

Make sure your cloud has a silver lining

At the MACH exhibition *The Manufacturer* spoke with Phil Lewis, SVP of Solution Consulting for International at Infor to discuss cloud adoption within UK manufacturing and how you can ensure your cloud project is successful.



What are the trends for cloud adoption within UK manufacturing?

We are seeing the desire to move to the cloud as a real priority for UK manufacturers. That wasn't the

case three years ago, so in recent times, there's been a push towards adoption. After 30 years of living off a diet of heavily modified, generic ERP systems and applications, manufacturers have realised that there are other options. And moving to a world with cloud services built exactly for your organisation is very attractive.

We have 70,000 customers around the world, so we see things happening at different rates, country by country, region by region. The UK is in the middle of the pack; it's not a leader, but it's certainly not a laggard.

Start with your business, your people and understand what your future vision is. The technology should follow the vision. It shouldn't be the other way around.



When you look at any new, emerging technology, it's never the UK that goes first. It will usually be others who adopt new technologies to see if they work; almost acting as pioneers or experimenters. Whereas in the UK, we tend to take a step back and see what others do before making a decision as to whether it's relevant or not.

But what we are seeing now, from a cloud and digital perspective, is an acceleration within UK manufacturing. We receive RFIs and RFPs from UK manufacturing companies, and one of the primary requirements will be that the system must run in the cloud. That's a fairly recent transition, but it's consistent now across the industry.

Who are the leaders in cloud adoption?

It varies by industry. For example you will see the automotive sector often adopt new manufacturing practices and technologies to become more efficient, increase productivity and to become more environmentally and sustainably compliant.

Everybody lags behind automotive, which tends to set the drumbeat for best practice in manufacturing. So, we see differences on a regional and geographical basis, but also from an industry-to-industry perspective. However, even the most basic manufacturing companies now feel they should be doing something digital.

The general feeling among manufacturers is that it's the right thing to do, but they just don't know what that looks like. When they open up the digital catalogue, there's a plethora of technologies around AI, machine learning, IoT, big data and mobility; it's a minefield. And when you're a 200 employee British manufacturing company, how do you know where to start?

The advice that we give is don't start with the technology, start with your business, your people and understand what your future vision is. What's your company's identity today? And what do you think it needs to be tomorrow? That then becomes the future vision for your organisation and where you start to figure out the technology you need to deliver on that. The technology should follow the vision, not the other way around.

What are the main barriers to entry?

The big ones are knowledge, complexity and a perceived lack of support. There is a myriad of digital capabilities to choose from so it's very difficult to cut through that. From Infor's perspective, we understand our customers and the technologies that are relevant in today's world. All of our cloud services run on a common technology platform that enables us to combine our applications into a single solution and deliver a single user experience across all of those components that we deliver to customers; we called that an industry specific cloud suite.

However, it's also a platform that has integration, user experience, big data and a data fabric platform. It has built in artificial intelligence, robotic process automation and machine learning. So Infor customers have the benefit of knowing that those elements are already connected to each other and to the enterprise applications that they use.

When you look at the overall Infor proposition, we are dealing with the traditional business process management applications that control your business and what you do today. But then there's the digital intelligence platform that will support you in terms of how you optimise and transform your business going forward.

We're never going to leave customers to figure that out themselves. We have specialist teams working on the technical capabilities of the platform, but also people that can inspire customers from a design thinking and ideation perspective; we run workshops etc to help people identify the current and

future DNA of their organisation and where elements of digital might fit into that.

How important is cyber security within UK manufacturing?

It's massive, particularly given the geopolitical situation we find ourselves in at the moment, but also, to a certain degree, the fallout of Brexit. There are all sorts of conversations now around data residency and security. It's something that people take incredibly seriously.

The benefit for Infor is that we are a true multi-tenancy cloud organisation. We don't run that ourselves; we're an applications rather than a data centre or cloud company. We partner with Amazon Web Services (AWS), so all of our services, cloud suites and technology framework runs in AWS.

80% of the data that is needed to truly understand what's happening in the business, sits outside of its four walls. Only when you understand your data can you begin to exploit it.

That gives customers the confidence that they're in safe hands when it comes to security. We run within AWS data centres all around the world and their approach to security is pretty phenomenal. Even some of the world's largest aerospace and defence organisations, that were traditionally resistant to cloud, are realising they could never get the level of security that AWS offers and are now more willing to explore cloud as an opportunity. Even three years ago, it was a no-go zone.

We have partnered with AWS since 2014 and they're the only cloud company that we use. And one of those factors in partnering with AWS was that we don't think there is another cloud provider that can get close to, not just the capacity and resources that AWS have, but their robustness when it comes to security, and making sure that their customers are absolutely watertight. A great example of this is that the CIA runs on AWS.

What are 'the 4 pillars of the smart factory'?

I always tell customers to not even think about doing anything until they've got control of their data. The first step of any digital project (which should actually be considered as a digital project in its own right), is how to harness data; understand it, access it, combine it, curate it and exploit it.

Many typical industrial manufacturing companies will have supply chains both ways; to customers and consumers, and also to fairly extensive, complex inbound supply chains. So, when you look at the piece in the middle of it all, the manufacturing company, 80% of the data that is needed to truly understand what's happening in the business, sits outside of its four walls. Understanding how to pull that all together and get visibility of that extended network is a really good exercise. Only when you understand your data can you begin to exploit it.

Exploiting your data may involve applying machine learning or modern analytics around prescriptive working and predictive working, but you can only do that when you know your data is good and

hygienic, it makes sense and is connected.

Step two is relevance of the cloud. When it comes to your systems and your applications, it's important that they are kept constantly up to date, that you're always on the latest version and that they are accessible, no matter where you are and how you want to use them. It's very difficult to do that nowadays with an on-premises deployment.

We've got to a point now where the cloud is no longer optional but is more or less mandatory in terms of deploying your application landscape going forward. Also, be careful when you are looking into that world, because when you speak to any software vendor, they'll all tell you that they're a cloud company.

Without understanding the impact of the project upfront, many projects fail. The stats estimate somewhere between 60-80% of all digital projects will fail, which is staggering.

However, you need to drill down further and ask how they are cloud? From our point of view at Infor, we've been on this journey for the last ten years, and we realised immediately that we needed to multi-tenant our applications to get the true value out of the cloud, and to pass that economic value on to our customers. We've multi-tenanted everything that we do and have gone all in on AWS, to the point where we actually use 130 of their web services to make our applications work.

That's a sign of being truly in the cloud. Whereas others have taken a 20 year old legacy application, for example, loaded it into somebody else's data centre (so it's essentially being hosted somewhere else), and they're calling it cloud.

When someone claims that their application can run anywhere, it probably means it's not a cloud application. What they are really saying is that their application can be hosted anywhere. However, they're doing clever things with pricing through subscription models etc, so people feel like it's cloud, but honestly, it's not.

The third pillar is understanding what you should use and making sure that you have a shortened time to value with a particular technology. So, do shop from the digital superstore, where the shelves are stacked full of AI, big data and all of the buzzwords that we hear? Or, do you take the platform approach where you have something that may not be best-in-class, but it's good enough for what you need as a manufacturing company; and it's connected, ready to go and is part of your solution.

Within this conversation between best-in-class digital capabilities or an all-encompassing digital platform, more and more people are going down the platform route because it covers more bases – so understanding the power of the platform versus niche digital capabilities is key.

The final piece is around people. Technology is one thing but being ready as an organisation is vital. If you don't have the company culture and people who are okay with change, agility and flexibility, and have the ability to react to certain situations, digital projects can fail as quickly as they start.

It is important to involve people and combine that top-down vision of where you want the company to go with the bottom-up ideation from your people; that combination works really well. The people who really understand your business are your workforce, the people who are involved every day. They see what is done well/badly and they can see where there's room for improvement. They can identify where there are gains to be had from productivity and efficiency, and those are the pinpoint areas where technology can really play a part.

Tapping into your number one asset, which is your top to bottom, left to right workforce, is a really good place to begin any digital project. It's not about starting with the technology. It's about starting with the people. But they need to be given the freedom to contribute. There's a lot of companies that don't give their workforce the freedom to step forward with an idea or a suggestion about how to do things differently; it all happens in the boardroom, and that's dangerous.

In summary, get control of your data; understand the importance of cloud; understand the power of the platform and the benefits that can bring; and make it all encompassing from a human perspective and get your people involved.

How are manufactures making sure they have the skills to make their digital transformation projects successful?

Some people look to do it themselves, while others partner. We tend to see three distinct teams that need to work together to make a digital project work. Firstly, there's the human team which is based around establishing the vision. They tend to be people who really understand the business rather than the technology.

Secondly, there is the build team. These are the people who are more technically inclined, developers, QA people, data analysts, etc. Bigger companies may have those skills in-house, smaller companies may not, which is why they may partner with a company like Infor to help with the build. The final team is the people focused on value creation. How does the project create value for the manufacturing organisation, employees or customers and consumers?

How do you avoid pilot purgatory?

Pilot purgatory still ultimately comes down to an incomplete or lack of vision in the first place. Without understanding the impact of the project upfront – how is it going to create value, what is the time to value, what is the TCO and the ROI – many projects fail.

The stats estimate somewhere between 60-80% of all digital projects will fail, which is staggering. Often the reasons for this are a lack of vision and understanding around why you're doing the project in the first place, and not having the right people and skills involved at the right times.

When you have a very clear, well thought out and understood digital strategy that defines how you

are going to do things, and it becomes a repeatable model, it gives you the building blocks that you need to be successful in your projects. Build that vision statement and then figure out the technologies that you're going to need. People sense that they need to do something with digital, which can lead to panic and result in projects starting at the wrong end of the conversation.

Have a digital strategy that enables you to define the vision. Start with the end in mind and then track back from there. That will lead you to the potential technologies that you need to use to deliver that vision. But before you even start looking at technology, figure out if it's actually going to be of use. Is it going to make a difference? Is it worth investing in? Because if you deploy a digital project and it's not actually doing what you wanted it to do, then there's no point in scaling it.

Source: [Make sure your cloud has a silver lining](#)