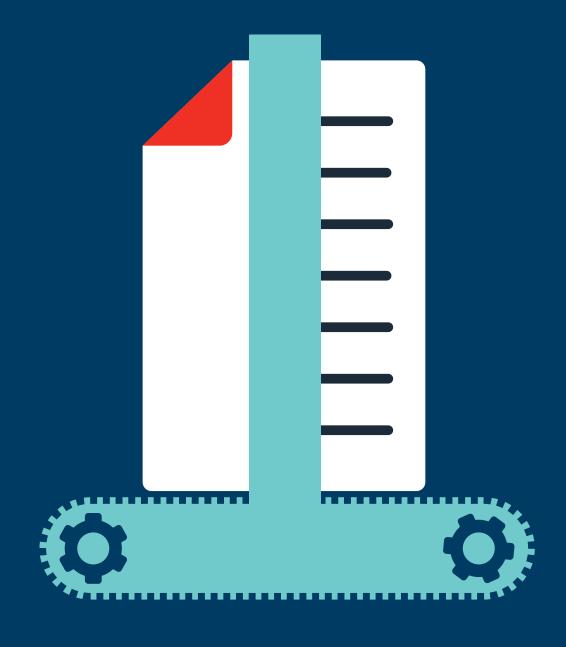
Fast & Flexible

Enhancing manufacturing through better information management





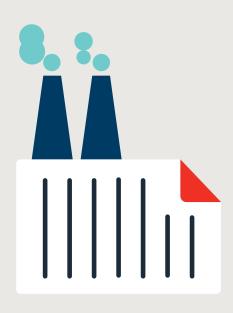
We always offer you **more.**

In manufacturing, efficiency is intimately connected to information workflows. A company that maintains good visibility at all stages of the production process is one that can more respond with greater agility.

These companies are more capable of optimising the pace of their operations, monitoring their compliance obligations and exposure to risk, and planning for the future with greater wisdom.

Manufacturers with poorly managed information flows experience lowered efficiency, and as a result damage their profitability and can experience higher rates of staff churn and other undesirable outcomes.

Fortunately, solutions exist that take a multi-faceted approach to helping manufacturers improve their information storage and access. This report will address the key areas of weakness presented by current information management practices in manufacturing and evaluate the solutions.



Major Information Management Challenges in Manufacturing

Speed & Accessibility

The manufacturing sector relies on accurate, real-time inventory information to operate properly. The older the information, the less useful it is for decision-making. This may seem obvious, but poor inventory management through a lack of timely information access is one of the industry's biggest efficiency barriers.

Paper-based workflows are a big part of this challenge because they bring with them issues of impractical filing systems, misplaced records (and the subsequent need to resource or re-create them), and haphazard archiving practices. In a study released by the IDC in 2012, Melissa Webster found that workers who handled paper documents spent 7% of their workweek dealing with problems and time-consuming tasks unique to hard copies. When taking into account the time spent searching for documents that were never found, the figure rose to 11.6%. If those documents then had to be re-created. this took the total amount of wasted time to 15.6% of the workweek.

A related factor affecting the speed and accessibility of information in manufacturing is the lack of a "single point of truth" across production units. Manufacturers often have multiple facilities that must work in concert.

A lack of a single, integrated information management system that provides real-time data access can make coordination extremely challenging, especially when units are located long distances from each other and production errors are easily compounded by small oversights.

"Even the best, most sophisticated systems rely on accurate and complete data," says Stephen Pillsbury, principal of PwC's US Industrial Products practice. "Businesses need to develop a common supply chain and operating data structure that facilitates communication among key stakeholders and enables effective management."

The manufacturing sector is in need of information management solutions that make existing hard-copy processes easier while removing their pitfalls, and solutions that facilitate the proper integration of digital systems.

^{1.} Webster, M., "Bridging the Information Worker Productivity Gap: New Challenges and Opportunities for IT" at [http://www.idc.com] (September 2012).

^{2.} http://usblogs.pwc.com/industrialinsights/2015/12/08/manufacturers-struggling-with-inventory-performance-can-advanced-information-management-solutions-help/

Costs & Compliance

Another challenge created by poorly optimised information management in manufacturing is weakness in regulatory compliance. Compliance-related documentation needs to be managed effectively. Failure to do so can result in costly production delays and exclusion from tenders.

The information accessibility issues mentioned in the previous section create a clear challenge in this area: it's difficult to meet compliance obligations when documents are lost or badly coordinated. But there is an issue at the other end of the spectrum that is worth mentioning. Many organisations are aware of where their document retention obligations end, but are nonetheless unwilling to commit to sentencing schedules. They keep everything. The most common reason for this is that large companies often aren't sure what their archives contain. From a liability perspective, the cost of ongoing storage is more than justified by the danger that an arbitrary sentencing mechanism might accidentally destroy mission-critical

documents. However, businesses practicing "infinite retention", while ostensibly ensuring compliance, may in fact be hampering it. Besides causing a company to spend many times what is necessary — in both dollars and square meters — to store their archives, infinitely retained human resources information, for example, may result in a violation of the *Privacy Act*.

Compliance in manufacturing is also complicated by an excessive reliance on paper in many businesses. While paper remains an indispensible part of information workflows, failing to adopt digital systems where appropriate can result in a lack of automation and more complex human-reliant information management systems. "Complexity is fertile territory for error," says researcher Matthew C. Holtman. When the human element in a system increases, so does the possibility that something will go wrong. More human engagement in the compliance process can also drive up costs because of the additional manual labour involved.



Whether paper-based, digital or hybrid, manufacturing businesses need a way of handling compliance that lowers costs, and limits error, and eliminates the risk of violation.

^{3.} Holtman, M. C., "Paradoxes of professionalism and error in complex systems", in Journal of Biomedical Informatics, Volume 44, Issue 3, June 2011, pp. 395-401

Agility & Adaptability

The information management needs of the manufacturing sector are as diverse as the products it makes.

But many companies find themselves relying on cookie-cutter information management solutions that are poorly suited to their specific needs.



This applies in both paper-based and digital workflows, with different consequences for each.

Businesses working mostly with hard copies will commonly find that their information management provider cannot accommodate their existing indexing system, making files difficult to request and retrieve. For manufacturers operating in multiple locations, third-party information management providers are frequently unable to deliver files in a timely, secure manner — especially outside of urban areas. Sensitive documents

are also often left exposed during transit due to a broken chain of custody where the primary custodian outsources to courier services that may then outsource to freelancers who are not accountable to the initial employer. Ultimately, any impediment to information flow has a severe impact on manufacturers' agility, and their profits.

For digital information systems, manufacturers engaging an external provider can be forced to use an inflexible interface that fails to intuitively mesh with their existing practices or allow customisation using terminology specific to their business. Companies can also find themselves limited by the document formats available through third-party systems, which affects both their ability to access files on any device from any location and the ease with which information can be shared between business units.

Some businesses respond to these challenges by opting to handle their information management internally. But this can end up as a financial liability due to an unrealistic appraisal of the capability of in-house services, as well as leading to accessibility and compliance problems.

The worst-case scenario from a financial and organisation perspective is when information exists in a variety of formats spread over multiple different systems managed by different in-house and third-party solutions.

Finally, manufacturers can also fail to ask the right questions in order to understand the full service offerings of contractors, meaning they often end up outsourcing their ICT systems, information management, cleaning services, office relocation logistics and worksite FF&E to completely different providers. Rarely will a company look for a contractor that rolls all of these services into a single, cost-saving solution.

Smooth, Compliant, Adaptable Information Management

To tackle the challenges of accessibility, compliance and adaptability, the manufacturing sector is increasingly turning towards external information management solutions that go beyond the scope of traditional access and archiving partnerships.

A good information management partner will audit existing archives and organise them using an intuitive indexing system. Documents can then be retrieved on demand with a simple online request. The best providers will deliver twice daily as standard, and urgently within three hours. Having an external information management firm looking after data also means that different manufacturing units have access to the same information in real-time.

Even when hard copies have to be delivered to remote locations, a good provider will get them there as quickly and efficiently as an urban courier.

Professional information management companies help businesses stay compliant by staying abreast of industry-specific legislation and creating sentencing schedules to match. They can also set up automatic document management systems that take the human element out of the compliance equation. The danger of accidental destruction is eliminated with a verification process that double-checks with the information owner before any action is taken.

In terms of adaptability, the best information management partners offer fully customisable

systems that minimise the hassle of transitioning from old processes to new ones. Hard copies stored off site are not only transported around the country quickly, but within an unbroken chain of custody — never leaving the direct possession of the company commissioned with their carriage. Superior digital information management systems are capable of functioning on any device and delivering files in any format for maximum flexibility in information sharing. If necessary, disparate information management solutions can also be integrated into a single system that is tailored to the specific needs of the company as a whole, or individual business units.



Manufacturers should also ask their information management partner what additional services they offer, and what cost savings engaging those services might have. The best information management firms integrate their archiving, digitisation and retrieval solutions with a wider range of offerings, including information courier services, fully customisable ICT interfaces, cleaning services, a full range of office relocation services for rapid redeployment, countrywide support, and many more functions.

Benefits

A good information management solution not only directly addresses the major data-handling challenges of the construction industry, but also provides additional accessibility, compliance and adaptability benefits.

Up to Speed

Perhaps the most attractive benefit to most businesses is the dramatic increase in productivity and efficiency that comes from better information management. There may still be a wait time for physical documents, but the time is almost entirely taken up by the transit process, and no longer by staff searching in vain for files that may not even exist. With document retrieval outsourced, paid staff can get on with more productive, revenue-generating tasks.

A more streamlined and intuitive electronic document access system also naturally increases information retrieval speeds, which translates into more responsive workflows and greater efficiency.



Real-time information access helps business units communicate more effectively and reduces the chance of costly errors.

:Compliant

The hallmark of a high-quality information management solution is the ability to ensure all of an organisation's records comply with the Privacy Act and other relevant legislation without significantly driving up costs. In fact, it can help lower them. By eliminating a company's risk of non-compliance, the chance of expensive fines and lost productivity is dramatically reduced. Careful monitoring of retention requirements also limits costs by ensuring files are not being stored unnecessarily. Automated systems contribute to savings by reducing labour costs as well as the financial fallout that results from human error.

More for Less

A faster, more secure chain of custody equates to greater efficiency as information flows become smoother and more reliable. Systems that are customised to a company's individual requirements limit time spend in retraining staff, while information equity (for both hard and soft copies) across all geographic locations ensures all facilities can function at full effectiveness.

In addition, solutions that integrate a wide range of services allow manufacturers enjoy reduced costs for those services overall. Providers of these consolidated systems will often provide attractive quotes to businesses looking to engage a number of different services. The silent benefit of this is that coordination between those services is also entirely managed by the information management firm — meaning, for example, that an office relocation project would not need to be organised separately from, say, the archiving of physical documents and installation of a digital system in the new premises.



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5 important questions

to ask when looking for an information management solution

1. Will the solution improve your existing archives?

The best information management partners will combine the relocation or digitisation of your archives with a full audit of the files within them. They'll also make your documents available electronically across all your devices, and can deliver hard copies within just hours.



2. Will the solution flexibly integrate with your existing system?

Information management systems need to be easy for every section of your business to use. The best providers will help you tailor a storage solution and access system that adapts to your existing filing references, industry terminology, record-keeping practices, and more.

3. Will the solution help you with compliance?

Compliance is one of the biggest concerns in manufacturing. The ideal information management solution will make relevant data instantly accessible, as well as perfectly matching your retention and sentencing schedules to your legal obligations.

4. Will the solution keep your archived and digitised information secure?

The costs of lost or stolen information can be high. Your information management partner's storage sites need to be equipped with fire protection systems with back-to-base intruder detection and 24-hour surveillance. Their employees should also all be police-vetted.

5. Will the solution help consolidate services to cut costs?

You should be looking to squeeze as much value out of your information management partner as possible. The best way to do this is to ask what other services they can provide, such as commercial relocations or cleaning, and how consolidating could reduce your costs.

The Grace Advantage

With over 50 years in the business, Grace is uniquely qualified to deliver excellence in information management.

Grace provides solutions for the full range of manufacturing sector information management requirements, from storage and indexing to retrieval and destruction. Here are the advantages your business will enjoy with Grace:

- Expert consultants to assess the precise needs of your business and tailor solutions that address your specific information management challenges.
- The speed, convenience and security of 26 information management centres across the country more than any other provider.
- Many facilities are protected by state-ofthe-art safety systems, including sprinklers and fire doors – all linked directly to the local fire brigade. Plus, electronic intruder detection with back-to-base alarms.
- Complete and customisable cataloguing, indexing and sentencing solutions for projects of any size, right across the country with information management software that gives you total control from any device.
- A scanning and digitisation process to make searching and retrieval as fast as possible. Digital files are audited to ensure 100% accuracy, and can be delivered in any electronic format or securely hosted in Grace's online data repository.

- Fast and flexible retrieval, with a standard service that delivers documents twice per day, urgent scan-on-demand services that respond within just 3 hours, and the option to personally retrieve information on site.
- The only secure chain of custody in the industry that spans the entire country. With GPS-tracked vehicles and police-checked staff, your documents never leave Grace's sight. Their client-anonymous indexing system also ensures your confidentiality at all times.
- Real-time tracking of your documents, from anywhere in the world.
- Secure destruction of documents (either on schedule or on demand) that operates under a strict authorisation process, protecting against both accidental data loss and unnecessary storage terms.
- Innovative solutions that recruit Grace's commercial and fine-art removals expertise to cater to a wide variety of unique business requirements.

Contact Grace today to find out how their specialised information management solutions and integrated services can help you. Visit www.grace.com.au/information/contact-us for your nearest office.

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