Information Age - Finding the value in your data

Smart Manufacturing Data

These days everyone is talking about big data. As computer technology has evolved we’ve become much more efficient and accustomed to collecting and having access to unprecedented volumes of data. You could argue that you can never have too much data but actually, what you can never have too much of is information. Cutting through all the noise and getting to the answers that will support decisions on real business issues is the true challenge and purpose of data.

Whether you are a multi-million pound OEM or an independent manufacturer with a handful of machines, data can help you to find the answers that will support smarter business decisions, cost reductions, time and operational efficiencies and generate sustainable smart manufacturing methodologies.

Data as a business asset

In order to derive the most value from your data, it should be considered a business asset. In doing so you are more likely to develop a data strategy that will capture effective content in a re-usable format. It is also important to understand data sharing as a necessity. Whilst collecting masses of raw data has its merits, if you take some time to consider who needs the information and why, it is possible to overcome the problems and costs inherent to disparate data sets. By standardising or at least aligning meanings, values and formatting you will better support cross-functional business usage. Standardised “packaging” of your data also enables a move towards centralised storage, greatly reducing the time spent managing and searching for information.

The connection between people, processes and things

In many businesses today finding data is a quest. It can be spread across multiple locations/platforms which then puts the onus on “local” knowledge and/or relationships to discover it. Duplication is also often a major overhead. Too many copies, in too many places is neither efficient nor helpful. If data were viewed as just another office tool, then greater efforts would be made to streamline the process - keeping it simple, efficient, more usable and easier to locate. In a standardised format, data can be a much more valuable asset. A shared understanding of the rules for population, packaging and publication of your data internally, will enable more people to contribute a greater volume of knowledge to your business. Furthermore, a pooling of aligned data from multiple sources within your organisation enables you to make the connections between processes, business units and people for a more holistic view.
Creating value from relevant data

So back to where we started - how to cut through the noise and get to the answers quickly is where the real value is to be found. Real time analytics are critical for event based decision making and this is where technology is a key enabler. Thanks to the sheer volume, speed, complexity and variety of data that is made available for analysis, manual intervention is problematic.

Systems support the instant retrieval and consolidation of live and historic source data. Speed and efficiency here can make the difference in being able to respond quickly to changing business conditions. Automated analysis and data validation then makes it easier to defend, explain and justify your decisions. It is then possible to find competitive advantages by:

- Identifying root causes of issues
- Reducing risks
- Determining prices that maximise profits
- Reducing costs and inventory
- Controlling processes
- Making predictions
- Keeping the whole process repeatable and sustainable with minimal intervention
- Uncovering and helping to solve complex problems

Supporting your company with the latest IT infrastructure and technologies is becoming increasingly vital as the demand for transparency, regulatory compliance and information sharing through the entire supply chain grows. As we start to hear more about the Internet of Things (IoT) and Industry 4.0, the connection between people, processes, data and things will be more in the spotlight. Getting your data strategy right now will pay dividends in the not too distant future. In fact, it could be making the difference today.

Seiki Systems has over 20 years experience in the development and provision of real time manufacturing execution and production control systems that provide an immediate, visual and dynamic picture of the ‘plan to make’ production process - your strategic and operational manufacturing management solution. We specialise in software that is designed to maximise the efficiency of production equipment and plant resources by addressing the complete works order lifecycle, from top floor to shop floor. The Seiki solution comprises of a suite of modular software including real-time scheduling, DNC and paperless manufacturing, SFDC and machine performance monitoring, W.I.P tracking, performance analysis and reporting and industrial touch screen PCs.

For further information about our integrated manufacturing system or individual software modules please contact us at sales@seikisystems.co.uk or call 01273 666999

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