

pluto**shift**

AI Change Management Success: Pre and Post COVID-19

Featuring:

Debbie Rothe, Senior Leader for the Environmental Analytical Global Capability within the Environmental Technology Center at Dow

Prateek Joshi, Founder & CEO of Plutoshift



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Debbie Rothe:

Debbie is a Technology Leader for the Environmental Analytical (EA) Team in the Environmental Technology Center at Dow. In her role, Debbie fosters innovation and drives Manufacturing 4.0 initiatives within the Global Environmental Operations Business. Debbie is passionate about developing people and building high achieving, empowered work teams. Under Debbie's leadership, the EA team has successfully implemented innovative technologies that increase safety, productivity and reliability.

Debbie holds a Bachelor's degree in Chemistry from Central Michigan University and a Ph.D. in Materials Engineering from New Mexico Tech. Debbie is a Prosci certified change management practitioner, Human Synergetics accredited facilitator for organizational effectiveness and culture, and a Franklin Covey certified facilitator.

Debbie joined Dow in 1998 as a college co-op in the Surface / Microscopy and X-ray group of Analytical Sciences. Debbie specialized in failure analysis and performing forensic investigations. Her areas of specialization include Microscopy, Infrared Spectroscopy, and X-ray fluorescence. In 2011 she added the role of Fundamental Problem Solving Subject Matter Expert, providing problem solving expertise to improve plant reliability by resolving complex and persistent manufacturing problems. Debbie became resource leader for EA in 2015, where she provided people leadership for the Midland team and aligned resources to meet the needs of EA's key Midland clients. In 2017, Debbie took on global resource leader responsibilities for Environmental Analytical.



Prateek Joshi,
Founder and CEO
of Plutoshift

Prateek Joshi:

Prateek Joshi, Founder of Plutoshift, is a published author of 13 books on Artificial Intelligence. He has been featured on Forbes 30 Under 30, CNBC, TechCrunch, Silicon Valley Business Journal, and more. He has also been an invited speaker at conferences such as TEDx, Global Big Data Conference, Machine Learning Developers Conference, and Sensors Expo.

About Plutoshift:

Prateek Joshi launched Plutoshift in late 2017 with the vision of connecting the constantly changing realities of the physical world with the monitoring power of intelligent software. This effort resulted in helping industrial operators harness the power of existing plant data related to operations, finances, and maintenance spread across different systems. Plutoshift is the leader in data intelligence for industrial processes.

Their cloud-based solution monitors the performance of industrial processes in an automated way for manufacturing businesses. Plutoshift's GROUNDED AI™ technology transforms passive legacy monitoring systems to active performance monitoring in industries like water, food, beverage, brewing, chemicals, and energy. This enables operators to automatically monitor critical processes and have access to actionable information in real-time. Plutoshift has offices in Palo Alto, CA, Denver, CO and Louisville, KY.



Joshi:

In the face of the COVID-19 global pandemic, we have seen the critical need for businesses to ramp up and begin digital transformation efforts. As we've seen the world change and businesses adapt, we went back and looked at the survey report that we published in January 2020, "Breaking Ground On Implementing AI", which summarized what businesses were doing to implement digital transformation efforts. It's now even more important than ever with the global pandemic. Plutoshift surveyed 250 manufacturing professionals and while manufacturing companies see the value in implementing AI solutions, many are struggling to deliver clear results and are reevaluating their strategy. Some of the key success factors that the survey highlights is the importance of data collection and knowing where to find the right data, ability to have a narrow focus in the project at hand, demonstrating early success, having small steps in the larger initiative and ensuring buy-in from key constituents.

With the onset and impact of COVID-19, companies have had to quickly adapt given their employees had to stay at home and were asked to work in remote environments. We've seen both digital and non-digital businesses try to pivot immediately - and many are accelerating their digital transformation plans given the pandemic and the new world we find ourselves living in.

We had the pleasure of sitting down with Debbie Rothe, over Zoom of course, to get her perspective on digital transformation and innovation. Debbie works in change management innovation at Dow and she began leading this group back in 2015. She is a trailblazer in this area and we had the pleasure of speaking with her about her role, what advice she has for those making changes in this current environment and what she has learned through this process.



Rothe:

Prior to 2015, I was working in a technical project leader role. I would lead multidisciplinary teams to solve problems for our manufacturing facilities. In 2015 I became a people leader for our Environmental Analytical Team at Dow. I focused my energy on learning as much as I could about how to be an outstanding leader. I studied culture, how to lead, and ignite people to achieve. We had a new tool that allowed us to create dashboards from plant data. We started a conversation with one of our sites bringing in experts from the plant, data analytics and our environmental analytical team to work on implementation.



Joshi:

What have you learned in leading innovation at Dow that companies can learn from as they implement AI projects in this challenging time - especially with remote workers?



Rothe:

I have learned a lot about the power of people. People's ideas fuel innovation. The focus needs to be on creating an environment where people are trusted, encouraged to think freely, share their ideas, and are willing to try things without fear of failure. We have successfully continued our focus on innovation amid the COVID-19 pandemic, because of the culture we have created. The abrupt shift to our remote working situation, happened almost seamlessly. We instantly implemented new communication avenues that helped us share ideas and continue moving forward with our projects. People quickly adapted, asked questions when they were unsure and approached everything with a bias for uncovering possibility. I attribute this to the emphasis we have on the well-being of our people. When you put people first, it alleviates some of the fear and worry that can derail focus because people know their leaders care about them. It's simply putting Maslow's hierarchy of needs into action in the workplace.



Joshi:

Can you discuss the principles of the change management process that are most important - especially in this changing time where digital transformation is being accelerated?



Rothe:

We utilize a change management model with the acronym ADKAR from Prosci™. There are a wide variety of tools that assist in change implementation that Prosci™ has available. Before beginning any change, a clear vision of success needs to be established. Build a case for "why" and identify how this will make things better. Compare this with the current state and establish a plan for transformation to achieve the final state. Once this is clear, you work through the ADKAR process which consists of 5 steps: Awareness, Desire, Knowledge, Ability and Reinforcement. In my experience, the focus on building awareness and desire cannot be understated. Helping people see the vision for the transformation and how this will help them builds that awareness and desire. Now this message needs to come from someone who has influence and credibility with the people impacted by the change. Another important source of motivation is involving the people impacted by the change in designing the solution. This builds a sense of ownership and contributes to removing barriers along the change process.



Joshi:

What digital tools and processes have helped Dow during COVID-19?



Rothe:

We have used a variety of tools for communication, project tracking and controlling instrumentation. We found that regular, informal video team huddles help keep us connected. We had some conversations focused on idea sharing for innovation efforts. We use Microsoft Teams to have conversations, share ideas and store documents across our global organization. We also use a variety of dashboards to monitor data from our plants and lab results. With our remote-desktop tools we check on instrument status to make sure things are operating properly.



Joshi:

What have been the benefits of being an early adopter of AI and how has this increased the company's success?



Rothe:

The magnitude of data we have available to us across our assets is impressive. The challenge is detecting the small shifts that are going to impact our operations today or the gradual drifts that will cause issues in a few days. We need a means to enhance this signal over the baseline noise so we know what really matters. The benefits of having an organization that is eager to adopt AI, saves significant time in culling through the data. Our experts can invest their time in taking action that will increase reliability and prevent unplanned events. With an organization that has a bias for continuous improvement, we are positioned to adapt and optimize these tools to have the biggest impact. We proactively shape solutions that meet our needs. This allows our organization to move rapidly through the innovation stages to implementation.



Joshi:

What advice do you have for companies that are beginning implementation at this time? How did you keep the project on track? What were the most important factors during implementation?



Rothe:

If I was brought into a new company and asked to lead digital implementation, the first thing I would want to understand is the culture. This will help me understand how to build effective messaging content, what behaviors I need to amplify and reward on the team. In terms of the implementation it is very important to define success and make the vision crystal clear. Engage the team on the vision process as much as possible. When a team owns the vision, it makes them more eager to invest energy to make it happen. Inspire the team with the vision and if you have the right culture, they will make things happen. If culture is a challenge, more effort will be invested showing people what is in it for them and bringing the team along on the journey. A sponsor or influencer that repeatedly articulates the value and urgency of the work being done is a critical component for success. Most of these implementations require a lot of pieces to work together. Defined roles and responsibilities for project managers and change managers helps things move smoothly. It can take a long time and you don't want people to get distracted and lose interest. Keep articulating the vision to keep awareness and desire high and resistance low.



Joshi:

What have you changed in your approach given the current environment and how will this impact your future workflow and process?



Rothe:

I think what has recently happened with COVID-19 amplifies the urgency of digital transformation and various other tools that allow us to keep operating safely and effectively. When you are unable to physically stand in front of the asset you are responsible for operating, it certainly enhances awareness of the need for technology to operate remotely. What I have seen in my team's response to this crisis is the value of being open to learning. We learned a lot of new skills very quickly when we all found ourselves doing our jobs remotely. I expect to see a greater emphasis on how we can enhance our signal through AI. I am curious to see the ideas this generates within our organization and how we evolve on our digital journey.