



**ENGINEERING
THE NEW NORMAL**

OUR POST-COVID VIEW ON SMART GOVERNMENT

An Appendix to *Engineering The New Normal*.

WHAT ARE WE DISCUSSING?

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WHAT HAPPENED

Phase 1 of the Covid-19 emergency has unequivocally demonstrated precisely how technology can and must be at the service of citizens. During the lockdown period, **from Smart Working to online schools**, it is indeed only thanks to the digital realm that we have been able to continue many of the activities that we previously carried out by leaving our homes.

During this sudden reliance on new technologies, also essential for maintaining the dialogue between Public Administrations and citizens, the Covid-19 impact on the PA has, however, brought to light **all the rigidity of information and organisational systems**, associated with a reality often unable to adapt to the new emergency context, which requires fast, scalable and interoperable decisions and responses.

During the emergency phase, the need to design “ecosystem-based” solutions supported by “citizen-centred” service models also started to become increasingly clear, in order to break down the boundaries between systems, data, processes and vertical legacy responsibilities (PAC, PAL, Healthcare).



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OUR VISION OF THE MARKET



For a complex organisation like Public Administration, Digital Transformation can no longer be an option; it must become the way **to innovate itself and, consequently, its relationship with citizens and businesses.**

The Covid-19 emergency has shown us how the public sector can receive a significant boost if it is able to build a strong alliance with the human capital that operates at different levels within the organisation.

In this sense, the “forced” virtualisation of work activities adopted during the past few months of lockdown can represent a **key opportunity to define and build new work organisation models** based on the mature use of new technologies.

Collaboration, communication and internal sharing of activities, measurement of work based on objectives and not on the completion of tasks, optimisation and sustainability of the timeframes and of the spaces in which the organisation operates. These are some of the key benefits derived from the adoption of digital solutions. Benefits of Digital Workplace that enable a change in the “Employee experience” while, at the same time, guaranteeing the growth of digital culture within public organisations.

If 94% of PA employees indicate that they want to continue Smart Working practices even after the Covid emergency (FPA survey dated 3/6/2020), this can probably become **the biggest investment opportunity to grow and develop digital skills** and redesign the organisational models of the public sector.

It is also essential for Governing bodies (councils, committees, commissions, etc.) not to trivialise the operation of remote activities by simply adopting video conferencing as part of the existing working models. The ineffectiveness of this approach has already been demonstrated when Phase 1 limited the physical movements of elected representatives and, therefore, the exercise of democracy itself.

Our knowledge of the core processes of the PA puts us in a position to obtain the standardisation and interoperability of “closed” administrative services in vertical legacy domains.

The “end-to-end” view of processes, data, competences and organisational models of the various State structures, at the central as well as at the local level, enables us **to coordinate the complexity that today blocks the simplification of the services offered by PAs**: the complexity of the various administrative systems, the interconnection between them and the relationship with other social and technical systems to which they are linked (independent Authorities, Trade Associations, Third Sector, etc.) or simply on the beneficiaries on which they produce effects. The citizen and the company to which public services are directed, in fact, are almost never directly engaged in the planning of administrative services, finding themselves subject to rules, prescriptions and obligations that would have been simpler and more applicable if only they had been adopted by listening to or involving the end users. And Phase 1 of the pandemic has clearly highlighted the inconvenience which the difficult management and communication of administrative complexity can create in private and business life, when the services offered are not built by “putting oneself in the shoes” of the end user. This, from the point of view of the tools available (the different versions of the paper self-certification) and of the language used (the interpretations of the term “relatives”).

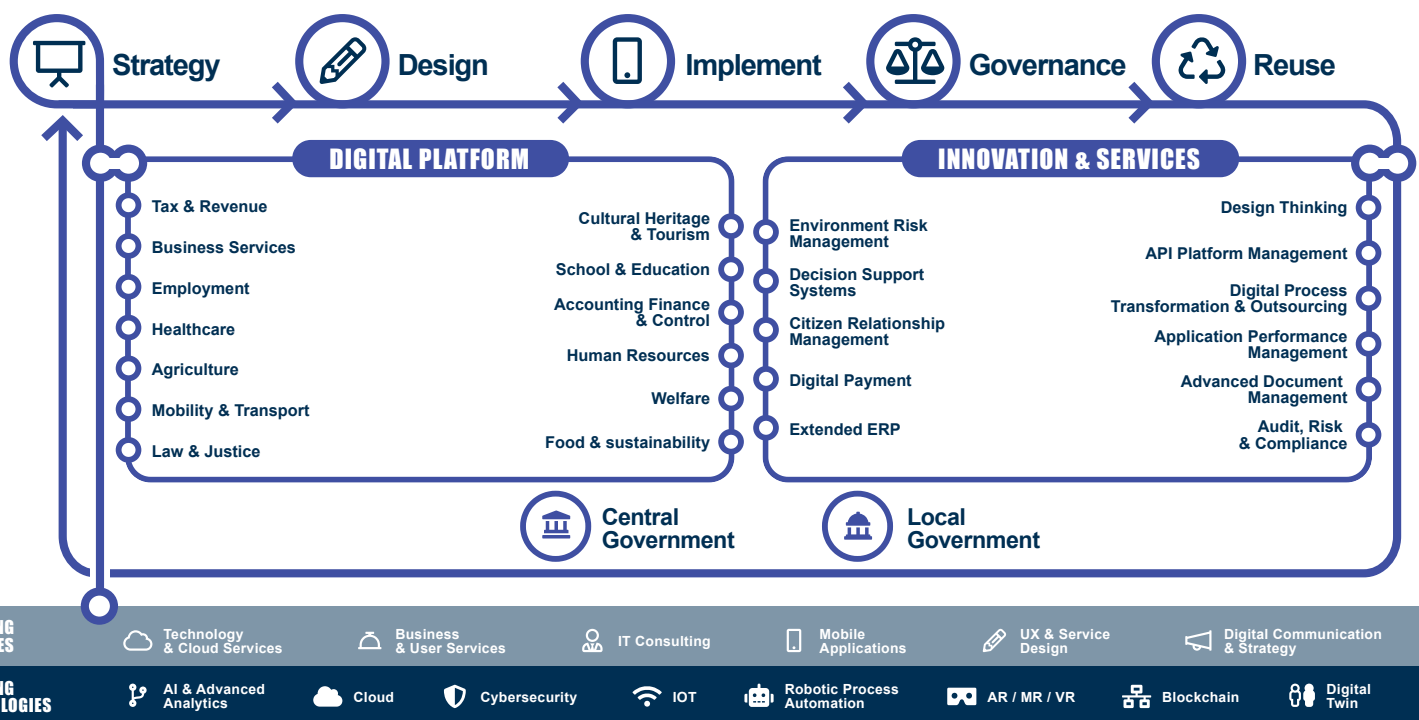
Our value proposition is to contribute to the creation of the so-called **Digital Citizenship ecosystem**, in which the new organisational model of the New Normal PA will be aimed at creating well-being for the citizen-sovereign (in simple terms, owner and shareholder before being a PA client). This, while able to implement not only the *Once Only* principle, concerned with interoperability and without replicating the data already in the PA's possession, but capable of evolving it into *Tell us once*. **A public service model that focuses on “taking care,” on “putting oneself in the shoes” of the citizen**, every time they ask a question.

A service model that no longer stands still behind the counter, waiting for the citizen to make a request, no longer limited to giving precise answers to precise questions.

But which is capable of interpreting them, of being proactive and predictive. A service model that completely eliminates the need to “make requests,” because it knows how **to create connections and relationships between all public services** (central PAs, local PAs, Healthcare, etc.), to which the citizen is already fully entitled, without any need to prove it every single time by filling out forms or self-certifications. In short, there is a need to re-invent everything that the bureaucratic model, centred on the “request” and on the “burden of proof” ascribed to the user, has taught us so far.

PORTFOLIO MAP

Smart Government



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OUR POSITIONING AND SOLUTIONS



The real challenge that the emergence of the New Normal places before us is that of being able to reinforce our role as a strategic partner of the PA, to become the reliable coach of its Digital Transformation plan.

A path that must directly involve **all the various stakeholders of the Administration**, as part of a process focussed on co-innovation. A process which is not focussed on the acquisition of technological innovation, but in investing in innovation.

In which we invest in human capital to share the values and objectives of innovation interventions that must be ecosystem-driven. In other words, interventions capable of embracing the growth of skills, the simplification of rules and procedures, the transformation of the organisation of work, the ease of use of services, the ability to listen to the needs and satisfaction of the end user. All elements for which our enabling technologies will only be functional solutions to support the transition of the public services model to the New Normal.

We will therefore support the achievement of universal objectives, through interventions that take digital technology and transform it into an instrument for the social, economic and cultural growth of the nation's public system: reducing and eventually fully eliminating the distances and differences that prevent full access to and enjoyment of the services across the entire national territory.



In this respect, we believe it is essential to invest in the consolidation and development of Smart Regions as an administrative level that can guarantee the homogeneous development of innovation among Local Authorities fragmented into small administrative bodies, particularly in the internal areas that are unable to offer sustainable solutions compatible with local skills and finances. On the other hand, it is important to support the governance of innovation interventions in a sustainable manner, in the dialogue between the consolidation of national systems and infrastructures and the maturity of local systems, in order to be able to serve as actuators and gateways to citizens within the various ecosystems: Welfare, Health, Tourism, Agriculture, EU Funds, Public Finance, Education, etc.

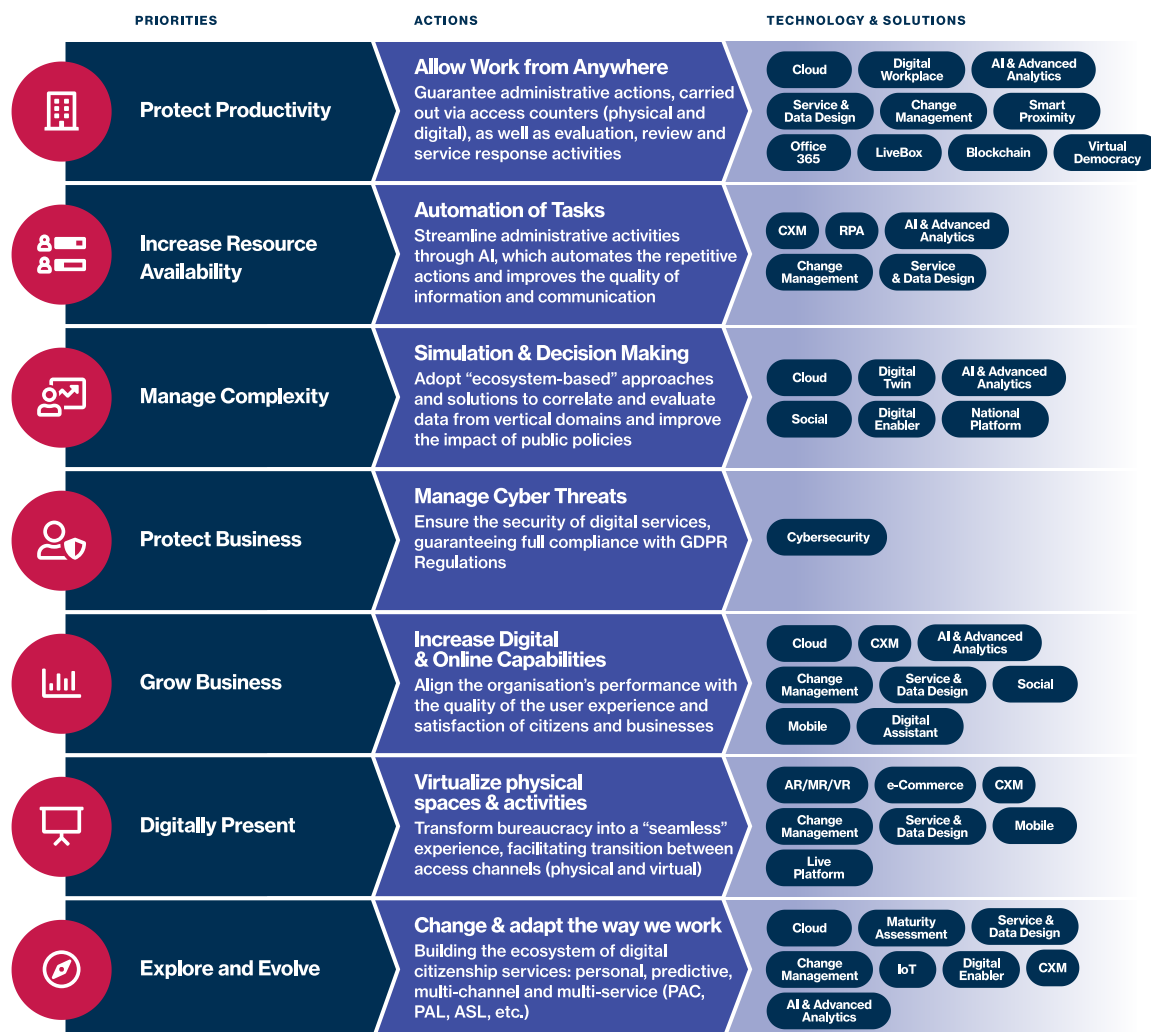
We will therefore carry out innovation interventions, adopting **service and data design approaches**. Approaches in which people, processes, data and technologies work together to imagine and create impressive digital citizenship experiences and to transform the State's administrative structure, consisting of its central and local government bodies, from impeding the country's socio-economic growth, to being an engine of its development.



From the very beginning of Phase 1 of the pandemic, we have guaranteed the continuity of critical national services: from the review and provision of extraordinary income subsidies for citizens and businesses, to the management of contact centre services overseen by the national Civil Protection. We also created a new national management and protection system for the health emergency. Over the next few months, we are working on developing new public service models aimed at:

- data governance for the management of the health and safety of citizens and of the national territory
- the cybersecurity of all physical and logical assets associated with information systems (GDPR)
- the robotic automation of activities and management processes used by the State's administrative bodies
- distance teaching and training
- the digitalisation of the relationship with citizens, with digital assistants and machine learning
- digital & data marketing of the tourism sector offer and of the nation's cultural heritage
- the virtualisation of the activities and services offered by local offices and elected bodies.

First Steps in a Post Covid World



To guide PAs in the creation of their New Normal, we have identified the lines of action that they must follow, together with our short and medium to long-term support solutions. Solutions that integrate both the actions required to support the internal corporate organisation (the employees) and those aimed at citizens and businesses (end customers).



Protect Productivity

Guarantee services with access counters (physical and digital) and assessment, preliminary and response activities. Ensure the functioning of the elective assemblies in the exercise of legislative and government functions

The challenge

The Covid-19 emergency has shown that PA, often considered refractory towards anything new, can adopt Smart Working methods in a matter of days. Similarly, the democratic functions carried out by elective assemblies can also exploit the potential of the full virtualisation and digitalisation of reactions and actions. It will therefore be necessary to support the PA in transporting all the various activities and operational processes, which until yesterday were delimited by the exclusive patrimony of the physical context, into the digital realm.

Our offer

- **Change Management programmes and interventions** 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 employees, as well as to ensure that they have the right training and assistance concerning the use of the new collaboration platforms. In this respect, we will propose the adoption of e-learning platforms, also supported by the use of immersive Virtual Reality technologies
- **Service & Data Design programmes and interventions** to co-design, test and adopt new work organisation models aimed at supporting the delivery of services: from those focussed on the relationship and contact with the citizen, to those aimed at the evaluation and investigation necessary for the provision of services, as well as models designed to support the governance of the State's organisational machine
- **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 (Livebox), to enable innovative and effective working solutions, thanks to worker-oriented technologies and organisational models
- **Virtual democracy**: our open and scalable solution designed to support government activities carried out by the elective bodies of Public Administrations; the following services can be added in addition to the live streaming and VOD recording functionalities: image recognition of representatives, electronic voting and notarisation blockchain, integration with the digital files of the Acts referenced, legislative resolutions and proposals, audio and text mining with speaker & emotion recognition to facilitate the automatic recording of the sessions, e-participation services on institutional platforms. These are some of the services that make it possible to transform legislative activity with the full digitalisation and virtualisation of the activities

- **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
- **Safe Eye:** our solution based on Artificial Intelligence that makes it possible to monitor and manage social distancing between people in public offices or within delimited spaces (corporate areas) by analysing videos and images



Streamline administrative activity through AI, which automates procedures repetitive and improves the quality of information and communication

The challenge

Ensure the cultural and operational transformation of the PA's organisational model, with the support of Artificial Intelligence technologies. This, in order to adopt into the PA the new organisational model in which human operators and robotic operators collaborate to improve the service performance of the bureaucratic organisation and in which governance tools are adopted to measure performance. Taking care not to leave the work processes unchanged with respect to the adoption of new digital solutions which, alone, do not help evolve the public system, but only to further hold it back.

Our offer

- **Change Management programmes** and interventions to guarantee training support (e-learning and Virtual Reality) and assistance in the adoption of the new “New Normal” work model and the use of the new Smart Working tools
- **Robot Process Automation (RPA)**, which we will use to robotise all repetitive and low-value processes that characterise the bureaucratic organisational model. The result will be to simplify and greatly reduce the time spent on control, validation and verification activities, and to re-evaluate the expertise of human operators towards specialised consultancy which, in turn, will help improve the quality of “taking charge” and taking care of the needs expressed by citizens
- **Digital Assistants** designed to improve support for the information and orientation phase of the citizen, in conversational text / voice and multilingual form, within web portals and institutional apps, which are often hardly usable and are unable to respond to the users' needs
- **Digital Enabler:** our ecosystem platform that enables users to build directional governance dashboards, making it possible to aggregate data which contributes to cost saving in various capacities (Asset Management, General Services, Utilities, Travel Management, etc.) resulting from the closure of local offices during Phase 1. This will enable organisations to evaluate the impact of re-opening according to a New Normal approach foreseen for the subsequent phases



The challenge

To give value to the data produced and managed by the PAs: knowing how to trace and aggregate the data, how to observe and measure it, to be able to correlate the data in order to generate new value. To improve the performance of the organisation and the quality of the services provided.

Our offer

- **Application of the Digital Enabler** to aggregate and correlate data from different sources, to build unified views of the impact produced by the services offered
- **Proposals of Digital Twin techniques** to build scenario simulations that can help the public decision maker in adopting the best policy choices
- **Adoption of AI & Advanced Analytics solutions** to improve the listening and understanding of the needs of public opinion expressed in conversations posted on social media platforms, starting from the reputation gained compared to the administrative interventions already carried out
- **Extended adoption of Cloud-based services and architectures** to define open, scalable and interoperable “ecosystem-based” solutions, built on the needs of citizens and capable of integrating front-end multi-channel services
- **Native integration of AGiD enabling platforms** to support the acceleration of the diffusion of innovation policies at national level (SPID/CIE, PagoPA, App IO, etc.)





Manage Complexity

Ensure the security of digital services, guaranteeing full compliance with GDPR Regulations

The challenge

To safeguard the cybersecurity of the end-to-end public system, by supporting Smart Working activities more effectively, avoiding hacking activities on remotely managed processes, as well as ensuring the protection of citizens' sensitive information (GDPR).

Our offer

The success of many cyber attacks often depends on human errors attributable to a lack of awareness of the risks one has to face. We will continue to support Administrations in their Cybersecurity activities through staff training to raise employees' awareness of potential IT vulnerabilities to which the organisation is exposed.

From an IT point of view, the in-depth knowledge of the technological solutions supporting **Cybertech, an Engineering Group company**, on both 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





The challenge

To simplify and make the relationship with the PA as intuitive as possible, in line with the accessing and using digital services offered by private companies. The diffusion and democratisation of consumer styles associated with the digital sphere will make citizens less and less willing to accept the complexity of bureaucratic action. The challenge lies in the ability to transform the public service culture through the use of enabling technologies.

Our offer

- **Service Design and Change management** to co-design the transformation of the public services ecosystem, focussing on the needs of end users, evaluating the impacts on the organisational system and modelling its sustainable change
- Support the extended **adoption of the “Cloud first” national strategy** for the migration, management and development of PA systems and services
- **CXM – Citizen eXperience Management solutions** that make it possible to define the citizen’s “multi-channel user journey” and, based on the experience of using the service, articulate the most appropriate administrative responses in relation to specific habits and to the style of access and use of the service
- **Integration of Social Media, Mobile and Digital Assistant capabilities** within the methods associated with accessing and using the digital services available, bringing them closer to the habits and consumption styles of end users
- **Extended adoption of AI & Advanced Analytics solutions** to enable social, economic and educational activities to co-exist with the pandemic risk and to simplify administrative actions



Transform bureaucracy into a “seamless” experience, facilitating a smooth transition between access channels (physical and virtual)

The challenge

To carry out interventions that enable the virtualisation of management and access to services, for their disintermediation on physical or digital channels, ensuring a secure self-service, together with the guarantee of the universal access right for the population at risk of exclusion as a result of the “digital divide”.

Our offer

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

- **Service Design and Change management**, to co-design the right mix between virtualisation and access in a secure physical mode of public services and growth of digital skills, through the adoption of e-learning and Virtual Reality platforms
- **CXM to create a “citizen-centric” view of the services** and ensure their effective and consistent access across all points of contact: web, social, phone, physical counter, chat, smart TV, etc. The aim is to “seamlessly” converge services upon the citizens' needs, without discontinuity in the transition between the different points of contact. And, before accessing the services available, ensure the consistency and updating of information, as well as the correct handling of the need, regardless of the contact channel (single knowledge base)
- **Live platform**, integrated with AR/MR/VR services, which make it possible to effectively manage activities and services, regardless of the physical location from which the service is accessed and used. From this point of view, we are developing Live streaming and VOD solutions to support tourism promotion services (cultural events offered at territorial level), also integrated with e-commerce services, as well as distance learning services
- **Specialised services available on the Mobile channel**, which enable the most effective management of pandemic risk, from a healthcare and public safety point of view, with the integration of Bio-surveillance systems





Building the ecosystem of digital citizenship services: personal, predictive, multi-channel and, above all, multi-service (PAC, PAL, ASL, etc.)

The challenge

To be able to overcome the PA's vertical bureaucratic model, we must help the Administration to carry out the actions that lead to a horizontal “revolution”; one in which the citizen and the institutions collaborate, equally, to exchange value (sustainability, accountability, performance, etc.) for the creation of the digital citizenship ecosystem. The real challenge of Public Administrations' New Normal.

Our offer

- **Maturity Assessment, Service Design and Change Management** to design the Multi-Entity Digital Citizenship services model
- **Cloud solutions and services** that rely on “ecosystem-based” platforms like Digital Enabler, capable of valorising and correlating open and IoT data with data available as part of legacy information systems, to build a new “user centric” service value and guarantee the new governance of public policies based on data
- **CXM and AI & Advanced Analytics**, to ensure the effectiveness of the citizen's unique view, to track the history of service relationships built by the latter regardless of the specific PA with which the same citizen comes into contact and to transform the service relationship from “question-answer” to “listening-service provision-prediction”

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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.

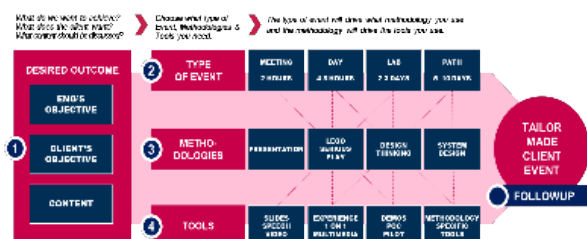
The walls between one vertical and the other will increasingly be mental barriers, we must then give life to new partnerships, designing and creating digital ecosystems based on technologies transversal and enabled by vertical services. These are the most important challenges to face. And we at Engineering 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.).

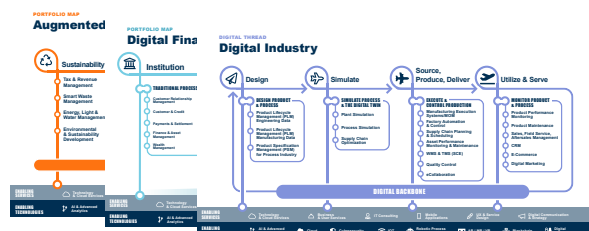
An intervention – the one we have adopted – that invests in innovation and not in technology: because first and foremost it focusses on the ability of the organisational body to react to the crisis, to face and resolve all the pre-existing rigidities on the supply and demand side, to then proceed to 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.



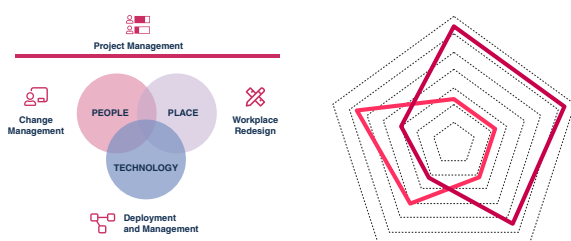
CO-DESIGN FRAMEWORK



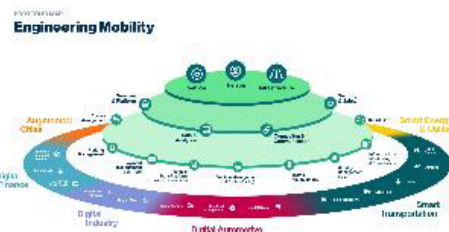
MULTI INDUSTRY EXPERIENCE



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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