Reply
Living network

CLICK Reply

UNIGRÀ S.p.A. warehouse and transportation management systems

Abstract

Always attentive to the most advanced developments and applications of technology, Unigrà has for some time been engaged in the reorganization of its manufacturing processes and warehousing systems with the assistance of @logistics Reply's valuable experience.

The collaboration with Reply began in late 2000, when Unigrà introduced Click WMS management system, which was later integrated with the transportation management system and interfaced with physical handling systems, such as palletisers, strapping machines, automatic warehouses and LGV shuttles.

Unigrà has recently completed the migration of its management system to SAP and has once again called-in @logistics Reply to carry out the technical research for creating the interface between the Click Reply™ WMS and the Click Reply™ TMS departmental systems and SAP.

Unigrà used the introduction of SAP as an opportunity to revise some of its business processes and, at the same time, to increase integration between the management and departmental systems. To ensure a robust and agile integration between these information systems, Reply recommended an approach to services that would be implemented using "SAP XI".

The context

Unigrà's core business is the transformation and sale of alimentary fats and oils, margarine and unfinished products for the food industry, particularly the confectionery sector.
Founded in 1972, the Company developed and maintained its mission to manufacture for a professional, highly specialised market, ranging from large scale food production to smaller-scale customers in the bakery, catering and ice cream sectors.
Unigrà bases its success on clear, winning strategies: a constant pursuit of high quality, backed up by a technologically advanced production system.

The company has its roots and headquarters in Conselice (Ravenna) and now operates in 40 different countries throughout the world.

Production in Conselice supplies an adjacent warehouse, equipped with the most sophisticated handling solutions available, by means of a palletiser which prepares the units destined for storage.

Next to the traditional warehouse, which is managed with the support of RF devices, is a large area with an automatic warehouse for the storage of fully-loaded pallets, previously prepared by the strapping and labeling system at the entrance to the intensive warehouse.

Pallets entering and leaving the automatic warehouse are handled by AGV shuttles.

The automatic warehouse replenishes the picking areas and moves the fully-loaded pallets towards the shipping bays.

The solution

@logistics Reply supplied its own solutions for the physical management of the warehouse and transportation management, expanding them to the ERP system (using SAP).

@logistics Reply, starting from a structured analysis of the existing context and logistic organisation, designed and produced a new warehouse management platform on the basis of Unigrà's requirements. The platform is based on Oracle/JEE technology and Windows architecture and its central element is Click Reply™, Reply's proprietary supply chain management suite.

Reply
Living network

Today, Click Reply™ is the engine driving Unigrà's complex warehouse logistic structure and managing all its logistic flow: from the reception of internally produced goods to their shelving; from the reception of delivery instructions to planning, to the launch and implementation of picking missions, up to journey closure; from the management of quality control and maturing processes, to the feeding of manufacturing departments with auxiliary materials.

The solution includes web-based monitoring of operative units with real-time reports of any critical points in delivery schedules.

The Reply solution is a leading-edge system based on JEE architecture, allowing integration with service oriented architectures which are used to integrate the ERP system.

The following two examples show how Click Reply™ WM achieves complete integration of systems into the management process of production warehousing and shipping management.

WAREHOUSING MANAGEMENT:

- Click sends the production plan to the palletiser
- The palletiser reports the composition of each individual pallet
- Click creates the stock and calls the AGV shuttles
- The AGV system requests the destination data for the pallet and Click deposits it at the entrance of the automatic warehouse
- The strapping and labeling system requests the data from Click and proceeds with its normal tasks
- The automatic warehouse asks Click for the pallet destination data
- Click sends the destination data to the automatic warehouse
- The automatic warehouse reports task closure.

SHIPPING MANAGEMENT:

- SAP sends the orders portfolio to the Click TMS system
- Click TMS plans the journeys and transfers the delivery instructions to Click WMS
- Click WMS reserves the physical stock and carries out picking in communication with the PLC system of the automatic
- Click WMS calls the LGV shuttles
- The AGV system requests pallet destination data towards the exit bays
- Click WMS checks the load and sends the data to Click TMS
- Click TMS checks the weighing data
- Click WMS closes the order and sends the data to SAP.

All executive subsystems are governed or interfaced by Click Reply™, which decides their functional logic and ensures the inventory does not contain ambiguities.

The systems that are governed and interfaced are:

- Palletiser at production outlet
- Automatic warehouse for intensive storage
- RF data transmission system
- Automatic LGV handling.

Reply
Living network

REFERENCE ENVIRONMENTS:

- Database: Oracle
- AS: Tomcat
- ERP: SAP
- OS: Windows 2003
- EAI: SAP XI

Value added by Reply

Reply's presence alongside the company throughout these years of great change in the fields of technology and processes, are proof of the value Unigrà places on their contribution both in terms of competence and flexibility.

Reply's active role in deciding to interface Sap through SAP XI and supplying a simple, complete user interface to replace the different display interfaces of the interfaced systems, are just two of Click Reply™'s contributions to Unigrà.

From the initial client-server solution working with RF devices, to the more recent solution that uses completely Web based JEE architecture and is highly integrated with the company's systems, Reply has helped Unigrà to achieve:

- Greater shipping capacity and efficiency
- Batch traceability from production to shipping to the customer
- Increased accuracy in inventories
- Increased efficiency in internal transport
- Unambiguous management of information exchange between systems

@logistics Reply is the Reply Group company that, in the field of Supply Chain Execution, provides its customers with a wide range of cutting-edge services and solutions, ranging from the logistics process design and modelling to the development of turnkey solutions, up to the introduction of new innovation technologies.
@logistics Reply markets under two product lines, Click Reply™ and SideUp Reply™, capable of entirely supporting warehouse processes.
Over 300 companies and over 12.000 users use and integrate solutions based on the Click Reply™ suite in their logistics Value Chain.

Reply [REY IM] offers Consulting, System Integration, Business Process Outsourcing and Application Management. Specialising in the design and development of solutions based on new communication channels and digital media, Reply combines vertical market expertise with innovative technologies such as Social Networking, Cloud Computing and the Internet of Things for the optimisation and integration of processes, applications and devices. Based on a network of companies specialized by service offering, Reply combines the planning and organisational capacity of a large corporation with the flexibility and dynamism typical of specialist companies. Reply has a presence in Germany, England and Italy and operates within the leading industrial sectors (Telco and Media, Banking and Insurance, Industry and Services, Energy and Utilities, Public Administration and Health) with a range of services covering three main areas: Processes, Applications and Technologies.
For further information: www.reply.eu