Beyond digitization (converting analog information to digital) and digitalization (the technology-driven shift to business processes) lies digital transformation.

In a recent AFPM webinar Bruce Taylor, director of digital transformation at Sinclair Oil and Chair of AFPM's OPCAT Committee, described digital transformation as "really focusing on getting incremental value from all of the investments made through digitalization and figuring out new ways to apply them to bring incremental value to an enterprise and how it operates."

The fuel and petrochemical industries have a long history of building strong cultures around environment, safety and community relations – and companies can use that experience to make cultural adaptation one of the core pillars of digital transformation.

Here are a few of the key characteristics that mark successful digital transformation efforts:

Prioritize communication and culture

Digital transformation should not be an IT initiative or a purely tech-centric activity. This effort is about transforming your business, its approach and interactions among the workforce – and is therefore a cultural transformation. In order to succeed, organizations must identify the cultural impacts of this transformation and address them proactively.

"It's important from a cultural perspective that you not only transition the business but that you move from pushing change to an organization that is actually pulling for more," says Taylor. "You need to ensure that there's parity with respect to the focus and amount of investment made into the 'people' aspect and organizational aspect, which will ultimately determine the success or failure of this transition."

Many new technological initiatives fail because of the rate of culture adaptation. The goal with digital transformation is to stimulate and shape the organization's culture so that the workforce understands, is eager for, and is prepared to adopt new technology. This requires vision and communication throughout the organization about the new "state" of the business after implementing a digital transformation.

For the fuel and petrochemical industries, one major area of cultural change during this digital transformation process is the breaking down of silos to better share knowledge and data among different disciplines. Facilities traditionally collect huge amounts of data and have extensive processes and systems in place to ensure safety and improve efficiency. The next step is to integrate data from departments and bring together people with expertise from different disciplines to not only optimize efforts but to turn the data into information and move to a more predictive model.

Digital transformation is continuous process. Technology will continue to evolve, challenges will continue to emerge, and having a workforce ready and able to adapt to meet those developments is key to companies' future success — and the success of our industries.

Recognize that each business will have a different experience

Digital transformation is based upon taking where a business is in terms of its technology, business model, and organizational characteristics and working to optimize and transform it to gain additional benefits.

To lay the groundwork for the transformation, an organization must understand their strengths and weaknesses, how they compare to their competitors, and identify deficiencies that must be addressed.

These characteristics will differ by company and even by site, making adaptation and flexibility an important part of any transformation. The goal is for a sustainable, ongoing transformation that will allow the organization to continue to thrive during the “accelerating acceleration” of technological change.

Ensure ongoing C-suite involvement and commitment

Much like the industries’ safety culture, digital transformation requires leadership and involvement of the C suite. To effectively shift to a continuous improvement model, an organization needs visionary leadership that includes a long-term understanding of what the next steps are going to be.

The constantly evolving nature of digital transformation means that it requires an ongoing dedicated commitment. This will not be effective as a part-time or siloed activity; it requires the best and brightest of an organization working in cross-functional, dedicated groups to identify business opportunities which are then tracked and supported.

And it also requires a belief within the organization that the journey is making life easier, not harder. It is essential that digital transformation efforts do not duplicate existing work processes but rather improve the system. By making the user experience for employees as good as it can be, companies set up a scenario in which employees willingly embrace the system, rather than have it forced upon them. This kind of cultural shift must come from — and be continually reinforced — by leadership.

AFPM’s OPCAT (Operational Planning, Control & Automation Technologies) Committee helps fuel and petrochemical manufacturers leverage and embrace digital transformation, share good practices, and improve outcomes. Their recent webinar on digital transformation was built upon several sessions at the 2020 AFPM Summit. Additional webinars and newsletters are in development. If you have a case study you would like to share or would like to sign up for OPCAT communications, please email Alyse Keller at AFPM.

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