





Medium-sized enterprise from Italy

Context of the Company and the Supply Chain

The company is a sanitary ceramic producer and seller that works within an industrial cluster with several others business organisations that take on different stages of the ceramic value chain. The company is specialised in selling made in Italy sanitaryware products managing the entire production process, from raw material acquisition to transformation and logistics.

The context of the company is in general traditionally organised. Most organisations in the industry are family-owned SMEs that resort on traditional processes. Part of the organisations are only resellers as they do not directly manage the assembly line, but they import products manufactured abroad and sell them under their brand.

The company is quite advanced in the management of material flows and is also characterised for a low environmental impact as all the unused materials (such as paper, cardboard, plastic, and wood) and waste are internally reused or recycled by partner companies.

Digitalization of SC

The value chain is in general traditionally organised. Most of the value chain activities involve the exchange of raw materials, by-products, and finished products and cannot be considered a digital value chain. However, the level of digitalisation significantly increased in the past, at least is some of the actors.

The administrative activities are extensively digitalised in the value chain. Almost all organisations in the cluster, including the company interviewed, make use of information systems to manage administrative activities, and digital exchange documents for the administrative processes through e-invoicing and e-procurement processes.

The second largest digitalisation impact on the value chain is on the manufacturing phase through the adoption of robotics, the Internet of Things, traceability systems and other advanced digital technologies across the assembly line. The more innovative business organisations, including the company interviewed, resorted to national fiscal and financial incentives to innovate assembly lines with Industry 4.0 technologies, increasing the level of digitalisation in the value chain.

Compared to the other companies in the value chain, this one is quite advanced on the digitalisation, having integrated the financial and technical data to operate





a highly granular continuous reporting system integrating both financial and technical data.

Risk Management

The value chain has always been prone to both internal and external shocks. Being dependent on raw materials procured from foreign markets, the value chain is sensible to potential disruptions in the logistic processes, and to the influence of prices fluctuation due to shipping costs and exchange rates. Such value chain risks impact organisations of the value chain in different ways, depending on the presence or not of a manufacturing phase.

The adoption of digital technologies introduced cyber risks in the activities of the business organisations of the value chain.

Practice of Risk Management: Risks:

To manage the risks related to the assembly line the company has invested in a continuous reporting system that can provide timely and accurate data on the operational processes. Such system helps the chief production officer and the quality manager to mitigate the operational risks.

Risks:

If we exclude the fluctuations in raw materials prices and availability, the main risks the company is subject to concerns the competition of low-cost producers and the reduction of operational margins due to low-cost competition.

Adding to this the Covid pandemic also materialised the risk of discontinuous production, rising costs, and failure to meet customers' demand. During the first part of the Covid pandemic, the company was indeed forced to stop the production processes because of the restrictive measures issued by the government to contain the diffusion of the covid-19 virus.



