

**ENGINEERING
THE NEW NORMAL**

OUR POST-COVID VIEW ON SMART ENERGY & UTILITIES

An Appendix to *Engineering The New Normal*.

WHAT ARE WE DISCUSSING?

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WHAT HAPPENED

A monthly reduction of more than 10% in electricity demand provides a measure of the impact of the unprecedented crisis created by the Covid-19 emergency on the Energy & Utilities (E&U) sector. Consistently with this, the entire oil supply chain has been impacted by the slowdown in the production of oil-based products, with the almost total halt of the transport and the travel sectors (a trend that is likely to continue post-crisis).

As in other market sectors, Energy & Utilities players have focussed on a number of general aspects: **guaranteeing the safety and operational continuity of their employees**, keeping a close eye on **profitability** (costs, revenues and cash-flow), with the adoption of appropriate Revenue Protection mechanisms relative to their customer base.

In redefining investments, balancing short and long-term priorities, they will keep the managerial skills of their human capital at the centre, trying to bring together what has been put into play in terms of operational processes and transitional intervention strategies.

To all this, companies in the segment will have to add further points, typical of the Industry as a whole, such as maintaining the levels of security essential for the provision of network and non-network services, especially if they are a public utility. Since these are highly regulated sectors, **the impacts of Covid-19 may be more or less mitigated by the intervention strategy of the various competent bodies** (e.g. ARERA - the Italian Regulatory Authority for Electricity Gas and Water), with regulations aimed at protecting both the interests of end customers and of the entire energy supply chain.

All these actions certainly represent a fundamental first step to face the crisis. But at the same time they can be the basis for a strategy with which to demonstrate not only the resilience of the sector, but also its ability to create a new ecosystem in balance between Digital Transformation and enhancement of human capital.



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OUR VISION OF THE MARKET



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The Covid-19 emergency took shape in an E&U market context, in which operators were progressively loosening their focus on operational efficiency to explore new opportunities for expanding their offer. Opportunities, on the B2C side, are linked to the development of consumer technology, and on the B2B side, focused on digital transformation.

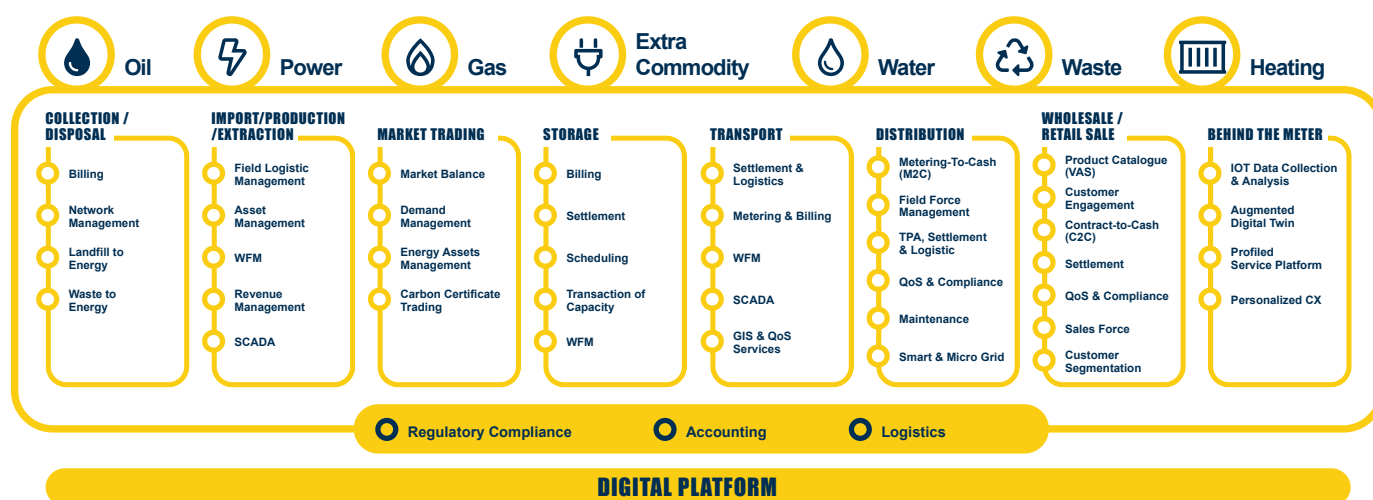
The close attention paid to operational efficiency by sector players in the last 10 to 15 years, has been the key element on which to build their response in the initial stages of the crisis. **The consolidated operating processes and the flexibility of the digital platforms** through which these are managed have, in fact, helped to guarantee the continuity of the service. In the early stages of response to the emergency, the attention of E&U operators, as well as of those operating in other sectors (defining an almost common pattern of behaviour), was directed to specific, crisis management technologies, without any direct link to the specific sector to which these belonged.

Almost in parallel with the purely emergency-focussed phase of the pandemic, operators quickly had to deal with the repercussions for their business: an attitude common to diverse markets, which obviously focussed on different instruments depending on the specific sector. **Most certainly, the E&U world has been forced to navigate a rather complex context:** on the one hand, it had to deal with regulations (generic and, above all, sector-specific) and on the other hand, with the effects of the lockdown policies on profitability and cash flow, while also having to redefine the investment priorities and the management policies of its employees.

The results, updated on a day by day basis, are the starting point for imagining the new normality. The truly challenging task will be to build a so-called New Normal, in which the digital experience progressively comes together with the physical experience, thus creating an overall experience whose value is far superior to that of the two components taken individually.

PORTFOLIO MAP

Smart Energy & Utilities



ENABLING SERVICES

Technology & Cloud Services

Business & User Services

IT Consulting

Mobile Applications

UX & Service Design

ENABLING TECHNOLOGIES

AI & Advanced Analytics

Cloud

Cybersecurity

IOT

Robotic Process Automation

AR / MR / VR

Blockchain

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OUR POSITIONING AND SOLUTIONS



When this crisis has passed, nothing will be the same as before, both in terms of internal operating processes within the organisation and in terms of approaching the market. Following phases must take into account the lessons learned during the lockdown, **avoiding dangerous attempts to restore pre-Covid modus operandi**.

In order to build a new normality, it will therefore be necessary to identify and adapt to the new market needs. Many organisations will have to carefully rethink their product-market focus, their value proposition, the actions taken to ensure customer involvement, following a Digital Transformation, which this emergency has proven to be no longer an option, but a necessary and mandatory path. If, in fact, the **human factor will remain central to directing business choices across all levels**, technology, fundamental in Phase 1 to ensure business and services continuity, in this reconstruction phase becomes the first tool to definitively innovate processes and organization.

The analyses made so far, and the diagram below with the corresponding lines of action, can help us imagine a sequential path, in which the end of a phase coincides with the start of the next phase. Nothing could be more wrong.

Indeed, it may happen that in the long run, the choices made during the Covid-19 emergency phase, first and foremost smart working, require the need for a massive revision of the company-employee relationship, with a new **Employee Experience (EX)** on the horizon, as has already taken place on the customer side (CX). At the same time, some phases will inevitably be recursive in nature. Just consider, for example, the management of the specific complexity associated with each sector, in which the arrival of new regulations or an unexpected reaction of the market could lead to questioning the decisions taken.

First Steps in a Post Covid World



To guide market players in the creation of their "New Normal", we have identified the lines of action that must be followed, as well as our short and medium/long-term support solutions, distinguishing both actions designed to support the internal company organisation (employees) and those aimed at the consumer market (end customers).

LINES OF ACTION FOR A NEW INTERNAL ORGANISATION



Protect Productivity

To guarantee **Business Continuity** and the health of employees with a new organisation of the workplace and a **Smart Working strategy**

The challenge

Implementing social distancing rules and evolving the employee's operating processes, moving from the Employee Management to the Employee Experience phase.

Once the technological platforms on which to deploy the operational activities of resources operating in the Digital Workplace have been identified, business organisations must understand which services to enable in order to transform employee management into a real Employee Experience, while at the same time ensuring performance and the health of the employee base. Moreover, companies must also support teams that are operating off-site to carry out activities effectively and safely, while guaranteeing the availability of skills, even in the absence of a physical presence (virtual collaboration).

Our offer

Taking into account the adoption timeframes, we will support our customers right from the start, with initiatives focussed on:

- **Smart Proximity**, our integrated platform designed to monitor and predict the risk behaviour of staff in the workplace, providing operators who exceed safety distances with real-time warning messages: the platform can be adapted, both in an office context and in off-site structures operating in the field (power plants, refineries, etc.)
- **Safe Eye**, our solution, based on Artificial Intelligence, which makes it possible to monitor and manage social distancing between people in public places or within delimited spaces (corporate areas) by analysing videos and images
- **Digital Workplace** and remote collaboration tools, both readily available on the market (**Microsoft Office 365**) and proprietary products developed by us through the adoption of secure, open source technologies, in order to enable innovative and effective working solutions, thanks to worker-oriented technologies and organisational models
- **Change Management programmes** to support the **New Normal** of the working world, through strategies and tools that help to organise, stimulate and monitor the efficiency and productivity of the individual employee, and to ensure that the right levels of training and assistance are available
- **SPACE1**, an OverIT solution based on **AR/MR/VR** technologies, designed to support the remote management of work progress and facilitate materials testing

- **Geocall**, an OverIT solution designed to help improve off-site control activities, through the use of drones and other automation tools

At a later stage, thanks to specific evolutions of the solutions, we will extend our support with additional elements:

- **Geocall**, used to support the administration of shifts typical of teams operating in the field, also applied to an office context, optimising spaces and distances
- **Management of PPE**, applicable regulations, training and health surveillance, relying on third-party solutions (Kalmo, a Cloud-based VeniceCom solution designed to help support the management of priority HSE-related issues in next phases) already successfully adopted by leading market players.



Increase Resource
Availability

**Increase the availability of the organisation's physical
and technological resources**

The challenge

Implementing an organisational and operational employee-focussed change strategy, designed to guarantee and assist their activities when operating in Smart Working mode, in turn automating operating procedures through workflow management and collaboration solutions

Our offer

We will support our customers right from the start, with initiatives focussed on:

- **Digital Services** based on coaching on the Office 365 platform, through the involvement of the corporate Centre of Competence (Change Management), while also relying on an intelligent BOT solution that plays the role of a Digital Coach and assists internal users in carrying out daily business processes
- Secure Digital Workplace and collaboration activities, through the use of **LiveBox**, a SogeIT solution designed to help manage workflows that enable business task automation
- Application of the Digital Enabler platform on company cost items, aggregating all the information which, for various reasons, contributes to cost savings (travel, corporate vehicle fleets, canteen services, electricity utilities, etc.) obtained from the closure of corporate offices during Phase 1 and to a reopening strategy based on a "New Normal" approach expected for subsequent phases.



LINE OF ACTION FOR THE END CUSTOMER MARKET



Manage Complexity

Manage the regulatory framework adjustments and improve the Profitability with installments and forecasts on cash flows and collections

The challenge

Having greater visibility on financial and cash flows, improving both the quality of the energy **supply and the effectiveness of portfolio/risk management activities**, through up-to-date information that supports forecasting activities.

Managing the payment instalment processes for the "consumer" segment at the same time, accompanying them in a gradual and evolutionary path towards normality

Follow the operational changes driven by the **National Regulatory Framework of the Energy & Utilities** sector (ARERA, other Authorities), managing the impacts of regulations (including transitional provisions) on employees, as well as on customers within the operating chain.

Our offer

We will support organisations, right from the start, with a number of features offered as part of our Utility Digital Platform, in order to improve the ability to evaluate scenarios on energy consumption, through the **Net@Forecasting** solution that helps predictively manage consumption, fuelling Decision Support System processes.

Moreover, we will strengthen the support actions aimed at consumers/actors in the supply chain experiencing economic difficulties in Phases 1 and 2 of the Covid-19 emergency, thanks to the **Net@Suite accruals** functionality, in order to guarantee the management of the deferment of payments with respect to the entire production chain.

In relation to the sector-specific Regulatory Framework, we are supporting customers in the adoption of organisational and IT actions, in light of the transitional regulatory provisions (Resolutions) nos. 60/20, 116/20, 117/20, 124/20 published during Phase 1, through targeted consulting services (**Digital Services, Change Management**).

Moreover, we will support customers in the management of digital payments based on a full cloud-based solution (**Net@PAY/EngPay**) consistent and compliant with the AGiD directives (Agency for Digital Italy) and with the PagoPA standard adopted by Italian Public Administrations, taking advantage of the existing channels and agreements with payment service providers and ensuring the improvement of corporate cash flows, thanks to a significant reduction in collection timeframes.

As part of an evolutionary phase, thanks to the development of predictive algorithms, we will target similar activities on custom applications or on extra **Net@platforms** (SAP, Salesforce, Oracle). Thanks to this approach, we will be able to take advantage of the existing capabilities developed in relation to other customers, allowing us to manage predictive scenarios relating to the collection and cash flow components in addition to the analysis on consumption.

From a regulatory point of view, we will support customers in the adoption of the necessary organisational and IT actions provided for by the Resolutions that will be published for the subsequent Covid-19 phases (Phase 2 and later).



To ensure cyber security

The challenge

To safeguard the cyber security of operators (employees, customers who use IT applications), supporting them more effectively in their Smart Working activities, avoiding hacking attacks on remotely-managed processes through chat and conference platforms and ensuring the protection of customers' business information.

Our offer

risks to be faced. We will continuously support our customers in their **Cybersecurity** activities through staff training, to raise employees' awareness of potential IT vulnerabilities to which the Company is exposed.

From an IT point of view, the in-depth knowledge of the technological solutions supporting Cybertech, an Engineering Group company, both on the IT and OT Security sides, **guarantees a comprehensive view and coverage of business processes**, thanks to the in-depth knowledge of the security management methodologies and policies required to neutralise threats and manage vulnerabilities.



Increase Profitability by supporting the improvement and robustness of IT applications

The challenge

To improve the robustness of IT applications, enabling technological porting on better protected and more efficient environments, while promoting business growth through the adoption of value-added solutions that enable the sale of extra commodities services.

Our offer

We will support our customers in the remotisation of applications to our data centres, offering the implementation of **Disaster Recovery** and **Multicloud marketplace** services. These, in turn, facilitate the management of centralised IT resource orchestration services (orders, invoices, self-service provisioning), improving IT resource management and reducing physical interactions within customer data centres.

Moreover, in addition to commodity services, we will support the sale of extra commodity services, thanks to our **Net@4VAS** solution, by enabling cross-selling service policies, as well as favouring reward mechanisms (discounts on "bundled" services), which facilitate the reduction of the number of utility bills and, consequently, of payment processes.



Digitally Present

**Ensure worker safety by managing the relationship
with consumers in zero contact mode**

The challenge

To reduce physical interactions between the customer and the consumer, by fully revisiting non-digital processes, favouring a remote relationship through front-end and back-end solutions that facilitate the adoption of the digital channel, for a more effective engagement method and more efficient operational processes.

Our Solution

We will support customers in digitising the customer/consumer relationship with the **Net@web** solution, which enables the "contact" with the consumer customer to be transformed, through a new management of the company's key business processes.

At a later date, we will enable multi-channel management policies (web + mobile app) of the relationship with our **Digital Services**, to completely eliminate both the paper-based manual processes and the physical interactions typically required in sales processes, thus enabling the integration between processes and IT applications.



Support business diversification with new services/campaigns focussed on the consumer segment

The challenge

To embark on new initiatives aimed at enhancing the value of the market with respect to customers, both existing and new, using services and solutions based on **Artificial Intelligence** algorithms, applied to the sales data obtained from consumer customers, to manage the "restart" phase with new services provided based on new approaches. To enable services applicable to **Renewable Energy Sources**, to extend their adoption, including in the management of the everyday lives of consumer customers.

Our offer

The "New Normal" will encourage customers to rebuild their existing business model, as well as to define new scenarios that enrich the offer of services to consumer customers.

We intend to support our customers in this regard through:

Digital Services including Artificial Intelligence algorithms to carry out analyses on the propensity of customers to enable cross-selling actions from the single commodity to multiple offers (from mono to dual, to extra-commodity, to insurance, from protected to free) and to evaluate the possibility of activating new sales campaigns.

Business solutions included in the Digital Platform Utility that enable:

- the promotion of Home Digital Transformation (**Home EnergiA**) services, designed to support customers in managing their consumption in a better way, using information to enable new engagement models and facilitating energy efficiency policies, thanks to a better understanding of the behaviour of their electronic devices (which ones and how they consume, ways to save)
- the provision of electricity sharing services (**Mobile Energy**) through access to recharging infrastructure, both new and existing. The solution takes full advantage of public and private electricity networks, enabling access to energy in "everytime-everywhere" mode and within which the customer can play both the role of consumer, as well as that of producer.



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BUILDING THE NEW NORMAL



There's no doubt the world has changed. New values, new rhythms, new models. Everyone is wondering how to rebuild and what direction to take. It is a time when the answer has to be found by asking the right questions. Questioning the status quo. The rules of the game have changed and perhaps the game itself will change. How to combine the definition of core values to generate ideas, how to learn from other markets, or how to capitalise quickly on technological developments.

New Normal will speed up the use of data to create value: these recent months have shown the power of data transversality and how, around them, we can create quickly services and virtuous ecosystems.

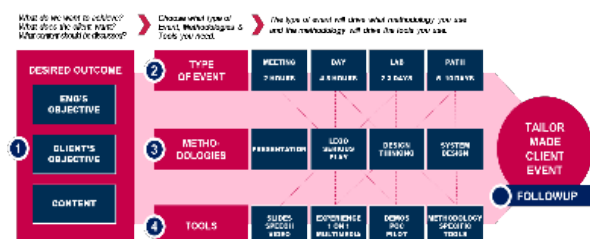
The walls between one vertical and the other will increasingly be mental barriers, we must then give life to new partnerships, designing and creating digital ecosystems based on technologies transversal and enabled by vertical services. These are the most important challenges to face. And we at Engineering have the strategic vision and operational capacity to accompany our customers in this challenging journey. Every day, we experiment and measure the potential for change of the new enabling technologies coming out on the innovation scene. But we also know how to do this gradually and strategically, in order **to ensure the harmonious and sustainable evolution** of the complex system of skills, processes, infrastructures and services of the organisational context in which we operate.

It is with this strategic ecosystem-based approach that today, we can partner with our stakeholders to build a New Normal that follows the paradigms of Digital Transformation: a path that starts with the restoration of specific business values and continues up to the recognition and involvement of the various networks of relationships and transactions that define the internal organisational system and that relate to it externally. Directly (customers, suppliers, partners, etc.) and indirectly (physical, social, economic, environmental, technological, cultural/educational system, etc.).

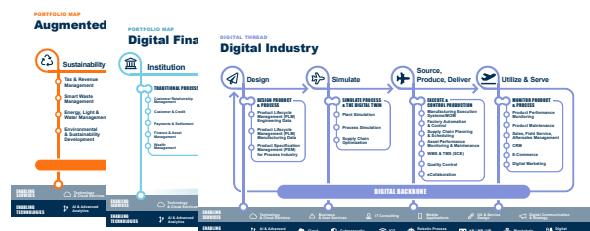
An intervention – the one we have adopted – that invests in innovation and not in technology: because first and foremost it focusses on the ability of the organisational body to react to the crisis, to face and resolve all the pre-existing rigidities on the supply and demand side, to then proceed to build, based on unexpressed potential and on the new value proposition, its very own specific and solid construction of the new New Normal business model.



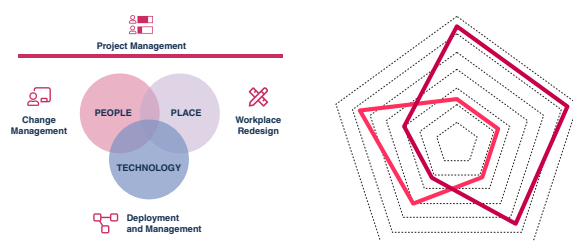
CO-DESIGN FRAMEWORK



MULTI INDUSTRY EXPERIENCE



CHANGE MANAGEMENT & MATURITY ASSESSMENT



ECOSYSTEM VIEW



Our toolbox consists of:

- **A Co-design Framework**, for the generation of ideas focussed on the innovation and transformation of the business model and for the joint design of prototypes of "ecosystem"-based solutions and platforms;
- **Change Management and Maturity Assessment processes**, to assess the strengths and areas for improvement of the organisational system and its positioning with respect to the business context in which it operates;
- **A Multi-Industrial Experience**, for sharing the experience, skills, processes and solutions that our Group has matured in the specific business chains and which become transversal when they intersect and can enhance or condition the customer's new innovation model;
- **An Ecosystem View**, designed to offer integrated and coherent services models that enable "user-centred" views (e.g. Digital Citizenship, Mobility).

There is no perfect solution for overcoming this crisis and building the so-called New Normal. But there is that sought-after ability to imagine, to create and to develop the open "peer production" solution based on a collaborative, synergistic and iterative approach: always able to give the best answers to the new innovation questions.

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ENGINEERING

Engineering is one of the main players in the field of Digital Transformation of public and private companies and organizations, offering an innovative offer targeted at the main market segments. Together with its subsidiaries, the Engineering Group is committed to pushing the envelope as regards the application of emerging technologies. It also works in the area of system implementation and integration and on redefining processes in order to promote innovation for the benefit of businesses and Public Administrations.

With around 12,000 professionals in 65 locations spread across Italy, Belgium, Germany, Norway, Republic of Serbia, Spain, Sweden, Switzerland, Argentina, Brazil and the USA, Engineering manages projects in over 20 countries, supporting customers in the business areas where digitalization is having the biggest impact. Its products and services cover all strategic sectors, including Digital Finance, Smart Government & E-Health, Augmented Cities, Digital Industry, Smart Energy & Utilities, Digital Media & Communication. The group aims to help change the way in which the world lives and works, by combining technological infrastructures organized in a single hybrid multicloud, the capability to interpret new business models and specialist competences in all next-generation technologies: AI & Advanced Analytics, Cybersecurity, RPA, Digital Twin, IoT, Blockchain. With significant investments in R&D, Engineering plays a leading role in research, by coordinating national and international projects thanks to its team of 450 researchers and data scientists and a network of academic partners and universities throughout Europe. One of the group's key strategic assets is its carefully considered staff training policy. Engineering, since 1999, has had its own dedicated multidisciplinary training academy, the "Enrico Della Valle" School of IT & Management. With 300 certified trainers and hundreds of courses, the School has delivered more than 19,000 days of technical, methodological and process training during the last year.

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