## Deloitte.



### **2019 Deloitte and MAPI Smart Factory Study**

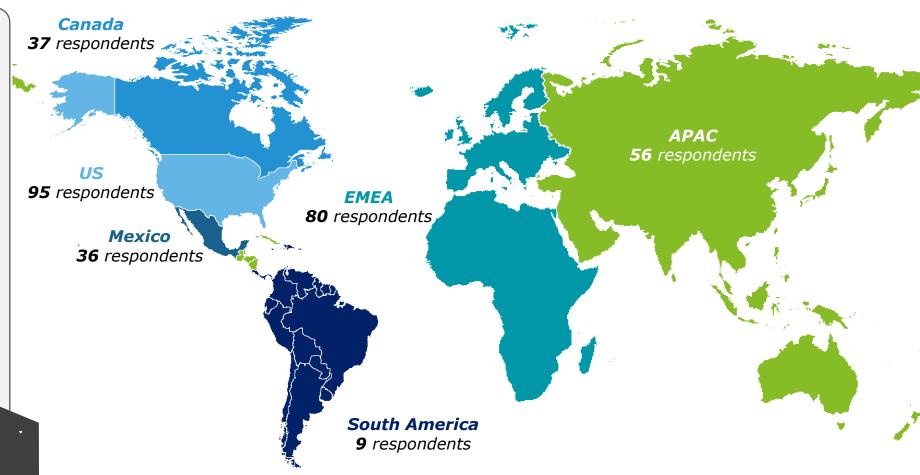
Regional Statistics
October, 2019

#### Overall survey methodology and regional distribution\*

#### **Study Components**

- Executive survey with 600+ total respondents
- Executive interviews
   with more than a dozen
   manufacturers
- Focus groups with finance and operations leaders
- Economic forecast and modeling





\*Manufacturers who have a production facility or factory in US were the target group for the study. For the regional distribution, we have tagged the respondent to the region with the maximum factories

# Navigating this presentation What do the numbers represent?

#### **Current smart factory transformation status**

**Current status of manufacturers' surveyed in terms of smart factory transformation** 



Share of factories in the region that have a smart production line

#### **Current and near term approaches to smart factory**



Brownfield vs Greenfield - Type of smart factory initiatives the manufacturers' surveyed are implementing or planning during the next 24 months

## Share of factory budget being applied toward smart factory initiative

Percent of the current fiscal year's overall factory budget being applied toward smart factory initiatives

#### Benefits observed from smart factory initiatives during last 3 years

Average 3-year gains from smart factory initiatives for the manufacturers' surveyed during the past 3 years on the three key metrics

### Top 3 smart factory implementation challenges

Challenges that manufacturers' surveyed are facing in launch and/or execution of their smart factory initiatives

#### **Smart Factory Cohorts**

Classification of manufacturers' surveyed into three groups – Trailblazers, Explorers, and Followers

#### Top 3 Use cases in action

Top 3 smart factory use cases currently in use among the manufacturers' surveyed. They were presented with a list of twelve use cases

## Top 5 advanced technologies in use

Top 5 advanced manufacturing technologies currently in use among the manufacturers' surveyed to support their smart factory initiatives. They were presented with a list of fifteen technologies

#### Smart Factory Region Profile - EMEA

#### **Current smart factory transformation status**

**28% 71% 1%** 

**Planning to start** 

**Currently implementing** 

Completed transformation of at least 1 facility



25% of factories in the region have a smart production line

#### **Current and near term approaches to smart factory**

Retrofitting existing factories/plants 64%

Building/planning new factories
4%

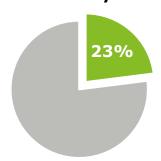
A combination of retrofitting and new

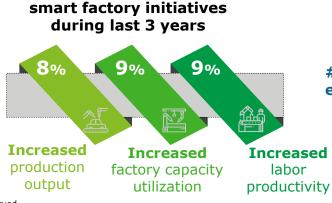
28%

\*remaining 1% indicated Don't know

**Benefits observed from** 

Share of factory budget being applied toward smart factory initiative





Top 3 smart factory implementation challenges

**#1** Lack of experience

**#2 Insufficient** funding

**#3 Lack of IT** infrastructure

Source: Deloitte analysis of the 2019 Deloitte and MAPI Smart Factory Study data, selected responses (80) with major presence in EMEA region

#### **EMEA Smart Factory Cohorts**



Trailblazers 5%



Explorers 71%



Followers 23%

#### Top 3 Use cases in action



Quality sensing and detecting



Plant consumption and energy management



Advanced manufacturing, 3D printing

#### Top 5 advanced technologies in use

- Data analytics
- Robotics
- Factory automation hardware
- Cloud networking
- Vision systems



#### Smart Factory Region Profile - EMEA

#### **Current smart factory transformation status**

**27% 66% 7%** 

**Planning to start** 

**Currently implementing** 

Completed transformation of at least 1 facility



28% of factories in the region have a smart production line

#### **Current and near term approaches to smart factory**

R.

Retrofitting existing factories/plants

**52%** 

Building/planning new factories

11%

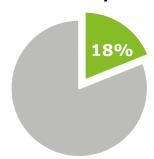
**Benefits observed from** 

A combination of retrofitting and new

30%

\*remaining 1% indicated Don't know

Share of factory budget being applied toward smart factory initiative



smart factory initiatives during last 3 years

8% 9% 9% full last 3 years

Increased production output utilization productivity

Top 3 smart factory implementation challenges

**#1 Insufficient** funding

#2 Lack of IT infrastructure

#3 Difficulty in modifying business processes

**PSSES**MAPI Smart Factory

Source: Deloitte analysis of the 2019 Deloitte and MAPI Smart Factory Study data, selected responses (80) with major presence in EMEA region

#### **EMEA Smart Factory Cohorts**



Trailblazers 6%



Explorers **61%** 



Followers 33%

#### Top 3 Use cases in action



Quality sensing and detecting



Plant consumption and energy management



Smart conveyance

#### Top 5 advanced technologies in use

- Factory automation hardware
- Data analytics
- Robotics
- Active sensors
- Cloud networking

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