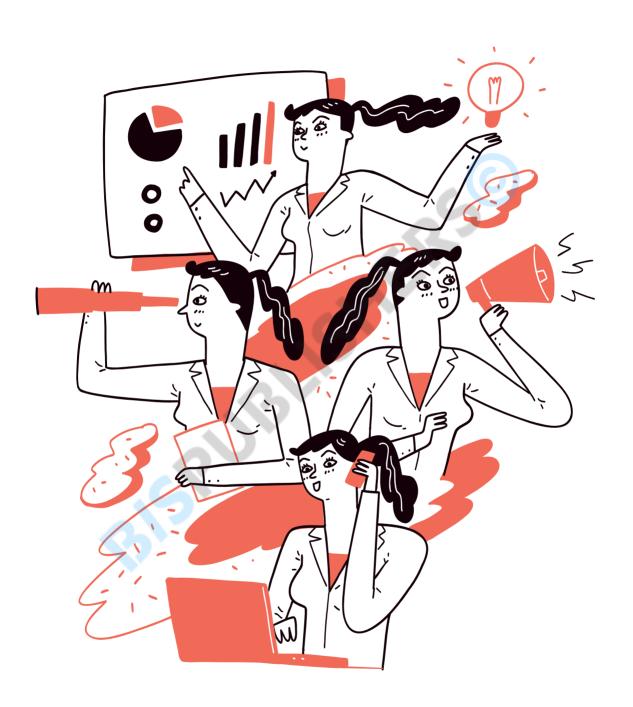
DR CHLOE SHARP

A PRACTICAL GUIDE TO UNDERSTANDING CUSTOMER AND USER NEEDS

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Introduction: Understand the Problem Before Building A Product

"The most important thing is knowing what we can't know." (Marc Andreesen)

One of the biggest causes of start-up failure is building something the market doesn't need. CB Insights (2021) evaluated over 100 failed start-ups and found that 42% of businesses made a product that no one required because they didn't prioritise validating the problem or the market. As an entrepreneur, Innovation Lead or Product Owner, it may feel exciting to start building a product or service immediately to create something tangible to demonstrate progress. However, making a product and service this way means that entrepreneurs and product teams focus on the technical aspects and the question, 'Can we build this?' rather than 'Should we build this?'

Not understanding and validating the problem the business is trying to solve means building a solution that no one needs, which has real-life consequences for businesses. Having a product or service no one buys can lead to the company failing as it runs out of money, is in the wrong market and has ineffective marketing.

Start-up Genome (2019), an innovation policy advisory and research firm, found that 90% of start-ups fail, with similar leading causes. The top reason was a lack of Product-Market Fit (34%), and the second was marketing problems (22%). A poor product can lead to difficulties entering the market, reaching profitable sales volume, and communicating its benefits to customers through marketing. As Andy Rachleff's Law of Start-up Success states: "The #1 company-killer is lack of market. When a great team meets a lousy market, the market wins."

Not meeting market needs isn't a challenge unique to start-ups. Accenture (2010) found across 630 US and UK Executives that, 57% reported the 'inability to meet customer needs', resulting in low uptake of new products and services. Fifty per cent blamed product failure on 'lack of a new or unique customer-perceived value proposition'.

Understanding the market and customer needs takes time. An excellent place to start is understanding and validating the problem, creating ideas for the solution, testing the problem-solution fit as early as possible, and then building the product.

start-up, such as Jobs-To-Be-Done, Product-Market Fit and Lean Start-up.

Today, we need to be sustainable and environmentally conscious when developing product and services and can see the rise of Planet-Centred Design. This enables design and software development teams to consider the impact technology and ways of working may have on the environment, animals, and people.

Each key idea will be expanded from The Agile Manifesto to Planet-Centred Design to explain each concept in more detail.

1980s	User-Centred Design and Hur	nan-Computer Interaction
2001	The Agile Manifesto	
2003	Open Innovation	
2003	Jobs-To-Be-Done	
2007	Product-Market Fit	
2009	Design Thinking	
2010	Lean Start-up	
2010	Business Model Canvas	
2012	Marmer Stages	
2014	Value Proposition Canvas	
2016	Design Sprints	
2018	Objectivies and Key Results	
2021	Continuous Discovery	. 69
2023	Planet-Centred Design	

The 1980s: Start of User-Centred Design and Human-Computer Interaction

Don Norman, a design theorist, developed User-Centred Design in the 1980s. User-Centred Design focuses on the users and their needs throughout the design process. User-Centred Design (UCD) has evolved through four waves, coinciding with Human-Computer Interaction (HCI) development. Human-Computer Interaction is a multidisciplinary field that brings together engineers and designers to understand how the user, software and hardware interact and HCI has evolved over three waves.

The first wave of HCI focused on engineering and aimed to build systems that are easy to use. The first wave of UCD was where there was external support for users to use software such as training to help people use products. The second wave of HCI was cognitive science and psychology, where the idea of decision-making processes influenced design as minds were seen as information processors. The second wave of UCD was where designers became advocates for users and were more involved in product design. During this time, usability became popular, and the movement toward grouping people started through personas.

The third wave of HCl was inclusivity and the social environment, meaning that users are not just end users but can be part of the co-creation process. The third wave of UCD arose from an evolution of mobile phone technology and the internet. User experience was popularised, as it could help a business to improve its brand position. Accessibility and understanding cross-cultural requirements also became important.

The fourth wave of UCD is the cross-over of UX and innovation. For UX researchers, this means not just meeting unmet needs but continuing to find them through on going product innovation.

2001: The Agile Manifesto

In 2001, seventeen people with a wide range of programming and software development specialisations met in a ski resort in Utah. They were looking for an alternative to the heavy technical documentation that was common at the time. They felt strongly that this type of documentation needed to be changed for software development. The group named themselves 'The Agile Alliance' and created the 'Manifesto for Agile Software Development', the Agile Manifesto.

The manifesto is as follows: "We are uncovering better ways of developing software by doing it and helping others do it. Through this work, we have come to value:

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Responding to change, over following a plan
 That is, while there is value in the items on the right, we value the items on the left more." (Agile Manifesto)

This Manifesto is still relevant today. Agile means that team members communicate regularly, incrementally update products, and include users in the process. Agile is relevant for research because product teams need regular and continuous feedback to understand what improvements to make, how it's meeting their needs and what may not be working well.

2003: Open Innovation

Open Innovation was coined by Chesbrough (2003) as a decentralised approach to innovation. Businesses may use it to benefit from wider networks and communities as it allows a broader range of people to be involved in problem-solving and product development rather than all being done in-house, which is called Closed Innovation.

Introducing

THE LEMONADE VAN

Throughout this book, we'll use The Lemonade Van as a case study to illustrate the practical application of various concepts and ideas. The Lemonade Van is a mobile lemonade stand. Sam and The Lemonade Van are entirely fictional and for illustrative case studies to put theory into practice.

As she embarks on this journey, Sam will explore strategies for product development, market research, and customer engagement to ensure The Lemonade Van becomes a cherished staple in her community.





THE LEMONADE VAN

USING JOBS-TO-BE-DONE TO UNDERSTAND CUSTOMER NEEDS

The Lemonade Van is a fictional business. Sam is the company's founder, and it's at an early stage. It's currently an idea that Sam has, she has enjoyed drinking fresh, homemade lemonade for years. She used to sell it on a homemade stand outside her house when she was younger.

Sam has grand plans for The Lemonade Van. She can use an electric-powered food truck for local events. She would like to deliver lemonade to local houses and develop an app for customers to order and subscribe to her lemonade. She will deliver it in her truck. Sam wants to use organic ingredients and will use a recipe from her grandmother. Sam wants a premium feel for her brand, as she will use good quality ingredients.

This is the first time we see Sam use one of the theories we cover. To illustrate how to apply the Jobs-To-Be-Done approach, Sam will use this framework to identify the jobs customers have for the event value proposition.

Customer Jobs

Here is a breakdown of the tasks and jobs that customers need to complete for The Lemonade Van serving lemonade to customers at a local event:

Quenching thirst

- Task: Customers attending the event need a refreshing drink to satisfy their thirst
- Job: The Lemonade Van must provide various delicious and cold lemonade options to quench customers' thirst.

2. Cooling down

- Task: Customers want to cool down and combat the hot weather during the event
- Job: The Lemonade Van must offer icy, refreshing choices that help customers beat the heat and stay comfortable.

3. Enjoyment and indulgence

- Task: Customers seek a delightful experience during the event
- Job: The Lemonade Van must create a pleasant atmosphere and offer flavourful, high-quality lemonade options that customers can enjoy

4. Quick and convenient service

- Task: Customers don't want to waste time waiting for their drinks
- Job: The Lemonade Van must provide efficient and speedy service, ensuring that customers can get their lemonades quickly and conveniently

5. Catering to taste preferences

- Task: Customers have diverse taste preferences and dietary requirements
- Job: The Lemonade Van should offer a range of lemonade flavours and variations, including options for different sweeteners, fruit additions, or even sugar-free alternatives, to cater to various taste preferences and dietary needs

6. Providing a fun experience

- Task: Customers seek unique and exciting experiences at the event
- Job: The Lemonade Van could offer speciality lemonade recipes, creative garnishes, or interactive elements (e.g., customisable flavours or mix-ins) to provide a sense of novelty and fun for customers

7. Supporting local businesses

- Task: Customers appreciate supporting local vendors and businesses
- Job: The Lemonade Van can emphasise its locally sourced ingredients or partnerships with nearby farmers or suppliers, highlighting its commitment to the community and supporting local businesses

8. Refreshments for children

- Task: Parents attending the event want to keep their children hydrated and satisfied
- Job: The Lemonade Van should have kid-friendly lemonade options, potentially including reduced-sugar or natural fruit-based lemonades, to provide refreshment options specifically designed for children

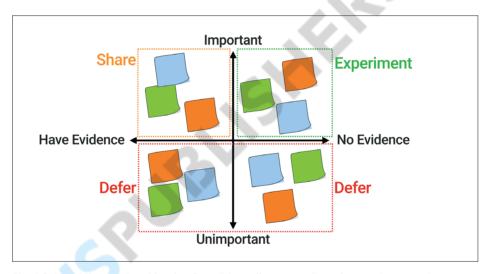
By understanding these customer tasks and jobs, The Lemonade Van can tailor its offerings and marketing efforts to meet the needs and expectations of its target customers at local events.

Sam's Conclusions

After analysing the customer jobs using the JTBD framework, Sam has concluded that she needs to understand customer goals, preferences, and resources to cater to their needs, particularly in attracting customers to her stand at events. She's also reflected that information needs to be clear when offering lemonade to help customers make informed decisions. She must select the right location, maintain cleanliness, and ensure a friendly environment when customers approach. The Lemonade Van. Sam has concluded that she needs to get regular customer feedback and be open to change, such as offering new flavours to differentiate from other lemonade vans. She needs to reflect on how she'll create a memorable experience and how they can share this on social media. Having excellent customer experience and satisfaction will help set her apart from competitors.

The Assumptions Map below has colour-coded Post-it notes based on the Three Lenses of Innovation: Feasibility, Desirability and Viability. Orange signifies Desirable Assumptions; green indicates Viable Assumptions and blue shows Feasible Assumptions. Value proposition and lean experiments focus on 'Unknown and Important'. 'Known and Important' can be assessed against the product roadmap. 'Unknown and Unimportant' can be investigated using user interviews and tests. Finally, 'Known and Unimportant' should be deferred.

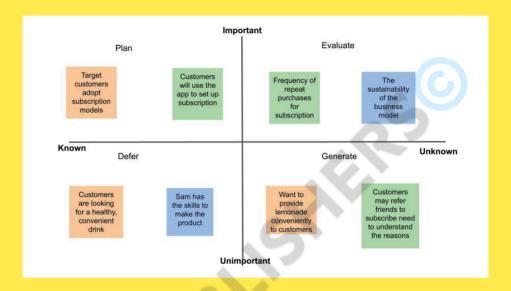
Teresa Torres suggested that Assumptions Mapping identifies the riskiest assumptions and can be validated or invalidated in the product development cycle as early as possible. The Riskiest Assumption Test starts with testable assumptions, devising experiments to validate or invalidate these assumptions and measuring the results to gain insights and make informed decisions about the product or idea. Assumption testing helps to reduce uncertainty, minimise waste, and increase the chances of success by focusing on the most critical assumptions and testing them with real users or customers.



Bland, D. (2017), Assumptions Mapping, Precoil: https://www.precoil.com/assumptions-mapping

THE LEMONADE VAN ASSUMPTION MAPPING

Here, Sam is focusing on the subscription and delivery value proposition for her Assumption Mapping.



Sam will do this exercise again for the events value proposition, which has a different market and user group.





How to Analyse the Market and Competition

Introduction

Gathering information on the competition and market trends and dynamics, as well as looking at the broader picture for potential threats and opportunities, can be a helpful way to provide context to customer and user needs and contribute toward critical strategic decisions on the commercial viability of a product or service. Having a complete picture of the market you may be entering based on the prioritised user and customer groups; will indicate who the buyers are and the markets where the problem lives, and if it is a problem in a growing market.

This chapter will outline desk research and secondary analysis as two strategies for understanding the competition and the market. Desk research is reviewing and assessing existing information such as reports. Secondary analysis evaluates existing company information or databases to understand user behaviours and needs, such as sales or customer databases. We will go through how to do market analysis and industry analysis to identify trends and big players in the market. Also, competition analysis will be covered to determine what similar products and services are currently available and how the product may compete in this market.

Reasons for doing desk research

Desk research or secondary research is learning from existing resources and can be used to understand more about the problem to be solved. Desk research is the review and analysis of existing data and information, which can be online research or printed sources.

Desk research can help to understand the problem better, and it's helpful to read social media posts, reviews, and forums where customers discuss the problem you're looking to explore. Plus, identify existing solutions as we can learn from what already exists and review academic papers for similar programmes or approaches. Additionally, researching how people use workarounds to solve their problems and considering alternative solutions to the problem can be beneficial. Analysing competitor websites can provide insight into potential improvements for your solution or idea and what your unique seeling point is.

THE LEMONADE VAN RESEARCH QUESTION AND AIMS

Sam plans to research independently and wants to focus her time and efforts as much as possible. She's interested in understanding her potential customers for The Lemonade Van at events and the delivery of lemonade in the local area on a subscription model. Here, Sam outlines her research plan.

Research Question:

What are the needs and preferences of potential customers for The Lemonade Van for both value propositions?

Research Aims:

- To identify the target market for the lemonade stand, at events and home delivery.
- To understand the needs and preferences of potential customers in terms of flavours, pricing, and location.
- To identify the factors that influence potential customers' decision to purchase lemonade at events and through a subscription or delivery service.

Timeline and budget

Sam has approximately three months and £2,500 to spend on research. She may get some support from freelance researchers with the data collection or analysis. She may use the budget for incentives.

Target Audience

The two user groups that Sam has prioritised are:

- The parents of young families who attend local family events and visit local venues such as parks and beaches are likely to purchase organic lemonade for parents and children at events and locations.
- Health-conscious adults in the local area who are looking for convenient drink options that could be delivered to their door.

Research method for understanding customer needs

Ethnography and problem/solution interviews will be used to evaluate customer and user needs. Ethnography will be used to understand the event context and what can be learned about buying beverages.

Interviews will be with both user groups to understand approaches toward choosing and buying beverages and if organic lemonade is commonly chosen. What factors influence choices and for them to try flavours to see which is most popular.

Analysis and outputs

The interview data will be analysed using thematic analysis to understand patterns, and the outputs will be presented in a short report which could be used in the business plan.



THE LEMONADE VAN HOPES AND FEARS

Although Sam is doing the research herself, she wants to consider what she may be concerned or excited about and have these in mind when collecting data. She completes the Hopes and Fears exercise.



Sam's Hopes:

- Gain a better understanding of our customer's preferences and needs.
- Discover new opportunities to attract more customers.
- Find ways to differentiate ourselves from competitors based on customer preferences.

Sam's Fears:

- Customers may not be interested in participating in the research.
- Results may show that assumptions about customers are incorrect.
- Target market is smaller than we initially thought, limiting our potential customer base.
- Research may uncover intense competition in the market, making it difficult to differentiate ourselves based on customer preferences.
- Research may require significant time and resources, taking away from other important business activities.



THE LEMONADE VAN

SURVEY

Sam wants to use a survey and interviews to evaluate her potential customers' needs. In this survey, her focus is on understanding customer preferences and potential interest in The Lemonade Van.

Introduction

My name is Sam, and I'm interested in learning about your drink preferences and where you purchase drinks. This survey will help me understand more about a business I'm interested in setting up locally to provide organic lemonade at events and to deliver to local communities.

Thank you for your interest and time in completing this survey. All the data you provide will be anonymous, and you can provide your email at the end if you're interested in a follow-up discussion. Data will be stored according to Data Protection and Data Privacy policies and regulations. You can withdraw from the survey anytime, and your responses will be removed.

What postcode do you live in? (This is to screen responses and could be a list but will be open in this example, and if they don't meet the criteria will be led to a screen that thanks them for their time)

ΑŁ	oout you
1.	What is your age group?
	Under 18
	18-24
	25-34
	35-44
	45-54
	55-64
	Over 65
2.	What is your gender?
	Female
	Male
	Non-binary
	Prefer not to say

Lemonade Delivery Services
3. How often do you order home-delivered beverages (e.g., soft drinks, coffee?)
Never
Rarely
Monthly
Weekly
Daily
4. If a lemonade delivery service was available in your area, how likely would you
be to use it?
Very unlikely
Unlikely
Neutral
Likely
Very Likely
5. What factors would you consider in using a lemonade delivery service? (Select
all that apply)
Price
Convenience
Quality/taste of the lemonade
Variety of flavours/options
Eco-friendly packaging
Organic ingredients
Special promotions or discounts
6. Which of the following options would you prefer for a lemonade delivery service?
(Select one)
On-demand (1-2 hours)
Scheduled (choose a specific date and time)
Subscription-based (regular deliveries on a set schedule)
Lemonade Stand at Local Events
7. How often do you attend local events (e.g., outdoor concerts, sports events)?
Never
Rarely
Monthly
Weekly
Daily

8. What types of events do you attend most regularly?
9. If a lemonade stand was available at events, how likely would you be to purchas
from it?
Very unlikely
Unlikely
Neutral
Likely
Very Likely
10. What factors would you consider purchasing lemonade from a mobile
lemonade van at a local event? (Select all that apply)
Price
Convenience
Quality/taste of the lemonade
Variety of flavours/options
Eco-friendly packaging
Organic ingredients
Special promotions or discounts
Closing
11. What are your suggestions for a lemonade delivery service or van at local events
12. Please provide your email if you'd like to be invited to a research interview.
Thank you for completing the survey. Your feedback is valuable.
Company Amphysic

Survey Analysis

Descriptive statistics will be used to analyse the findings to understand the popular responses and displayed visually using bar graphs and pie charts.

 Social Return on Investment (SROI): SROI is a framework that combines elements of CBA and stakeholder engagement to measure and monetise an intervention's social, environmental, and economic value.

In this chapter, we discussed the move from MVP to beta, where we've progressed from a basic product to test its viability and value to a full, complete product where we're testing for different aspects such as performance and usability. Now the product or service has been through stages of testing. The product, marketing and development teams need to consider the product or service's launch into the market. Each launch is different for each product or service. The next chapter will start from the assumption that the product is launched and readily available for public use in the market to demonstrate ways to test live products and services.





We all know the value of engaging with our users and customers, but the real question is: how can we do it effectively? Dive deep into the world of innovation, product development, User Experience, and design to learn from highly influential ideas, from the revolutionary Product-Market Fit to the groundbreaking Lean Startup and the game-changing Design Thinking. Make **Products That Matter** outlines when and how to apply these transformative concepts throughout your product development process, turning ideas into realities through comprehensive research and insightful analyses. The book has bite-size chapters to give you the toolkit of well-established tools at your fingertips; whether it's conducting customer interviews or lean experiments, you'll find everything you need to create products that leave a lasting impact. This book will help you confidently take a customer-centric approach that will revolutionise the way you innovate. Leave the guesswork behind with Make Products That Matter as your go-to guide to creating impactful, competitive products that resonate with your customers.

