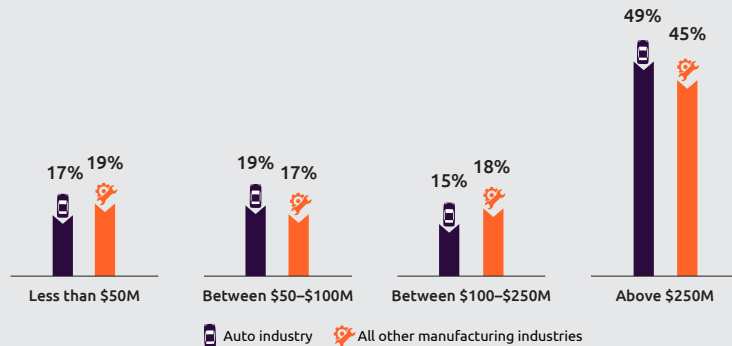


Automotive—the industry most bullish on smart factories

The automotive industry leads all other industries in its share of firms in the highest investment category



Source: Capgemini Digital Transformation Institute Smart Factory Survey 2017–18.

Driver's seat

When it comes to smart factories, the automotive sector is in a class of its own. The sector is making larger investments and setting higher targets for its digital manufacturing operations than any other sector. Smart factories could add up to \$160 billion annually in the global auto industry in productivity gains by 2023, according to a recent study, "Automotive Smart Factories: Putting Auto Manufacturers in the Digital Industrial Revolution Driving Seat." But that's only if digital technologies are introduced across the entire production process. By the end of 2022, automotive manufacturers expect that 24 per cent of their plants will be smart factories, and 49 per cent of automakers will have already invested more than \$250 million in smart factories. The study draws on more than 320 automotive manufacturers, and, to date, reveals that few automotive manufacturers have translated their intentions into real progress – 42 per cent of smart-factory initiatives are struggling and the digital maturity of their manufacturing operations is below par. Those who are making the best progress invest 2.5 times more than the companies who are struggling.

Source: Capgemini's Digital Transformation Institute

CALIBRATION AND REPAIR SERVICES

The calibration and repair services market are expected to reach \$3.98 billion by 2022. That's according to Frost & Sullivan's recent report, "Growth Opportunities in the Calibration and Repair Services Market, Forecast to 2022." The report forecasts that the North American calibration services market is expected to grow steadily in the next seven years, driven by the greater complexity of instruments and stricter regulations.

Where should calibration and repair services providers place their efforts? Analysts point to four areas:

Online asset management tools. Offer comprehensive tools to share the real-time status of the equipment, shipping information, electronic storage of documents and equipment recalibration notice;

Global reach. Improve global presence to harness emerging countries' need for strong technological support;

Automation. Automate calibration procedures, as 10 - 15 per cent of calibration procedures are expected to be automated in the coming years to reduce equipment downtime and improve service quality; and

Market share. Expand offerings to maintain market share due to consolidation of calibration laboratories.

For more information, visit frost.ly/2fi

Mr. O, The Practical Problem Solver

Who owns your data?

Consider who owns the data that is being generated by your assets. Remember: If you are not paying for the sensors and the data created by them, you are the product.

Data is being called the world's most valuable resource, replacing oil. The race for data has spun up the revolution, spawning the era of Everything-as-a-Service (XaaS) whereby hardware and software become a medium to create data – lots of data.

When we look outside our industry, we see this everywhere in our daily lives. Take for example, Google Photos; we can download the Google Photos App and store photos for free in their cloud. Google Photos now has 500 million monthly active users adding 1.2 billion photos per day. No one is quite sure what Google plans to do with all of these pictures in the long run, and it's possible the search engine hasn't even figured that out either. But in a landscape fast becoming dominated by artificial intelligence, data – in this case your photos – has become its own reward.

When we look at the trillions of data points we gather from our assets, the same scenario exists in our plants. We are seeing many data companies starting to offer hardware as a medium to collect data from our assets with the intent of building their own intellectual property. This is not necessarily a bad thing, especially when we consider how many similar assets are out there, and we can learn from each one.

But as with Google Photos, there are concerns: What if I want to download all of my information to use it for other purposes? What if I want to switch service providers? If I cancel the service, do I get the data at the end? These are questions to consider when entering the world of XaaS and the race to collect data.

– Blair Fraser, Lakeside Process Controls

