



GTI VR Webinar Series - Session 1

VR Users Committee Introduction

April 9, 2020

Presented by Ray Deatherage



Meeting Agenda

- Introductions (GTI, PixoVR, etc.)
- Background Details of VR Development Efforts by GTI
- VR Users Committee Introduction
- Webinar Series Overview
- Industry VR Presentations and Demonstrations in 2020
- Participant Discussion
- Next Steps

Presenter Introduction

Ray Deatherage – Senior Program Manager with GTI

- 27+ years experience in the natural gas industry
- 25+ years experience with a gas distribution company
 - Operations, Standards, Materials, Failure Analysis, Quality Assurance, Compliance, Training, and Operator Qualification
- 15+ years experience developing, delivering, and maintaining training and qualification programs
- 4+ years experience evaluating and developing VR training technologies
- VR/AR Association Member – Chicago Chapter
- VR/AR Energy Committee Member
- MEA Technical Training Committee Member

Background Details of VR Technology Efforts by GTI

- Operations Technology Development (OTD) Proof of Concept Project (2018)
- OTD VR Training Library Development Project (2019)
- Miscellaneous Non-OTD Development and Integration Projects (2019-2020)
- Conducted 23 onsite training and demonstrations for LDC's and others (2019-2020)
- Participated at 8 VR/AR industry events (2019-2020)
- Worked with LDC's, Pipeline Operators, Propane Companies, Water Departments, and Construction Contractors addressing their VR needs (2019-2020)
- Established an onsite VR Lab at the Des Plaines headquarters (2020)
- Has dedicated SME's to advance VR technology (2019-2020)
- Is currently a VRAR Association Member – Chicago Chapter and participates on the Energy Committee (2020)

Webinar Series Overview – 8 Sessions

- Session #1: VR Users Committee Introduction (April 9)
- Session #2: Industry Training Challenges and VR Benefits and Use Cases (April 21)
- Session #3: Hardware Equipment and Software Requirements (May 5)
- Session #4: Dashboard Overview (May 19)
- Session #5: Scoring Manager (June 2)
- Session #6: Module Development and Maintenance (June 16)
- Session #7: Current and Future VR Training Modules (June 30)
- Session #8: Technology Integration and Support Services (July 14)

Session #1: VR Users Committee Introduction (April 9)

A GTI VR Users Committee is being established to better educate the industry on the use and benefits of VR training and to provide guidance on the listed items:

- Hardware and software requirements
- Content delivery platform requirements
- Custom authoring requirements
- Enhancements to current training content
- Input on future module design and development
- Identification of future modules to-be developed
- Implementation and integration support
- FAQ's (e.g., surveys, ROI's, etc.)



Immediate Goals of VR Users Committee

- Identify VR User Committee Members and Back-Up for Each Organization.
- Identify 1st Co-Chair and 2nd Co-Chair (1-year term) – Describe GTI's Role
- Create and Formalize Committee Charter
- Identify Next VR Training Modules to be Developed
- Provide Development Input on Learning Objectives and Scoring
- Identify Proof of Concept for OQ VR Evaluation Module
- Identify Proof of Concept for VR Equipment or Tool Inspection Module
- Identify Enhancements and Requirements for Current VR Platform and Content

VR Users Committee Details Summarized

– Committee Structure

- VR developer(s)
- Current users of VR platform

– Roles & Responsibilities

- Guidance on training content, data requirements, and delivery requirements – continuous improvement of all areas.

– Estimated Time Commitment

- 1 to 2 hours monthly attending meetings, responding to communications, and providing feedback on VR usage by your organization.

– Next Steps for Identifying Users Committee

Session #2: Industry Training Challenges and Benefits of VR and Use Cases (April 21)

- Increased learner retention
- Increased on-demand training opportunities
- Remote and multi-user training and qualification opportunities
- Increased consistency of training and qualification programs
- Increased exposure to different scenarios including hazard situations.
- Improved reporting capabilities and training effectiveness data
- Decreased O&M expenses associated with training (e.g., travel, classroom prep, etc.)
- Uses Cases: Training, OQ Evaluations, Virtual Equipment Inspections, Virtual Classroom, HR Empathy Training, Headset and Computer Usage
- Return on Investment (ROI) Examples



Session #3: Hardware Equipment and Software Requirements

(May 5)

- Hardware Equipment



- Software Requirements

- Applications (See below)
- Internet Requirements
- Cyber Security

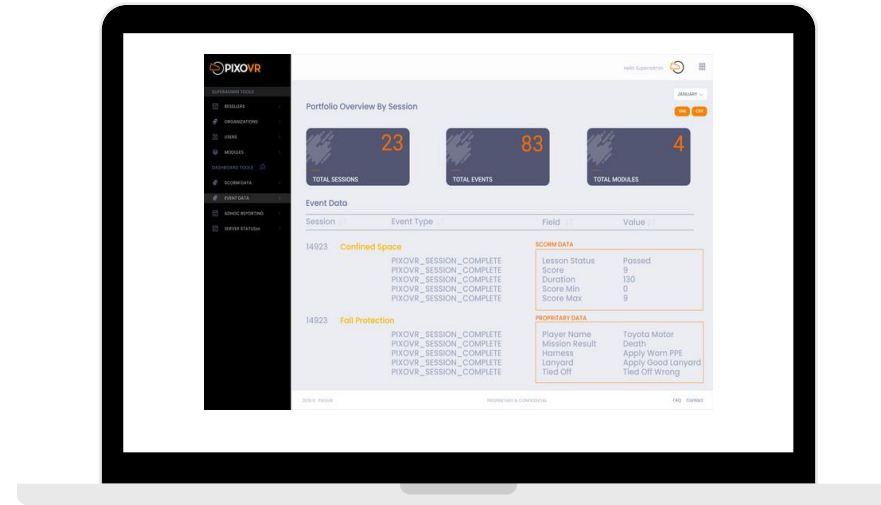
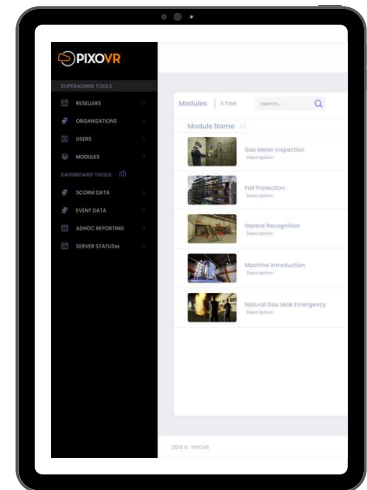
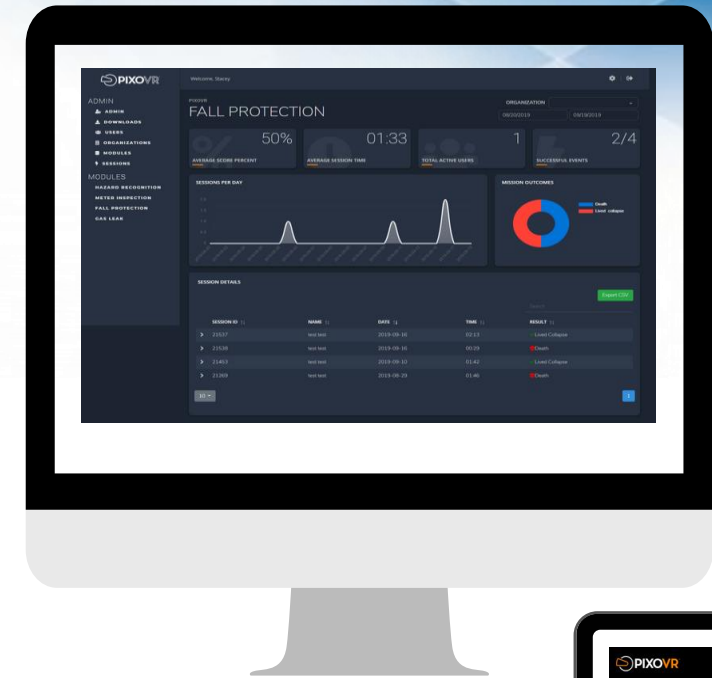


Microsoft
DirectX

Session #4: Dashboard Overview (May 19)

The Dashboard allows users to manage the listed training program elements.

- Content Delivery
- User & Administrator Assignments
- Scoring & Data Analytics
- Custom Authoring Manager



Session #5: Scoring Manager and Authoring Tool (June 2)

The Scoring Manager application is an authoring tool that allows users to customize the scoring to their specific company procedures or training requirements.

- Initial Module Development
- Semi-Annual Updates



Session #6: Module Development and Maintenance (June 16)

- VR Users Committee
- Discovery and Design Document
- Alpha and Beta Builds
- Testing Modules During Development
- Semi-Annual Enhancement Log



Session #7: Current and Future VR Training Modules (June 30)

Current Modules Available

- Inside Meter Inspection
- Emergency Response Procedure
- Appliance Inspection*
- Inside Leak Investigation*
- Pipeline Patrolling*
- Facility Locating and Marking*
- Outside Leak Investigation and Classification*

Sizzler and demonstration videos will be shared during webinar session.

Future Module Development

- Gas Handling
- Meter Change
- Regulator Inspection
- Industrial Regulator Inspection
- Valve Inspection
- Leak Survey
- Hazard Mapping a Jobsite
- Pre-Excavation Inspections

This list will have been prioritized by the VR Users Committee before webinar date.



Session #8: Technology Integration and Support Services (July 14)

- Hardware equipment procurement and set-up
- Platform access to modules
- Onsite train-the-trainer sessions
- Stakeholder presentations and demonstrations
- VR Users Committee participation
- Development of training material and technology aids
- Training module development
- Training module customization support



Session #8: Technology Integration and Support Services (July 14)



Industry VR Presentations and Demonstrations (2020)

- AGA Spring Conference (May - Chicago, IL)
- *NGA Gas Operations School (June - Smithfield, RI)
- Propane Association of New England Summer Meeting (June - Portland, ME)
- Mid-Atlantic Conference of Regulatory Utilities Commission (June - Hot Springs, VA)
- *The Roundtable Live! (August - Manteno, IL)
- *MEA Operations Conference (August - Rochester, MN)
- *Propane Association of New England Summer Meeting (August - Portland, ME)
- *Western Regional Gas Conference (August - Scottsdale, AZ)
- *APGA Operations Conference (October - Louisville, KY)
- GTI VR/AR User's Conference w/PixoVR (November - Chicago, IL)
- *The Roundtable (August - Manteno, IL)

**Note: Events that GTI plans to be an exhibitor at.*

Participant Discussion Questions

- Before today's session, have you actively been exploring the use of VR training?
- If so, what internal resources (e.g., training, IT, innovation, etc.) are responsible for evaluating and integrating this technology?
- Do you feel participation in a VR Users Committee will help your organization better understand the capabilities and how to integrate this training technology?
- What types of challenges do you expect with the acceptance and adoption of VR training? Budget, internal knowledge of technology, leadership buy-in, workforce buy-in, etc.?
- How has COVID-19 changed your view on how effective training could still be delivered to your workforce remotely without travel?

Next Steps

- Determine if your organization wants to participate in the VR Users Committee.
- Complete VR survey – Based on the topic of each webinar session and the questions raised by participants, a short survey will be created and distributed within 48-hours. The results will be shared with participants during the next webinar session.
- Collect VR questions from your company stakeholders and submit to GTI (Ray).
- Invite the necessary company stakeholders to participate in **Session #2: Industry Training Challenges and VR Benefits and Use Cases**

Stay Safe and Healthy!



Questions?

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