DIGITAL TRANSFORMATION IN GREECE 2020-2021

Accelerated change in a time of a global crisis
The times we live in, in an unprecedented global health crisis, call for hard work and creative solutions. They demand forward-looking and quickening. They demand outgrowing our “containers” and venturing out to uncharted waters. We will navigate through as we have done so many times before.

Sometimes, it takes an unfortunate event to shake things up and make us move forward. As it needs a violent eruption to create new land. This is one of those times.

Perhaps it is not that we were unprepared for such a line-up of unfortunate events. It’s that we were late. Digital Transformation has begun a few years before for many companies, and yet they too were left unguarded at some points. If we had proceeded more efficiently, we would be less surprised and less stressed.

We often forget that this was not the first time. Just a few years ago, our country had to take extreme measures to safeguard the national economy. Only then, thousands of Greeks got to know and eventually enjoyed using digital services such as e-banking – which took off in 2015 even though being around for almost 15 years. Five years later, we have few reasons to visit a local branch, as our smartphones can open the door to almost all banking services offered today.

History is repeating itself this year, as the majority of the business world jumps on the digital wagon. Were they prepared? Not entirely. Did they succeed? In some cases. Could they have succeeded? Definitely yes.

In the following pages, we will not only talk about the challenges and the difficulties, but we will also look towards the future. We will set a framework for the aspects of Digital Transformation that are the most tangible for the year to come and yet the most important for future-proofing enterprises for a long time after. And most of all, we will share the voices of the people working on or driving the digital projects within their organizations, as our annual survey sample includes highly experienced professionals from Greek enterprises.

There’s a Japanese proverb saying “Fall seven times. Get up eight.” Are you counting?
EIT DIGITAL

EIT Digital is a leading European digital innovation and entrepreneurial education organisation driving Europe’s digital transformation. Its way of working embodies the future of innovation through a pan-European ecosystem of over 200 top European corporations, SMEs, startups, universities and research institutes, where students, researchers, engineers, business developers and entrepreneurs collaborate in an open innovation setting. This pan-European ecosystem is located in Amsterdam, Berlin, Braga, Budapest, Brussels, Eindhoven, Edinburgh, Helsinki, London, Madrid, Milano, Munich, Nice, Paris, Rennes, Stockholm, Trento, and San Francisco.

As a Knowledge and Innovation Community of the European Institute of Innovation and Technology (eit.europa.eu), EIT Digital invests in strategic areas to accelerate the market uptake and scaling of research-based digital technologies (deep tech) focusing on Europe’s strategic, societal challenges: Digital Tech, Digital Cities, Digital Industry, Digital Wellbeing, and Digital Finance. EIT Digital breeds T-shaped entrepreneurial digital talent focused on innovation through a blended Education Strategy that includes a Master School, an Industrial Doctoral School and a Professional School.

ABOUT

www.eitdigital.eu

FOUND.ATION

Found.ation is a leading startup-enabling platform for tech-oriented products & services in SE Europe, a digital transformation accelerator for corporations and a tech education hub.

Found.ation helps brands embrace Digital Transformation by disrupting every sector of their operation, unlocking potentials and resources, setting the foundations for future development and accelerating growth, based on innovation. We connect brands, startups, business leaders and young talent in order to create a successful, future-ready entrepreneurship ecosystem in the tech space and across various industries.

The Found.ation team strongly believes in the interaction between established corporations and startups. One of the key roles of Found.ation is to highlight these opportunities for cooperation between these two polar opposites. It already works with companies and organisations such as Eurobank, Pappastratos - PMI, Microsoft and the Municipality of Athens.

In 2016, Found.ation started cooperating with EIT Digital, under the ARISE Europe Programme, with the objective of strengthening the Greek startup ecosystem and enhancing the Digital Transformation of local corporations even further. Through the implementation of common, well-structured initiatives the aim of the collaboration is to initiate discussions and enhance cooperation between small and big companies. This will help both startups expand and grow and corporates adapt and evolve. Currently, the collaboration has been extended to include Cyprus, Romania, Albania and Bulgaria.

Foundation prepared this report to provide an invaluable scope of the Greek business ecosystem. Also, it offers important insights and examples on up to date practices, examines how much companies and large organisations have adopted Digital Transformation procedures, and pinpoints the reasons for any delays. The report follows the strategy of selected large organisations that operate in the country and aims at drawing attention to the need for transformation.

The major limitation of this report is access to data, as digital transformation is not easily measurable. Similar reports focused on the region are usually based on quantitative research; mostly questionnaires sent to companies. This report is partly based on and refers to their findings but goes beyond that in an attempt to give a good indication of insights and outlooks of the Greek landscape. Its needs and perspectives. We have conducted a research of our own, targeting a very specific sample – namely business executives of large companies that operate in Greece. In the ‘Private Sector’ chapter, the report presents infographics and data in charts that come from this research.

WHAT’S NEW?

For the fourth version of this report about Digital Transformation, Found.ation conducted once again a survey completed by industry stakeholders from various Greek and multinational companies that operate in a broad spectrum of sectors. The purpose of the survey was to examine how much companies and large organisations have adopted Digital Transformation, and identify the extent of knowledge that individual employees have, regarding Digital Transformation and its practices. This year’s questionnaire also focused on the challenges imposed by the COVID-19 pandemic, to examine how it affected companies and their employees and how digitally prepared they were. Therefore, this updated version offers a better look into the transformation from the employer’s point of view and provides more data to help us understand the situation in the country.

As we do each year, in 2020 we have also selected two Greek organisations whose strategic approach to Digital Transformation can be viewed as interesting case studies: Kotsiovalos (Dixons South-East Europe) stands always on the front line of technology, and SETE (Greek Tourism Confederation), which had to help the Greek Tourism sector overcome great obstacles amidst the pandemic era.

The report includes a statement from the Minister of Digital Governance to provide a scope of what comes next for the Greek business ecosystem, from the government’s point of view. Also, to offer a fresh perspective on what drives innovation in Greece today, it includes an interesting op-ed from the Chief Creative Officer of Greece.
Learnings from a Pandemic

This year was all about learning from our COVID-19 experience - both good and bad. Threats we never may have expected or planned, threats that can be ferocious and with long-lasting consequences. We kept us stressed and worried.

On the other hand, we learned that transforming is not at all impossible, risky, or difficult as we imagined. Entire departments moved to remote working in a few days, different channels were created to communicate with consumers, different business propositions explored.

Lesson one: Change is possible and, as it became obvious from the pandemic crisis, mainly the resistance to change of people and the non-aligned common strategy and direction hinders it. In the case of COVID-19, the threat was obvious and universal, hence the alignment was easier and faster with impressive results.

The digital revolution can be accelerated in two ways: with carefully designed and impeccably executed long-term strategy or with a leap of faith. In March and April of 2020, millions of people rushed unprepared into a new digital reality.

Projects that normally take months or years to implement happened in a matter of weeks. Not without problems, but with impressive speed and decisiveness.

Lesson two: Speed is important; speed can give a head start.

The fastest runner only wins at short races. Efficient management of stamina, strategy and resilience get a runner to the finishing line of a marathon.

Lesson three: Even if an organization wins the first round, it has to strengthen for the next obstacles, to future-proof itself. Most of all, our leaders need to create a crystal-clear vision of change, align their teams and lead the transformation.

Accelerated digital transformation is only half of the story. To keep moving and overcome any other obstacle life throws at us, we need to gain inertia. We need to future-proof our businesses. The only way to do this is through innovation.

Lesson four: Just as we thought the worse was behind us, the first wave of the pandemic hit the shore. Then another wave came and along with it the need to build smarter breakwaters.

We need to build on these learnings. We need to understand that technology is a way forward to tackle uncertainty. User-centered design and consumer behavioral analysis is paramount, and organizational restructuring is inevitable.

Everything designed before was designed long ago. Practically, in the beginning of the previous century with the management revolution, it now needs re-evaluation and a start over.

2020 has been a challenging year in so many fronts. Humanity has been enduring continuous stress caused by the COVID-19 outbreak. Experienced by all, this has been altering the way individuals, groups and organizations have been operating. It has been a time full of unexpected events and changes, a very difficult and precarious situation that, seen through an optimistic lens, can bring home lessons of how to operate in uncertain and unexpected environments.

Digital Transformation has been the main turn the world has taken; 97% of businesses report that COVID-19 has sped up this shift, accelerating their digital communication strategy by 6 years¹. As we will see in the following chapters, this holds far the Greek enterprises as well.

But businesses are not the only ones to enter a rapid transformation phase. Customers, the driving force of every business sector, have changed, too. The way everyone works has been disrupted. The tools and services used have moved to the cloud; the employees have been forced to immediately upgrade their technical and digital skills; communication with the clients and customers had to be quick and swiftly customized. It is time for organizational structures to adapt to the demands of this peculiar era.

As always, no transformation can succeed unless relying on the empowerment of the people at the core of the business organizations. In the following pages, we will explore the most current aspects of the long-term journey we call Digital Transformation, the key points the leaders of this process need to focus on right now.

CUSTOMER BEHAVIOUR CHANGE

COVID-19 afflicted businesses in several ways. The two most influential factors considering Digital Transformation have been the new behaviour developed by end customers and the actual way businesses carry out their work.

The pandemic affected purchasing habits, preferences in products and services. Reports indicate there has been a radical adoption of the digital, covering an uptake of a “decade in days”, with, for example, 20 times more videoconferencing participants in 3 months and an increase of e-commerce over 8 weeks, equivalent of an earlier 10-year projection².

E-commerce take-up owing to COVID-19 vs. earlier predictions

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During the pandemic, the online has not just been the workplace but has additionally been the main place for households to seek entertainment, learning and DIY activities. On a par with this trend of living more time online, shopping has equally reached new heights, with mobile increasing in popularity as much as 45%\(^6\). However, most consumers focused their purchases on basic consumer products, covering basic needs such as personal health, health of friends and family and food and medicine safety.\(^6\) In contradiction, the once high performing sales of clothing and footwear dropped by 51%, possibly a ripple effect of the once high performing sales of clothing and footwear.\(^5\) The same consumer behaviour patterns were observed in Greece. All fashion purchases dropped by 35.40%, whilst Hobby and Sports accessories saw a rise of 70.40%\(^6\).

Reports show that owing to the virus, the interests of consumers towards three long-term trends have accelerated: the health and well-being sector, where consumers lead healthy lifestyles, conscious consumption, where consumers choose sustainability and quality over quantity, and the focus on everything local, as in the place of production, sales and consumption.\(^7\) These long-discussed trends have been arguments pro and con of production, sales and consumption.\(^7\) These trends have reached new heights, with mobile increasing in popularity as much as 45%\(^3\). However, most reports show that owing to the virus, the interests of consumers towards three long-term trends have accelerated: the health and well-being sector, where consumers lead healthy lifestyles, conscious consumption, where consumers choose sustainability and quality over quantity, and the focus on everything local, as in the place of production, sales and consumption.\(^7\)

### USER-CENTERED INNOVATION

#### User Centricity

Today, in the forefront of the development of digital technologies, specialized software and robust hardware should work the way they are designed to. As users of a business product or service we can identify the company’s employees and its stakeholders as well as its customers. This is why a user-centric approach is of paramount importance in any Digital Transformation process. The greater the inclusion of users in the transition process the more successful the Digital Transformation of an organization is.

#### Customer Experience

Outside of the business, Digital Transformation involves the people who benefit from its offered product or service: the customers. Each organization ought to look at new opportunities to grow in the digital world, omnichannel touchpoints to reach customers and create unique and seamless experiences to remain in the forefront of the buying preferences, thus making Customer Experience (CX) a core matter in the R&D process of Digital Transformation.

#### Ideas Management

Employees, as the interface between the customer and the business product or service, are ideally positioned to identify opportunities, best and worse practices of how the customers are responding to offerings and features. For this reason, ideas management tools ought to be considered and in place, as nets for catching the greatest and most promising in-house ideas. As straight forward as they may be considered, the mindset they require transcends soft skills. These have been discussed more at length in our most recent white paper.\(^10\)

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7. Accenture, How COVID-19 will permanently change consumer behavior, April 2020, Ibid.

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Employees who were new to “working from home” report that the shift has found them unsettled in their routine, missing the eventful life in the office, an indication for HR departments to address employee psychological well-being, in less digital transformed business environments, these unplanned rapid shifts into the digital might have an important hurdle. As reported for Greece, the still existing digital divide in businesses is attributed to the lack of digital skills of the general population, preventing a fast and easy pivot into working remotely.

Processes and operations are only one side of Digital Transformation that can help during this transition. To take things further, as the uncertainty continues, some leading technology companies are making brave decisions of permitting employees to work away from the office for as long as June 2021, while others are already deciding on permanent ‘working from home’ operations. Those are decisions requiring strong commitment towards “being digital”. The ramifications of remote working involve the working environment, psychological well-being coaching and a new home-office for each employee, a “working from home” stipend and a re-evaluation of the company’s real estate and workspace interior after the new reality post-COVID-19 settles in. Having to weigh in factors such as care, well-being and innovation, each organization will decide how to carry on ahead, especially as employees seem willing to continue working from home the same as during lockdowns.

**ORGANIZATIONAL REDISEIGN**

In the dawn of this new reality, many changes seem to be on the way. Approaching the user, monitoring customer behaviour and changing the way employees work, are considered the main pillars of any business operation. These changes can denote a complete shift of how and for whom you are in business, questioning whether the existing business structure is sufficient to cover the new requirements. Necessarily, this requires giving some thought on how the organization can take advantage of the digital, in order to address the above, while considering employee well-being.

Redesigning new customer behaviour would require new datasets and KPIs that would result in new ways of decision-making. Working remotely would require new processes for team communications that would result in new ways of organizing and managing geographically dispersed teams. These are challenges, which can either turn into obstacles for operations, if not addressed: or opportunities for development and growth, if tackled head-on. Thus, redesigning and amending the operation of a business that has been affected by the pandemic is not only paramount but becomes a matter of business survival.

**Steps for Business Redesign:**

1. Make peace with your legacy
2. Understand who you are and who you want to be. Accept that you may have to change.
3. Identify your strengths and weaknesses. Be honest.
4. Use both internal and external talent to create opportunities for your business.
5. Develop clear roadmaps towards fulfilling these opportunities.
6. Identify where a new structure is required to accommodate these changes. It is almost certain that old processes cannot fit new realities.
7. Be vigilant on future developments which might affect roadmap adherence.

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**Why there is a need for organizational redesign**

The aforementioned shifts owing to COVID-19 are based on data gathered during the March-June 2020 period. What lies ahead remains unknown and uncertain, although indications and hints develop day by day. The OECD has laid out several possibilities that might play out in the near future, in a foresight report to prepare for various anticipated scenarios. Will the digital be the main mode of future social interactions, or will there be a backlash once this is considered over? Will our future with technology be pro-privacy or not? Will there be employment or unemployment? Jobs for the elder or jobs for the robots? Re-localization or re-globalization? Will consumers go for social responsibility or will sustainability be overshadowed by survival?

There are no easy answers to the above questions. Only time will tell what the direction will be, but this does not mean that businesses should stand still. On the contrary, it is important to invest in innovation and R&D to be ahead of the curve, once the new normal becomes standard. Every forward-looking company ought to future-proof its business by working on different scenarios as a team, expecting outcomes based on various hypotheses, while on the constant lookout on how things are developing and which scenario seems closer to reality at every moment.

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GLOBAL TRENDS

At the beginning of 2020, digital transformation trends predictions focused on 5G, data analysis, machine intelligence and security. It was right before COVID-19 struck. In the wake of the pandemic, transformation accelerated at a breakneck pace. Everything turned digital, as a massive surge of online activity for business, public administration, education, and research and social interaction resulted from a lockdown policy adopted by more than 90 countries worldwide.

Remote medical diagnosis and contact tracing, contactless commerce and cashless payments, virtual meetings and remote working became the new normality. It was the time for technology to help save lives, help businesses stay afloat and reopen.

Big Data has always been on a steady growth trajectory. Post COVID-19, the need for data is even greater. From contact tracing to life-saving decisions even in the workplace, this year data analytics were used in real-time. What is expected is a massive continued investment from companies into data and analytics capabilities that power faster, leaner and smarter organizations.

Investing in Digital Transformation

Realizing that the COVID-19 crisis has changed the way everything worked, businesses decided to invest in digital transformation, increasing their budget. The pandemic also propelled some industries further than others, opening up “definite” future remote work opportunities. In addition, organizations have recognized that transforming digital communications is very critical to address business challenges – having the intention to expand digital communication channels as the world reopens.

During the lockdown, customers seemed to fully rely on digital solutions – maybe this reliance has never been greater. Facing a new reality that will come after the pandemic crisis is over, businesses globally seem to have the intention to harness digital channels to supplement and strengthen their relationships with the customers. They should seek to ensure they are in the best possible position to succeed, and they should build in digital resiliency in case there is a second wave or a different global threat.

COVID-19 also intensified the demand for faster connectivity - at home and in the workplace. Better networks to keep everyone connected were proven during the lockdown. The constraints of legacy IT and the lack of collaboration across organizational silos made it increasingly difficult for them to be nimble and responsive to changes in their environment.

However, as data is the core ground on which political, economic, and social battles are fought at all levels—from global to local, data collection, integration, management and use (or misuse), underpinning IT and applications infrastructure and cybersecurity are still on the frontline. Greater control over personal data and more protection for consumers from big tech companies who harness and sell data for money are issues on the table until there is greater transparency.

However, data without technology is useless. AI and machine learning have exploded in recent months. Businesses turned to technology to gain insights into their data, as they have realized during 2020 the value propositions of AI and machine learning: speed, scale, and convenience. Additionally, as companies see how fast and accurate conversational AI becomes, they will increasingly develop it. During a global emergency, AI applications can help at scale.

DIGITAL TRANSFORMATION IN GREECE: THE COUNTRY’S DIGITAL PROFILE

Greece’s position on the Digital Economy and Society Index (DESI) for 2020 has dropped one place compared to the previous year and the EU average increase. For 2020, the country ranks second to last, in the 27th position out of the 28 EU Member States, with Bulgaria ranking last.

Still, the overall score for Greece has improved from 63.1 in 2019 to 71.3 in 2020. Greece has demonstrated for the first time a major improvement in digital skills, with over 50 per cent of Greek citizens claiming to have at least the basic digital skills. On Connectivity, the country has seen the progress of over 15 per cent compared to 2019. The signs of digitization are there for Greece, however the country needs to accelerate its digital growth, as it falls way behind the EU average.

Connectivity

There is no improvement since 2017 for Greece in Connectivity, one of the five indicators of DESI, as the country ranks last among the 28 EU member states. The fast broadband take-up is 76 per cent, which is lower than the EU average, due to high prices in the Greek telecommunications market. However, it is worth noting that there has been a significant improvement on the fast broadband coverage in 2019, which was expanded by fifteen points compared to 2018, reaching 81 per cent, just five points below the EU average. There has also been an increase of eleven per cent on the mobile broadband take-up, although there were only 86 subscriptions per 100 people when the continent’s average is 100 subscriptions per 100 people. Meanwhile, 4G coverage (96 per cent) exceeds the EU average by 1 per cent.

The good news is that Greece will announce a digitalisation plan in 2020. The ‘Digital Transformation Bible’ will be finalised within the year and it is expected to result in a structured, actionable and measurable strategy. In addition, Greece has invested 700 million euros in its “Ultra-fast Broadband” project, out of which 300 million came from the European Union, with the purpose to provide a modern and fast internet connection to the approximately 11 million citizens by May 2021.

Meanwhile, the country has initiated a draft plan for implementing 5G connectivity, as it currently scores 0 in 5G readiness. There is a study estimating the cost of the required actions, and the impact it might have on the public. There is a significant delay in granting permission to new antennas, as the relevant law is still in discussion in the Greek parliament, but it is expected that by the end of 2021, the issues will be resolved and Greece will get on track on its digitalization plans.

**Human Capital**

As for digital skills, Greece has made significant progress. 51 per cent of people between 16 and 74 years of age had at least basic digital skills in 2019, a 5 per cent rise compared to 2018, rise much faster than the EU average. In the last three years, the number of ICT professionals has also increased, although the 1.8 per cent of the total workforce is still way below the EU average, at 3.9 per cent.

The Greek government has taken significant steps in providing opportunities for developing the citizens’ digital skills, organizing and co-funding several projects aiming to educate the public and train them in the digital space. It realised that the lack of digital skills is a major obstacle in the country’s digital transformation plans.

**Use of Internet Services**

There is a significant increase in the use of specific internet services in Greece. For Greeks, reading online news, using social media and video calls are the three most popular internet services, the use of which is way above the EU average. 80 per cent of users are reading news online, while video calls are making 67 per cent of them. On the other hand, internet banking is still quite low, with only 40 per cent of internet users making online transactions, while 51 per cent shops online.

Integration of digital technology

Despite Greece’s priority in the digitization of business, enterprises still struggle to implement the goals of digital transformation. However, Greek businesses share of electronic information sharing is above the EU average, while the use of social media fell sharply by 2 per cent in 2019.

There are some steps toward the digitalization of businesses, as there is some progress in providing digital services when someone wants to start a business. Furthermore, small and medium sized companies can benefit from the 14 digital innovation hubs covering some of the country’s most critical sectors (agriculture, tourism, etc.).

**Digital Public Services**

The public sector shows signs of improvement; however, it still ranks second to last among the EU member-states. The open data maturity indicator shows that Greece in 2020 ranks at the EU average with 66 per cent. The number of internet users that are active users of e-government services at 39 per cent with a 3 per cent increase in 2019. The availability of digital public services for businesses increased to 63 per cent.

The Greek state has made some improvements in simplifying its administrative systems and processes for the citizens. For example, we can now fill birth certificates in hospitals and upload them digitally to the public registration system. Moreover, gov.gr has helped simplify procedures, bringing together different services from different ministries, enabling citizens to ease the burden of complicated processes.

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**Digital Transformation in Greece: The Public Sector**

Greece consistently ranked low on the Economy and Society index. The country has been significantly slower than the rest of Europe in making fast and ultrafast broadband available to its citizens, as well as digital government services. It was something unexpected that changed everything. When COVID-19 struck the globe, Greece was already determined to apply measures to accelerate its digital transformation, in both the private and public sector. Digital solutions were part of the overall government programme, which were decided to speed up regarding its implementation.

The government introduced measures, which led to a transformation of the digital landscape. A unified government portal is currently providing 614 different government services to citizens, including an electronic prescription service and a mobile platform for the cabinet to function remotely.

In September 2020, Gov.gr had already been on air for six months. Its activation was accelerated two months earlier than planned due to COVID-19, enabling the citizens to conduct their transactions with the state from their home or office, without commuting and unnecessary bureaucracy. Among those transactions added, there are many which significantly facilitate Greek’s daily life: certificate of genuine signature, registration documents and municipal certificates, transactions with KEP (Citizens’ Service Centers) and Tax Offices via video conference, driving licenses and registrations in kindergartens - to name but a few. Citizens and businesses save time and money with a single click from their mobile or computer. According to what the Prime Minister Kyriakos Mitsotakis has announced in September, gov.gr is expected to have more than a thousand electronic services.

Digital Transformation in Greece

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2. As per September 2020
4. As per September 2020, 6 months of operation
COVID-19 has been a strong motivator. Nevertheless, the unprecedented situation has also unequivocally highlighted the importance of internet accessibility and digital literacy. Greece is one of the 28 EU countries, which up to the beginning of 2020 were significantly lagging in various areas of digital performance, such as internet accessibility, Internet services usage, using technologies at work and digital skills. As a result, the digital gap and inequalities were created both between Greece and other European countries, as well as inside the country. Nevertheless, it is worth noting that Greece improved its score on the human capital chapter making progress in most of the related DESI indicators. For the first time, the percentage of individuals with at least basic digital skills is over 50%.

Despite the progress, the gap remains. Moreover, there is not only a gap between Greece and the 28 EU countries but also inland, between older and younger people, residents in rural and urban areas, people with low and higher education level, employees in small and large enterprises etc. However, the gap between men and women is slight, since both genders use mobile phones to have internet access. The lack of digital skills and the internet usefulness are the two major reasons those who have no internet access more often mention 5. We should give priority to digital development and execution of strategies that will ensure equal opportunities for all. Therefore, the Ministry of Digital Governance, triple-play for the development of broadband in Greece, https://bit.ly/3cAXR8Y

In July 2020, the General Secretariat for Digital Governance and Simplification of Procedures of the Ministry of Digital Governance started cooperation with the Organization for Economic Cooperation and Development. This agreement allows the transfer of the high know-how and experience of the OECD in matters of competence of the General Secretariat for Digital Governance and Simplification of Procedures. The axes of cooperation are the establishment and activation of the Bureaucracy Observatory, which will be a permanent mechanism for measuring and reducing bureaucracy in the country and the strengthening of the National Program for the Simplification of Procedures, which is the central policy for the reduction of bureaucracy in the country. 

What is more, in February 2020, the Ministry announced that Superfast Broadband programme is being extended to Businesses, the EU has approved the Ultrafast Broadband Financing and also that the country’s performance in the WiFi4EU programme has been the highest in Europe, with 82.7% of Greek municipalities having applied for financing to implement open Wi-Fi networks in their regions 6.

The country still has a long way to go. It is about two years away from simplifying the ID system so that Greeks only need one personal identification number for all paperwork. This is a fact that still imposes great obstacles in doing business and seriously impedes attempts to attract foreign investments 6.

A good start was the operation of Digital Academy, an online platform (nationaldigitalacademy.gov.gr) activated by the Ministry of Digital Governance that gathers free educational material available to citizens. In its first edition, the Digital Academy has over 150 basic and advanced level courses of over 1,500 hours of training. The courses aim at both those who need basic digital skills in their daily lives and those who want to enrich their knowledge of new technologies 5.

Towards the digital transformation of the state, the continuous and steady reduction of administrative burdens through the simplification and digitization of procedures is a key factor to strengthen the economic activity, create new jobs, attract investment and regain citizens’ confidence to the institutions.

Looking back to these six months several conclusions can be made. We affirmed that a country can overcome bureaucracy and technologically outdated practices if it has a plan and executes a well-defined digitization strategy — as was the case with previous examples, such as Great Britain’s. Additionally, and perhaps equally important, we saw that the public was not only better prepared for this digital transformation but also looked forward to it. The millions of documents that were issued digitally with just a few clicks are in essence the result of a large section of the Greek society which has adopted these services.

Meanwhile, we are already preparing our next steps. Only recently, we passed a signature bill into law which unifies and codifies all existing pieces of legislation about technology, digital and e-services, telecoms, cybersecurity, and more. At the same time, it aims to introduce landmark reforms such as the ‘Personal number,’ the new unique identification number for individuals and businesses unifying essentially various other existing identification numbers such as ID, tax ID, and social security ID numbers and linking their respective registries.

An area where we invested with singular focus is 5G. It was pivotal for us to establish and create the conditions for the birth of an ‘innovation ecosystem’ with a focus on 5G. In the upcoming months, we will have completed the auction of the 5G spectrum and part of the proceeds will be allocated to a special venture capital fund which will invest in companies active in the research and development of products and services that operate with 5G infrastructure. Additionally, part of the spectrum will be available free of charge for research institutions and startups.

To conclude, the Ministry of Digital Governance has achieved significant results in each of its key verticals and policy goals. From simplifying government processes to the benefit of citizens and businesses to building a single point of delivery for all of its digital services through gov.gr, to dealing with national security and pandemic crises, to improving cybersecurity defenses, and laying the groundwork for the 5G era. Consequently, we want Greece to become a digital leader both in services and infrastructure by moving quickly into the era of the Fourth Industrial Revolution and leaving no one behind.

Greece is ready for the big leap in the digital age

Long before the advent of the coronavirus, Greece was a laggard in terms of digitally transforming the state and the economy. This was reflected in the relevant indicators, most notably DESI. When the Ministry of Digital Governance was established in the summer of 2019 we set a pivotal goal to converge with the European average in four years. We set out to achieve this goal through the digitization and simplification of government services, which results in a better, easier, and more streamlined experience for citizens and businesses. The outbreak of the pandemic turned the country’s digital strategy into a necessity: travel and commute restrictions meant that we had to digitize services quickly and efficiently, thus “moving” them from counters to computers and smartphones. Because of our diligent planning, the coronavirus pandemic did not overturn our design. Instead, it acted as an accelerator of our digital transformation strategy.

We built and continue to implement our strategy with a singular focus on gov.gr, the government platform that brings together all the services provided digitally by the state. With gov.gr we digitized and integrated procedures that relieved the Citizen’s Service Centers (KEP) of millions of visits. Services and documents like solemn declarations, power of attorney, drug prescriptions on the cloud, birth certificates, driving licenses, and communication with the tax authorities via video conference are now provided by gov.gr effortlessly, secure, and from the comfort of one’s home or office.

At the same time, during the lockdown, we also utilized SMS technology. We created a simple five-digit number, 13033. With it, citizens could declare their extraordinary movements. The “13033” service has been recognized as best practice by the OECD and the Executive Vice President of the European Commission, Margrethe Vestager.


The pandemic has triggered some of the biggest economic and social challenges that countries across the world have had to face in decades. With such a difficult crisis on their hands, world leaders might be forgiven for not prioritising the creative industries. However, my experience working in the design industry, for Google, and now as Chief Creative Officer for Greece has shown me first-hand that creativity, innovation and technology can be critical factors in rebuilding a country at a time of crisis.

After the snap elections in July of 2019 I was fortunate enough to be invited to join the newly appointed Prime Minister, Kyriakos Mitsotakis, as a special adviser and the country’s first ever Chief Creative Officer.

A few months into my new role we were faced with a global Pandemic. One causing untold pain and suffering as well as economic meltdown in areas like our Tourism Industry, an industry that relies on people visiting our beautiful country in real life. Al.In 2010, almost 10 years of running Google’s Creative Lab in EMEA had shown me first-hand what design thinking and an innovation mindset could do for a brand and now I had my first opportunity to apply it to an entire nation: a population that had already endured ten years of economic crisis, mass youth unemployment and a brain drain in the hundreds of thousands.

Greece’s Ministry of Digital Transformation responded to the pandemic by rapidly developing online and mobile tools that allowed Greek citizens to quickly adapt to a new way of life. Alongside this, my team developed Greecefromhome.com: a platform that warmly encouraged visitors to stay safe while sharing a diverse array of video content celebrating Greek cuisine, music, fashion and sport. Hacked together in two weeks, our aim was to keep potential visitors engaged and also keep locals occupied indoors and affected professionals skilled-up and trained. It was a big success, driven by creative thinking, and has been cited by many as a textbook example of an effective response to an industry in turmoil and all in record time.

I’ve also been working on Greece’s country narrative, or what they call in some circles ‘country branding’ - a term I’m not really fan of as it feels more like ‘marketing speak’ than real structural change resulting in real-world benefit. The creative and strategic idea driving the work is to take one of the world’s oldest civilisations and show its future-facing side, one based on its current achievements. The aim is to state the ambition of where we want to go, not just where we’ve been, to drive further growth and innovation in the country in the years to come.

Creativity has been key here in how we’ve identified the challenges the country is facing, especially during the crisis, and developed innovative ways of solving them. This is what design thinking is all about.

I think more countries need Chief Creative Officers, or at least more creatives and designers working in Government. People who can capture and creatively communicate why one should visit, invest and live in a country. People who can help rebuild confidence internally whilst trying to re-establish credibility on the world stage by sharing the vision of a Government. People who can galvanise its citizens and the diaspora through a shared sense of belonging while attracting tourists and investors who also want to be part of a movement.

I am trying to incorporate all of this into my current work for Greece, supported by a team of brilliant creative minds, many of whom are recent graduates without jobs who are now helping ‘rebrand’ and rebuild a country.

It’s for all of these reasons that I believe drawing on a nation’s creative minds, and nurturing the next generation of creative talent, is what creativity, innovation and technology can offer and why they are so critical in rebuilding a country.
Challenges and risks

The factors slowing DT uptake have shifted compared to 2019. Instead of skill deprivation, the main hurdle for Digital Transformation is business culture, more specifically a resistance to change. Half of the respondents claim that educating and training employees is one of the most effective tactics to drive an organization’s Digital Transformation Journey. The main needed skills are of the soft kind, such as originality, innovative thinking and active learning.

Data- and user-driven strategies

In the front of working with data, 56.1% of respondents within Greek businesses report that they do not or partial collect data and from those who systematically do so, 61% use this information to improve their understanding of the customer. However, 57.3% do not make use of behavioural data or User Centered Design methodologies to improve their offering to their users and 48.8% incorporate no ideas management process. In a sense, this has been discussed in Foundation’s white paper on User Centered Innovation.1

The effects of COVID-19

Regarding the sectors in need to apply DT urgently in their business reality, there has been a significant rise in than of products and operations compared to last year, at 19.5% and 17% respectively. As this report’s data has been gathered during the pandemic, it might be a sign of the changes brought to the workplace owed to COVID-19 and related to the fact that 92.7% of businesses switched to a remote working mode in response to the pandemic. However, participants suggest that IT, marketing, operations and products are easier to change due to DT efforts. But the main risk in their minds is the demotivation of employees, who might feel that failure in a DT task could be a potential threat to their job position or status. Along with psychological strains that rise due to COVID-19, every HR department ought to act regarding employee wellbeing, since important and possibly unmentioned issues will surface unpredictably.

Following the global trend of turning to the digital world, 93.8% of the cases reported an acceleration of DT efforts because of the pandemic, when only 16% could shift to remote working immediately, while a notable 48% were ready to do so. This finding becomes even more impressive, considering that before the pandemic, 7 out of 10 Greek businesses had a maximum 25% of their workforce working remotely. After the pandemic breakout, 6 in 10 businesses have over 50% of their workforce work remotely, agreeing with the global trends where more businesses have embraced remote working for most of their employees – a trend believed that is here to stay and possibly grow, as noted by 81.7% of respondents.

Leaving thoughts

From the results, we can fathom that “remote” is here to stay, “digital” is now an important part of our being, and “transformation” is what we ought to strive for. The tools are out there. We need to use them and get results.

Let’s talk this over a zoom-drink!

Q: Are you actively involved in that kind of projects?

- 1.35% No
- 2.70% Rarely
- 21.62% Occasionally
- 44.59% Often
- 29.73% Full time

Q: In your opinion what are the most effective tactics to drive your organization’s digital transformation journey?

- Data-driven decision making
- Change of culture
- Adoption of new methodologies (e.g. design thinking, agile, etc.)
- Adoption of new technologies
- Top-down development of roadmaps and milestones
- Involving external partners (e.g. advisors, business counselling companies)
- Educating and training employees
- Bottom-up discovery of new paths or talent (e.g. internal innovation competitions)
- Encouraging innovation from outside (e.g. external competitions, collaboration with startups etc.)
- Use KPIs to access the progress of the DT projects
- Other

Q: Does your organisation run projects that include a Digital Transformation scope or are part of a broader Digital Transformation roadmap?

- 90.24% Yes
- 9.76% No

Q: Which are the biggest barriers your organization faces in their digital transformation journey?

- Need for new skillsets
- Lack of clear vision for a digital customer journey
- Integrating new technologies
- Resistance to change
- Ineffective gathering and/or leveraging of data
- Insufficient budget
- Lack of executive support and leadership
- Security or regulatory reasons
- Other

Q: Which area of your business you’d suggest as more urgent to change through Digital Transformation efforts?

- Business development: 13.41%
- Products or Services: 19.51%
- Management: 7.32%
- Sales: 13.41%
- Marketing: 10.98%
- HR: 6.10%
- Operations: 12.20%
- IT: 17.07%
- Other: 9.76%

Q: Which area of your business you’d suggest as easier to change through Digital Transformation efforts?

- Business development: 7.32%
- Products or Services: 13.41%
- Management: 3.66%
- Sales: 13.41%
- Marketing: 24.39%
- HR: 2.44%
- IT: 25.61%
- Operations: 9.76%
- Other: 13.41%

Q: What do you believe are the potential risks that come with Digital Transformation?

- Security (e.g. data loss)
- Legal (regulations, GDPR)
- Cultural (e.g. demotivation of employees)
- Sustainability (required investments threaten existing business models)
- Failure (projects may fail to deliver results)

Q: Which department is responsible for running and monitoring Digital Transformation projects?

- BoD / CEO / COO / Upper Management
- DT/Innovation/Digital Department
- HR
- A dedicated cross-departmental team
- It’s a company-wide effort
- Business Systems
- IT
- Marketing/IT
- Financial Department
- Production and Quality Control
- No such department
- Other
Q: Which of the following skills do employees need to have in order to support an organization’s digital transformation journey?

- Analytical thinking & innovation
- Complex problem-solving
- Critical thinking and analysis
- Active learning & learning strategies
- Creativity, originality & initiative
- Attention to detail, trustworthiness
- Emotional intelligence
- Reasoning, problem solving & ideation
- Leadership & social influence
- Coordination & time management
- Technology design & programming
- Systems analysis & evaluation
- Basic (use of spreadsheets, reports, etc.)
- Digital (there are standardized metrics and tools that data are entered)
- Structured (there are standardized processes and information templates)
- Partial (depending on the team, some/all of the above)
- Strategic (various data feeds organized in digital data lakes)
- Other

Q: How does your company collect data?

- 21.95% Basic (use of spreadsheets, reports, etc.)
- 24.39% Digital (there are standardized metrics and tools that data are entered)
- 32.93% Partial (depending on the team, some/all of the above)
- 6.10% Strategic (various data feeds organized in digital data lakes)
- 1.22% Other
- 1.22% It doesn’t
- 12.20% Structured (there are standardized processes and information templates)

Q: How does your company use the collected data?

- Improve its understanding of the customer
- Inform or design company strategies
- Manage productivity
- Discover new ways to grow
- Optimize internal processes & operations
- Other

Q: Does your company implement some kind of employee idea management process (i.e. internal competitions, idea boxes, idea submission forms etc.)?

- Yes 48.78%
- No 45.12%
- I don’t know 6.10%

Q: What actions did your business take in response to COVID-19?

- Remote work (either partial or full)
- Precaution measures (e.g. physical distancing, enhanced sanitizing/cleaning etc.)
- Ceased Operations (permanently or temporarily)
- Laid off personnel / Reduced salaries
- Reduced operating costs
- Digitized operations (internal or on the customer end)
- No actions were required
Q: To what extent did the pandemic accelerate the digital transformation efforts of your company?

- Not at all: 1.23%
- Insignificantly: 4.94%
- Somewhat: 30.86%
- Significantly: 46.91%
- Extremely: 16.05%

Q: To what extent was your company ready for remote working?

- <25%: 69.51%
- 25-50%: 12.20%
- 50-75%: 9.76%
- >75%: 8.54%

Q: What percentage of employees were working (or having the option to work) remotely BEFORE the pandemic?

- <25%: 10.98%
- 25-50%: 28.05%
- 50-75%: 30.49%
- >75%: 30.49%

Q: What percentage of employees are working (or having the option to work) remotely AFTER the pandemic?

- <25%: 10.98%
- 25-50%: 28.05%
- 50-75%: 30.49%
- >75%: 30.49%

Q: Which do you think will be the most important changes that the pandemic brought on the way of working that are here to stay?

- More remote work
- Flexible working hours
- Flexible working locations
- Reduction of corporate real estate
- Shift to more technological tools
- Flexible processes

Q: In your opinion, what are the top three most significant challenges in a remote-work environment?

- Lack of training on digital tools / processes
- Physical presence is required
- Technical equipment or processes do not support remote working
- Security issues limit remote operations
- Work from home is challenging because of other family members
- Employee psychology (i.e. emotional detaching, overworking, depression, anxiety)
The main needed skills are analytical & innovative thinking, originality and active learning.

Educating and training employees is one of the most effective tactics to drive an organization’s Digital Transformation Journey.

Before the pandemic, 7 out of 10 Greek businesses had a maximum 25% of their workforce working remotely.

90.2% include a DT scope or have a DT roadmap in place.

56.1% do not or partially collect data...

57.3% do not make use of behavioural data or user-centered design methodologies to improve their offering to their users.

48.8% incorporate no idea management process.

C-Level executives are mainly in charge of these projects.

The main hurdle for Digital Transformation is the resistance to change.

57.3% of businesses switched to a remote working mode in response to the pandemic...

...whereas after the pandemic breakout, 6 in 10 businesses have over 50% of their workforce work remotely.

81.7% of respondents believe that remote work is here to stay.

93.8% reported an acceleration of DT efforts because of the pandemic.

92.7% of businesses felt significantly ready to do so.

But only 14.8% could shift to remote working immediately, while a notable 48.4% felt significantly ready to do so.

92.7% of businesses switched to a remote working mode in response to the pandemic...

81.7% of respondents believe that remote work is here to stay.

Digital Transformation in Greece
In the aftermath of the crisis, digitalization in tourism shall be a prerequisite for developing businesses and destinations.

During the pandemic crisis, companies of all sizes developed, delved into or embarked on a forceful digitalization with considerable success. Digitalization primarily addressed two key parameters: first, operations and infrastructures management, where it helped in resolving problems and issues, improving the operation of businesses and making it more efficient and problem-free; and second, tourists, who would inevitably expect it as part of their experience.

For tourists, the travel experience begins from the moment they start looking for their next destination. Their search is carried out mainly digitally, so they would most likely expect their experience at the destination to include a lot of digital features. In other words, all travel and hospitality organizations should develop smart digital strategies focusing on personalized customer experiences and excellent customer service. They should aim to engage travellers flawlessly across every link in the chain, across the different channels and every stage in a traveller’s journey.

However, for the sector to take this step-in unison, an entire ecosystem should move in that direction both at national and at a local level. Everyone should contribute to the efforts of the numerous start-ups which are still in their very early stages.

The state should establish the context and carry out the funding and tax relief plans they have repeatedly pledged to undertake. Moreover, it should provide businesses in the tourism industry with financial incentives to encourage them to investigate and adopt digital solutions in their operations. In terms of destinations, it should prioritize the funding of such solutions for promotion and destination management purposes.

In parallel, the business community should invest time, funds and resources in order to listen to new ideas, possibly funding or steering some of them, and sharing the knowledge, experience and features that businesses possess. There is no doubt that an insightful interaction between the start-up ecosystems and companies working towards a common goal shall generate mutual benefits.

The greatest challenge in digital transformation is that it is contingent on a substantial transformation of operations and habits. In this respect, businesses and destinations need additional assets to overcome challenges in this ever-changing environment that is the new normal now.

“Agility” and “Resilience” are the two basic elements that will strengthen their immune system. Besides, recent tourism history has proven that agile entities are better equipped to adapt immediately and efficiently to any kind of disruption.

Additional to that, one of the key success factors in the industry’s digital transformation is the fact that all stakeholders share a common vision. This vision must have at its center both the citizen and the traveller. It cannot simply be embraced by a few, to be forced on others; to succeed, it must be embraced by everybody participating in the ecosystem. Every innovation counts. Every step forward shall lead to better and more sustainable ways of experiencing the destination.

The digital transition is undoubtedly a requirement both for the present and for the future of the tourism industry. At the same time, it provides an opportunity for development, creativity and competitiveness.
Kotsosvolos has been a technology company since its inception 70 years ago but its digital transformation approach focuses on people more than technology. Digital transformation is all about putting its people at the center.

The CEO and all the top executives are sponsoring the need for change. They knew from the very beginning that every employee - from the stores and call center to our central Distribution Centers and HQ offices - are the basic ingredients for Kotsosvolos’ success during these 7 decades. This is why one of the first steps towards digital transformation was not only the reskilling/upskilling of people but also the modification of our organizational structure. Organizational barriers dropped; business and technology people are working closely together in small teams that engage an agile culture to move fast and achieve quick wins that continuously bring value to the company. Technology and business people share the same goals and OKRs and work closely in the same space. This was enabled by moving to a new open space HQ building in September 2019, allowing everybody to move freely between teams, and work closely together in their everyday work.

To provide a concrete example, the goal for our IT is not to create a functional e-commerce portal. The goal is for the whole team (Business and IT) to create a state of the art e-Commerce portal that fulfills its commercial purpose offering the best customer experience to its visitors and achieves its revenue targets. This could be achieved in no other way than moving the decisions to the first line and working in multi-skilled collaborative teams that trust each other.

All the steps described above, were - and remain - a continuous effort to achieve a cultural shift within the organization and as a result, create the fertile ground for new technologies to act as the best enabler that will help the company move fast. An almost complete redesign and restructuring of our systems are in progress during the last 3 years. Legacy systems that have been part of Kotsosvolos’ operating life for a long time, are or will be shortly left behind. The latest technology and applications are engaged for each business unit. We are investing in the latest technologies and turning this into a competitive advantage.

By combining the mindset shift along with the technological enablement of the people, we unlock creativity and innovation. And by innovation, I do not necessarily mean the aspect of “re-inventing the wheel”, but re-inventing every little aspect of our operations, identity and experience with the company. Ideation and internal pet-projects have been part of the K-mentality for many years with the form of internal academies, led by the HR department aiming at the personal development of our people. This is now being formed into wider processes like proof of concepts for our in-store operations and projects with academic institutions - concerning both our front and backend functions. Feedback and continuous improvement is always part of each team’s effort, most of the time trying to engage the customer - internal or external - from the first steps of the exercise.

The overall journey has not been ‘a piece of cake’; there were cases of resistance and hesitation of leaving the comfort zone, concerning not only culture but also processes that hadn’t been altered for years and years. However due to the fact that top management and the majority of the people are embracing and pushing for change, the ones who resisted gradually got on board. They had the time to adapt to the new reality and understand that they could only benefit from the transformed company they are working for.

It is important to note that the COVID-19 pandemic generated a significant boost to this journey, as observed worldwide despite the bad consequences for global health and economy. During these last 6 months, we became mature enough to confront many obstacles of the past as ‘opportunities for the days to come’. Starting with working from home, as for many companies around the globe during this period, our infrastructure enabled more than 300 people from our HQs and 150 call center agents to work from home transparently within a few hours. Processes that up until last February were ‘risky’ or difficult to touch, were transformed within days. But the most impressive part was that the Kotsosvolos’ team managed to turn the company’s operating model “upside down”! Stores were transformed to DCs during the lockdown, salespeople served our customers from our contact center, the whole business turned online, new partnerships - mostly in the supply chain area, were established to fulfill demand. This has not been a success that just happened by accident! This was the solid proof that our transformational journey is producing results: flexibility, agility, real-time response to change and continuous improvement.

To wrap up, I strongly believe that for every company to survive surrounding challenges, thinking, acting and continuously learning and improving like a young kid is the only choice forward. As for those who have not defined their journey yet, I would be optimistic enough to say that it is always ‘better late than sorry’, but you should get on board... yesterday!
The pandemic has left its mark in the business world. Shifts and changes have taken place leading us all to a new reality. For this reality, technology is an enabler, but people skills and communication ought to take the frontstage, as they are more important than ever.

○ Deciphering new ways to address your user needs through the digital ought to be a primary lens for any business.

○ Remembering that a user is not only your customer is crucial. Your employees and other business stakeholders or partners are an important part of your organisation’s outlook.

○ Remote working is here to stay. Adapting and transforming for it is not only a matter of innovation but also a matter of business survival.

○ Working from home can bring along unprecedented challenges, such as employee mental well-being or business real estate. These are opportunities to act upon to benefit the employee experience.

○ Businesses should always look in the mirror, weigh in any shifts in this fluid reality and be quick to act in order to realign.

○ A redesign of existing structures is paramount. This does not mean minor tweaks on your remote work policy. Fundamental changes in the structure of your organisation are leading to a truly agile yet performance measurable structure that can adapt to even more externally imposed unknowns (whether these are a pandemic, a market shift or an unexpected customer behavior change).

○ Employees should put soft skills in practice and work on hypothetical scenarios to be more prepared should hypotheses verge to reality. This is a first step towards future-proofing your business.

○ Culture is the most critical success factor in Digital Transformation. If the COVID crisis did one thing, it emphatically proved that businesses could change and adapt with unimaginable speed to seemingly unsurmountable challenges, if there is an accepting culture to change, an alignment to the reason of the change and a common goal.

○ If a month before the start of the COVID crisis one got five CEOs in a room and asked them, “do you think possible in 3 months from now your company to function with 90% of your employees working from home”, he would get five negative answers. The reality proved us all wrong.