

Improving the customer experience in SDU

Introduction

What is associated with the first queue for an SDU student? The answer is, of course, queues, a long queue in a small market space. The purpose of this project is to improve the purchasing experience of the average student in the SDU market. On this basis, we conducted a survey, observation and data analysis. According to the results of which key problems were identified and solutions were proposed.

1. Problem research

Based on the survey results, several key problems faced by students in the SDU market can be identified:

- **Long queues:**
Most respondents report frequent cases of waiting in long queues, especially during rush hours. This often leads to a negative shopping experience and students refusing to shop.
- **Narrow passages:**
Narrow passages in the market make it difficult to move and create additional delays, especially during heavy traffic hours. This problem is especially noticeable when drinks are selected from the refrigerator, next to which one of the cash registers is located.
- **Problems with the availability of goods:**
Many respondents note that they cannot find the right product, which also affects their purchase decision.
- **Poor network:**
Poor communication quality in the market sometimes makes it difficult to use mobile applications to pay for goods.

2. Data analysis

Based on the collected data from the survey and personal observations, the following conclusions can be drawn:

1. **Probability of purchase:** 71.4% of respondents are ready to buy gum if it is located next to the cash register, which indicates impulsive purchases, especially when waiting in line.
2. **Attracting goods:** 42.9% of respondents prefer quick snacks (snacks, drinks), which indicates a high interest in convenient and fast food options.
3. **Important factors in choosing:** Convenience of selection and availability of goods on sale, as well as the speed of service are the most important factors for 71.4% of respondents.
4. **Problems with finding goods:** 71.4% of respondents face difficulties in finding the right goods, which indicates the need to improve navigation and accessibility of information about goods.
5. **Stock preferences:** 71.4% of respondents are interested in repeat purchase promotions, which can be a good strategy to attract customers.
6. **Using the mobile app:** 100% of respondents noted that it would be convenient for them to use the mobile app for pre-ordering, especially if there were no queues.
7. **Suggestions for improvement:** The majority of respondents (57.1%) suggested adding more cash registers or employees, as well as introducing a mobile app for pre-orders, which can significantly improve the shopping experience.

Recommendations

- Space optimization: Consider the possibility of expanding the aisles and improving the organization of space in the dining room.
- Increase the number of cash registers: Increase the number of cash registers or introduce self-service to reduce waiting times.
- Mobile application: Develop and implement a mobile application for pre-ordering and receiving information about products.
- Improved Navigation: Provide clearer navigation and accessibility of product information so that students can find the products they need faster.

3. Prototyping

Based on all the collected results from the analysis, several prototypes can be proposed to improve the customer experience in the SDU market:

Mobile application:

- **Functions:** Pre-ordering food, viewing the menu, information about the availability of goods, the ability to receive notifications about the readiness of the order.
- **Design:** User-friendly interface with the ability to filter products by category (drinks, snacks, etc.) and display current promotions.

Improved navigation:

- **Interactive maps:** Installation of screens with dining room maps showing the location of goods and cash registers.
- **Pointers:** Bright pointers that help students quickly find the right products.

Space optimization:

- **Wide Aisles:** Redevelop the space to create wider aisles to reduce congestion.
- **Self-service areas:** Create separate areas for quick snacks and self-service to speed up the shopping process.

Queue management system:

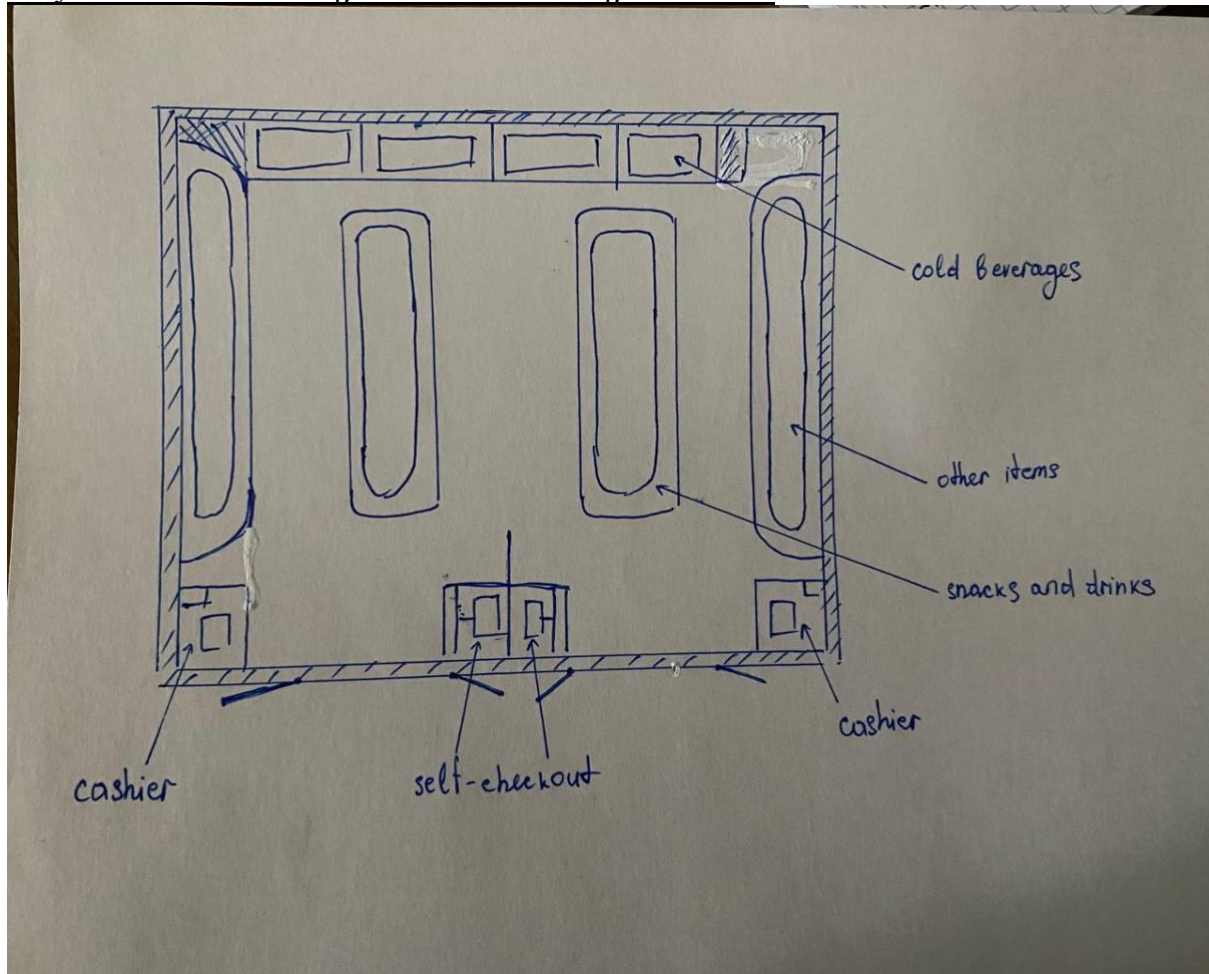
- **Electronic queue:** Implementation of a system that allows students to sign up for a queue through a mobile application in order to avoid waiting on the spot (Example: Kaspi postamata).

4. Evaluation of solutions

These methods can be used to evaluate the solutions we have proposed:

1. **User testing:** Conducting testing of the mobile application with real users to get feedback on its convenience and functionality.
2. **Observation:** Monitoring the behavior of students in the cafeteria after the implementation of changes to assess how they affect waiting time and overall satisfaction.
3. **Surveys:** Conducting surveys among students after the introduction of new solutions to gather opinions on how much their shopping experience has improved.
4. **Data analysis:** Comparison of data on waiting time and the number of purchases before and after the introduction of changes to assess the effectiveness of the proposed solutions.

Storyboard: Student Visiting SDU Canteen During Peak Hours



Scene: Entering the Canteen (Peak Hours)

Visual: The student enters through one of the two doors (left or right), noticing a crowded space with many other students.

The canteen is bustling with activity; students are in lines at the cashier and browsing the shelves.

Action: The student hesitates for a moment, unsure if they should join the long line at the cashier or wait for the self-checkout.

2. Scene: Observation of the Self-Checkout

Visual: The student notices the self-checkout station in the middle of the room, which has no line at the moment.

The self-checkout station is clearly visible and easily accessible, with enough space around it for students to approach comfortably.

Next to self-checkout station, they see the traditional cashier with a line of students waiting.

Action: The student decides to walk toward the self-checkout, relieved by the lack of a queue.

3. Scene: Browsing Snacks (Side Shelves)

Visual: The student walks along one of the side shelves that are stocked with snacks (chips, candy, etc.). The space is organized, and there is plenty of room to move around.

The shelves are positioned along the sides of the room, with clear aisles between them, making it easy for the student to navigate even in a crowded space.

Action: The student picks up a few items quickly, enjoying the fact that they don't have to squeeze through crowded areas or wait for other students to finish browsing.

4. Scene: Picking a Drink from the Refrigerators

Visual: The student moves toward the back corner of the canteen where the refrigerators with cold drinks are located.

The refrigerators are well-organized, and there is no crowd blocking the student's access.

The student opens the fridge, grabs a drink, and heads towards the self-checkout.

Action: The student is pleased with the efficiency and organization of the layout, as there's no congestion in the drink section either.

5. Scene: Using the Self-Checkout

Visual: The student approaches the self-checkout station, which is located centrally in the room.

The station is designed to handle multiple students at once, with enough space for each student to scan and pay for their items independently.

The interface is user-friendly, with an easy scanning process for items.

Action: The student scans their snacks and drink, pays using Kaspi QR, and receives their receipt.

6. Scene: Leaving the Canteen

Visual: After completing the purchase, the student leaves the canteen through the same door they entered, noticing that the queue at the cashier is still long, but they had a smooth experience using the self-checkout.

Action: The student feels satisfied with the quick and efficient process and exits with their items, thankful for the streamlined layout that helped avoid the long wait.

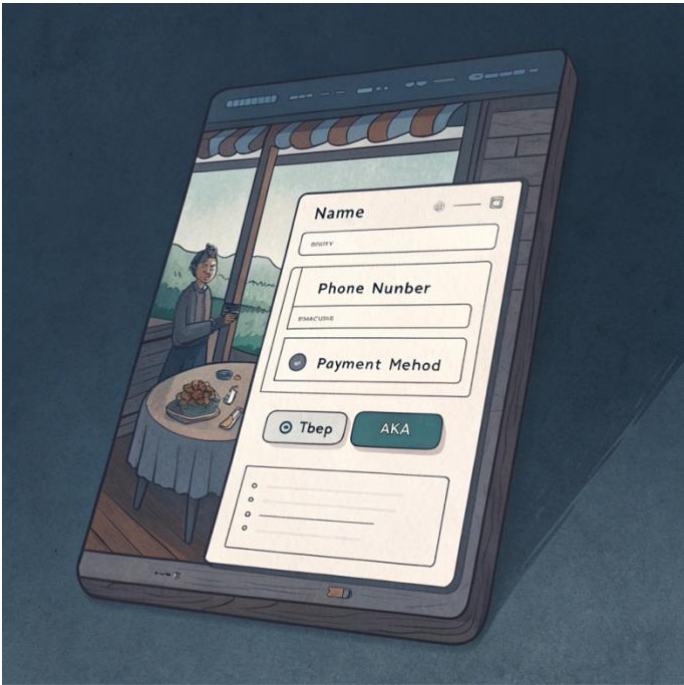
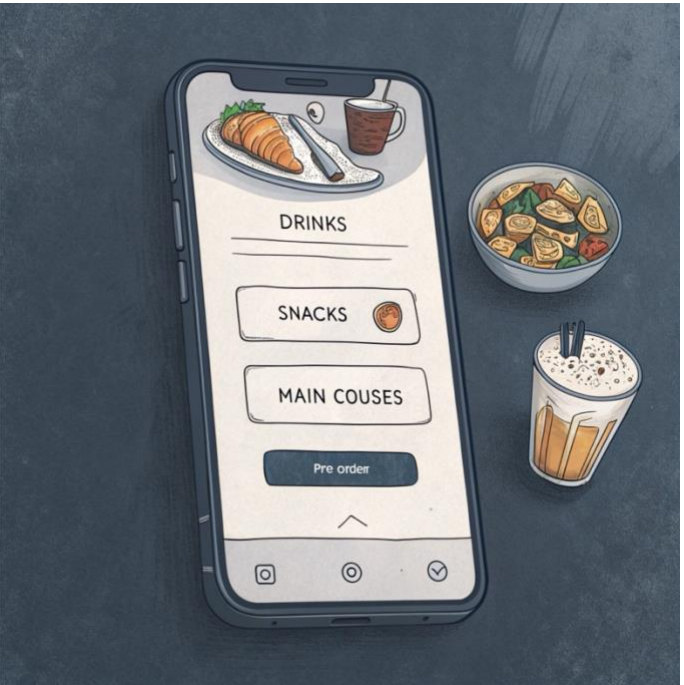
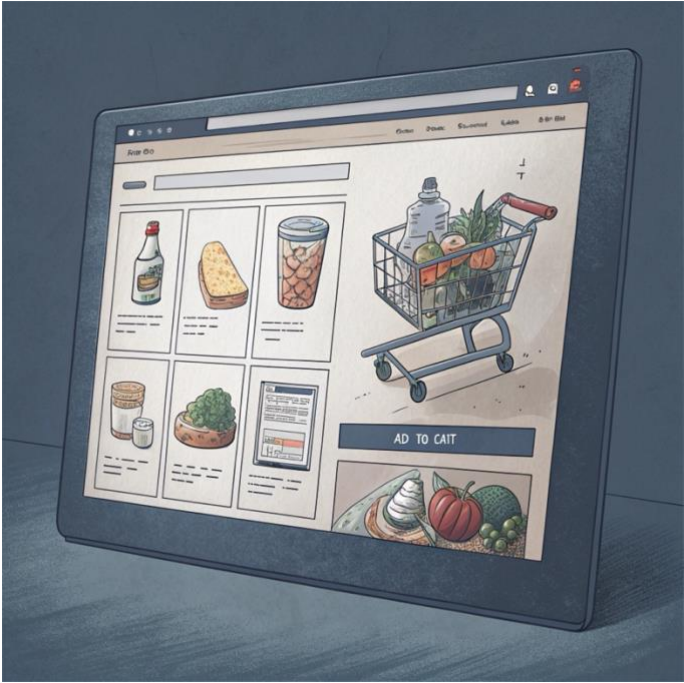
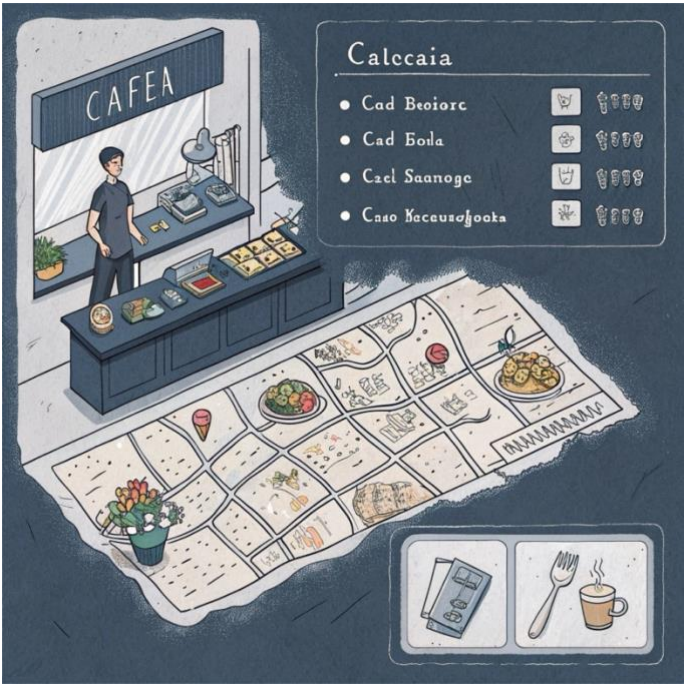
Key Benefits of the New Layout During Peak Hours:

Self-checkout Station: Reduces wait times by offering an alternative to the traditional cashier line.

Clear Navigation and Space: Allows for smooth movement even during busy hours, with enough space between shelves and payment stations.

Organized Sections: Snacks and drinks are easy to access, with no bottlenecks, allowing students to shop quickly and efficiently.

Efficient Flow: The layout ensures that students don't have to wait in long lines, improving the overall shopping experience during peak times.



References to materials

Presentation |

https://www.canva.com/design/DAGXCbTYkgI/9VS6Wf1g0LNXsfF23XLtvq/edit?utm_content=DAGXCbTYkgI&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

Task flow diagram |

https://www.canva.com/design/DAGXCp6WENM/wxmV-f2SbnRvYv-pox-Rg/edit?utm_content=DAGXCp6WENM&utm_campaign=designshare&utm_medium=link2&utm_source=sharebutton

Survey results |

<https://docs.google.com/spreadsheets/d/1n94xuwVbuiSicQTVEnfoOaSGaUBImYOOQ5BLWv8PDq4/edit?usp=sharing>

Roles of team members

- **Altynbek Adilkhan:** [220107089] Responsible for conducting surveys and collecting data. He processed the results and prepared an analysis. He has prepared all the documentation.
- **Tumabayev Ali:** [220107023] Designer. Artist. He worked on visual elements and navigation. I created a prototype and an application interface.
- **Toktassynov Akzhol:** [220107120] Designer. He processed the results and prepared an analysis.