

Introduction

A discount grocery chain in Germany has been providing self-service checkout terminals for several years. This makes it one of the companies in Germany that recognized and implemented the benefits of self-checkout technology at an early stage.

For the retailer, self-service checkouts create more checkout capacity without having to hire additional staff. Also, transaction times at these terminals are shorter, especially for small orders. For the shoppers, the customer experience is enhanced as there is no need to line up at a conventional checkout, which means that checking out can be completed more quickly.

Services:

- Pyramid project team identifies current weak points.
- Modifications, optimizations and innovations are taken into account in the redesign.
- Reduction in manufacturing, installation and maintenance costs.

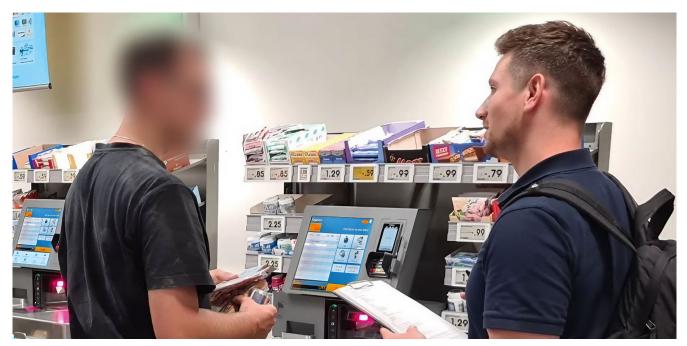


Self-service technologies on the rise

Self-service technology has progressed continuously over the years. At the same time, consumer acceptance and openness towards self-checkout has increased noticeably. In view of this, our retail client decided to add more self-checkout systems in stores and to increase their number throughout the store network with a new supplier. In order to identify a suitable developer and manufacturer for the new generation of terminals, the retailer launched a bidding round. Pyramid Computer participated as a bidder.

In the initial meeting, the client presented their current self-service terminal to Pyramid's development team, which consisted of a business development representative, product manager, project manager and product designer. Following this exchange, Pyramid drew up an extensive list of questions, to ascertain the experiences the client had gained with their current terminal as well as their requirements for the next solution. Where do the customer's decision-makers see potential for improvements in the technical design of the current self-checkout system, and in its visual design? The questionnaire also took into account the expertise of store employees and of the technical support employees who maintain the terminals.

For an in-depth analysis, the Pyramid project team examined the actual consumer usage behavior at the current terminals in three stores. Using a checklist that divided the checkout process into 19 individual steps, detailed observations of the self-checkout processes were collected: what is done to prepare for scanning and how is the scanning process organized? How are the scanned items handled, and what are the steps to complete the payment process?



Member of the Pyramid project team during the customer survey at the discount grocery store

The Pyramid project team also surveyed 50 consumers from different age groups. This provided additional insights into the usability of the current self-checkout solution. For example, a statement made by numerous customers that the symmetry of the terminal gave them the flexibility to move items from left to right as well as from right to left for scanning was important for the further course of the project.

The findings from the analysis of the questionnaire, the customer observation and the customer feedback formed the basis for the further decision-making process. When it came to the question of either adapting a product from Pyramid's portfolio to the customer's requirements or redesigning the current self-checkout terminal, the redesign emerged as the optimal solution for the following reasons.

Findings of the customer survey

- The current terminal was found to be a suitable platform for the planned extensive modernization via modifications and adaptations.
- Consumers would receive a completely redesigned terminal whose underlying technical design is, however, familiar to them. This means they will not have to relearn or adapt, which is an important aspect especially for elderly customers, to retain their acceptance of self-checkout at these discount stores.
- Our client was keen to build on the design of the previous self-checkout solution, because it had become established as a positive and recognizable part of their brand identity.
- Taking all parameters and objectives into account, the most cost-effective solution in this case was to modernize the existing design and technology elements and add new ones.

The next generation SCO terminal

Several working sessions were attended by the customer and Pyramid to make decisions on the next-generation self-checkout terminal. The desired modifications, optimizations and innovations were partly the initiative of our customer and partly the initiative of Pyramid.

One of the main goals of the redesign was to reduce the weight of the terminal. To this end, one of the most obvious changes of the entire redesign was made to the body. The new-generation body is much slimmer and less heavy.

Another striking modification relates to the installation of the peripheral modules. The display, payment module and scanner are no longer all housed in a common chassis, but are installed in open distribution. As the current modules are more visually appealing than their predecessors, there is no longer any need to integrate them. Another advantage of the open installation: replacing a module that is defective or has reached the end of its useful life is quicker and therefore more cost-efficient. In addition, the open installation further reduces the weight of the terminal.

Small but important modifications were made to the printer and the bag holder: The printer, which was previously housed in its own casing, is now embedded in the countertop. This redesign saves even more material. The new positioning also makes it easier to change the paper roll, which minimizes maintenance work and terminal downtime. To protect the printer from liquids that can escape from damaged items during the scanning process, it is raised slightly above the countertop.

Finally, the bag holder has been rotated, so that the bag design faces the customers. This means more effective marketing for the brand, whose logo is now even more present in the store.

The successful redesign

The modifications and innovations described above are just a few of the numerous measures that contributed to the successful redesign of the existing platform. The redesigned version of the terminal is a prime example of the extent to which the success of a project depends on choosing the right partner. There were several reasons why this discount retailer chose Pyramid as the developer and manufacturer for their next generation of terminals.

Firstly, Pyramid's ability to create a cost-effective solution through design simplifications and modifications (slimmer body, open installation of peripheral modules) was decisive.

Secondly, Pyramid demonstrated a high level of creativity and solution orientation within the boundaries of the desired redesign with regard to implementing the client's requirements and contributing its own innovative ideas.

Thirdly, the discounter was impressed by Pyramid's analytical and holistic approach. A unique selling point compared to the competition was Pyramid's approach of starting the project with a detailed questionnaire, observation of user behavior at the terminal and direct consumer surveys. This method ensured that the perspective of the retail client as well as its customers was incorporated into the development and optimization of the new terminal generation.

The redesign is characterized, among other things, by considerable material savings, lower weight, a more appealing visual design, completely modernized peripheral modules, and reduced manufacturing, installation and maintenance costs.

Pyramid Computer is proud to support a major grocery discount chain in Germany with technology solutions. The stores will be equipped with approximately 1000 new self-checkout terminals phased in over the next five years.



Initial installation of the POLYTOUCH® Express cash registers

Pyramid Computer GmbH and its brands – AKHET®, FAYTECH® and POLYTOUCH® – provide solutions for the comprehensive digitalization of entire branches.

The POLYTOUCH® brand offers tailor-made kiosk solutions thanks to maximum modularity. We get the best out of self-checkin and self-checkout, self-ordering and indoor localization!