







## vuforia® engine

for Developers

Allows custom apps to "see" and puts content in the world



## vuforia® studio™

for Enterprise Content Creators

Powerful AR content creation and publishing solution for industrial enterprises



## vuforia® chalk™

for Remote Assistance

Allows an expert to "see what I see" and annotate in a shared workspace



## MANUFACTURING AND SERVICE PRESSURES TODAY















## MANUFACTURING AND SERVICE PRESSURES TODAY















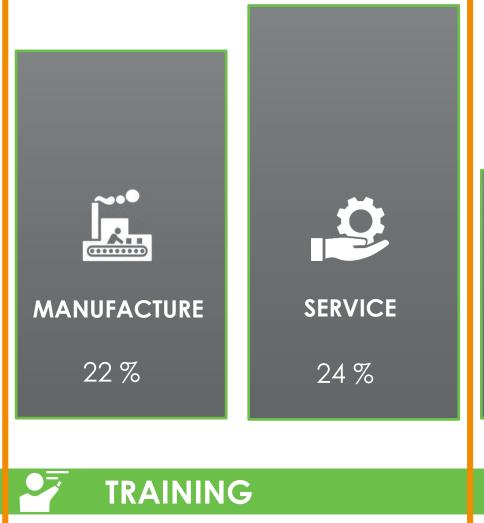
**TRAINING** 

## MANUFACTURING AND SERVICE PRESSURES TODAY













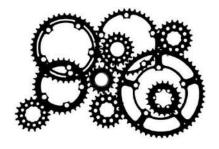
Remote Assistance is the ability for a subject matter expert to provide on the job support to a frontline worker from anywhere in the world.

## WHY IS REMOTE ASSISTANCE IMPORTANT?





Aging Skilled Workforce



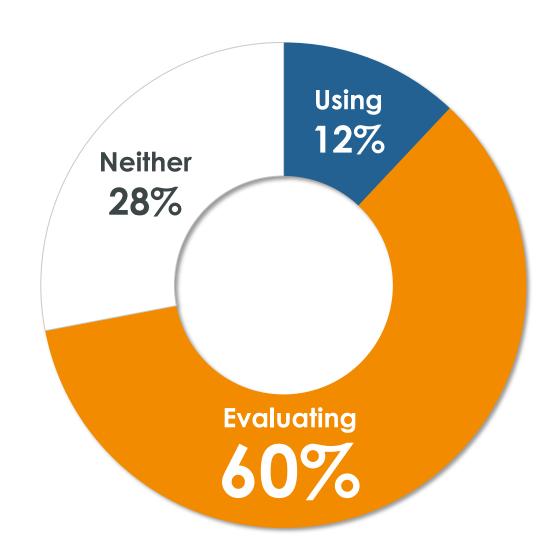
Complexity of Service Requirements



Service Profitability

## AR IN THE SERVICE INDUSTRY TODAY





Is your organization currently using AR for service and support?

The Feasibility of Augmented Reality in Service: The Service Council, 2017 Survey Results

## AR IN THE SERVICE INDUSTRY TODAY



Market view of AR in service today....

What service business challenges are AR applications most suited to solve?

71%: Improve on the job support

What Devices will your technicians use to access AR content?

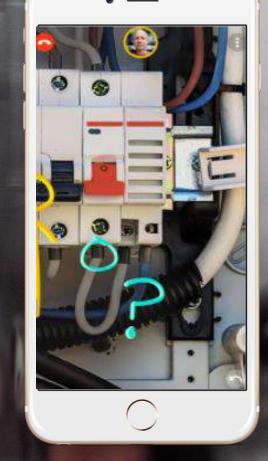
81%: Smartphones

What needs to change for AR applications to be truly market-ready?

62%: Ease of Use

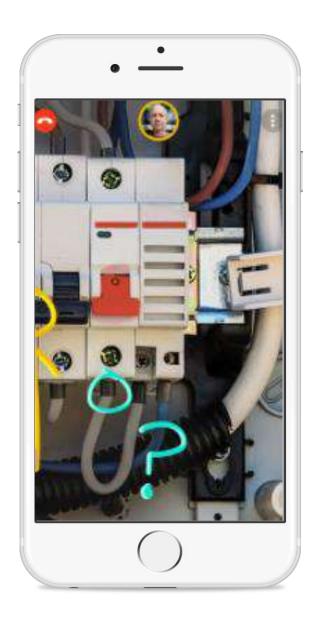






vuforia chalk





## vuforia® chalk™

### OUT OF THE BOX REMOTE ASSISTANCE

- Advanced 3D annotation anchoring
- Simple, intuitive user experience
- Designed for devices deployed in the field today
- Built by the global leader in enterprise AR





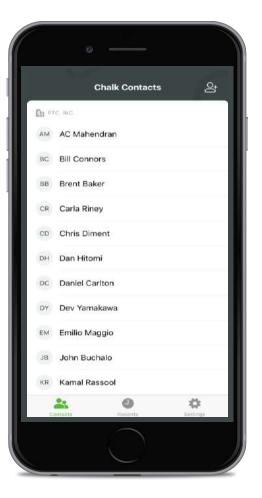


## EASY TO USE



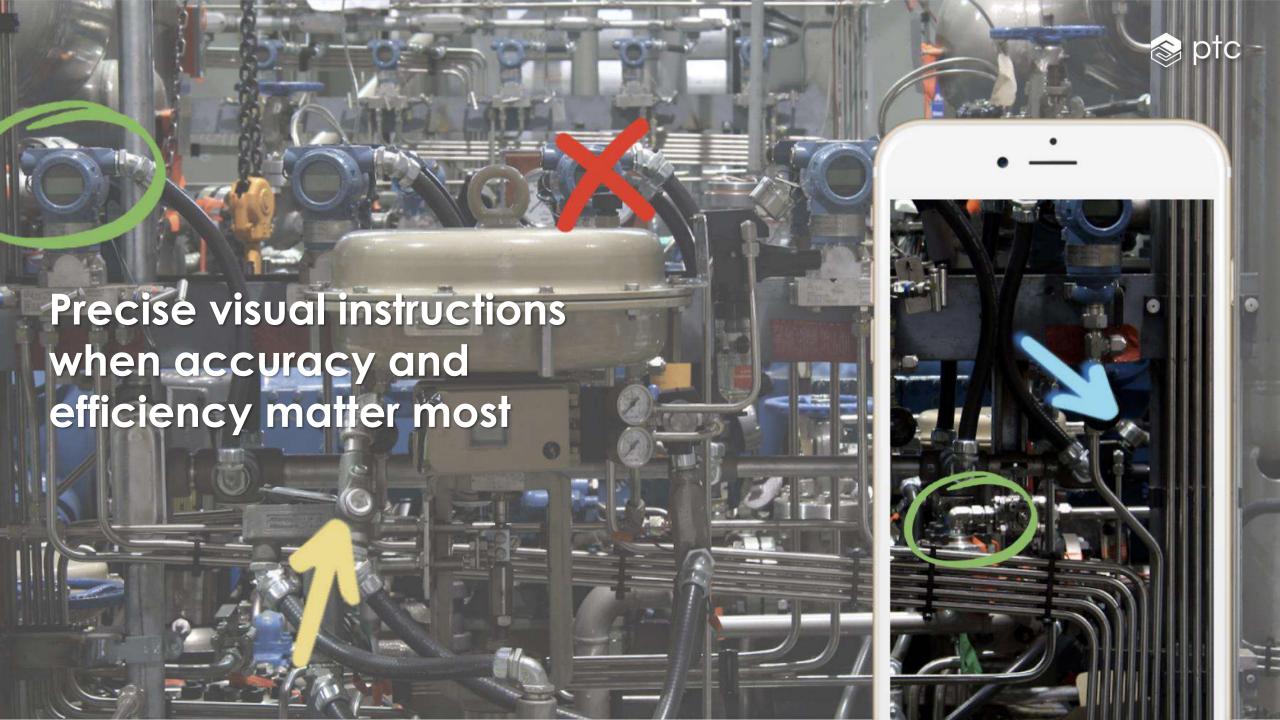
Vuforia Chalk is a simple, intuitive tool that brings your workforce together to solve problems on the devices they use today. Accessibility and ease of use makes Chalk the most effective "gateway" solution for deploying enterprise AR





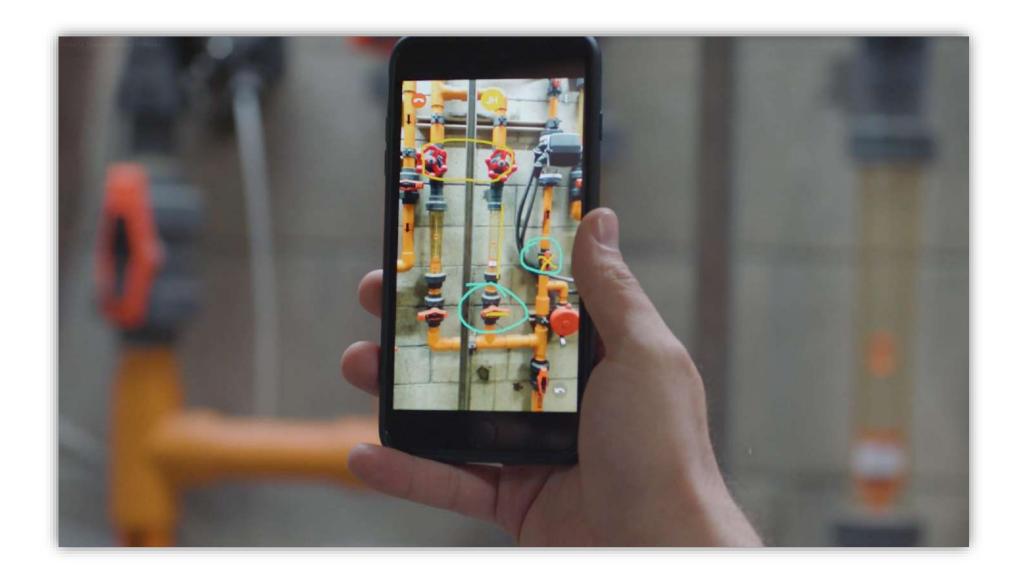






## ANNOTATIONS THAT 'STICK'

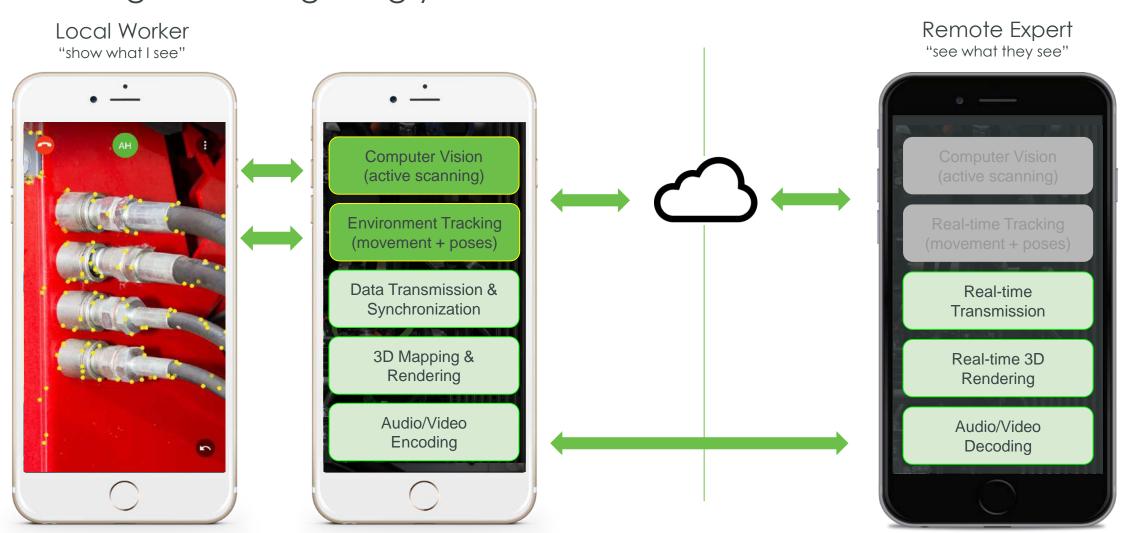




## BEST IN CLASS TECHNOLOGY



Building and recognizing your environment in real-time



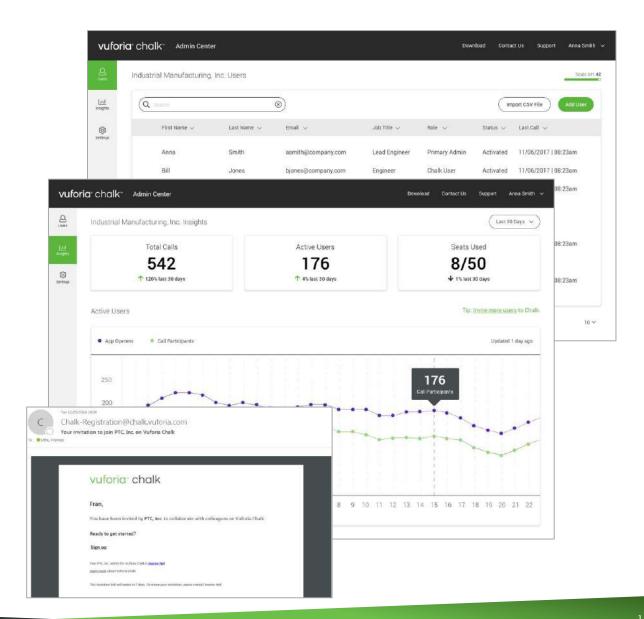
## SIMPLIFIED ENTERPRISE MANAGEMENT



- Global availability
- iOS & Android compatibility
- Enterprise-grade security
- Centralized user management and workgroup analytics
- Federated Authentication/SSO
- PTC Gold Support
- 90-day customer success package







## WIDE RANGE OF PILOTS AND DEPLOYMENTS



















































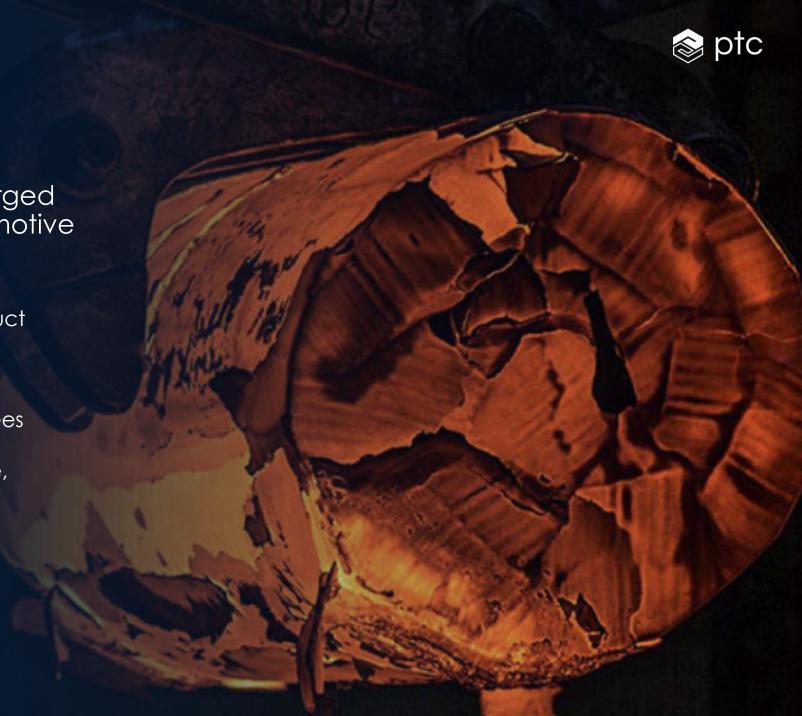


### **BHARAT FORGE**



Global manufacturing leader of forged and machine components for automotive and industrial sectors

- End-to-end solution provider from product conceptualization to designing, manufacturing, testing and validation
- Global footprint of over 10,000 employees and 10 manufacturing locations spread across India, Germany, Sweden, France, and North America
- Operates over 29 press lines with an aggregate forging capacity of 600,000 tons per year

















"Vuforia Chalk will transform the critical support process on the shop-floor. Now, key experts are available without constraints of space and time. We are impressed by our first quick wins."

> - YOGESH ZOPE, GROUP CIO BHARAT FORGE

## Varian

Global leader in integrated cancer therapy systems

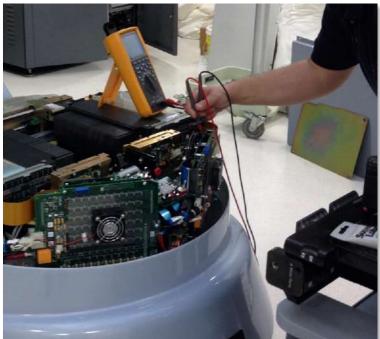
- Holds approximately 55% of the \$5 billion global radiation oncology market
- Linear accelerator install base of over 7,800 machines globally, more than double the installed base of closest competitors
- Service organization employs more than 2,000 people, generating over \$1 billion in annual revenue















## varian

"Traditionally our technicians are working through thousands of pages of manuals for onsite troubleshooting and support. Vuforia Chalk and AR enables us deliver anytime, anywhere interactive guidance–providing a new level of collaboration and transparency between our technicians and product specialists around the globe."

Sven EhmesProduct Support Engineer



# Howden

Global leader in air and gas handling equipment and solutions

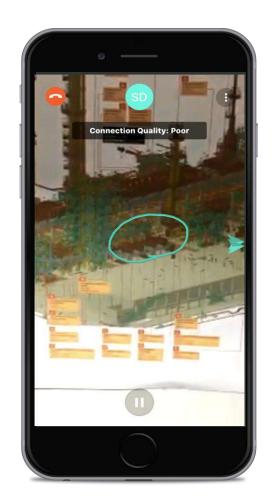
 Designs, manufactures, installs, and maintains air and gas handling products for a wide rage of industrial markets such as power generation, oil and gas, petrochemical, mining and steel.

 Subsidiary of Colfax Corporation, a \$4.2
billion diversified industrial company with over 18,000 employees



## vuforia® chalk™ | LOW BANDWIDTH MODE











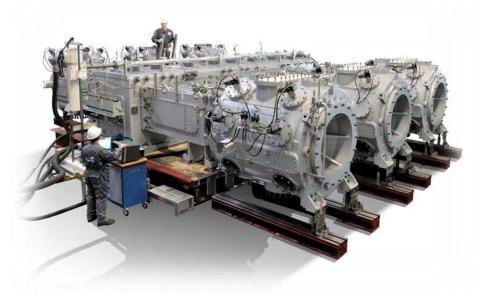


Low Bandwidth Solution













"Chalk is moving towards becoming an essential part of our customer offering to minimize downtime by providing immediate expert knowledge to the field at any time in any location"

Graeme Russell,
Product Manager – Data Driven Advantage

## vuforia® chalk™ | SESSION SUMMARY





- Chalk can automatically store and display the "points of interest" at the end of a session.
- "Points of interest" are auto-captured based on annotations made by the session participants.
- These images can be used to:
  - Attach to work orders as evidence of service work
  - Improve QC processes (verify thoroughness and correctness of fix)
  - Share knowledge to scale service and training of field technicians (especially for new products)
  - Share feedback to identify design flaws, design improvements or support improvements.

## vuforia® chalk™ | DESKTOP CLIENT FOR REMOTE EXPERTS





## vuforia® chalk™ | SHARE MY EXPERIENCE











**Technician:** Request help from View



**Expert:** Provide help from Chalk

## vuforia® chalk™ | TELEPORT... IS IT POSSIBLE?







What if the **Remote Expert** could go back on their own to an area the **Field Technician** showed earlier in their session?

**Teleport** is a future Chalk feature that enables a Remote Expert to freely navigate the Field Technician's physical environment on their own.

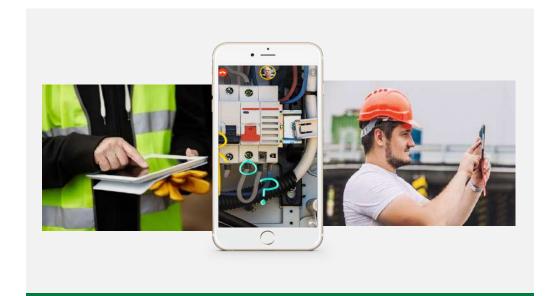
Similar to **Google Maps' Street View** where we can virtually experience and explore the physical street at our own pace.

## vuforia® chalk™



## **VUFORIA CHALK**30-DAY EVALUATION

- 30-day free access to Vuforia Chalk
- Chalk Admin Center usage
- Add & manage up to 50 users
- Full-suite of commercially available features
- No migration from Evaluation to Paid



Available now chalk.vuforia.com