manufacturing IT

managed securely and in real time
with right-fit application management

Manufacturers of every kind are rapidly moving towards integration of their core processes and systems, leading to greater agility, quality and efficiency right across their operations. Manufacturing Execution Systems (MES) are at the heart of this strategy. Atos aims to help manufacturers optimize their systems, offering specific and dedicated Application Management Services.

Manufacturing Execution Systems must be managed and maintained on a proactive real time basis, so it is unacceptable for software that supports these execution processes ever to be offline during working hours. Routine stoppages for maintenance or downtime for updates are concepts that often do not apply to MES, because stopping the systems means stopping the manufacturing process itself.

Unexpected downtime as a result of faults must also be avoided and this means that managing applications for MES is fundamentally different from managing almost any other transactional applications.

► You cannot take the MES systems offline in order to carry out vital maintenance or version upgrades. Instead, these essential activities must be carried out "on the fly", as part of everyday "business as usual" operations. 24/7 operational system availability is crucial

► You must never risk losing data, which makes fail-over and disaster recovery systems not just important but strategically essential

► If problems do occur, you need the ability to proactively identify them and follow them back to the source, reverse-engineering to pinpoint and then eliminate any weaknesses.

The potential damage done to a manufacturer by losing access to MES systems is so great that everything possible must be done to avoid this. In practice, that means moving from a reactive approach for maintenance and problem-solving to a much more proactive and rather predictive strategy. The aim must be to spot where issues are likely to arise and deal with them before users even become aware of them, and certainly before they impact on operations.

The outsourcing paradox

Manufacturers are as keen as any other enterprise to gain the benefits available from high quality, low-cost outsourcing support. With MES, there are key points of differences and additional standards that have to be met before external Application Management (AM) becomes possible.

A "traditional" outsourcing approach to AM may be viewed as too reactive, too slow in response time, with insufficient expertise and too far away from the factory floor to be credible for the needs of ambitious manufacturers in highly competitive markets. Yet the right kind of external support remains vitally important, and not just for financial reasons (important though these are).

Managing global manufacturing networks and supply chains and improved levels of integration across all core processes requires standardization, rationalization and virtualization. That is a huge task for any large business, and is especially challenging for manufacturers. Not only is it necessary to simplify business applications estates, and to align business IT and Operational Technology (OT), it is also vital to standardize factory floor information technology and interfaces.

In our experience there is five times as much IT complexity on the factory floor as in the business infrastructure because of the many specialized point solutions and the different tasks of "shadow IT" in this area. Most production or assembly equipment, test systems, robots, automated equipment come with their own IT Hardware, Software database and connectivity. For any internal IT department, reducing complexity of all this is a massive task, and one that is often too big to be handled in-house.

Outsourcing maintenance and support in manufacturing systems is going to be essential in the future, simply in order to let experts worry about the increasing shop floor IT complexity and focus on keeping the business on track.

So how can we balance the need for external AM support with the vital importance of keeping all systems up and running, all of the time?

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Atos

Partnership for success

Atos sees the world of applications management in manufacturing as a best practice partnership between application vendors, client IT departments and the Atos team. We recognize that in the world of factory floor IT, vendors proliferate and complexity has a natural tendency to grow. Our task is to standardize and rationalize the existing shop floor IT including applications and interfaces working with client IT and external vendors to ensure the most effective and reliable long-term management possible.

As manufacturers target a more integrated and globalized operation, they are also aiming to create new relationships that support their strategic objectives. That's where Atos Right-Fit Application Management can deliver exceptional benefits, right now and well into the future.

The Right-Fit approach covers the entire application along the manufacturing value chain, from initial assessment and architectural design, to implementation and migration, up to long-term maintenance and close support to users. We use our Sure-Source network of global delivery centres and resources to make sure that every task is carried out in the right location, delivering the ideal balance of on-site and remote services.

Above all, our approach is driven by deep understanding of the manufacturing sector, developed as a direct result of our own industrial heritage, which goes back more than 160 years, and is based on our own MES-specific insights and methods.

Atos AM for MES is specifically designed and optimized for manufacturing environments, offering a partnership that is targeted at your success and is rooted in your operational realities.

Scope and service

Atos Manufacturing AM is defined in three dimensions:

1. The Service Catalogue, which defines the types of services we offer and makes it possible for stakeholders in a client organization to identify those areas in which they need AM support and access the right services quickly and simply.

2. Service Level Agreements, which are managed by a comprehensive and robust governance strategy and reflect the business outcomes required by the client.

3. Service Delivery Matrix, which defines the objects to be supported, the broader operational context and the approach to be followed.

A typical management structure will see Atos personnel permanently on the client's site, acting as integrated members of the client's own team. They will be supported by comprehensive Help Desk Services, which may be based at an agreed near-shore or off-shore location, delivering the best possible balance between speed, cost and expertise.

This approach ensures that the Atos team incorporates deep and relevant industry knowledge, which is continually extended and refreshed through day to day interaction with the client's own operational experts. It also ensures that clients can access specialized IT support capabilities, delivered in a highly flexible manner, with costs that are lower than any in-house department could achieve.

The Atos Manufacturing AM approach addresses all of the four key requirements for effective support to shop floor systems:

Shared governance model that brings together all relevant players in a single, consistent approach, with shared vision, understanding and objectives.

Flexible resource availability, using the massive global capability of Atos to ensure that clients receive the best of both worlds: high-touch on site expertise, with access to a high quality resource pool that numbers almost 80,000 experts.

Superior cost performance, based on combined on-site–off-shore model, with real-time data to ensure predictive intervention and cost-effective project support with no compromise on quality.

Assured operational excellence, using real-time data for management dashboards, fast and complete reporting via our governance system, backed by a commitment to continuous improvement.

Manufacturers today are faced with a business environment that is increasingly complex and challenging. They need access to the best specialist skills that the global IT industry can offer, but always on their own terms. Atos Manufacturing AM delivers that special combination of industry insight, global resourcing and proactive intervention adding value from day one.

Our value proposition

Atos understands the need for an integrated approach to application management that uses standardization, industrialized methodology and customized elements to connect people, processes and technology across the enterprise, specifically tailored for the needs of manufacturers.

Here comes an innovative but proven approach that is

► Backed by practical experience of what really works in the manufacturing industry

► Delivered by people with deep knowledge of technology and backed by strong competence and understanding of manufacturing industries

► Using a delivery model that is highly flexible, global, enables the right combination of low-cost offshore and local added value services

► Backed by commercially attractive and innovative pricing models.

We'd like to work with you to identify how we can bring these benefits to your business.

Talk to Atos, your business technologists.

We help our clients respond to a changing environment by taking over the day-to-day operation of their application estate, giving access to more skills and resources.