



Industry 4.0

The key challenges

kpmg.com/gr



Contents



What does Industry 4.0 look like?

2



Trends & COVID-19

4



KPMG Framework & Capabilities

6



Your Challenges

8



We Can Help – Our Solution Offering

10



The Team

14

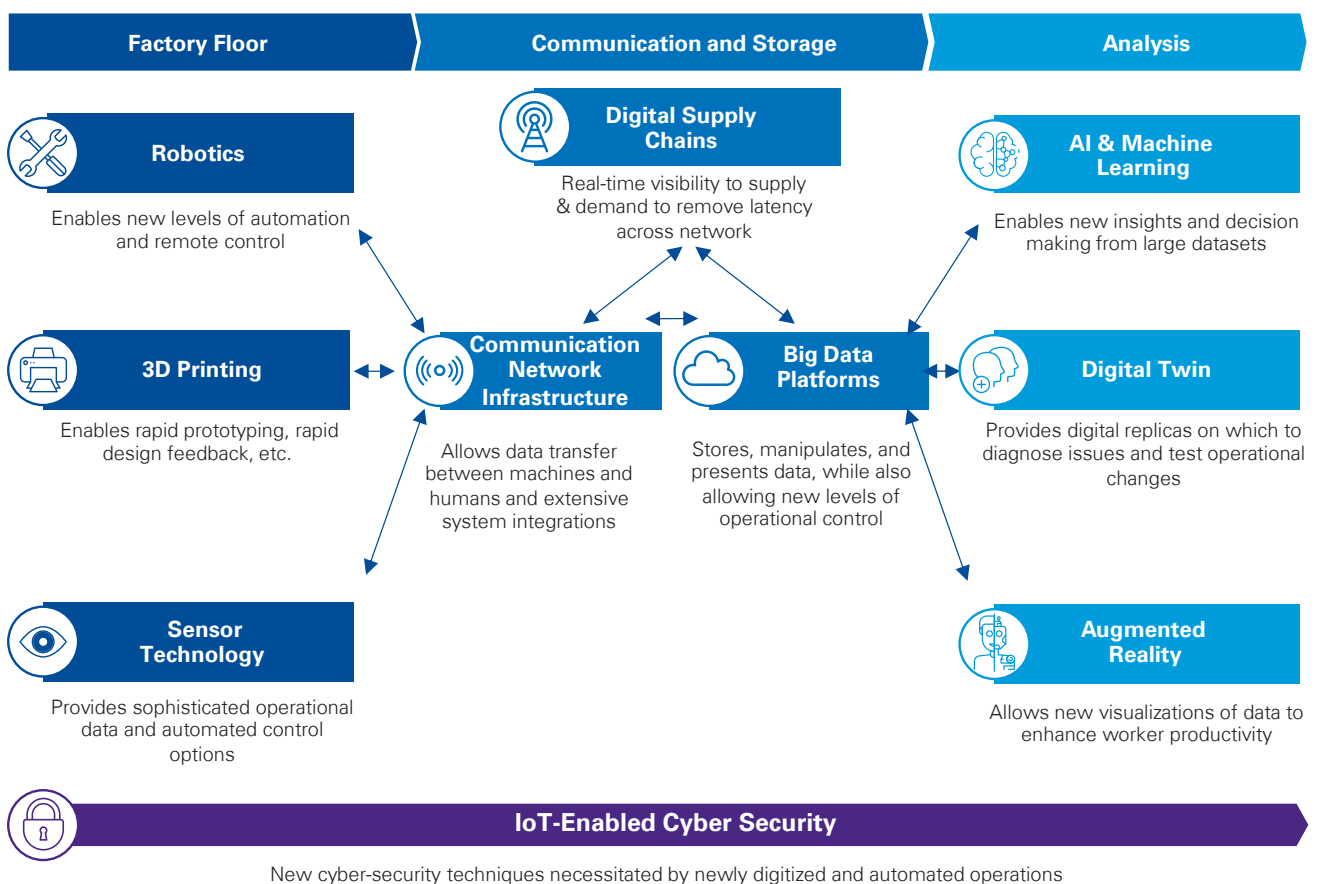


What does I4.0 look like?

Industry 4.0 (i4.0) is used around the world to describe the **convergence of IoT-driven technologies, augmented decision making and advanced automation**. These technologies are fundamentally challenging the traditional concepts of value-chain organization and driving a step change in business performance and revenue streams.

I4.0 is addressing existing issues in the industry, such as improving and maintaining **quality**, unstable prices of **raw material**, **traceability** concerns, management of **external/ internal parties** and **regulatory** compliance.

I4.0 is introducing a smart, interconnected & pervasive environment:



Trends & COVID-19

In order to face the escalating crisis of the COVID-19 pandemic, companies are focused on pursuing a thorough Industry 4.0 adaptation.

Post-COVID-19 enterprises have prioritized the adoption of **Cybersecurity, Smart analytics and Hybrid Cloud tech**. The importance of these technologies remains at high levels during the COVID-19 period. Enterprises swift investment into more advanced technologies to improve internal processes and customer experience: **5G, AR/VR and AI tech** increase significantly.

67%

Of companies have accelerated their transformation strategy as a result of the pandemic

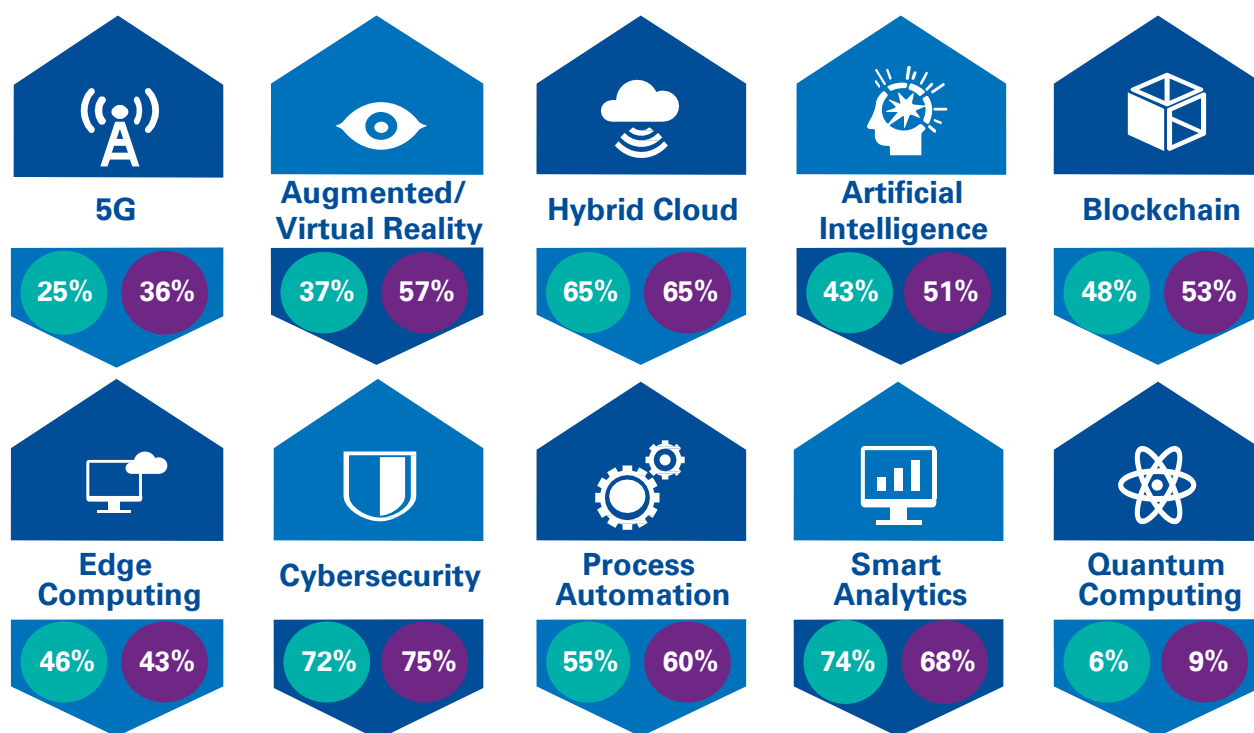
50%

Of companies are pursuing their digital transformation strategy across the entire enterprise

63%

Of companies increased their digital transformation budget, as a result of COVID-19

Percentage of companies that adopted i4.0 technology before and during the COVID-19 pandemic:



● Pre-COVID-19 period ● COVID-19 period

Sources: Impacts of COVID19 on digital transformation strategies (September 2020), HFS/KPMG Enterprise Reboot (August 2020)

KPMG framework & capabilities

KPMG has brought together its experts to develop a performance-led approach that can address the strategic needs of our clients. Our approach recognizes the criticality of multi-disciplinary teams to deliver transformative value, weaving together the corporate and operational elements of the i4.0 ecosystem.

KPMG Framework consists of six core areas that must work in concert to drive i4.0 success: Customer experience, Strategy & Business model, Operational excellence, Technology & Systems, People, Governance & Risk Management.



Customer Experience

Changing customer behavior is transforming business models. The ability to build a greater connection with the customer is one of the most valuable sources of strategic advantage

Our capabilities

- Redesign and alignment of customer journey and ecosystem
- New product and service market Assessments
- Comprehensive customer data and analytics use case development



Strategy & business model

The leaders in i4.0 have a clear strategy and roadmap that is ensuring benefits are delivered and enterprise value is being achieved at scale

Our capabilities

- i4.0 maturity assessment and benchmarking
- i4.0 strategy and digital roadmap development
- Business case definition, i4.0 investment strategy and ROI measurement
- Joint venture and alliance facilitation



Operational Excellence

i4.0 reinvents operational performance, seizing the opportunity to integrate the end-to-end value chain to offer competitive advantage

Our capabilities

- End-to-end value network optimization
- Predictive and advanced analytics
- Digital transformation of company operations



Technology & System

Many organizations still need to understand where to invest the capital to best deliver their strategy

Our capabilities

- Analysis of data and technology infrastructure
- Technology roadmap development
- Business model transformation via cloud-based technology solutions



People

New competencies are required to support i4.0-era change now and in the future. Focus is needed on skills development, recruitment, workforce integration and knowledge share

Our capabilities

- Organizational restructuring
- Behavioural change management
- Workforce planning and optimization



Governance and risk management

Leaders in i4.0 are focusing on the value from technology led change rather than the costs of delivering it. Strong governance is required to mitigate risks and ensure ROI

Our capabilities

- Project governance framework
- Design and implementation of cyber security and intelligence functions
- Risk mitigation and optimization
- Tax incentives and considerations

Your challenges

Implementation of i4.0 solutions creates a myriad of challenges that can be broken down into the 6 dimensions. Our experts have produced a body of research that our teams use as the foundations for a strategy and performance-led approach.



Additional enterprise challenges in the post COVID-19 era are affecting the i4.0 journey:



Our measurable results

Measurable results have been captured and will be obtained through our industry 4.0 lever application



**Indicative
Industry 4.0
Levers**



**Concrete
examples of
actions**



**Obtained
results**

Reduce time-to-market

Customer Cocreation / Open Innovation
Rapid experimentation and simulation

Time-to-Market -20 to -50%

Optimise the supply/ demand match

Data-driven demand prediction
Data-driven design to value

Forecasting Accuracy > 80%

Develop the service/ aftersales

Predictive maintenance
Remote maintenance
Virtually guided self-service

Costs -10% to -40%

Control quality

Statistical Process Control (SPC)
Advanced Process Control (APC)
Digital Quality Management (DQM)

Costs -10% to -20%

Master resources

Smart energy consumption
Intelligent IoTs
Real-time yield optimization

Productivity +3% to +5%

Optimise assets utilisation

Routing and Machine flexibility
Remote monitoring and control
Augmented reality

Downtimes -30% to -50%

Optimise the resource process

Human-Robot collaboration
Remote monitoring and control
Automation

Productivity +45% to +55%

Optimise Inventories

In situ (on site) 3D printings
Real-time SC optimisation
Optimisation of batch sizes

Costs -20% to -50%

We can help

Regardless of the i4.0 journey stage that you are currently in, our local & global teams of experts have the capabilities to address these stages from the onset (Strategy & Governance phase) or at any point along the journey.

Our team can support every stage your transformation journey and consists of Experienced Professionals and Subject Matter Experts in:

Operations Strategy
Supply Chain & Operations
Data & Analytics
Technology Solutions

Cyber Security
People & Change Management
Financial
Tax

Planning & Design stage

Including:

- Organizational/ Business Model Design
- Process Design
- Technology Architecture & Solutions
- Partners Identification
- People & Change Planning
- Demand Driven Supply Chain
- Cybersecurity
- D&A/ IoT
- Risk Mitigation Planning

Sustainment stage

Including:

- Governance
- Monitoring KPIs
- Results assessment
- Executive Refresh

Strategy & Governance stage

Including:

- Vision and Value definition
- Roadmap design
- Business Case conduction
- Performance-based Outcomes through to Data & Analytics (D&A)
- High-level Risk Identification

Implementation & Enterprise Roll-out stage

Including:

- PMO
- Technology Implementation
- People & Change Execution
- Cybersecurity
- D&A/ IoT
- Business Solution Testing



Our value proposition

At KPMG, we put i4.0 within a business context to help manufacturers achieve lasting value from their i4.0 investments. We work with industrial manufacturers to create, execute and improve their enterprise-level i4.0 roadmap. And we help them achieve the scale and integration required to deliver real and sustainable business results.

At KPMG, we understand the challenges and opportunities facing industrial manufacturers. Every day, our people work shoulder-to-shoulder with the world's most innovative manufacturing leaders. And our experience and our research offer our teams significant insight into the reality surrounding i4.0.



We partner with our clients to embed i4.0 into their business.

No matter where our clients are on their i4.0 journey, KPMG professionals are available to help them find and secure value, across the technology maturity cycle and the product lifecycle

We can help manufacturing organizations:



Create their unique **i4.0 strategy and vision**, aligned to their business objectives



Quantify the business case and **develop the roadmap** to support investment



Define, **improve and support** proof of concept initiatives and use cases, and **help** appropriately scale to **achieve value**



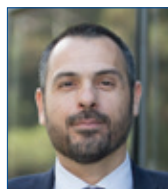
Take a holistic approach to addressing the **financial, change and risk management** requirements of i4.0 adoption

Our experts



Dimitrios Papakanellou
Partner, Consulting

E: dpapakanellou@kpmg.gr



Theodoros Stergiou
Director

E: tstergiou@kpmg.gr



Thanos Pavlatos
Senior Manager

E: apavlatos@kpmg.gr



Marios Stournaras
Senior Manager

E: mstournaras@kpmg.gr



Alexandros Kanonis
Manager, Consulting

E: akanonis@kpmg.gr



Athanasios Voulodimos
Manager, Consulting

E: avoulodimos@kpmg.gr



Konstantinos Gioulountas
Manager, People Services

E: kgioulountas@kpmg.gr



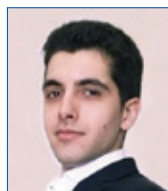
Alkistis Kyriakopoulou
Advisor, Consulting

E: akyriakopoulou@kpmg.gr



Katerina Fatsi
**Supervising Senior Advisor,
Consulting**

E: afatsi@kpmg.gr



Nikolas Togias
Advisor, Consulting

E: ntogias@kpmg.gr

Contact us

To learn more about KPMG Change Leadership service offerings in Greece, please contact:

Nikos Dimakos

Partner, Head of Consulting

T: +30 6944 617 831

E: ndimakos@kpmg.gr

Dimitris Papakanellou

Partner, Consulting

T: +30 697 33 40 517

E: dpapakanellou@kpmg.gr

Alexandros Kanonis

Manager, Consulting

T: +30 693 65 65 859

E: akanonis@kpmg.gr

kpmg.com/gr

kpmg.com/socialmedia



© 2021 KPMG Advisors Single Member S.A., a Greek Société Anonyme and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved.

The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.

The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization.