AUGMENTED REALITY IN MANUFACTURING

AN INTERVIEW WITH

LIBRESTREAM

Dan Flynn has 20 years of experience in sales and business development at companies ranging from early stage high growth to global corporations. At Librestream, Dan is responsible for North American Sales. His experience includes Networking, Security, Hosting, Video, Enterprise and SaaS software platforms, and Big Data.

In March 2019, Dan will join industry leaders at the American Manufacturing Summit to discuss the impact of market dynamics and new technologies for current and future manufacturing, operations and supply chain leaders. Pulling on his own expertise, Dan will lead a Lunch & Learn titled, Digitize Your Workers Day with Augmented Reality and Wearables: Deployment Examples and Business Outcomes. His session will cover the benefits of digitization and augmented reality (AR), the different types of wearables available to manufacturers and the outcomes of implementing AR into an organization.

What are the main drivers for organizations deploying augmented reality?

When it comes to organizations investing in digital transformation technologies like augmented reality (AR), there are three main trends we are seeing in the manufacturing market.

The first trend focuses on the digital ecosystem of smart factories. Nowadays, factories are well equipped with better wireless coverage and many organizations have the devices needed, such as smart phones and wearables, to start deploying AR.

The second factor is the shift in service demands. This in turn puts more demand on the manufacturing industry to produce the products that can perform and deliver the higher uptime end customers are now expecting. AR collaboration tools are key to helping manufacturers deliver on these products.

Expertise shortage is the other trend we are seeing across not only the manufacturing industry, but all industrial industries. AR tools that can leverage the knowledge and expertise within an organization are one of the main drivers for deploying this technology.

How is augmented reality disrupting the manufacturing industry?

One of the main outcomes we have seen from our manufacturing customers is that AR provides an opportunity for them to reassess and streamline their operational processes. It allows them to optimize and create new workflows, whether that be the physical steps it takes to solve a problem or turning day-to-day processes into digital workflows. The data captured from these tools is extremely important and can help determine next steps based on analytics. AR is changing the way workers perform their tasks as well as how they access expertise and the content they need to complete their jobs.

How can augmented reality be leveraged in the manufacturing industry? What are its most beneficial uses?

There are many different AR tools that manufacturers can choose from. Two key tools that are deployable today are remote expert solutions and digital work instructions; both tools are a part of Librestream's AR platform.

Remote expertise is the 'see what I see' concept. It allows remote teams to communicate with audio, video, on screen drawing and content sharing to get their jobs done as quickly as possible. Digital work instructions takes any process whether it be day-to-day maintenance operations or special troubleshooting instructions and provides users with an easy step-by-step digital workflow.

Both of these tools are great individually, but the real power is with what comes after and that's creating a knowledge base with all of the content captured through the tools. This knowledge base then becomes a crucial part in helping manufacturers improve organizational operations.

A few key uses cases are:

- Remote facility maintenance and support: This is the ability to remotely connect field staff and subject matter experts to accelerate issue resolution and reduce downtime.

- Best practice training and mentoring: This happens between team members when using remote expert augmented reality to effectively transfer knowledge.

- Virtual tours and audits: Internal teams and external vendors use remote expert augmented reality to help when rapidly diagnosing and inspecting assets.

What are the benefits and challenges of implementing augmented reality in an organization?

The goal of implementing AR for manufacturing organizations is increasing overall cost and time efficiency within the organization.

This is done through achieving the following top benefits we have seen through our customers:

- Standardizing global process: Digital work instructions solutions give organizations a reason to look at their processes and help them streamline them across global facilities.

- Reducing unplanned downtime: Downtime usually comes out of the blue and can be extremely costly to manufacturing organizations. Using AR to immediately connect with expertise can help teams quickly reduce that downtime.

- Creating a knowledge base of tagged and searchable content: This is critical for capturing expertise and sharing for training and mentoring situations.

Although there are clear benefits to AR, there are common challenges organizations may experience when trying to implement it:

- Getting the okay from IT: According to a Forrester study, "31% of global organizations see security as one of the biggest challenges to their digital transformation strategies". In order to combat this challenge, it's crucial to have IT involved from the start of implementation so that they can work with the vendor to check off all of the security boxes.

- Selecting the right use cases and tools that can deliver immediate results: It's important to start with the AR solution that is realistic for right now. These are the tools that have already been deployed and tested.

- Gaining internal buy-in and a successful adoption plan: It's vital to the success of a project to have a project team. This must include all of the important roles from the top management support, and project champion to the boots-on-the-ground super users.

How can manufacturing companies use digitization to stay competitive and maximize ROI?

Digitization, and specifically AR, is helping manufacturing companies stay ahead of the game and be innovative. AR gives these companies the ability to become more predicative in their day-to-day operations and spot problems before they happen.

Here a few examples of ROI seen by our customers:

- 5-10% Improvement in production line asset uptime.

- 30% Productivity gain in mentoring new technicians.

- 10-20% Accelerated time to market for new products.

- 340% Improvement in fit and finish discrepancies down from 179 to 40.

What are the next big trends for augmented reality within manufacturing?

AR is at an exciting time right now. With so many organizations focusing their digital transformation initiatives around AR, there is a big push for its 'next steps'.

There are three main trends we are hearing our customers talk about:

- IoT sensor data: This is the ability for users to pull up relevant data from IoT sensors either in a remote expert session or within a workflow.

- Integrated solution: Customers aren't looking for a stand-alone solution. It's important that the tools they choose are a part of a fully integrated system.

- Data & Analytics: The ability to perform data analytics is top of mind for customers. This gives organizations valuable data to help with predictive maintenance.

Join Librestream at the American Manufacturing Summit.

Join our interactive Lunch & Learn on augmented reality and wearables within manufacturing and hear from Gary Binstock, Director of Technology - Strategic Innovation and Technology Alliances at Colgate Palmolive. Find out more by visiting the **Generis website** and **American Manufacturing Summit program**.