

Advanced Textiles EXPO®

DEFINING THE FUTURE OF TEXTILES

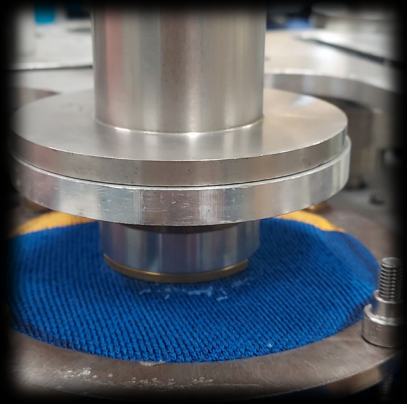
Utilizing Technology in Workforce Training to Retain, Expand, and Transfer Knowledge

MANUFACTURING
SOLUTIONS CENTER

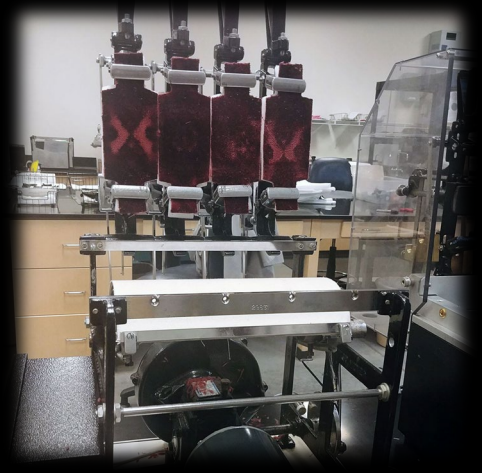
AT CATAWBA VALLEY COMMUNITY COLLEGE

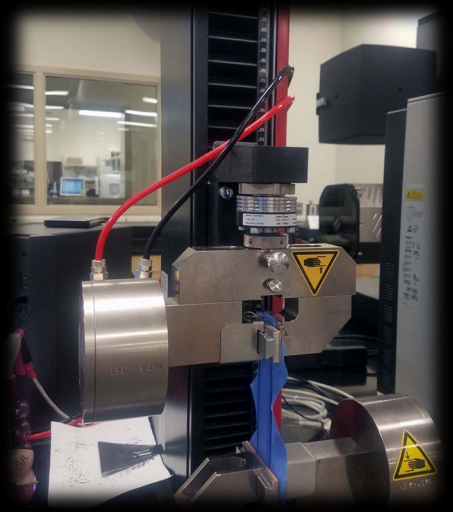






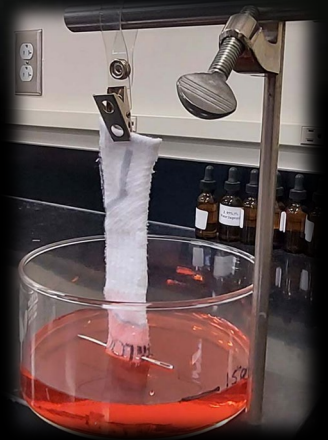




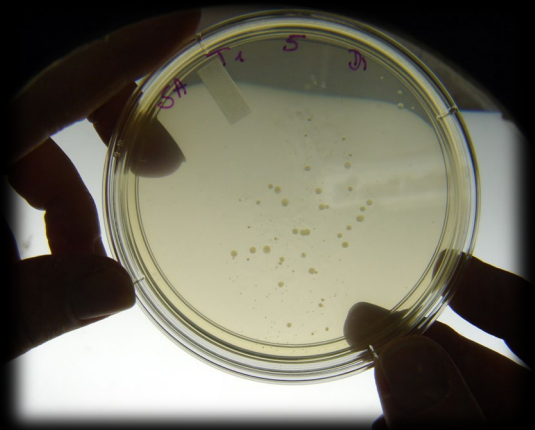


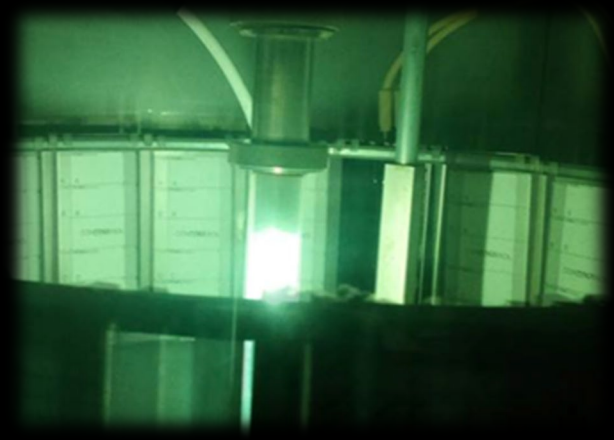



SCHAP










20.2
100 cm²




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GK

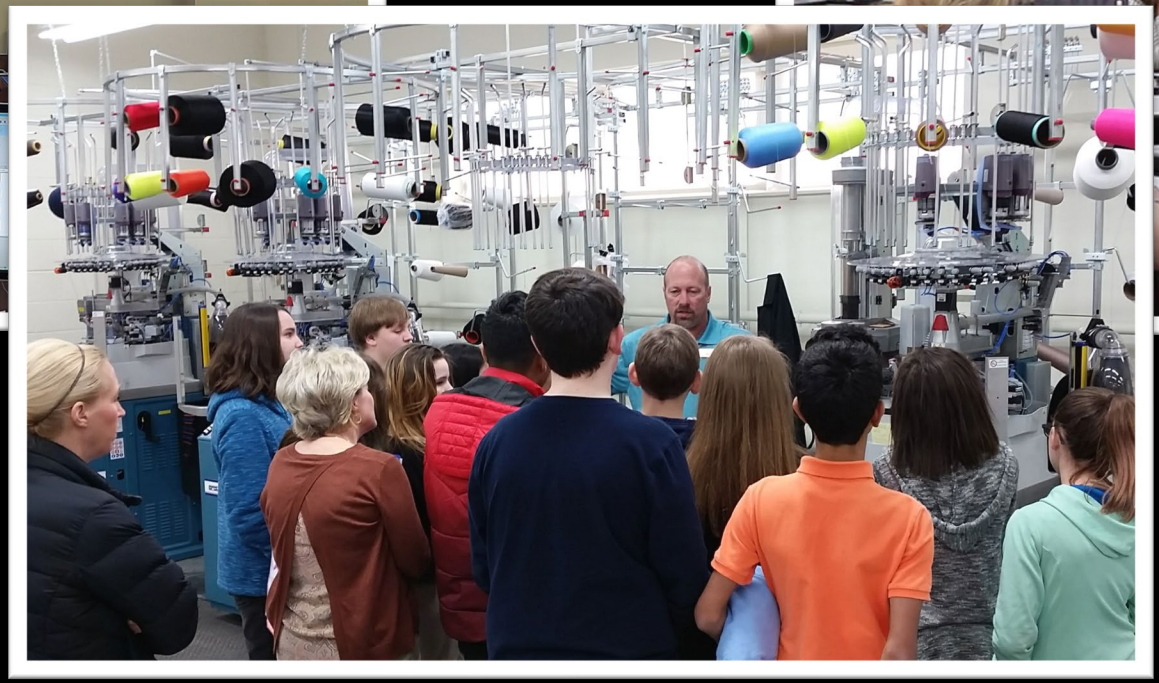

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Current Workforce Challenges in Every Industry…

- Aging Workforce aka “Silver Tsunami”
- Recruitment of New and Younger People
- Training Time and Cost for New Hires
- Consistency in Training Personal
- Scaling Training Processes Efficiently



INNOVATIVE & AUTOMATED SOLUTIONS IN THE INDUSTRY

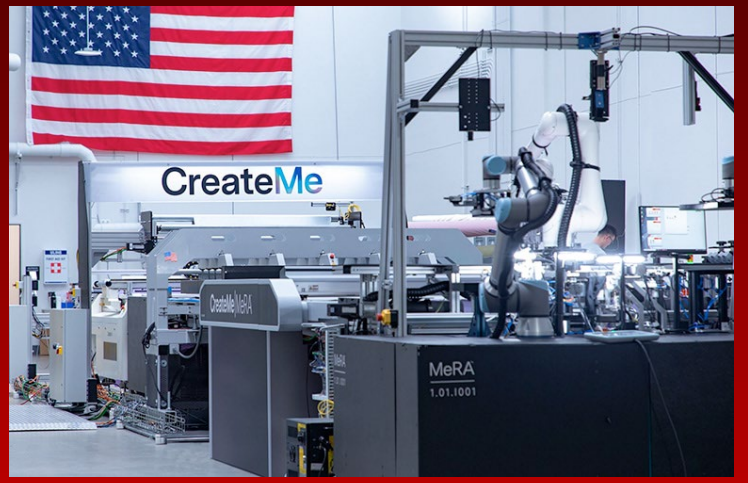
TUKATECH



CreateMe
The Future of Fashion is Bonded



HENDERSON
Sewing Machine Co.
SERVICE OUR No 1 PRODUCT




Textile Handling Real-time Expertise and Data Exchange
THREAD-X
AI Cloud and AR
Training Platform
THREAD-X was Conceptualized by the Manufacturing Solutions Center and Created by Analog

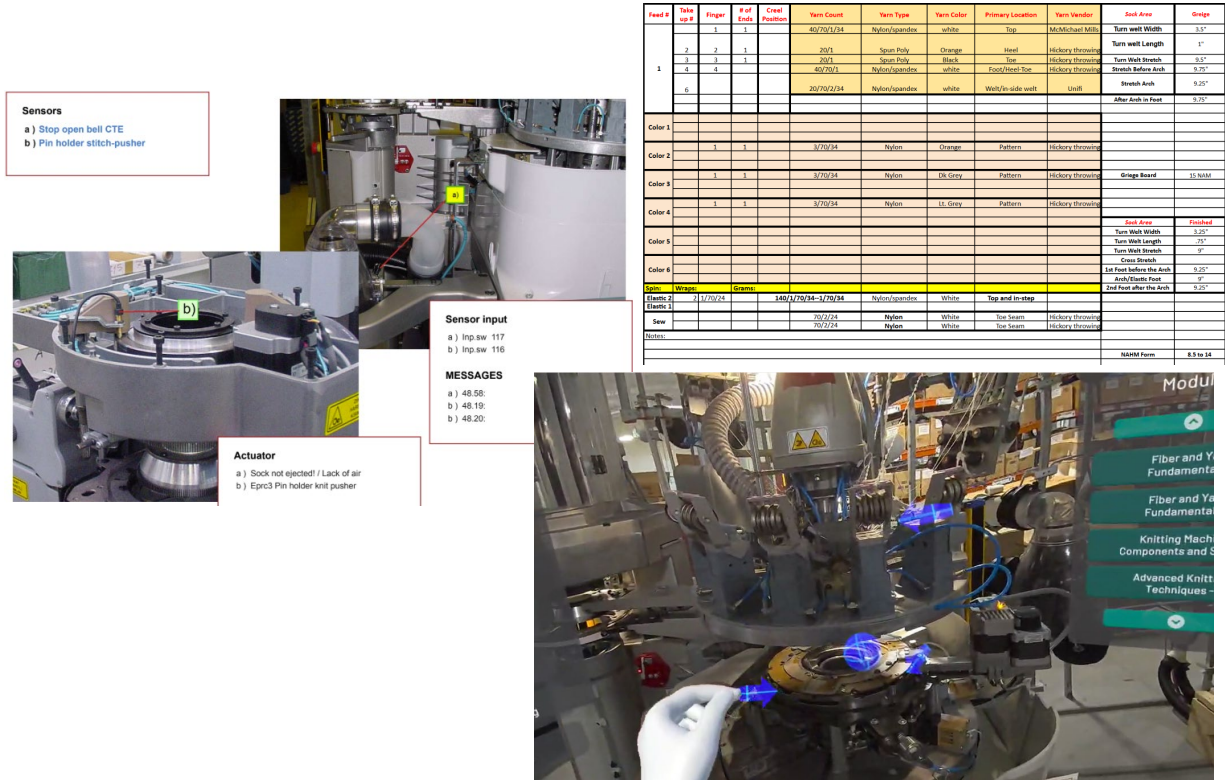
THE INITIAL OBJECTIVE

Create an automated system that allows experts to easily capture knowledge, scale training and troubleshoot equipment issues

THREAD-X will give every trainer the ability to deploy their knowledge and skills to new technicians in a matter of DAYS, instead of weeks or months

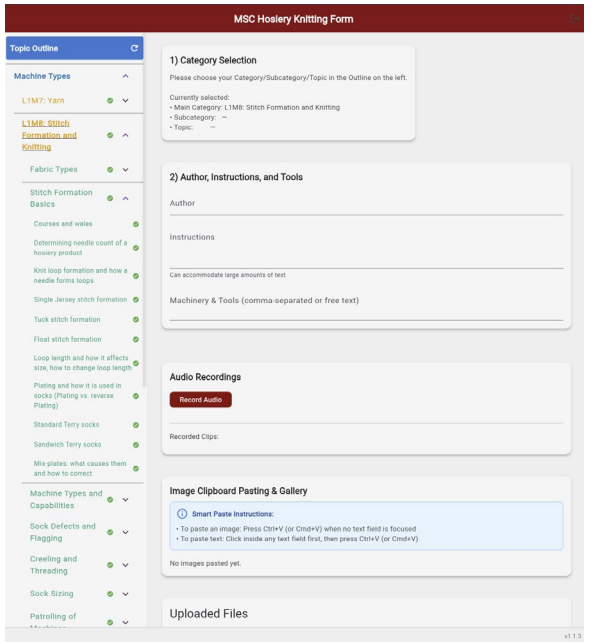
Experts can easily upload:

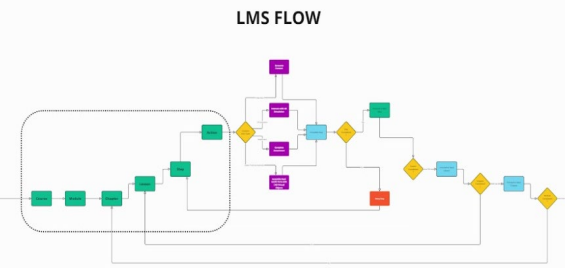
- ✓ SOPs
- ✓ PowerPoints
- ✓ User Manuals
- ✓ Safety Standards
- ✓ Equipment Settings
- ✓ Instructional Materials
- ✓ Handwritten Notes
- ✓ Spec Sheets
- ✓ Videos
- ✓ Photos
- ✓ CAD / 3D Assets



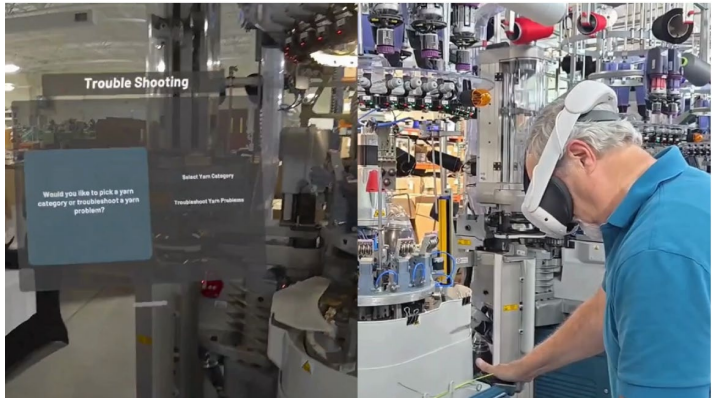
How THREAD-X Works

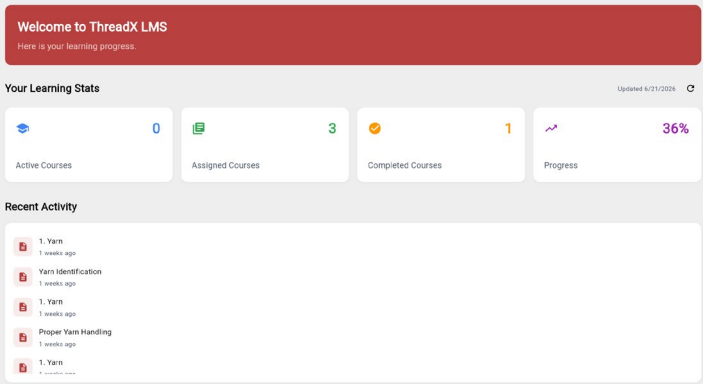
- The **Subject Matter Expert *(SME)*** uploads information associated with each piece of equipment or process into the SME Portal, which has web-access.
- It allows AI to breakdown and classify all of the information into a **Content Management System *(CMS)*** database, where it then creates a relationship between all words, people, parts, or phrases, just like a brain.
- There are two ways the information can then be retrieved from the CMS.
  1. The **Learning Management System *(LMS),*** which uses AI to personalize learning based on the user and their skill level.
  2. AI Chat, where the user can ask a question about any topic that has been uploaded into the CMS and the AI Chat walk them through it.
- You can utilize **Mixed Reality (MR)** headsets (REALWEAR, Oculus, etc.) for simulation training and equipment troubleshooting, even remote assistance.









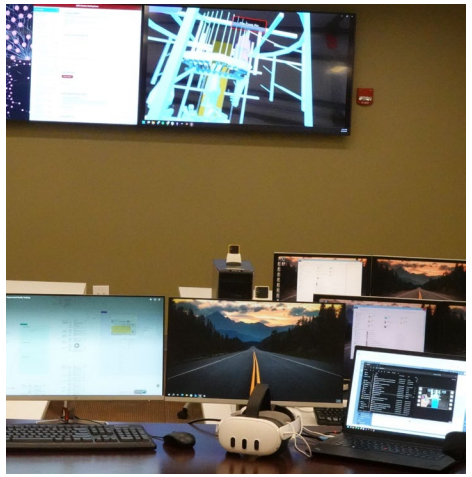


GETTING STARTED WITH THREAD-X

- You must have a Subject Matter Expert (SME) for the equipment/process that you wish to utilize THREAD-X on.
- You need a designated trainer who will incorporate THREAD-X in the training with all new hires.
- THREAD-X is not a do it one time miracle solution, it is an on going commitment.
  The trainer will also be in charge of implementing THREAD-X on the production floor for reinforcement learning and capturing new training materials.

THREAD-X TRAINING PROCESS

1. Review Course Content
2. Trainer Reinforcement
3. AR Simulation Headset Training Exercises
4. Equipment Introduction On Floor
5. Utilize AR Headset to Record Training







THE RESULTS

- **Standardized Training**
  - Every new hire will be trained according to the company SOP.
- **Faster Training Times**
  - 3-4x faster to become self-sufficient to run a production line.
- **Accelerated Troubleshooting Capabilities**
  - 95x reduction in equipment downtime in multiple industries.

MANUFACTURING SOLUTIONS CENTER
AT CATAWBA VALLEY COMMUNITY COLLEGE

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>> Workforce Training >> THREAD-X Augmented Reality Training For Manufacturing



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INTERESTED IN IMPLEMENTING
THREAD-X IN YOUR FACILITY?
Click Here to get started!

Augmented Reality Training For Manufacturing: THREAD-X