

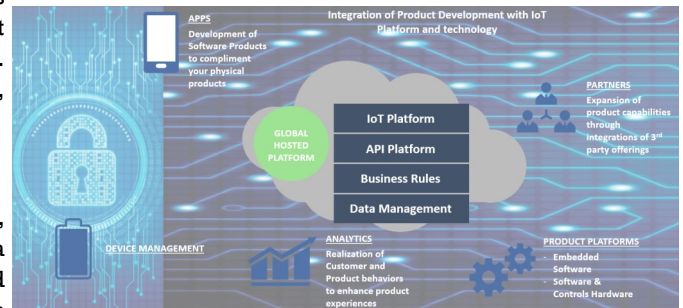


The Road to Connected Product Development

At DRIVEN-4 we believe that the future of product development is a connected product and development process. What do we mean by this? We believe that all products in the future will consist of a physical component, digital components, and will communicate with a platform that can be used by both the original equipment manufacturer (OEM) and the end customer. In being able to deliver a product connected to market, an OEM needs to have the needed information and capabilities within its product development, manufacturing, and service processes and offerings. These capabilities are then utilized by the OEM to develop, manufacture, and service the product.

Connected Physical Product

The OEM product needs to incorporate electronic hardware, sensors, computing power, and firmware to make the shift from a mechanically controlled product to an electronically controlled product. This also includes the incorporation of communication mechanisms such as WI-FI and cellular capability.



Connected Operations

In order to improve the efficiency of product development, manufacturing, and service, incorporating these same technologies for creating a closed loop process throughout the stages of the product's life is key to both optimizing the internal processes and for honing the organization's skills that are needed to deliver an optimum customer experience. Connected closed loop product development needs to include requirements management from the perspective of customer needs all the way through validated design requirements with maintaining traceability to ensure all features are delivered. Furthermore, incorporating connected physical validation through real-time communication of test equipment and connecting these results to design parameters are required to ensure product validity and quality. Lastly, by utilizing Industrial Internet of Things (IIoT) to drive the closed loop from design to manufacturing we are able to connect shop floor equipment with the data from them to improve operational efficiency, in tolerance quality throughput, and production throughput.



Customer Relationships

Connected product development starts and finishes with satisfying customer needs in the product developed and delivered to the customer, while fostering customer interaction and ensuring customer satisfaction. Typically, OEMs have an inconsistent relationship with their end customers. Most OEMs do upfront customer demand, requirements assessment, and market needs. However, after that, most OEMs use dealer networks or retailers that intercept the direct communication with the end customer. This leads to the last and most stressful communication that is had when OEMs then need to manage customer complaints. Connected products provide the opportunity to drive a consistent and continuous customer relationship. Additionally, due to the connectivity capability of connected products, OEMs can become preventive and even predictive on potential issues with their products. This provides them the opportunity to resolve issues before they happen and create an environment that fosters customer satisfaction and provides the needed customer loyalty for long-term success

Connected products of today, and the future, provide for potential improvements in enhancing internal efficiencies while establishing a winning relationship with your organization's employees and your end customers.

If you'd like to talk about our experience in creating the connected product and operational environment, please give us a call!

Next Month: Managing Your Portfolio & Project Information