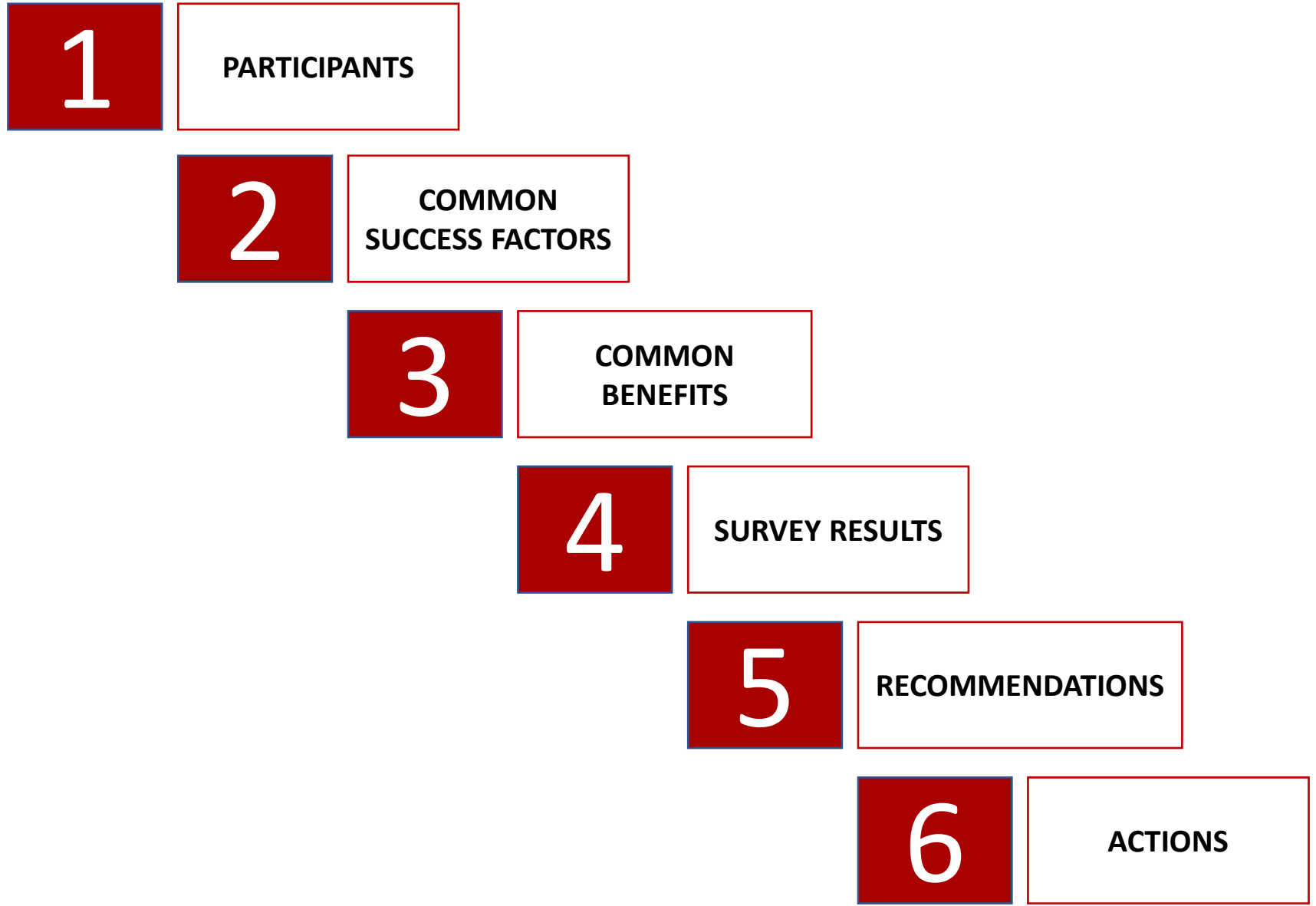


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**YASED Digital Transformation
Webinar Series
2021**

AGENDA



1a The webinar series hosted senior executives of 13 YASED member companies so far.



BOSCH

- Speaker: Mr. Heiko Schwindt, Vice President Sales at Bosch Connected Industry
- Speaker: Mr. Murat Kurtlar, Industry 4.0 Projects Director at Bosch Turkey
- Moderator: Mr. Sezgin Topçu, Director of IT Advisory Services at KPMG

**Renault
Group**

- Speaker: Ms. Odile Panciatici, Blockchain Project Vice President at Groupe Renault
- Speaker: Mr. Thierry Brancard, Digital Officer Manufacturing at Groupe Renault
- Speaker: Mr. Mahmut Şenaltun, Digital Transformation Leader at Oyak Renault
- Moderator: Ms. Vedya Daron Menase, Experience Strategy Manager at PwC Experience Consulting



- Speaker: Mr. Jan-Willem de Jong, EMEA Innovation & Digitalization Vice President at DHL Supply Chain
- Speaker: Mr. Ahmet Güleç, Operations Excellence Director Turkey & Middle East at DHL Supply Chain
- Moderator: Mr. Serkan Valandova, Secretary General of YASED



- Speaker: Ms. Meltem Bakiler Şahin, Vodafone Turkey Consumer Business Unit Director
- Moderator: Ms. Özlem Yanmaz, Deloitte Digital Türkiye Ortağı

1b The webinar series hosted senior executives of 13 YASED member companies so far.



- Speaker: Mr. Mohamed Emad El-Din, IBM Business Unit Head of Cloud Platform, Middle East, Africa and Turkey
- Moderator: Mr. Arda Karaçelebi, EY Partner, Supply Chain and Operations Leader

Philip Morris / Sabancı

- Speaker: Mr. Barış Tandoğan, Director Sales at Philip Morris Sabancı
- Speaker: Mr. Emre Kozlu, Director Strategy & Program Delivery at Philip Morris Sabancı
- Moderator: Mr. Murat Sedef, Advisory Director at KPMG Turkey



- Speaker: Dr. Frank Melzer, Board Member of Festo SE & Co. KG and Member of the Industry Board Plattform Industrie 4.0
- Moderator: Mr. Serkan Valandova, Secretary General of YASED



- Speaker: Dr. Julia Jonas, Senior Consultant at Siemens Advanta Consulting
- Speaker: Mr. Efe Erdem, Executive Director of Technology Center at Turkish Employers Association of Metal Industries - MESS
- Speaker: Mr. Kerim Oal, Digital Factory - Process Industries and Drives Country Division Lead at Siemens Turkey
- Moderator: Mr. Mehmet Gülez, Associate Partner at EY

1c The webinar series hosted senior executives of 13 YASED member companies so far.



- Speaker: Ms. Gizem Turan Pazar, Senior Director of Strategy, Insights and Digital at PepsiCo Turkey
- Moderator: Ms. Özlem Yanmaz, Deloitte Digital Türkiye Ortağı



- Speaker: Mr. Mike Maltezakis, G4S Europe & Middle East Regional Director on Business Integration & Development
- Speaker: Mr. Kağan Gümüş, G4S Turkey Managing Director
- Moderator: Mr. Engin Şayan, IT Advisory Director at KPMG Turkey



- Speaker: Mr. David Hart, Ericsson USA 5G Smart Factory Industry 4.0 Transformation Leader
- Speaker: Mr. Sebastian Elmgren, Ericsson Smart Manufacturing Portfolio Manager
- Moderator: Mr. Mehmet Gülez, EY Turkey Associate Partner



- Speaker: Mr. Alvaro Perez, CDO of Acwa Power
- Moderator: Mr. Selim Güven, YASED Energy WG Chairperson & CEO of Acwa Power Turkey



- Speaker: Mr. Hakan Irgıt, Chief Digital Transformation Officer of SOCAR Turkey
- Moderator: Mr. Serkan Valandova, Secretary General of YASED

1d Highlights from Bosch Connected Industry

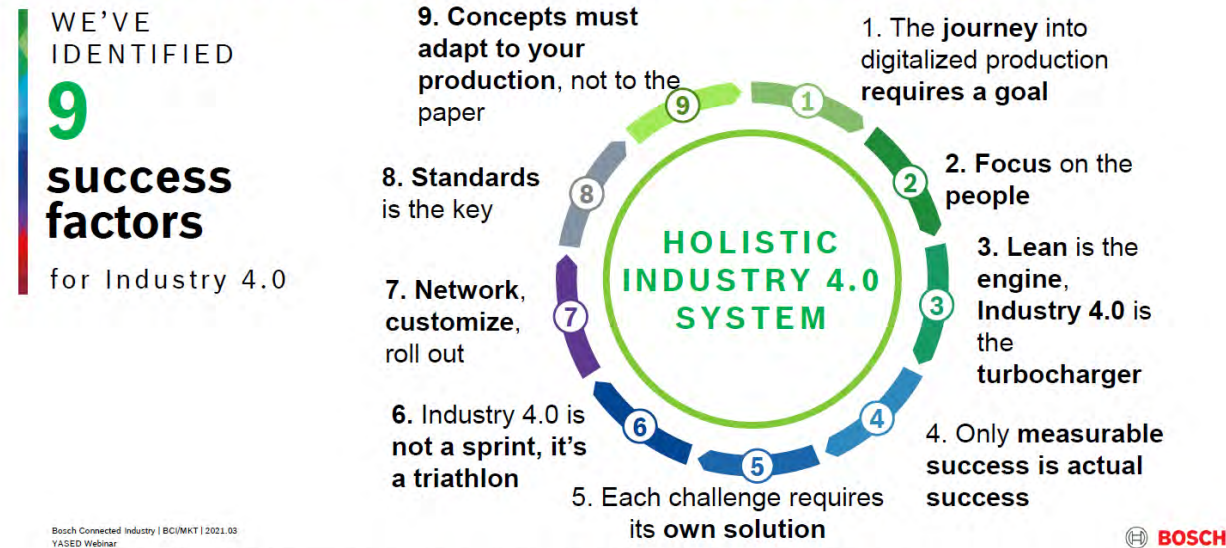


BOSCH

- **Industry 4.0** is about implementing Internet of Things (IoT) solutions in production lines and adding value in production and processes.
- The **challenge** of Industrial IoT is to create real value for companies and their customers.
- The **nine key success factors** are; having a goal, focusing on people, lean production, measurable outputs, finding solution for each challenge, running different disciplines, customizing, standardization, adapting concepts to production.

Bosch Connected Industry

Nine key success factors and Industry 4.0 as a system



Digitalization Process

Investments & Applications

- Automation
- Connectivity
- Cloud Computing
- Industrial IoT
- Big Data
- System Integration
- Robotics
- Artificial Intelligence

Benefits & Advantages

- Transparency
- Easy and quick access to data
- Paperless factory
- Flexibility
- Product quality
- Customer trust
- Less machine downtimes
- Less maintenance costs
- Machine availability

Enablers

- Change Management
- Training Programs
- Standards for all plants
- Digitalizing entire value chain

1e Highlights from Renault Group

- **Blockchain** is the way to connect all the players in the automotive industry ecosystem such as manufacturing, supply chain, sales & marketing, service provider, finance, engineering, etc. by making links between the functions of all the companies working together and bringing more speed and reactivity into the processes of the ecosystem.
- **XCEED** has been developed with the aim of being an ecosystem wide compliance and conformity traceability platform which answers regulation and customer demand and bolster industrial competitiveness and technological sovereignty.



Digitalization Process

Investments & Applications

- Blockchain Technology
- Big Data
- Artificial Intelligence
- Mobility for employees with digital equipment
- Robotics
- Track&Trace Systems

Benefits & Advantages

- Speed and reactivity
- Shared risks and costs
- Profitability
- Digital continuity
- Protected data
- Safe exchange of data
- Quick access to real time data
- Higher performance
- Customer satisfaction
- Value-added supply chain

Enablers

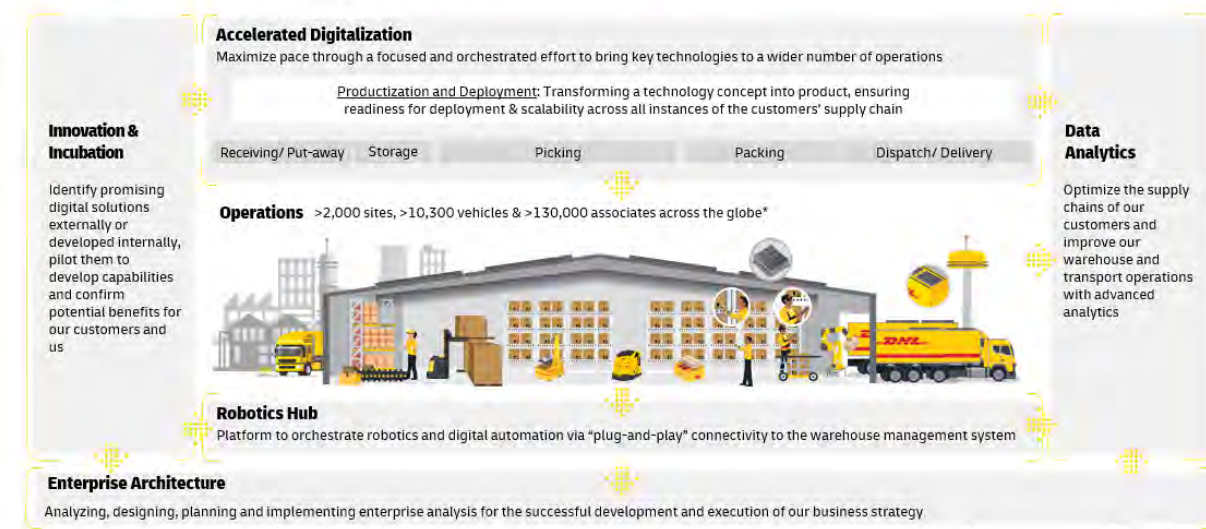
- More reactivity among the ecosystem for severe regulations
- Collaboration with other players
- Changing mindset
- Real time data
- Mobile tools



1f Highlights from DHL Supply Chain

- **Major trends in digitalization** are faster adoption of new technology, automation and robotics becoming a reality and data-based service offerings.
- **Building an ecosystem** is more effective than trying to do everything on your own.
- Working with **subject matter experts** is essential for digitalization.

Our Digitalization Strategy is key to ensure we continue our journey on this path – at pace, and with stakeholders & customers on-board



Digitalization Process

Investments & Applications

- Robotics
- Automation
- Digital Applications
- E-commerce
- Data Analytics

Benefits & Advantages

- Less manual work
- Efficiency in cost and time
- Reduce operational faults
- Ensuring access to right data, in the right place at the right time
- Operational efficiency
- Flexibility
- Better decision making and delivery
- Customer satisfaction

Enablers

- Implementing digitalization into corporate strategy and every operation
- Trained workforce
- Change Management
- Lean Management

1g Highlights from Vodafone Turkey

(As an Infrastructure Provider)

- The upcoming period is called **Intensified Digital Era** which will consist more data analytics and artificial intelligence.
- **Digitalization increased** data traffic, e-commerce activities, and cloud investments in considerable amounts.
- Vodafone's survey on Covid-19 shows that the **four development areas for companies** are workplace safety, digital competences of employees, technology investments and technology infrastructure investments.

We save up with our IoT solutions!



Red Energy

Energy saving up to 20%



Safe Vehicle Solutions

Fuel saving up to 25%



Vehicle Tracking

Fuel saving up to 10%



Red Control

Effective Work Tracking

Efficiency increase up to 10 %

Machinery and Production Tracking

Efficiency increase up to 10 %

Energy Tracking

Saving up to 20 %

Digitalization Process of Their Customers

Investments & Applications

- IoT Solutions
- Cloud Computing
- Artificial Intelligence
- Smart Tracking Systems
- Digital Applications
- Robotic Process Automation

Benefits & Advantages

- Energy saving
- Increase in work efficiency
- Productivity
- Remote working
- Remote control systems
- Building digital market places
- Contact-free delivery and payment systems
- Online ordering systems

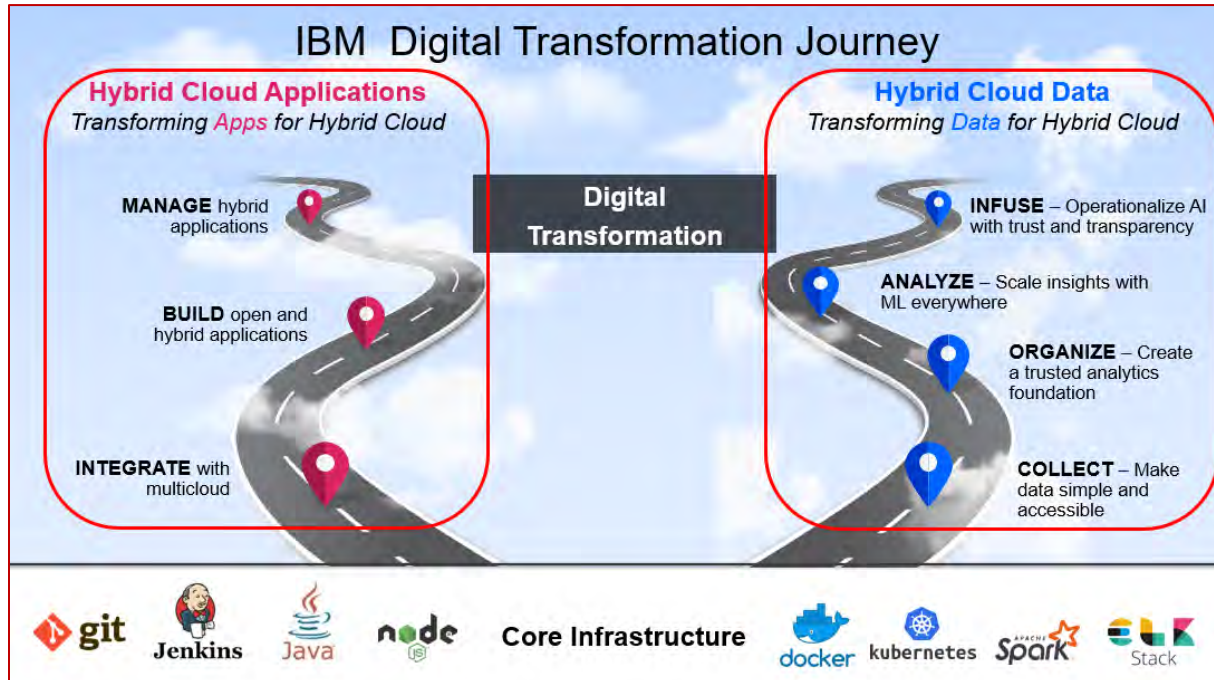
Enablers

- Cyber security
- Data protection
- Consultancy and support for SMEs
- Developing 5G infrastructure
- Supporting data and technology centers

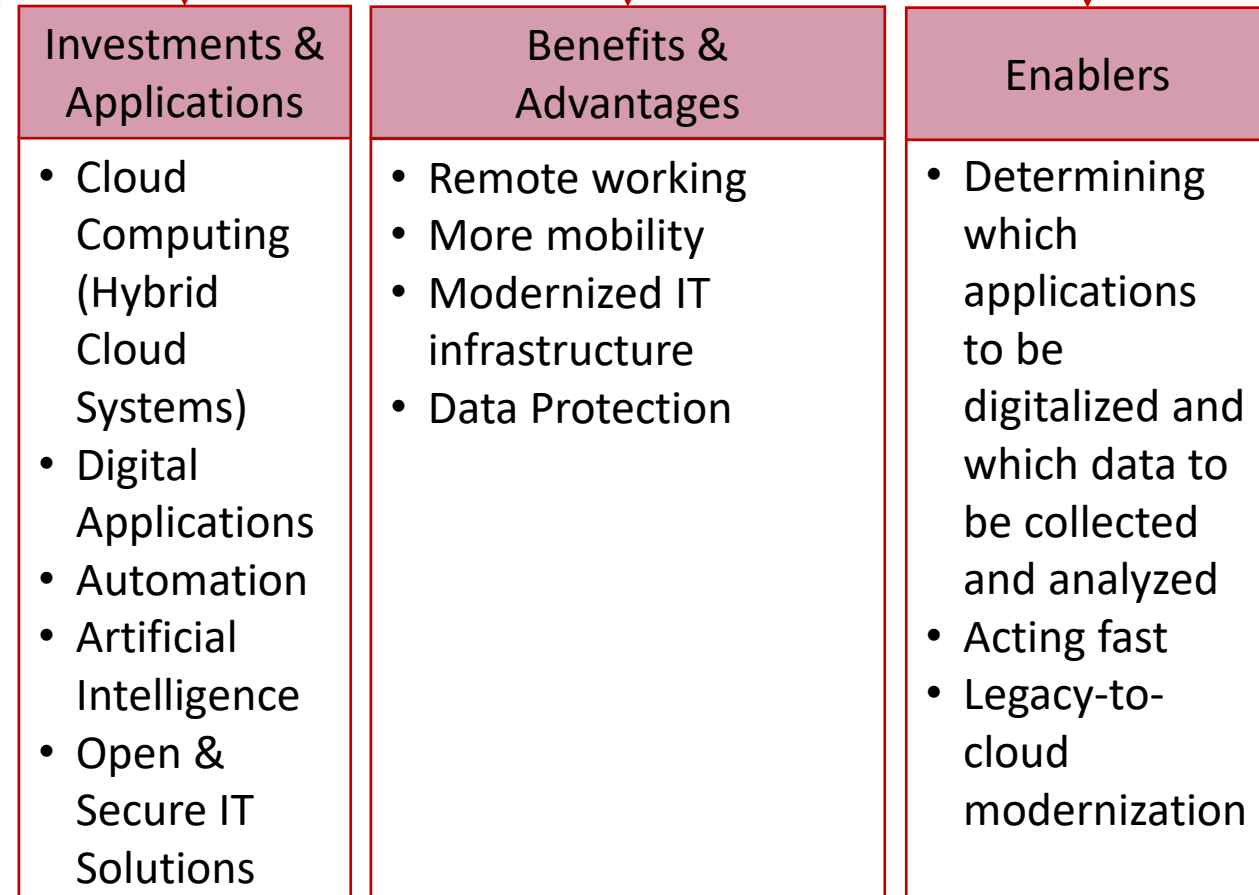
1h Highlights from IBM

(As an Infrastructure Provider)

- **Cloud adoption** is foundational enabler of digital transformation and accelerates access to next generation cloud services and cloud-native technologies.
- **Hybrid Cloud** is a technology of systems that can be stored in companies' own data centers, and it provides all the cloud services to the data center.
- It provides a **hybrid service** as enabling using the on-premise systems and as well as the other public cloud systems according to the preferences.



Digitalization Process of Their Customers



1i Highlights from Philip Morris Sabancı

- **Science and technology** are the main two pillars of digital transformation journey.
- Close relation with **start-up ecosystem** is crucial. PM Equity Partner was founded as a global venture capital firm with 150 mio USD fund and has invested in 11 start-ups so far.
- **Advantages to work with start-ups** are being flexible and quick on decision making and evolving easily according to circumstances.

Digitalization Process

Investments & Applications

- Integrated Digital Apps
- Value Stream Mapping
- E-Ordering Systems
- Big Data
- AI
- Cooperation w/ Start-ups
- Computer Vision Tech.

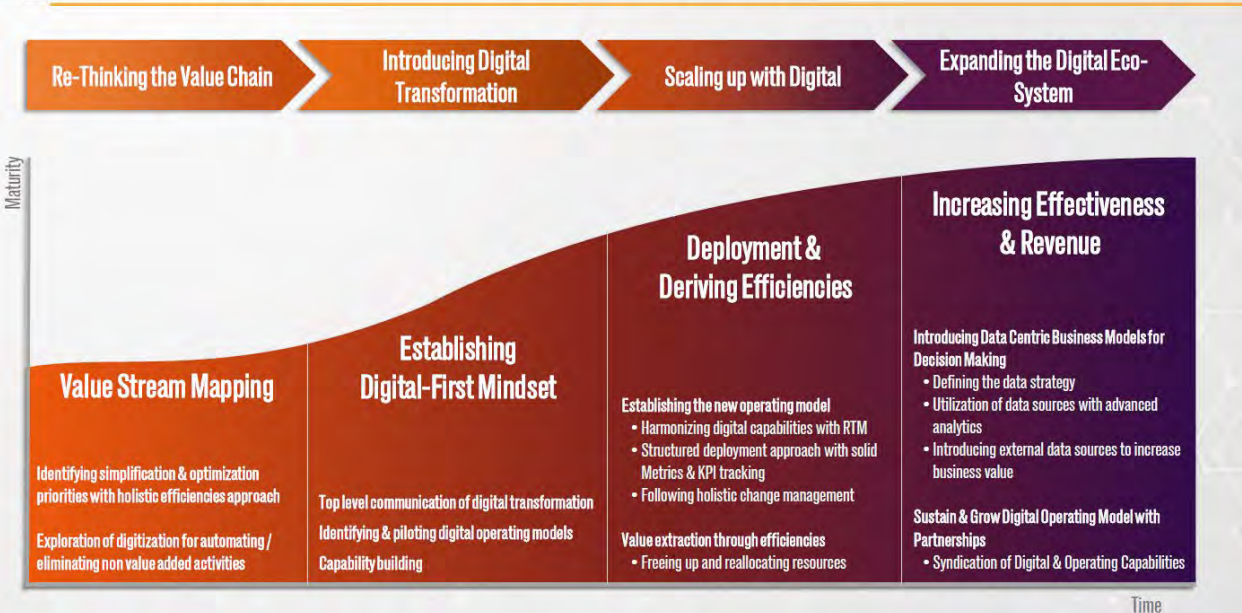
Benefits & Advantages

- Mapping more than 250 processes within only 2 weeks
- Speed & efficiency in sales & distribution operations
- Business development for customers
- Personalized solutions

Enablers

- More R&D Investments
- Change mang. w/ customer-focus
- Developing internal & external digital know-how
- Coop. w/ other players in ecosystem

The Phases of Digital Transformation / Organizational Maturity

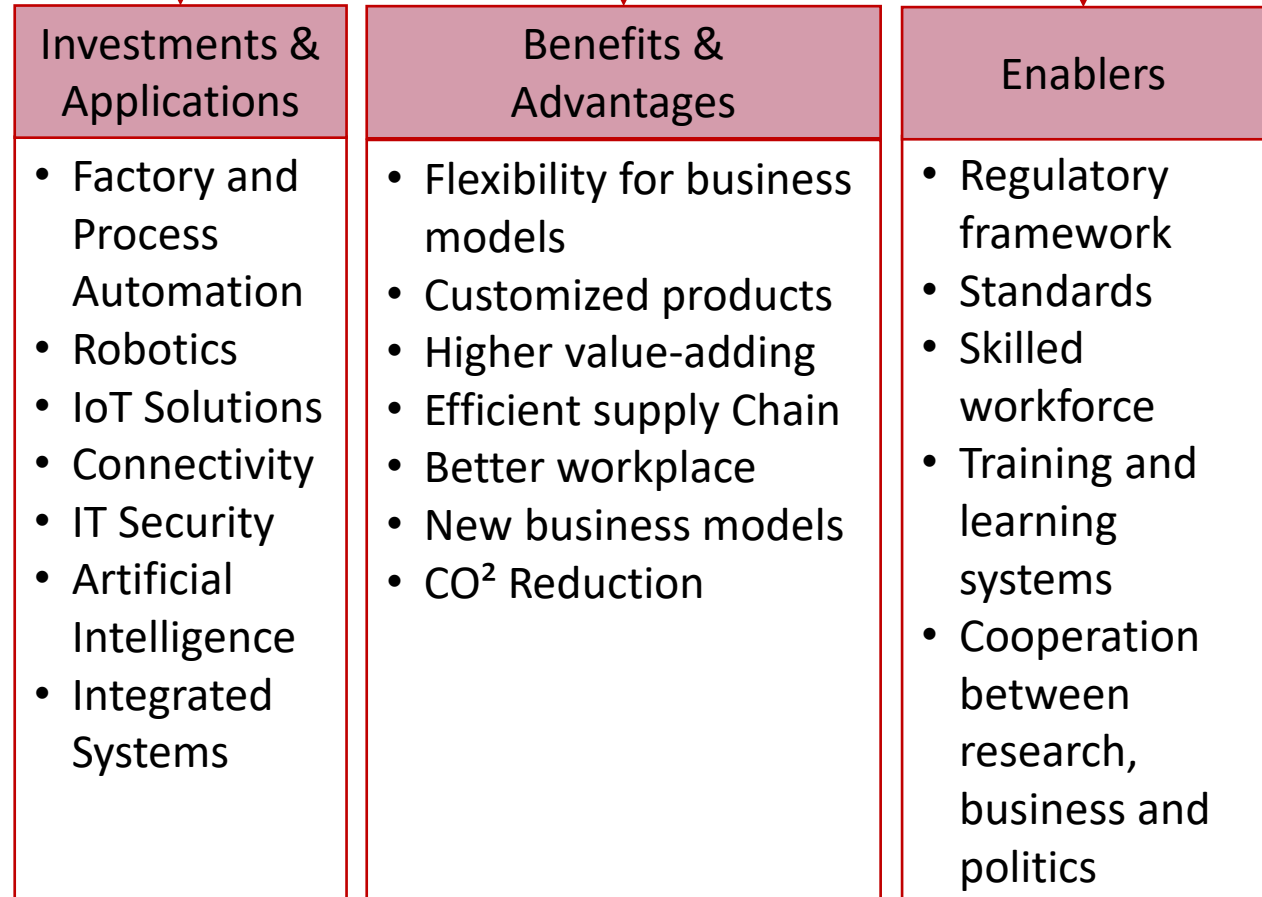


1j Highlights from Festo

- **Public, private and academic partnership** is the key success of digitalization initiatives.
- Key aspects of **the Vision of Industry 4.0 for 2030** are **autonomy, interoperability, and sustainability**.
- **Industry 4.0** is the interaction and connectivity of people, machines, and products – in real time and virtual reality. It requires **different skill sets**.



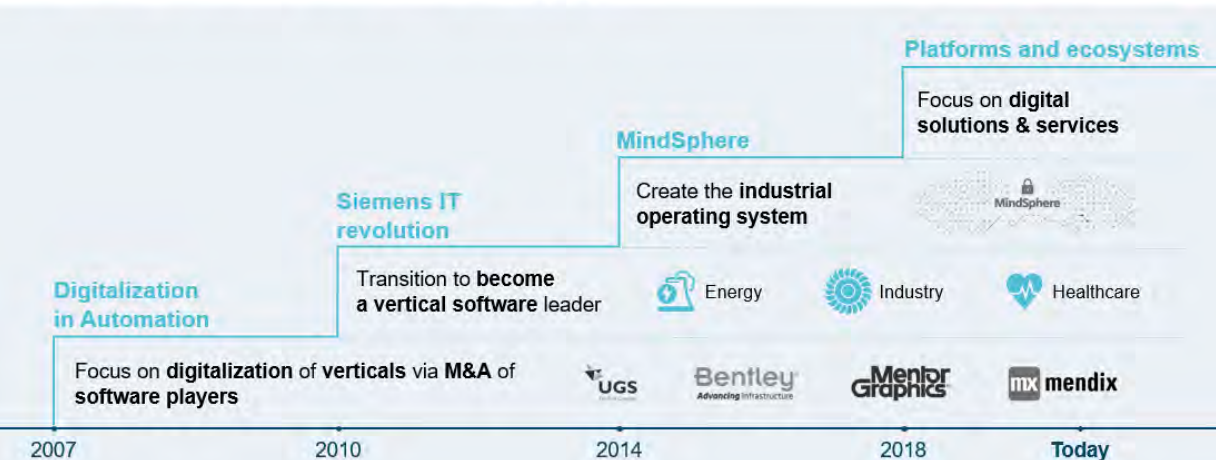
Digitalization Process



1k Highlights from Siemens

- World's most valuable public companies are more and more building on **platform-based business models**.
- A **digital platform** is an open architecture, with rules of governance, designed to facilitate interactions.
- It is all about the **power of the ecosystem**, joining forces, and bringing together the resources and competences.

In order stay ahead of digital transruption in the future, digital transformation was put at the core of Siemens' company program



Digitalization Process

Investments & Applications

- Platform-Based Ecosystems
- Digital Applications
- Big Data

Benefits & Advantages

- Creating a thriving ecosystem
- Crowdsourcing and open innovation
- Inbound marketing
- Better workplace
- User friendly apps without any requirements of technical expertise

Enablers

- Pilot projects
- Changing mindset
- More incentives for producers
- Cooperation with other players of the ecosystem

1 | Highlights from MEXT

(As an Infrastructure Provider)

- **MEXT** is the world's biggest and most comprehensive digital transformation and capability building center.
- There are two production lines in the digital factory. And it is **the first end to end integrated digital manufacturing facility** in Turkey.
- MESS has partnered with Fraunhofer to make the **maturity assessments** and determine the maturity indexes of their members.



Digitalization Process of Their Customers

Investments & Applications

- Product Lifecycle Management
- ERP Systems
- IoT Solutions
- 5G infrastructure
- Data Analytics
- Virtual Technologies

Benefits & Advantages

- Productivity
- Higher Quality
- Maturity Level Assessments
- Flexible Infrastructure
- Scaling pilot projects
- Capability building programs
- Partnerships in the ecosystem
- Accessing real time data
- Working w/ start-ups

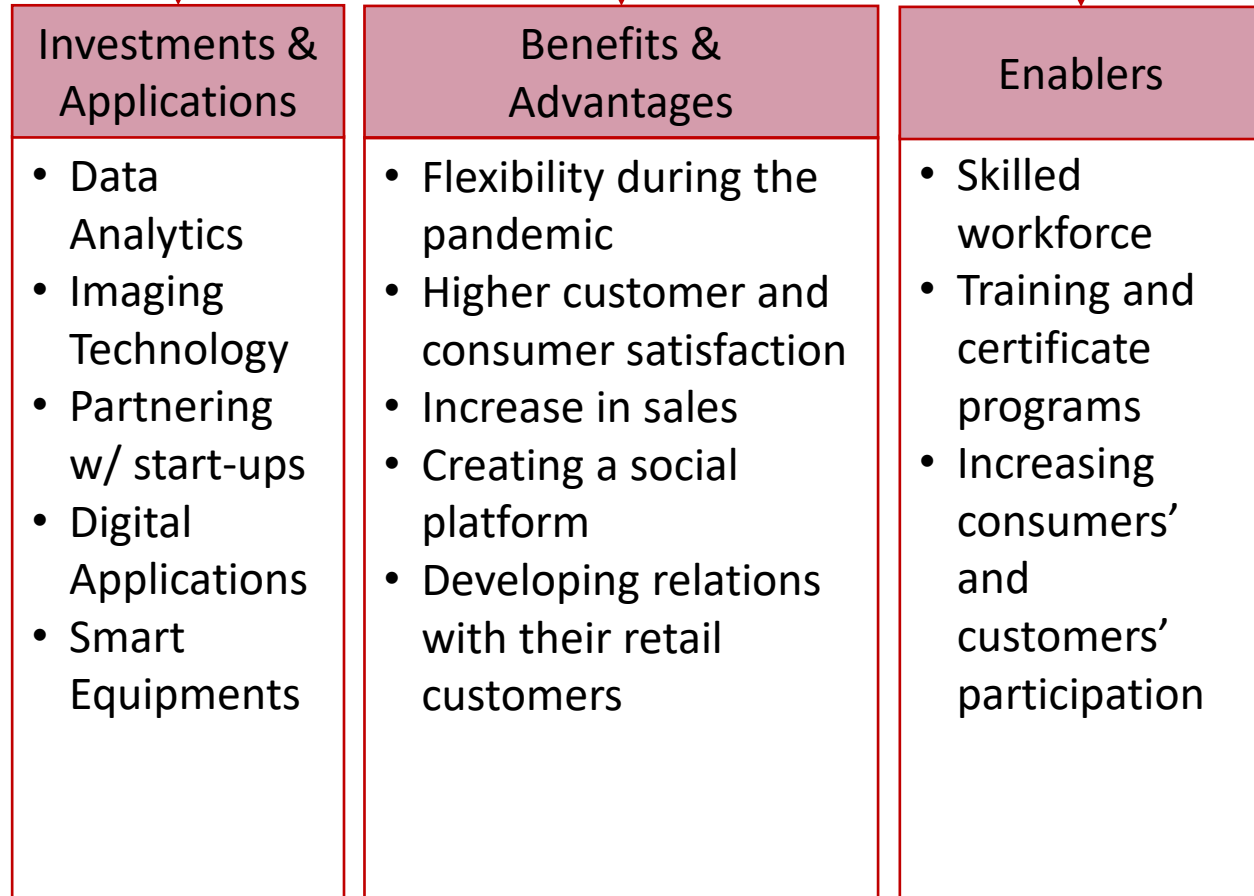
Enablers

- Higher awareness in top management levels
- Skilled workforce

1m Highlights from PepsiCo Turkey

- **Pace of digitalization** is very fast and full of obscurity. These obscurities can be overcome with versatile perspective and collaboration.
- **Supporting the ecosystem and creating a common mind** is among the necessities.
- **Partnerships** between public and private sector, academicians and entrepreneurs are crucial.

Digitalization Process



Our Vision PEPSICO

To create connected experiences and value for our consumers, customers and sales teams thru integrated systems powered by Advanced Analytics



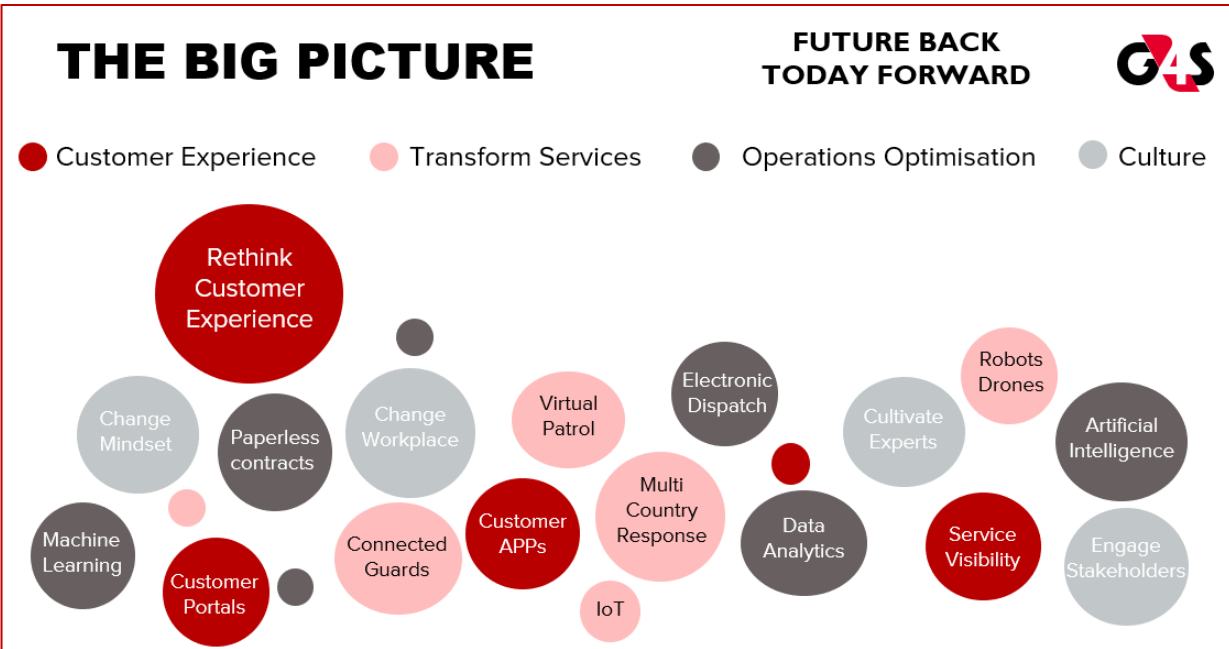
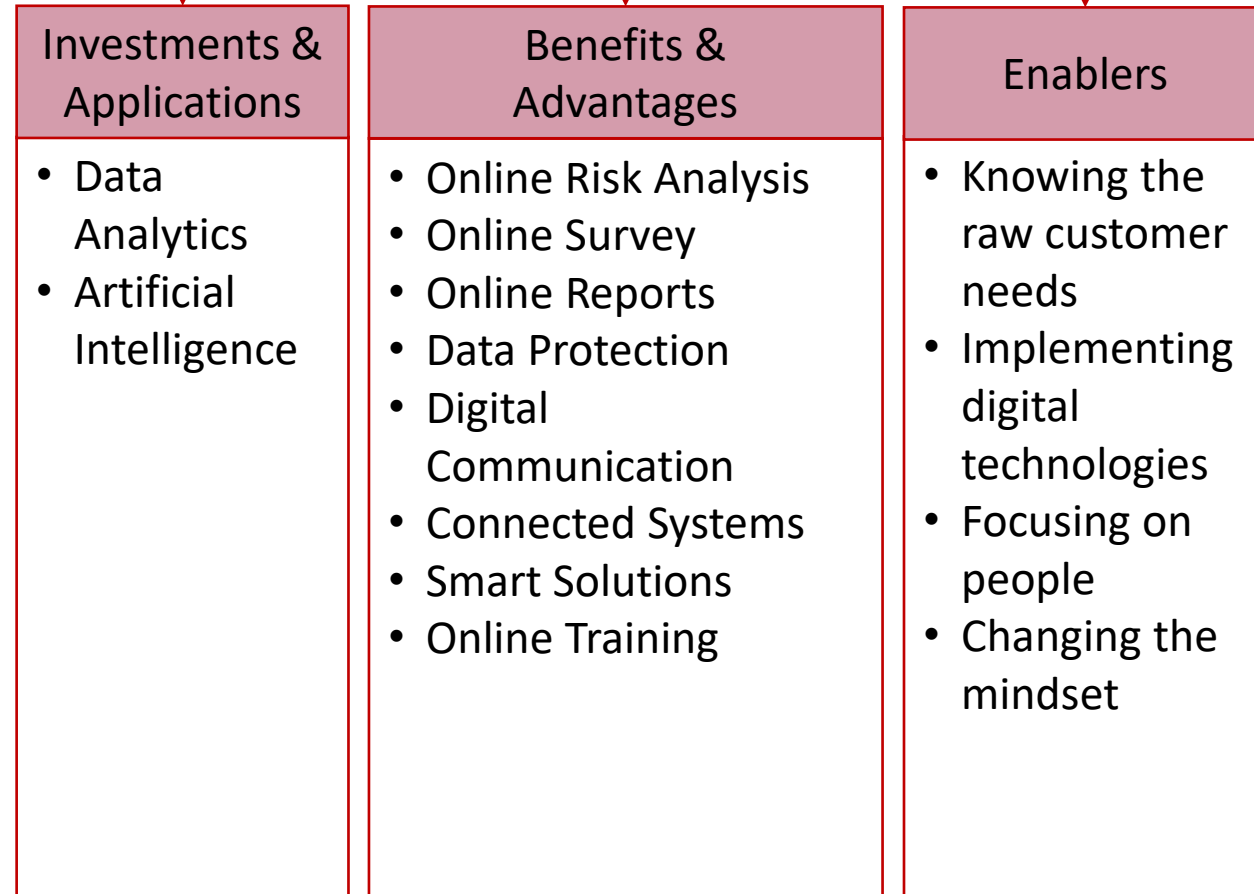




1n Highlights from G4S

- Systems, investments, vision, passion, and mindset are the **key elements** for digitalization.
- Digital transformation is a series of projects which need to focus on **four pillars** which are; Customer Experience, Operations Optimization, Products/Services Transformation, and Culture.
- The only thing you can integrate in security sector is the data. **Data should be** live, continuous, streaming, visible, traceable, and transparent.

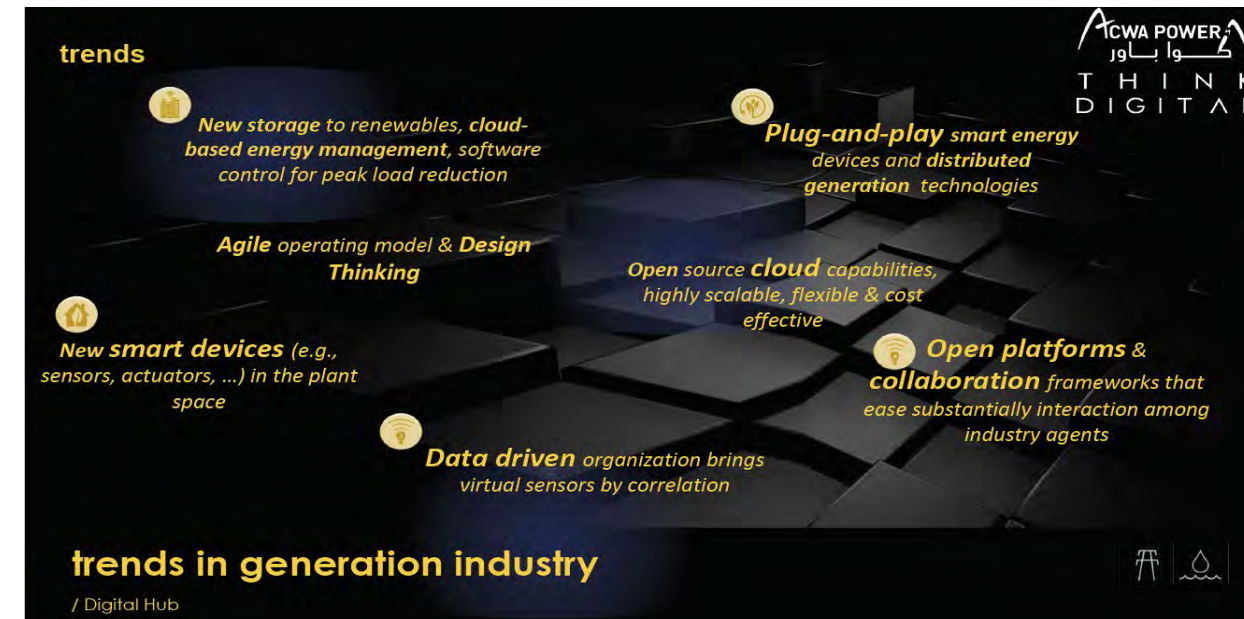
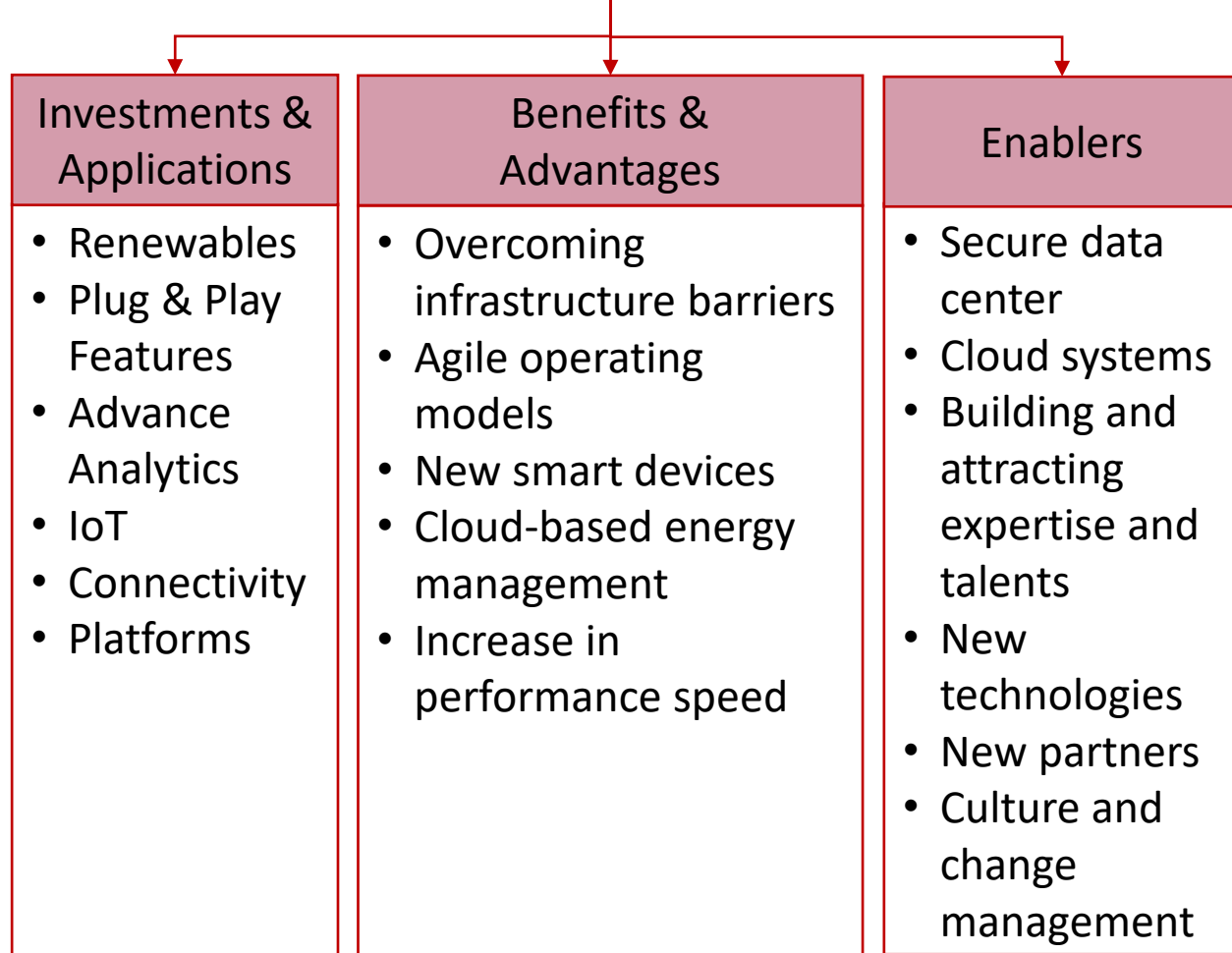
Digitalization Process



10 Highlights from Acwa Power

- Digitalization is about **culture & change management (95%)**.
- **Adoption** of new technologies and **agility (flexibility)** are the main aspects of digitalization.
- Every digitalization process should add a value to companies, and it should be done **fast, agile and lean**.
- Integration, capabilities, data and hardware are inside the companies. Companies need to develop this infrastructure with **plug & play features** for digital technologies by start-ups and technology vendors.

Digitalization Process



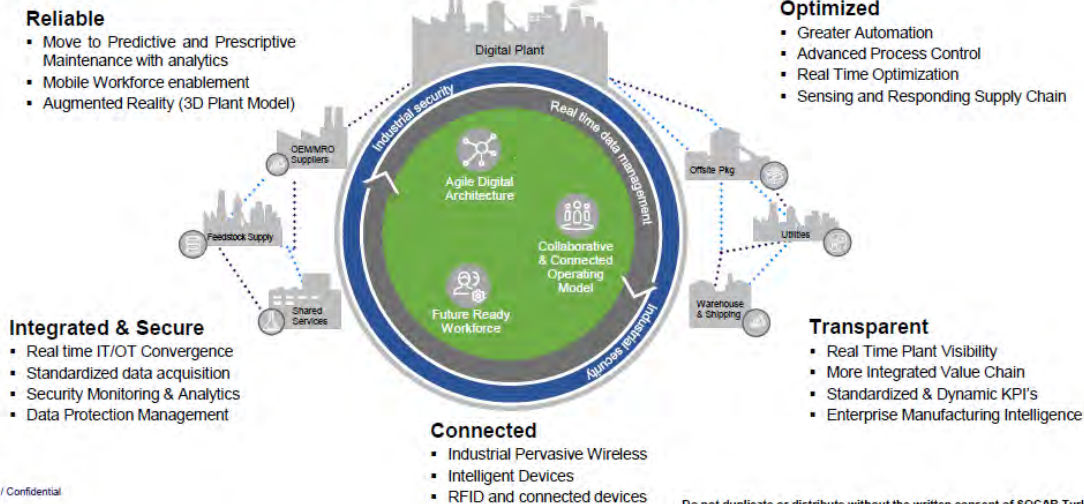
1p Highlights from SOCAR Turkey

- The **focal points** of digitalization are optimization, reliability, integration & security, connectivity, and transparency.
- SOCAR Turkey's digitalization process is established on 5 steps which are **Discovery, Ideation, Design, Develop, Release**.
- **Distinctive technologies** for digital transformation are analytics and machine Learning, mobility, robotics, IoT, artificial intelligence, simulation, VR/AR, cloud, blockchain and 3D printing.

Value chain optimization and reliable operations are two main focus areas we are spending our energies on



Industry Focus & Opportunities



Digitalization Process

Investments & Applications

- Ad. Analytics
- Machine Learning
- Sensors
- IoT
- Blockchain
- Mobility
- Robotics
- Simulations
- AR/VR
- Cloud
- AI
- 3D Printing

Benefits & Advantages

- Developing IT infrastructure
- Using advance technologies
- Improving business processes
- Providing operational excellence
- Corporate transformation
- More accurate estimations
- Saving manpower

Enablers

- Corporate strategy integration
- Sponsors
- Increasing awareness
- Incentives for involving employees
- Adopting working environment into digital

2a Common success factors and requirements of digital transformation

Corporate Strategy & Process Landscape

Companies must implement digital transformation into their corporate strategy and process landscape of every operation.

Change Management

Companies must change their mindsets. All levels of management and employees must become a part of this process and be aware of the benefits they will get from digitalization.

Skilled Workforce & Continuous Training

Companies need to have right people to start digitalization, train them continuously, show them the benefits of digitalization and support their digital journey with Change Management.

Digital Systems

Digital transformation consists of automation, connectivity, cloud computing, IIoT, big data and system integration. These systems must be supported by process optimization and data analytics.

Standards

Companies must define and use standards for all their plants worldwide which can be a big challenge.

Collaboration

Collaboration is the way of progress and innovation. Expenses and risks are shared among players of the ecosystem.

Pilot Projects

Companies are advised to start with pilot projects. 'Thinking big and starting small' is the key principle in digital transformation.

2b Common success factors and requirements of digital transformation

Transparency

Higher transparency across all production plants must be obtained which should be connected to each other. All data about manufacturing should be accessed at all times and from anywhere.

Goals & Path

Companies need to determine their goals and know what they would like to achieve before taking any action. Then they need to determine their path on digitalization.

Maturity Level Assessments

Companies can make the first assessment on measuring their maturity level in digitalization in comparison to their peers. This can be a starting point for a company.

Data Protection & Cyber Security

Cloud systems are generally the safest and most affordable way of storing data. Companies must invest into data protection and cyber security to keep the data they generate safe.

Infrastructure

Limitless and continuous high-speed internet connection for digital processes in production plants and data centers is vital.

Supporting Start-ups

Cooperation with start-ups, universities, technocities and entrepreneurs supports the ecosystem and fastens digitalization processes and helps taking quick actions due to flexibility of start-ups.

Supporting Suppliers

Companies can offer support and expertise to their suppliers on developing their digitalization processes so that suppliers can increase the quality of their products as well.

3 Benefits and advantages that companies gain by digital transformation

Cost Saving

-  **Saving of Manpower**
-  **Utilization of Logistics**
-  **Agility**
-  **Reduction in Maintenance Costs**
-  **Less Time Needed to Collect Real Time Data**
-  **Higher Connectivity**

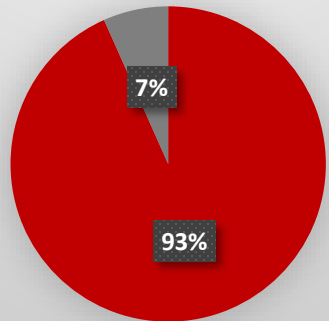
Productivity

-  **Higher Machine Availability**
-  **Remote Control**
-  **Value-Added Supply Chain**
-  **Higher Quality**
-  **Process and Operation Excellence**
-  **Flexibility in Production Lines**
-  **Increase in Customer Satisfaction**

4a A survey is conducted among members during the webinars on digital transformation

Survey Results – Number of Participant International Investor Companies: 113

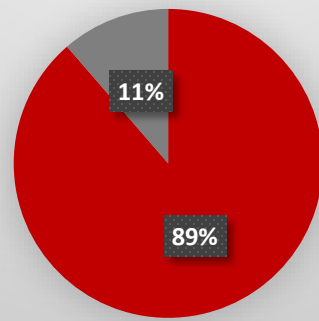
Did your company adapt digitalization in its corporate strategy?



■ Yes
■ No

Answers from 82 participants

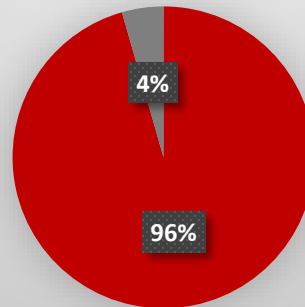
Did your company communicate its digitalization process within a time frame?



■ Yes
■ No

Answers from 65 participants

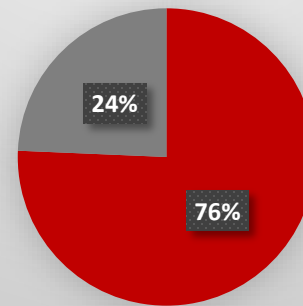
Does your company allocate additional resources for digitalization projects?



■ Yes
■ No

Answers from 63 participants

Does your company organize training programs on digitalization?



■ Yes
■ No

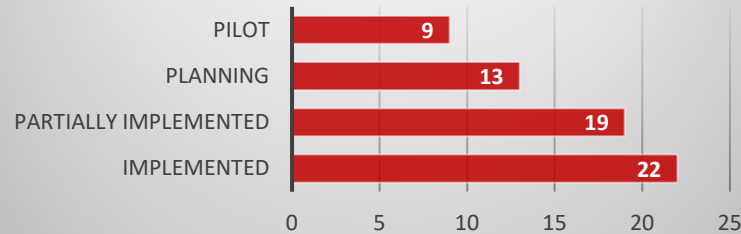
Answers from 58 participants

The survey reflects the **perception and current situation** of YASED members on their digital transformation processes.

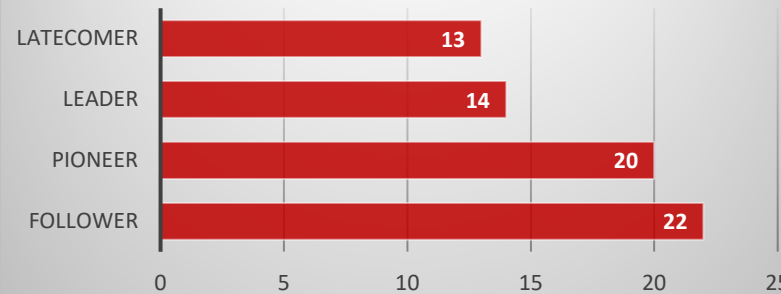
4b1 A survey is conducted among members during the webinars on digital transformation

Survey Results

At what stage do you consider your company on digitalization?



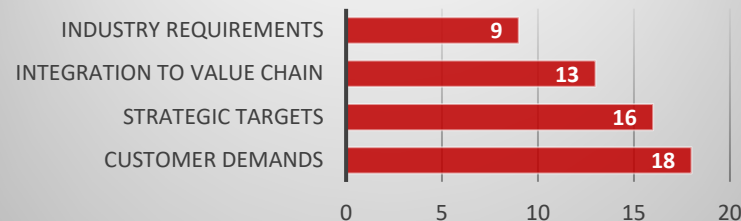
At what stage do you consider your company in digitalization?



Who is in charge of digitalization in your company?



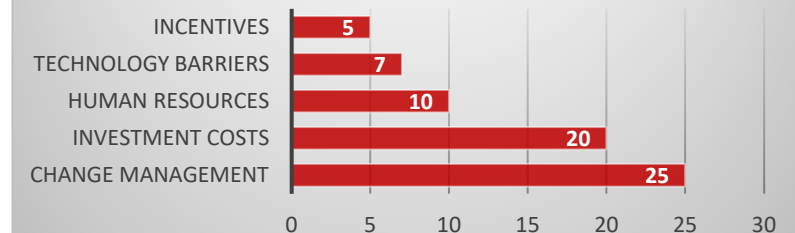
What is the primary focus of your company in digitalization?



Which strategy should be prioritized in your company to accelerate digitalization?



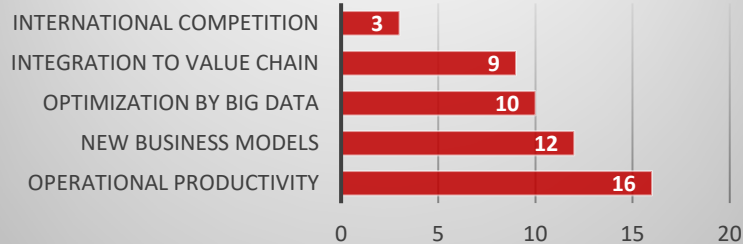
What is the most important barrier to digitalization in your company?



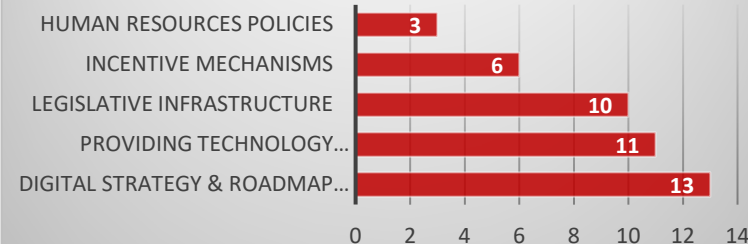
4b2 A survey is conducted among members during the webinars on digital transformation

Survey Results

What is the most important benefit expected from industrial digitalization?



What is the most critical element in terms of government role & supports?



What do you think about the impact of current incentives supporting digitalization?



5a Policy and support recommendations which will enable acceleration of digital transformation

Supporting Cloud Computing

- Preparing impact analyses on the lack of rules and procedures for cloud computing technologies
- Conducting studies to classify data (personal data, critical data, etc.)
- Revising regulations on the obligation to keep the information systems except critical data in Turkey

Data Protection

- Making the alignment between the Turkish Law on the Protection of Personal Data (KVKK) and the General Data Protection Regulation (GDPR).
- Announcing the safe country list.
- Changing the legal requirement of explicit consent to be the prior condition for abroad data transferring.

Cyber Security

- Preparing the Law on Cyber Security
- Consulting with private sector for regulation studies

Supporting Data Centers

- Determining a special and legal status for data centers in order to be a regional hub
- Providing incentives for data centers such as tax exemptions (e.g. corporate tax), cost reductions for energy usage, etc.
- Preparing rules and procedures to determine which information, documentation and access will be needed from data centers

5b Policy and support recommendations which will enable acceleration of digital transformation

Supporting 5G Infrastructure

- Building capacity for 5G and developing the infrastructure (5G supports infrastructure of many technologies such as autonomous vehicles, augmented reality, smart cities/buildings, high-definition videos, cloud-based operations. Telecommunication sector will be able to provide higher quality services on IoT, remote working, specialized mobile network with 5G in near future. 5G provides fewer lagging times and high-speed communication which enable higher productivity.)

Supporting E-Trade Activities & Increasing Digital Literacy

- Providing end-to-end guidance for companies who will invest in e-trading (Most of the SMEs are lacking knowledge, competence, infrastructure and IT security.)
- Developing special supports and training programs to increase SMEs' digital literacy

Providing TUBITAK Supports for Large Scale Companies

- Increasing the number and scale of TUBITAK's supports for large companies
- Increasing the grants provided to a single company rather than giving small amounts of grants to several companies in order to increase the quality of the projects rather than the quantity

Enhancing R&D Incentives

- Introducing «R&D Expenditure Credit» as a part of current R&D incentives which will have a positive effect on pre-tax profit of companies
- Revising Law on Supporting Research and Development Activities accordingly

6 Next steps by YASED



Webinar Series

Workshops / Meetings

White Paper

- A **Launching Event** is planned for the **Digital Transformation Platform** where the results of the Webinar Series will be shared.

- Workshops and meetings with **government institutions** will be organized for YASED members to share these suggestions on policy requirements, supportive regulations and incentives for increasing investments on digital transformation.

Possible insitutions to meet;

- Digital Transformation Office
- Ministry of Industry and Technology
- TUBITAK TUSSIDE
- Academicians
- International Organizations and Missions

- A **White Paper** is prepared at the end of the Webinar Series which consist information on the good practices of YASED members and policy requirements to be shared with related public authorities.

Outputs will support TUBITAK TUSSIDE's studies on **Digital Transformation Maturity Level Assessment.**

Platform studies are planned to be concluded with an **International Digital Transformation Summit.**