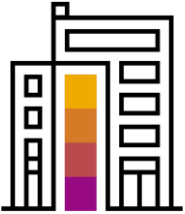




# SAP® Innovation Awards 2020 Entry Pitch Deck

Revolutionizing Asset Maintenance with Remote Assisted Reality

Visual Mobility Inc.



## Company Information

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<b>Headquarters</b>	San Diego, California
<b>Industry</b>	High tech
<b>Web site</b>	<a href="http://www.visualmobilityinc.com">www.visualmobilityinc.com</a>

Visual Mobility Inc. (VMI) develops stand-alone and Web-based apps that optimize and expedite asset management and solve real-life field service and maintenance challenges in real time – including the installation, maintenance, repair, inspection, and renovation of high-tech machinery. Its breakthrough Remote Assisted Reality (RAR) technology and SEENiX apps are technology disrupters. Specialized Internet of Things (IoT) smart glasses use secure, high-definition audio and video live streaming for real-time collaboration between on-site technicians and remote experts. Field technicians can quickly call on experts who are specifically qualified to help with the asset under maintenance. Experts can watch live streaming over the Internet from any device, invite other internal or external experts to watch the live stream, and make comments instantly available for field reference and prompt action. Remote experts can interact with each other to assist the field in resolving problems quickly, efficiently, and correctly. Each interaction can be recorded and attached as multimedia data and preserved for reference, use cases, and business needs.

SEENiX delivers on the promise of “digital omnipresence” – the ability of service experts to be available digitally in multiple places at the same time – a core concept in RAR. The result is faster resolution of service requests, optimized leverage of the expertise of qualified experts without requiring physical presence, lower service costs, and happier customers.

# Revolutionizing Asset Maintenance with Remote Assisted Reality

Visual Mobility Inc.



**Our remote assisted reality platform is a real game changer for field service operations. Not only can experts anywhere in the world see what the technician is seeing on-site in real time, but the platform can also be integrated into and activated from your back-end SAP applications. Plus, you now have all that multimedia content attached to the asset service order history for future reference and analysis.**

Jim Hoffman, President and CEO,  
Visual Mobility Inc.

## Challenge

Companies and equipment makers often lack enough field service personnel and qualified experts to meet the demand for maintenance, repair, inspection, and renovation of high-tech machinery. When on-site, technicians may encounter problems they can't fix, leading to repeat service visits, longer downtime, and higher costs.

## Solution

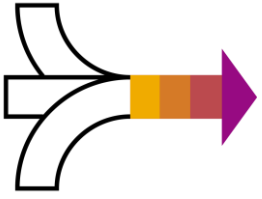
VMI's Remote Assisted Reality platform, SEENiX, integrates with SAP® applications and supports a digital omnipresence for collaborative asset maintenance. IoT-enabled smart glasses let field technicians download asset instructions and securely broadcast audio and video for live collaboration with remote experts.

## Outcome

SEENiX and integrated SAP solutions enable faster repairs and maintenance for a higher first-time fix rate, less downtime, lower service costs, fewer complaints, and higher customer satisfaction. Recorded multimedia content can be accessed for validating repairs, future analysis, inspections, training, and auditing.



\*Results are benchmark analysis estimates based on proof-of-concept results with selected VMI customers.



## Business Challenges and Objectives

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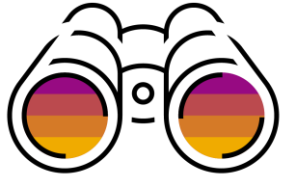
VMI aims to address the following challenges in asset maintenance and repair:

- Unpredictable repair requirements that on-site technicians can't fix on their own
- Need for additional service calls to address the problem
- Longer asset downtime, higher service costs, and customer frustration with delays
- Lack of qualified experts to perform corrective actions
- Regulatory risk due to lack of standard operating procedure performance validation
- Demand for increased safety performance and compliance in the field

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VMI developed a platform that:

- Provides technicians with real-time remote assistance from qualified experts located anywhere in the world
- Allows experts to securely observe the situational content of the asset, communicate with on-site technicians in real time to resolve issues using a modern browser, and oversee and validate the quality of repairs
- Speeds service for customers, reducing asset downtime and service costs
- Provides a repository of recorded multimedia content for use in inspections, audits, training, and more
- Integrates the RAR platform with back-end SAP applications to enable a one-touch launch of SEENiX and its inherent live collaboration capabilities directly within the asset record or service ticket



## Project or Use Case Details

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Equipment manufacturers use SEENiX to speed maintenance and lower costs. Field technicians can browse a list of available experts and invite one to connect for help resolving on-site issues. Using visual, intelligence-based enterprise services (SEENIX-VIBES), specialized IoT smart glasses are embedded with live-streaming video-recording technology to securely broadcast what technicians are observing to remote experts anywhere in the world. An embedded microSD card provides backup when no Internet connection is available. The recording is then uploaded and available for future use.

The glasses also use SEENiXGUIDE for bar-code or OCR technology. They scan asset numbers and connect with a remote SEENiX server to download maintenance instructions for the asset directly onto the glasses, offering a guided instruction set to the technician.

SEENiX APIs enable integration with SAP solutions, including ones for asset management, asset intelligence, cloud, ERP, and CRM. Using VMI's RAR technology, SEENiX apps extend the value proposition of SAP Intelligent Asset Management solutions with multimedia and real-time capabilities. VMI apps also include a customer-assisted remote triage system (SEENiX-CARTS) and a live interactive observation system (SEENiX-LIOS).



# Benefits and Outcomes

## Business or Social

- Reduced asset downtime
- Higher first-time fix rate
- Lower service costs for customers
- Lower overtime costs
- Reduced operational costs, risks, and liabilities
- Improved compliance
- Increased customer satisfaction

## IT

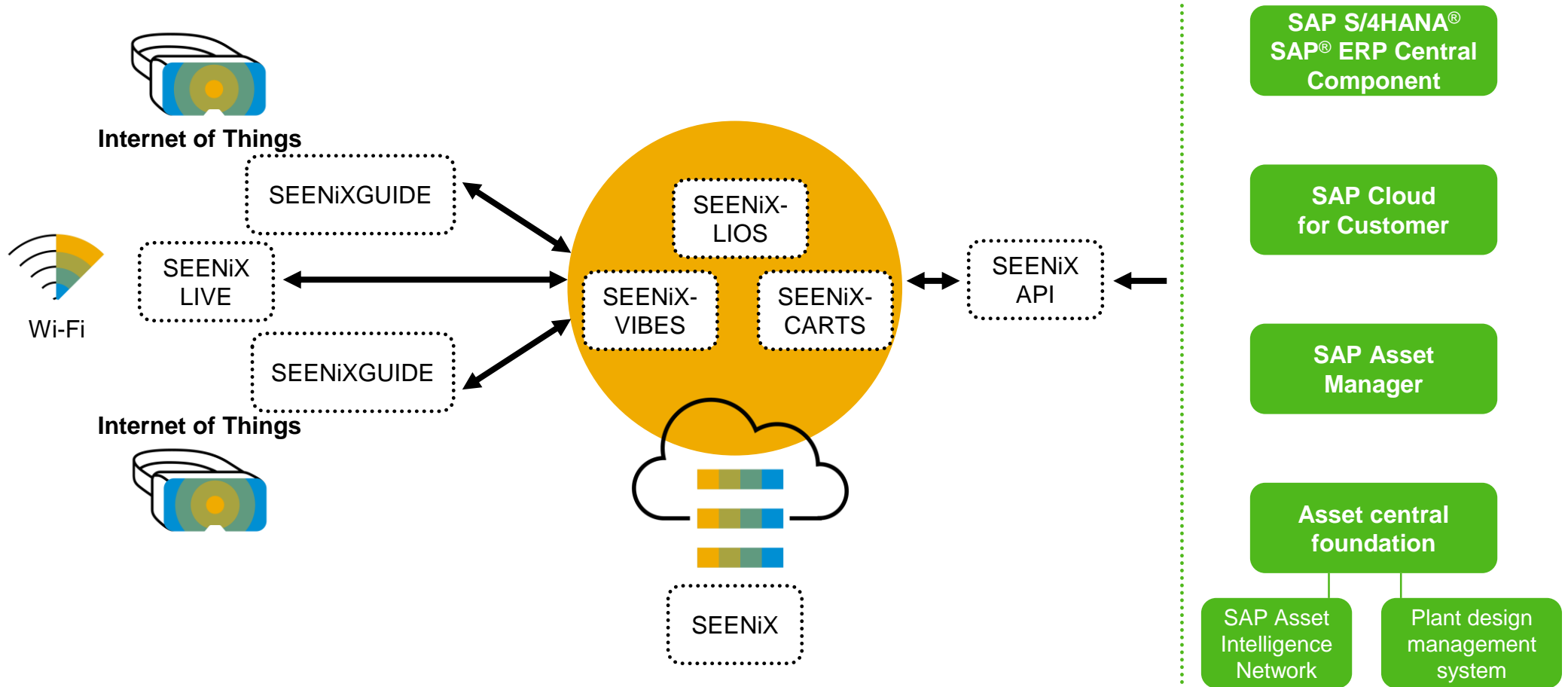
- Digital omnipresence
- High definition (up to 1080p resolution) audio and video live streaming with remote multiparty collaboration using a browser
- Secure streaming, recording, and retrieval
- Instant access to high-definition multimedia content related to the asset, including an enhanced, 360-degree view of assets
- Extended capabilities of existing IT applications and analytics

## Human Empowerment

- Technician empowerment
- Increased expert and stakeholder collaboration
- Full realization of expert resource potential and capacity
- Greater transparency
- Faster, better service



# Architecture





# Deployment

Deployment status

POC

[SAP integration video](#)

Date

03/01/2019

Number of users

80 users in 16 states in North America

## SAP technologies used:

	SAP product	Deployment status (live or proof of concept [POC])	Contribution to project
1	SAP Asset Manager mobile app	POC	Integration
2	SAP Asset Intelligence Network	POC	Integration
3	SAP ERP application	POC	Integration
4	SAP S/4HANA®	POC	Integration
5	SAP Service Cloud solutions	POC	Integration

If you have used one of the services or support offerings from SAP Digital Business Services during the implementation or deployment phase, please select with ☒ one or more of the following offerings:

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| <input type="checkbox"/> SAP MaxAttention™ services        | <input type="checkbox"/> SAP ActiveAttention™ offerings                 | <input type="checkbox"/> SAP Advanced Deployment service |
| <input type="checkbox"/> SAP Value Assurance program       | <input type="checkbox"/> SAP Model Company service                      | <input type="checkbox"/> Others:                         |
| <input type="checkbox"/> SAP Innovation Services portfolio | <input type="checkbox"/> SAP Innovative Business Solutions organization |  |





# Advanced Technologies

The following **advanced technologies** were part of the project.

	Technology or use case	Yes or No	Contribution to project
1	3D printing	No	
2	Blockchain	No	
3	IoT	Yes	Video-enabled IoT smart glasses broadcast what technicians are seeing to remote users for real-time collaboration and problem resolution.
4	Machine learning or AI	No	
5	Conversational AI	No	
6	Robotic process automation	No	
7	Data anonymization	No	
8	Augmented analytics	No	