Myths that can stall adoption

The benefits of legacy machines

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The easiest first step to adoption

Made Smarter implementation support

Your guide to legacy manufacturing machinery:
Enhancing your existing equipment with emerging technologies

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Ever wish your legacy equipment was more connected? Unsure how to improve performance without having to invest in new machinery? There are some easy steps you can take to improve both function and efficiency without the need to dedicate as many resources.

This chiefly involves modifying your older equipment with digital technologies. Here, we debunk the most widespread myths around technology adoption, and guide you through the benefits, options and steps for adapting legacy machinery successfully.

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Technology myths

The myths around legacy machinery include:

1. You need an entire manufacturing execution system (MES) or enterprise resource planning (ERP) system for process control

This isn't true at all. In fact, all you may need is suitable sensors. These can act as a kind of retroactive sticking plaster until you're ready for a complete solution.

2. You have to spend a fortune to access data

Actually, this might only total a few hundred pounds. A 'primitive' legacy machine can be adapted using sensors to provide you with the required data.

3. You should immerse yourself into data in one go

Would you buy a sofa without sitting on it? When adding sensors to your machines, you want to identify the value of data before steamrolling on to the next step – so you really don't need to do it all at once.

4. You need highly skilled digital natives on your team

You can teach yourself as you go through incremental implementation. So much of the learning is intuitive, just like when you get a new phone.

Benefits of legacy machines

If you use legacy machines, you can add sensors and other technology – effectively reaping the rewards of both existing and emerging tools without completely overhauling your operations. You'll also be able to collect extremely valuable data and enhance your business insights.

It's quite a simple process, and it can be carried out at a relatively low cost too, meaning you don't have to put unnecessary strain on your budgets. This makes it the perfect first step if you're just starting on your digital transformation journey.

Plus, adapting legacy machines is more flexible than a complete data acquisition solution like an MES. They can work as the basis for a digitalised 'ecosystem', enabling you to customise your reporting by integrating with a variety of technology tools and suppliers.

Legacy machine scenarios

Let's explore a few scenarios to demonstrate the difference between staying with primitive legacy machines and introducing smart technology:

Scenario 1: Using primitive legacy machines

You'll have to manually tally machine output, and proactively plan maintenance to limit the chance of any breakdowns. Unseen aspects (like spindle speed, temperature and power usage) will remain unseen; you won't have any information about them, so can't easily boost efficiency or productivity. You'll continue to depend on staff to fill in sheets or write on boards in order to pass information on to others, leaving yourself open to the human error associated with this.

Scenario 2: Using intelligent machines

You'll have access to all the data you need on a nearby screen. However, it won't be connected to the cloud or a server. If you need to know what's happening, you'll have to go and have a look. This will eat into valuable time that you could be spending on other, higher value activities.

Scenario 3: Using a mixture of primitive and intelligent machines

You won't just have a single problem to deal with – instead, there will likely be a combination of problems that will all need distinct solutions. *Adapting* your existing machinery with aspects of smart technology can limit these challenges.

Options for legacy machinery

There are many low-cost choices available for you to adapt your legacy machinery:

- **Smart sensors** – these will allow you to quickly measure both the seen and unseen

- **Retrofit kits** – these also work quickly, bolting sensors and connections on to machinery

- **Edge gateways** – through these, you can integrate current machine data and effectively use what you already have but remotely

- **Video cameras** – you'll be able to improve data analytics, read gauges, and monitor both safety and machines remotely through visuals or temperature

- **Plug-in visual technology** – you can transform analogue visuals into digital data, removing the need for technical knowledge

Steps to adapt your legacy machinery

Ready to take your first steps into digital? Consider these two points first:

1. Ask yourself: what information do you want from the data?

Otherwise, you could end up falling into the 'washing machine trap' – where you have 29 programmes, but only ever use two. Start small. You can always add more as you go.

2. Purchase the sensors that will provide the required data and can be successfully connected to your nominated devices

You'll need to ensure this data is secure too. Think about how you want the process to go as well – will you adapt one machine at a time, or will you opt for them all to be inter-connected and feeding data into your management information system?

Implementation support from Made Smarter

Getting started on your digital adoption journey is often easier said than done. There's a lot to consider, which is why it pays to seek some outside help. Made Smarter can provide such support in the form of:

- **Digital transformation strategy workshops – these are independently facilitated to help determine the data you need**

- **Advice from an industrial digital technology specialist – they can help you pinpoint the right solutions for your business**

- **Technology supplier recommendations – we have a directory of <u>digital technology providers</u> who could assist you with your project.**

What's more, we can help with your investment in the technology too, offering up to 50% match-funding.

To find out more about the support available to you, <u>speak to our team today</u>.

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