



## Creating Business Synergy by Utilizing Analytics

Business synergy is the concept of achieving a better outcome compared to the outcome resulting from the parts on their own. Organizations today are taken this concept to heart and are concentrating on how to utilize analytics to achieve greater results. The concept of integrating data analytics with business intelligence to achieve this business synergy can be utilized in multiple areas of the business. Mobilizing the same technology and focusing it on multiple business facets results in business synergy that can be used to drive a cohesive marketing, product and manufacturing capability that stems from customer and marketplace trends, resulting in a great customer experience.

### Data Driven Marketing

Companies can utilize business intelligence and data analytics to create a constant narrative from customer and market information and applying analytics to understand key customer needs and wants. Using analysis methods such as regression analysis to identify relationships between key customer variables. The time series analysis methodology can be applied to historical data to create product forecasts based on key potential/new product features.

### Connected Product Development

Incorporating data analytics methods and technology within the product development process can be used to strengthen and realize the powerful “Digital Twin” concept within mechanical design as the first step to understand the characteristics and capabilities that the design components, sub-assemblies and final assembly need to deliver a quality product. From there, extension into electrical, hardware/software systems can complete the full digital product definition and can be used to validate and predict performance prior to physical prototyping. Once the product development cycle gets to the validation process, data analysis and business intelligence methods can be used to forecast product performance and potential areas of concern for failure mode.

### Data Driven Manufacturing

Machine Learning when applied correctly enables a differentiated capability that utilizes learning algorithms to change the manner organizations manage their factory floors, thus improving uptime and managing unforeseen outages. The synergy is realized by integrating communication capability from your machines /assets, with edge computing to provide the needed response timing needed to support real-time decision making where needed. While using a cloud platform for hosting the needed data, algorithm and connected manufacturing platform with predictive and preventive capabilities.

From our perspective, data analytics and business intelligence is a powerful technology to expose, understand, rationalize, and utilize data and turn it into information for greater business synergy.

If you'd like to talk about our experience in enabling business synergy, please give us a call!



## Next Month: The Road to Connected Product Development

