Finding Hidden Treasure in Your Industrial Manufacturing Attics
Tap into the Wealth of Data Gathering Dust in Your Manufacturing Plants

Last month, I read an excellent article in the Harvard Business Review called "*Unlock the Hidden Value of Your Data*". In the article, the author Stefaan Verhulst references a book written 20 years ago by Kevin Rivette and David Kline entitled "*Rembrandts in the Attic*" about the hidden value within companies' underutilized patents. The authors claimed that patents were intangible assets that are extremely valuable but often overlooked, and that they should be viewed as a form of currency.

Verhulst's recent article took this idea and applied it to current times. He suggests that in our information and data-driven society today, the currency has changed – "Today's Rembrandts in the attic are *data*".

I love this analogy. (However, when thinking about the immense amount of captured manufacturing data and process manufacturing software that uses artificial intelligence and machine learning to make sense of that data, I envision Kandinskys or Pollocks in the Attic). But regardless of which famous artist you use for the comparison, industrial data analytics in the manufacturing industry can help process experts tap into the wealth of hidden treasure waiting in your industrial attic.

Kandinskys & Pollocks: The Data in Your Industrial Attic

Jackson Pollock – Blue Poles

In 2015, a lost Jackson Pollock painting estimated at $15 million was found by an Arizona retiree cleaning out his garage. Imagine if all along you had a hugely valuable painting, a Pollock or Kandinsky, just sitting in your attic gathering dust. Think of the potential value of that masterpiece. Envision the wealth it could bring to you, to the art world, and to world as a whole.

Plant data is, in a way, a lot like this. The information is hugely valuable to the process experts, to the plant operations, and to the business as a whole. And most process experts would agree it is an immensely important but underutilized asset.

What is it, and how can you uncover it?

Industrial manufacturing plants capture two main types of data: time-series and contextual. Time-series data is created by continuously recording a value at different time intervals which can be from minutes to hours. This data type is captured in an historian, and after aggregation and processing, can be analyzed. Contextual data includes information about quality, maintenance events, operational events, environmental conditions, and process performance. This data type typically resides in external business applications. Because of this, it is siloed or held separately in its own applications and is separately reviewed and monitored by other teams. Also, it is usually not used in conjunction with time-series data – which is a huge loss of potential. But this potential can be harnessed with the right tooling.

Much like needing a metal detector to search for coins, you need to implement a user-friendly self-service analytics tool that allows process experts to drill down into plant data, even data going back years, to unlock its treasure. And that treasure is substantial:

- Plant efficiency, flexibility, and agility are increased.
- Process experts have greater visibility into the factory operation, so they can more effectively steer the process.
- Plant management is better supported since operators can identify process deviations and take corrective measures.
- Root causes and hidden process restrictions can be revealed.
- Failure and maintenance issues can be predicted.
- Alerts for potential process issues can be sent to experts, so they can take action to prevent or prepare the problems.
- Plant process and team corroboration will be streamlined.
- Plant experts can continuously improve plant operation through the insights the data gives.

Self-Service Analytics: Your Industrial Attic's Flashlight

Analytics is the interpretation of data patterns into meaningful and understandable information in order to make data-driven and thus informed decisions. Self-service analytics is a process manufacturing software that can be used by individuals at any level, who do not necessarily have a data science background, to make sense out of data. Another aspect of this tool is that it is easy to learn, use, and understand.

Wassily Kandinsky – Composition VII

Using pattern recognition and machine learning, a self-service analytics platform makes sense of information retrieved from a plant thus tapping into the wealth of years of captured data. This capability gives experts a more thorough understanding of plant operations allowing them to make better decisions. It also makes it possible for the experts to solve process performance issues themselves without the help of data scientists who build complex and time-consuming data models to address issues. The result – experts can make faster and more effective decisions to maximize plant operations.

All of the data from the entire production and manufacturing process, which includes time-series and contextual data, can be integrated and used to continuously measure, observe, check, control, solve and prevent issues, and improve the process. Ultimately, this process manufacturing software allows for a constant and increased awareness about what's happening everywhere in the factory.

One Company's Treasure Trove

LANXESS, a German specialty chemicals company is an example of a company that has embraced new technology to look at data differently. Their CDO Jörg Hellwig gives sound advice about using advanced analytics in the manufacturing industry via a self-service industrial analytics tool. He says experts need to have patience, courage, and openness to embracing new technology. He also adds that when process experts see the benefits and the ease-of-use, there is a high rate of acceptance.

Ultimately by connecting the data dots and giving plant experts access to data, they are able to maximize plant operation, save energy and time, reduce waste and downtime, gain a greater competitive advantage, and increase profitability. Through this software, these experts can more easily achieve operational excellence. Not bad!

Discover what's hiding in your industrial attic.

Having the proper tooling is the only thing stopping you from uncovering the hidden treasure gathering dust at your plant site. What are you waiting for? Get up there and dust off those Kandinskys and Pollocks!