



Driving enterprise Digital Transformation—where should I start?

There are many definitions around the term “Digital Transformation”. We define “Digital Transformation” as the process of integrating digital technology by an organization into all areas of their business resulting in the creation of new products, services and operations by changing how a company operates and delivers value.

To fully understand the breadth and width of a Digital Transformation, we believe that the activities needed to truly transform your organization, can be broken into 3 areas:

- ◆ Digital Processes
- ◆ Digital Assets
- ◆ Human Interaction with the Digital and Physical worlds



Digital Processes-Setup and Execution

The initial step is to understand how your organization currently operates. Which company processes are currently manual processes and which processes are currently digital processes. This allows companies to understand the initial work of migrating manual processes to digital processes. Once this is understood, the work of migrating manual to digital processes needs to occur. The next step is to see what can be achieved by automating these processes. This should be prioritized based on the value gained by the company and how it impacts the work key employees spend their valuable time on. Key employees should focus their energy on working on the anomalies that occur during daily execution versus working on everyday tasks that can be automated.

Digital Assets

Once the digital processes are established, the next objective is ensure creating, utilizing and managing the digital assets that are created and utilized within the digital processes. In terms of Engineering assets /artifacts, we think about Computer Aided Design (CAD)- 2D / 3D, Engineering Requirements at the Product, System, Sub-system and Item level. As well as Finite Element Analysis (FEA), Engineering Specifications and Guidelines, Engineering Test Design Verification Plan and Report (DVP&R), etc. In terms of Manufacturing assets /artifacts, we think about Process Artifacts, Work Instructions, Quality Specifications, etc. In terms of Service assets /artifacts such as Service Parts, Technical Service Instructions, etc.

You also need to create a closed loop change and configuration digital process to manage the product lifecycle of all assets. This involves creating an Enterprise Change Process that includes Engineering Change Management, Manufacturing Change Management and Service change Management that encompasses the lifecycle from innovation all the way to end of life of the product.

Human Involvement/Interaction

The next step is to integrate the people side of the equation, people need to interact in both the digital and physical world. This can start with the integration of AR/VR within Employee Training and Certification that can be used for Engineering Validation, Manufacturing Operations and Service Operations. With this human involvement and interaction, comes the need to understand the organizational impact to the company before implementing and ensure these people areas of concern are address before / during implementation. Organizational Support for Organizational Change Management (OCM) is critical for a digital transformation to be successful in a company.

A digital transformation is a multi-year company transformation. It needs to be planned correctly and executed in digital initiatives. With that in mind, we would suggest the following in the context of what we discussed above:

- 1st : Design and Agree on – System and Data Architecture
- 2nd : Understand Org Change Management – Impact and plan of attack
- 3rd : Create Roadmap for Implementation
- 4th : Start execution of Roadmap

At DRIVEN-4 we have industry proven processes and practices that we can help you organization get started on your digital transformation. If you'd like to talk about how we can help you give us a call!

Next Month: Enterprise Bill of Material Management