

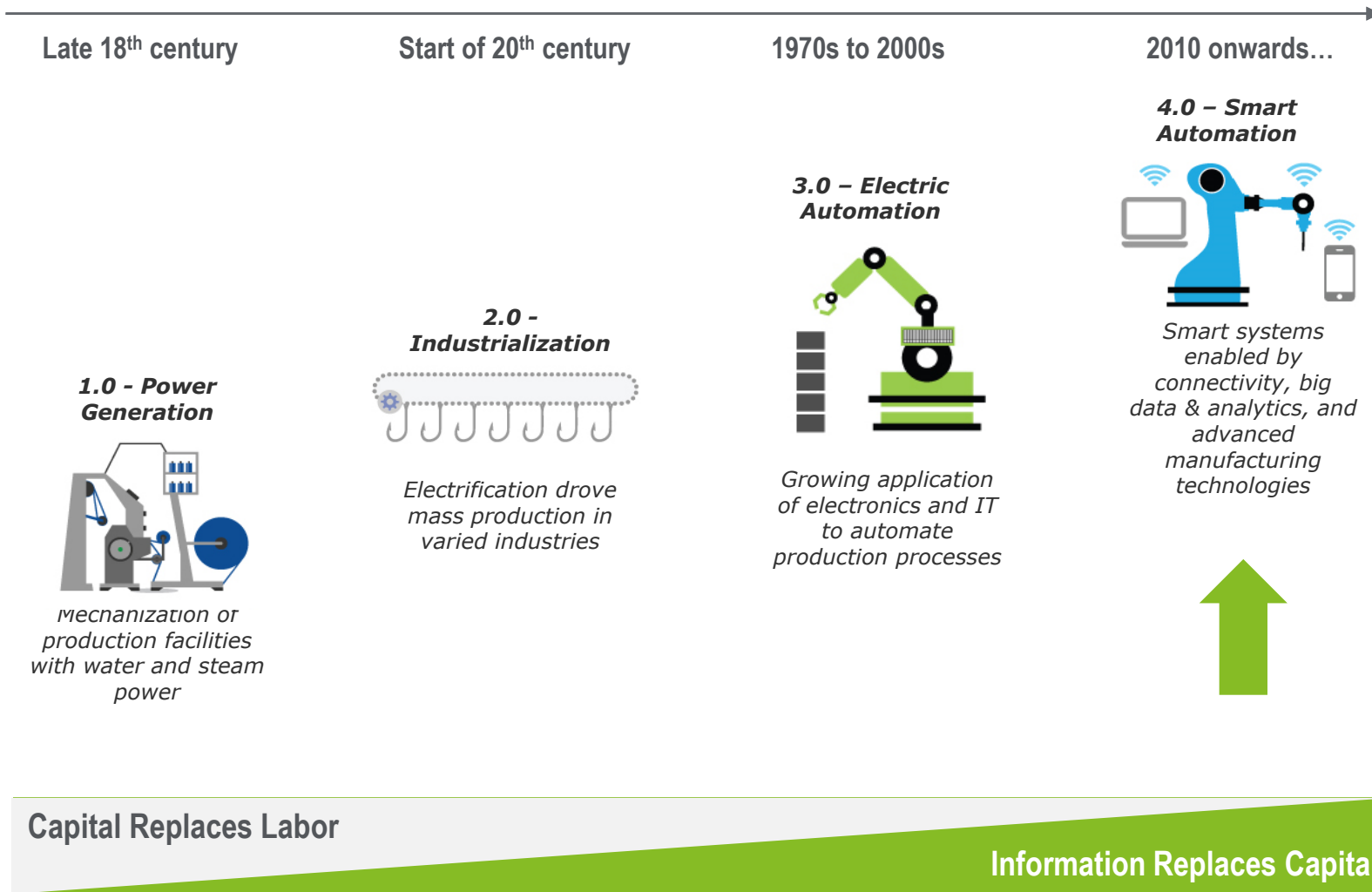
**Deloitte.**



**Introducing digital transformation in Chemicals**

June 2017

# The next industrial revolution is underway



Digital opportunities are transforming the way we operate and grow the business

'Digital Core'

'Digital Business'

**SMART  
SUPPLY  
CHAINS**

**SMART  
MANU-  
FACTURING**

**SMART  
INNOVATION**

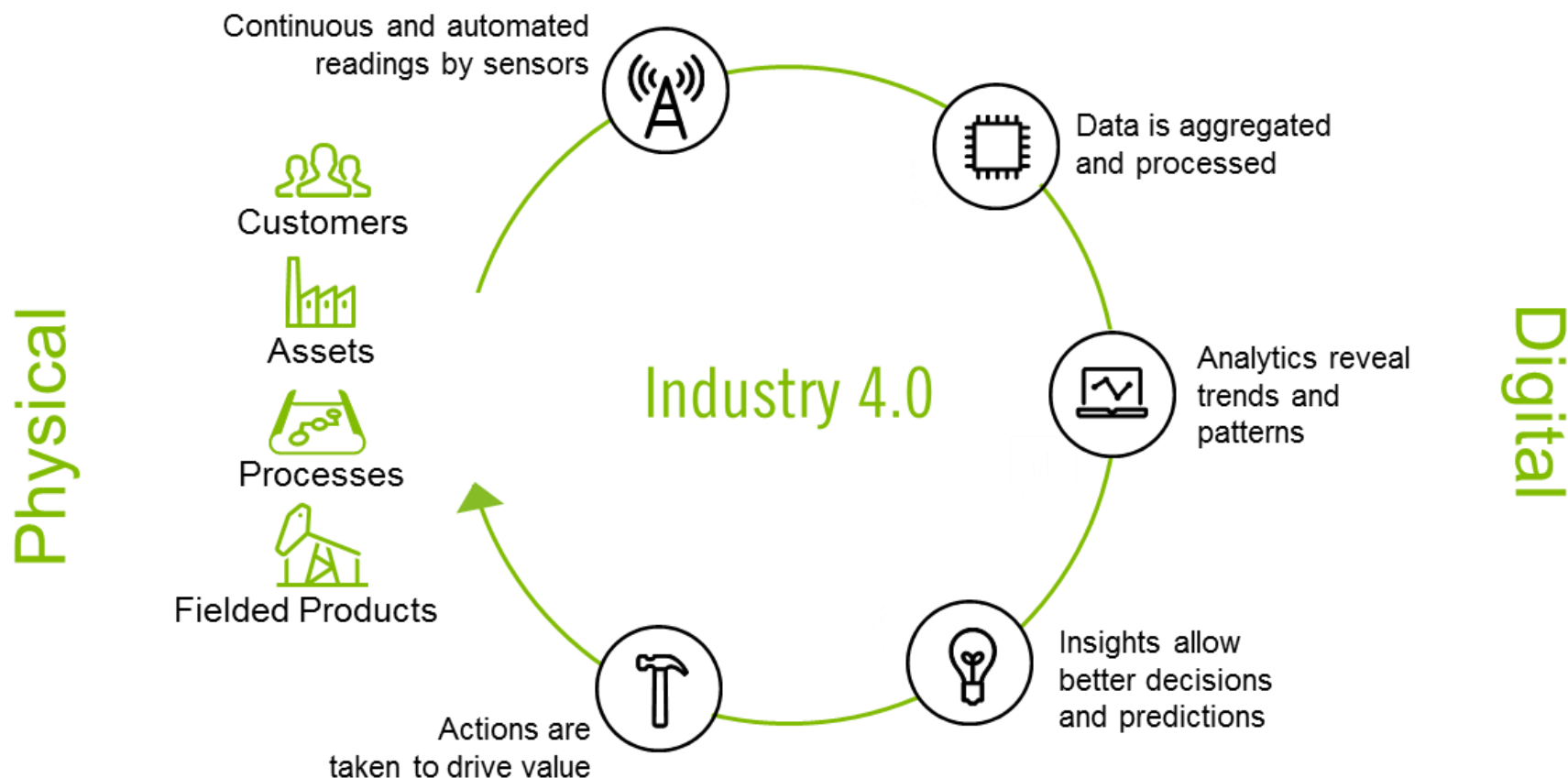
**NEW  
BUSINESS  
MODELS**

'Digital Experience'

# Technologies and trends enable new ways of working and of doing business



# Industry 4.0 is about connecting the physical and digital worlds to create a smarter business



A **digital enterprise** continuously redefines what it offers, how it delivers, and how it operates to drive **competitive differentiation**, maximize **profitability**, and minimize enterprise **risk**



### Adoption of Exponential Technologies

Embracing new technologies  
such as mobile, cognitive, or  
internet of things



### Digital Mindset

Incorporating a digital  
mindset into the DNA of  
the organization



### Continuous Feedback Loop

Processes in place to  
encourage experimentation  
and innovation

# DIGITAL TRANSFORMATION JOURNEY



# Voice of the Industry

Chemical players are at varying maturity stages of their digital transformation journey according to quantitative analysis



## Strategy & Innovation

- **Almost 40% of executives** want their company to be **digital trailblazers (or disrupters)** over the next 3 years
- The **adoption of open and semi-open platforms are underdeveloped** beside Innovation & ICT enablement
- However, **more than 50% of companies lack a digital strategy & transformation roadmap** creating a major challenge to overcome



## Agility & Transformation

- **Org agility (55%) and flexibility (39%) are the biggest barriers** to enable digital transformation
- **Current digital responsibilities are challenged** – significant shift expected from IT to the business with corporate guidance (CEO/COO)
- **Lack of change management components** designed to help executives embrace the digital agenda
- The **critical role of cyber security and strategic alliances have not yet been fully recognized** to make the most of digital



## Performance & Scalability

- **75% of companies** currently appear to be **focusing on digital** initiatives for **incremental, organic growth and margin improvement**
- **Short-term focus on sales activation & customer experience**, commercial & supply chain efficiency ; Mid-term focus new business development and asset intelligence
- **Predictive Analytics, Sensors and Controls** are the main technologies perceived for growth & operation (IoT trends)



## Image & Talent

- Digital initiatives are **primarily focused on the immediate economic value**
- Most executives **advocate digital engagement potential for customers but lack perspective across other stakeholder groups**
- **Proprietary digital channels** (Websites, Mobile apps) are preferred to engage customers over social platforms
- **Facebook and Twitter (and regional equivalents) are leading social media platforms** to engage stakeholders - B2B & B2C blurring boundaries

Note: ICT Information and communications technologies.

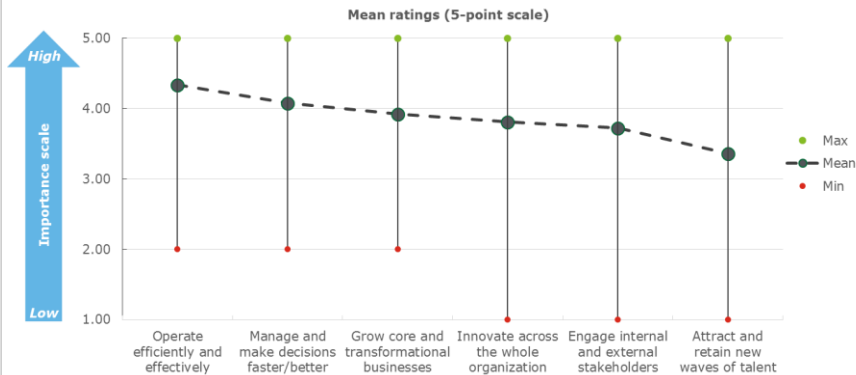
Source: Deloitte 2016 Global Digital Chemistry Survey: 102 responding executives from more than 50 chemical companies over the May-June period



# Digital opportunity and challenge

Most companies have launched a lot of digital experiments – but no evidence yet of true transformation to realize its full potential

## Spectrum of digital initiatives



Note 1: Weighted mean has been calculated for each of the options.  
 Note 2: Ratings range from '1' which means 'Not at all important' to '5' which means 'Extremely important'.

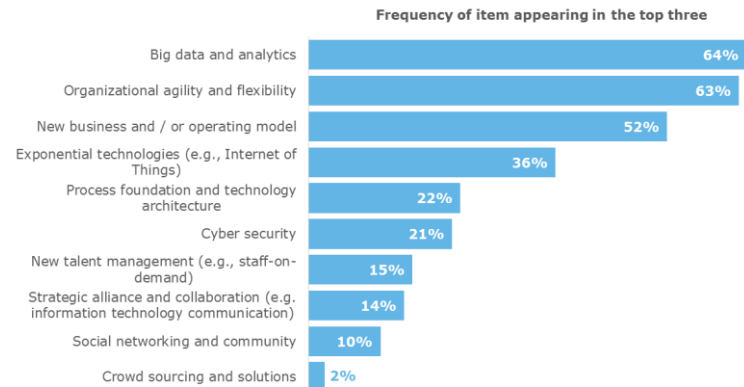
**"When thinking about the future health and development of your company, how important are digital initiatives in the following areas?"**

Most companies (75%) currently appear to be focusing on digital initiatives for incremental, organic growth and margin improvement – but already 40% consider new information-based business models

## Strategy & Innovation

Almost 40% of executives want their company to be digital trailblazers (or disrupters) by outperforming the industry average over the next 3 years

## Monetizing digital initiatives



Note: Percentage of respondents who ranked a capability as "1", "2" and "3" have been summed up together.

**"What are the top three (3) capabilities required to monetize digital initiatives? Please rank in order of importance."**

Only few capabilities identified e.g. the critical role of cyber security and strategic alliances have not yet been fully recognized to make the most of digital

## Agility & Transformation

Current digital responsibilities are challenged – significant shift expected from IT (enabler) to the business (driver) with corporate guidance (CEO/COO)

Source: Deloitte 2016 Global Digital Chemistry Survey: 102 responding executives from more than 50 chemical companies over the May-June period

# References on Deloitte University Press

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