

Summary of the user interviews

We have conducted a user interview with two people in leading positions from the company Kispatak 2000. They expressed their interest in our project as well as providing a multitude of ideas and suggestions for the features of our product.

Our findings approved our hypotheses that receiving information about areas of low and high traffic inside a store would be of value to a retail owner. Our interviewees explained that they could use this information for improving the layout of their shop, for example, they would leave a larger open space in areas of high traffic and a smaller space where the traffic is generally lower. They could also recognize areas that fall out of the route of a typical customer, meaning that the products in that area are less likely to be sold. With this information they could rearrange the store in such a way that would make customers reach all parts of the store more equally.

In addition to this, they have also provided some new ideas about ways we could expand on the functionalities of our product. They were interested to use our software to improve the security of their stores. One of the examples they gave was that in case of something being stolen from the shop they would like our software to be able to find the frame in the video footage when that item disappeared from the shelf. They would also like our software to be able to follow the person who took that item through multiple cameras, generating their complete trajectory in the shop.

They were also interested in detecting products being stolen by not being shown to the cashier (either leaving them in the basket, or putting them down on the ground and pushing it through the checkout).

Lastly, they suggested that another use-case for our product could be detecting the number of people in the queues behind the cashiers and notifying to open a new checkout desk in case of the queues getting too long.

Updated user hypotheses

Based on the user interview we can update the Retail Manager part of our user hypotheses.

Retail Manager Rachel: Rachel is a retail store manager in her late 30s with a background in business management and experience in retail sales. She is interested in optimizing her store's layout and product displays to increase sales and enhance customer experience. Rachel is also keen on improving her store's security by using AI-driven solutions to detect and handle theft more effectively.

Rachel wants to use VigilHeat to:

- Analyze customer behavior and interactions with different products to determine which items are generating the most interest or attention.
- Monitor high and low traffic areas in the store for optimizing store layout and product placement.
- Track queue lengths at cash registers for better resource management and improved customer experience.
- Detect potential theft incidents by identifying the exact time an item disappeared and following the route a potential thief has taken through the store.
- Receive real-time alerts for theft incidents and other security issues.

Rachel values data-driven insights to improve business operations, achieve sales goals, and enhance store security.

Changes: She maintains a desire to analyze customer behavior and interactions with different products, adding:

- Optimize store layout and product displays.
- Improve store security and handle theft with AI.
- Monitor queue lengths at cash registers.
- Get real-time alerts for security issues.

Retail Manager Mark: Robert is a retail manager who is primarily focused on managing peak hours and reducing queue problems in his store. He is in his early 40s, with a background in retail operations and customer service. Robert is interested in using VigilHeat to monitor customer flow during peak hours, identify patterns in customer behavior, and predict when peak hours are most likely to occur. He also wants to use VigilHeat to monitor queue lengths and receive real-time alerts to open new checkout lanes when needed. Robert values data-driven insights to improve customer experience and maintain efficient store operations during busy times.

Changes: His profession is modified to bring it closer to the current scope of the project:

- Manage peak hours and reduce queue problems.
- Improve store security and handle theft with AI.
- Monitor queue lengths at cash registers.
- Monitor customer flow and predict peak hours.

Mall Operations Manager Catherine: Melanie is an operations manager responsible for managing a large shopping mall, which includes multiple retail stores, entertainment venues, and dining options. She is in her late 40s and has a background in facility management and operations. Melanie is interested in using VigilHeat to monitor and optimize the flow of people throughout the mall, particularly during peak hours, to ensure a comfortable and enjoyable experience for visitors. She also wants to use VigilHeat to manage queues at popular venues and minimize congestion in common areas.

Changes: Her profession is modified to bring it closer to the current scope of the project:

- Manage large shopping mall with multiple stores and venues.
- Monitor and optimize people flow during peak hours.
- Manage queues at popular venues, reduce congestion.

User Stories

High priority user stories address the most critical aspects of their objectives, while medium and low priority stories provide additional value in achieving her goals.

Retail Manager Rachel

High Priority

- As a retail manager, I want to monitor high and low traffic areas in the store, so I can make informed decisions on store layout and product placement.
- As a retail manager, I want to receive real-time alerts for potential theft incidents, so I can take immediate action and prevent loss.
- As a retail manager, I want to analyze customer behavior and interactions with products, so I can determine which items are generating the most interest or attention and optimize product displays accordingly.

Medium Priority

- As a retail manager, I want to track queue lengths at cash registers, so I can manage resources effectively and improve customer experience.
- As a retail manager, I want to review the exact time an item disappeared from the shelf during a theft incident, so I can better investigate and gather evidence.

Low Priority

- As a retail manager, I want to follow the route a potential thief has taken through the store, so I can understand their behavior and implement preventive measures.

Retail Manager Robert

High Priority

- As a retail manager, I want to monitor customer flow during peak hours, so I can identify patterns in customer behavior and make informed decisions about store layout and staffing.
- As a retail manager, I want to predict when peak hours are most likely to occur, so I can plan staff schedules and store resources accordingly.
- As a retail manager, I want to receive real-time alerts when queues exceed a certain length, so I can open additional checkout lanes and reduce customer waiting times.

Medium Priority

- As a retail manager, I want to analyze the efficiency of different checkout lane configurations during peak hours, so I can implement the most effective layout to handle high customer traffic.
- As a retail manager, I want to review the efficiency of staff performance during peak hours, so I can identify areas for improvement and provide targeted training.

Low Priority

- As a retail manager, I want to track customer satisfaction levels during peak hours, so I can ensure that our store is meeting customer expectations despite increased traffic.

Retail Manager Robert

High Priority

- As a mall operations manager, I want to monitor the flow of people throughout the mall during peak hours, so I can identify areas of congestion and make informed decisions about facility layout and resource allocation.
- As a mall operations manager, I want to receive real-time alerts when queues at popular venues exceed a certain length, so I can allocate staff and resources to address the issue and maintain a positive visitor experience.
- As a mall operations manager, I want to analyze the efficiency of different facility layouts during peak hours, so I can implement the most effective design to accommodate high visitor traffic.

Medium Priority

- As a mall operations manager, I want to analyze the efficiency of different facility layouts during peak hours, so I can implement the most effective design to accommodate high visitor traffic.
- As a mall operations manager, I want to predict when peak hours are most likely to occur, so I can plan staffing and resource allocation accordingly.

Low Priority

- As a mall operations manager, I want to review the performance of security personnel and other staff during peak hours, so I can identify areas for improvement and provide targeted training.
- As a mall operations manager, I want to track visitor satisfaction levels during peak hours, so I can ensure that our mall is meeting visitor expectations despite increased traffic.