

Digitalization and Innovation Practices

Entrepreneurial Ecosystem

Migros Up

Migros Up is an innovation program that promotes the development of innovative solutions by enabling external entrepreneurial talent and in-house specialists to collaborate as a single team. Through the program, strategic partnerships are established with entrepreneurs to address diverse functional needs, while fostering a company-wide culture of innovation. A total of 102 co-innovation proposals were received during the 2025 call for applications cycle; 19 co-innovation projects have been completed to date. Migros is aiming to increase this number to 23 by the end of 2026.

Migros Up 2025 project highlights:

- **Green Lentil Protein Chips** is high-protein vegan snack was co-developed with Yummate using Migros' domestically-sourced green lentils. The chips are available in three flavors and are sold under the "Only At Migros" label.
- In collaboration with **Farmhood** within the scope of the EIT Food Straight to Market project, functional snack products were developed by freeze-drying tomatoes and apples withdrawn from sale in Migros stores and enriching them with protein derived from sesame.
- **The MigRobot** project aims to automate part of the workflow inside a selected Migros distribution center. Working together with Patika Robotics, the team is developing an autonomous vehicle that moves around the facility on its own. Project goals are to reduce the time employees spend picking up and putting down handheld terminals and to lessen the physical effort required to pull pallet jacks. A MigRobot can collect orders for two stores at the same time and carry loads of up to one ton. Hardware production and software development are currently in progress.



- In the **My Customer project**, Migros partnered with The Clico to analyze customer communication data from store-level customer reports, surveys, WhatsApp messages, live chat interactions, and similar channels. Using artificial intelligence (AI) and large language models (LLM), this feedback was analyzed and an interface that provides stores and business units with actionable insights and recommended next steps was developed.
- In **Product Carbon Footprint Project**; Migros is collaborating with Carbonsmart to calculate ISO 14067 standard-compliant greenhouse gas emissions across individual products' lifecycles. Development of a supporting software platform featuring a user-friendly interface and AI-enabled calculation algorithms is currently in progress.

Customer-Focused Innovation

MGo and 24/7 Vending Solutions

Migros' MGo format was created to provide a contactless, rapid, and innovative shopping experience in high-traffic areas such as workplaces and office plazas. By utilizing minimal-footprint

layouts, these units offer a dynamic product portfolio combined with advanced mobile payment solutions. In 2025, 11 MGo were installed in five different locations. Locally manufactured MGo, currently under testing at the Migros R&D Center and is supported by a strategic rollout plan to increase market penetration.

Two new Migros 24/7 vending machines were set up in 2025, bringing the total number of active installations to 85. Through the operations of MGo and 24/7 vending solutions, Migros is currently delivering rapid, reliable, and uninterrupted self-service retailing to customers at 96 locations across Türkiye.

Migros Deniz Market

Delivery services are provided by Migros Deniz Market (Sea Store) to islands and remote bays without road access in the Fethiye and Göcek seaside resort regions. Customers may place orders through Migros Sanal Market and by telephone. Migros Deniz Market provides yachters and vacationers with a premium shopping experience and a selection of more than 3,500 items ranging from fresh produce, meat, fish, and delicatessen to ice and freshly-baked bread.

Business Process Efficiency Enhancement

Through its technology-driven and innovation-focused approach, Migros develops AI-supported solutions and integrates them into operational processes both to increase customer satisfaction and to enhance business process productivity. 2025 project highlights are presented below.

Electronic Labels: As part of the digitalization of product price labeling, the installation of electronic shelf labels surpassed initial targets of 775 stores in 2025 which had originally been planned and installations were successfully completed at 816 stores. By 2030, it is aimed to include 90% of stores in the electronic labeling process.

Kaptan: Kaptan is a dedicated platform for the delivery of Migros' corporate mobile applications. The number of apps available at the store reached 50 in 2025. Kaptan's five most frequently-used apps have been downloaded more than 13 million times so far.

Jet Kasa 3.0: Jet Kasa 3.0 self-checkout counters continue to be deployed to help reduce checkout aisle waiting times and enhance the customer experience. New units installed at 530 stores in 2025 brought the total number to 796.

Robotic Process Automation (RPA): Software robots are utilized in the performance of high-priority and high-volume but repetitive tasks to increase operational process efficiency and reduce the likelihood of error. Routine-task RPA also improves employee time management and ensures that operational processes are carried out faster, more consistently, and with greater oversight. Total workload shifted to RPA systems averaged 8,347 hours a month across the company during 2025.

Financial System Digitalization: With the project, the transition of 17 modules to the new system has been completed. During the hypercare period, support for the related operations continues.

Legal Affairs Department Digitalization: All Legal Affairs Department tasks and documentation processes have been fully transitioned to a digital platform. This system has been commissioned and is now in active use.

Shelf and Aisle Product Recognition: To enhance operational efficiency and reduce hardware expenditures, AI-powered planogram verification has been rolled out at 67 Migros stores. This system utilizes AI to analyze images captured via mobile applications and devices. An Aisle Analysis Module deployed at 140 Macrocenter stores allow for automated visual auditing of the entire store and its aisles without any need for category-based model training.

Fresh Produce Image Processing: The fill-levels of fresh produce bins are monitored using AI-supported technology. This system allows for the instant tracking of stock based on data obtained directly from the sales floor. Currently deployed in 50 stores, these systems enable more effective management of fresh-produce replenishment processes while supporting customers' uninterrupted access to fresh products.

AI-Supported Loss and Fraud Detection: AI-supported systems spot irregularities at checkout points and store exits, eliminating the need for physical monitoring and checks. System effectiveness is enhanced by means of AI model training across different store formats and risk scenarios.

R10 Payment Systems Platform: Within the scope of the R10 project, which involves a software and payment systems infrastructure transformation based on an omni-channel architecture in the field of payment systems, the application inventory completion rate reached 86% in 2025. The total number of stores migrated to R10 increased to 689, while the total number of checkout points reached 2,617.

Taro: Autonomous Order Picking System Designed to enhance operational efficiency, the Taro autonomous picking system has been deployed in the stockroom operations of 62 stores. Capable of processing three separate orders simultaneously, delivering a fourfold

increase in hourly picking performance and achieving a significant improvement in process speed.

The Taro system operates using autonomous navigation, dynamic route optimization, and advanced obstacle-detection features. Thanks to milligram-level weight measurement precision, order fulfillment accuracy has reached 99.9%. This infrastructure is utilized as a critical technology that contributes to increasing operational speed and ensuring customer satisfaction.

Rings: Light-Guided Picking System The innovative Rings light-guided order-picking system is currently in active use in the stockroom operations of 74 stores across Türkiye. The Rings system uses software-controlled smart LED strips that have been retrofitted onto stockroom shelves and racks. When an order picker approaches a particular item on their pick list, the system lights up the strip directly beneath it, resulting in a significant increase in picking speed and accuracy. The system's coordinated multi-color feature assigns each picker a unique color that matches their handheld screen and the LED strip that lights up. This allows several employees to work simultaneously in the same space without interfering with one another. The Rings system also drives operational productivity gains across other stockroom processes, including put-away, restocking, re-shelving, shelf maintenance, and inventory counting.

Carrgo: Autonomous Picking System A dedicated 1,500 m² robotic fulfillment center has been commissioned at the Ankara Bilkent 5M store. Featuring a fleet of 12 autonomous Carrgo robots capable of processing four concurrent orders, the facility achieves a fivefold increase in hourly picking throughput. The fleet operates via natural navigation and dynamic traffic management, ensuring peak efficiency through real-time route optimization and advanced obstacle-avoidance. Order fulfillment accuracy is guaranteed at 99.9%. Through dynamic picker management, the system coordinates task allocation based on real-time employee positioning. By dispatching robots directly to worker locations, the system delivers a 50% reduction in employee step counts.