Random THREADS
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Analytics 101

Analytics. If you operate a business, you hear about this frequently.

But what is it and how can it help your business grow?

Data analytics is the science of analyzing raw data in order to make conclusions about that information. The techniques and processes of data analytics have been automated into mechanical processes and algorithms that transform raw data for human consumption.

Analytics uses data and math to answer business questions, discover relationships, predict unknown outcomes, and automate decisions.

Sounds exciting. But how important is it?

“Analytics is about survival in today’s business world,” says Nelson Valderrama, CEO of analytics firm Intuilize.

Data analytics help a business optimize its performance, Valderrama says. Utilizing analytics can improve profits, increase sales, and boost operating performance.

Specifically, analytics can increase gross margin by enabling a business to sell more products to current customers. That’s because analytics tells you what to sell and what you can sell more of, Valderrama explains.

Analytics also increase profitability.

“You can sell the same amount of product at a higher price,” according to Valderrama.

In addition, analysis of good data can improve business inventory, allowing you to avoid stockouts by knowing what to buy and what to stop buying, as well as showing what items are more likely to become problems so you can reduce your exposure.

And it's vital for demand planning.

"Most supply chains are exposed to disruption now, introducing cost volatility."

The Covid-19 pandemic has driven more companies to focus on e-commerce, which means your competitors are likely doubling down on analytics, Valderrama explains.

There are four types of analytics:

1) Descriptive Analytics: Describing or summarizing the existing data using existing business intelligence tools to better understand what is going on or what has happened.

2) Diagnostic Analytics: Focus on past performance to determine what happened and why. The result of the analysis is often an analytic dashboard.

3) Predictive Analytics: Emphasizes on predicting the possible outcome using statistical models and machine learning techniques.

4) Prescriptive Analytics: It is a type of predictive analytics that is used to recommend one or more course of action on analyzing the data.

Among most fastener distributors, there are three levels or maturities of analytics.

If they use analytics at all, roughly 50% of distributors use the most basic form, such as regular reporting from ERP Assistant. Some companies simply use Excel spreadsheets or analyze sales reports.

"They're looking in the rearview mirror about what happened in the past," Valderrama explains.

About 30% of U.S. fastener distributors utilize business intelligence tools that provide more descriptive information that helps them understand what is happening in the business and why. Many of these distributors use Profit 21, NetSuite, or Microsoft Dynamics for their analytics.

But top-tier distributors use data science provided by third party platforms such as Intuilize for real-time analytics that reveal what is happening, why it's happening and what to do with this information.

"Analytics democratizes company information, enabling people to do better work and collaborate," Valderrama explains.

But you need an open and innovative company culture, and that starts with the leadership.

"If the leadership doesn't trust this or value it, there is no way the company is going to adopt it successfully," Valderrama adds.

Inventory Management Forecasting

Once leadership embraces analytics, one area of improvement they can focus on is inventory management.

Demand forecasting is an estimated demand of what will be required to fulfill customer requests over a defined period of time. Knowing how demand fluctuates enables a company to keep the right amount of stock on hand.

There are two main reasons for forecasting: supplier lead times and ordering costs. Businesses need to forecast future demand to stay in front of these two variables. But it isn't enough to forecast your demand. Understanding demand forecast accuracy is equally important to determine how uncertain the forecast will be for a given period.

Good data help "avoid stock-outs by showing what to buy and what to stop buying so you can reduce your exposure to those items more likely to become problems," Valderrama notes.

This is Part 1 of a two-part series on data analytics.

If you have suggestions for future issues of Random Threads, send them to amy@pac-west.org

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