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Σύγχρονες Επιχειρήσεις, Σύγχρονη Ελλάδα

DIGITAL GREECE:
THE PATH TO GROWTH - SYNOPSIS

Athens, May 2017

PROJECT ON A PAGE

EVALUATION OF THE DIGITAL "STATE OF THE NATION" AND DESIGN OF THE WAY FORWARD

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GLOBAL DIGITAL DISRUPTION

- The convergence of Digital Technologies
- Digital transforms Businesses
- Digital transforms Governments

GREECE'S DIGITAL ANATOMY

- Describe the European & Greek digital "state of the nation"
- Identify Greece's digital maturity (national & industry level)
- Evaluate the % contribution of digital to the Greek GDP

THE GREEK DIGITAL VISION & DIGITAL STRATEGY

- Define Greece's Digital Vision
- Formulate the Greek Digital Strategy
- Evaluate the uplift of the Greek GDP through the implementation of the Digital Strategy

THE EXECUTION OF THE GREEK DIGITAL STRATEGY

- Translate the Digital Strategy into an actionable plan to enable Greece's rotation to Digital
- Define the guiding principles for the set up of a Governance Mechanism
- Set up the performance management framework and define the relevant metrics for strategy monitoring

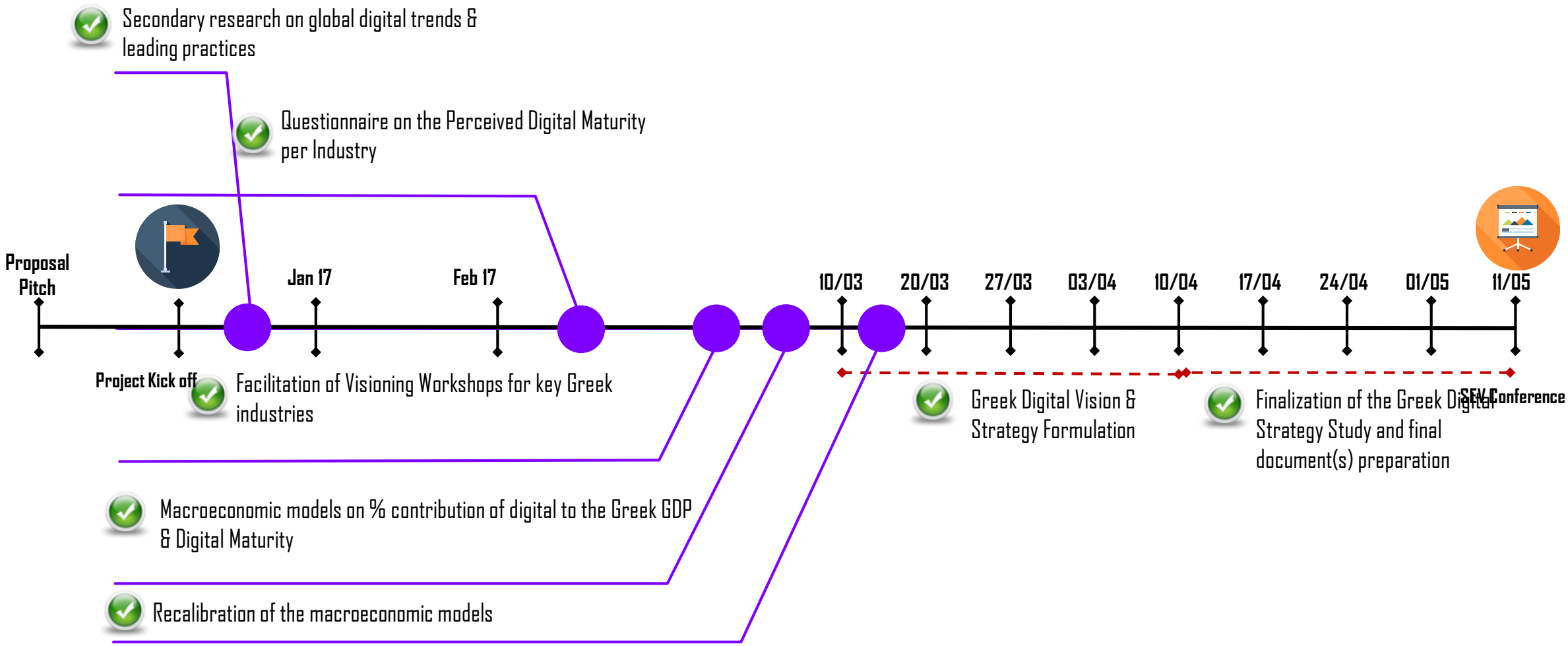
Digital Greece: The Path for Growth

Input used:

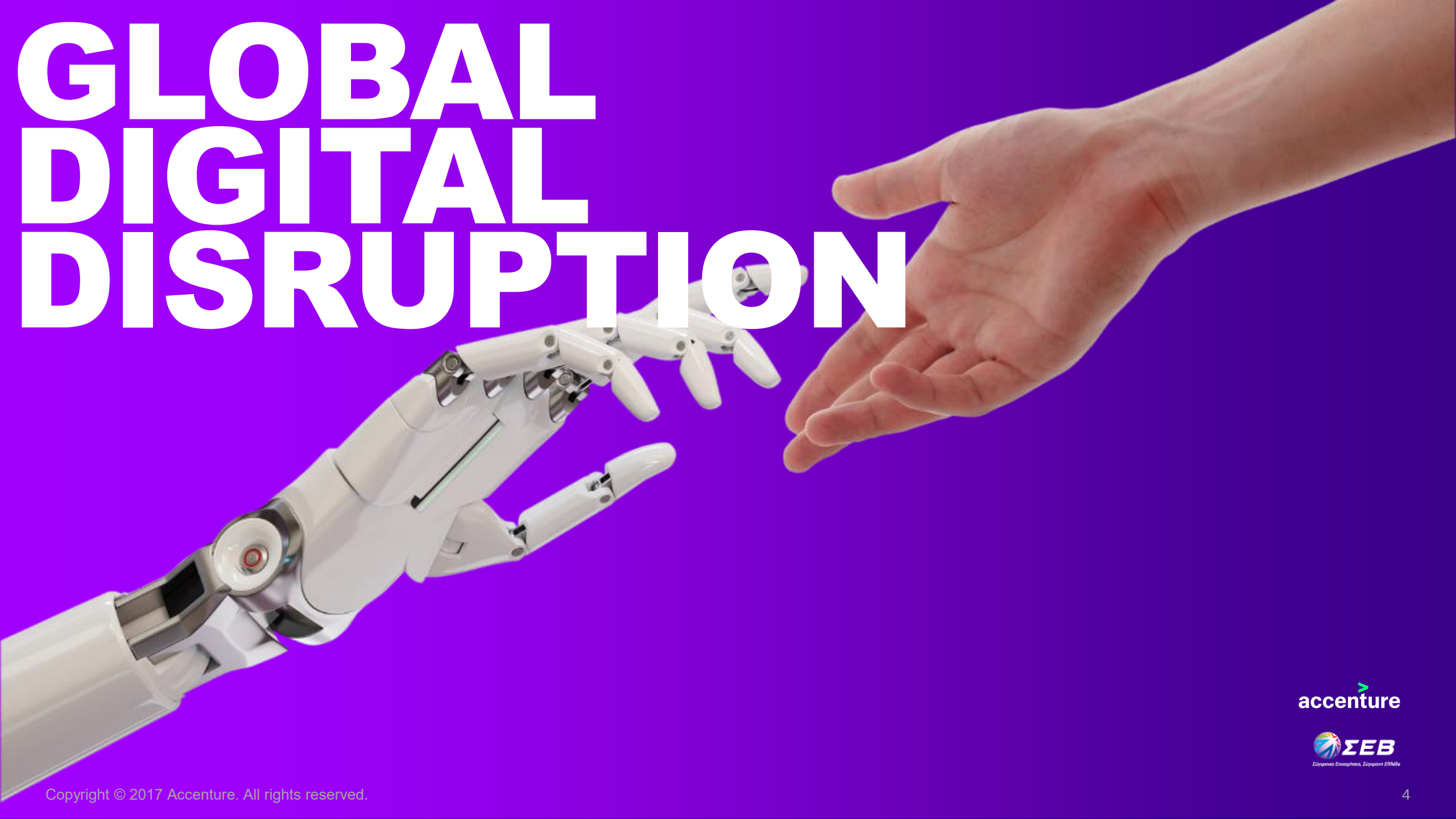
- ACN Secondary Research
- Econometric Models
- Questionnaire of Perceived Digital Maturity

PROJECT TIME PLAN

AN AGGRESSIVE TIME PLAN WAS PUT IN PLACE IN ORDER TO MEET CLIENT REQUIREMENTS



GLOBAL DIGITAL DISRUPTION



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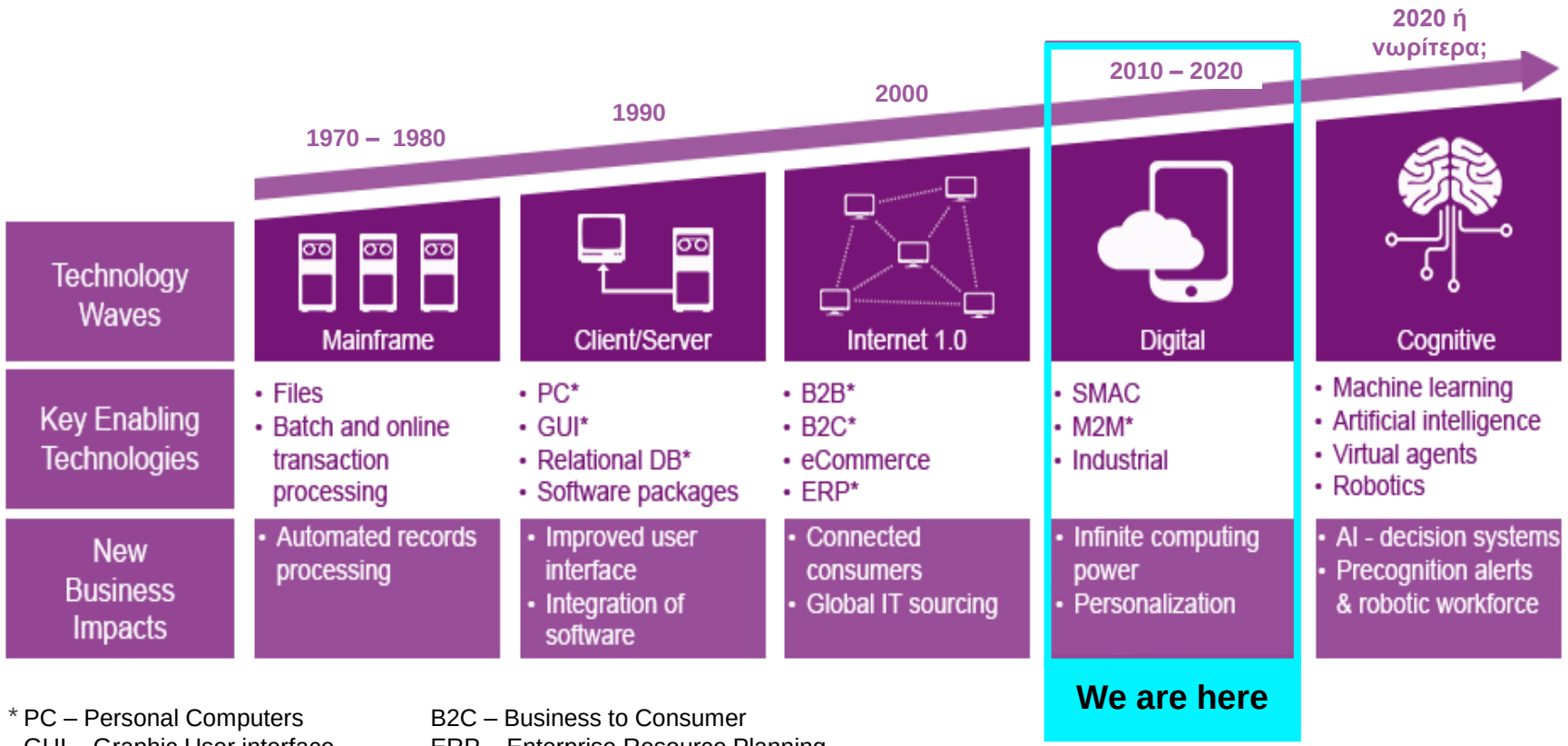
THE EVOLUTION OF TECHNOLOGY

DIGITAL TECHNOLOGIES – THE "PRIME SUSPECTS" OF THE DIGITAL REVOLUTION



* PC – Personal Computers
GUI – Graphic User interface
DB – Data Base
B2B – Business to Business
B2C – Business to Consumer
ERP – Enterprise Resource Planning
M2M – Machine to Machine

> After almost four decades of exponential increase, the world is now doubling an immense amount of processing power, which is leading to astonishing leaps forward

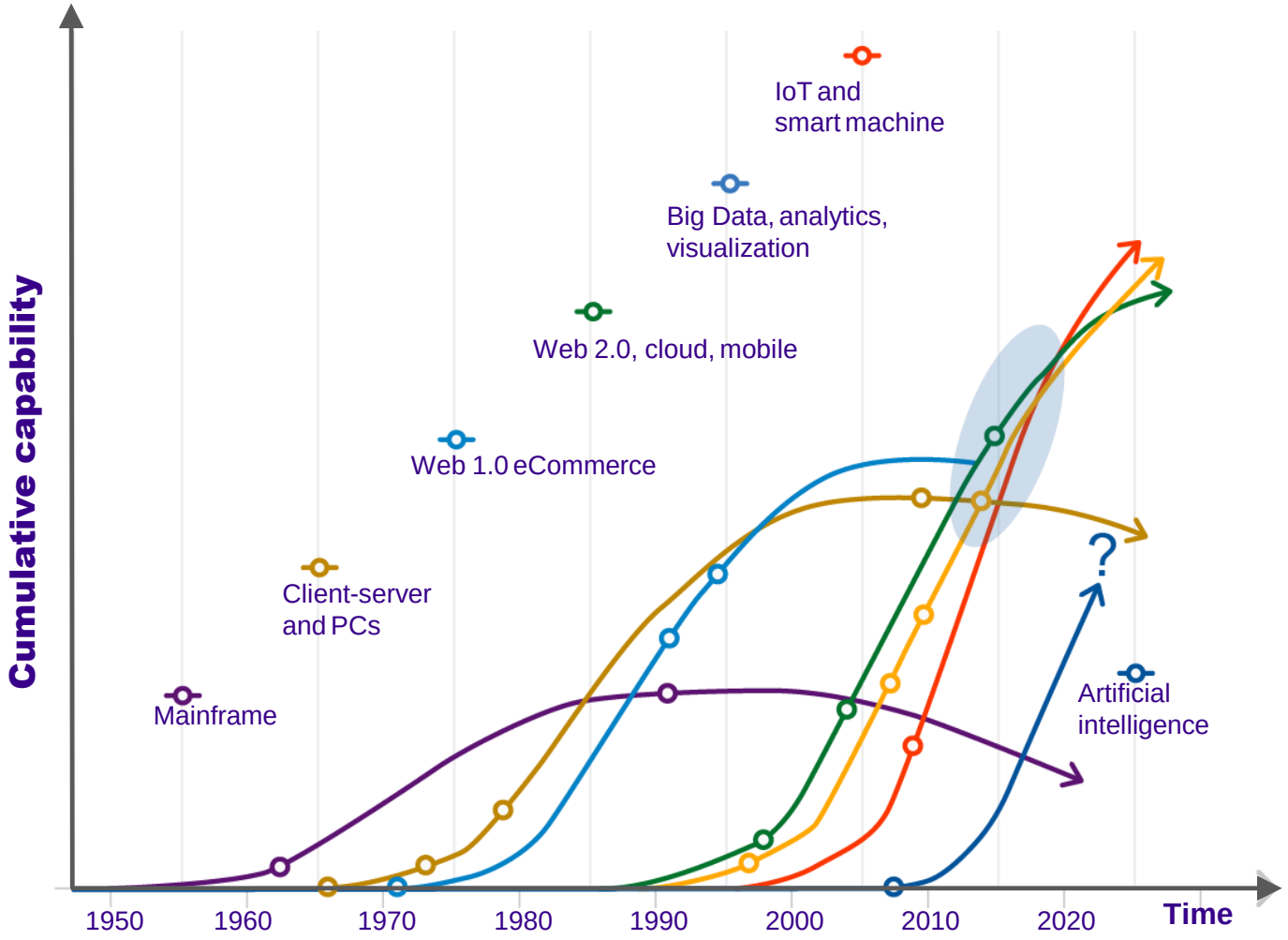
> Technology is now more affordable, integrated and smart. It accelerates our movement to digital

> Connectivity has become the "king" in this new digital world, where we are all connected with everyone and everything

> Sophisticated smart devices are now mass-market and better known as personal assistants by the names of Alexa, Siri and Cortana

THE CONVERGENCE OF TECHNOLOGIES

THE CONVERGENCE OF TECHNOLOGIES DRIVES EXPONENTIAL GROWTH



- Mobile, cloud, artificial intelligence, sensors and analytics, among others are the engines of our digital future
- While each individual digital technology is a powerful means towards transformation, it is their combinatorial effect that accelerates progress, exponentially

ACN TECHNOLOGY TRENDS 2017

WE SEE 5 TRENDS AS PART OF OUR TECHNOLOGY VISION 2017 THAT WILL DISRUPT THE WORLD AS WE KNOW IT WITHIN THE NEXT YEARS

AI IS THE NEW UI

EXPERIENCE ABOVE ALL

Simple and smart interactions, value at each connection made… resulting in AI coming of age to become the new user interface of every digital business brand

ECOSYSTEM POWER PLAYS

BEYOND PLATFORMS

Platform companies: completely breaking the rules on how to operate and compete …companies now need more than just a platform strategy, they need a robust ecosystem approach

WORKFORCE MARKET PLACE

INVENT YOUR FUTURE

On-demand labor platforms + surging online management solutions = talent marketplaces driving the most profound economic transformation since the Industrial Revolution

DESIGN FOR HUMANS

INSPIRE NEW BEHAVIORS

Technology design decisions are being made by humans, for humans…technology is adapting to how we behave to learn how to enhance our lives

THE UN CHARTED

INVENT NEW INDUSTRIES, SET NEW STANDARDS

To succeed in today's ecosystem-driven digital economy, businesses must seize opportunities to establish rules and standards for entirely new industries

Source: Accenture Technology Vision 2017

NEW RULES OF COMPETITIVENESS

DIGITAL RESHUFFLES THE FUNDAMENTALS OF INDUSTRIES AND CHANGES THE WAY WE DO BUSINESS

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Industry	Disruptors
Maps & dedicated GPS devices	Google, Waze
Taxi Services	Uber, Lyft, Side·car, Taxi Magic
Hospitality – Hotels	airbnb
PCs and Laptops	Apple, Google
Financial Services – Payments	Apple Pay, PayPal
Retail	amazon.com, Alibaba Group
Education	coursera, Udacity, edX
Travel agencies	expedia inc., Booking.com, Hotels.com
Yellow pages	yelp
Film rentals	Netflix, amazon instant video, HBO GO
Low-end digital cameras	iPhone

52%

Expect digital to cause significant change or complete transformation in their industries

4 out of 5

State at least 30% of major business processes currently rely upon digital technologies

NEW BUSINESS MODELS

ESTABLISHED COMPANIES HAVE MANAGED TO REINVENT THEMSELVES EFFECTIVELY

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	From old business models	To new business models
LEGO	Near bankruptcy in 2004, LEGO underwent a restructuring, reducing the number of divisions they had and outsourcing unprofitable ones such as LEGO computer games	LEGO's design capabilities are increasingly being handed over to its fans , e.g. LEGO Digital Designer. LEGO has set up new digital business: movies, LEGO Mindstorms, video games
axel springer	Axel Springer struggled with its declining print business and in the early 2000s, its shift towards digital was perceived as chaotic	Revenues from digital business surpassed print in 2012 and today accounts for more than 50% of revenues
AUTODESK	Autodesk, a leader in software solutions for 3D design and engineering, had a perpetual licensing model, that was faced with diminishing profits due to increasing digitalization	In 2013, Autodesk made a swift toward recurring a subscription model. This move was widely appreciated by analysts, who projected an increase in operating margins from 13% to 30%
HBO	HBO's subscription-based model was increasingly being challenged by new online content distribution models	HBO, to counter the challenge from digital natives, created its own distribution platforms HBO Now and HBO Go and licensed media to Amazon Prime and other streaming platforms

NEW CONSUMPTION PARADIGM

FROM MASS CUSTOMIZED PRODUCTS TO INDIVIDUALLY TAILORED, ADJUSTED TO OUR NEEDS

What is bought?

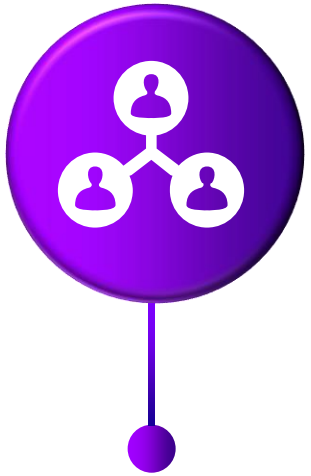
Mass customized product	Individually tailored
Pre-produced product	Created/ printed on demand
Ownership of a product	Usage/ rental
What the salesperson recommends	What your peers like (via social media)
What is available and you are aware of	The best of/ exactly what we are looking for

How is it bought?

In a physical location	Online, mobile, delivered today
Through distributors	Directly from the producer
Paid with currency	Also paid with information, attention, virtual currencies
By a seller who knows a lot more about you than you about them and their financials	With fairly symmetrical information

NEW WORKING ENVIRONMENT

DIGITAL IS DISRUPTING WORK AND THE WORKFORCE



HOW work is organized

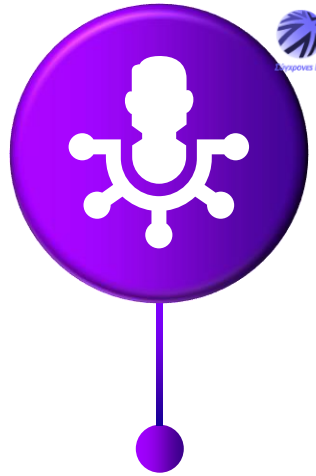
By 2025, 45% of workers will be contractors

WHAT work is performed

Technology has made us five times more productive since 1972

WHO performs the work

80% of companies currently don't have the skills and capability to analyze and interpret big data



HOW work is led and orchestrated

The average number of direct reports for CEOs has doubled in the last two decades

Source: Accenture Analysis

NEXT HORIZON SKILLS

IN SUCH A RAPIDLY EVOLVING LANDSCAPE, THE ABILITY TO ANTICIPATE AND PREPARE FOR FUTURE SKILLS REQUIREMENTS IS INCREASINGLY CRITICAL

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In 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment & Decision Making
9. Active Listening
10. Creativity

In 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment & Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

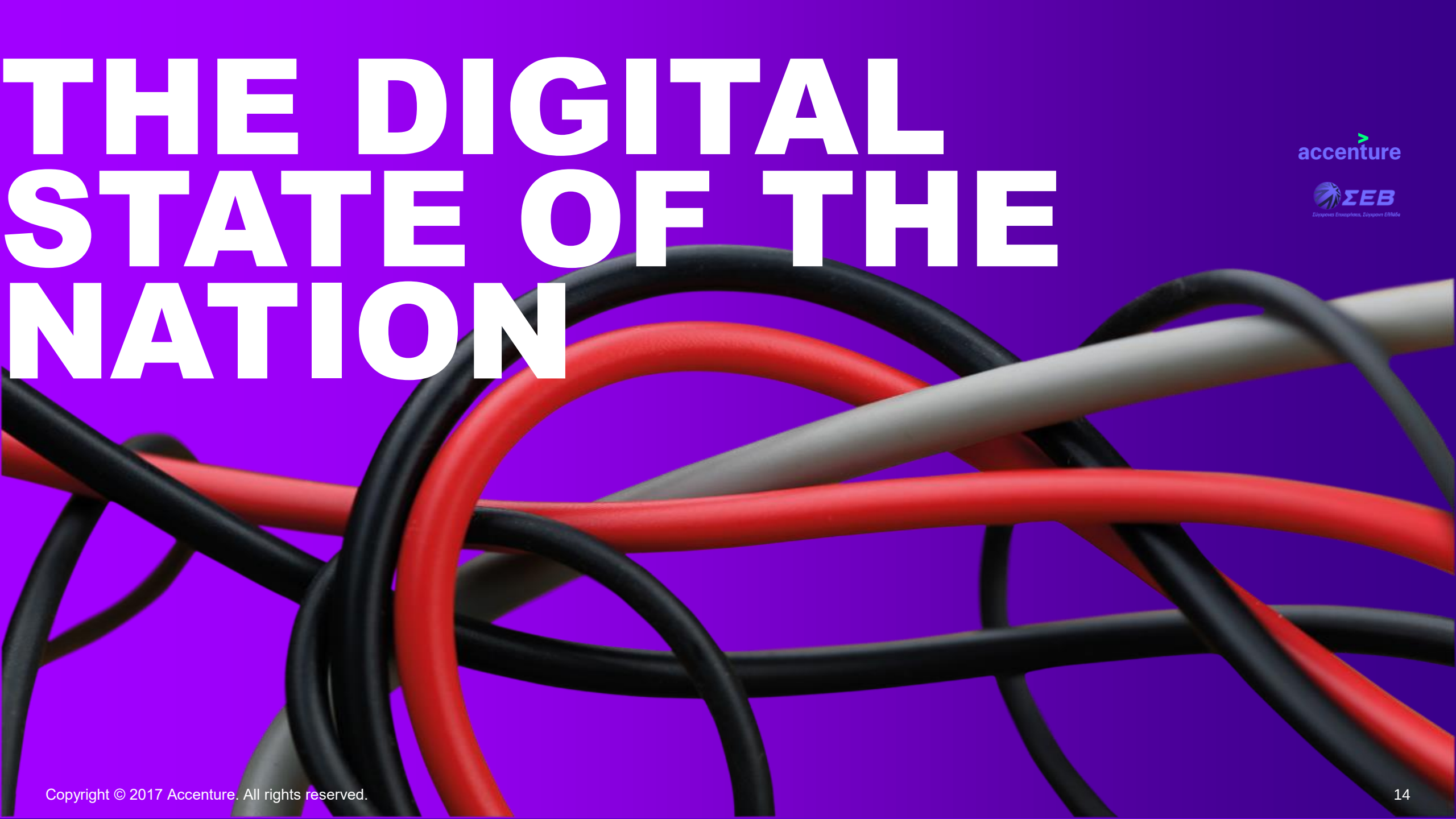
Source: WEF, The Future of Jobs, http://www3.weforum.org/docs/WEF_FOJ_Executive_Summary_Jobs.pdf

FROM AN ANALOGUE TO A DIGITAL GOVERNMENT

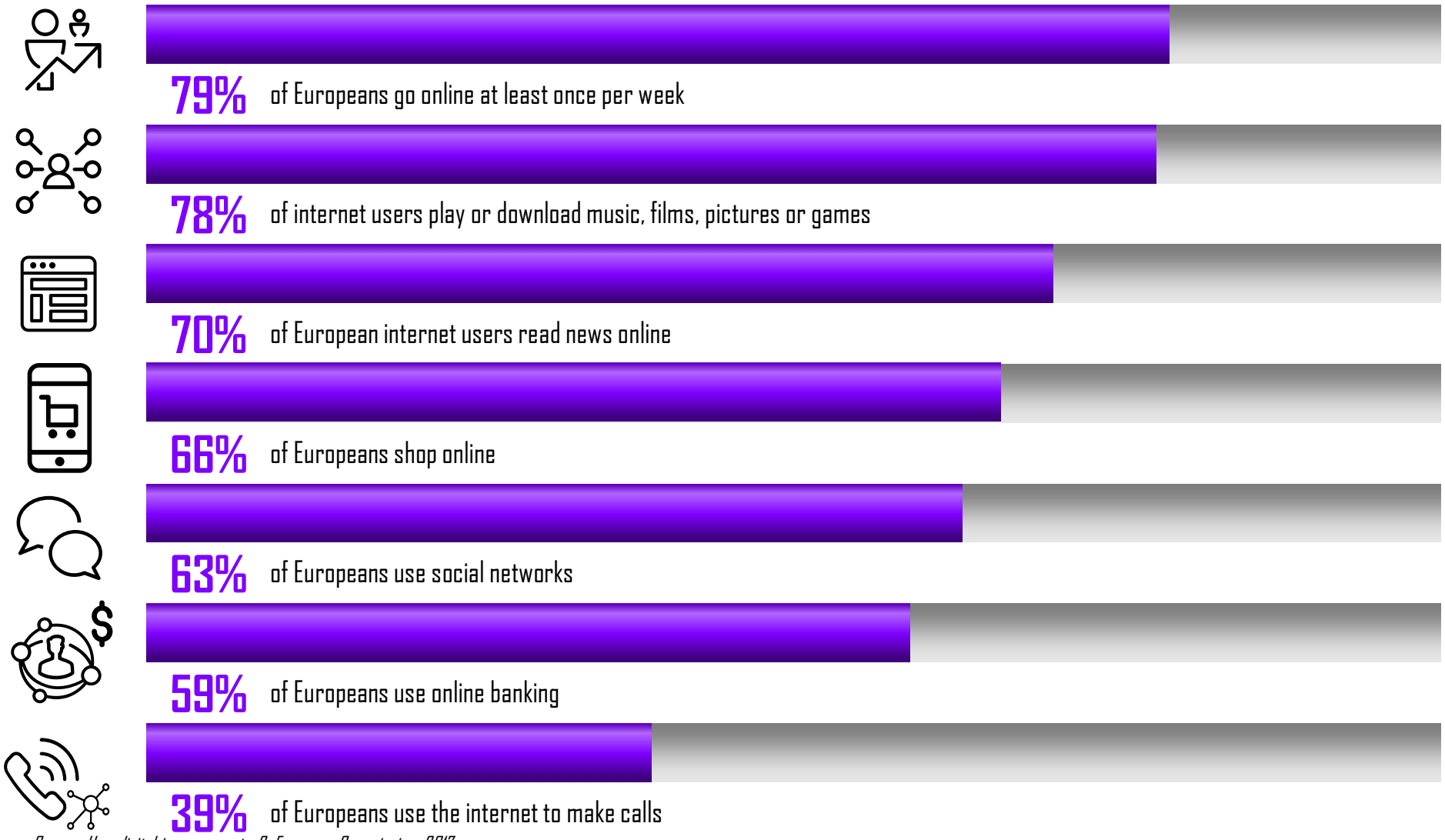
GOVERNMENTS HAVE EMBARKED ON THEIR DIGITAL JOURNEYS. THAT CONVERTS THEM FROM AN "ANALOGUE" STATE TO THEIR DIGITAL EQUIVALENTS

FROM ANALOGUE	TO DIGITAL
Government asks from citizens the same information multiple times	Government is transformed to a public service provider that recognizes each citizen through a single eID and provide citizen-centric services to them
Government is the principal provider of public services	Government facilitates and commissions public services
Uniform public services are provisioned by "siloed" departments and ministries	Public-sector organizations are flexible, networked, purpose driven entities

THE DIGITAL STATE OF THE NATION



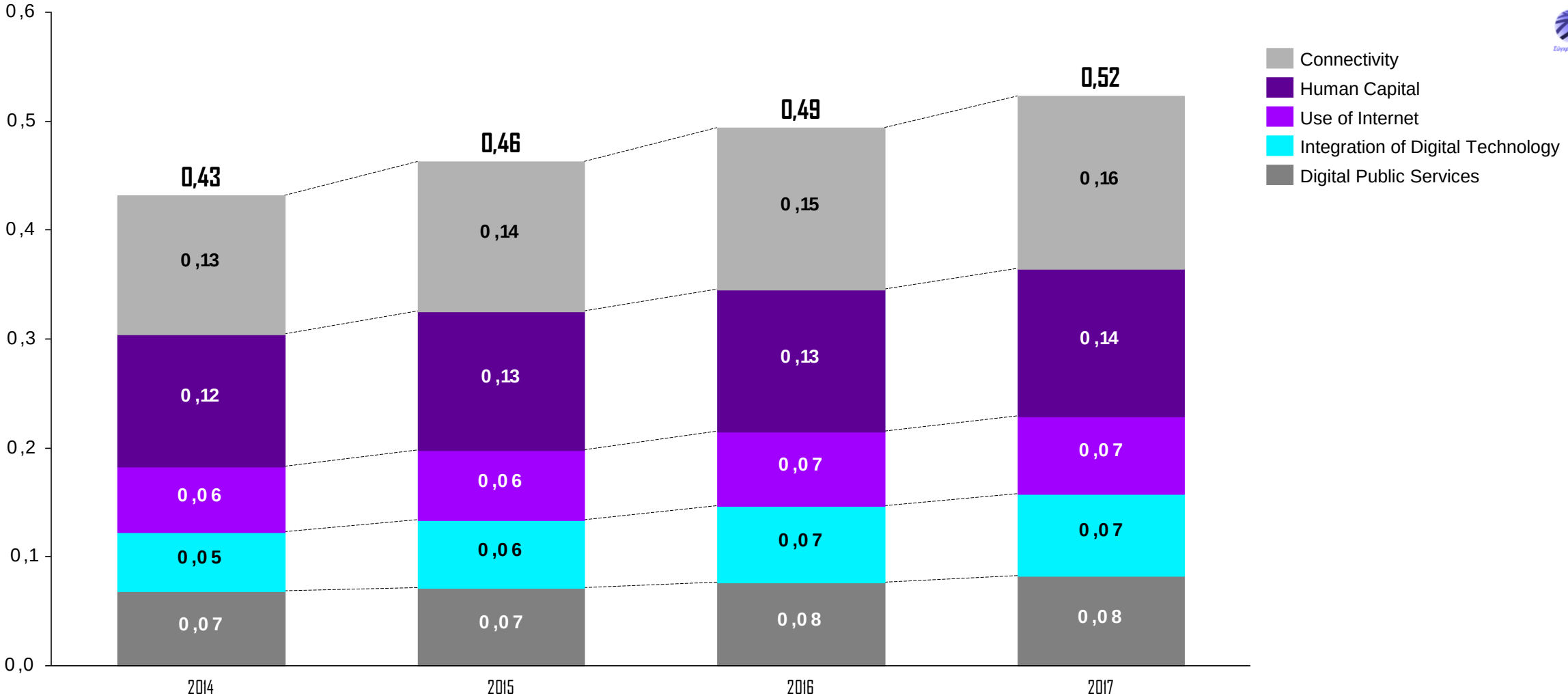
PERVASIVENESS OF DIGITAL ACROSS EUROPE



Source: How digital is your country?, European Commission, 2017

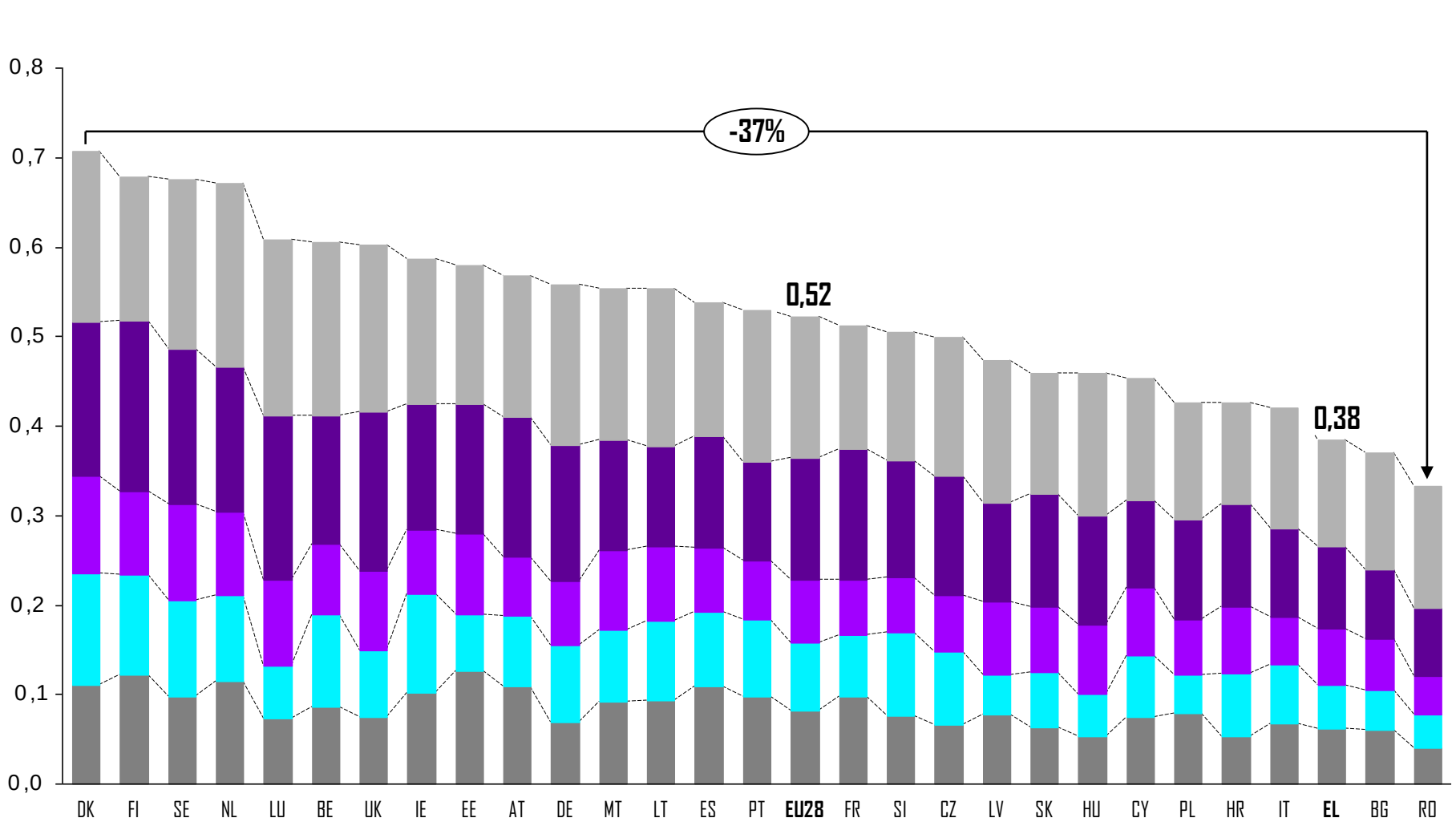
THE DESI INDEX 2014 – 2017

ACCORDING TO THE DESI INDEX FOR 2017, EUROPE AS A WHOLE HAS DIGITALLY PROGRESSED



Source: Digital Economy and Society Index 2014-2017, European Commission

THE "DIGITAL RIFT" – THE DESI INDEX 2017



Source: Digital Economy and Society Index 2017, European Commission, 2017

- Despite Europe's overall progress on the digital front, divergent country performances are increasingly evident
- In fact, the "digital rift" between top performers and countries scoring near the bottom remains notably wide
- In 2017 the digital gap between the most and least digitally advanced countries was 37 percentage points

THE "DIGITAL RIFT" – 3 EUROPEAN GROUPS

Digital Frontrunners

- Denmark
- Finland
- Sweden
- Netherlands
- Luxemburg
- Belgium
- UK
- Ireland
- Estonia

Digital Followers

- Austria
- Germany
- Malta
- Lithuania
- Spain
- Portugal
- France
- Slovenia
- Czech Rep.
- Latvia
- Slovakia

Digital Laggards

- Hungary
- Cyprus
- Poland
- Croatia
- Italy
- Greece
- Bulgaria
- Romania

Greece is ranked 26th out of 28 countries in the Digital Economy and Society Index (DESI) and scores at the lower end of the "digital laggards" group

Source: DESI Index, European Commission, 2017

COUNTRIES' COMPARISON (1/2)

GREECE SCORES AT THE BOTTOM END AGAINST 31 OTHER COUNTRIES REGARDLESS OF THE INDEX

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Country	Digital Maturity Index (out of 100)[1]	NRI (out of 10)[2]	IDI 2016 (out of 10)[3]	EGDI 2016 (out of 1)[4]	DESI (out of 1)[5]	Avg. GDP growth 2014-2016f[6]	Per-capita GDP (USD), 2016f[6]	Budget surplus / deficit 2016f (% of GDP)[6]	Population 2016f (thousand)[6]
USA	71,4	5,8	8,17	0,842	N/A	3,40%	$ 57.705	-2,90%	321.601
UK	67,9	5,7	8,57	0,9193	0,6	2,90%	$ 42.106	-3,80%	65.097
Sweden	66,2	5,8	8,45	0,8704	0,67	5,60%	$ 51.137	-0,40%	9.879
Denmark	65,9	5,6	8,74	0,851	0,71	2,20%	$ 53.103	-2,50%	5.660
Finland	64,8	6	8,08	0,8817	0,68	1,40%	$ 42.651	-2,10%	5.472
Switzerland	64,1	5,8	8,68	0,7525	N/A	0,30%	$ 78.178	0,40%	8.238
New Zealand	61,6	5,5	8,29	0,8653	N/A	3,60%	$ 36.542	0,30%	4.650
Netherlands	60,8	5,8	8,43	0,8659	0,67	1,80%	$ 44.828	-1,40%	16.935
Norway	59,0	5,8	8,42	0,8117	0,69	0,40%	$ 69.708	2,90%	5.205
Korea, Rep.	58,7	5,6	8,84	0,8915	N/A	4,10%	$ 26.096	-1,20%	50.629
Canada	55,5	5,6	7,62	0,8285	N/A	1,20%	$ 40.819	-2,50%	35.825
Australia	54,1	5,5	8,19	0,9143	N/A	2,70%	$ 49.999	-2,10%	24.016
Japan	50,2	5,6	8,37	0,844	N/A	2,00%	$ 34.765	-5,00%	126.926
Belgium	50,2	5,4	7,83	0,7874	0,61	2,30%	$ 40.690	-2,70%	11.337
Ireland	48,4	5,3	7,92	0,7689	0,59	10,20%	$ 54.459	-0,80%	4.635
France	47,5	5,3	8,11	0,8456	0,51	2,00%	$ 38.173	-3,20%	64.275

1. "Digital Economic Opportunity Index", Oxford Economics, 2017 2. "World Economic Outlook Database", International Monetary Fund, April 2016 3."Measuring the Information Society Report 2016", ITU, 2016, 4. "UN E-Government Survey 2016", United Nations, 2016 4. "The Global Information Technology Report 2016", World Economic Forum, 2016 5. "World Economic Outlook Database", International Monetary Fund, April 2016 6. "The World Factbook", Central Intelligence Agency, 2016 7. DESI Results 2017, https://ec.europa.eu/digital-single-market/en/scoreboard/

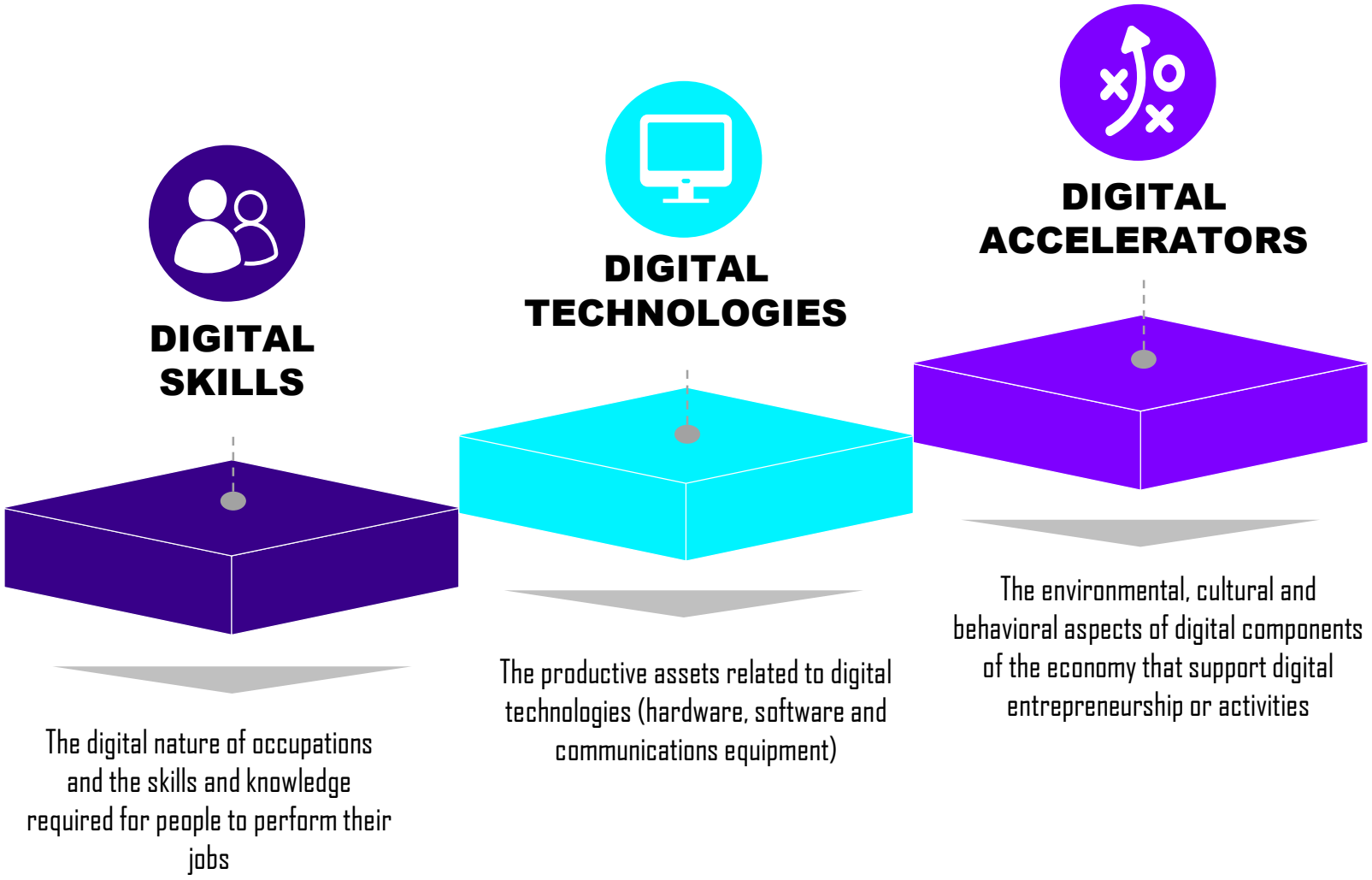
COUNTRIES' COMPARISON (2/2)

GREECE SCORES AT THE BOTTOM END AGAINST 31 OTHER COUNTRIES REGARDLESS OF THE INDEX

Country	Digital Maturity Index (out of 100)[5]	NRI (out of 10)[1]	IDI 2016 (out of 10)[2]	EGDI 2016 (out of 1)[3]	DESI (out of 1)[7]	Avg. GDP growth 2014-2016f[4]	Per-capita GDP (USD), 2016f[4]	Budget surplus / deficit 2016f (% of GDP)[6]	Population 2016f (thousand)[4]
Germany	46,2	5,6	8,31	0,821	0,56	3,50%	$ 41.895	0,60%	81.900
Austria	44,8	5,4	7,69	0,8208	0,57	2,60%	$ 44.775	-1,40%	8.556
Czech Rep.	39,8	4,7	7,25	0,6454	0,5	4,30%	$ 17.543	-0,50%	10.538
Portugal	36,5	4,9	6,94	0,7144	0,53	3,20%	$ 19.684	-2,40%	10.411
Spain	35,4	4,8	7,62	0,8135	0,54	3,60%	$ 26.823	-4,10%	46.384
Chile	33,1	4,6	6,35	0,6949	N/A	5,70%	$ 13.075	-2,60%	18.006
Italy	27,8	4,4	7,11	0,7764	0,42	1,60%	$ 30.232	-2,60%	60.796
China	27,2	4,2	5,19	0,6071	N/A	6,80%	$ 8.281	-3,80%	1.374.620
Poland	27,1	4,5	6,65	0,7211	0,43	4,20%	$ 12.460	-2,80%	38.006
Russia	25,4	4,5	6,95	0,7215	N/A	4,50%	$ 7.743	-4,00%	146.300
Brazil	25,4	4	5,99	0,6377	N/A	5,70%	$ 7.507	-2,60%	204.451
Hungary	23,6	4,4	6,72	0,6745	0,46	4,60%	$ 11.970	-2,40%	9.856
Mexico	23,4	4	4,87	0,6195	N/A	6,20%	$ 8.522	-3,00%	127.017
Turkey	19,3	4,4	5,69	0,5900	N/A	14,70%	$ 9.562	-2,00%	77.738
Greece	17,8	4,1	7,13	0,6910	0,38	-0,70%	$ 18.035	-4,50%	10.812
India	17,5	3,8	2,69	0,4637	N/A	10,50%	$ 1.771	-3,70%	1.292.707

1. "Digital Economic Opportunity Index", Oxford Economics, 2017 2. "World Economic Outlook Database", International Monetary Fund, April 2016 3."Measuring the Information Society Report 2016", ITU, 2016, 4. "UN E-Government Survey 2016", United Nations, 2016 4. "The Global Information Technology Report 2016", World Economic Forum, 2016 5. "World Economic Outlook Database", International Monetary Fund, April 2016 6. "The World Factbook", Central Intelligence Agency, 2016 7. DESI Results 2017, https://ec.europa.eu/digital-single-market/en/scoreboard/

THE DIGITAL ECONOMIC OPPORTUNITY INDEX (DEOI)



DIGITAL SKILLS

The digital nature of occupations and the skills and knowledge required for people to perform their jobs

DIGITAL TECHNOLOGIES

The productive assets related to digital technologies (hardware, software and communications equipment)

DIGITAL ACCELERATORS

The environmental, cultural and behavioral aspects of digital components of the economy that support digital entrepreneurship or activities

WHY DEOI?

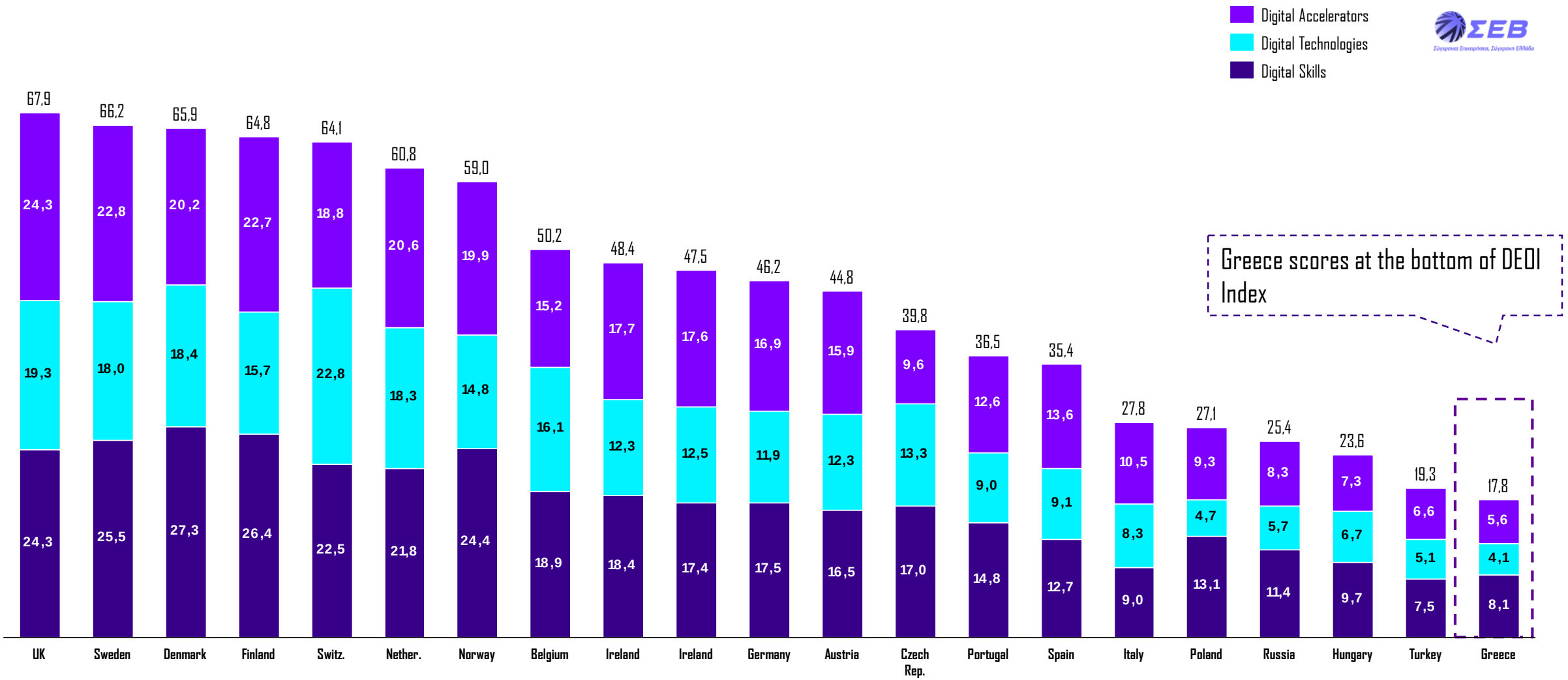
1

CONNECTION OF DIGITAL MATURITY WITH PRODUCED ECONOMIC VALUE

2

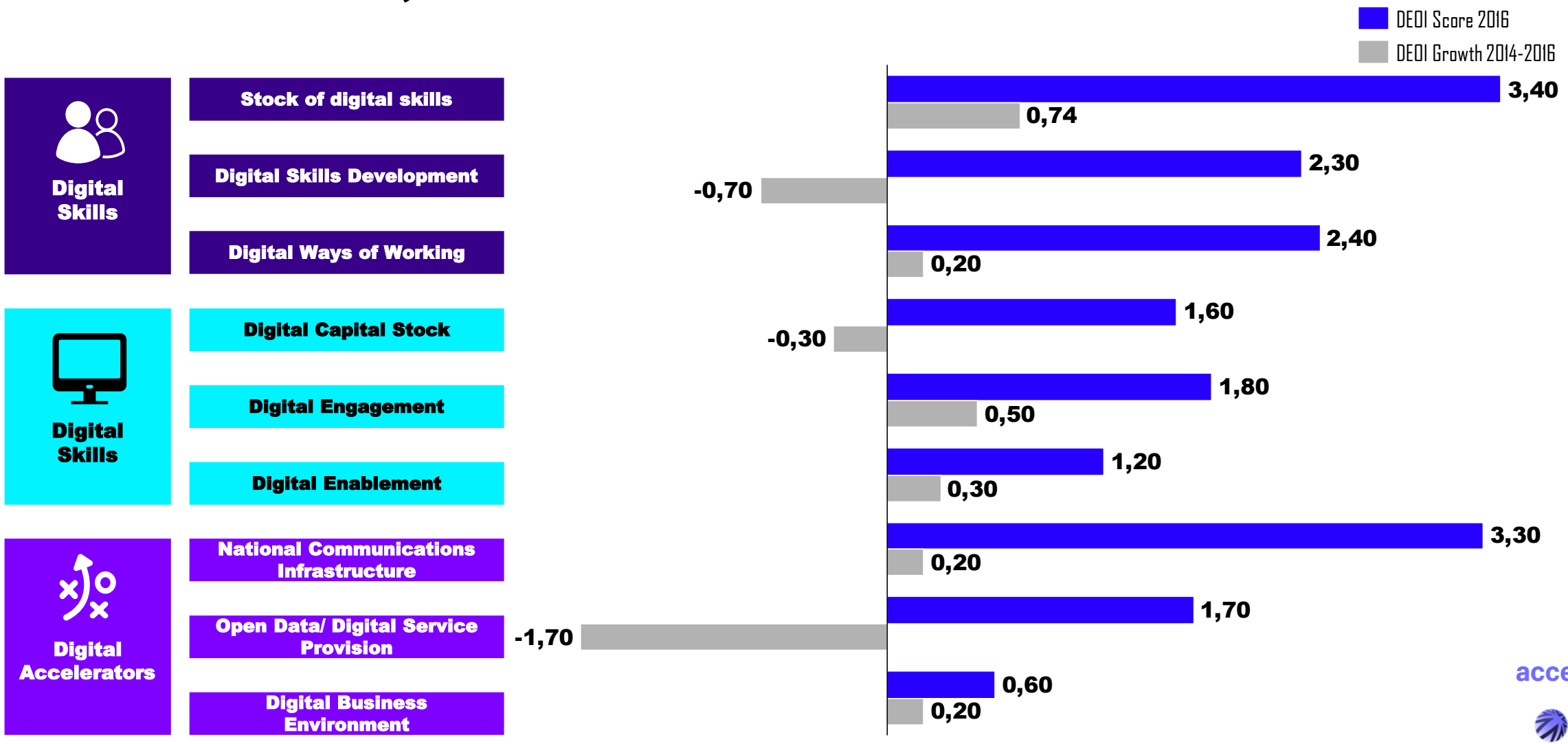
COMPARISON BETWEEN GREECE AND ITS GLOBAL PEERS WITH REGARDS TO VALUE CREATION

DEOI SCORES – EUROPEAN SAMPLE, 2016



Source: Oxford Economics, Accenture analysis

DEOI COMPONENTS ANALYSIS – GREECE, 2014 – 2016



Source: Oxford Economics, Accenture analysis

GREECE SCORES AT THE LOWER END WITH 17,8 POINTS

Digital Skills

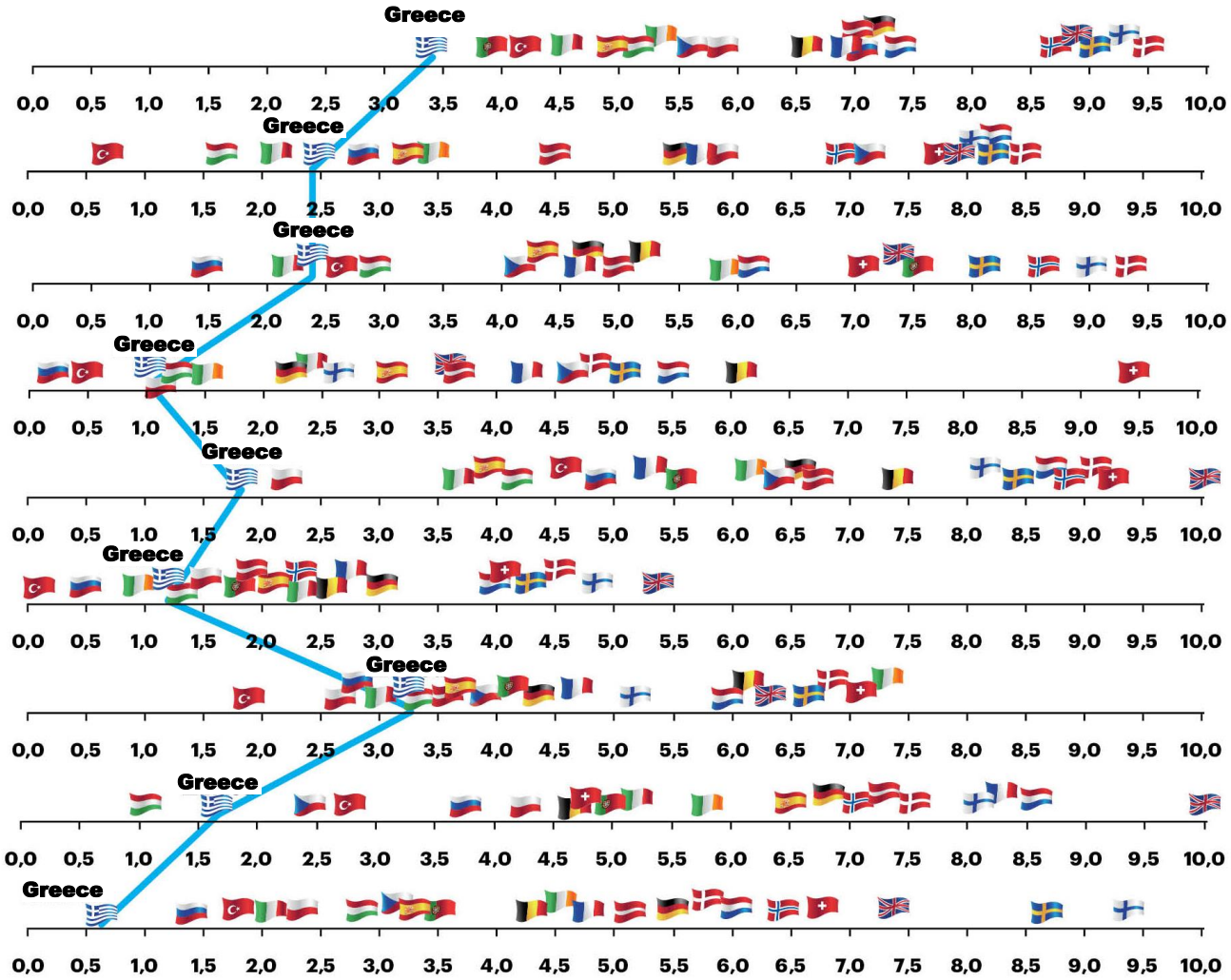
- Stock of digital skills
- Digital Skills Development
- Digital Ways of Working

Digital Skills

- Digital Capital Stock
- Digital Engagement
- Digital Enablement

Digital Accelerators

- National Communications Infrastructure
- Open Data/ Digital Service Provision
- Digital Business Environment



- Austria
- Belgium
- Czech rep.
- Denmark
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Netherlands
- Norway
- Poland
- Portugal
- Russia
- Spain
- Sweden
- Switzerland
- Turkey
- UK

Source: Oxford Economics, Accenture analysis

DIGITAL MATURITY OF EUROPEAN COUNTRIES, 2016 & 2021

IF GREECE CONTINUES ON THE CURRENT TRAJECTORY, IT SHALL REMAIN AT THE BOTTOM OF THE DIGITAL MATURITY INDEX

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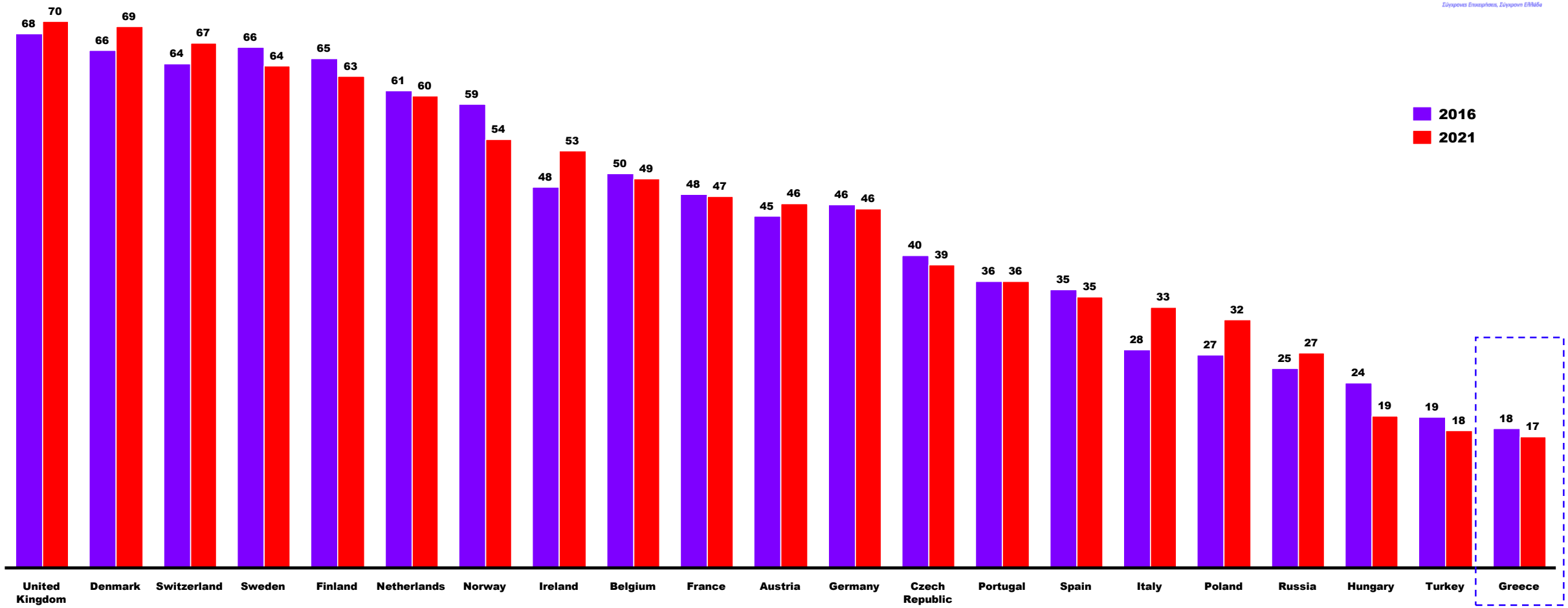
Digital Economic Opportunity Index, European Sample, 2016 & 2021f[1] (#, out of 100)



1. 2021 projections have been estimated using countries' CAGR for 2014-2016 digital maturities

 Source: Oxford Economics, Accenture analysis

FACTORS CONTRIBUTING TO GREECE'S LOW DIGITAL MATURITY

Absence of a National Digital Vision

Lack of Continuity in the National Digital Strategy

Conflation of the National Digital Strategy with the ICT strategy

Lack of meaningful collaboration between the Private and the Public Sector

Absence of a Digital Governance Model

Limited interconnection and synergies between the Private Sector and Greek Academia

Outdated Regulatory Framework/ Inflexible Data Protection Regulation

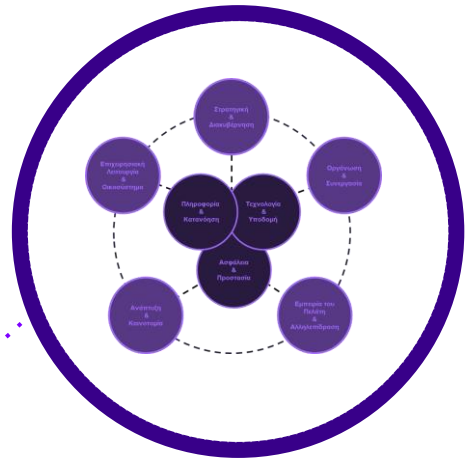
Absence of a structured Performance Management Framework

Lack of an attainable action plan

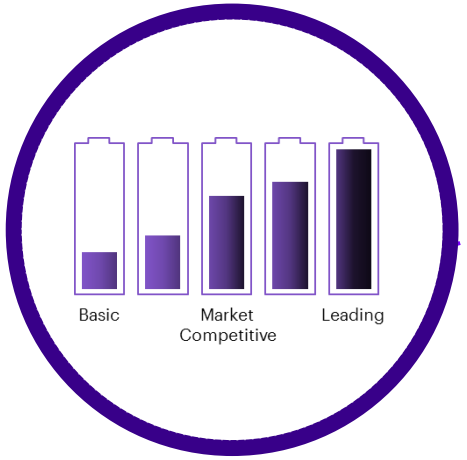
PERCEIVED DIGITAL MATURITY

THE GOAL WAS TO RECORD EXECUTIVES' PERCEPTION WITH REGARDS TO THEIR ORGANIZATIONS' DIGITAL MATURITY - CURRENT STATE VS AMBITION

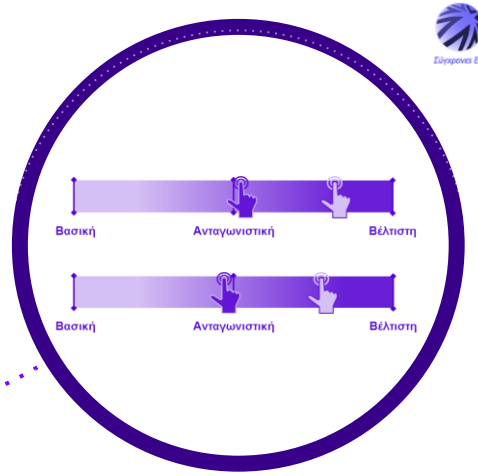
MORE THAN **160 EXECUTIVES** ACROSS **12 INDUSTRIES...**



... COMPLETED A **QUESTIONNAIRE** BUILT AROUND **3 KEY LEVERS** AND **8 SUB-LEVERS..**



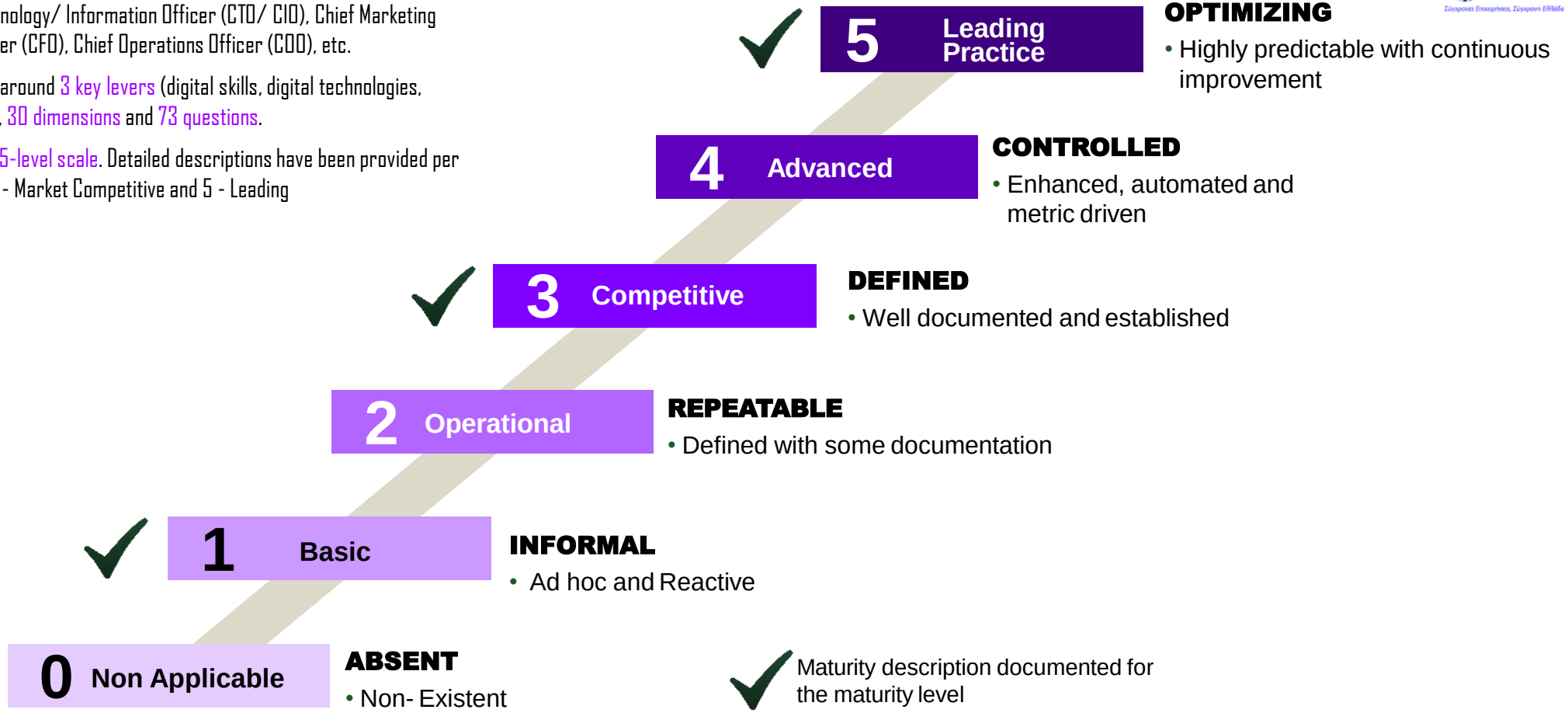
...RESPONDED TO MORE THAN **70 QUESTIONS** MEASURED ON A **5 LEVEL SCALE**...



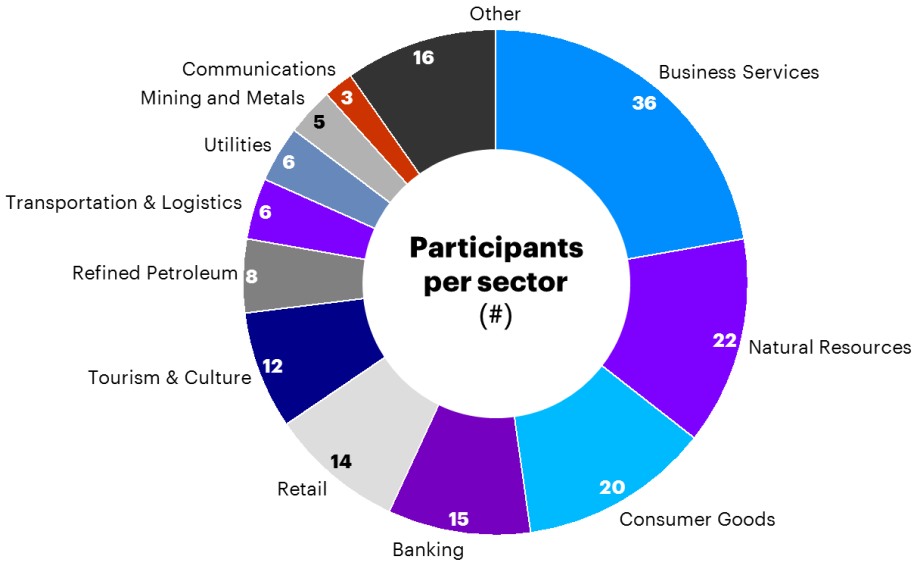
...AND RECORDED THEIR **PERCEPTION** WITH REGARDS TO THEIR ORGANIZATIONS' **DIGITAL MATURITY** IN THE **CURRENT STATE** AND PROJECTED WITHIN A **5 YEAR** HORIZON

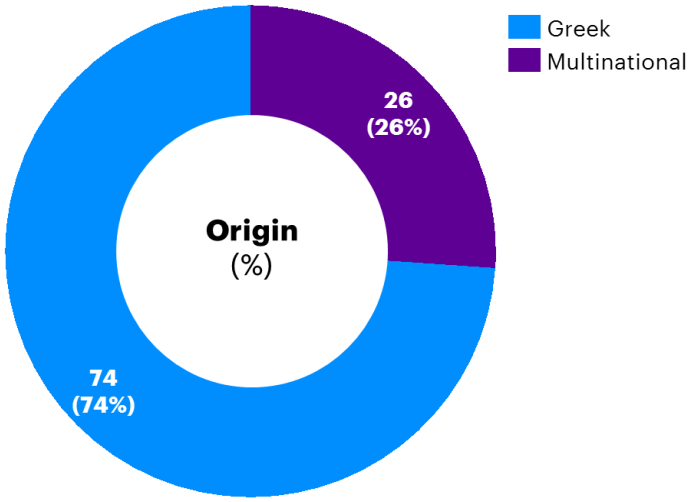
STRUCTURE OF THE QUESTIONNAIRE

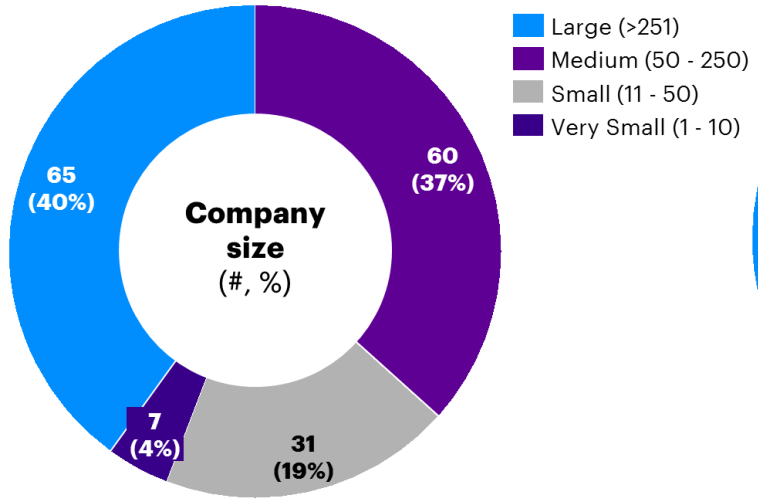
- The performed analysis and the respective conclusions were based on data recorded through the Questionnaire of Perceived Digital Maturity that launched from 19/12/2016 to 30/01/2017
- The Questionnaire was completed by organizations' C-level/ senior management, i.e. Chief Executive Officer (CEO), Chief Technology/ Information Officer (CTO/ CIO), Chief Marketing Officer (CMO), Chief Financial Officer (CFO), Chief Operations Officer (COO), etc.
- The Questionnaire was structured around 3 key levers (digital skills, digital technologies, digital accelerators), 8 sub-levers, 30 dimensions and 73 questions.
- Each question was measured on a 5-level scale. Detailed descriptions have been provided per question for levels: 1- Basic, 3 - Market Competitive and 5 - Leading

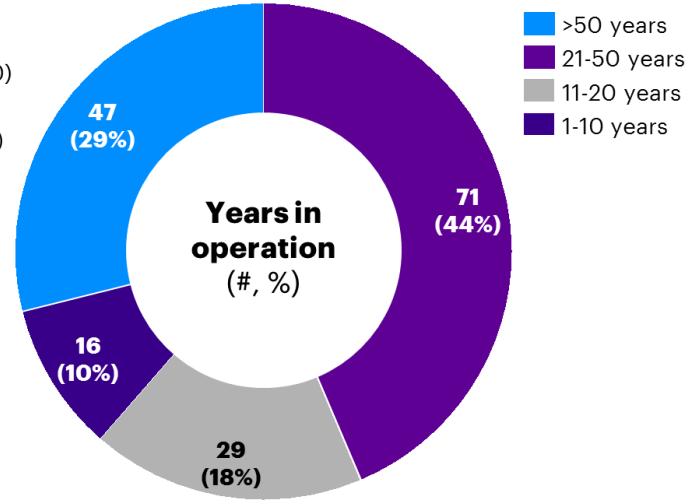


QUESTIONNAIRE SAMPLE ANALYSIS









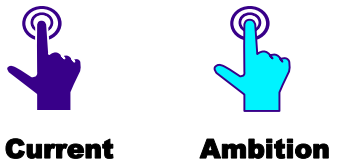
QUESTIONNAIRE SAMPLE SIZE:
163 COMPANIES

PERCEIVED DIGITAL MATURITY – OVERALL RESULTS

OVERALL DIGITAL MATURITY

Currently, organizations across all surveyed Greek industries demonstrate at an aggregate level an intermediate digital maturity

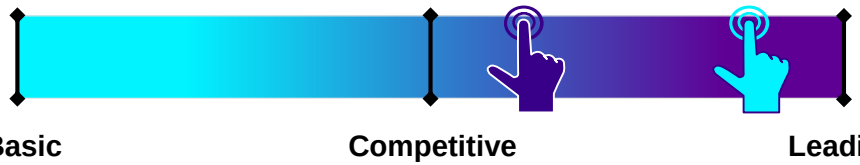
Within a 5 year period, organizations across all industries aim to adopt advanced digital practices on all capabilities and accelerate their rotation to digital



GREEK COMPANIES - OVERALL DIGITAL MATURITY

Currently, Greek companies exhibit a lower digital maturity than their multinational peers

MULTINATIONAL COMPANIES - OVERALL DIGITAL MATURITY

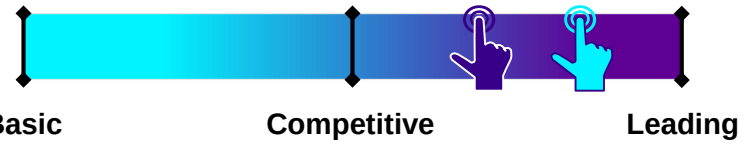


In the future, multinationals appear to remain more digitally advanced. However, Greek companies appear more ambitious in terms of their digital transformation

Source: Questionnaire of Perceived Digital Maturity, Accenture analysis

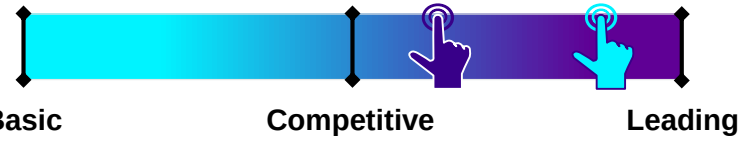
PERCEIVED DIGITAL MATURITY – INDUSTRY RESULTS (1/3)

Perceived Digital Maturity of **Transportation & Logistics** industry



Perceived Digital Maturity of **Communications** industry

Perceived Digital Maturity of **Business Services & Technology** industries



Perceived Digital Maturity of **Banking** industry

Perceived Digital Maturity of **Refined Petroleum** industry

Perceived Digital Maturity of **Tourism & Culture** industry

Source: Questionnaire of Perceived Digital Maturity, Accenture analysis

PERCEIVED DIGITAL MATURITY – INDUSTRY RESULTS (2/3)

Perceived Digital Maturity of **Utilities** industry

Perceived Digital Maturity of **Mining and Metals** industry

Perceived Digital Maturity of **Consumer Goods** industry

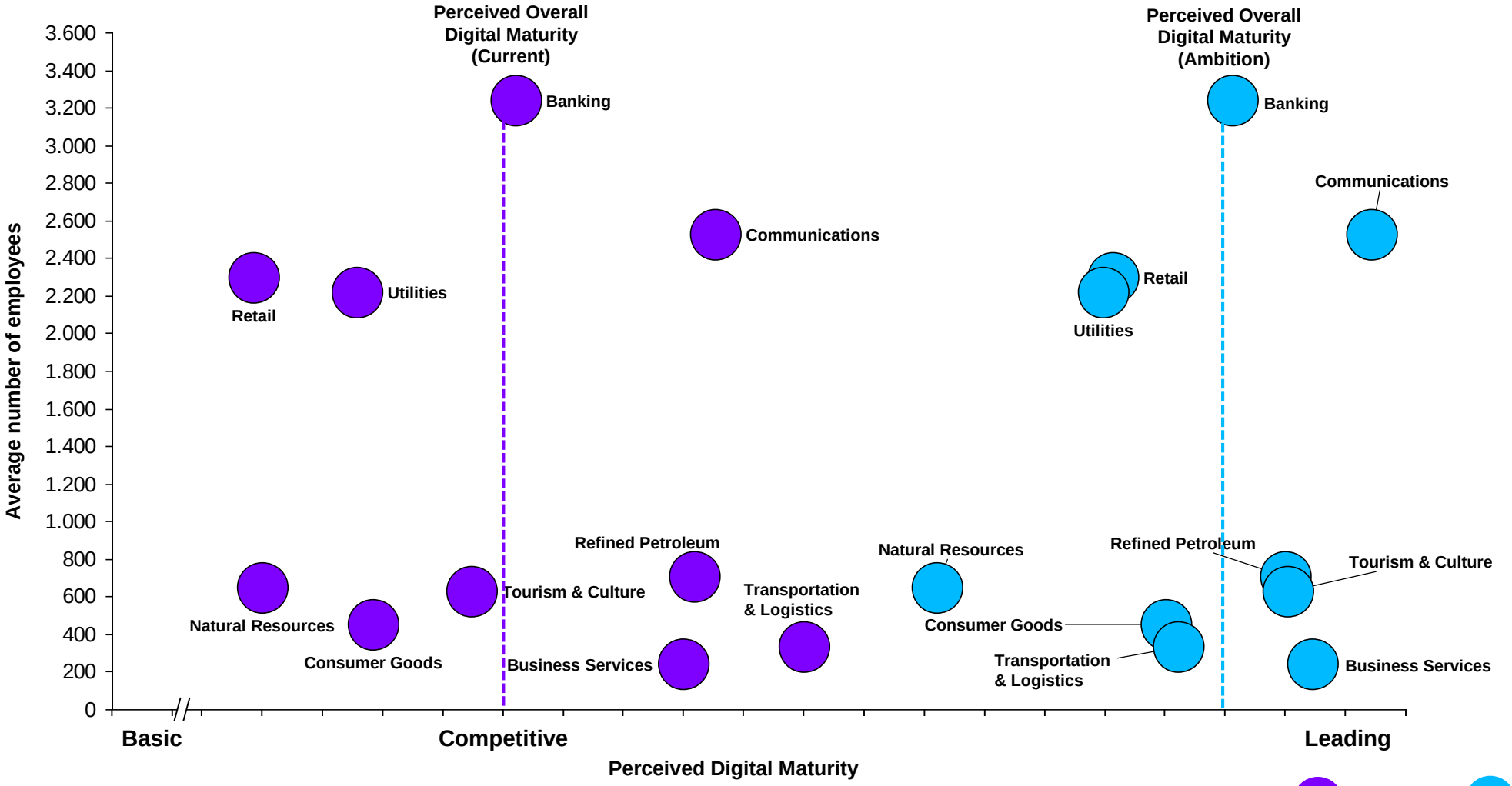
Perceived Digital Maturity of **Retail** industry

Perceived Digital Maturity of **Natural Resources** industry

Source: Questionnaire of Perceived Digital Maturity, Accenture analysis

PERCEIVED DIGITAL MATURITY – INDUSTRY RESULTS (3/3)

Perceived industry digital maturity vs average number of employees, (#,#)



> Currently, organizations that belong to the Transportation & Logistics industry are perceived to be the most digitally mature. On the contrary, companies that belong to the Natural Resources and Retail industries demonstrate the lowest score with regards to their digital maturity

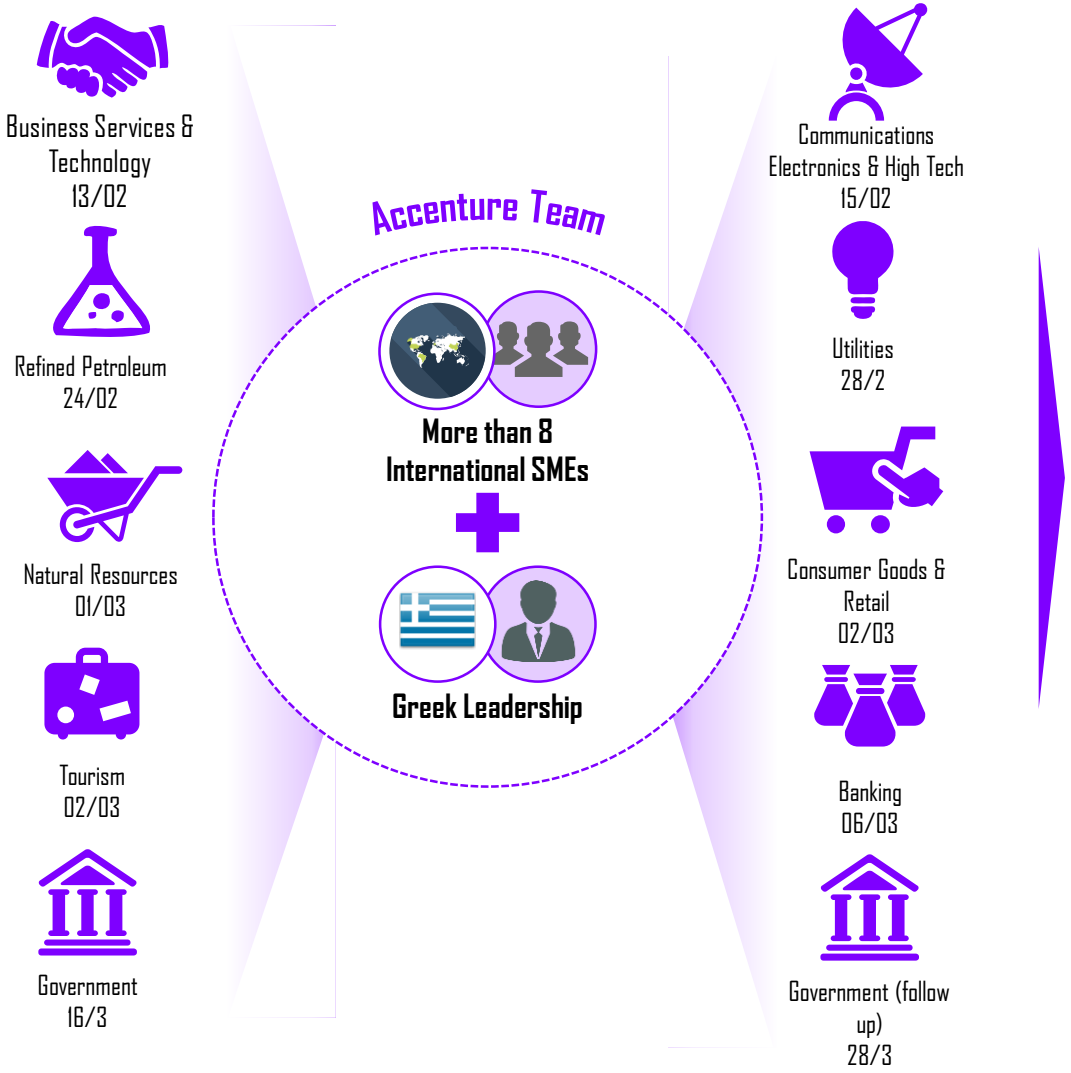
> Communications and Business Services & Technology organizations appear determined to lead the digital transformation of all Greek industries within a 5 year horizon

> Retail and Tourism & Culture organizations claim to be the most ambitious with regards to the leap they are ready to make and rotate to digital

Source: Questionnaire of Perceived Digital Maturity, Accenture analysis

INDUSTRY WORKSHOPS

TO VALIDATE THE FINDINGS, WE ORGANIZED A SET OF DEDICATED INDUSTRY WORKSHOPS



Common Denominators

- Digital is a top priority for all organizations to maintain and extend their competitiveness
- Each industry is impacted heavily by digital across different pivot point(s) on their value chain
- Introduction of an actionable digital strategy and clear governance structure are prerequisites for a successful digital transformation
- Customer Experience and Interaction is an area demonstrating further room for improvement across all industries
- Digital upskilling of existing workforce and attracting young digitally savvy personnel are key enablers for rotating to digital
- Key recorded inhibitors for the industries' digital transformation are: lack of digital public services, lack of tax incentives, strict regulations and restrictive laws on data protection and sharing, lack of a change mindset

WORKSHOP SCOPE & AGENDA

OUR OBJECTIVE WAS TO DISCUSS DIGITAL TRENDS AND ASSESS HOW THESE DISRUPT THE GREEK INDUSTRIES

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ΣΕΒ

SCOPE OF WORKSHOP:

OBJECTIVES

- Share and discuss initial takeaways of the Questionnaire for the Perceived Digital Maturity for the Greek industries
- Introduce and discuss on the emerging digital trends that we see transforming the respective industries at a global scale
- Evaluate the structural inhibitors that prevent the Greek industries from making the digital transformation a reality

AGENDA

Questionnaire on Perceived Digital Maturity – Initial Takeaways

Emerging Digital Trends for the Greek industries

Discussion on industry themes & impact

Next Steps & Workshop Wrap Up

WORKSHOP POSTCARDS

FOR EACH WORKSHOP MOM'S AND POSTCARDS WITH KEY TAKEAWAYS WERE PREPARED & DELIVERED

Indicative

- George Nathanail (SEV)
- Maggie Athanassiadi (SEV)
- Filippo Moroni (Accenture)
- Kyriacos Sabatakakis (Accenture)
- Jiorgis Kritsotakis (Accenture)
- Manthos Sarantos (Accenture)
- Valia Siakavella (Accenture)
- Lefteris Kororos (Intralot)
- Giannis Konstantinidis (OTE)
- Afrodyte Vamvakopoulou (EEKT)

Communications Workshop Participants

- Aristotelis Lekatsas (AUEB)
- Maria Skagou (Vodafone)
- Giorgos Stefanopoulos (EEKT)
- Antonis Tzortzakakis (Wind)
- Giorgos Tsakogiannis (Huawei)
- Maria Boura (Ericsson)
- Eirini Nikolaidi (OTE)
- Giorgos Pappas (Ericsson)

Digital Maturity Study - Key Takeaways

Communications Perceived Digital Maturity

Major Communications Digital Initiatives Recorded

- Implement the National Broadband Next Generation Plan to provide broadband infrastructure and penetration to a high percentage of the population
- Join forces with flagship Greek industries to introduce a national platform and respective ecosystem and boost the Greek economic growth
- Exploit new revenue streams (i.e. data monetization) and investigate the provision of new, non-traditional services (i.e. provide mobile payments services/ provide security services to other industries and to the government)
- Act as a digital evangelist both for the government and for the other Greek industries

Key Structural Inhibitors

- Heavy regulations and restrictive laws with regards to open data, data sharing, electronic signatures, online storage of documentation etc.
- Stakeholders' vested interests and mindset towards short-term incremental innovation (in terms of their go-to-market strategy)
- Legacy brick and mortar retail stores/network inhibit the digitization of the industry
- Legacy systems and IT infrastructure
- Limited public – private collaboration for infrastructural initiatives to enable national digitization
- Lack of a clear national digital strategy (until recently) and lack of political continuity

INDUSTRY DEOI INDEX (1/2)

THE OVERLAY OF SECONDARY DATA ON EXECUTIVES' PERCEPTIONS ADDS AN OBJECTIVE LAYER OF GRANULARITY

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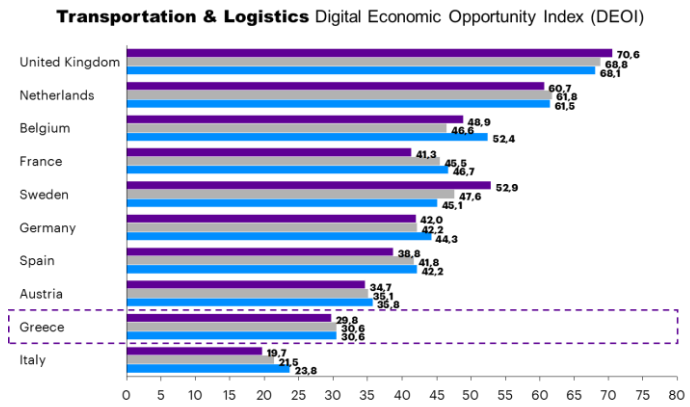
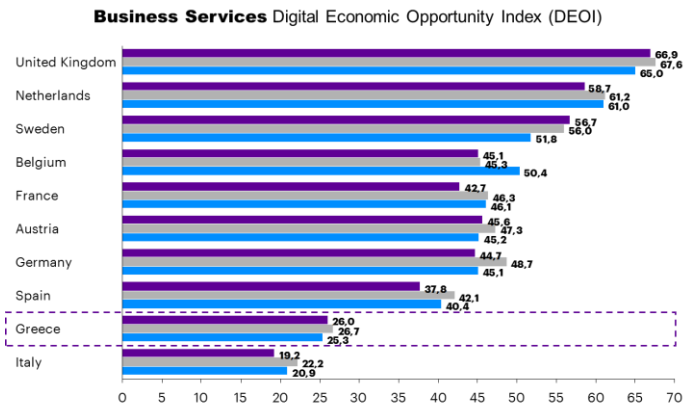
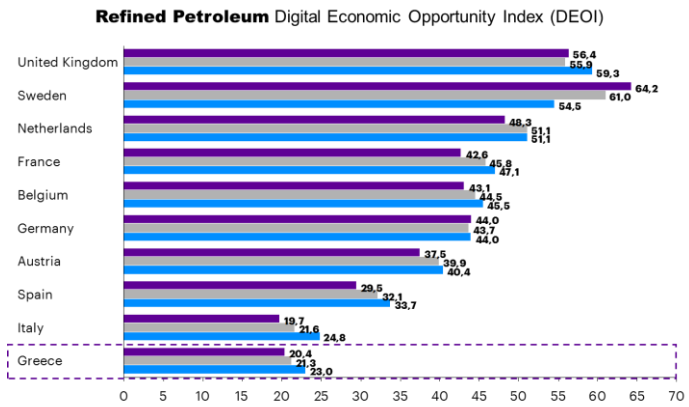
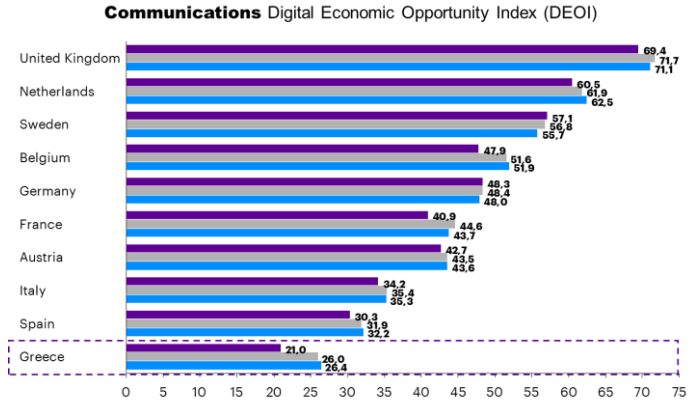
ΣΕΒ
Σύγχρονες Επιχειρήσεις, Σύγχρονη Ελλάδα

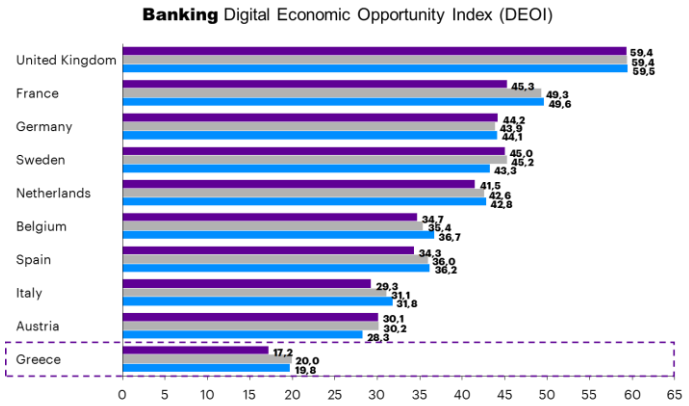
2014
2015
2016

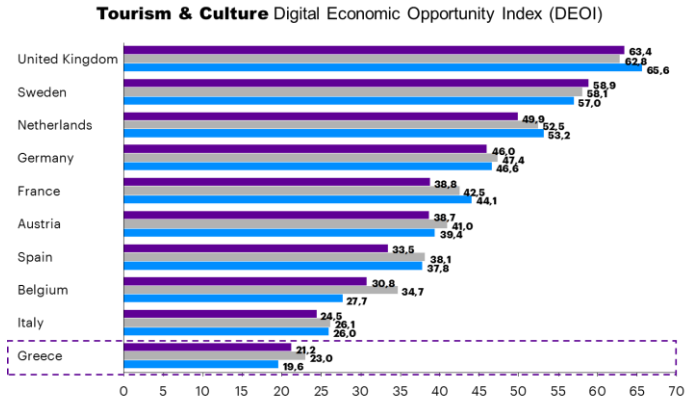












Source: Oxford Economics, Accenture analysis

INDUSTRY DEOI INDEX (2/2)

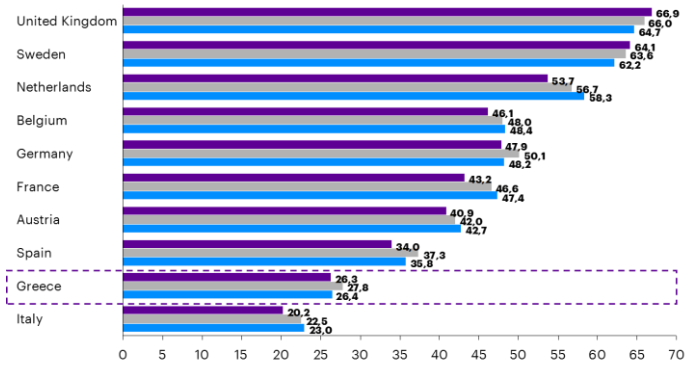
THE OVERLAY OF SECONDARY DATA ON EXECUTIVES' PERCEPTIONS ADDS AN OBJECTIVE LAYER OF GRANULARITY

accenture

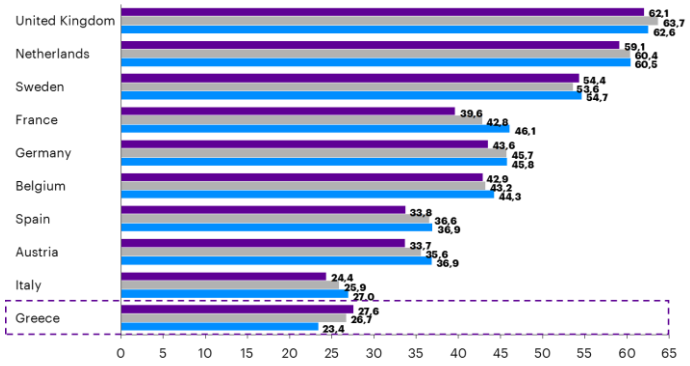
ΣΕΒ
Σύγχρονες Επιχειρήσεις, Σύγχρονη Ελλάδα

2014
2015
2016

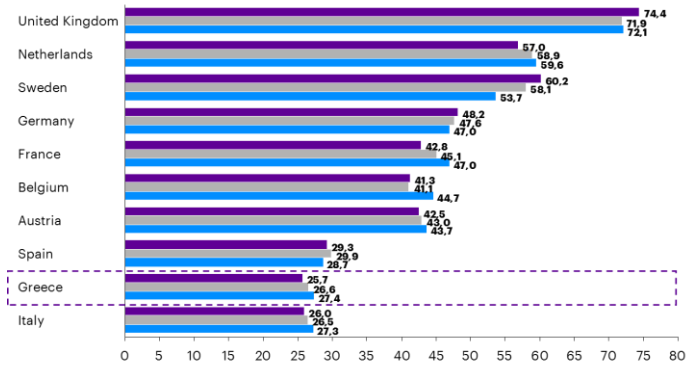
Retail Digital Economic Opportunity Index (DEOI)



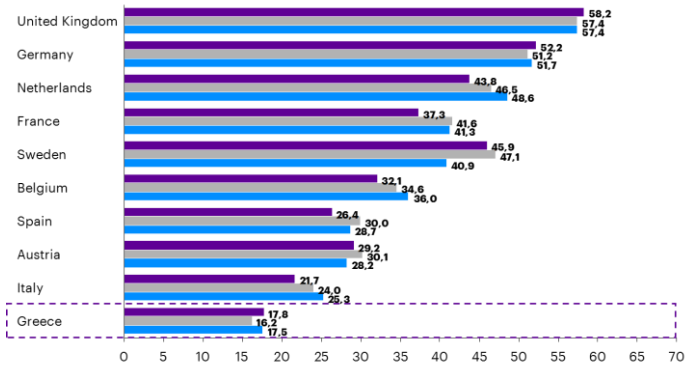
Utilities Digital Economic Opportunity Index (DEOI)



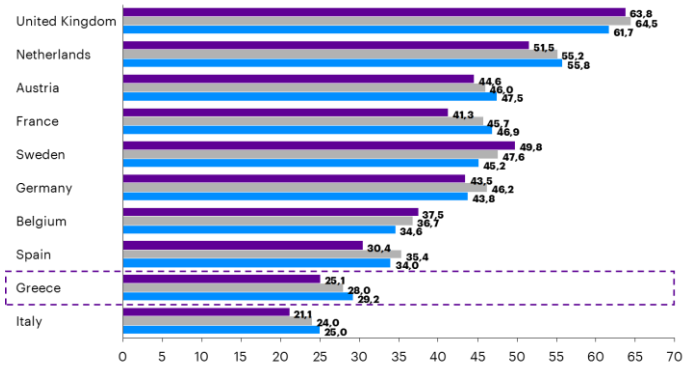
Consumer Goods Digital Economic Opportunity Index (DEOI)



Natural Resources Digital Economic Opportunity Index (DEOI)

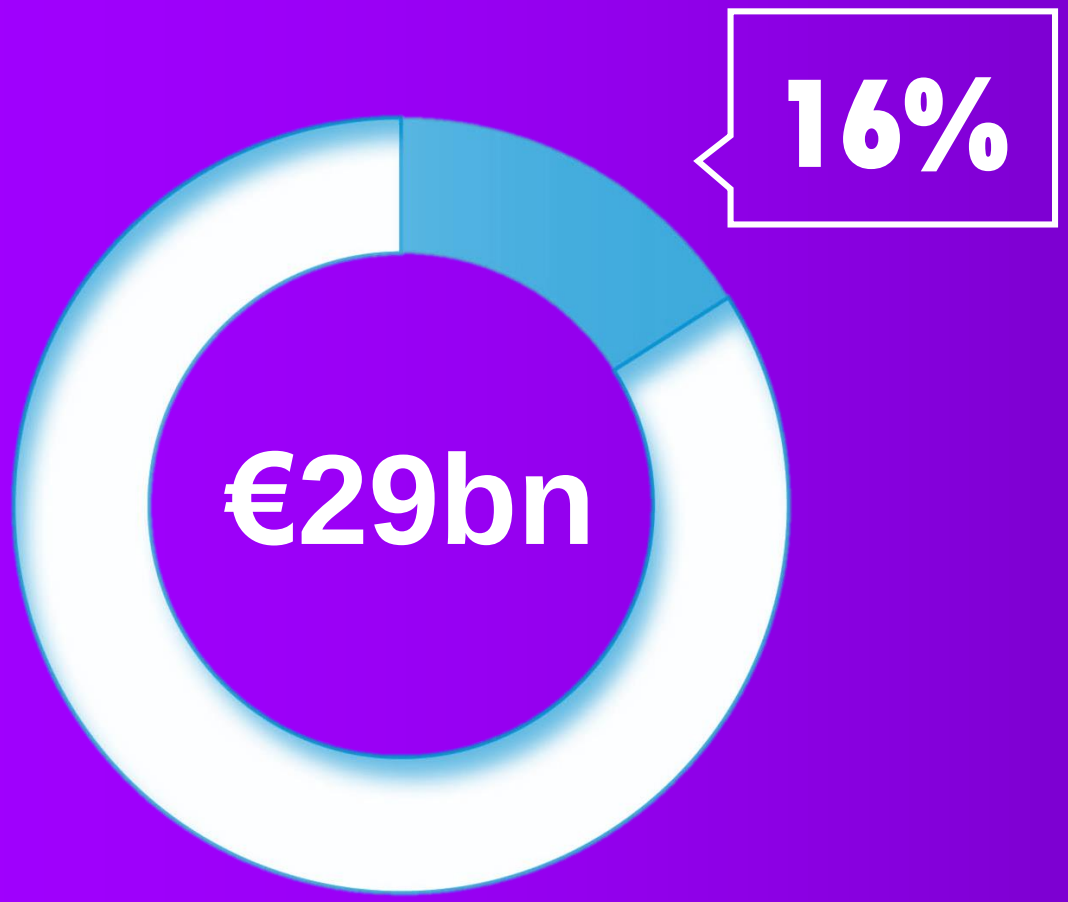


Mining and Metals Digital Economic Opportunity Index (DEOI)



Source: Oxford Economics, Accenture analysis

THE SIZE OF THE GREEK DIGITAL ECONOMY

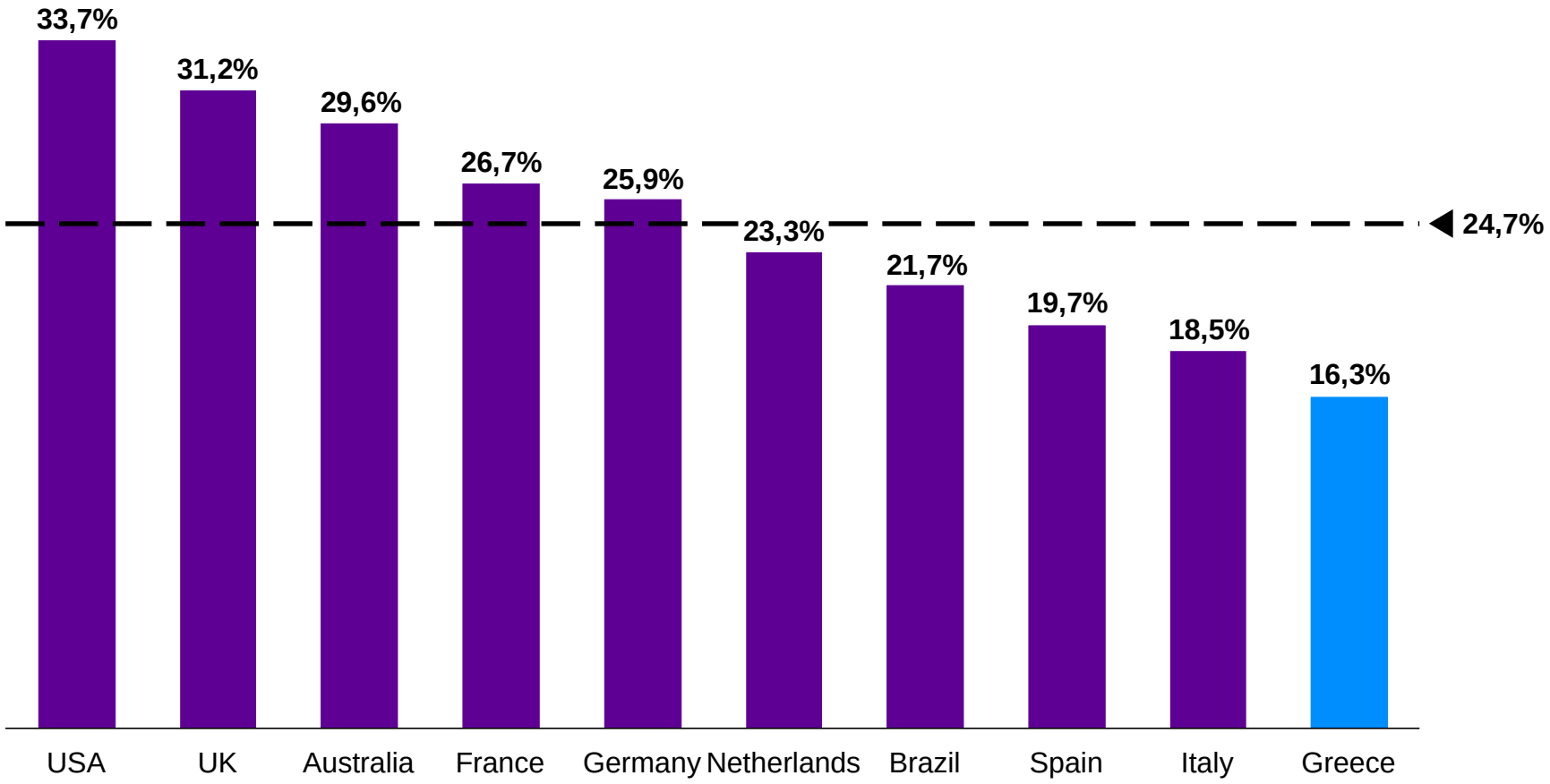


Greece's low digital maturity score, both at a national and at an industry level, results to a limited contribution to the Greek economy

The Greek digital economy is currently worth 16.3% of the Greek GDP. This is equivalent to contributing €29bn to Greek GDP each year

Source: Oxford Economics, Accenture analysis

THE SIZE OF DIGITAL ECONOMY FOR SELECTED COUNTRIES



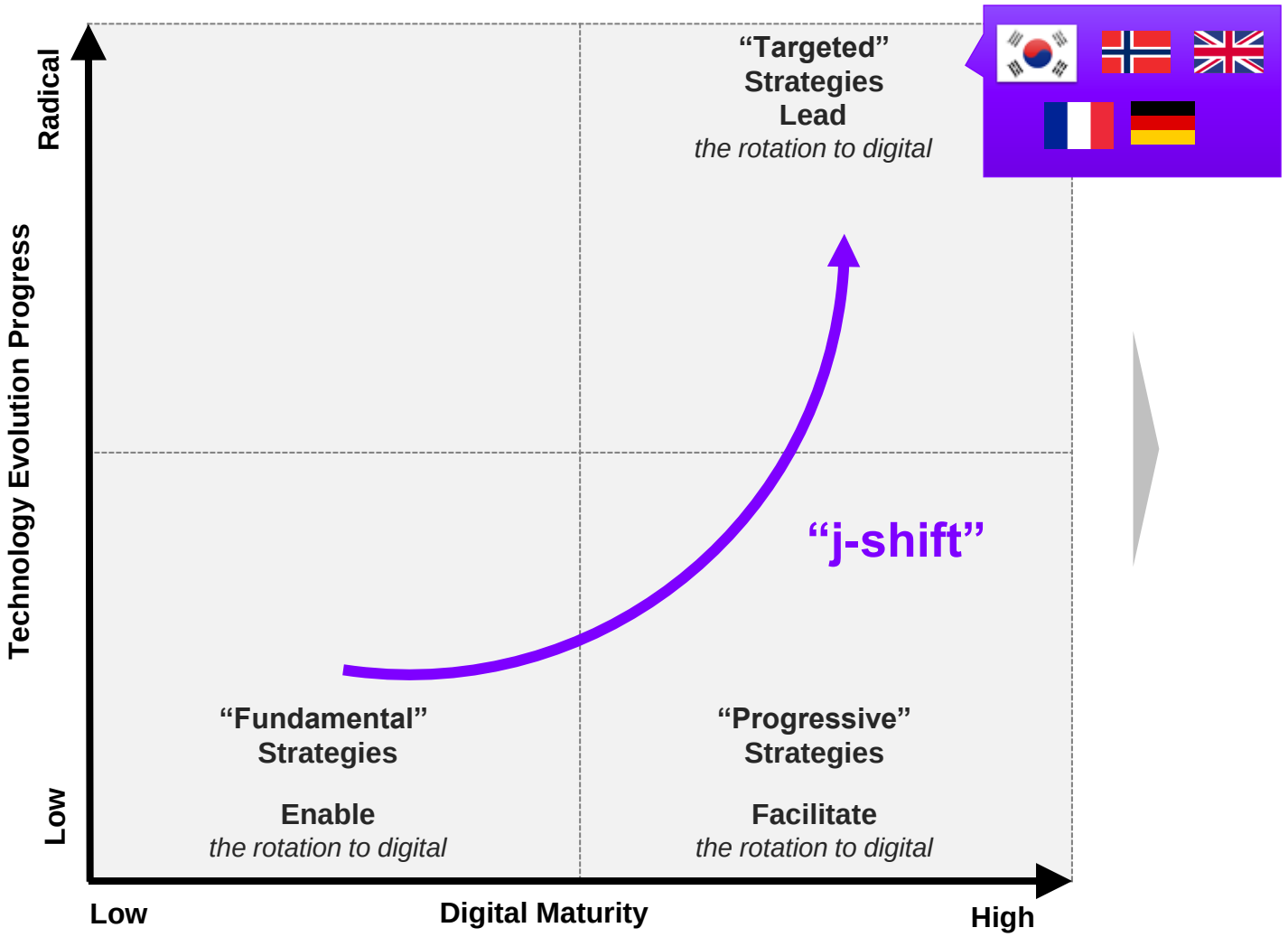
- If we juxtapose the Greek digital economy with the digital economies of a selected subset of 9 other countries (European and non-European), Greece's limited capacity to develop its digital economy is evident
- The country operates at a moderate 16.3% of its digital potential, situated at the bottom of the study's sample

Source: Oxford Economics, Accenture analysis

Greece's unfavorable position across all levers of its digital maturity creates a burning platform for the nation to identify an actionable digital strategy that will positively impact the growth of the country's economic output

GREECE'S DIGITAL STRATEGY

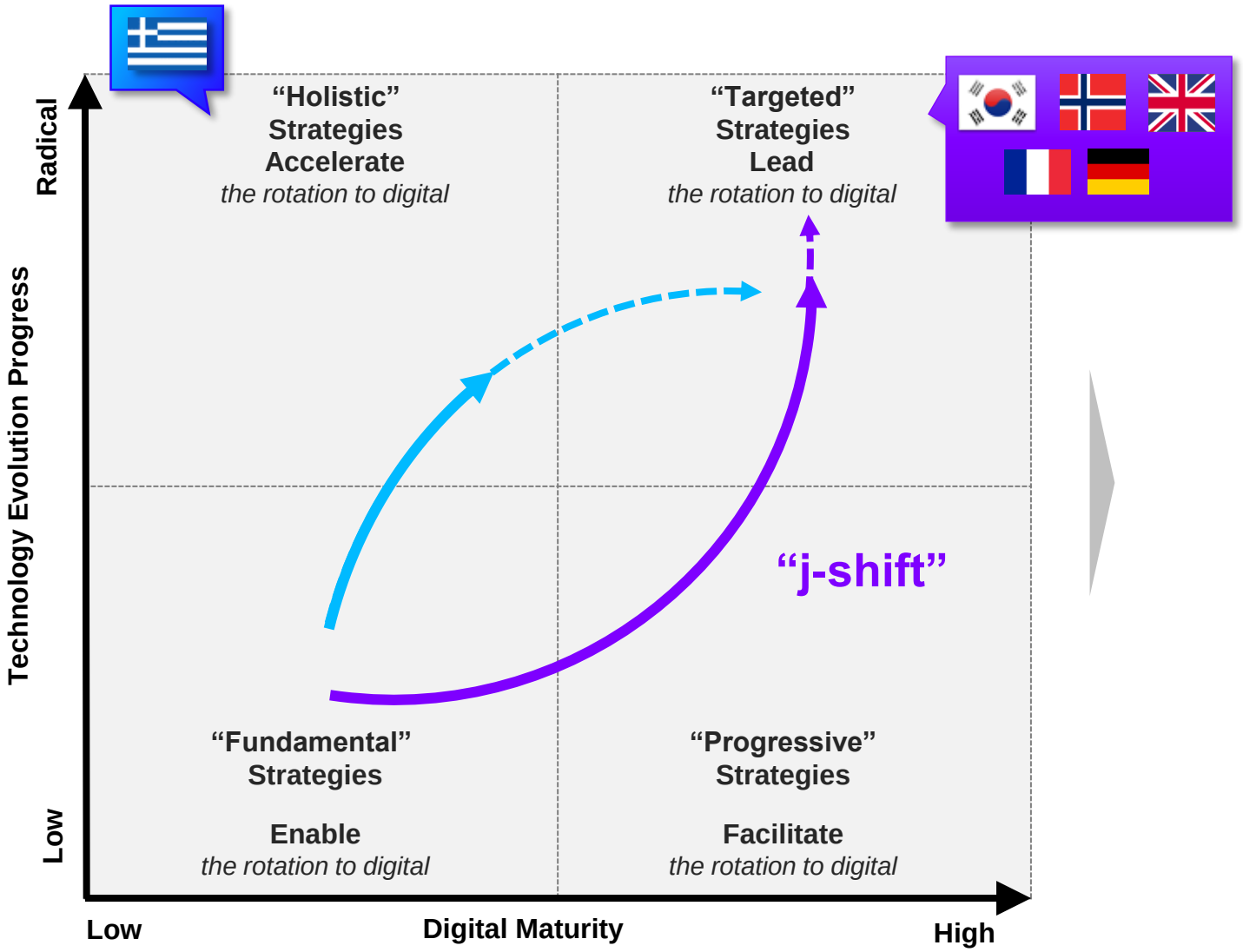
THE "J-SHIFT" OF THE DIGITALLY ADVANCED COUNTRIES



- The strategy adopted by each country for their rotation to digital significantly differs
- Countries are building their strategies on the basis of their competitive advantages, their digital maturity levels, and in the backdrop of the continuous technology advancements that directly impact the markets and societies
- Digitally advanced countries did not achieve their digital transformation overnight
- On the contrary, countries like the United Kingdom, South Korea and Norway have initiated their digital transformations several years ago, following a stepped approach
- This approach has been continuously re-evaluated to meet the countries' changing strategic intents and embrace the latest digital technologies that refedine the global environment, in which their economies perform and compete

Πηγή: Ανάλυση Accenture

GREECE'S REQUIRED "I-LIFT"



- Greece has already lost significant time with regards to its rotation to digital
- The country does not have the luxury of time to follow the "j-shift" that its digitally advanced peers have followed
- On the contrary, Greece's unfavorable position creates a burning platform for the nation to act fast, do many and perform them in sync within a tight timeframe
- In order not to lose momentum, Greece needs to take a shortcut and adopt an "holistic" strategy that will "i-lift" the nation to its digital future and will positively impact the growth of the Greek economy

Πηγή: Ανάλυση Accenture

Our vision for Greece is to imminently harness the transformative power of digital to boost the Greek GDP by 4% (€ 7,6 bn) by 2021 and join the digitally advanced countries by 2030

DIGITAL STRATEGY'S GUIDING PRINCIPLES

Greece shall avoid single country imitation in setting its digital trajectory

Greece shall aim to achieve a progressive digital maturity instead of an unrealizable imminent digital transformation. No child grows up overnight - and no country can become digitally mature overnight, either

"Fixing the brilliant basics" (i.e. the governance setup, the deployment of high-speed communications infrastructure, the use of open data etc.) is a prerequisite for the initiation of Greece's digital transformation

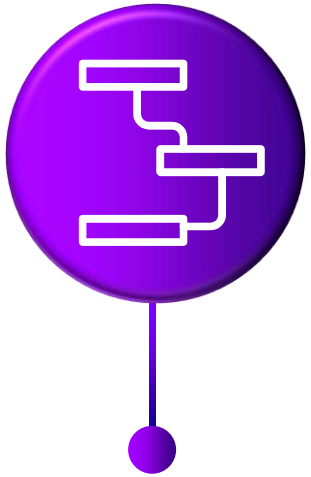
Digital vision shall not focus on Greece's repositioning on the digital indexes' ranking. Instead it should focus on value creation as a function of the digital transformation

GREECE'S HOLISTIC DIGITAL STRATEGY

- The Greek digital strategy incorporates four interconnected sets of strategic axes
- The four strategic axes provide the means of realizing the Greek digital vision and need to work in sync to deliver the desired strategic outcomes

THE 1ST STRATEGIC AXIS

"FIX THE BRILLIANT BASICS" – MAIN INTERVENTION AREAS

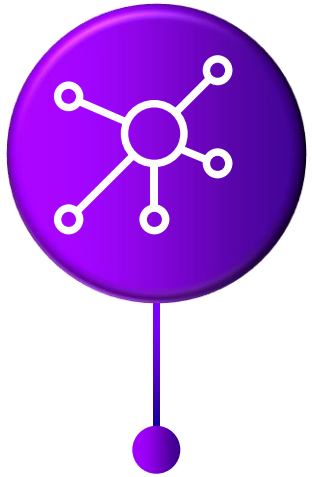


GOVERNANCE MODEL

Setup a governance model to monitor the implementation of Greece's Digital Strategy

POLICIES & REGULATORY FRAMEWORK

Update and enforce the required policies and regulatory framework for the provision of open data, the strengthening of digital trust, security and data protection and the safeguarding of online privacy



INFRASTRUCTURE

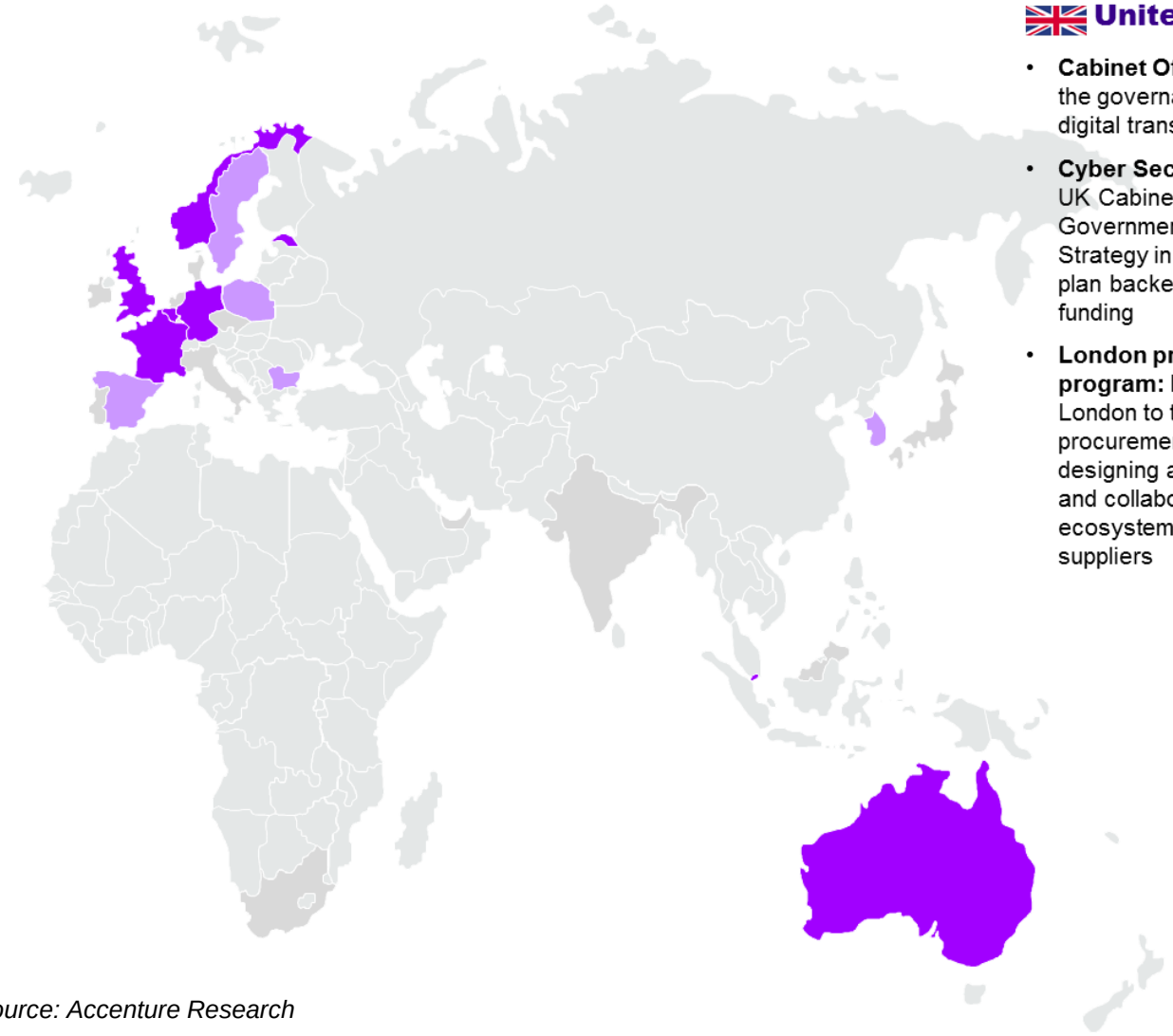
Rapid deployment of fiber optic broadband networks and wireless networks across the country that will enable ubiquitous and seamless high-speed connectivity

IMPROVE DIGITAL SKILLS

Increase the digital literacy within society through initiatives focused on education and lifelong learning, to enable society's connection with the digital world

THE 1ST STRATEGIC AXIS

GLOBAL LEADING PRACTICES



United Kingdom

- **Cabinet Office & GDS:** Leads the governance of the UK's digital transformation agenda
- **Cyber Security Strategy:** The UK Cabinet Office drafted the Government Cyber Security Strategy in 2011, a five year plan backed by £860m of public funding
- **London procurement program:** In 2011, the City of London to transform its procurement processes by designing a digital marketplace and collaborating across an ecosystem of partners and suppliers

Estonia

- **e-Estonia Council**: Directs the development of digital society and e-governance in the country
- **NATO Cyber Defence CoE:** seeks to enhance the capability and cooperation among NATO members and partners in cyber defense
- **Government programme:** contains strategic objectives for the government

Germany

- **WiBe 4.0 Framework:** Is the national e-government measurement framework to assess the economic efficiency of federal administrations

Norway

- **ALTINN:** is a 24/7 online portal that has eased the burden of public reporting for businesses, citizens and administrators

France

- **PM & Digital Council:** Prime Minister Manuel Valls has the vision to make France a 'digital republic' with the advisory of the French National Digital Council
- **Chief Digital Officer:** Appointed the first European CDO in September 2014

Singapore

- **Online OBLS:** Singapore government has partnered with the private sector to develop the Online Business Licensing Services

Australia

- **Smart Grid, Smart City:** is a trial deployment of smart grid infrastructure with government specified activities and outcomes

Source: Accenture Research

THE 2ND STRATEGIC AXIS

GOVERNMENT 2.0 – GUIDING PRINCIPLES

Digital by default
In any interaction between the government and the users of a given service, the user is obliged to use the digital channel. Progressively, all public services should be available in digital form

User friendliness and inclusiveness
The principle of digital by default implies that digital public services should be available for everyone, not only for selected digitally savvy population groups

Once-only
This means eliminating the unnecessary administrative burden that occurs when users are required to supply the same information more than once to public administrations

No legacy
This principle requires the Government to renew all state information technology systems after a certain amount of time to keep in line with the ever-changing environment and technological developments

24/7
Technology allows the delivery of public services in real time around the clock

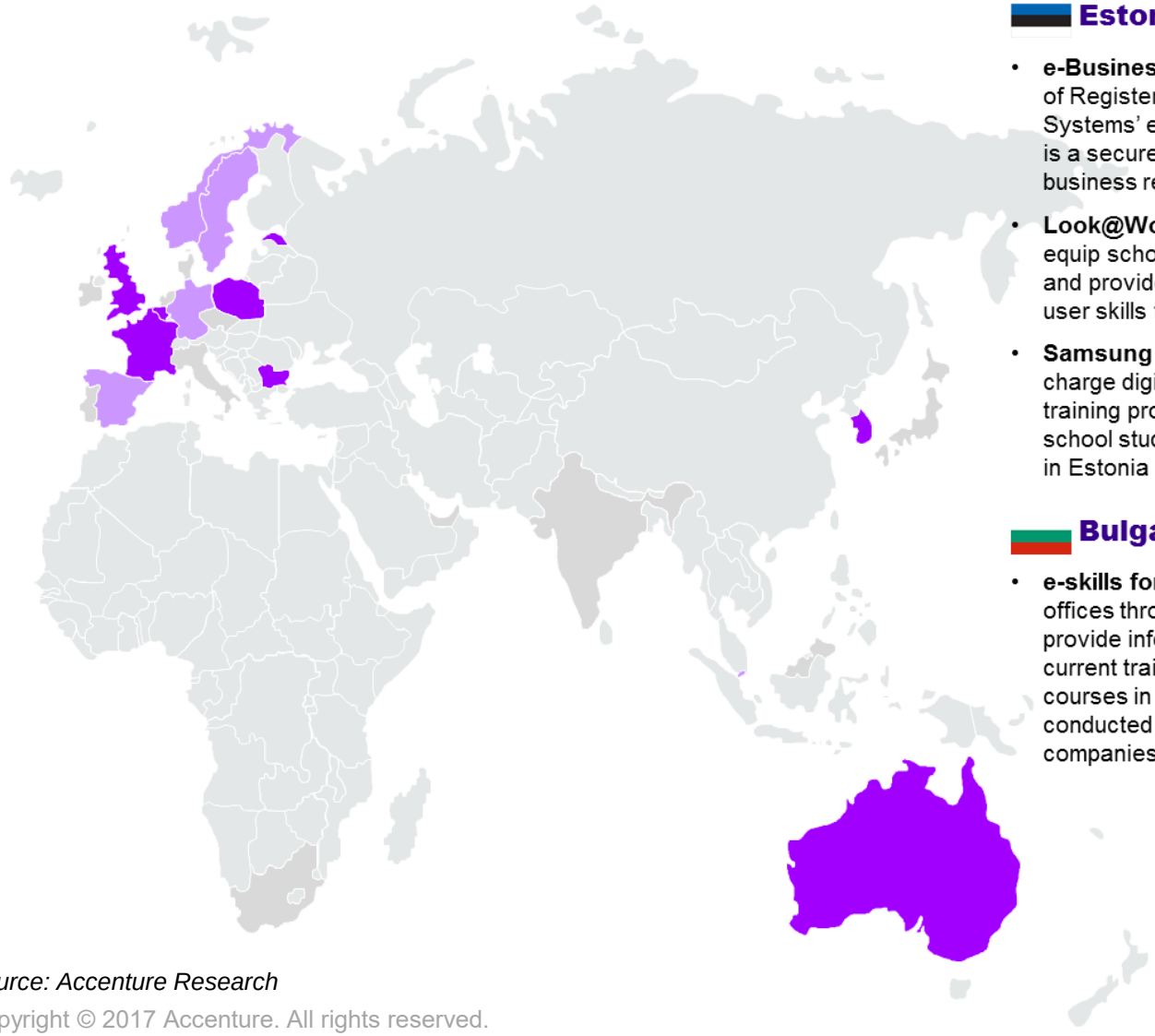
Single point of entry
For user convenience, public services should be accessible from one portal through single identification

Omni-channel services
The user should be provided with a seamless digital public services experience no matter what device – a desktop or a mobile device – is being used to access the portal

Open standards
Service-oriented architecture of user-centric public services is underpinned by open standards and open-source technologies, enabling digital collaboration

THE 2ND STRATEGIC AXIS

GLOBAL LEADING PRACTICES



Estonia

- **e-Business Register:** Center of Registers and Information Systems' e-Business Register is a secure one-stop shop for business registration
- **Look@World Foundation:** equip schools with computers and provided training in ICT user skills to the population
- **Samsung Digi Pass:** Free of charge digital and life-skills training program for vocational school students aged 14 to 19 in Estonia

Bulgaria

- **e-skills for jobs:** Labor offices throughout Bulgaria provide information about all current training sessions and courses in the field of ICT, conducted by the leading companies in the sector

United Kingdom

- **GaaP Strategy:** GDS is rationalizing public services by transitioning to 'Government as a Platform' (GaaP) approach, with services built upon a shared core to streamline processes and maximize public IT resources
- **GDS User Experience:** GDS has a dedicated User Research Team conducting in-depth user-research on public services

EU member States

- **Growth Engine for Europe:** Google's program designed to help individuals and businesses succeed online
- **#SuperCoders:** is a programme organized by Orange Group to introduce coding to children aged 9 to 13

France

- **Public Consultations:** 26 public consultations across four main themes were held by the French Digital Council (CNN) to engage the public in co-developing France's Digital Goals

South Korea

- **GEA:** The Ministry of Public Administration and Security's Government-wide Enterprise Architecture (GEA) provides integrated services to citizens, businesses

Australia

- **Better Together:** The South Australia state government's "Better Together" engages citizens in its decision making through the YourSAY portal

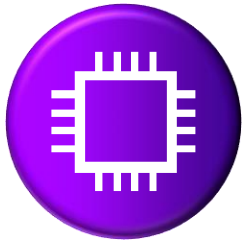
Poland

- **DigComping:** contributes to building the digital society by developing and validating the digital competences of Polish citizens

Source: Accenture Research

THE 2ND STRATEGIC AXIS

GOVERNMENT 2.0 – KEY INTERVENTION AREAS - ACTIVITIES

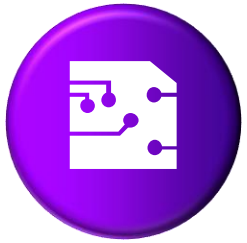


DIGITALIZE THE PROVIDED PUBLIC SERVICES

The provided public services shall be digitalized, following a user-centric approach. In addition, emphasis should be put on the digitalization of public services that will improve the ease of doing business

LAUNCH A DEDICATED CROSS-GOVERNMENT SERVICE-DESIGN TEAM

The team will be responsible for the design of integrated digital public government services through the application of service design methodologies and will support the different government departments



RE-ENGINEER AND SIMPLIFY THE INTERNAL PUBLIC SECTOR PROCESSES

These new, user-centric, digital services will by necessity trigger the automation of their supporting internal public sector processes

UPDATE THE DELIVERY AND SOURCING MODELS

Government 2.0 shall increasingly move away from the traditional emphasis on fragmented procurement services run by siloed functions and leverage new delivery methodologies such as agile software development

DEVELOP OPEN STANDARDS AND INTEROPERABILITY POLICIES TO ENABLE FREE DATA SHARING AND SMASH PUBLIC SECTOR "SILOS"

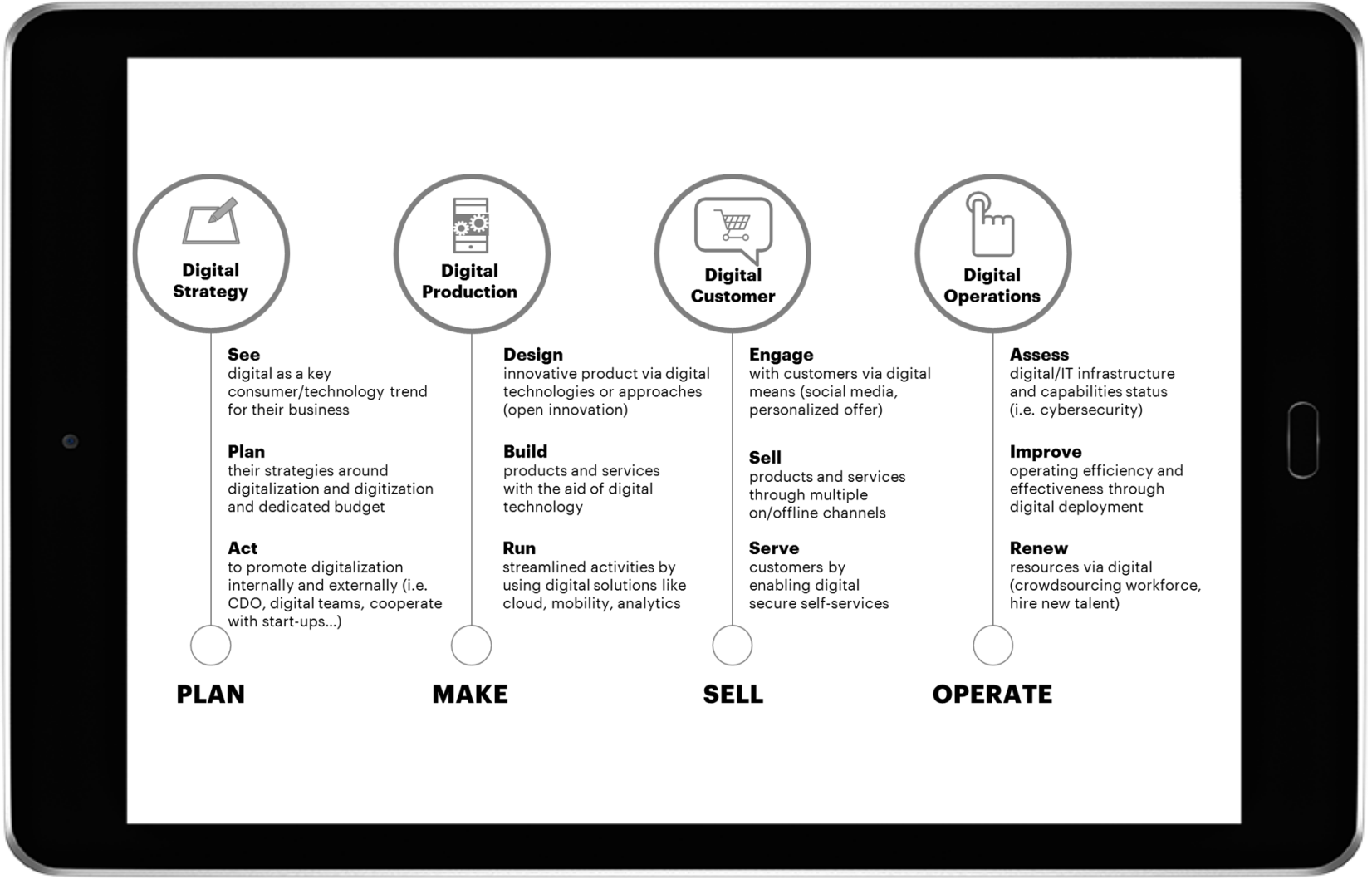
The implementation of open standards is expected to further accelerate Government 2.0 towards the design of user-centric and integrated services

DIGITALLY UPSKILL AND RESKILL THE PUBLIC SECTOR WORKFORCE

Key prerequisite for the provision of user-centric digital services is the increase of the digital literacy within the public administration. This will be achieved through the design and implementation of mandatory reskilling and upskilling initiatives for all Public Sector employees

THE 3RD STRATEGIC AXIS

NATIONAL STRENGTHS BASED PLAY – VALUE CHAIN AND "DIGITAL PIVOT POINTS"

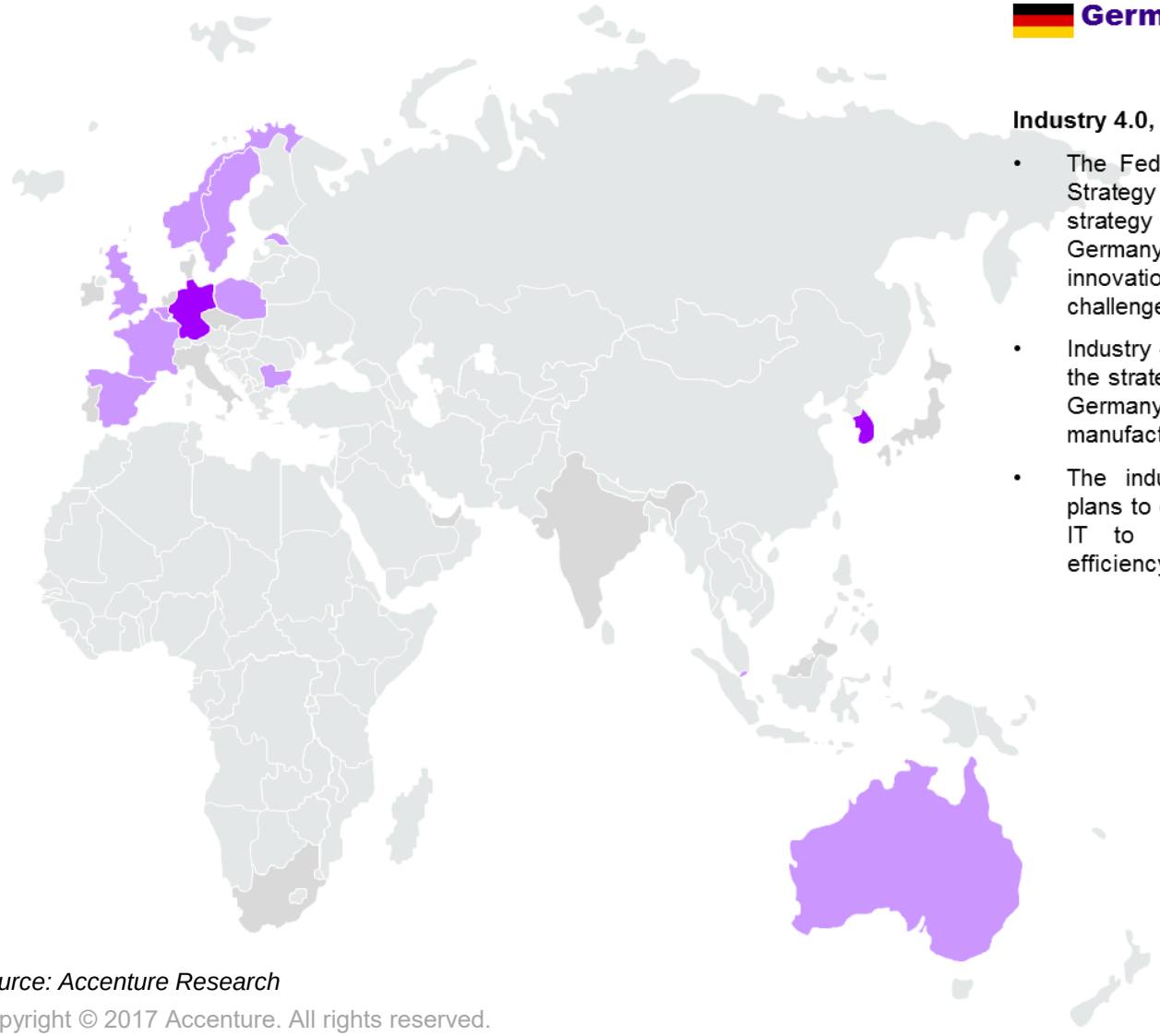


What are the "digital pivot points"?

- Companies organize their business activities against value chains that typically consist of strategy, production, customers and operations
- There is widespread evidence that all industries are impacted by digital. However, as each industry is also quite unique, its respective digital rotation places the emphasis on different areas of the value chain
- These areas are referred to as "digital pivot points"

THE 3RD STRATEGIC AXIS

GLOBAL LEADING PRACTICES



Germany

Industry 4.0, High Tech:

- The Federal Government's New High Tech Strategy is an interdepartmental innovation strategy built on 5 pillars to establish Germany as a prosperous world-leading innovation leader and find answers to future challenges
- Industry 4.0 is one of the "Future Projects" of the strategy backed by €200M funding and is Germany's vision for the future of manufacturing
- The industrial Internet of Things strategy plans to develop "smart factories", leveraging IT to digitize processes and improve efficiency

South Korea

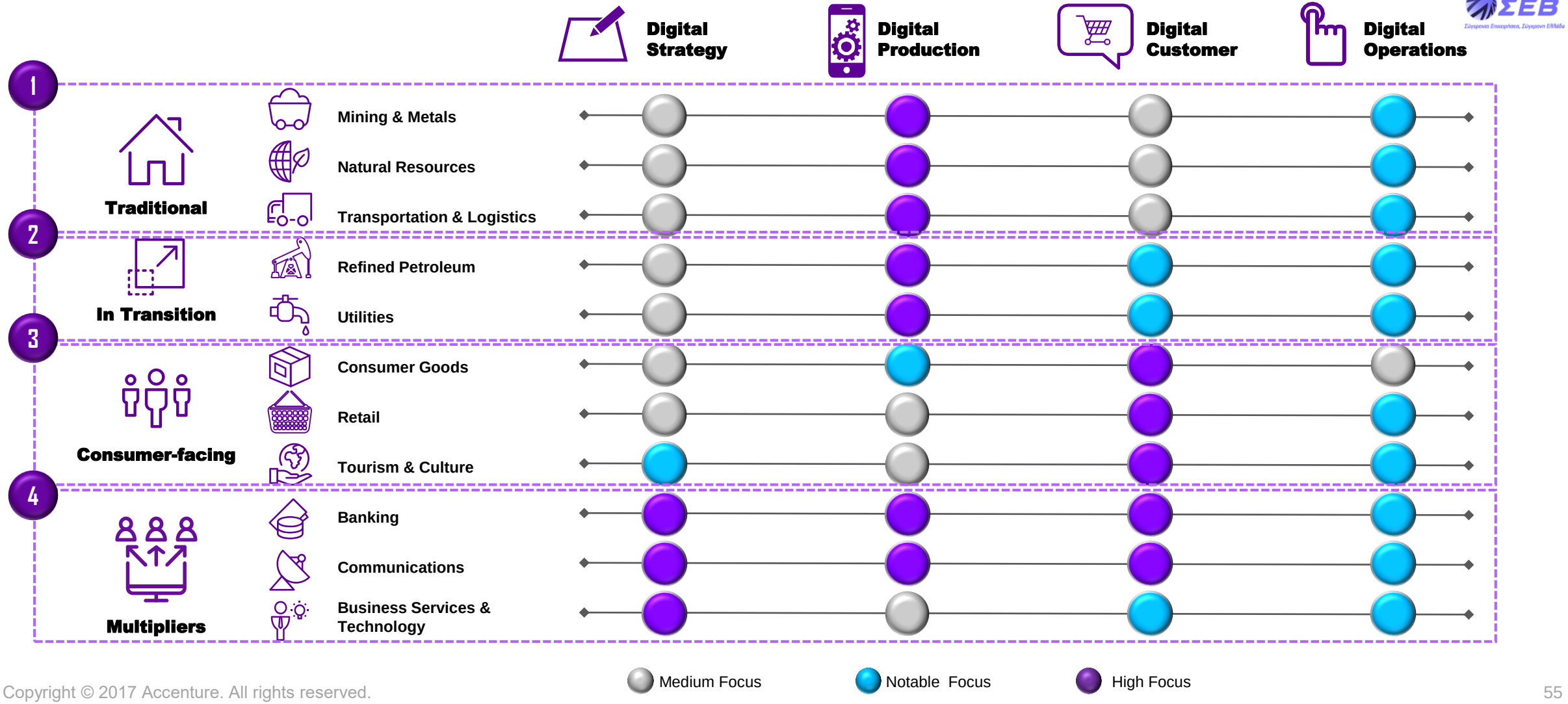
Big Data Strategy Center:

- National Information Society Agency's Korea Big Data Strategy Centre (KBiG) uses big data to gain insights on country's social issues and boost competitiveness of businesses through analytics
- KBiG has approximately 100 analysis servers with around 500 terabytes installed with open source software
- KBiG has 21.712 data providers from medical, government, IT and media industries

Source: Accenture Research

THE 3RD STRATEGIC AXIS

NATIONAL STRENGTHS BASED PLAY – INDUSTRY CLUSTERING



THE 3RD STRATEGIC AXIS

NATIONAL STRENGTHS BASED PLAY – KEY DIGITAL THEMES (1/2)

The Digital Strategy Office

The Digital Strategy Office will be established to serve as a sponsor and ambassador of the digitalization, drive the digital agenda across business units and organizational layers and provide the required oversight to operationalize the digital strategy

The Smart Plant

Digitally-enabled plants will leverage capabilities provided by the combination of software and hardware to automate primarily human-driven tasks, drive down costs, provide visibility across all production lines and elements and allow for greater and more in-depth control of all production operations

Integrated Customer Services

Using the increasing volumes of customer data to better understand behavior, a number of "traditional" companies will move from being "product-centric" to "customer-centric"

The Digital Enterprise

In the future, back-office functions will work autonomously, with minimal human intervention thus empowering the rest of the organization to focus their efforts on front-line activities

Personalization (of products and services)

Today, offering a product that is generic and cannot answer a specific requirement is not enough. Customers increasingly expect to experience interactions that are personalized, relevant and contextualized

Physical Store Transformation

Companies with physical stores and other points of sale must leverage digital capabilities within the complex store environment to transform their stores, making the experience more personalized and interactive

THE 3RD STRATEGIC AXIS

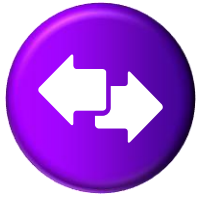
NATIONAL STRENGTHS BASED PLAY – KEY DIGITAL THEMES (2/2)

The Connected Supply Chain

A data-driven, insight-powered supply chain network will lead the way to the operations of the future. Supply chain analytics paves the path for generating strong business insights that enable better decision-making

The Cyber Security

Asset cybersecurity is the collection of tools, policies, concepts, safeguards, guidelines, risk management approaches, actions, training, best practices, assurance and technologies that can be used to protect the cyber environment, and an organization's or user's assets within



Customers' Omni-channel Experience

Being able to engage with customers across all online and offline channels is critical for modern organizations. Organizations must break down internal siloes that offer rigid, one-dimensional experiences and change the underlying capabilities of each touchpoint to engage in a customer-focused and holistic approach

The Digital Worker

Digitally-equipped workers can benefit from on-demand, real-time push and pull information and use mobile and wearable technologies (e.g. tablets, wearable glasses, watches, and vital trackers) to interact with sensors, robots and other systems around them, improving operational efficiency

From Products to Experiences

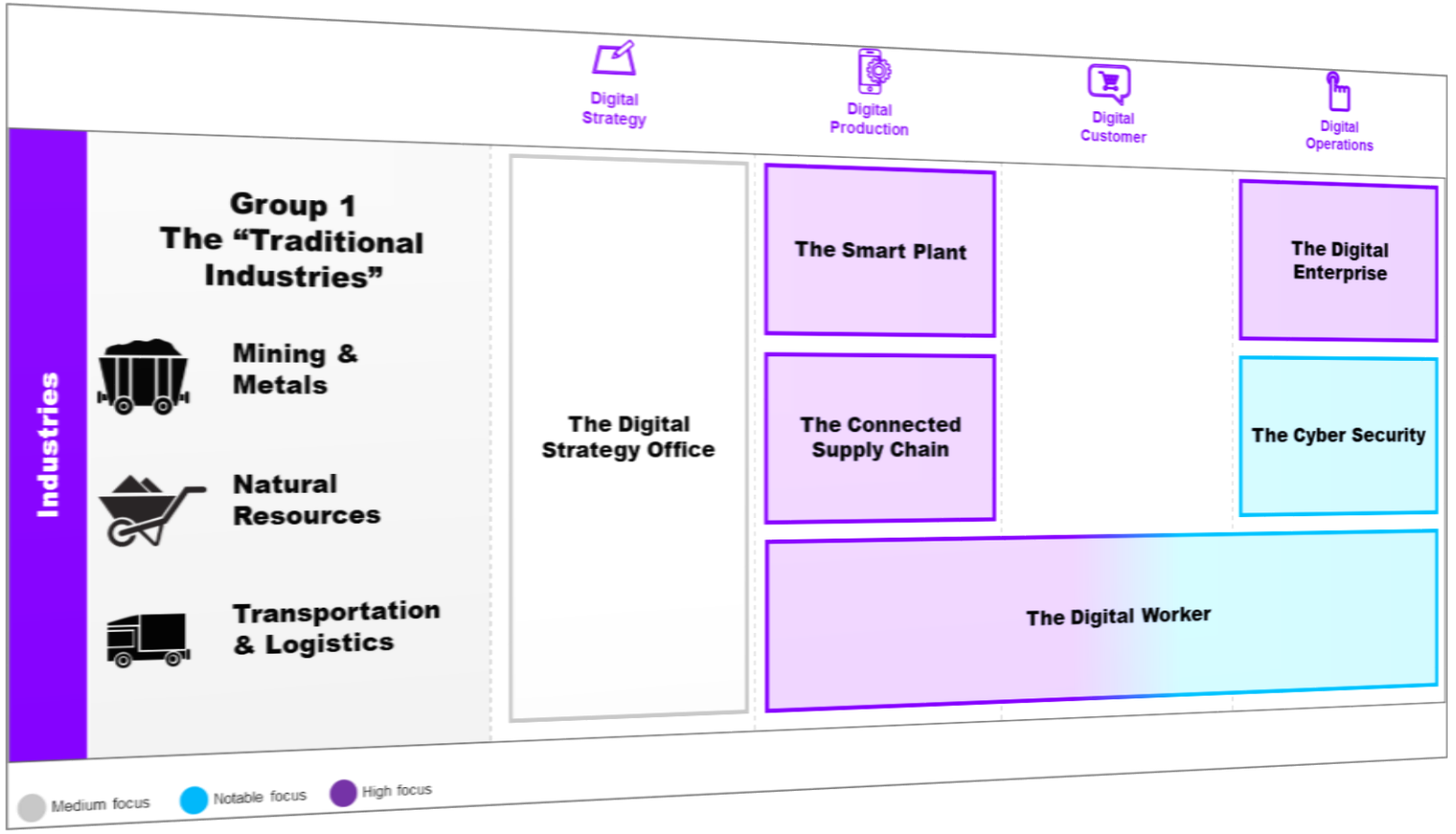
Products and services must turn into experiences that deliver some of the fundamental elements that create value for their customers, by appealing to their emotions, achieving positive impact on society or functionally improving their lives by saving time, simplifying or organizing various tasks and activities

Digital Sales Force

Companies are leveraging technologies such as big data, advanced analytics and digital points of sale like tablets to facilitate the selling process and improve their efficiency

THE 3RD STRATEGIC AXIS

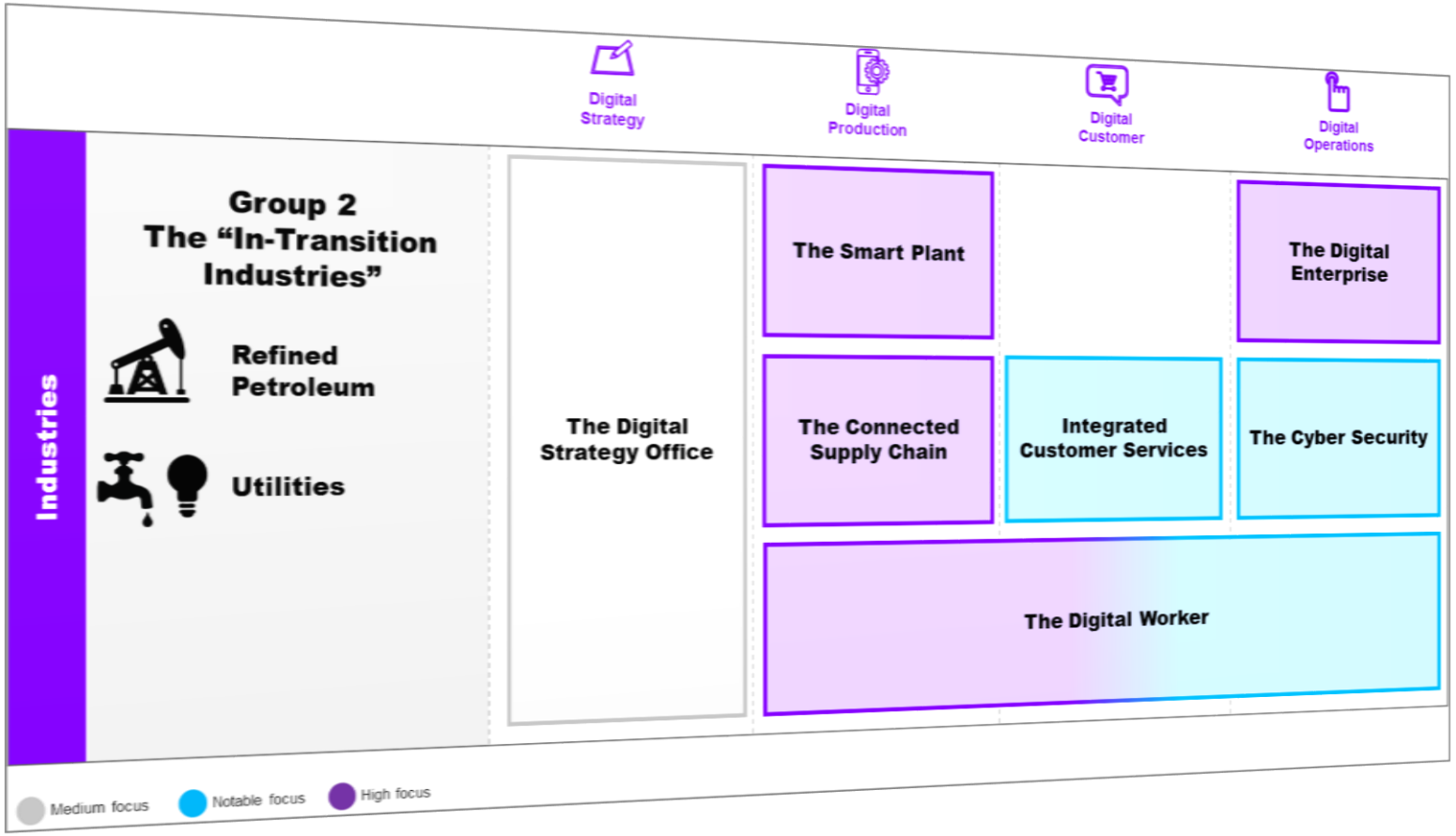
THE NATIONAL STRENGTH BASED PLAY – 1ST GROUP: THE "TRADITIONAL INDUSTRIES"



- Enterprises that belong to this group, are typically asset-heavy organizations, require large amounts of capital to establish and operate and their production is dependent on heavy industrial machinery
- Their workforce demonstrates a different composition and set of characteristics from that across the other industry groups. Their production and operations are heavily dependent on a large number of field workers
- The focus of their digitalization is primarily targeting production and operations
- 6 digital themes are evident for the Ist group.

THE 3RD STRATEGIC AXIS

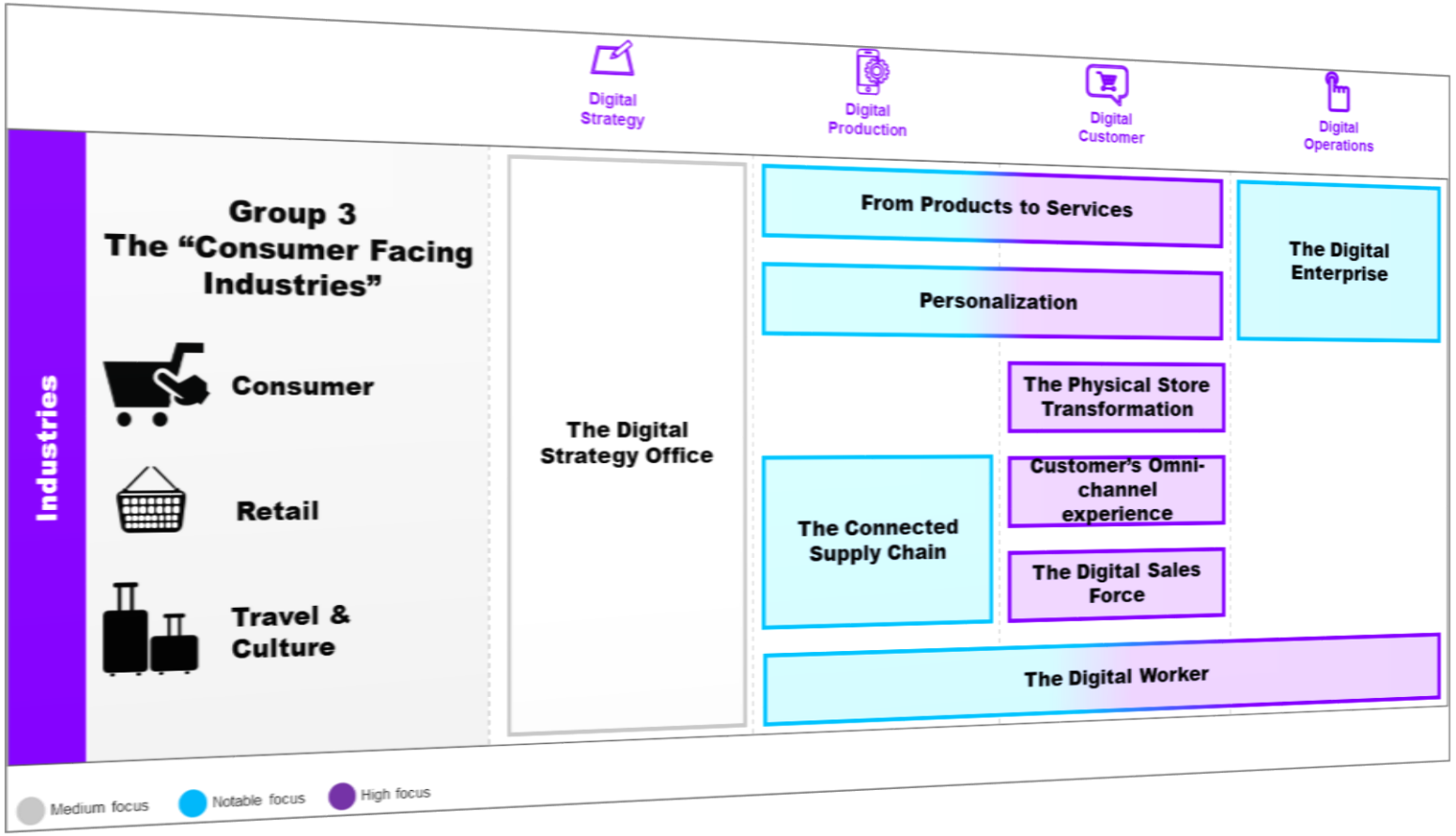
THE NATIONAL STRENGTH BASED PLAY – 2ND GROUP: THE "INDUSTRIES IN-TRANSITION"



- They have similar characteristics with the "Traditional" group, but we observe an additional theme, that of "Integrated Services to Final Consumers"
- In parallel with focusing on the digitalization of their production, these industries are starting to place significant emphasis and become more involved with their end-customers
- 7 digital themes influence the 2nd group

THE 3RD STRATEGIC AXIS

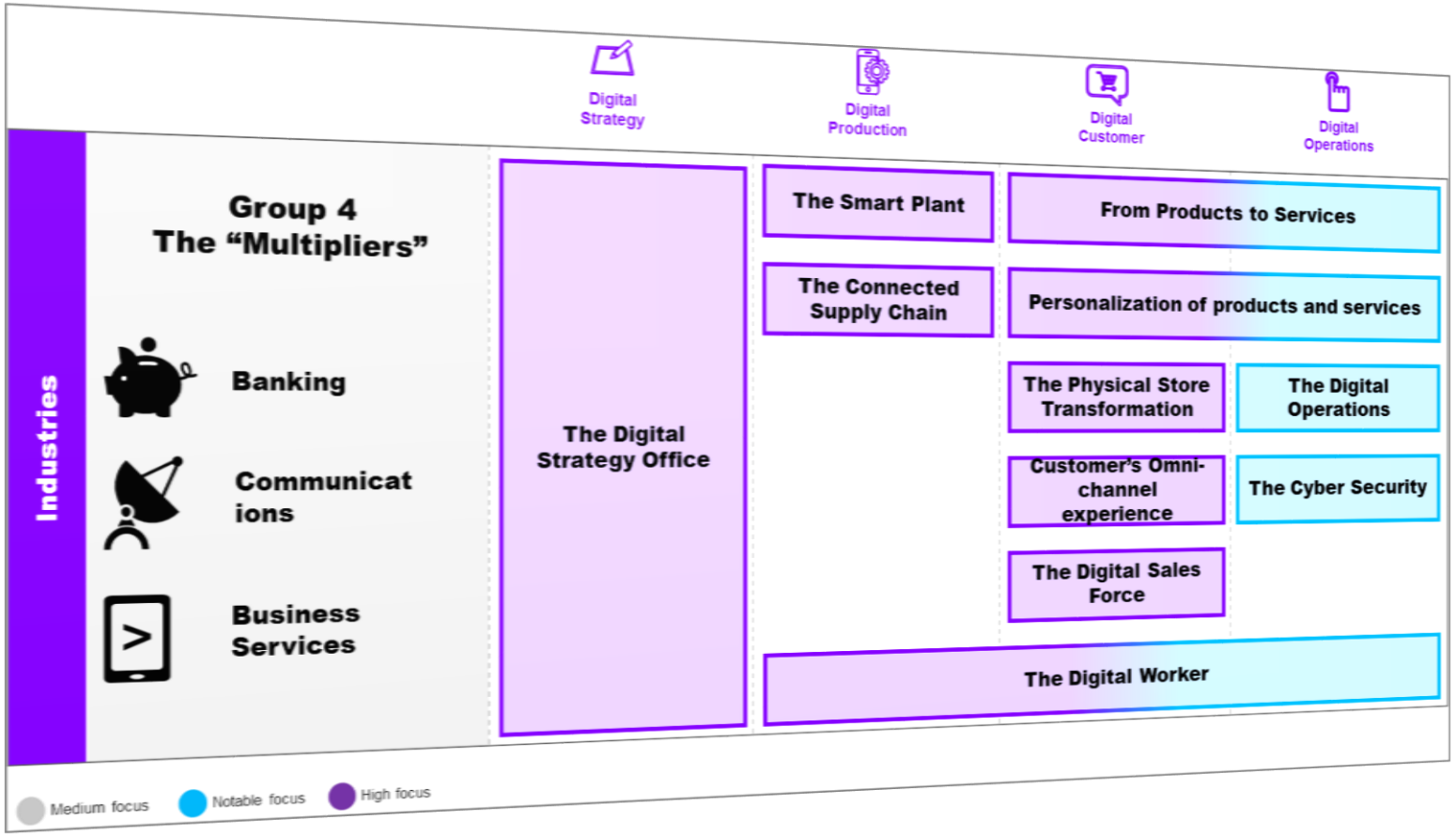
THE NATIONAL STRENGTH BASED PLAY – 3RD GROUP: THE "CONSUMER-FACING INDUSTRIES"



- Organizations that belong to this group demonstrate predominantly a Business to Consumer market orientation and focus primarily on the provision of both products and services to the end consumer
- Digital affects all areas of the value chain, with particular emphasis situated at the front end – client interaction
- 9 digital themes impact the 3rd group

THE 3RD STRATEGIC AXIS

THE NATIONAL STRENGTH BASED PLAY – 4TH GROUP: THE "MULTIPLIERS INDUSTRIES"



- These industries are primarily service oriented, they demonstrate a double market orientation (both Business to Business and Business to Consumer)
- "Multiplier" organizations shall have a double role with regards to Greece's digital transformation: they shall progress their own digital transformation and to that end, increase their maturity. At the same time, they shall act as the national "multipliers", in order to accelerate "Traditional" and "Customer facing" industries' rotation to digital
- Digital technologies have a significant impact across the "Multipliers" value chain, resulting into 11 digital themes

THE 3RD STRATEGIC AXIS

WE PERFORMED AN INDUSTRY ZOOM-IN FOR 10 SELECTED GREEK INDUSTRIES

Indicative industry zoom-in follows on slide 63

- MINING & METALS
- BUSINESS SERVICES & TECHNOLOGY
- REFINED PETROLEUM
- COMMUNICATIONS
- BANKING
- TOURISM & CULTURE
- NATURAL RESOURCES
- UTILITIES
- CONSUMER GOODS & RETAIL
- TRANSPORTATION & LOGISTICS

THE 3RD STRATEGIC AXIS

EACH INDUSTRY ZOOM-IN INCLUDED THE INDUSTRY'S PERCEIVED DIGITAL MATURITY…

Overall Perceived Digital Maturity of **Mining and Metals** industry

- Zooming into the Greek metals and mining industries, surveyed executives appear to acknowledge the role of digital and perceive themselves to perform on par with their respective global market and have clear ambitions to increase their digital maturity the future

Perceived Digital Maturity of **Mining and Metals** industry – **Digital Skills**

Perceived Digital Maturity of **Mining and Metals** industry – **Digital Technologies**

Perceived Digital Maturity of **Mining and Metals** industry – **Digital Accelerators**

Source: Accenture Analysis

THE 3RD STRATEGIC AXIS

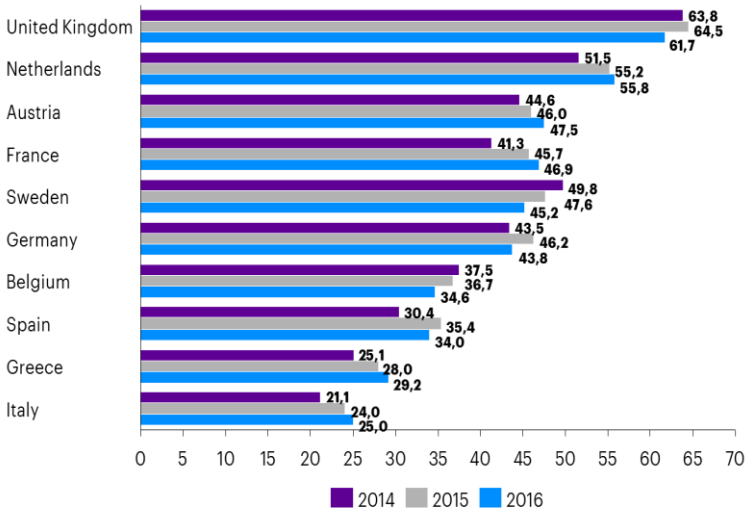
… ITS CALCULATED DIGITAL MATURITY AS PER OUR ECONOMETRIC ANALYSIS…

accenture

ΣΕΒ Σύνδεσμος Επιχειρήσεων, Συμφωνη Ελλάδα

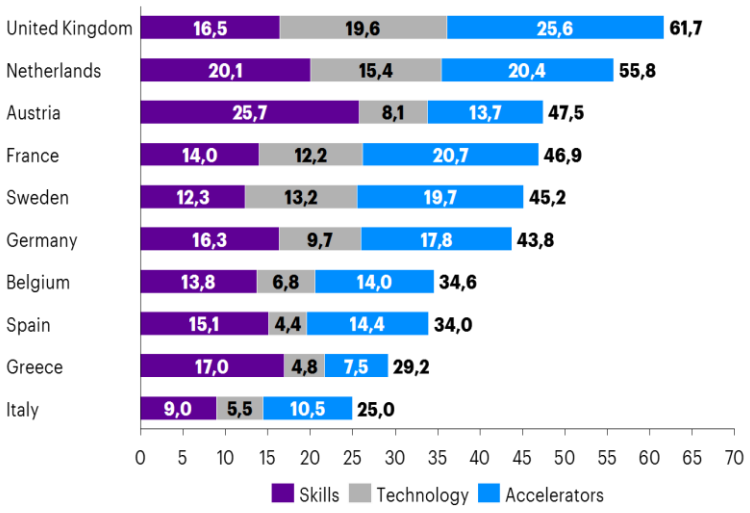
Indicative

Mining and Metals Industries Digital Economic Opportunity Index from 2014 to 2016



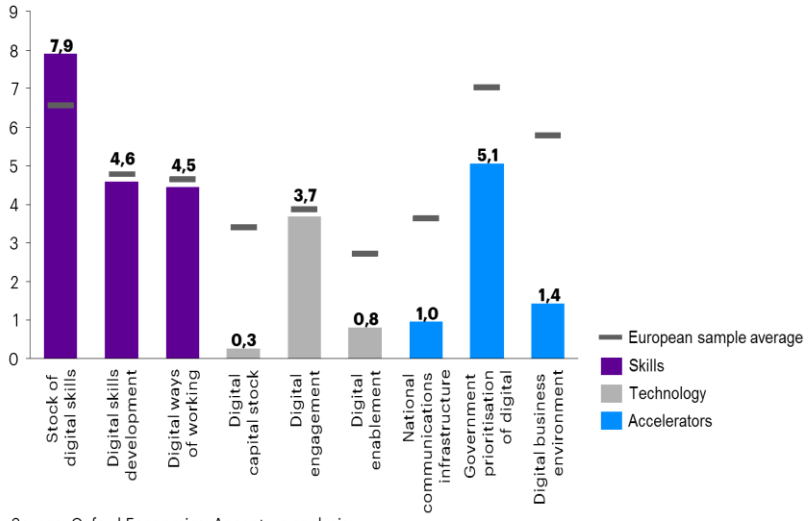
Source: Oxford Economics, Accenture analysis

Mining and Metals Digital Economic Opportunity scores by country



Source: Oxford Economics, Accenture analysis

Mining & Metals Industries - Digital Economic Opportunity Index Components



Source: Oxford Economics, Accenture analysis

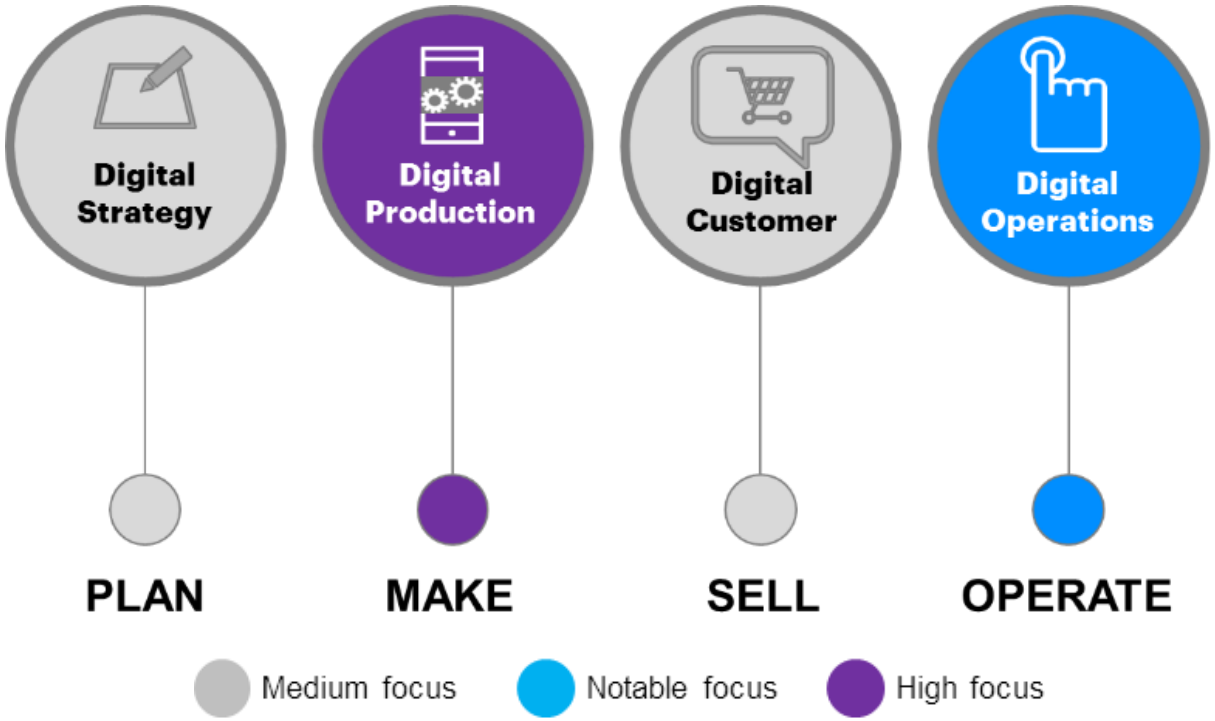
Source: Accenture Analysis

THE 3RD STRATEGIC AXIS ... THE DIGITAL PIVOT POINTS OF THE INDUSTRIES...

Perceived Digital Maturity | Calculated Digital Maturity | Digital Pivot Points | Digital Initiatives | GVA Uplift

Indicative

Mining & Metals Industries - Digital Pivot Points



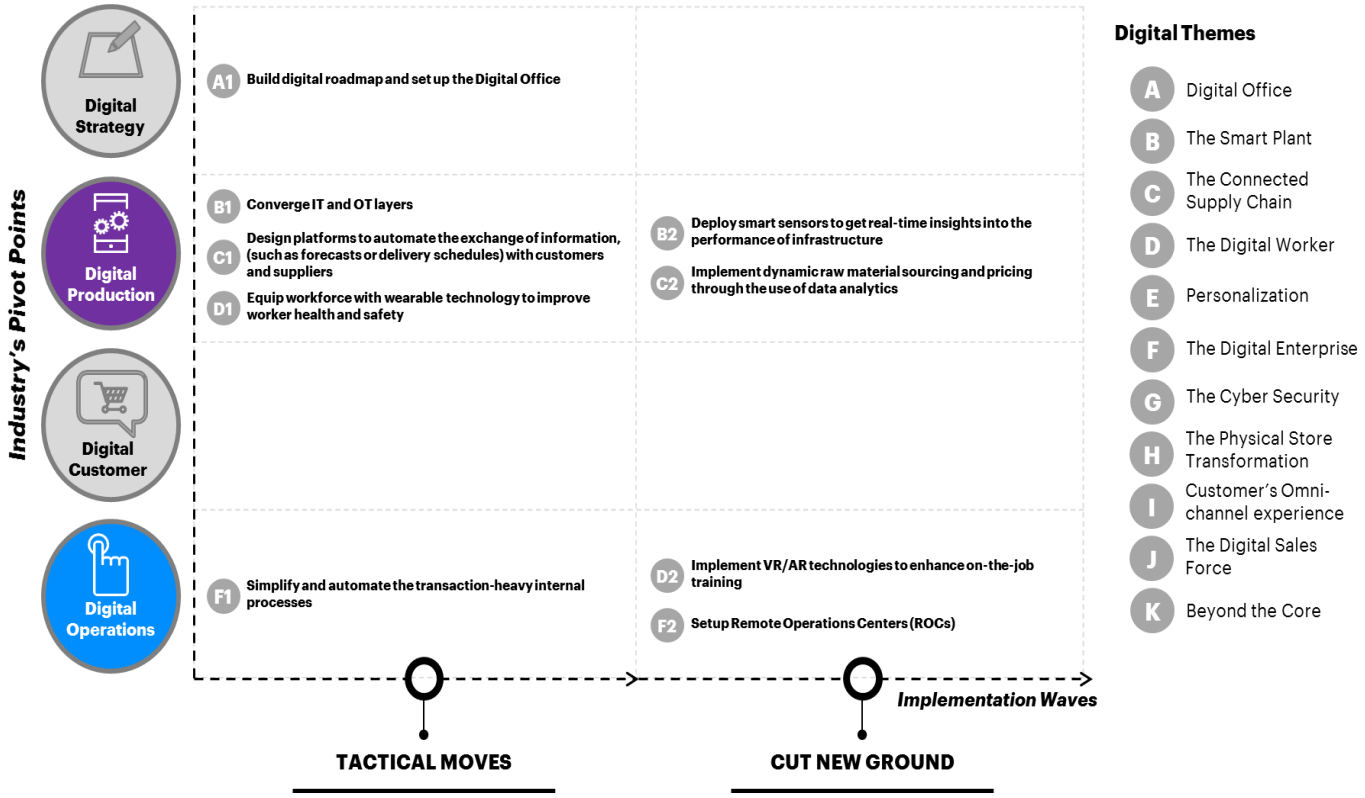
- Contextualizing this with industries' executives, we have identified the internal operations automation and the value chain integration as the primary areas for digital attention. A conclusion that is supported by our analysis as well
- The improvement of their customers' experience is another area of focus; primarily enabled via the deployment of data analytics in the area of digital production. The figure illustrates the emphasis on the different pivot points for the mining and metals industries

Source: Accenture Analysis

THE 3RD STRATEGIC AXIS ... THE RESPECTIVE SET OF PROPOSED DIGITAL INITIATIVES...

Indicative

Classification of Suggested Initiatives



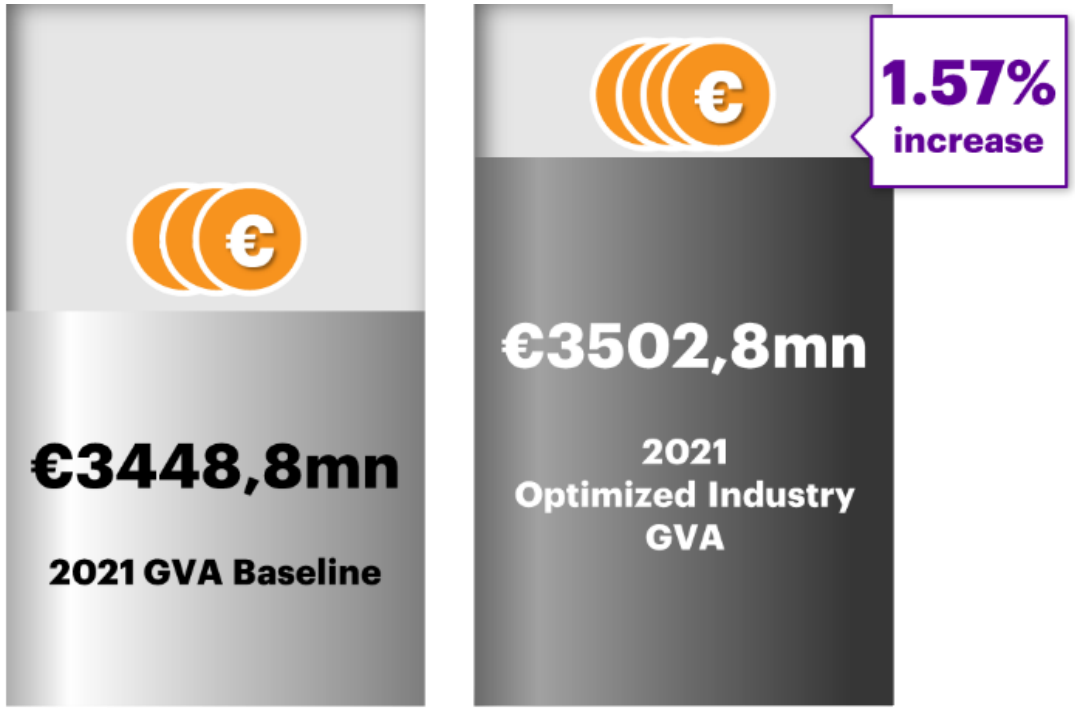
- With global best practices as our reference point, we propose a set of initiatives that will accelerate the industries' digital rotation
- It is evident that not all initiatives may be applicable for all organizations within these industries; indeed, digital initiatives are recommended to be selected in accordance to the different strategy, business model, size, available budget and most importantly, each company's own digital aspirations and vision
- The mentioned initiatives are broken down into tactical, which we call "tactical moves" and disruptive, which we call "cut new ground"

Source: Accenture Analysis

THE 3RD STRATEGIC AXIS ... AND THE CALCULATED INDUSTRY GVA[1] UPLIFT

Indicative

Mining and Metals GVA Uplift as % of the 2021 GVA Baseline, (Million Euros, %)



Source: Oxford Economics, Accenture analysis

- Our econometric analysis suggests that by 2021 the initiation of the digital rotation for the mining and metals industry is expected to result to a moderate increase in the economic output by 1,57 percentage points equals to approximately €54 million
- Key assumption for this projected increase is that a subset of the "tactical" initiatives will get underway, setting the path for a bold digital transformation

1. Gross Value Added *Source: Accenture Analysis*

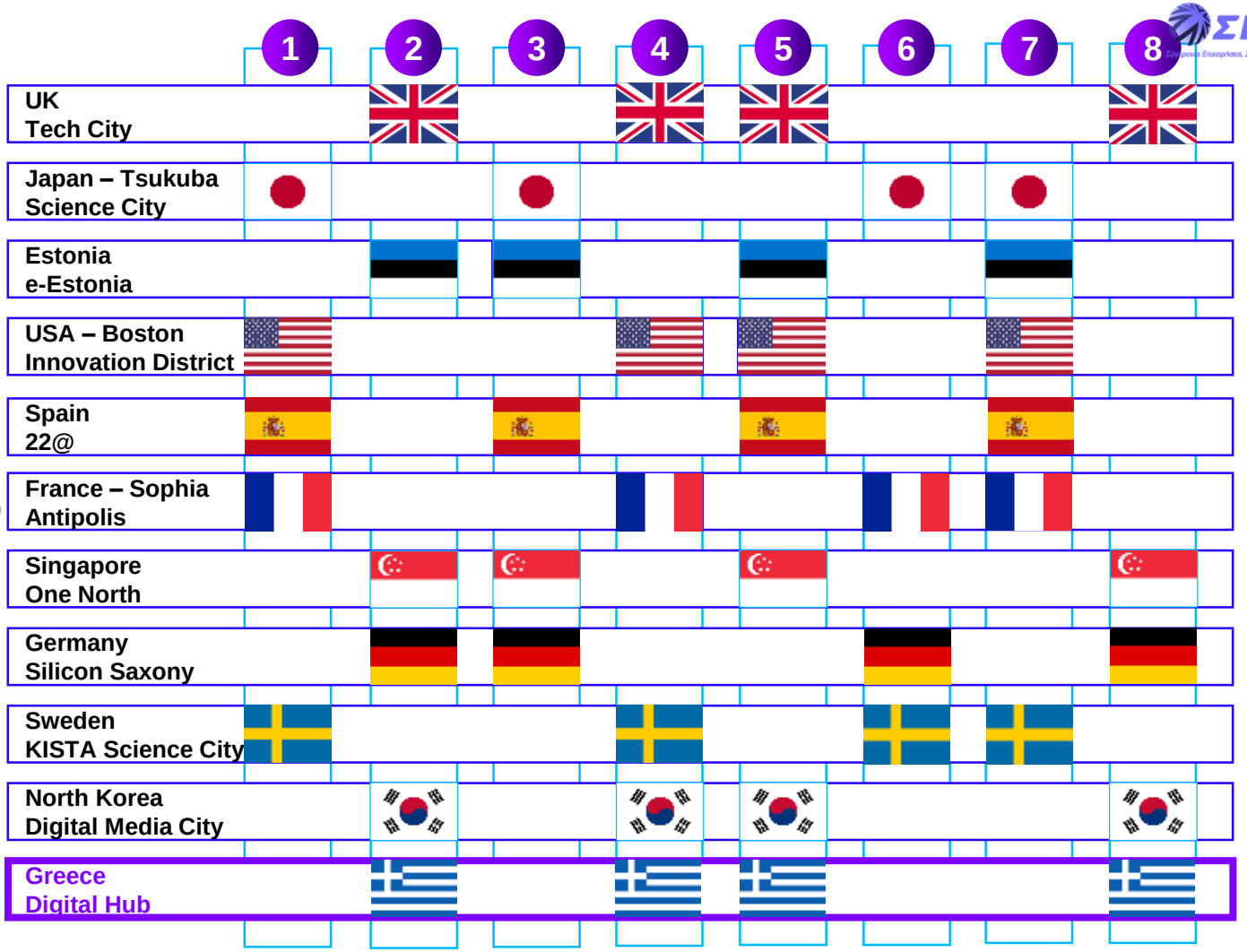
THE 4TH STRATEGIC AXIS

THE HELLENIC DIGITAL HUB – COMPARISON OF THE PROPOSED HELLENIC DIGITAL HUB WITH EXISTING INTERNATIONAL PEERS

accenture

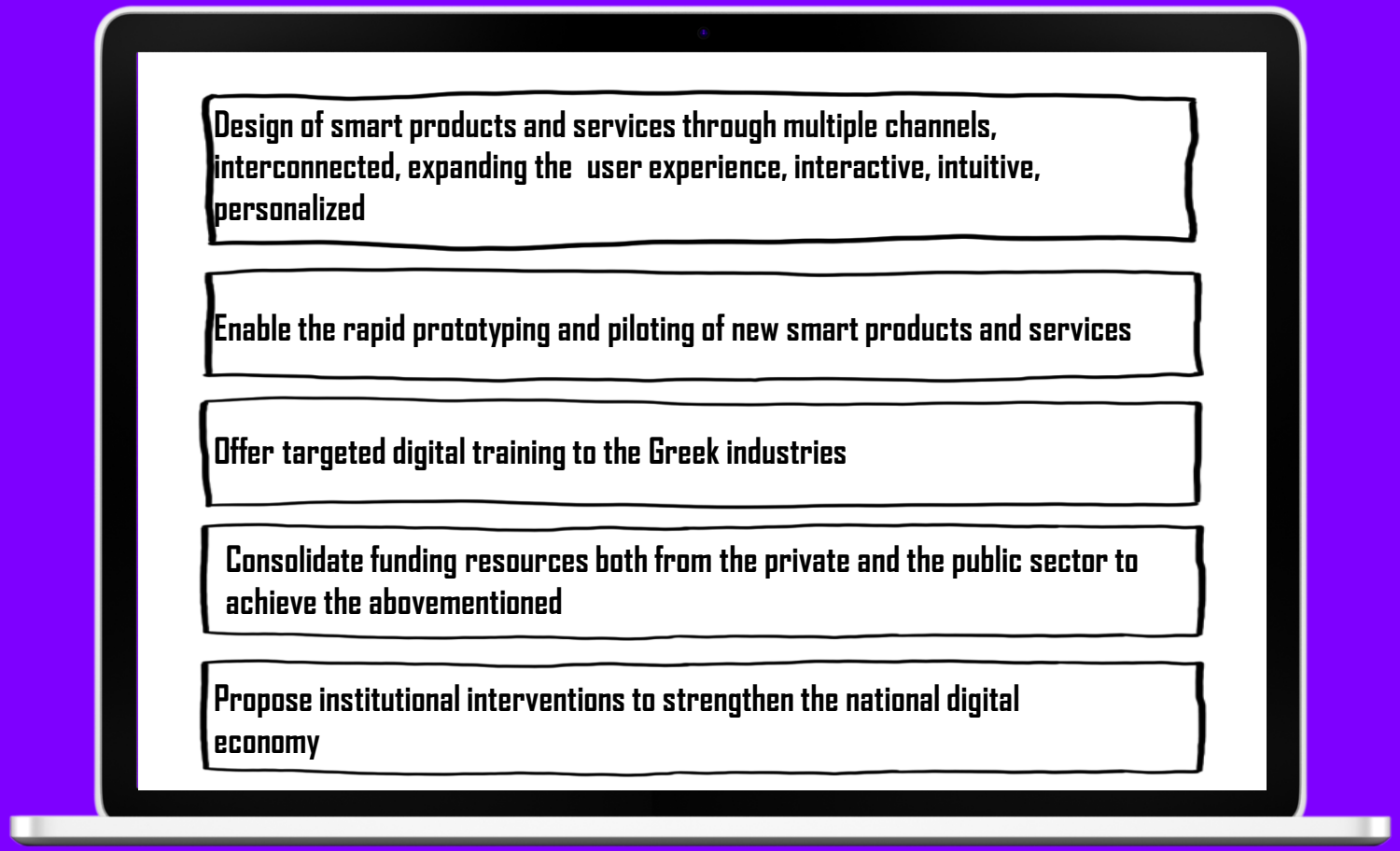
ΣΕΒ

Orientation	Academic	1
	Business	2
Industry Focus	Strong Industry Focus	3
	World Class IT & Comms Hub	4
Maturity	Relatively Young Hub	5
	Established Hub	6
Geographic Focus	Local	7
	Regional or Global	8



Source: Accenture Research

THE 4TH STRATEGIC AXIS

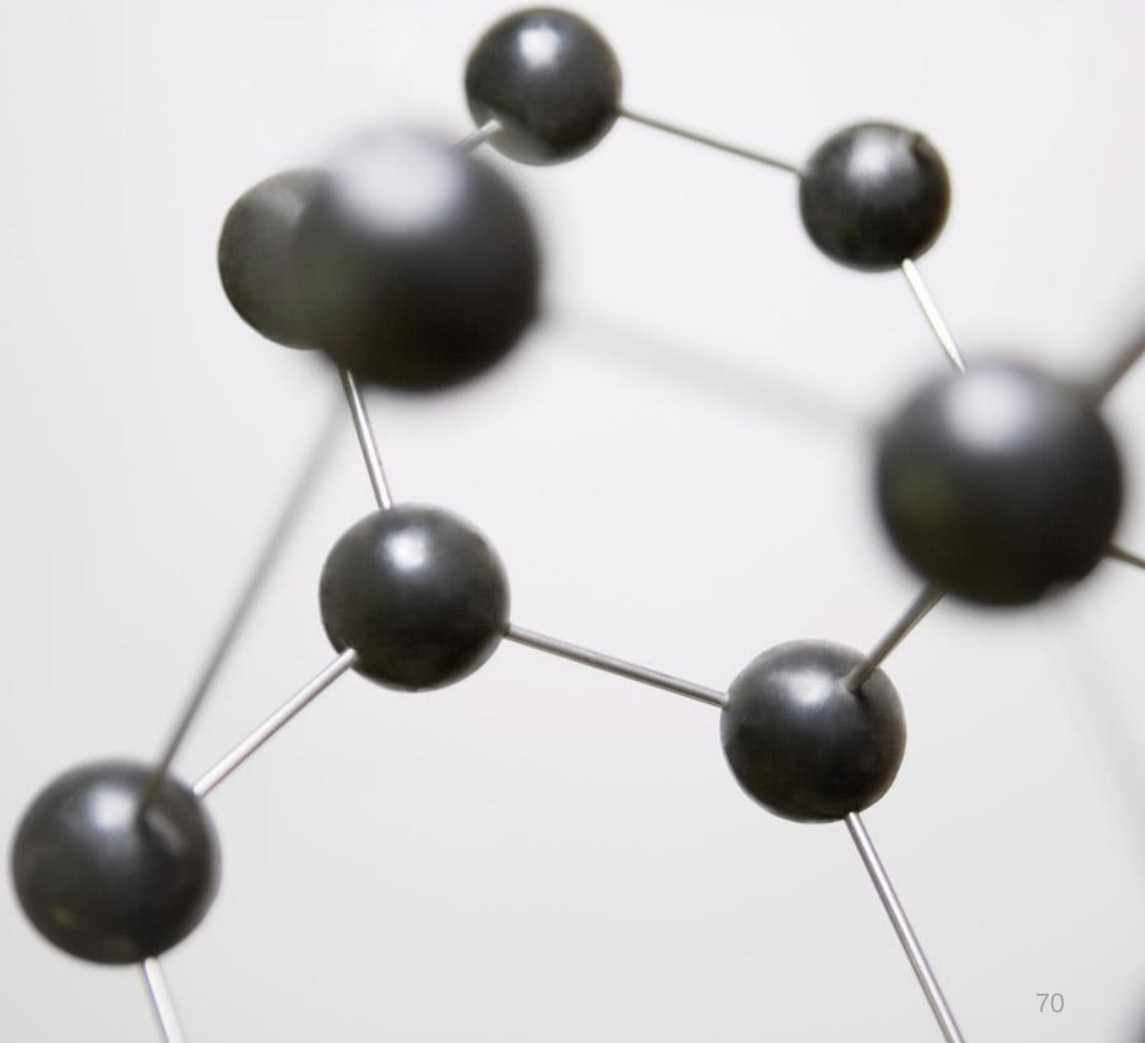


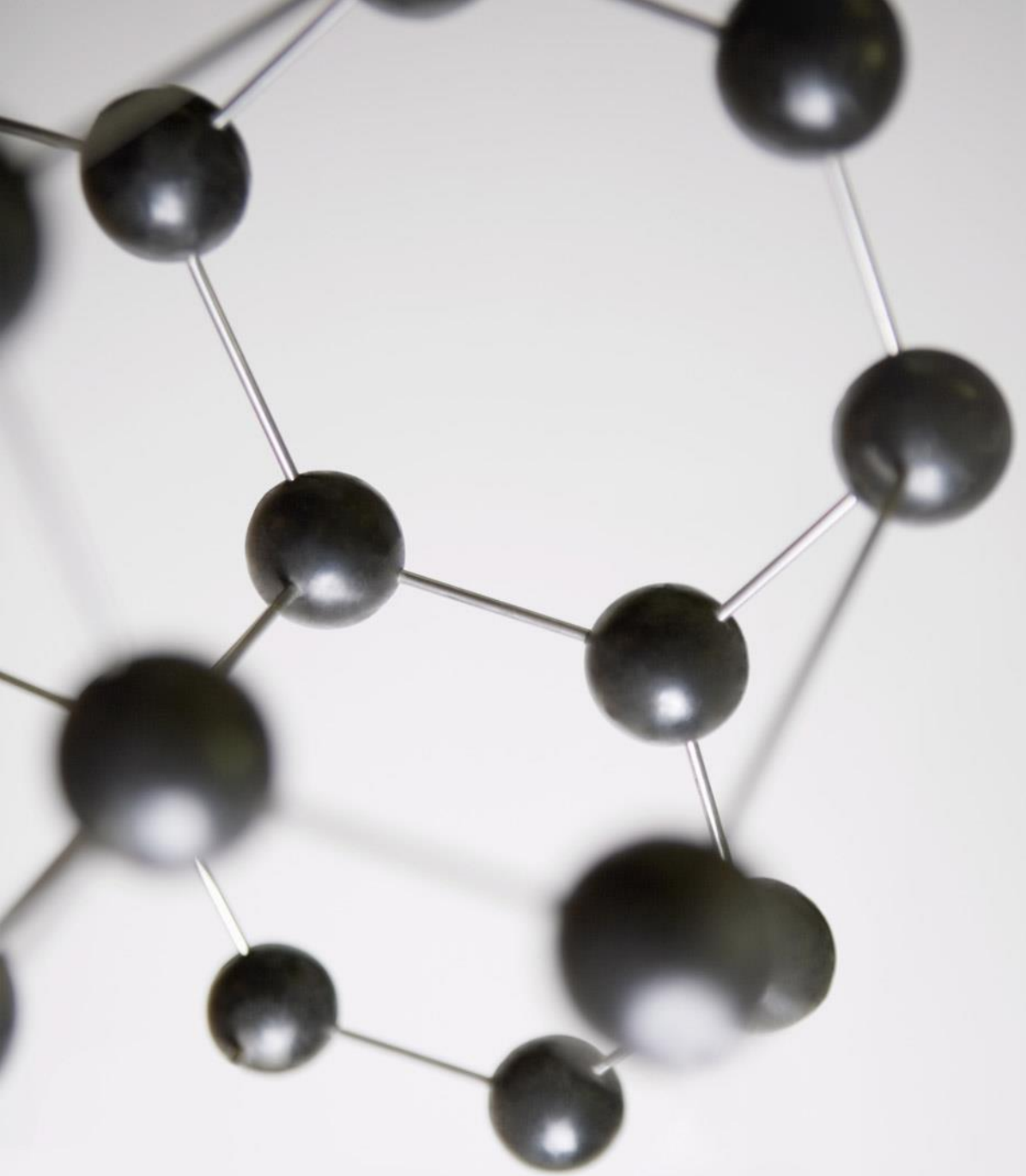
The Hellenic Digital Hub will act as the accelerator of Greece's digital transformation via the development of digital ecosystems within and across Greek industries

THE 4TH STRATEGIC AXIS

THE PARTICIPANTS

- Organizations and institutions of the Greek industries, as well as Greek academia
- The initiation of the Hellenic Digital Hub will be based on attraction of high caliber ICT organizations
- The geographical proximity of the hub members will facilitate the seamless flow and continuous exchange of information, experiences and know-how amongst them
- As a next step, the hub is proposed to adopt a decentralized structure that will allow the creation of digital "nuclei" across Greece
- Potential areas, in which these "nuclei" could be set up, shall be geographical regions with strong economic activity in industries of national competitive advantage and/or areas, in which innovation is already being generated (i.e. areas hosting research led active academic institutions, etc.)





THE 4TH STRATEGIC AXIS

GOVERNANCE STRUCTURE

- Prerequisite for the establishment, development and efficient steering of the Hellenic Digital Hub is the set up of a governance model with senior Government backing and engagement from leading industry stakeholders
- Leading practices indicate that hubs with role model stewards can attract more easily businesses and partners, increase their visibility and build entrepreneurial communities
- Within the Governance Structure we propose the set up of a digital council that will be responsible for the monitoring and supervision of all hub activities. In more detail, the council will:
  - serve as an ambassador of the hub
  - create a compelling vision, enhance the credibility of the hub and support the attraction of new hub members
  - establish a communication channel with the Greek Government and the Greek academia
  - be responsible for advertising the newly-established hub within Greece and abroad and contacting foreign companies and agencies that could invest in the hub

THE 4TH STRATEGIC AXIS

EXAMPLE – THE CREATION OF A DIGITAL HEALTH ECOSYSTEM

Applications

Digital products, devices and services

Open APIs

Integration and Processing of Health Data

Digital Platform based on cloud computing

Internet of Things (IoT)

Sensors

Smart devices

- Health data are collected by sensors and smart devices, rendered anonymous and processed by the platform
- Combined with the provision of APIs, they offer the ability to develop new digital applications, products and services

THE 4TH STRATEGIC AXIS

THE HELLENIC DIGITAL HUB – BIG DATA ANALYTICS: THE DIGITAL HUB'S DNA

1

At the heart of the Digital Hub we place big data analytics, which play the role of the "mediator" between the new smart products and humans

2

Big data analytics are responsible for processing data collected from the Internet of Things (IoT), sensors and intelligent/smart machines and for incorporating them into meaningful conclusions and suggestions

3

The initiation of the Digital Hub will be assisted by the application of the new rules on free movement of data. The hub will be responsible to structure and format them prior to their mass release

4

The added value produced will act as a center of attraction for enterprises across industries, which will bring new data to the ecosystem. This data will either be sold or leveraged by the Digital Hub

THE 4TH STRATEGIC AXIS

FAVORABLE CONDITIONS UNDERPINNING THE SETUP OF THE HELLENIC DIGITAL HUB

Favorable conditions from the demand side

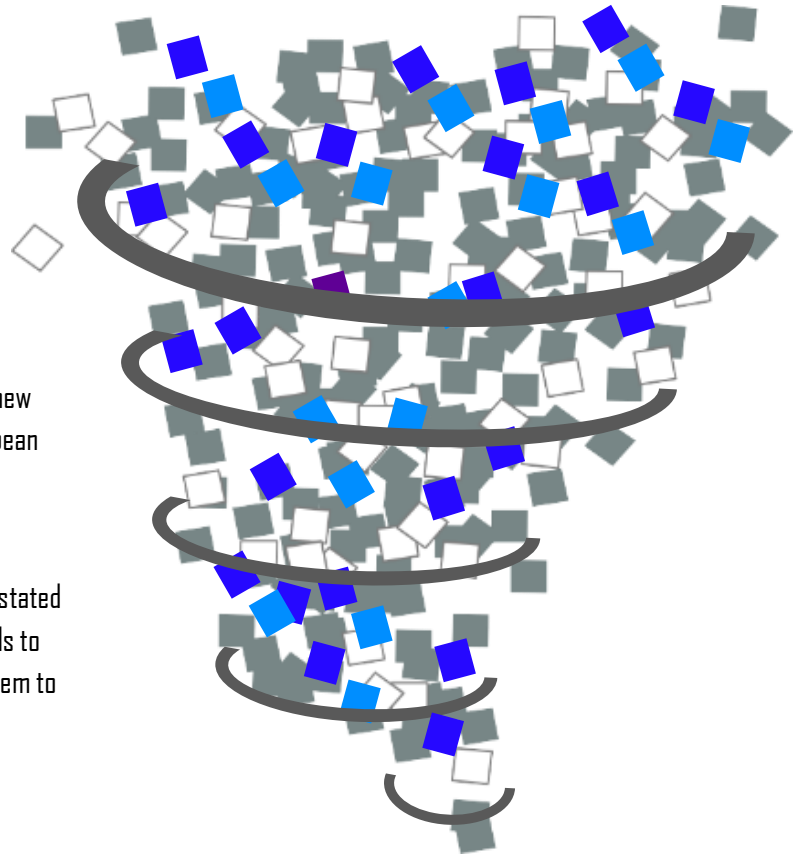
1. Big Data & Analytics combined with cognitive computing, artificial intelligence and the Internet of Things (IoT) establish themselves as the dominant enablers of the digital marketplace

2. Relevant European Commission initiatives create a favorable regulatory and policy framework for the creation of digital hubs

3. Greece is required to transpose into its national law by 6 May 2018 the new General Data Protection Regulation that has been approved by the European Parliament in 2016

4. The majority of the polled and interviewed Greek industry players have stated the widely accepted reality; Greek industries are far behind with regards to leveraging digital technologies and there is an absolute necessity for them to start exploiting their data

DATA THE NEW DIGITAL CAPITAL



Favorable conditions from the supply side

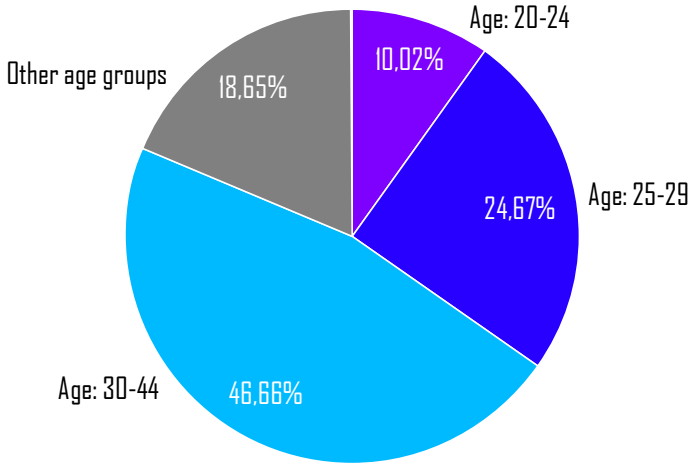
1. Our analysis indicated that Greece appears to perform better across its digital skills lever. This is further validated by WEF's Global Competitiveness report for 2017, in which Greece ranks 10th in the world in terms of availability of scientists and engineers

2. Testament of Greece's large talent pool of STEM resources, stand the increasing investments that global Technology leaders make in Greece for the creation of global Digital Centers of Excellence. Accenture, Cosmote on behalf of DT, SAP, Nokia, Microsoft and IBM are just some of the biggest global players that have selected the country to establish digital Centers of Excellence that diffuse digital expertise to their global clients

THE 4TH STRATEGIC AXIS

GR ENJOYS AN UNPARALLELED ADVANTAGE BASED ON THE "LIQUIDITY" & AVAILABILITY OF A HIGHLY EDUCATED WORKFORCE THAT MUST BE RETAINED TO GREECE

Unemployed with higher education in 2015: 437.000



Strong human capital

Ranked 10th in the world in availability of scientists and engineers[1]

Immigration desire

Employed: 49%

Unemployed: 43%

Main reasons for immigration

1. Low salaries – high non-wage labor costs
2. Lack of professional development opportunities
3. Lack of development plan for Greece

Freshmen in 2015 per field of studies, #

	Informatics	Science subjects[1]	Economics/ Management	Other	Total freshmen
Universities and Technical Universities	4.155	9.400	5.895	24.750	**44.200**
Technological Educational Institutes	2.285	6.660	7.160	8.040	**24.145**
Total	**6.440**	**16.060**	**13.055**	**32.790**	**68.345**

[1] Includes Engineering, Mathematics, Physics, etc.

Source: World Economic Forum, Global Competitiveness Report 2017

THE 4TH STRATEGIC AXIS

THE HELLENIC DIGITAL HUB – KEY ENABLERS FOR THE ESTABLISHMENT OF THE HELLENIC DIGITAL HUB

Renew and Update Policies

Establish a clear mandate for policy renewal, update and open the procurement process to support the hub's digital growth

Introduce a Governance Model

Prerequisite for the establishment, development and efficient steering of the Hellenic Digital Hub is the development of a governance model with senior Government backing and engagement from leading industry stakeholders

Attract Digital Talent

The long-term growth of the Hellenic Digital Hub will be driven by its ability to attract and nurture the relevant digital skills and capabilities. Therefore, the design of a talent acquisition and development plan will be key to attract and grow the necessary IT and digital skill

Repatriate the Greek Talent

Imminently introduce national programs and policies for the repatriation and rapid onboarding of Greek digital talent into the digital hub

Introduce financial instruments & provide access to capital

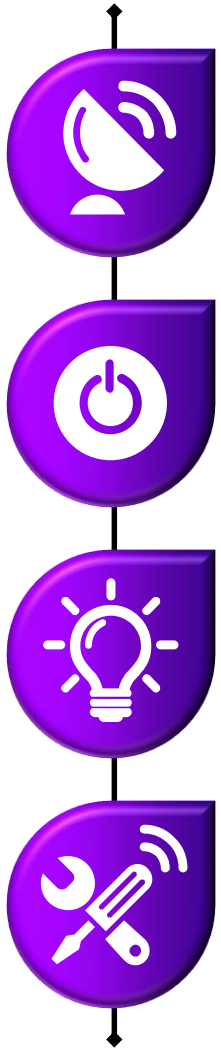
Public sector investment shall be complemented with a strong private sector effort that will provide investment, mentorship, experience and a set of more rigorous processes to monitor and drive the growth of the hub members

Create a compelling vision and brand

The design of a targeted brand image supported by exposure achieved through industry and global events, can further help to attract talent and to support the growth of hub members

THE 4TH STRATEGIC AXIS

THE HELLENIC DIGITAL HUB ENABLES THE SHIFT OF GREEK INDUSTRIES TOWARDS DIGITAL TECHNOLOGIES



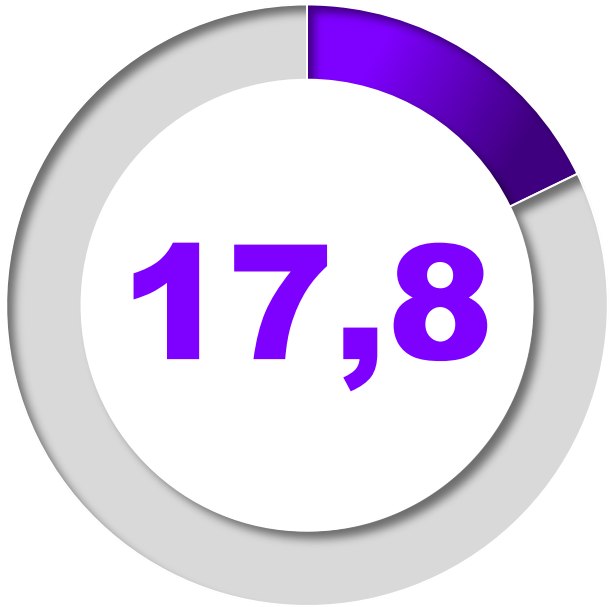
- It will increase the productivity and growth of the technology companies based within the digital hub through leveraging the network multiplier effect. Members will digitally tap into the hub's networks and leverage them to gain better and faster access to employees and suppliers and to exploit accumulated expertise
- It will stimulate the formation of new businesses, expected to expand and strengthen the digital hub itself and create a value add ecosystem
- It will act as an innovation sandbox. It will drive the direction and pace of disruptive innovation that will subsequently enhance the country's digital maturity and will uplift Greece's productivity growth through its transition to digital products
- It will incubate and build the critical "digital mass" and diffuse this both within the Technology sector and across the Greek economy and society

GREECE'S ESTIMATED DIGITAL MATURITY IN 2021

accenture

ΣΕΒ
Σύγχρονες Επιχειρήσεις, Σύγχρονη Ελλάδα

2016
CURRENT SITUATION



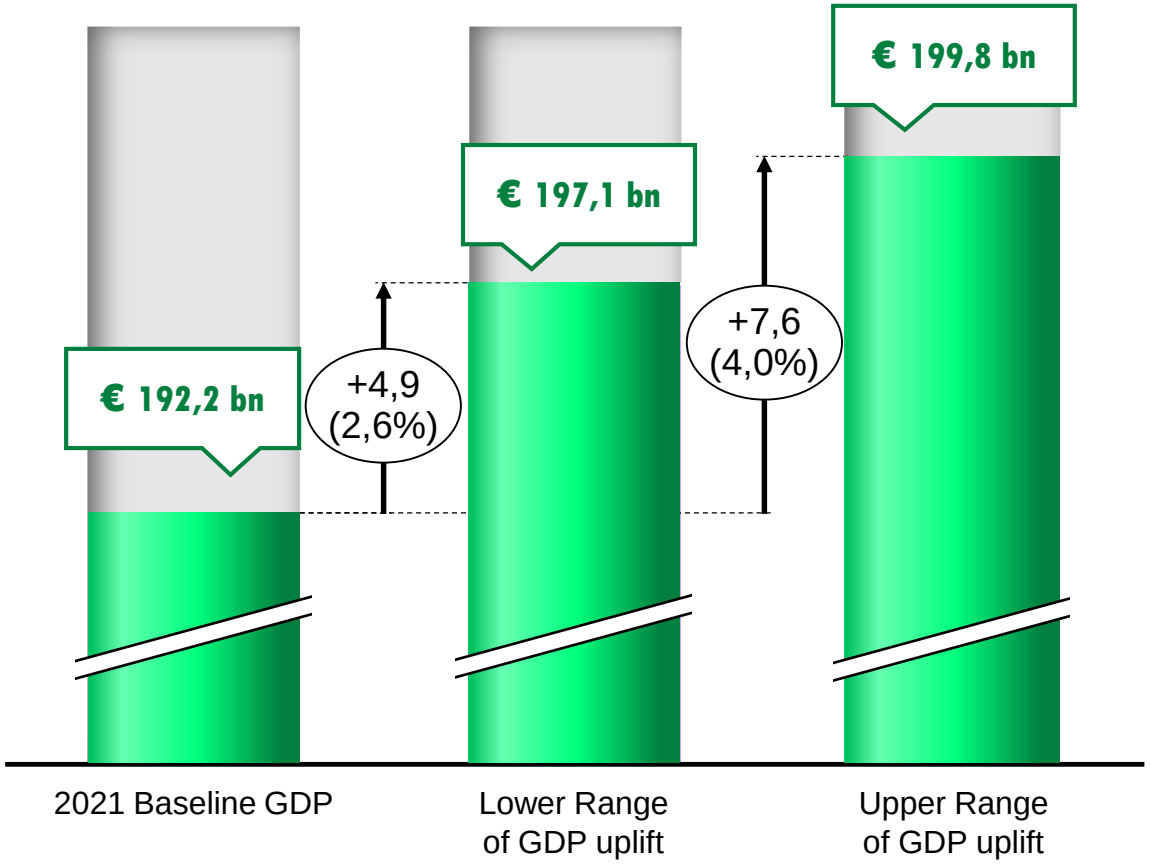
2021
"BUSINESS AS USUAL" SCENARIO

2021
INCREASE OF DIGITAL MATURITY THROUGH THE IMPLEMENTATION OF THE HOLISTIC DIGITAL STRATEGY

Source: Oxford Economics, Accenture Analysis

THE UPLIFT OF THE GREEK GDP & THE BRAIN DRAIN REVERSAL

Additional GDP Growth by 2021: €4,9 – 7,6 bn

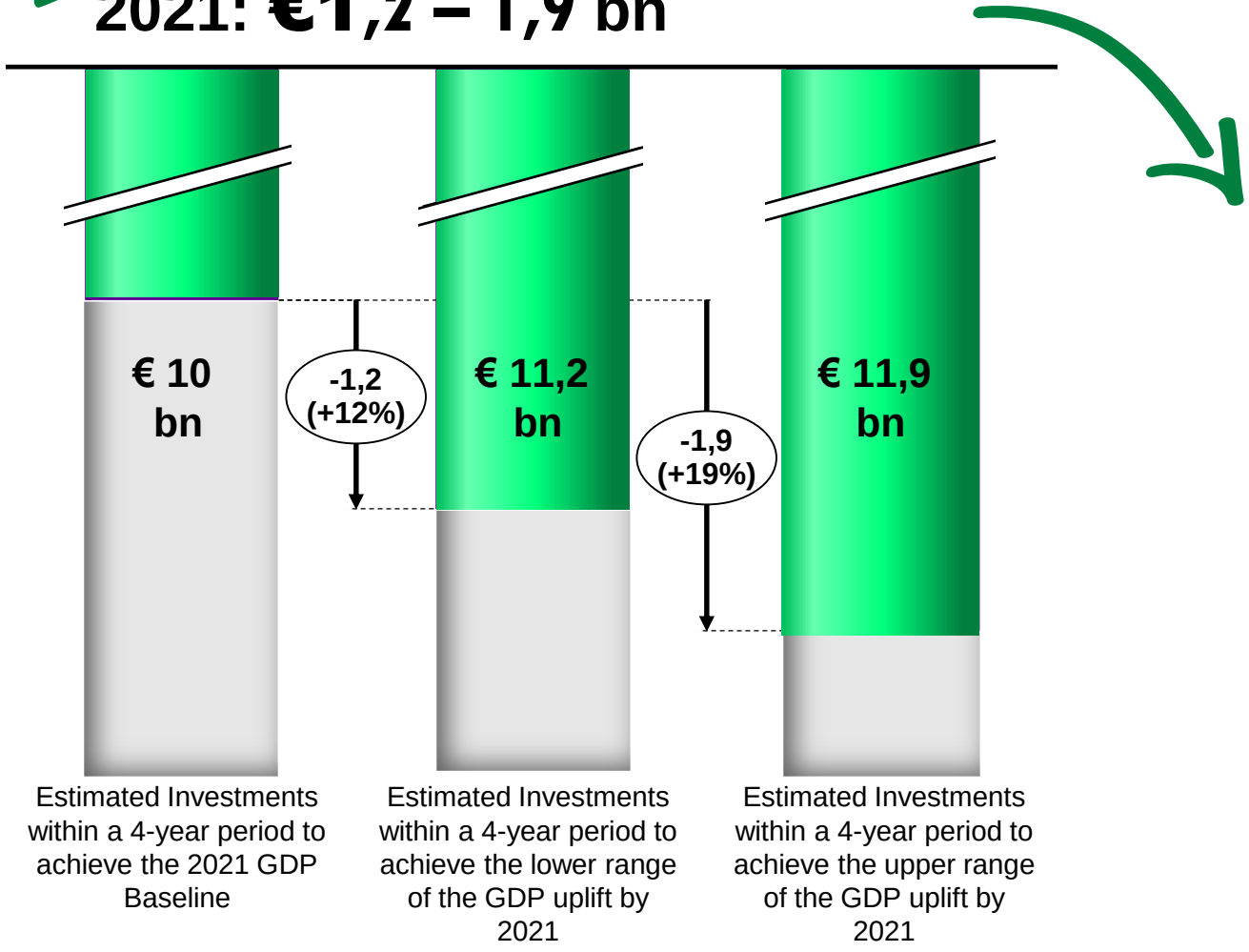


Brain drain reversal and creation of at least 50,000 jobs

Source: Oxford Economics, Accenture Analysis

ESTIMATED ADDITIONAL DIGITAL INVESTMENTS

Additional digital investments by 2021: €1,2 – 1,9 bn



- In order for Greece to achieve the 2021 GDP baseline, the country is required to invest approximately € 10 bn. over a four-year horizon (2018-2021)
- GDP's additional uplift by € 4,9 bn - € 7,6 bn requires additional digital investments from €1.2 bn to €1.9 bn over the next four years
- These digital investments include both public and private investments

Source: Oxford Economics, Accenture Analysis

THE EXECUTION OF GREECE'S DIGITAL STRATEGY

accenture

ΣΕΒ
Σύγχρονες Επιχειρήσεις, Σύγχρονη Ελλάδα

THE GUIDING PRINCIPLES FOR THE SUCCESSFUL EXECUTION

"TRANSLATION" OF THE DIGITAL STRATEGY

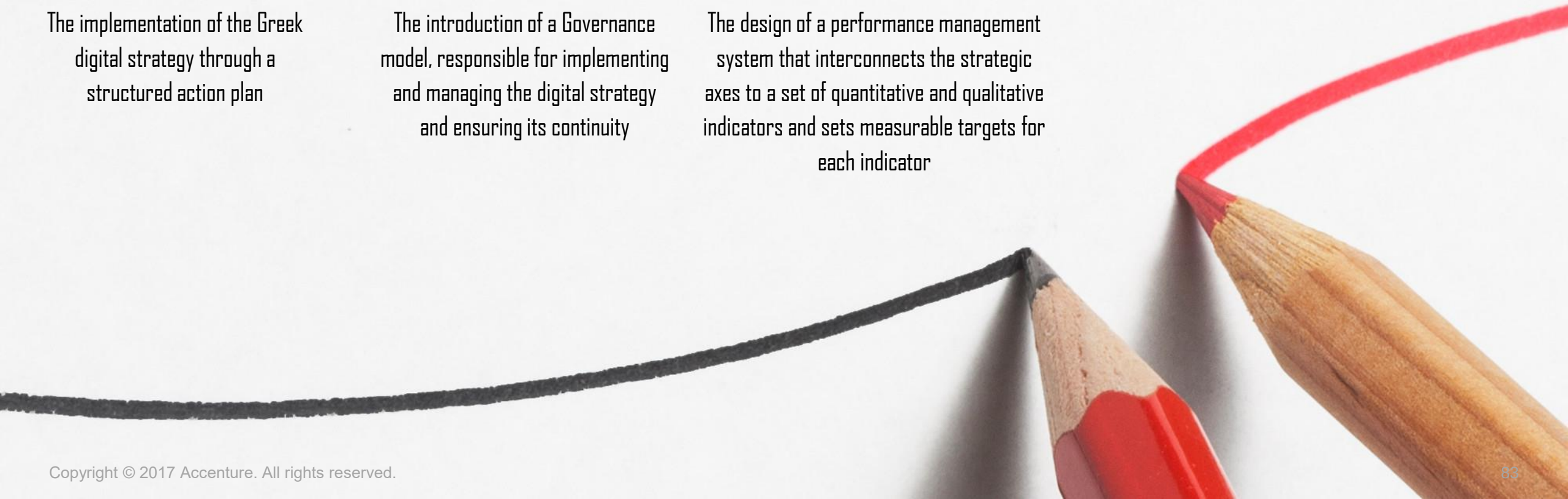
The implementation of the Greek digital strategy through a structured action plan

CLEAR SEGREGATION OF RESPONSIBILITIES

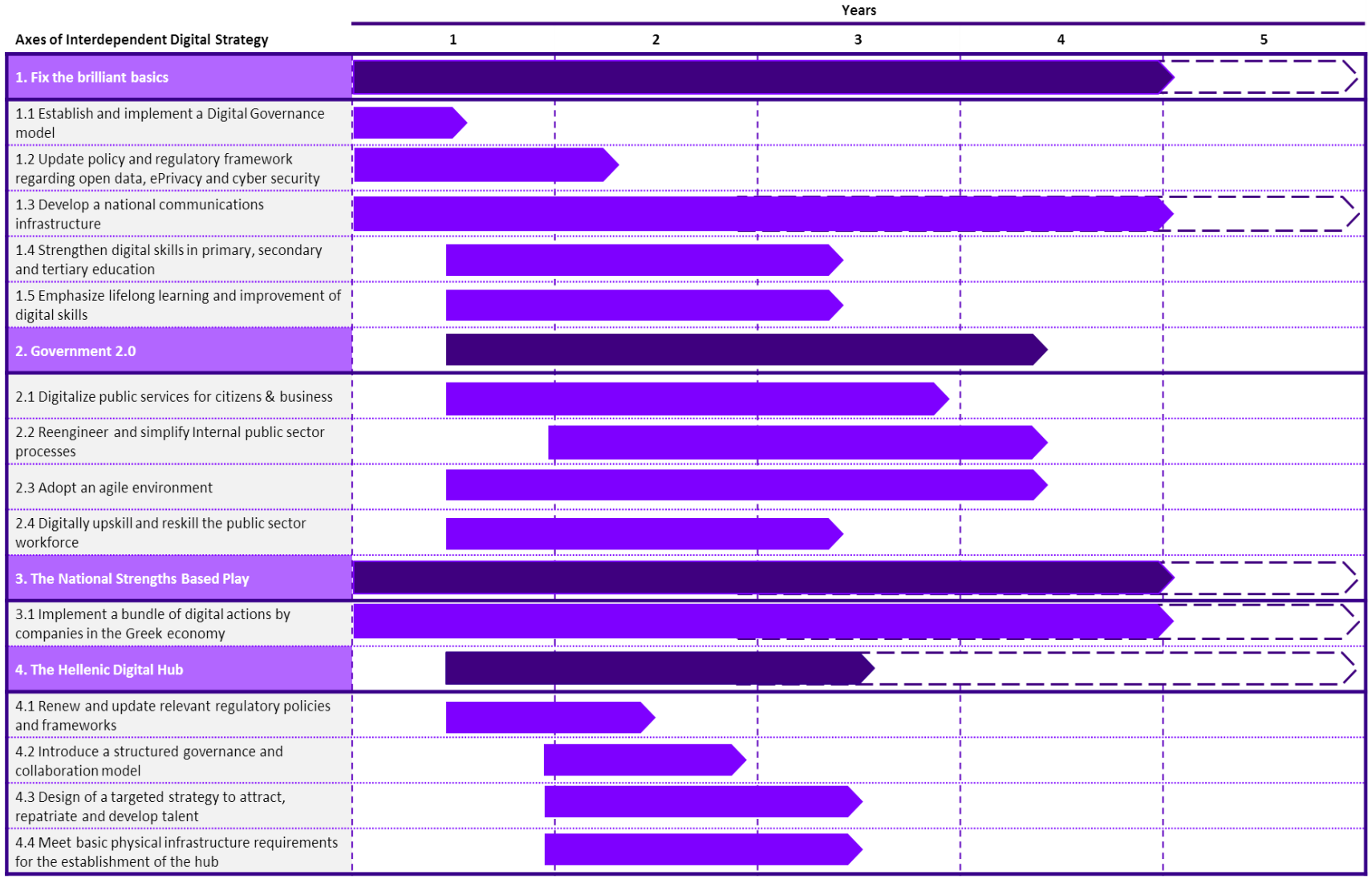
The introduction of a Governance model, responsible for implementing and managing the digital strategy and ensuring its continuity

DISCIPLINE DURING THE IMPLEMENTATION

The design of a performance management system that interconnects the strategic axes to a set of quantitative and qualitative indicators and sets measurable targets for each indicator



DIGITAL STRATEGY – ACTION PLAN



The proposed initiatives per strategic axis are categorized into two distinct groups:

> Actions with a **short-term** implementation horizon, which are considered a priority for the initiation of the strategy execution. The end of the short-term implementation horizon is set to two years from start

> Actions with a **medium-term** implementation horizon, need more time, and on a case-by-case basis require the completion of the first horizon actions as a prerequisite. The completion of the medium-term implementation horizon is set at the end of the four-years

ACTION PLAN OUTCOMES

1

The "Fixing the Brilliant Basics" strategic axis acts as the starting point of the overall Action Plan. Its initiation consists the prerequisite for the initiation of all other strategic axes

2

The setup of the Governance model is a critical milestone for the successful implementation of the overall action plan

3

The design and enforcement of a favorable regulations and policies framework is another critical milestone for the overall action plan's success

4

Infrastructure activities (including the national communications infrastructure and open data/ interoperability initiatives) are also set to be critical and must be implemented as a first priority

5

The "National Strengths Based" strategic axis will run independently of all other strategic axes; this is due to the fact that this consists of a set of initiatives to be undertaken individually by Greek industries

6

The Digital Hub shall be set up within the first two years of the action plan. After the end of the setup period, we assume that the hub will perform independently. However, active monitoring and continuous encouragement is required

GOVERNANCE PRINCIPLES

Role	Responsibilities
Ministry of Digital Policy, Telecommunications and Information	• Shall set out the overall strategic direction, work as a digital ambassador and demonstrate a high level supervision of the implementation of the Greek digital strategy
Digital Strategy Office / General Secretariat of Digital Policy	• Shall formulate the interdependent digital strategy, establish collaboration mechanisms among the involved stakeholders, monitor the implementation progress of the digital strategy and publish periodic progress reports
National Council of Digital Strategy	• Shall include the Minister of Digital Policy, Public Sector organizations, Political Parties and Private Sector representatives. The members of the National Council of Digital Strategy shall co-design the national digital strategy and monitor its implementation
Implementation Office (War Room) / General Secretariat for Digital Policy	• Shall identify the set of bundles of actions associated with the implementation of the Digital Strategy and manage the budget and the centralized planning of the implementation of the Digital Strategy
Chief Digital Officer (per Ministry)	• Shall head the project team per Ministry. Their main responsibility is the successful completion of digital activities under the responsibility of the Ministry within the specified time and budget constraints
Policy Formulation Council	• Shall maintain channels of communication with external bodies (academics, private sector stakeholders, etc.) to formulate effective regulations and policies regarding the digital transformation at a national and industry level and support their legislation
Digital Project Teams (per Ministry)	• Shall implement digital initiatives per ministry. Each project team is managed by the respective Chief Digital Officer

THE PERFORMANCE MANAGEMENT SYSTEM (1/2)

Digital Opportunity Economic Index (DEOI) Lever	Digital Opportunity Economic Index (DEOI) Indicator	Digital Opportunity Economic Index (DEOI) Sub-Indicator	Key Performance Indicator	As-Is Value	Recommended To-Be Value	Source	Strategic Axis
Digital Accelerators	National Communications Infrastructure	Broadband Speed	NGA broadband coverage/availability (as a % of households)	36,3%	100%	Eurostat	Axis 1
	Government Prioritization of Digital	Open Data	Open Data Index (0-100)	38,4	45,1	Open data barometer	Axes 1, 2
		E-participation	Online Service Completion (% of steps in a Public Service life event that can be completed online)	53,90%	65,40%	Eurostat	Axis 2
	Digital Business Environment	Ease of Business	Ease of Doing Business index	68,67%	76,80%	World Bank	Axes 1, 2
		Access to Venture Capital	Venture capital availability index based on WEF Executive Opinion Survey	1,81	2,41	WEF / GCI (2016-2017)	Axes 3, 4
		Ecommerce	Ecommerce turnover as a percentage of total turnover	6,00%	12,00%	Eurostat	Axes 3, 4
		Cyber Security	Percentage of enterprises whose ICT security policy was defined or most recently reviewed within the last 12 months	8,00%	11,44%	Eurostat	Axes 2,3,4
		ICT Patents	Patents per capita	0,004%	0,01%	World Bank	Axes 3, 4
Digital Technologies	Digital Capital Stock	Hardware	Percentage of real capital stock in hardware	0,17%	0,24%	EU KLEMS	Axes 2,3,4
		Software	Percentage of real capital stock in software	0,55%	1,05%	EU KLEMS	Axes 2,3,4
	Digital Engagement	Online Advertising	Percentage of advertising that is digital	13,60%	18,70%	eMarketer	Axes 3, 4
	Digital Enablement	Cloud	Percentage of enterprises/government bodies buying cloud computing services	9,00%	14,97%	Eurostat	Axes 2,3,4
		Analytics	Percentage of enterprises using CRM to analyze information about clients for marketing purposes	15,00%	20,12%	Eurostat	Axes 2,3,4

THE PERFORMANCE MANAGEMENT SYSTEM (2/2)

Digital Opportunity Economic Index (DEOI) Lever	Digital Opportunity Economic Index (DEOI) Indicator	Digital Opportunity Economic Index (DEOI) Sub-Indicator	Key Performance Indicator	As-Is Value	Recommended To-Be Value	Source	Strategic Axis
Digital Skills	Stock of Digital Skills	ICT Sector Employment	Percentage of enterprises that recruited/tried to recruit personnel for jobs requiring ICT specialist skills	7,00%	11,03%	Eurostat	Axes 2,3,4
		Digital Workers	Percentage of workforce basic ICT skills	22,01%	28,02%	Digital Economy Project	Axes 2,3,4
	Digital Skills Development	Computing Graduates	Percentage of individuals who have obtained ICT skills through formal educational institutions (school, college, university, etc.)	21,83%	22,36%	Eurostat	Axes 2,3,4
		ICT Training	Percentage of enterprises providing training of ICT skills to personnel	10,00%	18,34%	Eurostat	Axes 2,3,4
	Digital Ways of Working	Impact of ICT on Organization Models	Index measured from qualitative executive opinions on the impact of ICT to Organization Models	3,61	3,9	WEF / NRI	Axes 2,3,4
		Digital Conferencing	Percentage of enterprises providing persons employed a remote access to the enterprise's applications	48,00%	59,70%	Eurostat	Axes 2,3,4
		R&D Employment	R&D employment as a percentage of total employment	1,07%	1,89%	OECD	Axes 3, 4

KEY SUCCESS FACTORS

01

The Greek digital vision shall become an integral part of the national economic policy and commitment from the highest level of political leadership must be secured

02

The support for the execution of the digital strategy shall be bipartisan to ensure continuity

03

The active monitoring of Greece's digital transformation shall be performed via the application of a dedicated digital dashboard

04

The available public funds shall be the means and not the end of the Greek digital strategy

05

The design and enforcement of a favorable regulatory framework is a critical milestone

06

The deployment of nation-wide, up-to-date infrastructure is the "utility" for Greece's rotation to digital

07

The digital upskilling and reskilling of Greece's workforce are the "fuel" for digital rotation

08

The Greek industries have a major role to play in the country's rotation to digital and shall embrace this digital opportunity

09

The setup of the Digital Hub will act as a national digital "accelerator"

LIST OF DIGITAL INITIATIVES PER STRATEGIC AXIS

FIXING THE BRILLIANT BASICS

SUGGESTED SHORT-TERM TASKS (1/3)

1.1 GOVERNANCE	DIGITAL TECHNOLOGIES
Setup a dedicated Governance body to lead the end-to-end operationalization of the National Digital Strategy	
Introduce a structured performance management framework to interlock entities on digital initiative outcomes	
Design a communications strategy to inform and educate stakeholders about changes to processes, policies, standards and requirements	
Establish a mechanism to efficiently collaborate with government entities, private sector, advisory boards, and international experts	

1.2 POLICIES (OPEN DATA, E-PRIVACY, CYBERSECURITY)	DIGITAL ACCELERATORS
Enforce the adoption of data openness and reusability standards (PSI) and of the General Data Protection Regulation (GDPR) to enable greater transparency and allow for the reusability of public sector data	
Introduce a structured Open data strategy to be adopted and followed across the Public Sector	
Introduce a common interface of the main registries to achieve continuous updating of data (i.e., demographic, tax, insurance data) and unique entry of new records	
Implement the electronic identification (eID) initiative to ensure the ubiquitous identification of a person across all digital channels	
Enforce the application of electronic signatures and certifications is vital for safe digital services	
Collaborate with the private sector and academia to develop innovative cyber security solutions	
Collaborate with the European Network and Information Security Agency, the Computer Emergency Response Team for the EU institutions (CERT-EU) and other EU member states to exchange information on good practices with regards to cyber resilience	

FIXING THE BRILLIANT BASICS

SUGGESTED SHORT-TERM TASKS (2/3)

1.3 INFRASTRUCTURE	DIGITAL TECHNOLOGIES & DIGITAL ACCELERATORS
Set up and enforce a favorable regulatory framework that will enable the simplification and acceleration of the licensing processes for the deployment of NGA networks	
The private sector to rapidly deploy integrated nation-wide fiber and wireless networks to enable ubiquitous and seamless high-speed connectivity	
Government to invest public resources to expand the next generation broadband infrastructure across the “White NGA areas"	
Initiatives (e.g. subsidies) to boost the demand for broadband services and to bridge the digital gap	
Reevalution of the necessity for special taxes that burden each citizen for the consumption and usage of Fixed, Mobile and TV services, as those work towards a completely opposite direction with regards to the goals of the interdependent digital strategy and may negate any multiplier effects	

1.4 INCREASE OF DIGITAL LITERACY IN PRIMARY, SECONDARY AND TERTIARY EDUCATION	DIGITAL SKILLS
Incorporation of digital technologies (e.g. through the promotion of program in support of the “Digital School”, etc.) in the primary, secondary and tertiary education	
Provision of specialized incentives for professors to improve their digital literacy and facilitate their usage of new digital technologies and to modernized their teaching standards and methods	
Establishment of a digital and ICT skills certification system for professors, in cooperation with respective certification authorities, for example the Institute of Training (ΙΝΕΠ) of the National Center of Public Administration and Local Government	
Partnership between government and ICT industry players for the evolution of the educational material in primary, secondary and tertiary education through the incorporation of technology disciplines	

FIXING THE BRILLIANT BASICS

SUGGESTED SHORT-TERM TASKS (3/3)

1.5 EMPHASIS ON LIFELONG LEARNING AND ON IMPROVING DIGITAL SKILLS	 DIGITAL SKILLS
Design targeted communication initiatives and educational programs with regards to the digital public services that are currently being provided	
Design massive open online courses (MOOCs) focused on digital technology themes	
Design industry specific training courses focused on digital technologies and skills	
Design and implement specific training programs regarding the usage of digital technologies for small and medium enterprises as well as for citizen groups that exhibit limited familiarity with digital technologies	
Specialized analysis and design of a selected set of digital services so that these can be accessed and used by disabled people	
Setup local teams responsible for handling communications, training and provide support to specific demographic groups and small enterprises with regards to accessing and using the internet	
Provide incentives to specific demographics groups (like the elderly and/or low income citizens) that exhibit high levels of digital illiteracy	

FIXING THE BRILLIANT BASICS

SUGGESTED MEDIUM-TERM TASKS

1.3 INFRASTRUCTURE FOR HIGH SPEED BROADBAND NETWORKS	DIGITAL ACCELERATORS
Action plan for the harmonization of Greece with the European Radio Spectrum Policy Program and the coordinated use of the 700 MHz band for mobile services. This is expected to improve internet access for all Europeans and facilitate the development of cross-border applications	
Develop an action plan to facilitate and accelerate the deployment of 5G networks, including the provision of the required spectrum, in cooperation with the private sector and their respective linkages	
Prepare a set of future initiatives beyond the current national NGA plan to meet the EU's new long-term objectives and cover the period up to 2025 for the Gigabit Society	

GOVERNMENT 2.0

SUGGESTED SHORT-TERM TASKS

2.1 DIGITALIZATION OF SERVICES FOR CITIZENS & ENTERPRISES	DIGITAL TECHNOLOGIES
Establish a dedicated service-design team that will be responsible for working across the government entities to design integrated digital public services	
Update the IT Delivery and Sourcing Models to accommodate agile methodologies	

2.4 DIGITAL UPSKILLING AND RESKILLING OF THE PUBLIC SECTOR WORKFORCE	DIGITAL SKILLS
Assess the training requirements of different public administration workforce regularly on new digital technologies	
Design specialized, mandatory programs for digital upskilling and provision of respective certification, in collaboration with certification bodies i.e. The Institute for Training (ΙΝΕΠ) of the National Center for Public Administration and Local Government	
Develop a national program that will allow top graduates with relevant technical know how to complete a one-year internship in public administration and support the government's digital transformation	

GOVERNMENT 2.0

SUGGESTED MEDIUM-TERM TASKS

2.1 DIGITALIZATION OF SERVICES FOR CITIZENS & BUSINESSES	DIGITAL TECHNOLOGIES
Design a detailed process map with all services provided to businesses and citizens that need to be digitalized, accompanied by a detailed timeline and segregation of responsibilities	
Digitalize prioritized services to businesses and citizens (e-procurement extension, e-licensing, e-invoicing / payments, start-up, online interconnection of cash registers)	

2.2 INTERNAL PUBLIC SECTOR PROCESSES REENGINEERING AND SIMPLIFICATION	DIGITAL TECHNOLOGIES
Reengineer and simplify (and automate where possible) internal Public Sector processes	
Selectively outsource transactional low value activities to the Private Sector	

2.3 AGILE ENVIRONMENT ADOPTION	DIGITAL TECHNOLOGIES
Enforce interoperability through the establishment of common standards	
Implement an integrated electronic document management platform across public sector entities	
Deploy a single Public Administration Human Resources Management solution (HRMS)	
Establish a unified and integrated management platform for all transactions between citizens and public services, independent of citizens' access mode (online, physical present or via call center)	
Implement digital solutions, leveraging cloud and software as a service capabilities	
Design and manage a multi-speed IT infrastructure	
Develop a government marketplace, starting with a centralized government procurement portal in order to significantly reduce costs and accelerate the procure-to-pay process	

THE GREEK DIGITAL HUB

SUGGESTED SHORT-TERM TASKS (1/2)

4.1 POLICY RENEWAL & UPDATE	DIGITAL ACCELERATORS
Establish an open dialogue with businesses, public agencies, the Greek academia and other key stakeholders to create the foundation for the design of effective policies and regulations with regards to the hub's setup and operation	
Provide targeted tax incentives to attract large leading companies to join the hub; this will create a more viable hub ecosystem for start-ups, supporting business and SMEs to thrive. For example, the introduction of 200% horizontal over-depreciation as a tax incentive to promote productive investment capex, especially with regards to the digital upgrading of enterprises	
Provide customs duty suspensions for import of raw materials, components, or finished products into free industrial zones/ licensed manufacturing warehouses/ free commercial zones/ bonded warehouses	
Provide relevant incentives, such as tax or patent programs to attract businesses to develop and commercialize their research	
Simplify and digitalize the public tender process and remove pre-qualification inhibitors to support innovation and SMEs inclusion (small, medium enterprises)	
Make the use of digital technologies a mandatory part of the bidding conditions to become a strong lever to stimulate demand	

4.2 GOVERNANCE & COLLABORATION	DIGITAL ACCELERATORS
Develop a governance model with senior Government backing and direct engagement from leading ICT industry stakeholders	

THE GREEK DIGITAL HUB

SUGGESTED SHORT-TERM TASKS (2/2)

4.3 ACCESS TO SKILLS	 DIGITAL SKILLS
Introduce national programs and policies for repatriating and rapid onboarding of digital talent into the “digital hub”	
Hub tenants to fund research grants, logistical support, public recognition, etc. to create a favorable environment for expatriates	
Hub tenants to design targeted programs for accelerated career paths within the hub	
Design a services platform at the hub level to link fresh graduates and academic institutes with the job market	
Launch open e-Learning platform to provide startup courses and online support for business founders	

4.4 INFRASTRUCTURE	 DIGITAL ACCELERATORS
Collaborate with all appropriate government entities to develop comprehensive business startup packages to provide businesses with fast IT and Communications service	
Design of the physical estate of the Hellenic Digital Hub. It is recommended to adopt a decentralized structure that will allow the creation of digital "satellites" across Greece. The main areas to be examined will be marked by strong economic activity in sectors of national competitive advantage or will be areas where innovation is generated or constitute future free trade areas	