



BUSINESS ANALYTICS

It's 10 O'clock: Do You Know Where Your Assets Are?



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We've all heard the expression that success begins at the top. This is perhaps nowhere more true today than when it comes to unlocking the power of analytics and the Internet of Things (IoT) for asset optimization. If a company's C-Level is not bought in, and guiding the process, success will likely not occur.

Today's data reality is so different than that of the past. We used to live in a data desert, searching for an information oasis to quench our thirst. Now, in the era of big data, we're flush with the stuff. Data seems like an unlimited resource. But the question is, what do we do with it all? Leadership must play a huge role in answering this question.

Formerly, during our days of data deprivation, systems like ERP were created to capture high quality data about business operations. The amount of data was small compared to today, but it provided high value, in part because it was so rare. Being able to have detailed information about invoices, parts, customers, and so on, set the stage for deeper understanding of operations and vastly increased automation of central management processes.

Now, however, the challenge is to expand the model of the enterprise to maximize all the data we have at our disposal. Someone must guide that expansion. We've gone from optimizing core management processes to focusing on making corporate assets perform better. There is widespread recognition that this focus could engender massive returns.

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But asset optimization is harder than it sounds because of the glut of data and analytic tools at our fingertips. To accelerate asset optimization, a company must have a plan and an organizational focus, which only senior management can provide.

Here are some ways the C-level can push for more effective analytics.

Defining the right scope for asset optimization

Too often asset optimization is an exercise in optimizing a single asset – like getting a single machine in a factory to be more efficient. As an example, the concept of the digital twin is predicated on the idea we need a digital mirror image of each individual asset. While this is warranted for high-value assets, we may not need that level of detail for all of our assets.

What is usually urgently needed is a digital model of all value creating assets. We must understand what processes are pivotal to overall success and how individual assets contribute to this larger narrative. Models at this level offer us the chance to optimize and manage an entire line of production, rather than individual assets.

Leadership must guide decisions about the scope of data needed for asset optimization. Even though they don't have the content expertise of a lead engineer, the C-level can show interest, ask questions, and provide resources to improve models based on the use of analytics to optimize assets organization-wide.

High resolution management

The expansion of your data model has other implications beyond a focused optimization of assets: You can have detailed analyses of your assets' performance through IoT sensors or your customers through behavioral analytics.

But as we shift from a mega- to gigapixel view of our business, management practices must change concurrently. Two professors at the University of St. Gallen came up with a vision **called high resolution management**. This form of management takes advantage of granular models of customer and business activity using analytics, machine learning, and automation. The world of AdTech, massively automated data centers, and FinTech have all become leading examples of high resolution management practices.

The C-level can lead the way by maintaining focus on the most important business processes and insisting that the models evolve. As we know more, leadership must ensure we do more with that knowledge. In this way, asset optimization transforms a business.



Predictive Analytics Drive \$100 Million in Opportunity Gains

Siemens was looking for ways to enable its high-speed train to compete with airlines, starting with the train between Madrid and Barcelona. Siemens leveraged big data and built a predictive maintenance model to uncover mechanical issues prior to breakdown. With predictive analytics, the company performs proactive maintenance, achieving a 99% on-time arrival rate. Siemens was able to drive a business model that claimed 60% of airline customers taking the same route for \$100 million in opportunity gains.

Leadership problem to provide focus and resources

Yet, to paraphrase Dr. Seuss, the problem of asset optimization and the follow-on implementation of high resolution management is so wide and so deep and so tall that it will only yield to sustained effort. The C-level must provide this focus and ask the right questions, define the right scope, and create urgency about adopting new ways of managing the business. Pervasive, lasting victory will only come when the C-level provides the business-wide context to guide the bottom up work of improving models and analytics to reshape how the company operates.

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