

Improving the Flow of Information Through Digital Transformation

Hydra Dyne Technology designs and manufactures custom hydraulic products. They employ close to 150 engineers, manufacturing experts and support personnel who contribute to the production of some of the world's most reliable rotary unions, hydraulic cylinders and manifold blocks.



In 2014, Hydra Dyne experienced a rapid amount of growth, adding a second facility and ultimately requiring additional staff and resources. Much of their operational information at this time was being stored in Excel documents - a system that began to buckle under the weight of the growing firm. Using spreadsheets to store and process information was beginning to develop what staff considered to be a breakdown in communication. After further investigation, it was discovered that this perceived communication breakdown was actually a breakdown in the flow of information. Their out of the box software lacked the ability to store and streamline information in a way that made sense for their unique operation. Overall efficiencies were reduced when employees were unable to locate the information they required quickly and easily.



The Solution

Hydra Dyne decided on a partnership with Invaware due to their extensive experience and knowledge of how to address some of their most pertinent challenges. The goal was to implement an application in place of spreadsheets. Invaware was utilize the data from their existing systems to create custom applications. Approaching their challenges in this manner proved to be a tenth of the cost of tearing down their entire ERP system and replacing it with more out of the box products that only addressed a fraction of their needs. In an effort to reduce work flow disruption, it was decided that they would tackle one area at a time, starting with their delivery tracking system. The addition of a new facility created challenges around tracking the movement of products and inventory. It historically took 4-6 hours per week to track their trucks and determine what was on them.

The Results

Using the Delivery Portal developed by Invaware, Hydra Dyne has decreased the time spent on tracking deliveries down to less than an hour a week. Now, they are able to see exactly what is on the truck and where it has to be, and can even add additional stops in real-time that automatically update the driver's route.

While developing the Delivery Portal several other applications naturally materialized as more needs were identified. This list has grown to 12 different programs over 4 years, addressing challenges in the areas of inventory, assembly, machine scheduling, employee training, HR and more. All of these programs work to streamline communication between areas of the operation and allows for a clear and steady flow of information. Some of the results that Hydra Dyne has experienced since implementing these systems include:

- Reduced scrap rates from 1.6% to 0.9% of annual revenue
- \$20M increase in sales without adding additional overhead
- 1000 hours a year saved on machine setup times
- 5% increase in overall plant efficiency
- Employee retention has increased by 10%

"With custom software, you're the architect of what you want done and how it should flow. You are not relying on someone else's idea of how your business should be run."

-Steve Bohner, President Hydra Dyne Technology Hydra Dyne's success with their digital transformation came from their decision to do it gradually. By slowly adding new systems and only a few tablets at a time they were able to gain buy-in from their employees as they experienced the benefits for themselves.

Digital Transformation Timeline



