

Establishing a Digital Lighthouse Facility

Learnings, case examples and implications for Pharma companies

June 2023

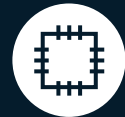


What is a Digital Lighthouse?



Impact achieved

Step-change in **innovation (operating model, product, service, business model)** considering level of advancement of industry and company



Integrated use cases

Multiple integrated Industry 4.0 use cases deployed at scale



Enablers

Best-practice on enablers such as a clear Industry 4.0¹ strategy, workforce engagement, capability-building and agile use case development



Technology platforms

Scalable Industry 4.0 technology platforms on which multiple technologies are deployed

Digital, Analytics & Automation has the potential to deliver breakthrough impact in life sciences operations

1 Productivity improvement



25-40% Increase in overall asset productivity



30-50% Increase in labor productivity

2 Quality excellence / improvement



30-50% Reduction in deviations



200%+ Increase in product robustness

3 Cost optimization



10-15% Reduction in conversion costs

4 Speed / Agility

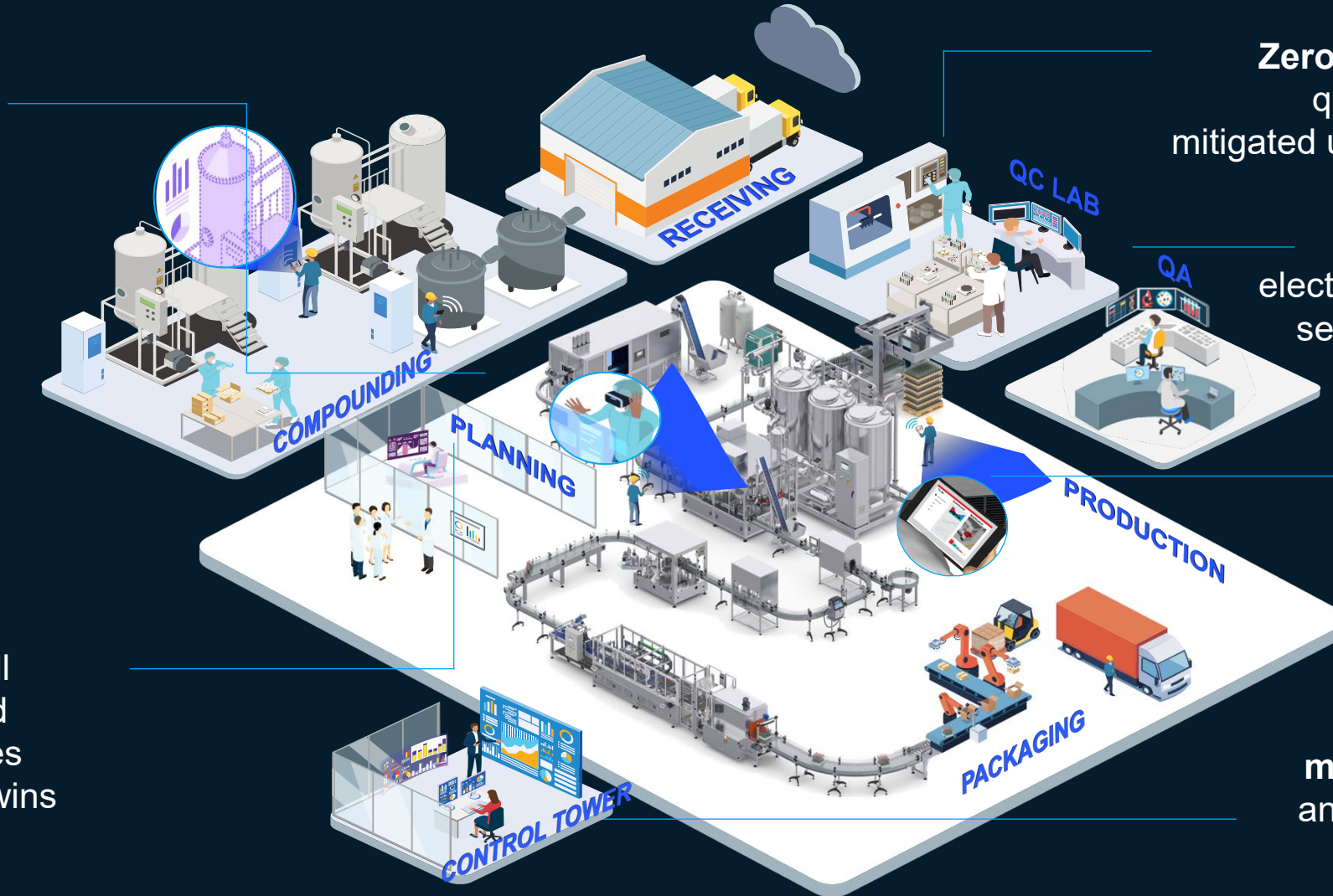


15-20% Reduction in lead times

It can be unlocked by adopting a 'Digital Production System' operating model

ILLUSTRATIVE / NOT EXHAUSTIVE

- 1 Shopfloor processes reimagined** using automation, digital guides, artificial intelligence augmented reality etc.
- 2 No-touch planning** of all production and quality activities using Digital twins



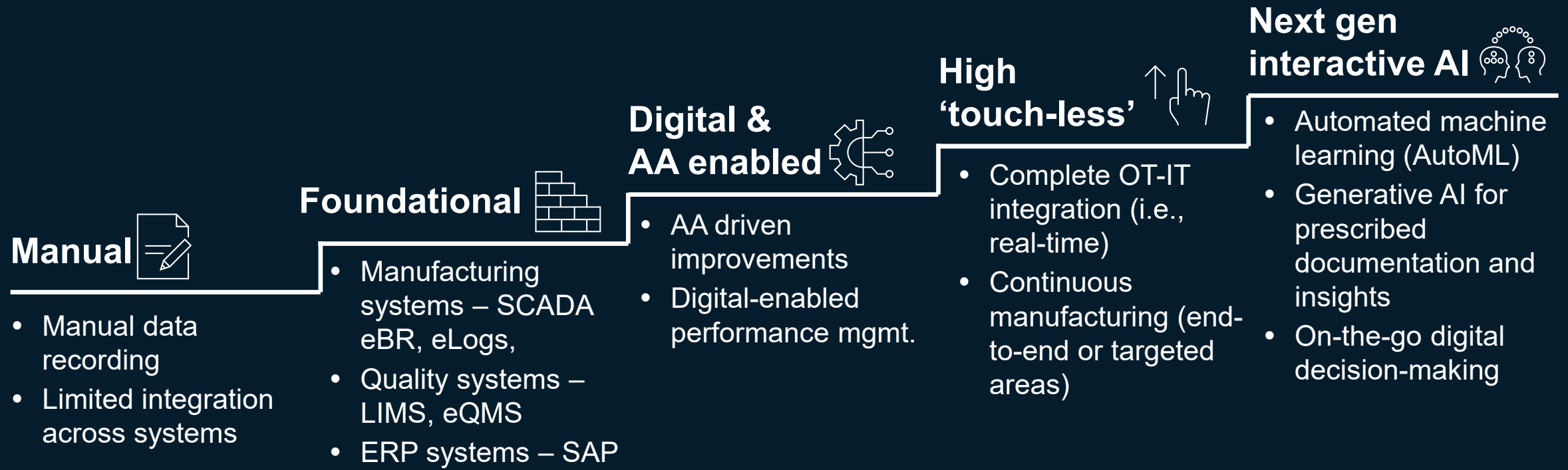
3 Zero deviations with product quality risks predicted and mitigated using advanced analytics

4 Paperless factory with electronic documentation and seamless information flows

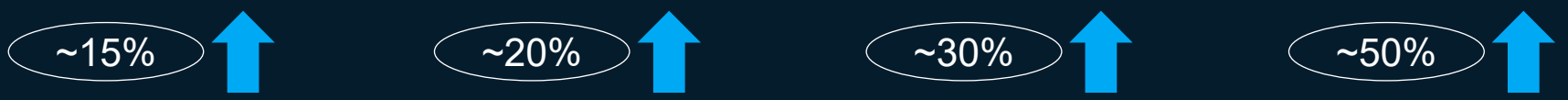
5 Data-driven proactive risk management across maintenance, sustainability and other areas

6 Digital performance management for real-time and remote monitoring and decision making

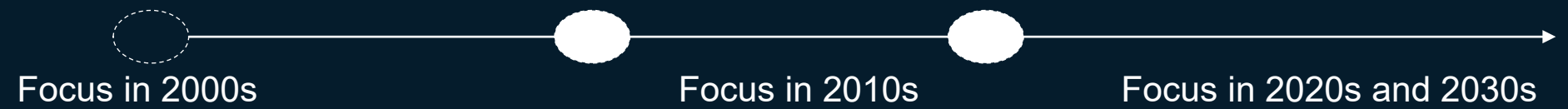
Globally, the industry have been moving through 5 stages of evolution in Digital adoption



Incremental Impact on productivity

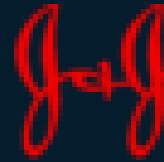


Industry evolution



Increasing number of life sciences companies have been accredited as digital lighthouses by World Economic Forum

- Global advanced 4IR lighthouses identified
- Global lighthouses from pharmaceuticals and medical devices



20-30% improvement in speed and agility



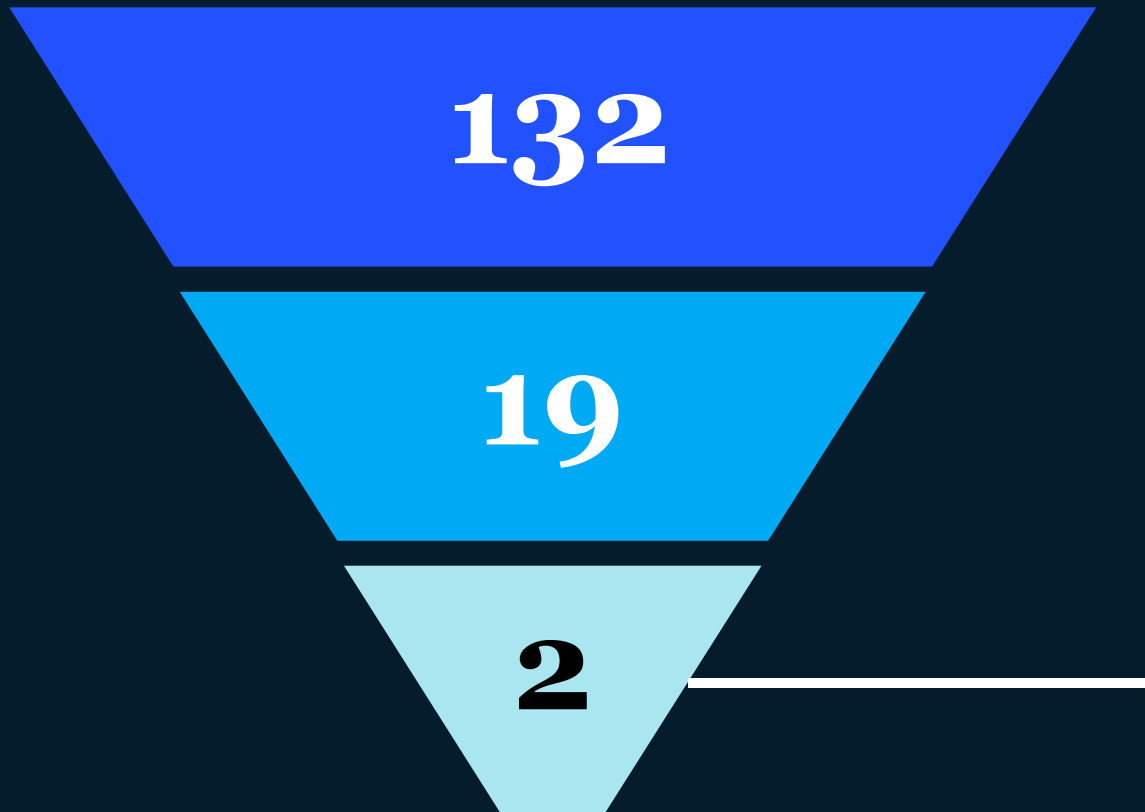
30-35% improvement in asset productivity



10-15% reduction in material costs

Two Indian Pharmaceutical leaders have most recently entered this distinguished league of digital leaders

- Global advanced 4IR lighthouses identified
- Indian lighthouses
- Global lighthouses from pharmaceuticals and medical devices



Dr.Reddy's 
Cipla

Welcome



**Sanjay Sharma, Global
Head Operations**



**Geena Malhotra, Global
Chief Technology Officer**

