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Final Project

GRADUATE IN MANAGEMENT OF BUSINESS AND TECHNOLOGY

ONSIGHT

**REDUCING IN STORE FRICTION IN RETAIL THROUGH A
SCALABLE CUSTOMER SUPPORT TECHNOLOGY**

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FINAL PROJECT DEFENCE

Meeting of the evaluating panel on this day, the student:30

D. **Dorian Laverne**

Presented their final thesis on the following subject:

REDUCING IN STORE FRICTION IN RETAIL THROUGH A SCALABLE CUSTOMER SUPPORT TECHNOLOGY

At the end of the presentation and upon answering the questions of the members of the panel, this thesis was awarded the following grade:

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Abstract

Physical retail stores generate frequent and measurable friction when customers cannot quickly find product information or staff assistance. This thesis identifies that friction as a design problem rather than an operational inevitability and proposes **OnSight as a solution: a screen-based, AI-powered in-store assistant that allows customers to check stock availability, locate products, and request staff help on their own terms.**

The research combines a customer survey of 111 respondents, seven expert interviews across retail operations, store design, and commercial strategy, and nine store staff interviews conducted across independent retail locations. Findings provide evidence that:

- In-store friction generates negative behavioral outcomes in most shoppers
- Staff time is disproportionately consumed by repetitive informational queries
- Customers are willing to use a self-service tool when it is simple, fast, and does not replace human interaction.

A functional prototype was built and tested with 20 participants, validating the core interaction flow and demonstrating strong reuse intent. The business case is developed for the Spanish market as a first deployment, with a SaaS pricing model and a four-year revenue projection reaching approximately €8.8 million cumulatively. OnSight is positioned as infrastructure for the physical store of the near future: one where technology handles routine queries so that people can focus on everything technology cannot do.

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1. Introduction and Background

Retail stores still matter, even after a decade of e-commerce growth, yet the in-store experience has struggled to keep pace with rising customer expectations. According to PwC (2018), **73% of consumers consider customer experience a key factor in their purchasing decisions**, but fewer than half report that companies actually deliver it. For many categories, the store is where people discover products, compare options, and make purchase decisions, and it is also where expectations are highest. When speed, clarity, and easy access to help are missing, the store becomes a place of friction.

In this thesis, I look at everyday obstacles that happen inside physical stores and slowly damage customer satisfaction. They are rarely dramatic enough to trigger a complaint, but they are frequent and cumulative. Consider a simple situation: a customer finds a product they want but cannot confirm if their size is available, spends several minutes searching for staff, and eventually leaves without buying. **This kind of silent exit does not appear in complaints, but it shows up in lower conversion, weaker loyalty, and negative word of mouth.**

In this project, I propose a software solution built around an AI agent delivered through in-store screens. The goal is simple: **reduce the time and effort customers spend searching and waiting, while supporting staff instead of replacing them.**

2. Problem Statement

Shopping in physical stores still feels harder than it should. Even when people are motivated to buy, they often lose time on basic tasks: finding the right area, confirming if something is available, or getting help at the right moment. These frictions are not rare. They accumulate into a feeling that the store is not delivering on its promise, and that matters because **the store is not only a place to purchase. It is a place that shapes how customers judge the brand and whether they come back** (Lemon and Verhoef, 2016).

The obstacle can be as small as a single unanswered doubt. A customer finds a shirt they like but wants to know if it comes in a different size. The doubt is small, but without a quick answer, the decision stalls. They look for staff, but staff are busy. After a few minutes, the effort starts to feel disproportionate, and the customer puts the item back and leaves. No complaint is filed. The sale is simply lost.

Friction can also work in the opposite direction. Some customers do not want help unless they ask for it, and an unsolicited "Can I help you?" at the wrong moment can feel like pressure. **In both cases, the store fails to match the customer's preferred level of support.**

2.1. Why this is a business problem

This problem impacts performance in two direct ways. First, **it reduces in-store conversion** because customers abandon purchases when the experience requires too much effort for small answers. Second, **it reduces satisfaction and loyalty over time**, since what customers experience across the journey shapes future behavior, not only what they buy that day (Lemon and Verhoef, 2016).

There is also an operational angle. When customers depend on staff for basic questions, staff time gets pulled into repetitive requests. During busy hours, this creates a bottleneck around human attention: customers wait, employees feel interrupted, and the store becomes less efficient overall. **A store can lose value even when it has the right products, simply because the journey feels effortful** (Dixon, Freeman and Toman, 2010).

3. Project Objective

The main objective of this project is to **reduce in-store inefficiencies and improve customer satisfaction by designing a scalable technology solution** that helps shoppers get the right information and support at the right moment, thus making the customer journey an enjoyable experience that can trigger positive brand sensation. The challenge is: How might we connect customers, staff, and stock in real time, so customers spend less time searching and waiting, and stores lose fewer sales due to frustration or uncertainty.

3.1. Specific objectives

- Identify the most common pain points in store visits, such as searching for items, verifying availability, and getting quick answers, and define where the experience breaks down.
- If validated, design and prototype an in-store interface powered by an AI agent, delivered through store screens, that gives customers fast answers and a simple way to request human help only when they want it.
- Ensure the concept is scalable across different store formats, product categories, and countries through a configurable and multilingual approach.
- Assess feasibility and fit with store operations, including how the solution works with inventory visibility and staff workflows, without adding complexity.
- Benchmark against existing approaches to clarify what gaps remain and what value the proposed solution adds.

3.2. How success will be evaluated in the thesis

- **Prototype and user testing** to observe whether customers can solve common questions faster and with less effort.
- **Expert interviews** with retail managers and store staff to test operational realism, adoption risks, and integration needs.
- **Customer survey** to capture perceived friction, satisfaction drivers, and willingness to use an in-store screen instead of searching for staff.
- **Secondary research comparison** to position the proposed solution against current market practices and known pain points.

4. Key Research Questions

4.1. Main research question

- **How might we improve the overall in-store shopping experience by reducing customer friction while supporting store teams and minimizing lost sales?**

4.1.1. Sub-questions

- Which moments in the in-store journey create the most friction for customers?
- How can an in-store digital touchpoint help customers navigate the store and access information with less effort, without forcing unwanted interaction?
- How should “help on demand” be designed so customers can easily request staff support when needed, while allowing employees to focus on higher-value tasks instead of constant interruptions?

4.2. Research Hypotheses

Three working hypotheses guide the validation process:

- **H1:** The use of an AI-based in-store assistant reduces perceived customer effort.
- **H2:** Reduced perceived effort decreases in-store purchase abandonment intention.
- **H3:** Access to self-service product information through an in-store screen reduces staff interruption rate during peak hours.

These hypotheses connect directly to the causal chain described in the theoretical framework and will be tested through user interviews, prototype testing, and the customer survey described in the validation section.

5. Scope and Limitations

5.1.Scope

This project addresses retail stores in general, with fashion and grocery used as the main reference contexts because they make in-store friction especially visible. The focus is on what happens during the store visit itself, meaning the moments when customers browse, search, decide, and sometimes hesitate or leave.

The in-scope customer journey covers:

- **In-store browsing and discovery**, including product finding and navigation.
- **In-store decision support**, such as quick product questions (size, options, basic specifications, alternatives).
- **Requesting staff help**, with an emphasis on “help on demand” rather than constant staff interruptions.
- **Stock visibility in-store**, meaning the customer’s need to understand availability in a simple, immediate way.

From a solution perspective, the project scope includes the design of an in-store technology concept with the following components:

- An **in-store screen interface** with an **AI agent** for interaction and quick answers
- **Store navigation logic** (store map and wayfinding)
- A **conceptual integration approach** for inventory and product information (described, not fully implemented)
- A **basic analytics concept** (what could be measured and why)
- A **staff call or notification concept** so customers can request help when they choose
- A **multilingual UI concept** to support future scalability

5.1.1. Scope boundaries

This project does not aim to replace staff or automate the store end-to-end. The solution is intended to **support human service, not remove it**, and to improve the experience through lower effort, clearer information, and better access to help.

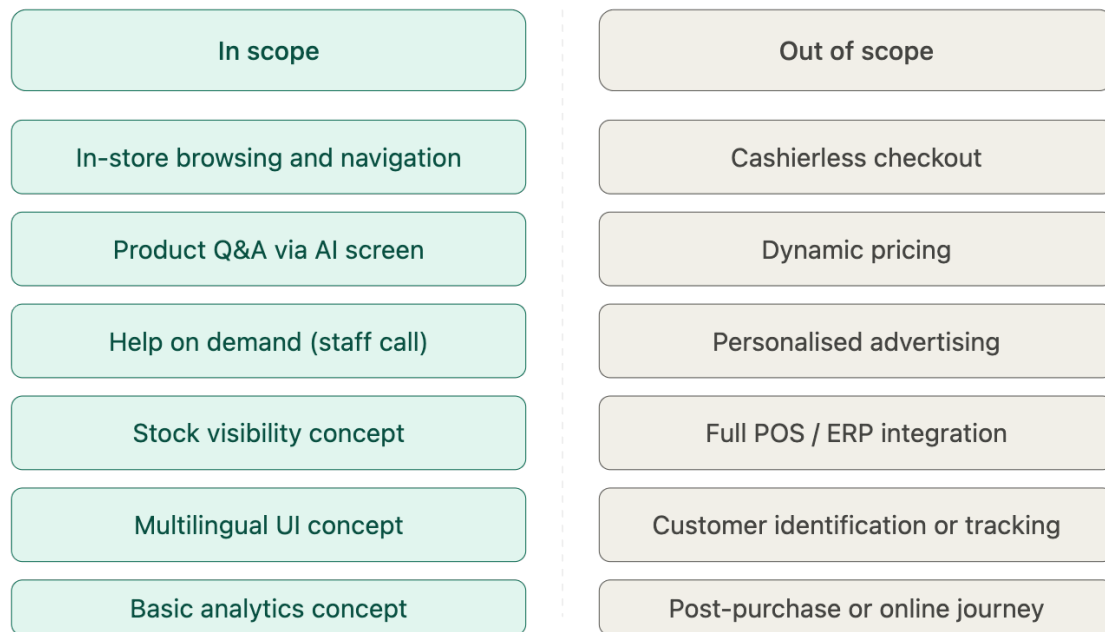


Figure 1. Project scope boundaries. Source: Own elaboration

5.2.Limitations

Due to the constraints of a bachelor thesis, the project will not be validated through a full deployment in real stores and instead relies on design, prototyping, and research-based evaluation. **The main limitations are a limited budget with no large-scale hardware rollout, restricted access to real retailer data such as live stock feeds and internal product databases, a limited sample size for user testing, and prototype fidelity constraints where some elements remain at a semi-functional level.** On the privacy side, the solution assumes privacy-by-design principles in line with GDPR, which limits certain types of personalization but keeps the concept realistic for European market deployment. These limitations clarify what can be proven within this academic project and what would require further work in a real pilot phase.

6. Industry and Market Analysis

6.1. Market Size and Opportunity (TAM/SAM/SOM)

For this project, OnSight, I size the market for **customer-facing in-store digital experience solutions delivered through interactive screens (kiosks)**. The goal of these solutions is to reduce customer effort inside the store by supporting navigation, quick product questions, and help-on-demand. OnSight sits between software and in-store hardware. It is an interactive screen experience with an AI assistant, plus links to stock and staff support.

6.1.1. TAM (Total Addressable Market)

The global retail interactive kiosk market was valued at **USD 6.4 billion in 2024** and is projected to reach USD 10.44 billion by 2029, growing at a compound annual growth rate of 10.3% (Research and Markets, 2025). Retail already represents approximately 23% of the total global interactive kiosk market, making it the single largest vertical by adoption (MarketsandMarkets, 2025). The growth is driven by retailers investing in self-service tools that improve customer experience, reduce staff workload, and provide operational data, which is exactly the problem space OnSight addresses. This retail slice represents OnSight's TAM, sitting at approximately USD 5 to 6.4 billion today and growing faster than the overall market due to rising consumer expectations for in-store self-service and AI-assisted retail experiences.

6.1.2. SAM (Serviceable Available Market)

The SAM is the portion of the TAM that OnSight could realistically serve given its product focus, geographic strategy, and go-to-market constraints. The starting point is Europe, which has over 9,000 retail chains operating approximately 1.9 million stores (Retail-Index, 2024). OnSight's value proposition is strongest in fashion and grocery, the two sectors where in-store friction is most visible and staff interruptions most costly. Applying three filters, sector relevance (fashion and grocery represent roughly 40% of European chains), minimum store count (chains with fewer than 20 stores lack the infrastructure for a SaaS kiosk rollout), and technology readiness (discount operators are excluded due to their cost model), produces a realistic SAM of approximately **700 to 750 retail chains across Europe**. Using conservative SaaS pricing of €150 per screen per month with an average of 50 stores per chain, this translates to an annual recurring revenue ceiling of approximately **€648 million**. The full filtering methodology and calculations are included in Appendix B.

6.1.3. SOM (Serviceable Obtainable Market)

The SOM focuses on Spain as the launch market, for three reasons: it is the market I know best, it has a well-documented retail chain structure, and it is the logical pilot market before expanding to the broader European SAM. Spain has 419 retail chains in total, with fashion and grocery together accounting for 168 chains (Retail-Index, 2024). Applying the same readiness filters used in the SAM calculation reduces the realistic target to approximately **80 to 90 chains**.

OnSight's revenue comes from three sources: a one-time setup and integration fee per retailer, a recurring monthly SaaS fee per screen, and an optional analytics add-on. The three pricing tiers are:

Tier	Setup fee	Monthly SaaS per screen	Analytics add-on
Basic	€2,000	€100	Not included
Pro	€4,000	€150	€200/month
Enterprise	€8,000	€250	Included

Figure 2. OnSight revenue model. Source: Own elaboration.

The base revenue model assumes OnSight starts with a small number of pilot chains and expands as results are proven, which is consistent with how retail technology is typically adopted (McKinsey and Company, 2021). As shown in Figure 3, this produces cumulative three-year revenue of **€8.175 million** across Spain, growing from €336,000 in Year 1 to €6.655 million in Year 3 as screen deployments scale. Figure 3 presents a high-level SOM-based revenue scenario to illustrate the potential size of the Spanish opportunity under an accelerated deployment case. This should be understood as an opportunity scenario, not the final operating forecast. A more detailed and conservative financial plan, including costs, cash flow, CAC, LTV, and financing needs, is developed later in Section 17. Detailed year-by-year assumptions are included in Appendix G.

The base scenario is as follows:

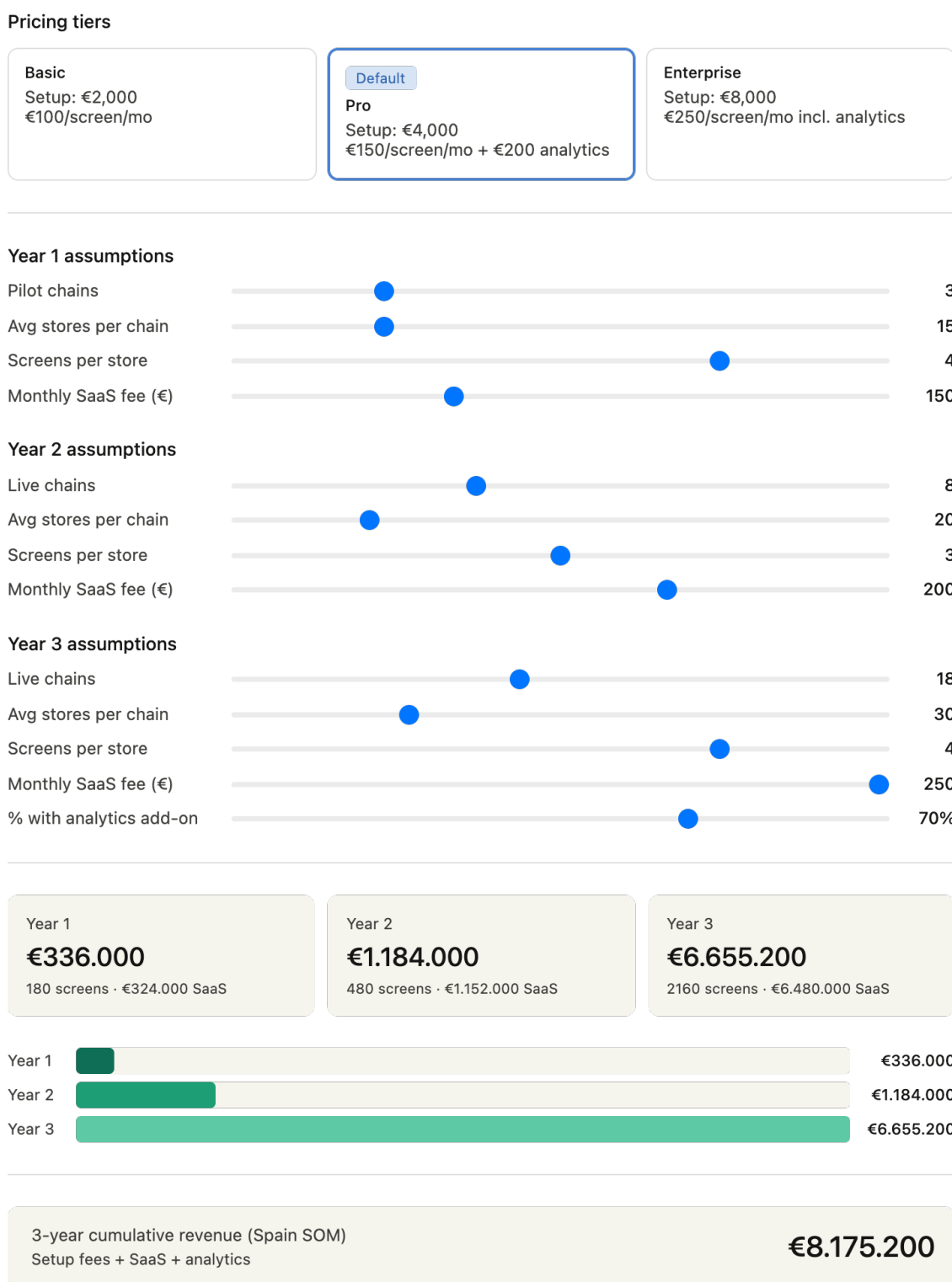


Figure 3. OnSight revenue model. Assumptions adjustable by pricing tier and deployment scale.

Source: Own elaboration with AI assistance.

6.2. Industry Trends and Digital Transformation in Retail

Several converging trends in European retail are creating the conditions that make a solution like OnSight both timely and necessary.

Customers expect convenience inside the store, not only online. Retailers are under growing pressure to close the gap between the digital experience customers have online and what they encounter in physical stores. Deloitte's retail trends for 2025 confirm that technology and innovation continue to be the primary levers retailers are pulling to close this gap (Deloitte, 2025). The expectation of speed, clarity, and ease is no longer limited to e-commerce. Customers bring it into the store.

AI is moving from the back office to the store floor. Retailers are actively testing AI in customer-facing environments to improve the shopping experience and reduce staff workload. According to Deloitte's Global Retail Outlook 2024, **73% of leading retailers are undertaking moderate to major investments in digital transformation** specifically to improve operational efficiency and customer experience (Deloitte, 2025). Real-world examples include retailers such as Lowe's, which is using AI tools directly on the store floor to make shopping simpler and faster (Business Insider, 2025).

Omnichannel expectations keep rising. Customers move naturally between online and offline and expect information to be consistent across both. When a store cannot quickly confirm product availability or basic specifications, the experience feels disconnected from the digital world the customer came from. NielsenIQ identifies this as one of the defining shopping trends of 2025, noting that the inability to bridge online and offline information is one of the main drivers of in-store frustration (NielsenIQ, 2025).

Stores must improve while managing cost pressure. Retailers recognize the need to upgrade the in-store experience but are simultaneously under pressure from rising labor costs and intensifying competition from online players. McKinsey's State of Retail Europe 2024 highlights that European non-grocery retailers are in a period of transition where **investment decisions must demonstrate clear and quick returns** (McKinsey and Company, 2024). This is precisely why OnSight is designed as a SaaS product rather than a hardware solution: it allows retailers to deploy incrementally, measure results per store, and expand only when value is proven.

Privacy and GDPR matter, especially in Europe. Any customer-facing technology deployed in European stores must account for GDPR from the ground up. The European Commission is explicit that data protection should be built into early stages of product design, applying the principles of privacy by design and privacy by default (European Commission, n.d.). For OnSight, this is not a constraint but a strategic advantage. The solution works without collecting personal data, with analytics focused on aggregate friction patterns rather than individual behaviour, making it easier to deploy in markets where retailers are cautious about customer data liability.

These five trends point in the same direction. **Customers want in-store convenience on par with online, retailers are investing in AI at the store level, omnichannel information consistency is a competitive requirement, cost pressure demands scalable solutions, and European privacy rules favor products built with data minimization from the start.** OnSight is designed to operate at the intersection of all five.

6.3.Competitive Landscape and Benchmarking

OnSight does not compete with one single type of product. It occupies a space between several existing solution categories, each of which solves only one part of the in-store friction problem. **OnSight's value is not in any individual feature, whether navigation, AI answers, or staff alerts, but in connecting all three in one customer-facing flow.**

Interactive kiosks and wayfinding vendors focus on store maps, directories, and directions, helping customers locate zones or departments in large spaces. Mappedin, for example, presents its Directory product as an interactive wayfinding kiosk that helps visitors find locations and real-time information (Mappedin, 2025). The limitation is that these solutions almost always stop at navigation. The gap between "where is the shoe section" and "do you have this shoe in my size" is exactly where wayfinding kiosks fail inside retail stores.

Retail AI assistants and kiosk agents focus on conversation and guidance through an AI interface on a screen. Eviden describes its KODA product as a conversational visual kiosk that can greet, assist, and guide customers in retail stores (Eviden, n.d.; Supermicro, 2024). The key weakness is data dependency. If the AI assistant is not connected to a live product catalogue and inventory system, it cannot give reliable answers on availability, and unreliable answers erode trust quickly.

Help request systems and call buttons give customers a direct line to staff when they choose to ask for it (Motorola Solutions, n.d.). The value is clear but so is the limitation: every interaction still requires a staff member. There is no self-service, no navigation, and no product information. The system increases responsiveness but does nothing for efficiency.

Retail suites such as POS and ERP platforms hold the most accurate and up-to-date product and stock information in any retail organization (Oracle, n.d.; SAP, n.d.). They are not direct customer-facing competitors, but they are the data source OnSight would connect to. **The data exists in the system but does not reach the customer in a simple, immediate way.**

6.3.1. What this means for OnSight

The goal is not to beat each competitor on one feature. The goal is to solve the full in-store friction journey in one simple experience: find it, understand it, and get help only when you want it, with answers that can be trusted because they connect to systems the retailer already uses.

Solution type	What it is good at	Main limitation
Wayfinding kiosks (malls, airports)	Finding places on a map	Not built for product questions, stock, or staff support inside a store
AI kiosks / AI assistants	Answering questions quickly	Needs strong data integration to be trusted, may not handle navigation + staff help together
Call buttons / help request systems	Calling staff fast	Does not reduce repetitive questions, no navigation, no self-service
Retail suites (POS/ERP)	Holding accurate data	Not customer-facing, does not remove in-store effort

Figure 4. Competitor analysis table. Source: Own elaboration.

6.4.Strategic Positioning Analysis (Petal Diagram)

To make the positioning easy to understand, I compare OnSight against the main solution categories that already exist in the market: wayfinding kiosks, AI kiosks and assistants, help request systems, and retail suites. Examples include Mappedin for wayfinding, Eviden KODA for AI kiosks, Motorola Solutions for call buttons, and Oracle or SAP for retail suites (Mappedin, 2025; Eviden, n.d.; Motorola Solutions, n.d.; Oracle, n.d.; SAP, n.d.).

The comparison uses six dimensions that match what OnSight is designed to deliver: integration with inventory and POS, navigation and wayfinding quality, staff enablement and workload reduction, privacy and GDPR friendliness, scalability across languages and store formats, and analytics and insights. Scores use a simple 1 to 5 scale where 1 is weak and 5 is strong. These are target positioning scores, not proven performance yet.

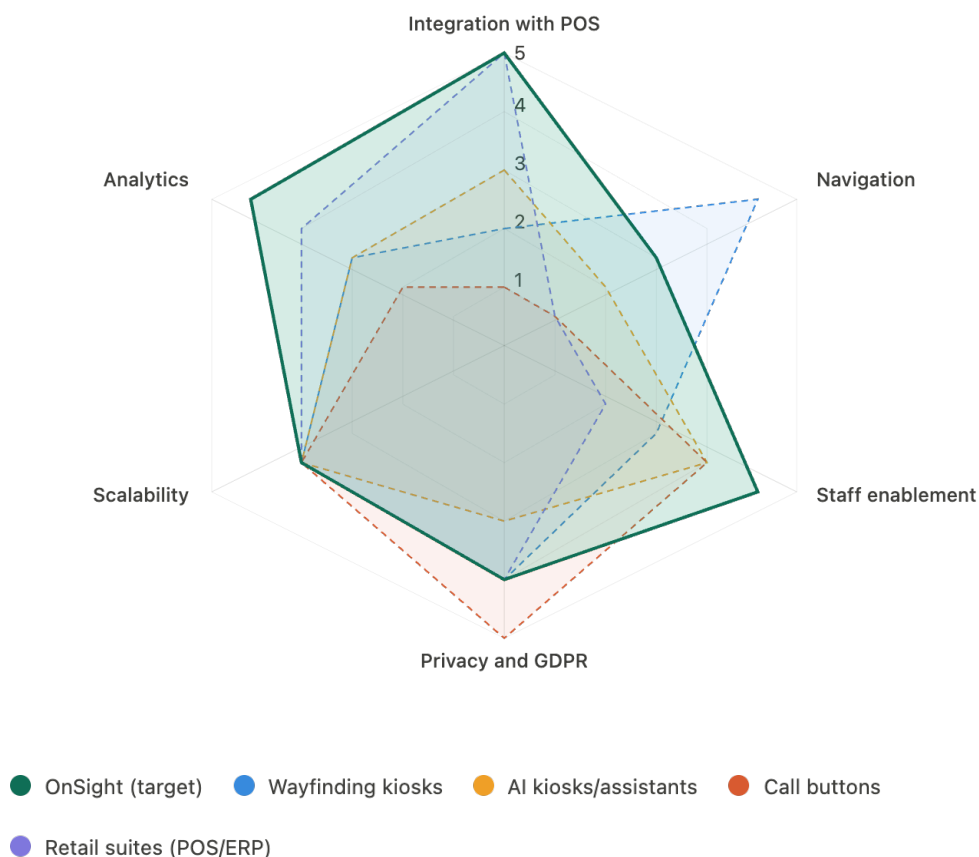


Figure 5. OnSight vs existing solution categories. Source: Own elaboration with AI assistance.

Dimension	OnSight	Wayfinding	AI kiosks	Call buttons	Retail suites
Integration with inventory/POS	5	2	3	1	5
Navigation and wayfinding	3	5	2	1	1
Staff enablement	5	3	4	4	2
Privacy and GDPR	4	4	3	5	4
Scalability	4	4	4	4	4
Analytics and insights	5	3	3	2	4

Figure 6. OnSight vs existing solution categories across six dimensions. Source: Own elaboration.

The main message is simple: most existing solutions are strong in one area but weak across the others. Wayfinding kiosks are excellent at navigation but are not connected to inventory or staff workflows. AI kiosks can answer questions but depend heavily on data integration to be trusted. Call buttons reach staff fast but do nothing to reduce repetitive questions. Retail suites hold the data but are not built as a customer-facing layer in the store. OnSight positions itself as the solution that connects the full chain in one place, which is why its must-win areas are integration with inventory and POS and analytics and insights.

6.4.1. Positioning Statement

OnSight connects customers, staff, and stock in real time through an in-store screen, so customers can get quick answers and request help only when they choose, while retailers gain insight into where friction happens, helping them improve layout, stock processes, and service over time.

7. Theoretical Foundations

This chapter explains the main ideas that support my research question: how to reduce in-store frictions and improve customer satisfaction through a scalable technology solution. I focus on three foundations that connect directly to the OnSight concept: customer experience and friction inside stores, service design for the in-store moment, and adoption of customer-facing self-service technology.

7.1. Customer Experience and In-Store Friction

Customer experience is not created in one single moment. It is built across a journey, through many touchpoints, including what happens inside the store (Lemon and Verhoef, 2016). This matters because most store problems are not dramatic. They are small obstacles that happen often, and over time these micro-frictions shape how customers remember the visit and whether they return.

In physical retail, a common source of friction is customer effort: time spent searching, uncertainty about availability, confusion about where to go, and waiting for help. **Research in service contexts shows that reducing customer effort has a strong impact on loyalty and repurchase intentions** (Dixon, Freeman and Toman, 2010). When customers must navigate the space, interpret the layout, find information, and locate staff on their own, friction appears. The core idea is straightforward: **customers value speed, clarity, and confidence, especially when they are tired or in a hurry.**

7.2. Service Design for the In-Store Retail

Service design helps explain why friction persists even when retailers already have systems and staff in place. Many customer problems are actually service flow problems. The store may have product information, inventory tools, and trained employees, but the service is not always designed to give the customer what they need at the exact moment they need it.

A useful way to analyze this is to separate what the customer sees from what happens behind the scenes. In retail, the frontstage includes browsing, signage, staff interactions, and customer-facing technology. The backstage includes stock rooms, inventory systems, staff tasks, and internal processes. **Friction often happens when the backstage reality cannot support the frontstage**

promise, for example when staff are busy, information is not accessible quickly, or inventory accuracy is low. One common bottleneck is human attention: if every small question requires staff help, the system becomes fragile during peak hours. A service design lens supports shifting some tasks to self-service while keeping staff available for higher-value support.

7.3. Technology Adoption and AI Acceptance

A solution can be well designed and still fail if people do not use it. Davis (1989) explains that two factors strongly influence whether people accept a new technology: **perceived usefulness, meaning does it help me, and perceived ease of use, meaning is it simple**. This fits the context of in-store screens because customers want fast results without onboarding, setup, or friction caused by the tool itself.

Adoption also involves trust. Customers need to believe that the information is accurate, especially for questions like availability, location, and alternatives. In physical spaces, people use self-service tools when the value is obvious and immediate. In retail, that value usually means saving time, reducing uncertainty, and avoiding unnecessary social interaction when the customer does not want it. This reinforces the importance of simplicity, clarity, and relevance in the OnSight interface.

7.4. Connecting the Three Frameworks

These three perspectives form a connected causal logic that underpins this project. In-store friction generates perceived effort. When effort is high, customer satisfaction decreases and the likelihood of purchase abandonment increases (Lemon and Verhoef, 2016; Dixon, Freeman and Toman, 2010). Any technology designed to reduce that effort must itself be perceived as useful and easy to use, or customers will not adopt it regardless of how well it works (Davis, 1989). Figure 7 illustrates how these three frameworks connect in the context of OnSight.

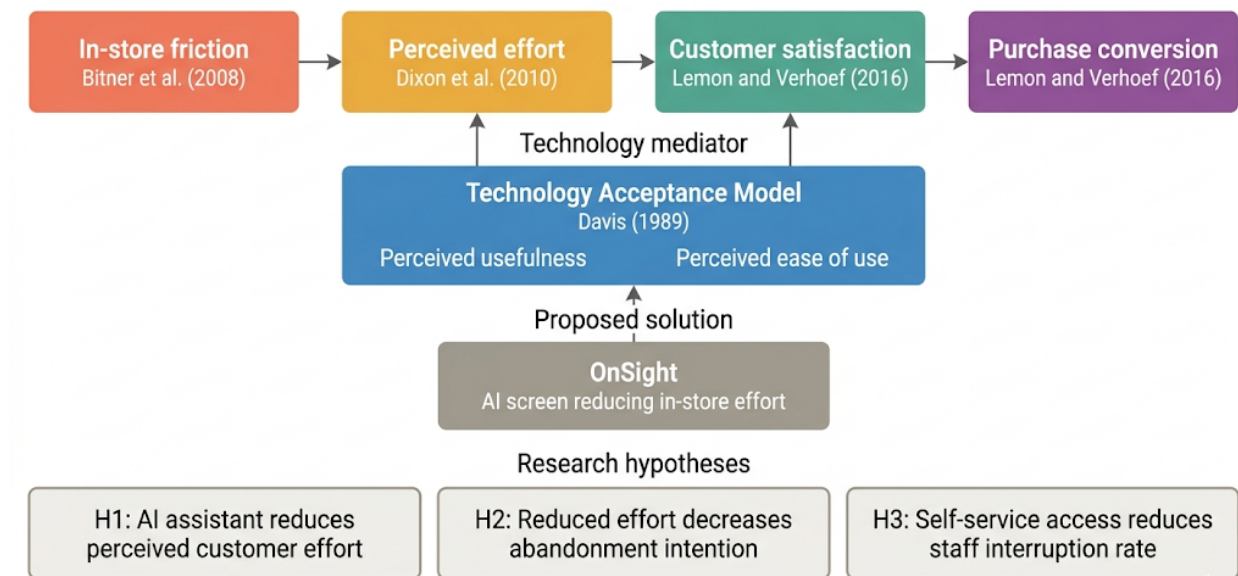


Figure 7. Frameworks relevant to OnSight. Source: Own elaboration.

7.5.Link to the OnSight project

Customer experience in stores is strongly shaped by repeated small frictions linked to customer effort. Many of these are service design issues where information and support exist but are not delivered smoothly in the moment. Any customer-facing in-store solution must therefore be **easy to use, clearly useful, and trusted, especially when AI is involved**. These ideas justify why OnSight focuses on reducing effort through quick answers, help on demand, and real-time clarity, rather than adding complex features that increase cognitive load.

8. Value proposition

OnSight is a **B2B SaaS product for retailers**. The buying decision is made at the company level, but the **day-to-day users are both store customers and store staff**. This dual-user structure is what makes OnSight's value proposition distinctive: it must deliver visible benefits to three different groups at the same time, or it will not be adopted, used, or renewed.

8.1. Core job (what OnSight helps people do)

At its core, OnSight exists to solve one job: **give customers the information they need at the moment they need it, without requiring them to find a member of staff**. Wayfinding tools stop at navigation. AI kiosks stop at Q&A. Call buttons require human attention for every interaction. OnSight connects all three into a single customer-facing flow, anchored to real inventory and product data so the answers can be trusted.

8.2. Value for retailers (the paying customer)

Retailers face a recurring problem: **staff time is consumed by repetitive questions, customers abandon purchases when they cannot find items or get quick answers, and store teams lack clear insight** into where and why customers struggle. OnSight creates value for retailers in three direct ways:

8.2.1. Reduce staff time spent on repetitive questions

Many in-store questions are predictable: where is the product, do you have it, what sizes or colors exist, what is a good alternative. If customers can get answers from an in-store screen, staff can focus on higher-value service instead of repeating the same information.

8.2.2. Reduce lost sales from abandonment

When customers feel stuck or tired, they often leave without buying. By reducing waiting time, OnSight aims to reduce “silent exits” and improve conversion.

8.2.3. Create useful, actionable insight

OnSight also produces operational insight from interactions. It is not about building personal profiles. It is about understanding where customers get blocked: which questions appear most, which areas create the most help requests, and which items trigger confusion. Over time, this can guide better layout decisions, clearer product information, and better staffing patterns.

8.3.What makes this proposition different

Many existing solutions solve only one part of the in-store friction chain: navigation only, AI answers only, or help request only. **OnSight connects all three in one customer-facing flow** and, critically, uses **real-time store data** to keep answers reliable. This is the key differentiator: not the screen, not the AI, but the fact that the information can be trusted because it is connected to the same systems the retailer already uses to manage its inventory and product catalogue.

8.4.Value for customers (end users)

For customers, the main value is reduced effort. Instead of searching, guessing, and waiting, the customer gets clarity quickly. The customer does not need an app, a login, or any onboarding. They approach the screen, ask their question, and get an answer. Specific benefits include finding items faster, getting quick answers on availability and options, and requesting staff help only when they choose, without having to hunt for an employee (Lemon and Verhoef, 2016).

8.5.Value for staff (second end user)

OnSight supports store staff by filtering the questions that do not need a human, so that when staff are called it is because they are genuinely needed. Staff get fewer random interruptions and can prioritize better. **OnSight is not a replacement for staff. It is a filter that makes their time more valuable.**

9. Business Model Canvas (BMC)



Figure 8. OnSight 1st Business Model Canvas. Source: Own elaboration.

10. Validation and Research Methodology

This project follows a practical validation approach. Rather than assuming the solution works, I test the main risks with real users and retail experts before building further. The methodology combines three complementary methods: **a quantitative customer survey to validate the problem from the customer perspective, qualitative interviews to understand operational feasibility from staff and managers, and a working prototype to test the solution interaction with real users.** This sequence reflects the logic of lean validation: confirm the problem exists before testing the solution, and test the solution before measuring it at scale.

The three methods map directly to the three research hypotheses. H2 is tested through the customer survey, which measures the behavioral impact of friction directly. H3 is validated through staff and manager interviews, which provide qualitative evidence of how staff time is currently consumed and what a self-service layer could change. H1 is tested through prototype testing with real users, where perceived effort before and after interacting with OnSight is directly observed.

10.1. Interview Plan: Targets to Interview

The interviews are designed to validate the problem from three distinct viewpoints: store staff who experience customer questions directly every day, store managers who understand operational impact and approval processes, and retail decision makers who control technology investment. Each group provides different and complementary signals about whether the problem is real, how costly it is, and what a realistic solution would need to deliver.

Target Group	Minimum Goal
Store staff (fashion and footwear retail)	10+
Store managers and retail experts	5+
Customers	100+ (survey, separate from interviews)

Figure 9. Interview plan objectives. Source: Own elaboration.

Store staff core questions focus on the most common and repetitive customer requests, the real process behind size and stock queries, the moments when staff feel their time is wasted, and their reaction to a self-service help-on-demand system. Store manager core questions focus on the biggest customer frictions and recent examples of lost sales, the decision-making process for approving a technology pilot, the reaction to the OnSight concept, and the KPIs they would use to judge success. The full interview guide is included in Appendix E.

10.2. Customer Survey

A customer survey was distributed targeting shoppers of fashion, footwear, and sports retail stores. The survey consists of 15 questions organized into three parts: profile and shopping frequency, problem measurement covering friction frequency, pain level, and behavioral impact, and solution validation covering the perceived usefulness and preferred format of a self-service in-store tool. The target sample was a minimum of 100 responses. The full list of survey questions is included in Appendix F.

10.3. Assumptions Matrix

Assumptions were organized across two dimensions: desirability, meaning whether customers will actually use the solution, and feasibility, meaning whether it can work in real store conditions. The full assumptions matrix is included in Appendix C.

10.4. Validation Strategy

The validation strategy combines qualitative understanding with quantitative signals across three sequential and partially overlapping layers, structured across an eight-week period as shown in Figure 10.

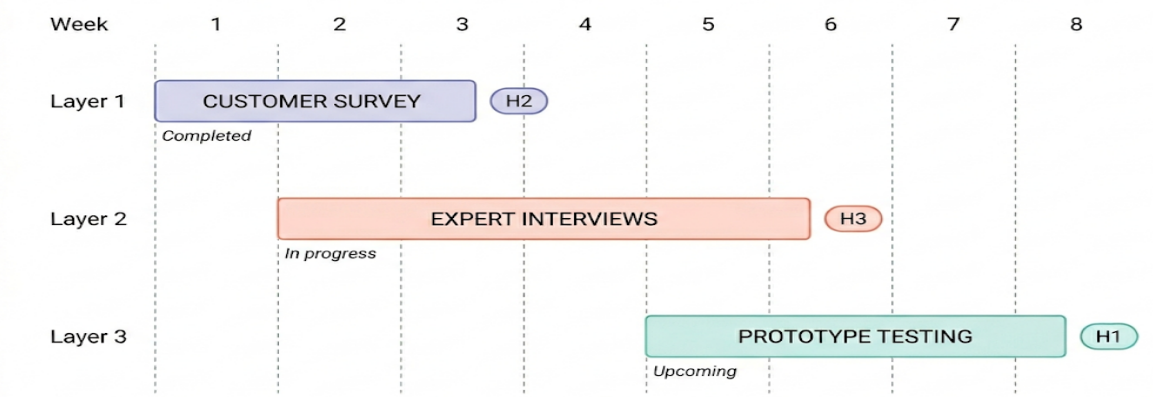


Figure 10. Timeline of validation strategy. Source: Own elaboration.

Layer 1 (Weeks 1 to 3) was the customer survey, conducted first because confirming the problem is real and frequent from the customer perspective is more important than testing any solution. This layer directly supports H2 by quantifying how often friction leads to customers leaving without buying.

Layer 2 (Weeks 2 to 6) covers expert interviews with store staff, store managers, and retail decision makers. This layer validates the operational and feasibility dimensions from the supply side, directly supporting H3 and providing the qualitative depth needed to interpret the survey findings.

Layer 3 (Weeks 5 to 8) is prototype testing with real users. The focus is on the interaction flow rather than underlying data accuracy. Key signals are time-to-answer, clarity of the interface, whether users understand how to request staff help, and whether the overall experience feels usable in a real store context. This layer directly tests H1.

10.5. Validation Metrics

Six core metrics were tracked across adoption, efficiency, and friction reduction: **help-request rate, resolution rate without staff, abandonment intention, staff interruption rate, average handling time, and usage per day per store.** Full definitions and measurement approach for each metric are included in Appendix D.

11. Customer Survey Analysis

The customer survey was distributed between March 11 and March 31, 2026, targeting shoppers of physical fashion, footwear, and sports retail stores. **A total of 111 valid responses were collected, exceeding the minimum target of 100.** The survey covered four areas: shopper profile, in-store friction frequency and pain level, behavioral impact, and solution desirability. The analysis below reports on each area in turn and connects the findings to the research hypotheses.

11.1. Respondent profile

Shopping in physical fashion and sports stores is a near-universal behaviors across all age groups, confirmed by the fact that only 2 out of 111 respondents reported never shopping in one. The largest age group was 18 to 24 years old at 35%, followed by 55 and above at 25%. In terms of shopping frequency, the majority shop seasonally at 59%, followed by monthly at 23%. **Even taking the most conservative estimate, a seasonal shopper visits a physical fashion or sports store at least four times a year, meaning the friction points measured in this survey are not isolated one-off experiences but recurring situations that compound over time.** On their most recent visit, 66% of respondents completed a purchase, while 31% did not buy anything. The fact that nearly one in three respondents did not complete a purchase on their most recent visit is a meaningful baseline signal for this thesis. Full demographic breakdown is included in Appendix F.

11.2. Friction frequency

Respondents were asked how often five specific friction situations occur during their store visits. The results confirm that friction is widespread across the sample.

Stock and size uncertainty was the most prevalent friction point. Not knowing whether an item is available or where it is in the store was reported as occurring sometimes, often, or almost always by 73% of respondents. Size and color unavailability despite the product being on display was reported at the same frequency levels by 72% of respondents. These two frictions are the most common by a significant margin.

Unwanted staff help and difficulty finding staff were also notable. Being approached when not wanting help was reported as sometimes or more frequent by 63% of respondents, and difficulty finding someone to ask was reported at the same threshold by 62%. Getting lost or unable to find a product section affected 54% of respondents at least sometimes. Checking their phone as a workaround was less common than expected, with 55% reporting they rarely or never do this, confirming that **most customers do not have a reliable self-service fallback when friction occurs.**

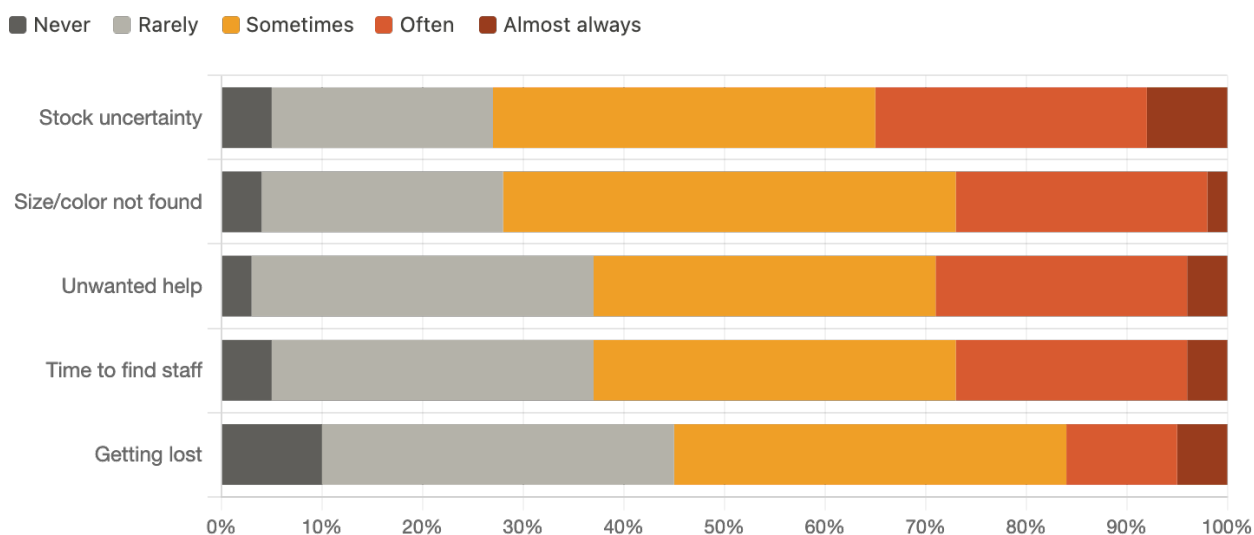


Figure 11. In physical fashion/footwear/sports stores, how often does this happen to you?

Source: Survey results.

11.3. Pain level

Respondents rated how much each friction bothers them on a scale of 1 to 5. **Size and color unavailability scored the highest average at 3.57, with 56% of respondents giving it a 4 or 5.** Difficulty finding staff scored 3.46, with 51% rating it highly. Stock uncertainty averaged 3.22, getting lost averaged 3.19, and unwanted help was the least painful at 3.06.

The combination of high frequency and high pain for size, stock, and staff availability confirms that **these are the priority friction points in this sample, which directly validates OnSight's core feature set.**



Figure 12. When something makes your purchase more difficult in-store, how much does it bother you?. Source: Survey results.

11.4. Problem confirmation

The frequency and pain data confirm the central problem statement of this thesis. The two most prevalent friction points, stock and size uncertainty affecting 73% and 72% of respondents respectively, are also the two most painful, with average scores of 3.57 and 3.46 out of 5. **Friction in fashion and footwear retail is not an edge case but a consistent and bothersome part of the shopping experience for the majority of customers.** This validates the problem assumption underlying OnSight and supports the focus on stock information access and help on demand as the two core solution features.

11.5. Behavioral impact (H2 foundation)

Respondents were asked what real impact dissatisfaction usually has on their shopping behaviour, with multiple selections allowed. The results are striking. The most common outcomes were going to another store at 31%, buying online instead at 30%, and buying less or switching products at 30%. Abandoning the purchase entirely was reported by 20% of respondents, and only 14% said nothing happens and they keep shopping regardless.

Approximately 86% of respondents report that in-store friction has a direct negative impact on their behaviors, with the most common consequences being lost sales for the retailer in the form of channel switching, competitor visits, reduced purchase size, or outright abandonment. These findings provide strong quantitative support for the foundation of H2.

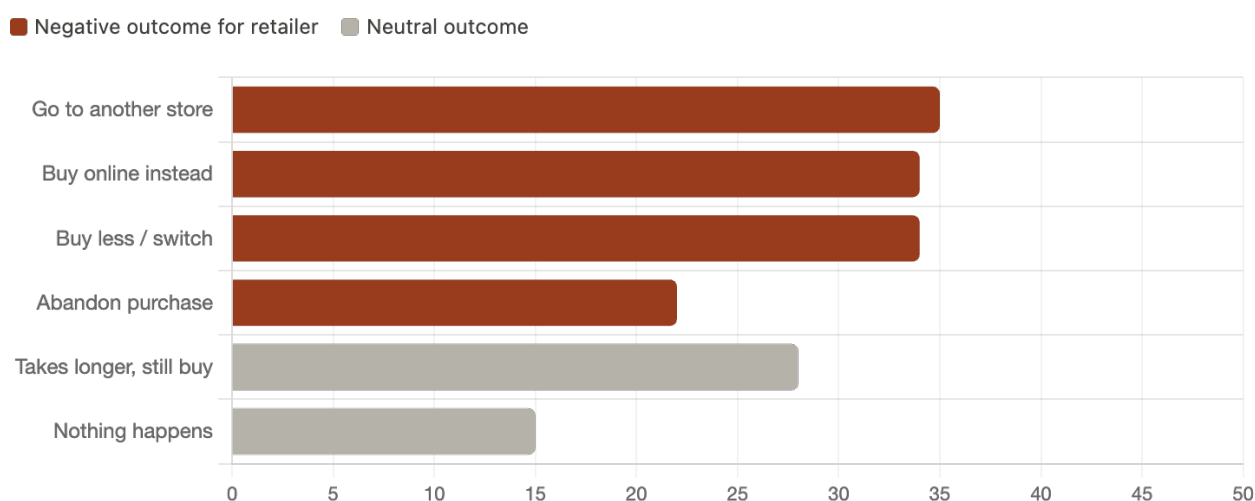


Figure 13. What real impact does this dissatisfaction usually have on you?

Source: Survey results.

11.6. Coping behaviors when size is unavailable

When customers cannot find their size or model, **78% turn immediately to staff as their first response**, while 24% leave without buying and 24% buy online instead. Only 18% try to manage on their own using signs or tags. Patience for staff help is short, with 81% of respondents expecting assistance within 2 to 5 minutes before giving up.

The 78% rate of staff dependency confirms that customers currently have no reliable self-service alternative for stock queries. This is precisely the gap OnSight is designed to close. The

24% who leave without buying when they cannot find their size represents direct abandonment that a self-service stock and location tool could prevent.

11.7. Solution desirability (H3 foundation)

Respondents rated the usefulness of four specific features of a hypothetical in-store screen on a scale of 1 to 5. All three core OnSight features scored strongly. **Checking available sizes and stock scored the highest average at 4.24, with 77% of respondents giving it a 4 or 5.** Requesting help on demand averaged 4.02 with 68% rating it highly, and locating products on a store map averaged 3.95 with 71% at 4 or 5. Leaving feedback scored the lowest at 3.19, making it the feature most likely to be deprioritized in the initial product version.

When asked which features they would actually use, **80% selected stock and size checking, 62% selected product location, and 46% selected requesting help.** Only 2% said they would not use any of the features. On format preference, 38% prefer a screen or kiosk in the store, 27% prefer a QR code, and 25% said they do not mind the format as long as it works. **Only 7% preferred a brand app**, consistent with the friction of downloading an app in a store context and directly validating the OnSight physical kiosk format.

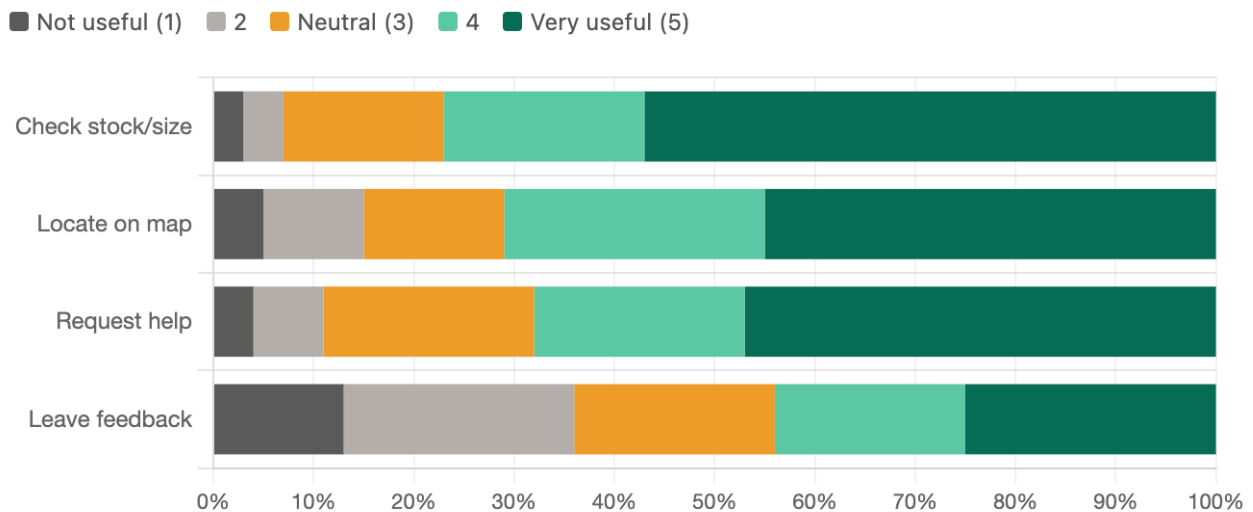


Figure 14. Imagine that in the store you can use a screen/kiosk or a feature in the app to: Check whether your size/color is in stock • Request help “whenever you want” • Locate products on a store map • Leave quick feedback. How useful would that be for you? (1–5)

Source: Survey results.

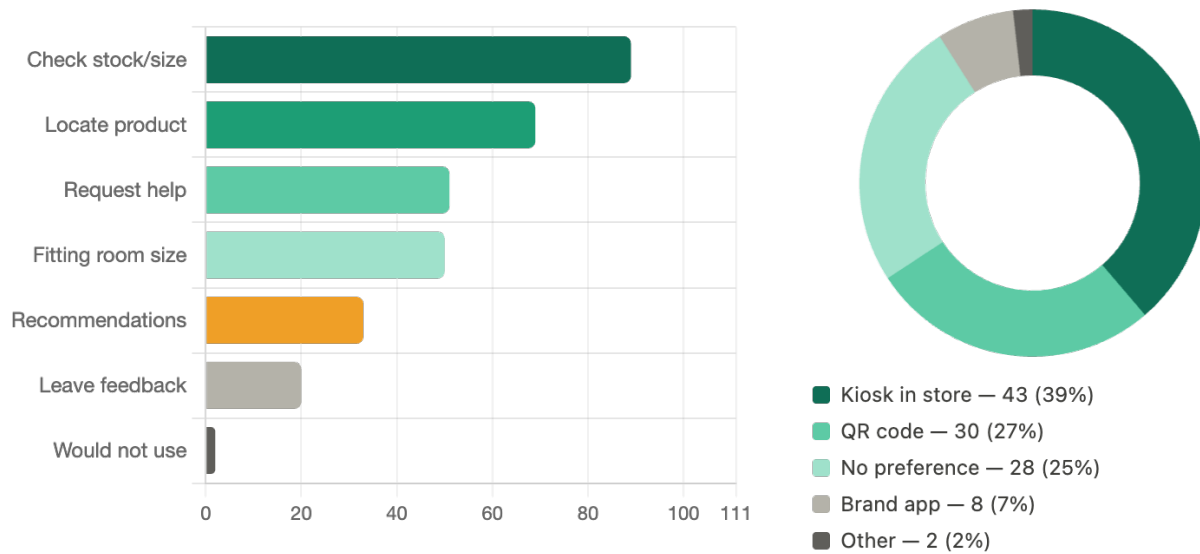


Figure 15. Which features would you actually use? Source: Survey results

11.8. Friction beyond fashion retail

Respondents confirmed that similar friction occurs across other store types. The most common responses were supermarket and grocery at 54%, department stores at 48%, home and DIY at 46%, and electronics at 45%. **This confirms that the problem OnSight addresses is not limited to fashion and footwear, and that the solution concept has clear potential for expansion into adjacent sectors.**

11.9. Summary of key findings

The survey of 111 respondents confirms all three problem assumptions underlying this thesis. In-store friction is frequent and painful, with stock and size uncertainty affecting more than 70% of respondents and generating the highest pain scores. Friction has a direct negative impact on purchasing behaviors, with 86% of respondents reporting reduced purchases, channel switching, or abandonment. And customers show strong stated demand for self-service digital tools, with 80% selecting stock checking and 62% selecting product location as features they would actually use.

Finding	Key number	Implication for OnSight
Stock and size uncertainty most common friction	73% and 72% affected	Validates stock check as the core feature
Size/color not found most painful friction	3.57/5 average	Prioritize size availability display
86% report negative behavioral outcome	Foundation of H2	Direct commercial case for the solution
78% ask staff when size unavailable	High staff dependency	Self-service can directly replace this flow
80% would use stock checking feature	Foundation of H3	Strong product-market fit signal
38% prefer kiosk format	Format validation	OnSight physical screen is the right channel

Figure 16. Survey key findings summarized. Survey results. Source: Own elaboration.

12. Interview Analysis

The following section presents findings from the interviews conducted as part of Layer 2 of the validation strategy. Each interview is presented independently, with a short profile of the interviewee, a summary of the conversation, and the key takeaways that emerged.

12.1. Retail Experts Interviews

12.1.1. Interview E1: Clément, Innovation Specialist, former Auchan

Clément spent several years working at Auchan, one of Europe's largest retail groups, giving him direct exposure to large-format store operations, customer flow, and the practical realities of in-store service. His background in innovation made the conversation particularly generative.

12.1.1.1. Key takeaways

The most striking contribution from Clément was his perspective on RFID. He was the first interviewee to explain in concrete terms how RFID technology could significantly strengthen the OnSight concept, not just for locating products on a store map but for improving the underlying inventory accuracy that any stock-related answer depends on. Without better tracking technology, stock data will always carry some level of unreliability, which is a real limitation for any solution that promises to tell a customer whether their size is available.

He also made a strong case for QR codes over physical screens as the primary access point, at least in the short term. His reasoning was practical: customers already have their phones in hand, QR codes avoid the risk of queues forming around a fixed screen, and they reduce the hardware dependency of the solution.

Two further points stood out for their strategic value. First, Clément raised the **upselling and cross-selling potential** of the solution, noting that a connected screen could suggest complementary products, highlight low-rotation stock, or surface alternatives when a size is unavailable. This reframes OnSight not just as a friction-reduction tool but as a potential revenue driver. Second, he introduced the idea of **workforce reallocation**, arguing that the real staffing benefit is not reducing headcount but redistributing it more intelligently, with fewer staff needed on quiet shifts and more available during peak periods.

Perhaps the most practically useful go-to-market observation came at the end of the conversation. Clément suggested that the smartest entry point into the market would be through franchise operators rather than fully integrated retail chains. A franchise manager carries the brand credibility of a large retailer but retains enough local autonomy to approve a technology pilot without requiring central HQ sign-off. If the pilot performs well, the results create a natural opening to approach the parent brand about a broader rollout.

12.1.2. Interview E2: Thibault, Founder, Retail Interior Design Studio

Thibault runs a company that designs and builds the physical interiors of retail stores. His work sits at the intersection of spatial design, customer experience, and retail operations, giving him a grounded perspective on what actually works in a store environment versus what sounds good on paper.

12.1.2.1. *Key takeaways*

The most important contribution from Thibault was a clear instruction to simplify. At the point of the interview, the OnSight concept was trying to do too many things at once. His advice was to start by defining very clearly who the users are, distinguishing between the end customer in the store, the staff who interact with the system daily, and the manager who makes the adoption decision. Each of these groups has different needs and different reasons to care about the solution, and trying to speak to all of them with one undifferentiated pitch was making the concept harder to understand and harder to sell.

Related to this, **Thibault helped reframe the go-to-market positioning in a way that was genuinely clarifying. The pitch needs to lead with what the tool does for the store, for the staff, and for operations, and then show how that ultimately benefits the customer.** This shift from a customer-first framing to an operations-first framing for the B2B audience is a meaningful change in how the solution is communicated.

He also pointed out that the more important question is not which format to use, whether a kiosk, a QR code, or an app, but what features customers actually want and need. The channel is secondary to the content. If the core functionality is genuinely useful, the format can be adapted.

Thibault brought a sobering perspective on adoption, drawing from his direct experience with failed retail technology experiments. Over the past fifteen to twenty years, retailers have invested

significantly in innovations that were eventually abandoned. **His point was not that technology does not work, but that retail decision makers today carry real institutional skepticism because they have seen the cycle before.** This makes it even more important for OnSight to enter with a lean, low-risk proposition that proves value quickly rather than asking for a large upfront commitment.

Finally, Thibault made perhaps the most fundamental observation of all the expert interviews. He asked simply: why do customers go to physical stores at all? People go to browse, to touch, to discover, and sometimes to be surprised. **Any in-store technology should be evaluated against that standard. When friction interrupts a store visit it does not just lose one sale, it breaks the mood and closes the customer off to discovery.** OnSight, in this framing, is an investment in keeping the customer in that open, exploratory state for as long as possible.

12.1.3. Interview E3: Cem, Senior Commercial Manager, Adidas

Cem spent several years working at Adidas, giving him deep firsthand knowledge of how a major global fashion and sportswear retailer operates, from product management and retail strategy to how decisions about in-store technology are actually made inside a large organization.

12.1.3.1. Key takeaways

The most significant contribution from Cem was his framing of RFID as a potential game-changer for the solution. While many large retailers are not yet using it at full scale, **the direction of travel is clear: companies will eventually need to adopt RFID because the operational benefits, from inventory accuracy to loss prevention to in-store product location, are too significant to ignore.** This creates a timing opportunity for OnSight: the solution can be designed to work today with imperfect stock data, while being architected to become significantly more powerful as RFID adoption increases across the retail sector.

Cem also reinforced from the inside how large fashion retailers think about technology investment. Decisions move slowly in big organizations, approvals require demonstrated ROI, and pilots must survive internal politics before becoming rollouts. **This supports the go-to-market logic of starting with smaller or more agile retail operators rather than targeting the largest chains first.** The first proof of concept needs to exist and show results before a company like Adidas or Inditex would seriously engage.

He confirmed that the friction points OnSight addresses, particularly stock and size availability and the time cost of staff-mediated queries, are real and recurring in fashion retail. He also added an important nuance: **staff themselves often lack fast, reliable access to inventory information, which means they sometimes cannot answer confidently even when they want to help.** This strengthens the staff enablement value proposition beyond just reducing interruptions, it also improves the quality of the service staff can deliver.

12.1.4. Interview E4: Violette, Customer Experience Consultant

Violette is a senior strategic advisor and entrepreneur based in Paris, with a career spanning L'Oréal, Procter & Gamble, and several founder and general manager roles in French retail and digital commerce. She currently sits on the board of Jules, the French menswear chain belonging to the Mulliez family group, which also owns Decathlon and Auchan, and runs her own strategic advisory firm.

12.1.4.1. Key takeaways

Violette's first and most clarifying contribution was to reframe the core value proposition around the concept of large-format retail and understaffed stores. She described how the economics of modern retail have pushed chains toward mega-stores that are not matched by proportional increases in staff. During peak periods the stock function gets deprioritized entirely, creating a structural disconnect between what is physically in the store and what is visible and accessible to the customer. **If OnSight can close that gap, it addresses something retailers genuinely do not know how to solve today.**

The most concrete and actionable insight Violette provided was around the fitting room flow. She described a scenario where a customer tries on a garment in size 40, likes it, but wants to try size 42. Today, that customer has to leave the fitting room, find a staff member, wait, and hope the size exists somewhere in the store. **With OnSight, the customer scans a QR code, the system checks stock, and if the size is available a dedicated staff member brings it directly to the fitting room.** She described this specific flow as something the market has genuinely not solved yet, and said it clearly with conviction.

On KPIs and proof of value, Violette was precise. She pointed out that **the most important metric is conversion rate per session: how many customers who made a request through the tool**

went on to complete a purchase. Alongside this, she highlighted the value of rupture data, meaning cases where a customer wanted a specific size or reference that was not available. Retailers often dismiss these as simple stock-outs, but if OnSight can show that a customer was ready to buy and did not because the size was missing, that transforms an invisible loss into a documented, actionable data point.

She also raised the upselling potential of the solution, noting that showing a customer three ways to wear an item they are considering, using photos and suggestions of complementary pieces available in their size and in stock nearby, could meaningfully increase basket size. She framed this not as a gimmick but as **a genuine service that helps customers feel more confident in their purchase.**

Finally, Violette made a practical and generous offer: she suggested connecting the project with the commercial director of Jules, who has both the operational knowledge to assess the concept honestly and the seniority to initiate a pilot conversation.

12.1.5. Interview E5: Alix, Store Operations Manager, former Decathlon

Alix spent over twelve years at Decathlon in a series of increasingly senior roles, eventually becoming part of the executive team responsible for European growth strategy. Her most distinctive experience for this project comes from her years based in Singapore, where she led Decathlon's Southeast Asia expansion and was responsible for developing an innovation flagship store that tested technologies including RFID-based product location, store mapping interfaces, and app-based stock checking.

12.1.5.1. *Key takeaways*

The most significant contribution Alix made was confirming, from direct experience, that the core features of OnSight have already been tested in a real retail environment and shown genuine value. At Decathlon Singapore, the team built a store map interface where customers could search for a product and be directed to its exact location in the store, enabled by full RFID tagging of the product range. **She described this as having clearly improved the customer experience.** The important nuance she added is that it worked partly because Decathlon Singapore carried only its own branded products, making full RFID coverage feasible. In a multi-brand environment or a

store with a fast-moving product range, maintaining that level of tagging accuracy is significantly more complex.

She also described the failure modes honestly. Screens and interactive tools were deployed across the store, but some created frustration rather than value, either because they were unreliable, required frequent updates that were not always completed, or because using them took longer than simply asking a staff member. **Her conclusion was direct and important: a tool that fails half the time damages trust more than having no tool at all.**

One of the most practically useful points Alix raised was about staff adoption. She identified this as the real make-or-break factor for any in-store technology. **Staff need to understand not just how to use a new tool but why it exists and what it does for them personally.** Without that understanding, staff will not promote the tool to customers, and without staff promotion, customers will not discover it. She described a pattern she had seen repeatedly: solutions that were technically sound but invisible to customers simply because staff had not been given a compelling reason to introduce them.

Alix also raised a subtler point about the perception of staff using devices in store. When customers see a staff member looking at a phone or tablet, the immediate impression is often one of unavailability, even if the staff member is actually using the device to help that very customer. This is a design and behavioral challenge as much as a technical one.

On the question of whether large retailers build or buy innovation, **Alix was clear that Decathlon is genuinely open to external solutions, particularly at the startup stage.** She described how the Singapore team actively sought out local startup partnerships, and noted that Decathlon had acquired the RFID tagging company it originally partnered with once the technology proved its value at scale. This suggests a model where OnSight could enter as a pilot partner and, if results are strong, become a deeper strategic relationship over time.

Finally, she made the point that many innovations already exist inside retail organizations but remain invisible to customers because no one has figured out how to make them discoverable at the right moment. She mentioned QR codes on product tags at Decathlon that linked to stock information online but which almost no customer knew about or used. **The information exists,**

the data exists, but the customer-facing layer that makes it accessible in the right moment is missing. That is exactly the gap OnSight fills.

12.1.6. Interview E6: Nacho, Store Manager, Macson (Premium Menswear Retail)

Nacho manages a Macson store, a premium menswear retailer operating a fully assisted sales model where every customer interaction is handled personally by trained staff. His perspective represents the high-service end of the retail spectrum, which makes him a useful contrast to the mass-market context OnSight primarily targets.

12.1.6.1. *Key takeaways*

The interview confirmed that OnSight's value proposition is strongest in precisely the segment it targets. Nacho was unambiguous that in large-format, low-service retail environments such as Inditex, Mango, or H&M, where **staff are neither trained nor expected to assist customers fully**, a self-service tool covering stock, size, and location queries fills a real and unmet gap. In his words, customers in those stores are already alone: the software simply gives them a resource they currently lack entirely.

On the question of assisted versus self-service selling, Nacho made a sharp distinction between information retrieval and genuine sales assistance. **Finding a size or confirming stock availability is a logistical question that a screen can answer as well as a person.** The value a trained human adds comes at a different layer: reading the customer, understanding the occasion, proposing combinations, and building a purchase that the customer had not anticipated. **That layer cannot be replicated by a screen and is not what OnSight attempts to replicate.** This is a validation of OnSight's scope: the tool targets the informational friction, not the relational one.

He also raised a use case directly relevant to Macson's own context. When all staff are occupied, a customer waiting could be directed to the interface to begin their query, buying the staff member a few minutes to close the existing interaction before attending. This **bridges self-service and assisted selling rather than replacing one with the other**, and is a concrete deployment scenario for premium stores that had not been explicitly articulated before this interview.

On adoption, Nacho pointed to a cultural dimension: **Japanese consumers accept technological innovation in retail almost universally**, while Southern European consumers require the experience to feel natural and human before they engage. This reinforces the design priority

already reflected in the OnSight prototype: the interface must feel like a helpful tool, not a replacement for a person.

Finally, he confirmed that Macson is in the process of adopting RFID technology for inventory and stock management, describing it as inevitable for any retailer operating at scale. This supports the RFID integration roadmap outlined in the future development section of this thesis.

12.1.7. Interview E7: Jose Luis, Senior Commercial Director, Adidas and Levi's

Jose Luis has extensive experience managing retail operations across Europe for major international brands including Adidas and Levi's. His background spans store network management, logistics, and retail technology adoption, giving him a practical view of both the customer-facing and operational dimensions of the problem OnSight addresses.

12.1.7.1. *Key takeaways*

Jose Luis confirmed the **core friction OnSight targets from an operational rather than consumer perspective**. In large-format stores, **staff spend a disproportionate share of their time on logistical tasks**, moving stock between the floor and the stockroom, processing deliveries, and answering basic product location queries, rather than on selling or advising. The commercial cost of this is direct: a staff member pulled away from the floor to answer a stock question is a staff member not available to support a purchase decision. Any tool that absorbs routine queries therefore returns measurable time to the floor.

He made a sharp point about the sales argument for OnSight. Customer satisfaction is a compelling framing internally but is difficult to translate into budget approval because it is intangible. The argument that lands with retail managers is **the staff time calculation: cost per staff hour multiplied by time absorbed by routine queries equals a concrete number that justifies the investment**. He recommended framing the ROI case around staff time saved and lost sales recovered rather than around customer experience improvement.

On RFID, he confirmed that the technology is proven and widely deployed at scale, including within the companies he works with. He noted that the main challenge is not the technology itself but the accuracy rate at store level: a 98% accuracy rate across 150 SKUs in a small store is operationally very different from 98% across tens of thousands of units in a large-format store. He also highlighted the highest-value application of RFID at the intake stage: automating the

verification of incoming stock deliveries, which currently consumes significant staff hours in manual counting and reconciliation.

He raised one substantive concern about the product format. A fixed screen in a store risks the same psychological rejection as other in-store kiosk formats that have failed before: customers associate the format with fast food ordering and resist using it for fashion. He suggested the mobile format, accessed through the customer's own phone via QR code, avoids this association. This is consistent with the dual-format approach already reflected in the OnSight prototype, and reinforces the priority of perfecting the mobile version.

His closing observation was the most strategically useful of the interview. He noted that every store manager at a major chain already tracks repeated customer questions, with some chains formally requiring managers to report questions asked more than a set number of times per week. OnSight's ability to capture and aggregate those questions automatically, without relying on staff reporting, is a data asset with direct commercial value to the retailer, independent of the customer-facing functionality. This supports the analytics tier of the OnSight pricing model and provides a concrete talking point for the sales conversation with store managers.

12.1.8. Expert Interview Summary

The table below summarizes the seven expert interviews, highlighting each interviewee's strongest insight and its direct implication for OnSight.

Code	Profile	Strongest insight	Key takeaway for OnSight	Hypotheses supported
Clément	Former Auchan, innovation background, Barcelona	QR codes reduce hardware friction; RFID unlocks stock reliability; franchises as go-to-market entry point	Start with franchises for speed and brand credibility; upselling and workforce reallocation as B2B value drivers	H2H3
Thibault	CEO, retail interior design company	Keep it simple; many retail tech experiments have failed; the channel matters less than the feature	Lead with operations and staff benefit, not customer UX; start lean; retailers are cautious buyers	H2H3
Cem	Former Adidas, fashion retail market expert	RFID adoption is inevitable; large chains move slowly; staff also lack fast stock access	Design for imperfect data now, architect for RFID later; pilot with agile operators before targeting large chains	H3H1
Violette	Board member at Jules (Mulliez Group), former GM Le Slip Français, L'Oréal	Fitting room size-request flow is the clearest use case; rupture data is the most valuable B2B metric; loyalty integration	Conversion rate per session and unconverted stock-outs are the KPIs retailers will pay for; upselling adds value	H2H3
Alix	Former Decathlon Executive Leader, 12 years including Singapore innovation flagship	Similar features already tested at Decathlon Singapore; staff adoption is the real barrier; tools exist but remain invisible to customers	Reliability is non-negotiable; staff must understand the benefit before they will promote the tool; large retailers are open to startup partnerships	H1H3
Nacho	Store manager, Macson (premium menswear)	OnSight fits where staff are absent or overwhelmed; in premium stores it bridges wait time between assisted interactions	Position as complement to human service, not replacement; simplicity is as important as functionality	H1H3
Jose Luis	Senior commercial director, Adidas and Levi's	Retailers buy on staff time and lost sales recovered, not customer satisfaction; screen interaction data is a commercial asset	Lead B2B pitch with staff time ROI; prioritise mobile format via QR; sell analytics as a separate value driver from day one	H2H3

Figure 17. Expert interviewee overview and key contributions. Source: Own elaboration.

12.2. Store Staff Interviews

To complement the expert perspective, a series of short field interviews were conducted with store staff across nine retail locations in the Sant Cugat and Barcelona area, covering Decathlon, Foot Locker, Levi's, Jack & Jones, Springfield, Zara, Oysho, Bata, and Media Markt. The goal was to capture a direct, unfiltered view of daily friction from the people who experience it most. Despite the short and informal nature of the conversations, a consistent picture emerged across almost all locations.

Stock and size queries dominate the day. Without exception, every member of staff interviewed identified stock and size availability as the most frequent type of customer question they receive, across every store format and product category. In Bata, staff described regularly having to retrieve multiple shoe boxes in different sizes per customer, each requiring a trip to the stockroom. In Decathlon, answering one stock question involved a multi-step process of QR code scanning, RFID scanning devices, and checking fitting rooms and returns areas. **The time cost of this process compounds during peak hours, with several staff members confirming that customers leave unattended during busy periods simply because all staff are occupied.** Both the customers who leave quietly and those who wait and express frustration represent lost sales, but only the second type is visible to management.

Technology exists but customers do not know it is for them. Several stores already have tools in place that could partially answer customer questions, but customers either do not know they exist or do not use them. In Decathlon, every product has a QR code linking to stock availability by store, but staff confirmed that almost no customers use it. Zara's app already includes a store map feature powered by RFID showing customers where specific items are located, but as the interviewee put it, **they have the technology but not always the practice.** This gap between what the system can do and what actually happens on the floor is a direct validation of the OnSight premise.

Staff are stretched between tasks and customer attention. A recurring theme across the interviews was the tension between floor tasks and customer service. Staff are responsible not only for attending customers but also for replenishment, returns processing, fitting room management, and maintaining the visual presentation of the store. During peak hours these tasks compete directly with customer attention. The Jack & Jones interviewee made the point clearly: **the store already checks stock via an internal computer system, meaning the information exists and is accessible, but only to staff.** If that same information were available to the customer directly, it would eliminate a significant portion of the interruptions staff currently handle.

An unexpected finding: AI is already changing customer behavior before they enter the store. The Media Markt interview introduced a dimension that none of the other store types surfaced. Staff noted that customers in the electronics category increasingly arrive having already consulted an AI tool before their visit. They come in knowing what they want and ask for that specific product directly. The nature of the interaction has shifted from exploratory to confirmatory. **In product categories where AI pre-research is becoming common, the role of in-store staff shifts from advisor to fulfilment,** making a self-service stock and location tool even more obviously valuable.

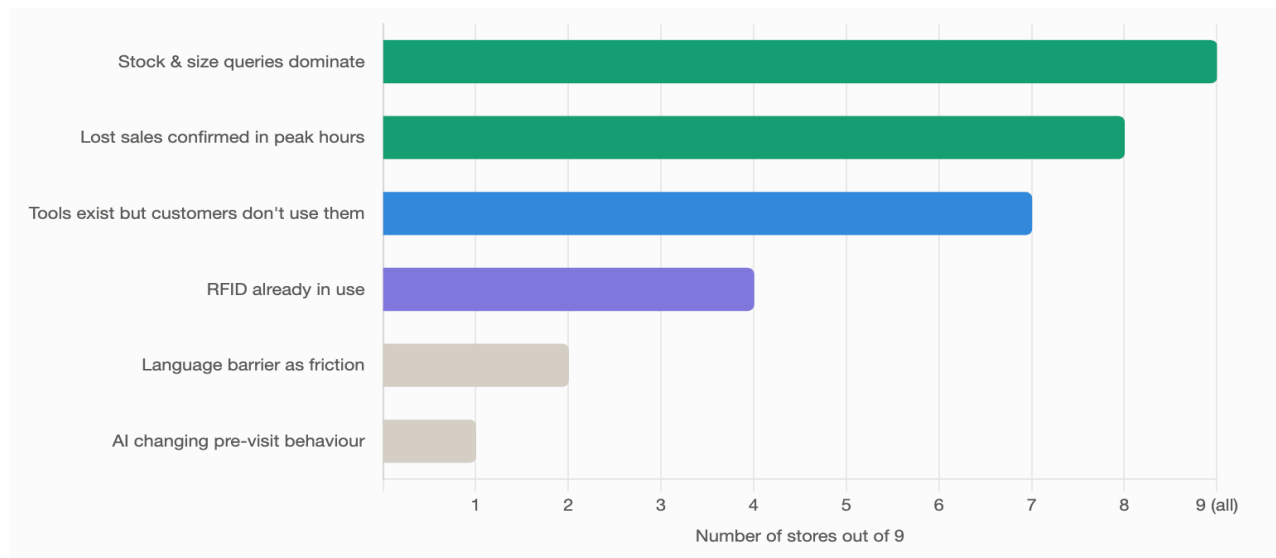


Figure 18. Number of stores (out of 9) where each theme was confirmed by staff. Source: Own elaboration.

12.3. Staff interviews in connection with the expert perspective

The nine store staff interviews provide ground-level evidence that directly supports the insights gathered from the expert interviews. Every theme that emerged from the expert conversations was confirmed in practice on the store floor. Violette's observation about understaffed large-format stores was visible across every location visited. Thibault's warning that technology exists but remains disconnected from what customers actually need in the moment was confirmed at Decathlon, Zara, and several other stores where tools are present but go unused by the people they were designed to serve.

Clément and Cem's point about RFID as the infrastructure that could make OnSight significantly more powerful was validated by active RFID deployment already in place at Decathlon, Zara, and Levi's. Alix's warning about staff adoption as the real make-or-break factor was echoed across multiple locations, where staff showed genuine openness to a self-service tool only when it was framed as something that would reduce their repetitive workload rather than replace their role. The alignment between expert prediction and operational reality across nine independent stores strengthens the validity of the findings considerably.

The gap is not the technology. The infrastructure already exists in many stores. What is missing is the customer-facing layer that makes it accessible at the right moment. That is what OnSight is designed to provide.

13. Updated Business Model Canvas

Following the customer survey and validation interviews, the Business Model Canvas has been updated to reflect a more operationally grounded and commercially focused strategy. Several assumptions from the first version were incomplete or misframed, and the changes below reflect what the validation process revealed.

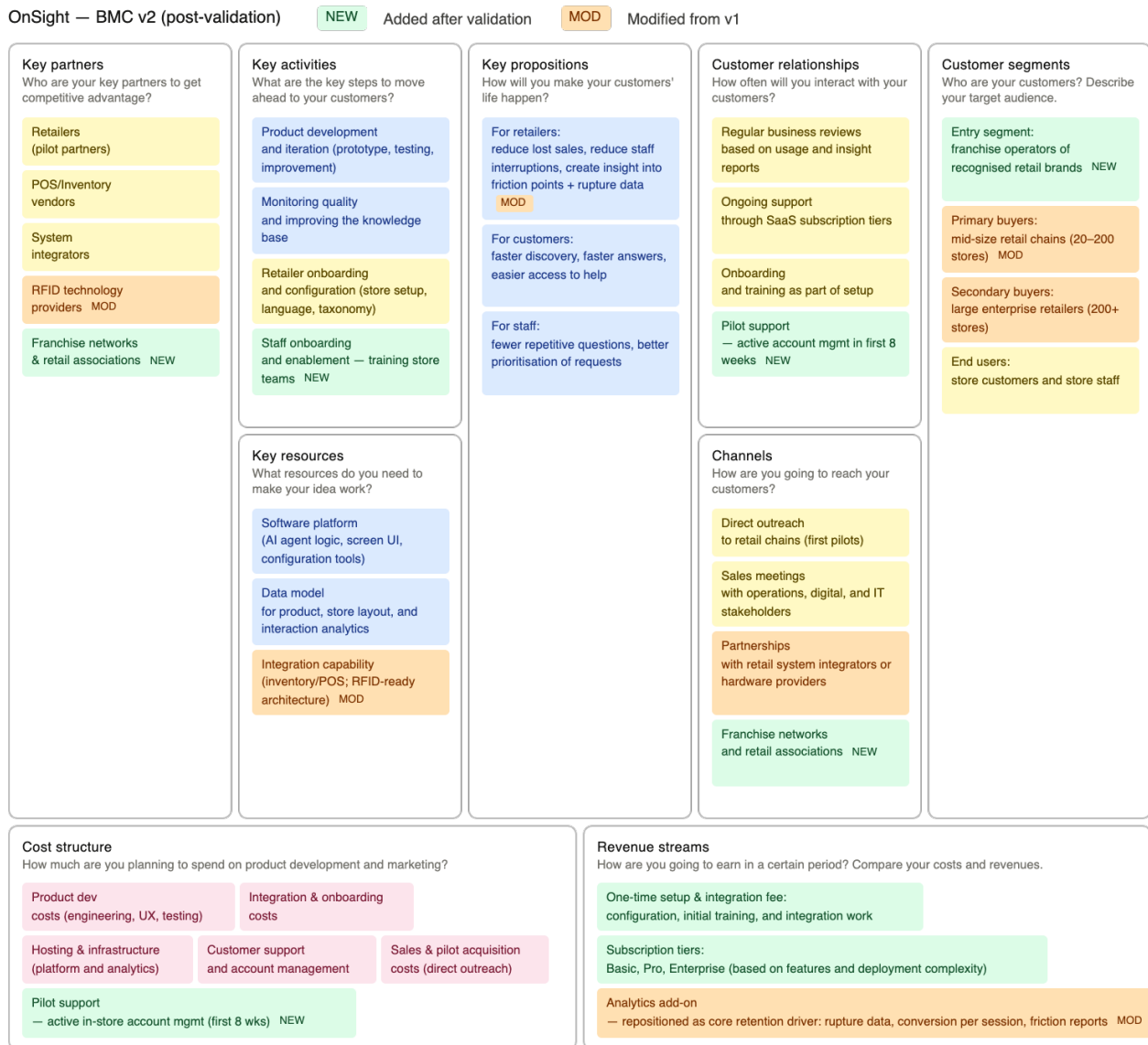


Figure 19. Business Model Canvas modified after Research. Source: Own elaboration.

13.1. Key Propositions

The value proposition is explained in full in Section 9. The key change from the original canvas is that **the pitch now leads with operational value for the retailer rather than customer experience**. As Thibault and Violette independently confirmed, the buyer is the retailer and what moves the conversation is staff time saved, lost sales recovered, and friction made visible through data.

13.2. Customer Segments

The entry segment and buyer tiers are explained in detail in the go-to-market strategy in Section 17. The key change is that **franchise operators have been added as the priority first segment**, replacing the original focus on mid-size chains directly. This shift came from Clément's observation that franchise managers can approve a pilot without central HQ sign-off, making them faster to close and more realistic as a first customer.

13.3. Customer Relationships

OnSight builds long-term relationships with retailers through three touchpoints. **Regular business reviews** based on usage data and insight reports keep the conversation focused on measurable outcomes. **Ongoing support** through the SaaS subscription tiers ensures retailers always have access to help when needed. **Active account management in the first eight weeks of every pilot** is non-negotiable; this is the period where staff adoption either happens or does not, and it requires human presence on the ground, not just a help center. This block is new in the updated canvas and reflects a gap identified across multiple interviews.

13.4. Channels

The full channel strategy is covered in Section 16. The key change is that **franchise networks and retail associations have been added as a channel** based on Clément's go-to-market suggestion, allowing OnSight to reach multiple early adopters through a single relationship rather than approaching each retailer individually.

13.5. Key Partners

Four partner categories are essential to delivering the OnSight proposition. **Pilot retailers** are the most critical early relationship: without a willing chain there is nothing to validate or sell. **POS and inventory vendors** such as Oracle and SAP hold the stock and product data that makes OnSight trustworthy, since connecting to real data is what separates OnSight from AI assistants that cannot be relied upon. **RFID technology providers** are a new addition to the updated canvas, identified by Clément, Cem, and Alix as the infrastructure that will make stock-check genuinely reliable at scale as retailer adoption grows. **System integrators and kiosk hardware providers** support deployment for retailers that require a more managed rollout.

13.6. Key Activities

Three activities are core to delivering the proposition consistently. **Product development and iteration** ensures the AI agent, screen interface, and integration capabilities stay reliable and improve over time. Reliability in busy store conditions is non-negotiable: as Alix confirmed, a tool that fails half the time damages trust more than having no tool at all. **Knowledge base monitoring** keeps AI answers accurate as retailers update catalogues and store layouts. **Staff onboarding and enablement** is the most important addition to the updated canvas. A tool that staff do not understand will remain invisible to customers, which means **every deployment must include a structured onboarding programme for store teams as a core part of setup, not an afterthought.**

Initial concept: in-store screen.

Validated learning: dual access model, screen + QR.

Recommended first pilot: QR-first or hybrid, to reduce hardware friction.

13.7. Key Resources

OnSight's most important resources are its **software platform**, including the AI agent logic, screen interface, and configuration tools, its **data model** for product information, store layout, and interaction analytics, and its **integration capability** connecting to inventory and POS systems. In the early phase, the founding team is also a critical resource: one commercial founder managing sales, operations, and client relationships, and one technical founder managing product development and retailer customization.

13.8. Cost Structure

The full cost breakdown is presented in Section 18. The key change from the original canvas is that **pilot support and account management has been added as a distinct cost category**, reflecting the reality that real pilots need active human presence in the first weeks to ensure staff adoption happens. This cost was missing from the first version and must be planned for from the start.

13.9. Revenue Streams

The full revenue model including pricing tiers, year-by-year projections, and unit economics is presented in Section 18. The key change from the original canvas is that **the analytics add-on has been repositioned from an optional extra to a central retention driver**. The SaaS fee gets the foot in the door, but the rupture data and conversion insights are what give retailers a reason to stay, expand, and increase their screen deployment over time.

14. Prototype Overview

The OnSight prototype was built as a single-page HTML application simulating an in-store kiosk screen deployed at SportStyle Barcelona, a fictional fashion and sportswear retailer used as the testing context. The prototype covers the full interaction flow across three distinct views: the customer-facing kiosk, the staff operations panel, and the manager analytics dashboard. The screens below walk through a complete end-to-end session as experienced during user testing.

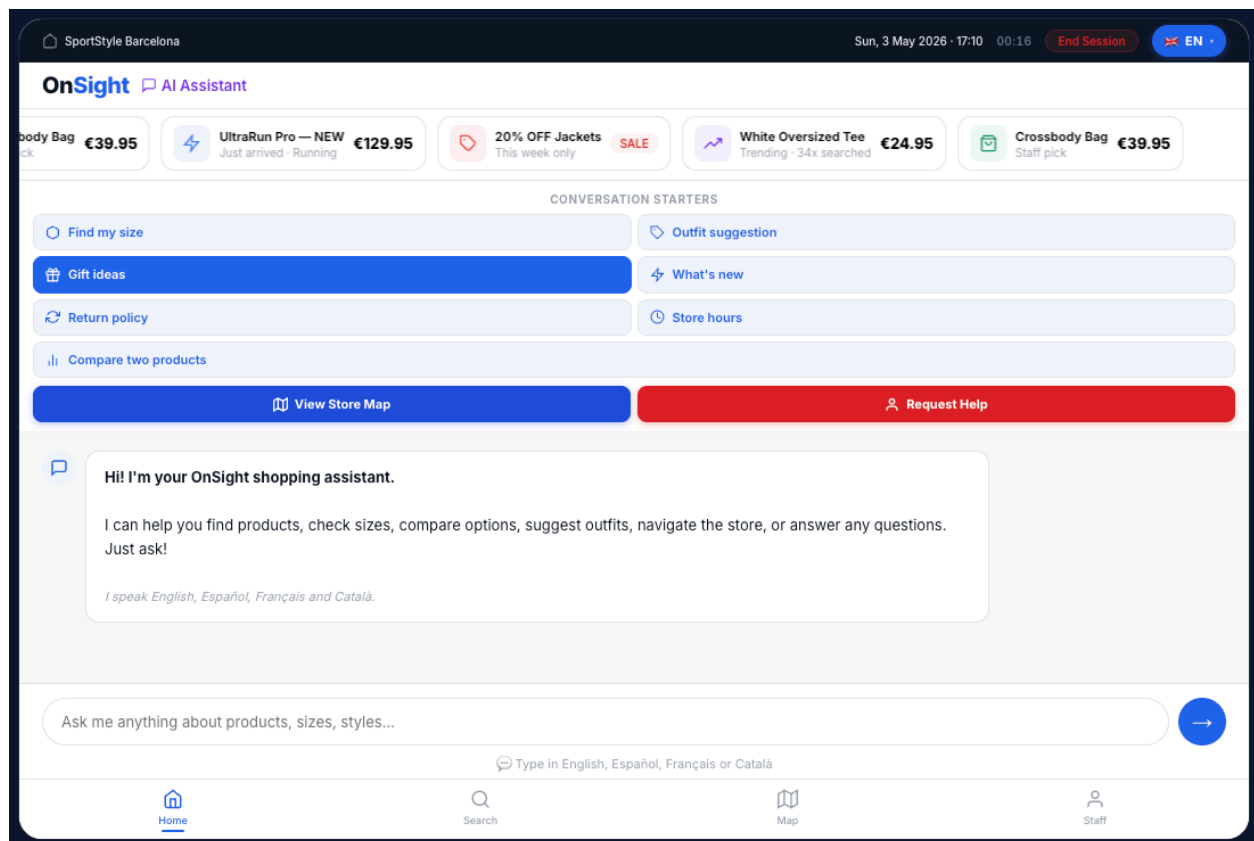


Figure 20. Home screen. Source: Own elaboration.

The home screen merges the entry point and the chat interface into one unified screen. A scrolling product ticker at the top surfaces trending items and new arrivals. Below it, conversation starter chips allow customers to begin an interaction instantly without typing. Two persistent shortcut buttons for the store map and staff help remain visible at all times. The chat input at the bottom accepts free text in four languages: English, Spanish, French, and Catalan. A session timer in the top bar tracks elapsed time for testing observation purposes.

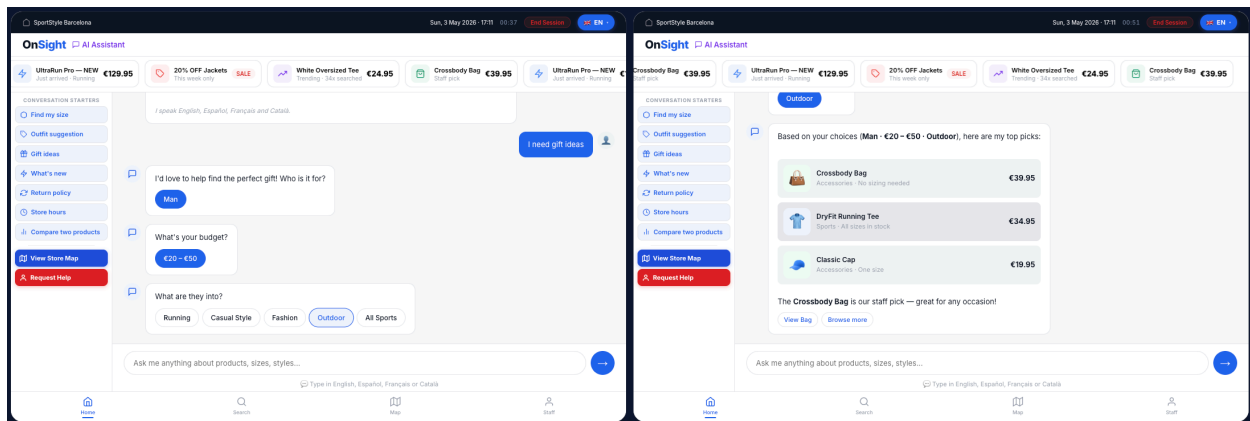


Figure 21. Guided conversation and personalized recommendation. Source: Own elaboration.

When a customer selects a conversation starter such as "Gift ideas", the assistant guides them through a short structured sequence, asking who the gift is for, the budget range, and the recipient's interests. Based on the selections, the assistant surfaces a ranked list of matching products available in the store, each showing stock status, price, and a brief description. This flow reduces customer effort by replacing open-ended searching with a guided decision path that reaches a concrete answer in under a minute.

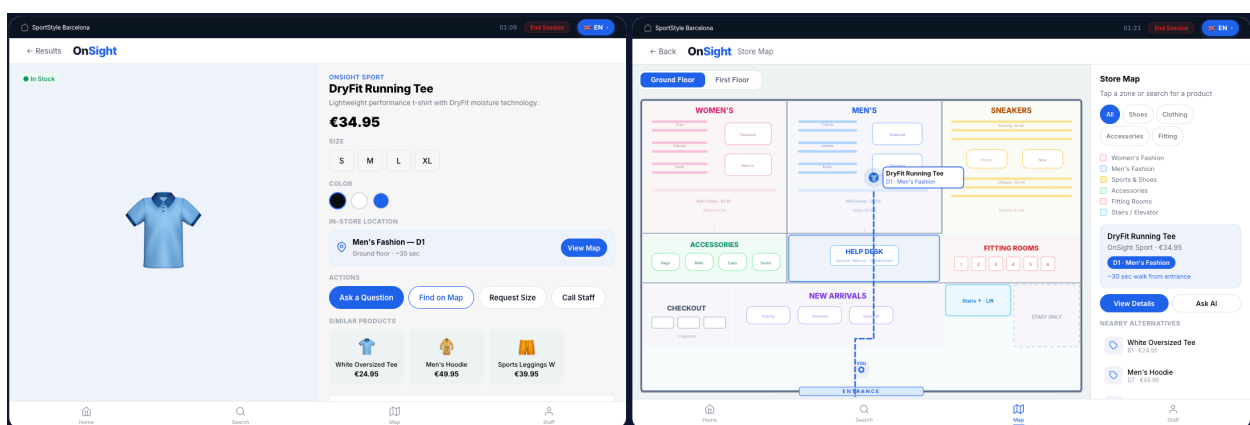


Figure 22. Product detail and store map. Source: Own elaboration.

Tapping any recommended product opens a detail screen showing the product image, price, available sizes and colors and precise in-store location. Four action buttons allow the customer to ask a follow-up question, find the item on the store map, request a specific size, or call staff directly. Tapping "Find on Map" opens the full floor plan with the product pinned at its exact location and a navigation panel on the right confirming the aisle reference and nearby alternatives. The map supports ground floor and first floor views.

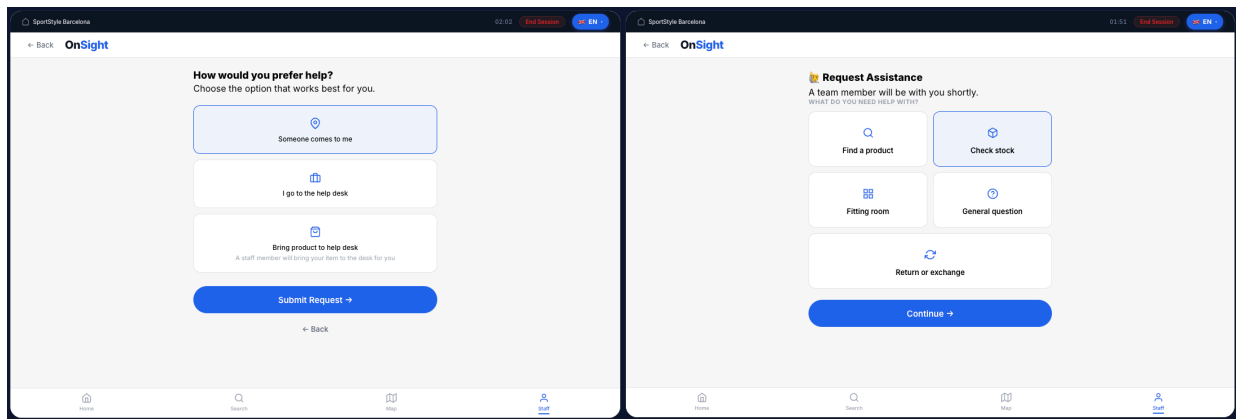


Figure 23. Help request flow. Source: Own elaboration.

When a customer needs human assistance, a two-step flow guides the request. In the first step the customer selects the reason: finding a product, checking stock, fitting room assistance, a general question, or a return or exchange. In the second step the customer chooses how they prefer to receive help: a staff member comes to them, they go to the help desk, or the product is brought to the help desk directly. This structured approach means the staff member who responds already knows exactly what is needed before arriving, eliminating the back-and-forth of a cold interruption.

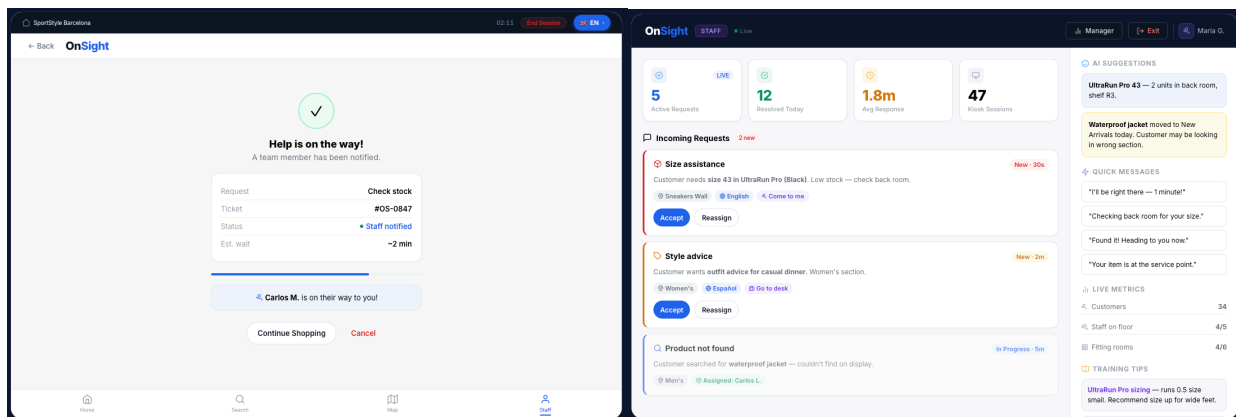


Figure 24. Confirmation and staff notification. Source: Own elaboration.

On submission the customer sees a confirmation screen with the request type, a ticket reference number, estimated wait time, and a live notification that a named staff member is on their way. Simultaneously, that staff member receives the request on their own device through the staff operations panel. Each incoming request shows the reason, the specific product involved, the customer's preferred language, and their chosen help method. Staff can accept or reassign with one

tap. An AI suggestions panel surfaces contextual information such as back-room stock locations and recent display changes. Quick message templates allow staff to send instant status updates without typing. Live metrics on the right show customers currently in store, staff on the floor, and fitting room occupancy in real time.

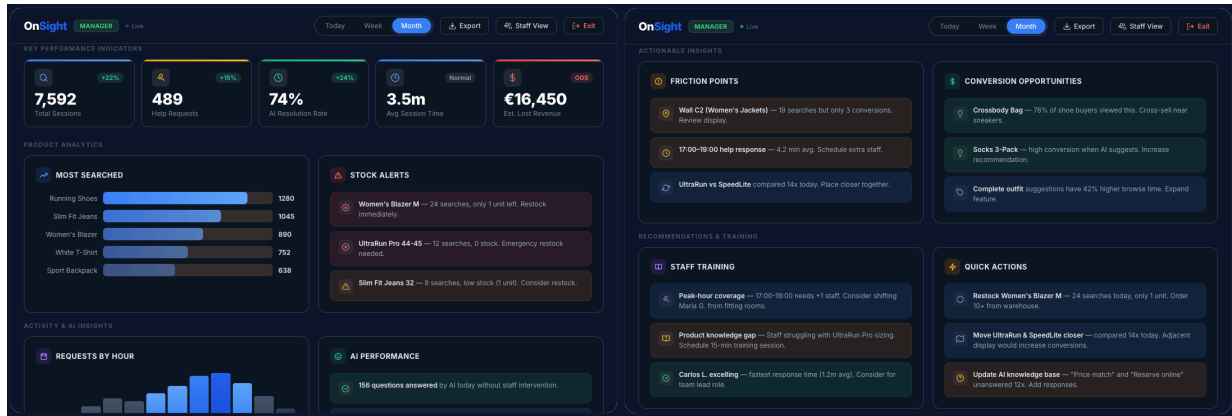


Figure 25. Manager dashboard and actionable insights. Source: Own elaboration.

The manager view provides a real-time and historical overview of store performance through OnSight. Key performance indicators cover total sessions, help requests, AI resolution rate, average session time, and estimated lost revenue from stock-outs. A most-searched products chart and stock alerts panel identify rupture situations in real time, showing how many customers searched for an item that was unavailable. The actionable insights section goes further: it identifies specific friction points such as display areas with low conversion and peak hours with slow staff response, surfaces cross-sell and upsell opportunities identified from session patterns, and flags individual staff training needs based on real interaction data. This transforms what would otherwise be invisible daily losses into documented, addressable business intelligence.

14.1. Prototype Testing and Results

Prototype testing was conducted with 20 participants recruited from personal contacts. The goal was to observe real users completing realistic tasks independently for the first time, in order to validate the core interaction flow and directly test H1: that interacting with OnSight reduces the perceived effort of getting product information without requiring staff involvement.

Link for prototype: <https://dashing-unicorn-3ca180.netlify.app/>

14.1.1. Session format

Each participant was given a task verbally, presented as a realistic shopping scenario, for example: *find a gift for your mother for less than €50, or find shoes in your size and locate them in the store*. Participants completed the task independently while the researcher observed without intervening. Some sessions were filmed for reference. Testing was conducted iteratively: observations from each session informed small improvements to the prototype before the next, meaning feedback quality improved progressively across the full set of sessions.

At the end of each session, participants completed the post-session survey below directly in the prototype.

OnSight

How was your experience?
Your feedback helps improve OnSight.

Overall satisfaction (1-5)

★ ★ ★ ★ ★

Did you find what you were looking for?

Ease of use (1-5)

Would you use OnSight again?

Any comments? (optional)

Tell us what you liked or what we can improve...

[Skip](#)

Figure 26. Post-session survey embedded in the OnSight prototype. Source: Own elaboration.

Responses to all four survey questions were concentrated at the most positive end of the scale across the full group. Participants were actively encouraged to give honest and critical feedback rather than polite responses, which makes the consistently high scores a meaningful signal rather than a courtesy effect. Verbal feedback collected alongside the survey surfaced more specific improvement points, which were acted on between sessions.

14.1.2. Task completion and findings

All participants completed the core tasks. Quick-action flows covering product search, size queries, and gift-finding were completed without hesitation in the large majority of sessions. The one friction point was the transition from the store map to the staff help-request feature, where a few of the participants took two or three extra steps because the fastest route was not immediately visible. This is a minor detail and did not break the flow of the navigation, but will be improved.

Post-session feedback confirmed three things relevant to the research hypotheses. First, users with no prior knowledge of the concept reached answers faster than they expected, which supports H1 on perceived effort reduction. Second, no participant reported feeling unsupported after completing a task without staff help, which addresses one of the core desirability assumptions. Third, all participants said they would use OnSight again in a real store, providing a directional signal for H3 on willingness to adopt.

The mobile format of the prototype was also tested informally. It performed well but remains less refined than the kiosk format, with minor improvements still to be made.

The main limitation of this testing is its informal nature. Sessions were not controlled environments, data was not systematically logged, and the sample came from personal contacts rather than shoppers in a live store. These constraints are appropriate for a thesis-stage prototype. A structured test in a real store with a broader sample is the logical next step before any commercial pilot.

15. Marketing and Financial Planning

15.1. Digital Marketing Plan (SOSTEC Model)

15.1.1. Situation

OnSight enters a market where physical retailers recognize the need to modernize the in-store experience but are cautious buyers with institutional memory of failed technology investments. The customer survey confirms that in-store friction is widespread and commercially damaging, and that **no current solution connects navigation, product Q&A, stock visibility, and help on demand in a single customer-facing flow**. The target buyer is the retail operations director, digital transformation lead, or store manager at a mid-size fashion or grocery chain, or the manager of a franchise location belonging to a recognized retail brand. This person is data-driven, commercially accountable, and will only adopt a new tool if the value can be demonstrated quickly and with low risk.

15.1.2. Objectives

OnSight's marketing objectives for the first twelve months are:

- **Secure 3 signed pilot contracts** with retail chains or franchise operators in Spain by month 9.
- **Generate a minimum of 15 qualified leads** through direct outreach and referral by month 6.
- **Achieve a pilot-to-renewal conversion rate of at least 67%** by month 12.
- **Build brand credibility** through at least 2 published case studies or documented pilot results by month 12

15.1.3. Strategy

OnSight's go-to-market strategy is built around proof, not awareness. At this stage a broad marketing campaign would be premature. The priority is to land the first credible pilots, generate measurable results, and use those results as the primary sales asset for subsequent conversations. The primary target for the first pilots is franchise operators, as identified by Clément, since they can make technology decisions without central HQ approval cycles. A successful pilot with a franchise location creates a natural opening to approach the parent brand with documented results.

15.1.4. Tactics

Direct outreach to retail decision makers. Personalized outreach to operations directors and store managers at target chains, anchored in the survey data. The 86% behavioral impact finding and the 78% staff dependency finding are the entry points for every conversation.

Warm introductions. Violette has offered to connect OnSight with the commercial director of Jules, and Alix has offered introductions within the Decathlon network. These are the highest-priority sales opportunities in Year 1 and should be activated before any cold outreach.

LinkedIn content and thought leadership. A focused LinkedIn presence targeting retail operations professionals, publishing short data-driven posts about in-store friction and retail technology ROI. The goal is credibility, not reach, ensuring that when a decision maker is introduced to OnSight, a quick search confirms it is a serious player.

Pilot case study development. From the first pilot onward, every engagement is documented. The metrics Violette identified as most compelling are tracked from day one: **conversion rate per session, staff interruption reduction, and rupture data.**

15.1.5. Execution

Month	Action
1–2	Finalize pitch deck and one-page pilot proposal. Activate warm introductions (network)
3–4	Direct outreach to 20 target franchise operators and mid-size chains in Spain.
5–6	Pilot live. Begin documenting results. LinkedIn content launched
7–8	Second pilot signed based on first results. Case study #1 published
9–12	Third pilot. Renewal conversations with pilot 1. Case study #2 published

Figure 27. Financial execution of first 12 month. Source: Own elaboration.

15.1.6. Control

Progress is measured monthly against four indicators: number of qualified leads generated, number of pilots signed, pilot satisfaction score collected via a short post-onboarding survey, and pilot renewal or expansion rate. **If the qualified lead target is not on track by month 4, the franchise network channel is prioritized more aggressively.**

16. Customer Acquisition Strategy

16.1. Customer Acquisition Cost (CAC)

In Year 1, OnSight operates with two founders, one commercial and one technical, both working on equity with no salary drawn. Acquisition costs are therefore limited to direct outreach expenses and pilot support. The setup fee charged to each client is explicitly designed to cover the customization work required per retailer and does not appear as an OnSight expense.

Cost item	Year 1	Year 2
Sales hire (part-time)	—	€24,000
Travel and meetings	€1,200	€2,400
Pitch materials and tools	€700	€1,200
Pilot support (non-billable)	€1,500	—
Total	€3,400	€27,600
Target new clients	3	5
CAC per client	€1,133	€5,520

Figure 28. CAC visual table. Source: Own elaboration.

The Year 2 increase reflects the cost of a part-time sales hire. This is expected and justified by the LTV figures below.

16.2. Lifetime Value (LTV)

The base case uses the Pro tier: €4,000 setup fee, €150 per screen per month, and €200 analytics add-on. It assumes a client starts with 9 screens and expands to 60 over 3 years, with 70% analytics adoption from Year 2.

Revenue item	Total
Setup fee	€4,000
SaaS Year 1 (9 screens)	€16,200
SaaS Year 2 (30 screens)	€54,000
SaaS Year 3 (60 screens)	€108,000
Analytics add-on (Yr 2+3)	€4,800
Total LTV (3 years)	€187,000

Figure 29. LTV over 3 years visual table. Source: Own elaboration.

If the client does not expand and stays at 9 screens for 3 years, LTV is approximately €62,000.

16.3. LTV:CAC Ratio and Payback Period

Scenario	LTV	CAC	LTV:CAC	Payback
Base case, Yr 1	€187,000	€1,133	165:1	<1 month
Conservative, Yr 1	€62,000	€1,133	55:1	<1 month
Base case, Yr 2	€187,000	€5,520	34:1	4 months

Figure 30. LTV:CAC ratio and payback period visual table. Source: Own elaboration.

A healthy SaaS business targets a LTV:CAC ratio above 3:1 and payback under 18 months. OnSight's unit economics are strong across all scenarios, confirming that the primary constraint on growth is sales capacity, not margin.

17. Economic Model and Financial Plan

This section presents OnSight's financial model across four areas: startup costs, key assumptions, a four-year cash flow projection, and key metrics. All figures are in euros and reflect the Spain-first go-to-market strategy. The full working model with adjustable assumptions is available in Appendix A.

17.1. Startup Costs

OnSight's initial cash requirements are minimal. Both founders operate on equity in Year 1 with no salary drawn, and the business operates remotely, eliminating office costs entirely.

Item	Cost
Company formation and legal (Spain)	€1,500
Initial cloud infrastructure setup	€800
Development tools and software licences	€600
Domain, branding, and basic website	€400
Prototype and demo environment	€500
Total startup costs	€3,800

The total startup requirement of €3,800 is bootstrappable by the founders without external investment, which means OnSight can reach its first paying clients without needing to raise capital.

17.2. Key Assumptions

The cash flow projection is built on a set of core assumptions consistent with the pricing model introduced in the SOM section and the CAC model in Section 17. The full assumptions table is included in Appendix A.

17.3. Four-Year Cash Flow Projection

The model assumes OnSight signs 3 pilot clients in Year 1 and grows to 32 cumulative active clients by Year 4, consistent with the SOM target of gradually capturing a small share of the Spanish market during the first four years. Revenue grows non-linearly because existing clients expand their screen deployment as the pilot proves value, which is the standard adoption pattern for retail technology identified by McKinsey (2021).

	Year 1	Year 2	Year 3	Year 4
Active clients	3	8	17	29
Total screens deployed	27	160	1,020	3,480
Revenue				
Setup fees	€12,000	€20,000	€40,000	€56,000
SaaS subscription	€48,600	€288,000	€1,836,000	€6,264,000
Analytics add-on	€0	€11,200	€50,400	€153,600
Total Revenue	€60,600	€319,200	€1,926,400	€6,473,600
Costs				
AI API and cloud hosting	€4,212	€20,800	€132,600	€452,400
Sales hire	€0	€24,000	€48,000	€48,000
Founder salaries	€0	€0	€48,000	€48,000
Customer support hire	€0	€0	€28,000	€28,000
Travel and outreach	€1,200	€2,400	€4,800	€6,000
Tools, licences, legal	€1,300	€1,690	€2,197	€2,856
Total Costs	€6,712	€48,890	€263,597	€585,256
Net Cash Flow	€53,888	€270,310	€1,662,803	€5,888,344
Cumulative Cash Flow	€53,888	€324,198	€1,987,001	€7,875,345
Gross margin	89%	93%	93%	93%
MRR (end of year)	€4,050	€24,000	€153,000	€522,000

The Year 3 and Year 4 figures reflect full rollout across client store networks. If clients do not expand beyond their initial deployment, Year 3 revenue would be approximately €180,000, still profitable but significantly smaller. The base case assumes that at least 70% of clients expand, consistent with the retention logic built into the analytics add-on.

17.4. Financing Needs

Based on the cash flow model, **OnSight does not require external investment to reach profitability.** The business generates positive net cash flow from Year 1, funded by the first three pilot contracts. Two scenarios could justify external funding as an accelerant rather than a necessity. First, accelerated European expansion before Year 3 would benefit from a seed round of approximately €150,000 to €200,000 to fund a dedicated sales hire and market localization. Second, if an enterprise retailer requires a deeper security audit or formal procurement process before signing, a small angel round of €50,000 to €80,000 would fund these requirements. In both cases, **external funding accelerates growth rather than enabling survival**, which is a meaningful advantage when negotiating with investors.

17.5. Key Financial Metrics

Metric	Year 1	Year 2	Year 3	Year 4
MRR	€4,050	€24,000	€153,000	€522,000
Gross margin	89%	93%	93%	93%
CAC	€1,133	€5,520	€5,800	€5,800
LTV (base case, 3 years)	€187,000	€187,000	€187,000	€187,000
LTV:CAC	165x	34x	32x	32x
Payback period	<1 month	4 months	4 months	4 months

The gross margin of approximately 90% is realistic for a pure SaaS business. The main variable costs are AI API usage and cloud hosting, both of which scale with screen count but do not compress margin significantly at projected volumes. The LTV:CAC ratio remains well above the 3x threshold considered healthy for SaaS businesses across all scenarios, confirming that **growth is constrained by sales capacity rather than margin.**

18. Summary and Conclusions

18.1. From Assumptions to Evidence

Every startup begins with assumptions that have not yet been tested. This project began with several, and the validation process treated each one seriously rather than assuming they would hold.

The most important leap of faith was confirmed more strongly than expected. The belief that in-store friction is not just an inconvenience but a problem painful enough to actually change customer behavior was validated by 86% of survey respondents reporting a direct negative behavioral outcome when friction occurred. This is not a marginal effect. It is a majority behavior that happens repeatedly across every store visit, and it is the commercial foundation everything else rests on.

A second assumption was also confirmed early. The belief that customers would prefer a physical screen over a brand app was validated by the survey: only 7% preferred a brand app, while 38% preferred a kiosk and 27% a QR code. This removed a significant product risk before any development investment was made.

Two assumptions changed meaningfully. The go-to-market entry point shifted from mid-size retail chains to franchise operators as the priority first segment, following Clément's observation that franchise managers can approve a pilot without navigating large corporate procurement cycles. The framing of the value proposition also changed: the original version led with customer experience, but Thibault and Violette independently corrected this, making clear that the pitch must lead with operational value for the retailer first.

One assumption was rejected entirely. The belief that staff adoption would follow naturally once the tool was deployed was disproven by Alix's direct experience at Decathlon Singapore. Staff must understand the tool, believe it makes their work easier, and actively introduce it to customers. Without that, the tool remains invisible regardless of how well it works. This is now a core activity in the business model.

18.2. Is this a viable business

Yes, based on the evidence collected across this thesis.

The problem is confirmed as real, frequent, and commercially damaging by both the customer survey and the store staff interviews across nine retail locations. The solution concept has real-world precedent, as Alix confirmed that comparable features were tested and shown to work at Decathlon Singapore. The unit economics are strong, with a LTV:CAC ratio above 30x in the most conservative scenario and a payback period under four months. The market is large and growing, with the European retail interactive kiosk segment valued at over €5 billion and expanding at 10% annually.

The most telling signal is not a number but a pattern: in every expert interview, the problems OnSight addresses came up unprompted before the solution was even described. Violette named the fitting room size-request flow as something the market has genuinely not solved. Cem confirmed that staff at major fashion chains often cannot answer stock questions confidently even when they want to. Alix described tools at Decathlon that customers never use because no one made them discoverable at the right moment. The infrastructure exists in many stores already. The customer-facing layer that makes it useful does not. That is the gap OnSight fills.

The two most significant risks are data reliability, since the stock-check feature depends on inventory accuracy that many retailers do not yet have, and staff adoption, which requires deliberate effort in every pilot. Both are manageable but neither should be underestimated.

18.3. How to scale the business

The scaling strategy follows a clear geographic and sector logic. **Spain is the launch market** for three reasons: it is the market I know best, the retail chain landscape is well documented, and the warm introductions identified during this thesis are the most direct path to a first signed contract. The goal in Spain is not to capture the full market but to build three to five reference clients with documented results.

France is the logical second market. My network is stronger there, several of the experts interviewed are based in France and have offered to help, and Jules represents a direct opening once a Spanish pilot exists with documented results.

From France, the expansion logic points toward broader Western Europe, where retail technology investment is high and where the GDPR-by-design architecture of OnSight is a commercial advantage rather than a compliance burden. **Sector expansion follows the same logic:** fashion and footwear first, grocery second, home and electronics after that, consistent with the friction data from the survey.

18.4. What this project taught me about building a startup

Three things stand out, and they compound on each other.

Talking to real people changes everything. No amount of desk research would have produced the fitting room insight from Violette, the franchise go-to-market logic from Clément, or the staff adoption warning from Alix. The interviews were the most valuable part of this entire process.

Starting simple and proving one thing is always better than trying to do everything. At multiple points the temptation was to add features and expand the scope. Thibault stopped that thinking early and it was the right correction. The version of OnSight that exists today is simpler and more focused than the one I started with, and it is better for it.

Ideas change, and that is not a weakness. The OnSight I am finishing this thesis with is meaningfully different from the one I registered in December. The go-to-market is different, the value proposition framing is different, the key partners are different. None of those changes came from sitting at a desk. They came from putting the idea in front of people who knew more than I did and listening carefully. **This thesis is not the end of OnSight. It is where it starts.**

19. AI Use Statement

In this thesis, I used generative AI as a support tool to improve the writing process. I personally selected and provided the research papers and sources used in the thesis. The AI was mainly used to help me organize ideas, structure sections, and rewrite or simplify text in clear English.

The analysis, interpretation, and final decisions are my own. I reviewed and edited all AI-assisted text to ensure it matches my arguments and my research focus. I did not use AI to generate data, results, or claims that are not supported by the sources I selected.

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21. Appendices

Appendix A — Full Financial Model with Adjustable Assumptions

Referenced in Section 18. The full working model is available as a separate Excel file: OnSight_Financial_Plan.xlsx. This file contains all formulas, scenario toggles, and adjustable inputs. The tables below present the key assumptions used to build the four-year cash flow projection for reference purposes.

Pricing

Assumption	Value
Monthly SaaS fee per screen — Basic tier	€100
Monthly SaaS fee per screen — Pro tier (base case)	€150
Monthly SaaS fee per screen — Enterprise tier	€250
One-time setup fee — Basic	€2,000
One-time setup fee — Pro (base case)	€4,000
One-time setup fee — Enterprise	€8,000
Analytics add-on — monthly per client	€200

Deployment

Assumption	Value
Average screens per client at launch (Year 1)	9
Average screens per client by Year 2	20
Average screens per client by Year 3	60
Average screens per client by Year 4	120
Analytics add-on adoption rate from Year 2	70%

Clients

Assumption	Value
New clients signed — Year 1	3
New clients signed — Year 2	5
New clients signed — Year 3	10
New clients signed — Year 4	14
Annual client churn rate	10%

Costs

Assumption	Value
AI API cost per screen per month	€8
Cloud hosting cost per screen per month	€5
Part-time sales hire — Year 2 annual salary	€24,000
Full-time sales hire — Year 3 and beyond	€48,000
Customer support hire — Year 3 and beyond	€28,000
Founder salary each — Year 3 and beyond	€24,000
Travel and outreach — Year 1	€1,200
Travel and outreach — Year 2	€2,400
Travel and outreach — Year 3	€4,800
Travel and outreach — Year 4	€6,000

Startup Costs

Item	Cost
Company formation and legal (Spain)	€1,500
Initial cloud infrastructure setup	€800
Development tools and software licences	€600
Domain, branding, and basic website	€400
Prototype and demo environment	€500
Total	€3,800

Note: Both founders work on equity in Year 1. No office costs — fully remote. Client customisation covering branding, colours, and store configuration is funded by the setup fee and does not appear in startup costs.

Appendix B — SAM Filtering Methodology and Calculations

The SAM is defined as the portion of the global TAM that OnSight could realistically serve given its product focus, geographic strategy, and go-to-market constraints. The methodology applies three sequential filters to the full European retail chain universe.

Starting point: Europe has over 9,000 retail chains operating approximately 1.9 million stores (Retail-Index, 2024).

Filter 1: Sector relevance

OnSight's value proposition is strongest in fashion and grocery, the two sectors where in-store friction is most visible and staff interruptions most costly. These two sectors represent roughly 40% of all European retail chains. Applying this filter gives approximately 3,600 relevant chains.

Filter 2: Minimum store count

OnSight is designed for multi-store deployment. Chains with fewer than 20 stores are unlikely to have the IT infrastructure, budget, or organisational readiness for a SaaS kiosk rollout. Applying this filter conservatively removes roughly 60% of chains, leaving approximately 1,440 chains.

Filter 3: Technology readiness

Discount operators such as Aldi or Lidl deliberately limit in-store technology as part of their cost model. Applying a 50% readiness discount to account for these and similar operators produces a final SAM of approximately 700 to 750 retail chains across Europe.

Revenue ceiling calculation

Using conservative SaaS pricing of €150 per screen per month, an average of 50 stores per chain, and one screen per store:

720 chains x 50 stores x €150 per month x 12 months = approximately €648 million per year.

This figure represents the annual recurring revenue ceiling OnSight could theoretically address across its European SAM at full penetration. Capturing 1 to 2% of this in the first three years represents the basis for the SOM calculation in Section 6.1.3.

Appendix C — Assumptions Matrix

Assumptions were organised across two dimensions: desirability, meaning whether customers will actually use the solution, and feasibility, meaning whether it can work in real store conditions. The matrix below lists the full set of assumptions used to prioritise validation risks.

Desirability assumptions (customers will use it)

- Customers will prefer a quick self-service option over searching for staff when facing a basic question.
- Customers will trust the answers if the information feels connected to store reality, covering stock, location, and available options.
- Customers will use the screen without needing an app, login, or onboarding process.
- Customers will feel less frustration and lower abandonment intention after using OnSight.

Feasibility assumptions (it can work in real stores)

- A screen-based interface can work in busy store conditions involving noise, speed, and distraction.
- Staff can respond to help-on-demand requests without creating disruption to their existing workflow.
- Basic integration can be achieved at the product catalogue level without requiring full POS connectivity in a first pilot.
- The solution can be designed in a privacy-safe way, focusing on aggregate interaction data rather than personal data.

Priority assessment

The highest-risk assumptions at the start of this project were the first desirability assumption (will customers actually choose self-service over staff?) and the third feasibility assumption (can integration be achieved without full POS access?). Both were addressed directly through the validation strategy: the customer survey tested the first, and the expert interviews tested the second. Results from both are presented in Sections 11 and 12 respectively.

Appendix D — Validation Metrics Dashboard

Six core metrics were tracked across adoption, efficiency, and friction reduction. These metrics were designed to be measurable within the constraints of a thesis, either through prototype testing sessions or through manager and staff reporting.

Help-request rate: The percentage of sessions that result in the customer triggering a staff request. A lower rate indicates stronger self-service resolution, but must not come at the cost of satisfaction. In prototype testing, this was observed directly by noting how many participants completed their task without using the call-staff feature.

Resolution rate without staff: The percentage of sessions where the customer gets a complete answer and does not request staff involvement. This is the primary signal of reduced staff load and directly supports H3. A high resolution rate means OnSight is absorbing repetitive questions that would otherwise require a staff member.

Abandonment intention: Self-reported likelihood of leaving without buying if the customer cannot find the product or get help quickly, measured before and after using the prototype. A reduction in abandonment intention between the two measurements is the clearest signal that H1 is holding: the interaction reduced perceived effort enough to change purchasing behaviour.

Staff interruption rate: How often staff are pulled away from floor tasks to answer basic customer questions during a given period. In the thesis context this was estimated through store staff interviews rather than direct observation. The staff interviews across nine retail locations confirmed this rate is high during peak hours across all store formats visited.

Average handling time: The time from when the customer begins the interaction to the point of resolution, whether self-resolved or via staff request. In prototype testing sessions, this was observed informally as the time taken to complete each task. All participants completed core tasks quickly, with no session requiring extended interaction to reach an answer.

Usage per day per store: The number of interactions per day in a store environment, used as a proxy for adoption rate. In a thesis context this cannot be measured directly, but participant behaviour during testing sessions and the universal willingness to reuse the tool expressed in post-session surveys provide a directional signal that real-store usage would be meaningful.

Appendix E — Interview Guide

Referenced in Section 10.1. The following pages contain the full structured interview guide used across all qualitative validation sessions, including the three-level priority structure applied to both the store staff and store manager versions.

OnSight — Interview Guide

Store Staff | Fashion Retail
Target duration: 15–20 minutes (core) | Up to 30 minutes (full)

Date:		Interviewer:	
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Name / Role:		Store:	
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Question priority guide

MANDATORY	Always ask — core data needed for every interview
GOOD TO HAVE	Ask if conversation is flowing well — adds useful depth
IF TIME ALLOWS	Skip if running short — interesting but not critical

Context and role

Q1 MANDATORY	Tell me about your role and what a normal shift looks like. What is the busiest part of your day?
Notes	

Problem — real friction moments

Q2 MANDATORY	Think about the last time a customer needed help but the interaction did not go smoothly. Walk me through exactly what happened, step by step.
Notes	

Q3 MANDATORY	What are the questions customers ask you most often, every single day? Why do you think they keep coming up?
Notes	

Q4 MANDATORY	When a customer asks for a different size or color, what actually happens behind the scenes? Where does time get lost in that process?
Notes	

Q5 MANDATORY	If you could remove one thing from your daily work right now, what would it be? What would change if it was gone?
Notes	

Solution reaction

Q6 MANDATORY	Imagine customers could request your help only when they actually want it, through a screen or QR code in the store, and you receive those requests in a clear queue on a device. What parts of your day would improve? What concerns would you have?
Notes	

Deeper dive — ask if time allows

Q7 GOOD TO HAVE	How accurate is the stock information you have access to in the moment? What happens when it turns out to be wrong?
Notes	

Q8 GOOD TO HAVE	When the store is busy, how do you decide who to help first? What makes that decision hard?
Notes	

Q9 GOOD TO HAVE	What would need to be true for you to actually trust and use a tool like that every day? And what would make you refuse to use it even if management asked you to?
Notes	

Q10 IF TIME ALLOWS	How do customers behave when they are confused or cannot find something? What signals do you notice?
Notes	

Q11 IF TIME ALLOWS	When is approaching a customer too early a problem? And when does waiting too long hurt the experience?
Notes	

Q12 IF TIME ALLOWS	If you could design the perfect support system for staff in-store, what would it look like?
Notes	

Closing and general notes

Key takeaway from this interview:

Surprising or unexpected insight:

Open to follow-up?

Yes / No Contact: _____

OnSight — Interview Guide

Store Manager | Fashion Retail

Target duration: 20–25 minutes (core) | Up to 40 minutes (full)

Date:

Interviewer:

Name / Role:

Store / Chain:

Question priority guide

MANDATORY

Always ask — core data needed for every interview

GOOD TO HAVE

Ask if conversation is flowing well — adds useful depth

IF TIME ALLOWS

Skip if running short — interesting but not critical

Context and role

Q1

MANDATORY

Tell me about your store and your role — team size, store format, and what your peak times look like.

Notes

Q2

GOOD TO HAVE

What does a great day in your store look like? And what are the things that most commonly ruin it?

Notes

Problem — friction and lost sales

Q3

MANDATORY

What are the biggest frictions customers face in your store right now? Give me a recent real example of a customer journey that ended in frustration or a lost sale.

Notes

Q4

GOOD TO HAVE

Where do you think you lose the most sales in-store? Is it sizing and stock, waiting for help, confusion about layout, or something else?

Notes

Q5 MANDATORY	Which of those frictions are accidental (you want to fix them) and which are actually intentional? Do you ever want customers to browse or discover on their own?
Notes	

Q6 GOOD TO HAVE	What are the biggest time sinks for your team today? What tasks consume effort without creating real value?
Notes	

Q7 GOOD TO HAVE	What tools or systems does your team use today, and where do they fail in terms of accuracy, speed, or adoption?
Notes	

Decision making and approval

Q8 MANDATORY	Who would need to approve a pilot of a new in-store technology, and what would they need to see to say yes? What does that decision-making process look like?
Notes	

Solution reaction

Q9 MANDATORY	I want to share a concept with you. Imagine a simple solution that lets customers check size and stock availability, locate items in the store, and request help only when they choose. Staff receive those requests in a prioritised queue. What do you like about this? What concerns you?
Notes	

Q10 IF TIME ALLOWS	What risks do you see for the customer experience, the brand feel, staff workload, or anything else?
Notes	

Q11 GOOD TO HAVE	What conditions would need to be true for this to actually work in your store? Think about stock data accuracy, integration with your systems, staff training, and layout.
Notes	

Q12 GOOD TO HAVE	Where would you test it first in the store, and why that location?
Notes	

Success and measurement

Q13 MANDATORY	What KPIs would you use to judge whether it is working? What improvement in those numbers would be enough to justify expanding it?
Notes	

If time allows

Q14 IF TIME ALLOWS	If you could redesign the in-store experience from scratch, what would you keep exactly as it is — and what would you change?
Notes	

Closing and general notes

Key takeaway from this interview:

Surprising or unexpected insight:

Open to follow-up?

Yes / No Contact: _____

Appendix F — Customer Survey Questions, Full Demographic Breakdown, and Supporting Survey Data

The survey was distributed to shoppers of fashion, footwear, and sports retail stores and collected 111 responses. It consists of 15 questions organised across three parts: respondent profile and shopping frequency, problem measurement covering friction frequency, pain level, and behavioural impact, and solution validation covering perceived usefulness and preferred format of a self-service in-store tool.

In-store shopping friction

We are conducting a Final Degree Project on the shopping experience in physical stores for fashion, footwear, and sports

products. This research is part of our academic study. The survey is anonymous, consists of 15 questions, takes about 5 minutes, and there are no right or wrong answers; we are interested in your opinion and personal experience.

ES: Si necesitas traducir este cuestionario, utiliza la función “Traducir” de tu navegador (normalmente en el menú de tres puntos arriba a la derecha).

CAT: Si necessites traduir aquest qüestionari, utilitza la funció «Traduir» del teu navegador (normalment al menú de tres punts a dalt a la dreta).

FR: Si vous devez traduire ce questionnaire, utilisez la fonction « Traduire » de votre navigateur (généralement dans le menu à trois points en haut à droite).

* Necessària

Profile

1. Age *

- <18
- 18-24
- 25-34
- 35-44
- 45-54
- 55+

2. How often do you shop in physical fashion, footwear, and sports stores? *

- Daily
- Weekly
- Monthly
- Seasonal
- Yearly
- Never

Context

3. Think about a recent visit to a physical fashion/footwear/sports store. What was your main objective? *

- To buy something specific (I knew exactly what I wanted)
- To browse / get inspiration / see new arrivals
- To try sizes / fit
- To pick up / return an order
- Autres

4. Did you end up buying something? *

- Yes
- No
- I bought, but was disappointed with the experience
- I don't remember

5. If you did NOT buy anything, why not?

- I couldn't find the right size/color/model
- I couldn't find help when I needed it
- There were long queues / waiting times
- I felt pressured by sales staff
- It wasn't clear where things were
- Price
- Autres

Problem measurement (frequency + pain + cost)

6. In physical fashion/footwear/sports stores, how often does this happen to you? *

Never Rarely Sometimes Often Almost always

- I can't find my size/color even though the product is on display
- It takes time to find someone to ask for help
- I'm offered help when I don't want it (it interrupts my flow)
- I don't know whether the item is in stock or where it is (store/backroom)
- I get lost / it's not clear where what I'm looking for is
- I end up checking on my phone (website/market place) inside the store to solve it

7. When something makes your purchase more difficult in-store, how much does it bother you? (1-5) * 1. It doesn't bother me 2 3 4 5. It bothers me a lot

- I can't find my size/color even though the product is on display
- It takes time to find someone to ask for help
- I'm offered help when I don't want it (it interrupts my flow)
- I don't know whether the item is in stock or where it is (store/backroom)
- I get lost / it's not clear where what I'm looking for is

8. What real impact does this dissatisfaction usually have on you? *

- Nothing happens, I keep shopping anyway
- It takes longer, but I still buy
- I buy less or switch products
- I go to another store
- I leave and buy it online (same brand or another one)
- I abandon the purchase

9. Approximately, how many minutes are you willing to wait to receive help when you need it? *

- 0–1 min
- 2–3 min
- 4–5 min
- 10 min
- 10+ min

10. When you can't find your size/model, what do you do? *

- I ask staff
- Look at signs/tags and manage on my own
- I buy it “even if it’s not perfect”
- I buy it online
- I leave without buying
- Autres

Solution validation (desirability)

11. Imagine that in the store you can use a screen/kiosk or a feature in the app to: Check whether your size/color is in stock • Request help “whenever you want” • Locate products on a store map • Leave quick feedback

How useful would that be for you? (1–5) * 1. Not useful 2 3 4 5. Very useful

- Check whether your size/color is in stock
- Request help “whenever you want”
- Locate products on a store map
- Leave quick feedback

12. Which features would you actually use? *

- Check available sizes/stock
- Locate the product (map/aisle)
- Request help and have someone come
- Request that a size be brought to the fitting room
- Recommendations (“if you like X, try Y”)
- Rate the experience / report that something is missing
- I would not use any of this

13. Which format would you prefer? *

- Screen/kiosk in the store
- Brand/retailer app
- QR code to open a quick website (without installing an app)
- I don't mind the format as long as it works well
- Autres

Closing

14. In which stores does this also happen to you? *

- Supermarket / grocery
- Cosmetics / pharmacy
- Electronics / technology
- Home / decoration / DIY
- Bookstore / stationery
- Department store / multi-brand
- Autres

15. Tell us about the last time a problem in a store made you lose time or abandon a purchase. What happened?

16. If you are open to a 15-minute interview, please leave your email.

Full demographic breakdown

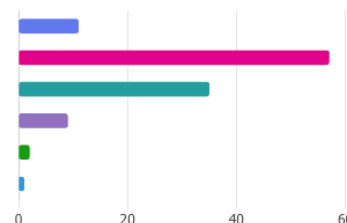
- Total responses: 111
- Age groups: 18 to 24 (35%), 25 to 34 (17%), 35 to 44 (12%), 45 to 54 (11%), 55 and above (25%)
- Shopping frequency: seasonal (59%), monthly (23%), weekly (13%), rarely (5%)
- Most recent visit: completed a purchase (66%), did not buy anything (31%)

Waiting time tolerance data

Of respondents, 81% reported expecting assistance within 2 to 5 minutes before giving up. This data point, which was moved from Section 11.6 in the main document, is included here in full for reference.

9. Approximately, how many minutes are you willing to wait to receive help when you need it?

• 0-1 min	11
• 2-3 min	57
• 4-5 min	35
• 10 min	9
• 10+ min	2
• Autres	1



Appendix G — SOM Year-by-Year Assumptions

The following assumptions underpin the three-year revenue model for Spain presented in Section 6.1.3. All figures use the Pro tier as the base case at €150 per screen per month, with a one-time setup fee of €4,000 per client.

Base scenario assumptions

Year 1: 3 pilot chains signed, average of 10 stores per chain, 1 screen per store, Pro tier pricing, no analytics add-on in Year 1. Total screens deployed: 30. Setup revenue: €12,000. Monthly SaaS revenue at end of Year 1: €4,500. Full-year SaaS revenue: €27,000. Total Year 1 revenue: approximately €39,000.

Year 2: 5 new chains added, giving 8 live chains in total. Average screens per client grows to 20 as initial pilots expand within the same chain. Mix of Basic and Pro tier. Analytics add-on adopted by 30% of clients. Total screens deployed: approximately 160. Monthly SaaS revenue at end of Year 2: €24,000. Total Year 2 revenue: approximately €296,000.

Year 3: 10 new chains added, giving 18 live chains in total. Average screens per client grows to 30. Mix of all three tiers. Analytics add-on adopted by 40% of clients. Total screens deployed: approximately 540. Monthly SaaS revenue at end of Year 3: €153,000. Total Year 3 revenue: approximately €6,655,000.

Cumulative three-year revenue across Spain: approximately €8.175 million.

Key assumptions and sensitivities

The model is most sensitive to two variables: the number of new clients signed per year and the average number of screens per client. A slower sales cycle in Year 2, for example signing 3 new clients instead of 5, reduces cumulative three-year revenue by approximately 30%. Conversely, a faster rollout within existing clients, averaging 40 screens by Year 3 instead of 30, increases Year 3 revenue by approximately 25%. These sensitivities confirm that client retention and screen expansion within existing accounts are as commercially important as new client acquisition.

The full working financial model with all adjustable inputs is available in Appendix A.

Appendix H — OneDrive link with all other information

Includes interview recordings, unprocessed survey results, financials and others...

- [TFG - Interview, survey, financials. etc](#)