

# SEIZING INDUSTRY 4.0 OPPORTUNITY THE ROLE OF MODERN MES SOFTWARE

## INDUSTRY 4.0 OFFERS OPPORTUNITY

**81%**  
of manufacturers expect Industry 4.0 will offer new opportunities for their enterprise



**17%**  
no

**2%**  
don't know

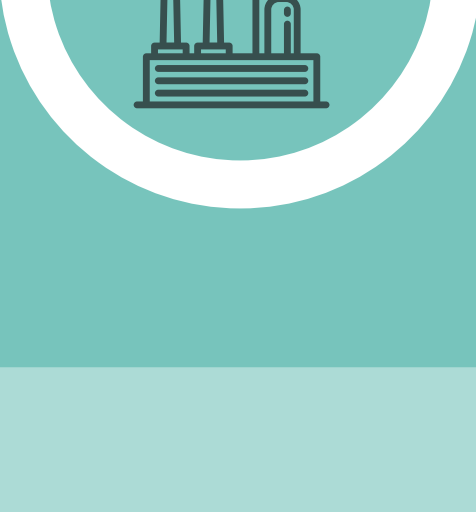
## SMART BUSINESS: HOW IT'S DONE



of the planned new capital investments for the next five years will be in industrial internet solutions

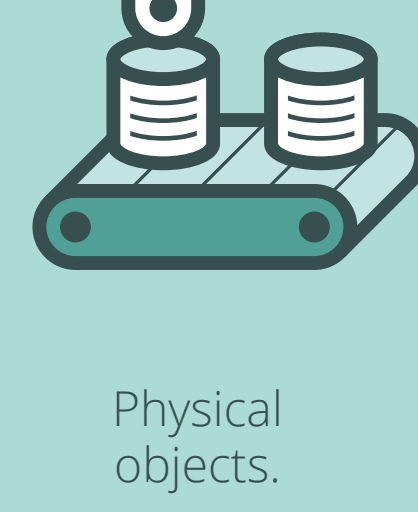
nowadays

5 years

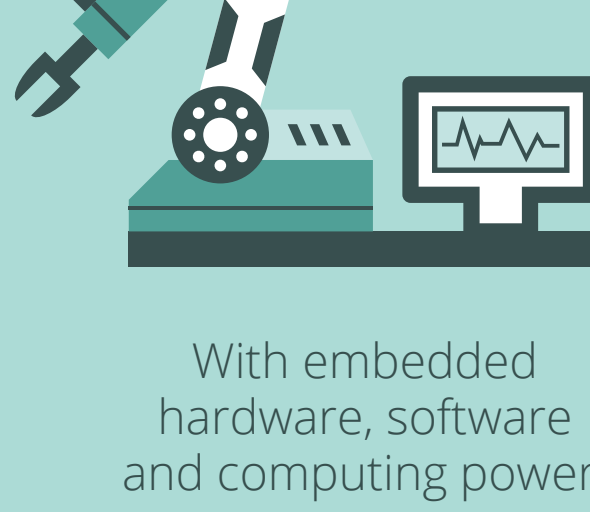


of companies will have implemented Industry 4.0 solutions in all important business divisions

## Cyber-Physical Systems: the Hallmark of Industry 4.0



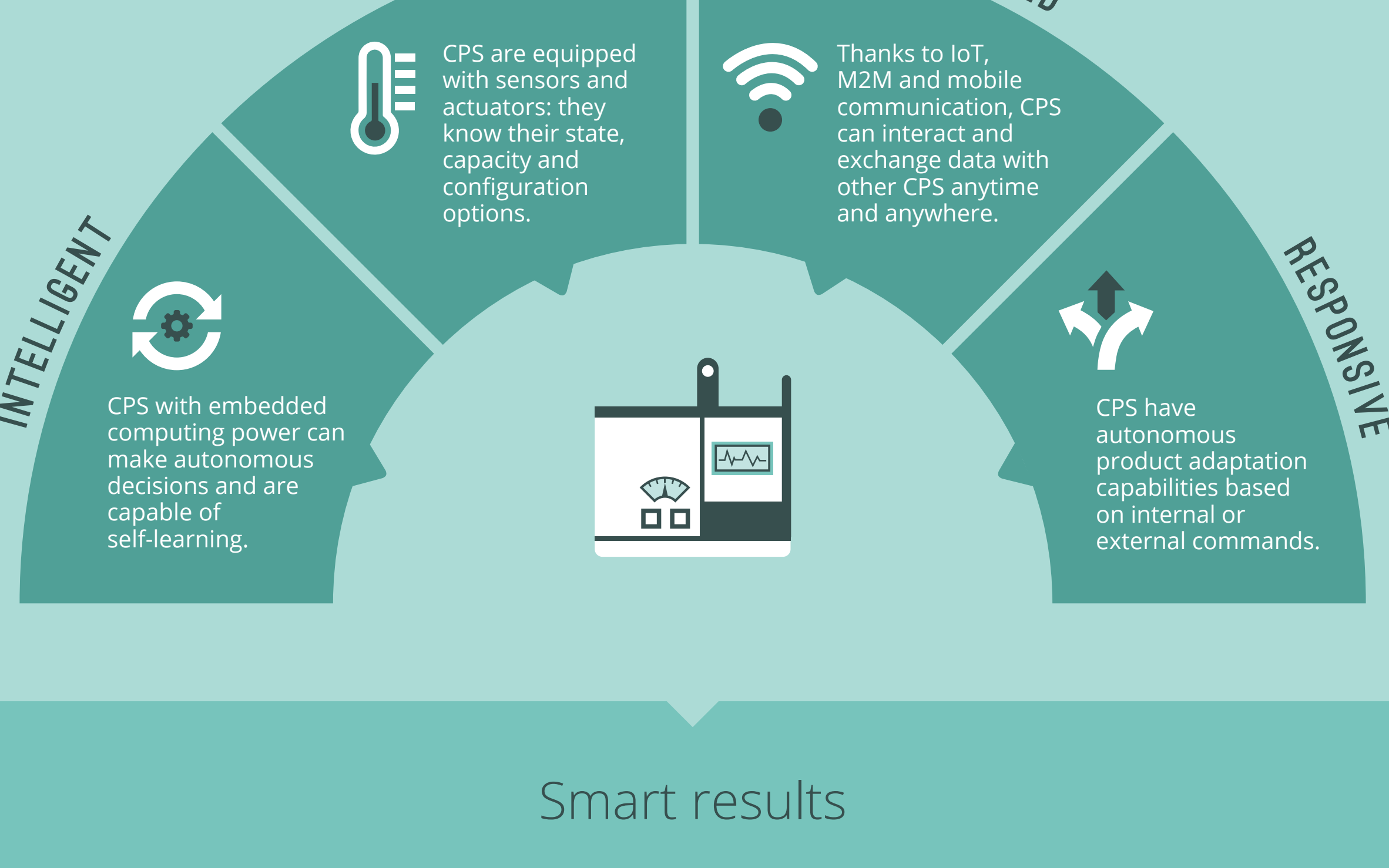
Physical objects.



With embedded hardware, software and computing power.



With self-management capabilities.



## Smart results



## CHALLENGE: PREPARATION

**48%**  
of manufacturers feel prepared for Industry 4.0



**52%**  
of manufacturers do not feel prepared for Industry 4.0

Industry 4.0 requires relatively low level of equipment replacement compared with other industrial revolutions



100%

Completely new tools



~10/20%

Tooling equipment could be kept, conveyor belt required only



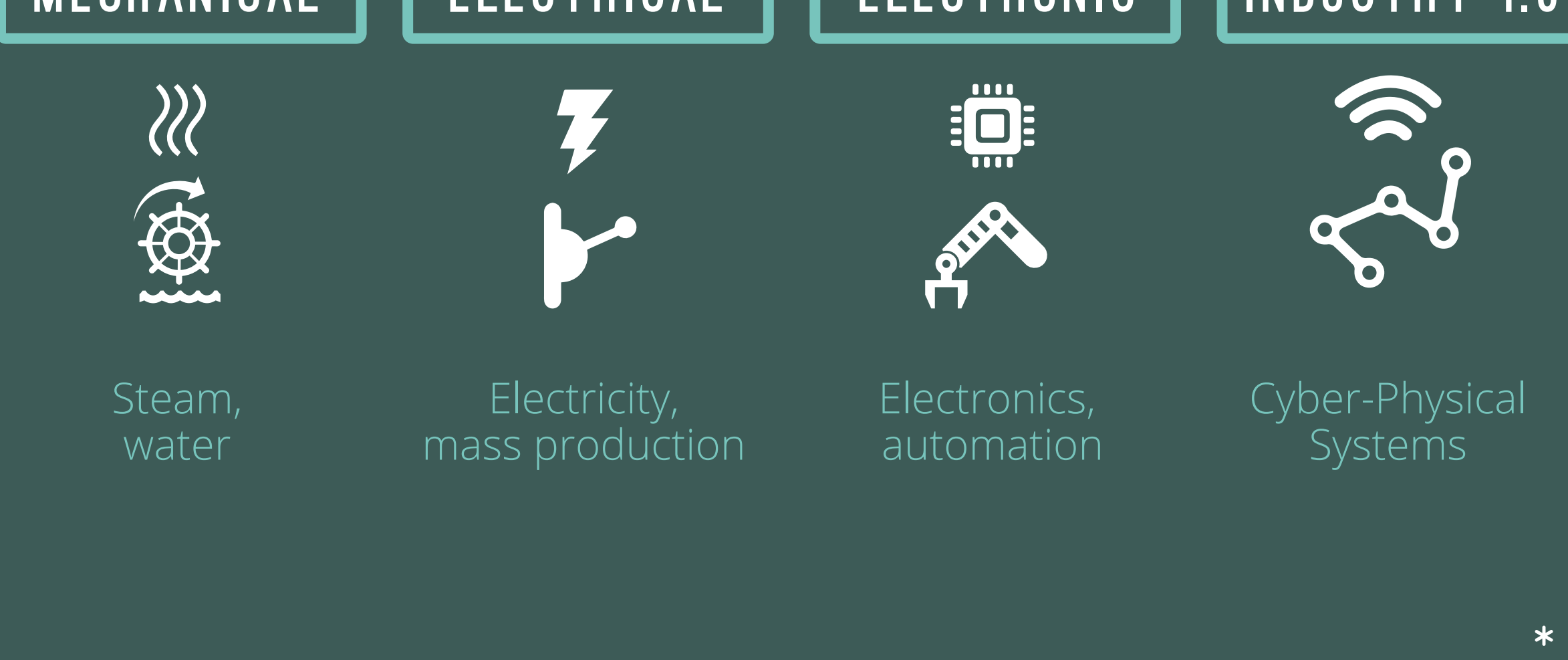
~80/90%

Tooling equipment replaced by machines



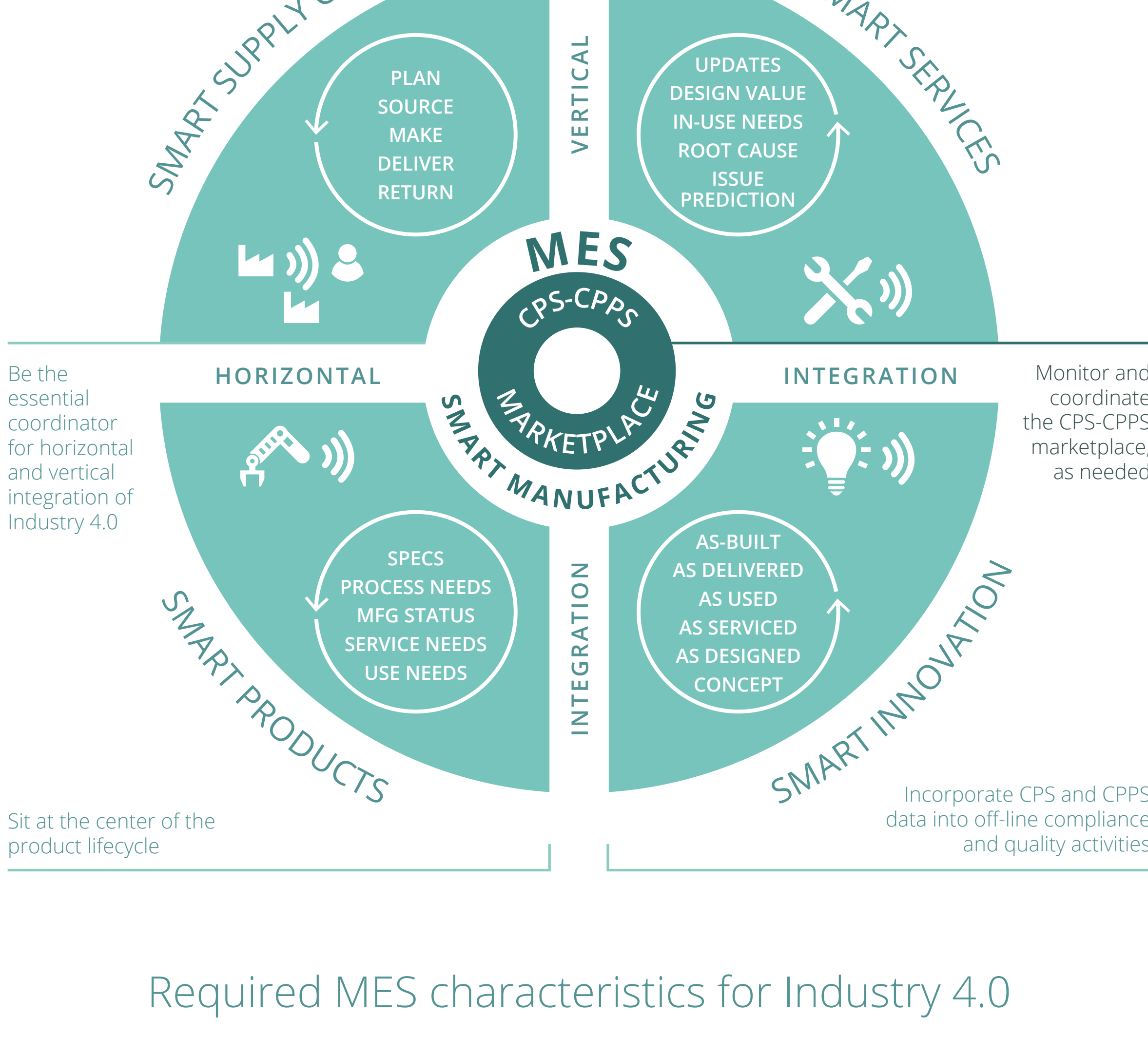
~40/50%

Upgrading existing equipment, adding sensors and improving connectivity

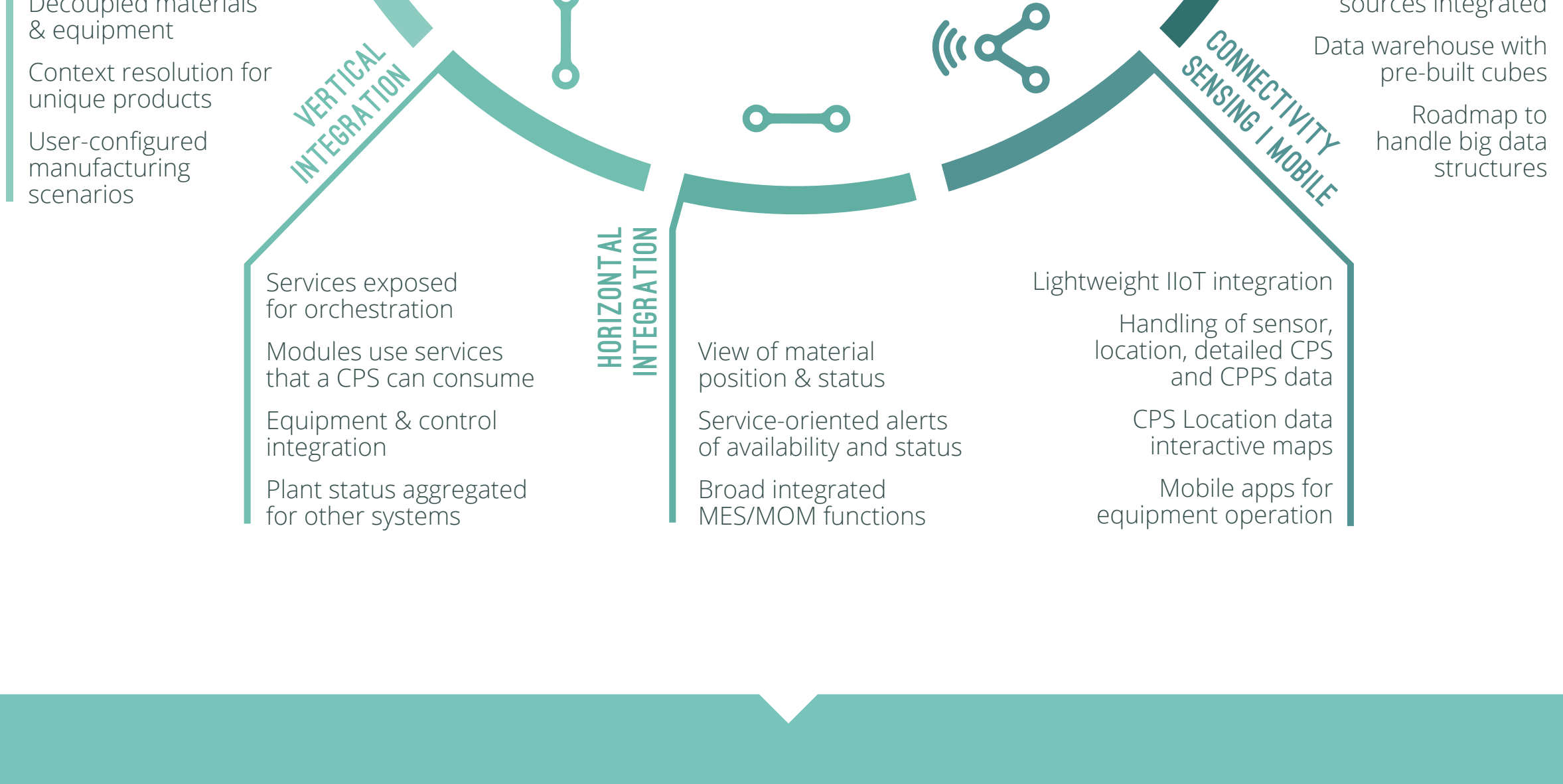


## MES AS A CENTRAL ENABLER

The primary functions of MES are a critical foundation around which manufacturers can build the industry 4.0.



## Required MES characteristics for Industry 4.0



## THE BUSINESS OPPORTUNITY BECKONS

Experts expect Industry 4.0 to increase revenues by 23% and productivity by 26%



\* Germany Trade & Invest Expert Survey on Industry 4.0, September 2015  
 \*\* McKinsey & Company Industry 4.0: How to navigate digitization of the manufacturing sector report 2016  
 \*\*\* Statistisches Bundesamt; Deutsche Bundesbank; Prognos; Thomas Nipperdey; McKinsey