We have known for many years that the digital wave is unstoppable, but after the pandemic we have seen that its spray has already reached the shore and is wetting our toes. In effect, Covid-19, has revolutionized consumer needs and has forced businesses to launch, in some cases, or accelerate, in the majority of cases, their digital transformation.

There is a lot of evidence to back this narrative of change in the interaction between companies and their customers. Online purchases are a prime example. According to data from Statista, in 2021 global e-commerce sales exceeded 4.9 billion dollars, 47% more than in 2019. We also have information pertinent to the impact of the pandemic on the industrial sector. The 3rd Smart Industry Study, carried out by NTT DATA and the Industry 4.0 Observatory, reveals that in 2020 the percentage of industrial companies in Spain which have launched a plan for digital transformation in the last three years was 70%, whereas in 2018 it was only 26%.

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The data backbone

The backbone of this commitment to innovation and new technology is data. Enel is aware of the importance of information for conducting more complete, accurate and structures analyses of customer relationships and, ultimately, to boost the quality of the company. To face new challenges, gathering and managing large quantities of data is crucial during its digital transformation.

However, effectively processing information is no mean feat. Over time, the heterogenous nature of structured and unstructured data (video, chat...), and their growing and massive volume, have rendered traditional data storage and business intelligence tools obsolete.

In this demanding scenario, Enel set out to transform its data architecture in the Italian market and create a new platform that is scalable by design (i.e., easily adaptable to system growth needs), full cloud (with all its IT services fully integrated into the cloud computing operating model), flexible and with security as a top priority. The goal was to simplify its use and guarantee a single access point for information. For this purpose, a data migration solution based on the Amazon Redshift service was implemented.

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Experience in AWS

For the implementation of this ambitious project (one of the most important in Europe in this field), Enel relied on NTT DATA’s extensive experience as a specialist in IT and business advisory services based on Amazon Web Services (AWS), Amazon’s cloud platform, of which it has been a partner since 2010. The relationship between Enel and NTT DATA has been ongoing for many years and covers many facets of the energy group’s business.

The adoption of the new data processing solution was part of a demanding project, with very tight implementation times, requiring technical and management skills to define a strategy that would minimize the impact on business operations. The implementation phase was characterized by the additional complexity of protecting the functional evolutions still in progress in the previous platform.

However, the collaboration of NTT DATA not only guaranteed the functional continuity of the business in a technological transformation project, but also a significant improvement in the performance of data usage, as well as strict compliance with the General Data Protection Regulation (the European regulation which regulates the use of citizens’ data) and respect for customers’ rights. NTT DATA’s experience in AWS technology helped Enel in its migration of data to the cloud, doing it gradually to maintain the continuity of the business and intensively focus on its current and future needs.
The results are in sight. Enel has a powerful flexible data platform in the Italian market (scalable with the increase in information), that is efficient from an operative point of view, agile (it is updated daily) and rapid (the information is available at great speed). In this way, the new tool has become the entry point, the strategic guide, and the essential reference point for managing the information assets of Enel’s customer base and interactions with the organization in all phases of the business cycle.

With these capabilities, the platform has become the backbone of the activity of thousands of the group’s employees who use it for commercial analysis, the development of sales strategies, the development of specific offers to current and potential customers, and even for experimenting with new commercial models.

The first step in a paradigm shift

The creation of the data platform for the Italian market is only the first step towards a broader architectural design. The aim is to extend the platform, with the same technological focus, to all the countries within the group, as part of a global convergence plan.

In this way, Enel is getting ready to tackle a real paradigm shift in the energy market which will require the processing of great quantities of data and, in consequence, radical changes in the storage and computational power necessary to efficiently manage this enormous volume of information. In the coming years, the data available will also increase thanks to the deployment of Open meters, which allow, through the exchange, reading and analysis of data between customer and retailer, personalized offer patterns to be developed.

The new technological architecture is there, as a base for Enel’s digital transformation plan, and is ready to extract the maximum benefit from the information available. However, the energy group is also aware that the human factor remains central in its activity. This sensitivity allows them to pay particular attention to the relational, emotional, and behavioral analyses of their clients and to integrate all the elements at their disposal to make the best decisions. In this way, Enel is present in and committed to the profound digital revolution we are experiencing.