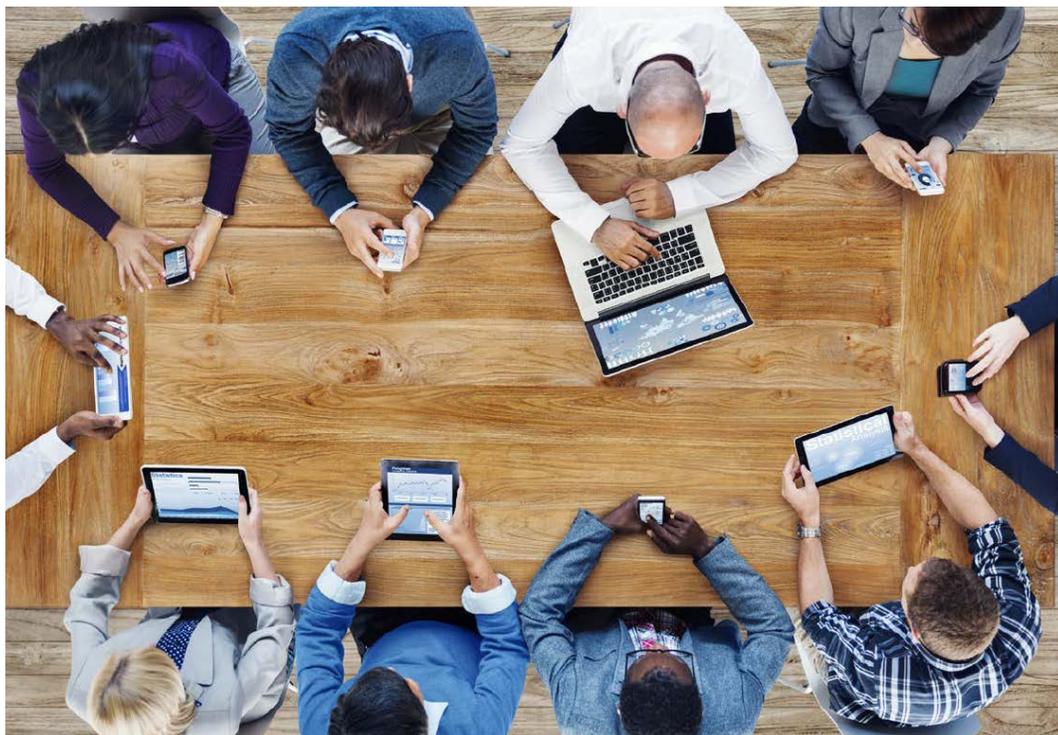


# *Data Science applications at PwC*

MIIA meetup  
16 August 2017

## ***A profound digital transformation is underway – Industry 4.0***



**2000+**  
*respondents in 26 countries*

**US\$493 bn**  
*in digital revenue gains p.a.*

**US\$421 bn**  
*p.a. in cost and efficiency gains*

**US\$907 bn**  
*in annual digital investments*

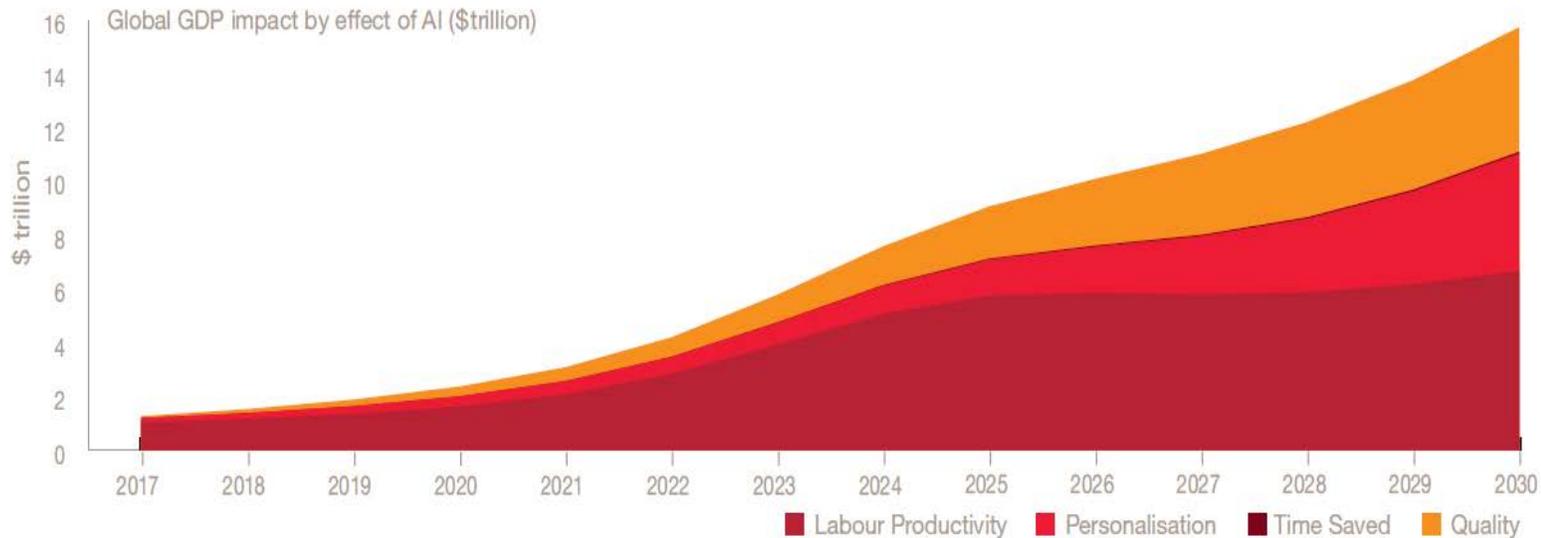
While Industry 3.0 focused on the automation of single machines and processes, Industry 4.0 focuses on the end-to-end digitisation of all physical assets and integration into digital ecosystems with value chain partners.

***The opportunity is enormous!***

As global data analytics and strategy thought leaders, we at PwC are helping our clients tackle today's problems and are preparing them for tomorrow's opportunities.

Source: PwC report, "Industry 4.0: Building the digital enterprise"

# Data science and AI hold the key to success in the world of Industry 4.0



Source: PwC report, "Sizing the prize: What's the real value of AI for your business and how can you capitalise?"

Data-led insight can add business value to every part of the value chain and every area of business decision-making.

According to PwC analysis, global GDP will be up to 14% higher in 2030 as a result of the accelerating development and take-up of AI.

**The economic impact of AI will be driven by:**

1. Productivity gains from businesses automating processes (including quality improvement, lead time improvement and greater utilisation of assets).
2. Productivity gains from businesses augmenting their existing labour force with AI technologies (less time preparing data, solving data quality/integrity issues, etc.).
3. Increased consumer demand resulting from the availability of personalised and/or higher-quality AI-enhanced products and services.

# *At PwC, we're using data science to build trust and solve important problems*

## **Automotive**



1. Autonomous fleets for ride sharing
2. Semi-autonomous features such as driver assist
3. Predictive, autonomous maintenance

## **Healthcare**



1. Patient onboarding, creation of patient records, scheduling hospital operations / appointments
2. Optimising supply chain
3. Assisted diagnosis and treatment management

## **Financial services**



1. Personalised financial planning
2. Fraud detection and anti-money laundering
3. Process automation

## **Retail**



1. Personalised design and production
2. Anticipating customer demand
3. Inventory and delivery management

# ***At PwC, we're using data science to build trust and solve important problems***

## ***Manufacturing***



1. Enhanced monitoring and auto-correction of manufacturing processes
2. Supply chain and production optimisation
3. On-demand production

## ***Telcos and entertainment***



1. Media archiving and search
2. Customised content creation
3. Personalised marketing and advertising

## ***Energy***



1. Smart metering – real-time energy usage information
2. More efficient grid operation and storage
3. Predictive infrastructure maintenance

## ***Transport and logistics***



1. Autonomous trucking and delivery
2. Traffic control and reduced congestion
3. Enhanced security

---

## ***AI touches almost every aspect of our lives – and it's just getting started***



***Picture your market in five years' time. How can you create the capabilities to compete?***

AI has the potential to fundamentally disrupt your market through the creation of innovative new services and entirely new business models.

With the eruption of AI, some of the market leaders in five years' time may be companies you've never heard of. In turn, some of today's biggest commercial names could be struggling to sustain relevance if their response has been too little or too late.

As a business leader, you may have to take a leap of faith.

The prize is being far more capable, in a far more relevant way, than your business could ever be without the infinite possibilities of AI.

PwC can help you claim this prize.

---

***For more information, please contact***

**Phillip Hattingh**  
Partner, D&A Lead  
+27 (11) 797 5513  
[phillip.hattingh@pwc.com](mailto:phillip.hattingh@pwc.com)  
[linkedin.com/in/phillip-hattingh-84b438b0](https://www.linkedin.com/in/phillip-hattingh-84b438b0)

---