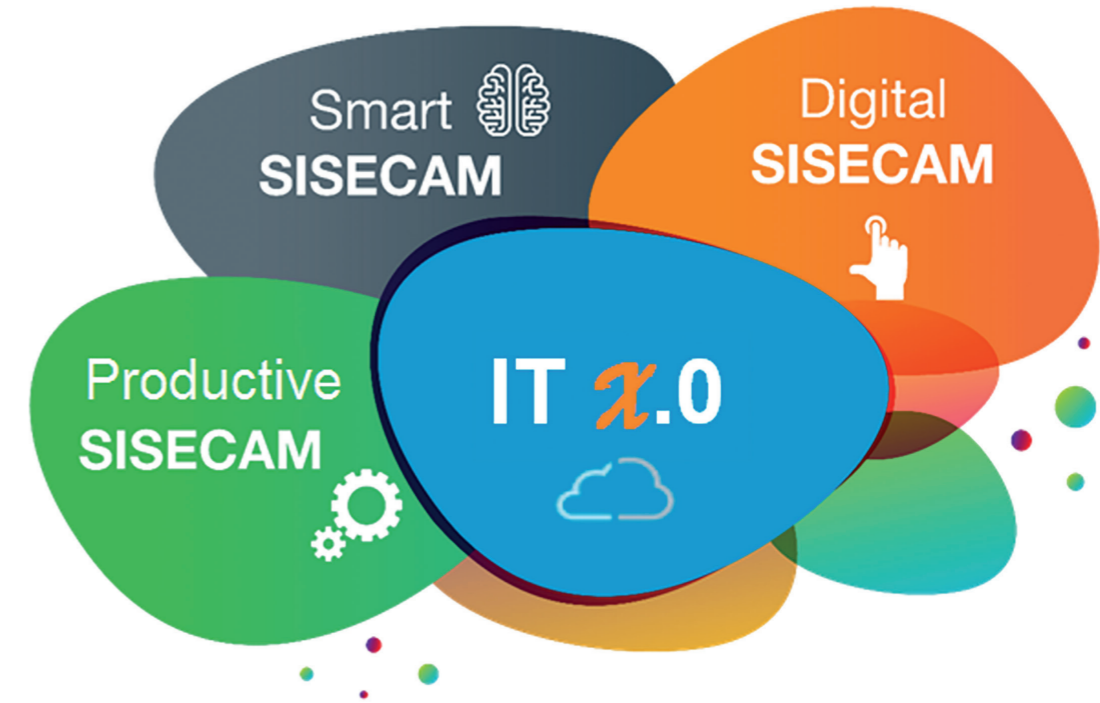# Information Technologies

Leading technological change by transforming data into value with the vision of "Competition with Data," the governance of operational technologies, deploying of the agile infrastructure by ensuring business continuity, providing the cybersecurity, risk and compliance, continue to transformation for IT X.0 main topics have been the strategic work activities.

Smart Şişecam

Şişecam carried out activities to develop the corporate data architecture, create an analytical structure and visualize data.

Under the "Roots and Wings Digital Transformation Program," the Company was engaged in various activities to improve data quality, clean and manage master data and create management cockpits. For the big data architecture design, a data architecture has been created that focuses on Single Şişecam and is reproducible, ensures end-to-end data security and improves analytical capabilities. The first steps of the New Modern Data Warehouse were taken with the data from Şişecam Glassware and Paşabahçe Mağazaları to meet Şişecam's reporting and analysis needs. A single, integrated data warehouse is planned to be created for the entire Şişecam organization by including data from other groups and functions in the future.

Architectural infrastructure has been created to collect and analyze data from especially proof of concept studies in plants to identify opportunities to generate added-value from data. For this purpose, Furnace Operational Efficiency (energy consumption, optimization based on glass production configurations) and Furnace Data Analytics (IoT, Quality, Safe data access) studies have been carried out.

Digital Şişecam

With the Roots and Wings Digital Transformation Program, Şişecam laid the foundation for a future-ready technological infrastructure, continued its efforts for integration of groups and central functions, increased the speed and quality of decisions and continued activities to create a digital transformation platform. The following were implemented under the Roots and Wings Digital Transformation Program;

- Financial Affairs - Central Finance & Financial Consolidation, International Bank Payments, Renewed Budget System (Holding, Paşabahçe Mağazalar), e-Transformation (E-invoice, E-dispatch note, E-ledger, etc.), Supplier Finance Glassware and Global Commerce Finance Infrastructure with Blockchain digital solutions
- Procurement - End-to-End Integrated Procurement, Process Standardization, Improved Collaboration with Suppliers, Compliance with Policies and Procedures, User-friendly and Flexible Contemporary Interfaces
- Human Resources - Payroll & Time Management, Global Performance Evaluation, HR Communication Centre Portal for provision of a Unified Employee Experience, Employee Data Centre and mobile technology solutions

- Glassware - New Technological Infrastructure Platform Production Switch, and projects for Production & Supply Chain Common Process Model.

Some of the key projects undertaken include the Paşabahçe Experience store for our customers; Location, Device and Time independent access solutions for Employees under the Digital Office program.

Şişecam continued to adopt widespread use of Smart Warehouse and RFID Production monitoring systems in its plants and evaluated the Digital Twin opportunities.

The Digitalization and Innovation Workgroup searched for opportunities associated with digital transformation technologies that could add value to Şişecam, held workshop events, performed proof of concept studies and useful solutions were turned into projects.

Productive Şişecam

Şişecam's business processes and IT processes were aligned to create a corporate architectural structure. Business value-based demand management was evaluated on the basis of portfolio, and process and product ownerships were defined. Important projects such as Integrated Work Planning for Processes and Jumbo glass logistics optimization were carried out.

Regarding the use of Competitive Automation with Data, increased efficiency and productivity were achieved by speeding up selected processes, separating them from manual operations, making workforce improvements and contributing to reducing errors.

IT X.0

With a strategic value creation approach, an architectural model was planned which analyzes changing functional processes focused on Single Şişecam, organizational structure and technological solutions together.

To achieve excellence in the Program and Project Management, demands are addressed as strategic priorities. An Industrial Systems Committee was established to improve governance of operational technologies, and it was ensured that IT & OT teams work in collaboration and coordination. For identity, device, data, application and infrastructure security, comprehensive security projects were carried out to improve cyber security, manage risks, ensure compliance with Zero Trust approach. New Technological Infrastructures were created in a flexible and agile architectural environment. Business continuity was improved by migrating data centre to the cloud architecture. Service Consumption model was changed to the "pay as you go" model. Active monitoring of IT Financials per investment was made possible. Performance measurements were made against International IT Metrics to manage efficiency IT services. New organizations, roles, responsibilities and skill sets were defined under the IT X.0 Structural Transformation. Processes within the IT Process Architecture (ITIL, Cobit-compliant) were analyzed and improved. An integrated IT Governance was ensured with regard to legal regulations, audits and compliance.

With the vision and mission of "providing a climate of digital transformation to enable Şişecam to compete more effectively with data," Şişecam continues to implement Digital, Smart, Productive and IT X.0 technology strategies as planned in its road map.