

# Lionbridge Technologies

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**Augmented Reality:**  
Vitalizing Global Learning & Performance Support with  
Transformative Technology



2016 Annual Conference  
Atlanta, GA  
5 April 2016

Wendy Farrell  
Jon Sweeney

Lionbridge

# About Lionbridge Technologies

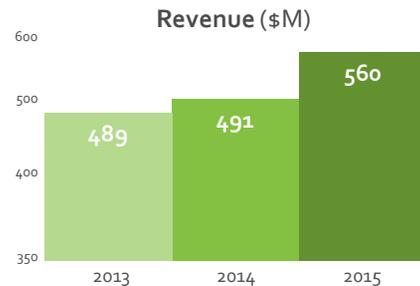
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# LIONBRIDGE TECHNOLOGIES | GLOBAL LIFECYCLE SOLUTIONS

## Business Highlights



Market Leader in Content Development & Localization



Impressive Growth

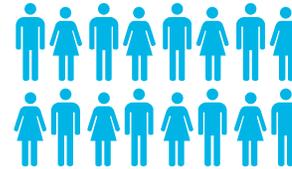


Top 20 Training Outsource Provider



Top 100 Most Trusted Company

## Organizational Highlights



**7,000+**  
Employees



**25,000+**  
Vendor Database



**26**  
Countries



Global Project Management Methodology



**250**  
Languages



Secure Platform & IT Systems to Ensure Data Security

# LIONBRIDGE TECHNOLOGIES | SERVICE OFFERINGS

## Content Development & Engineering



Training Design & Development



Technical Publications



Engineering & Design

## Global Language Services



Translate and adapt products and content for international markets



Translation Tools & Software



**Training Content Translation:**  
Global training and e-learning, video and audio localization

## Global Marketing Services



Global web sites



Product/Service microsites

### Digital marketing campaigns



E-mail



Landing pages



Social media



Blogs



Mobile Ads



Desktop publishing



Cultural evaluation & transcreation

## Testing



Device Hardware & Software



Graphical user interface (GUI)



Online help applications

# GLOBAL CONTENT & ENGINEERING | CORE SERVICES

- ✓ Training Content Development
- ✓ Engineering and Design
- ✓ Technical Data Services
- ✓ Logistics & Provisioning
- ✓ Tactical Placement
- ✓ Drafting Services
- ✓ Translation/Localization



# GLOBAL PRESENCE | INDUSTRIES SERVED

- ✓ Automotive
- ✓ Heavy Truck & Bus
- ✓ Defense
- ✓ Aerospace
- ✓ Construction
- ✓ Agriculture
- ✓ Marine
- ✓ Energy



# LIONBRIDGE TECHNOLOGIES | GLOBAL PRESENCE

## UNITED STATES

Detroit, MI  
 Indianapolis, IN  
 Bellevue, WA  
 Boise, ID  
 Los Angeles, CA  
 ★ Boulder, CO  
 Fort Collins, CO  
 Minneapolis, MN  
 New York, NY  
 ★★ Waltham, MA  
 Washington, DC

## CANADA

Montréal  
 Moncton  
 Ottawa  
 Quebec  
 Toronto

## CENTRAL AMERICA

Costa Rica, San José  
 Panama, Panama City

## SOUTH AMERICA

Santiago, Chile  
 São Paulo, Brazil

## EUROPE

Copenhagen, Denmark ★ Amsterdam, The Netherlands Brussels, Belgium Ballina, Ireland ★ Dublin, Ireland London, UK Derby, UK Bristol, UK Coventry, UK Rome, Italy	Madrid, Spain Göteborg, Sweden Paris, France Sophia Antipolis, France Basel, Switzerland Lausanne, Switzerland Zurich, Switzerland Tampere, Finland Espoo, Finland	Berlin, Germany Cologne, Germany Frankfurt, Germany Hamburg, Germany Wuppertal, Germany Munich, Germany Warsaw, Poland Zilina, Slovakia
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## FAR EAST/ASIA PACIFIC

Mumbai, India Chennai, India Singapore Bangkok, Thailand	Taipei, Taiwan Shanghai, China Beijing, China Seoul, Korea Yokohama, Japan
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- ★ Corporate HQ: Waltham, MA, USA
- Production Centers
- ★ Centers of Excellence

# Augmented Reality

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# Trends & Organizational Challenges Affecting Support & Training



## More Demand for Support & Training

Turnover, Aging Workforce, Compliance Requirements

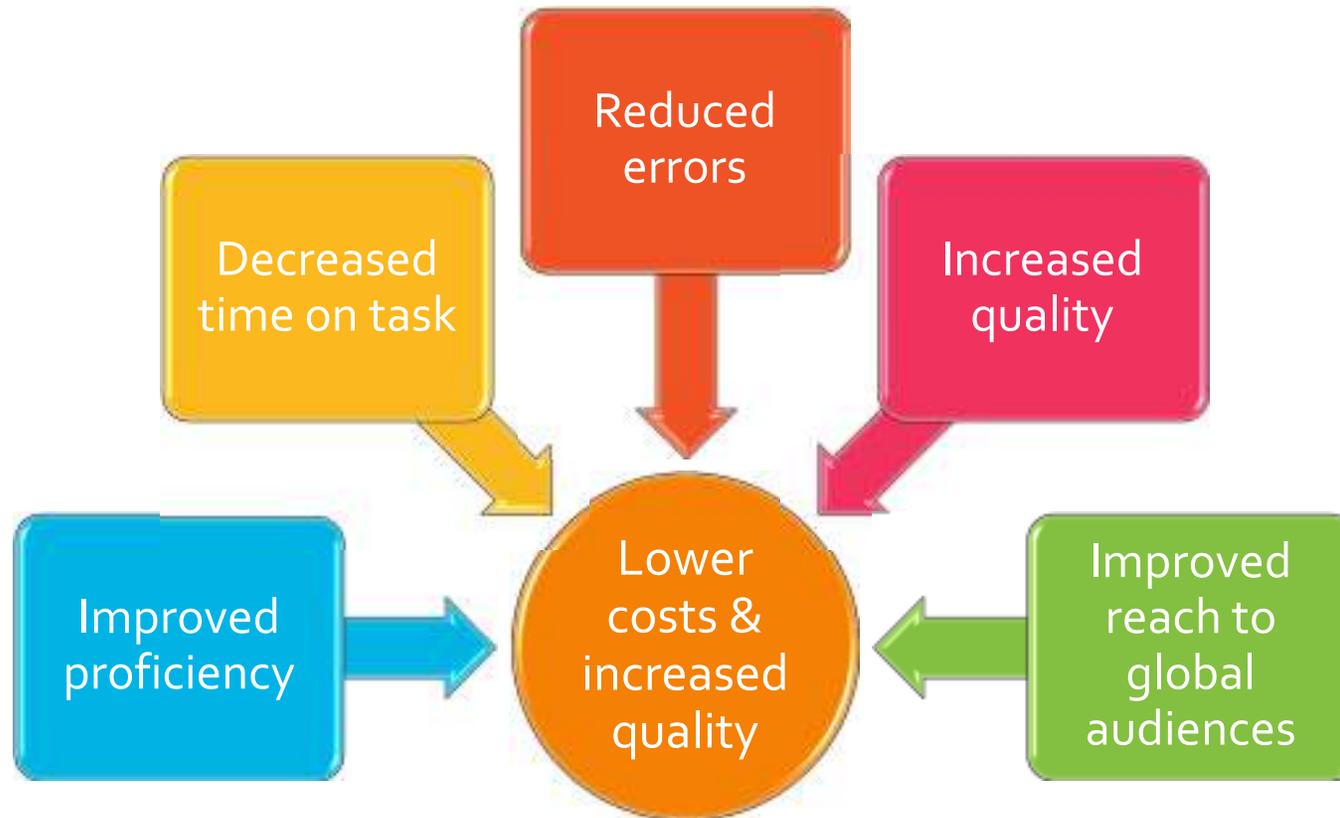


## Larger Global Audiences



## More Complex Products & Services

# How we add value



# Training – Old and New

- Traditional Training – all Formal



- Training 2016 – On-the-Job, Formal, On-the-Job & Performance Support



# Augmented Reality:

So How Does Augmented Reality Help Us  
and Our Business?

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# AR Use Cases

Provide additional information— for example, specs, size or safety.

Identification & Recall

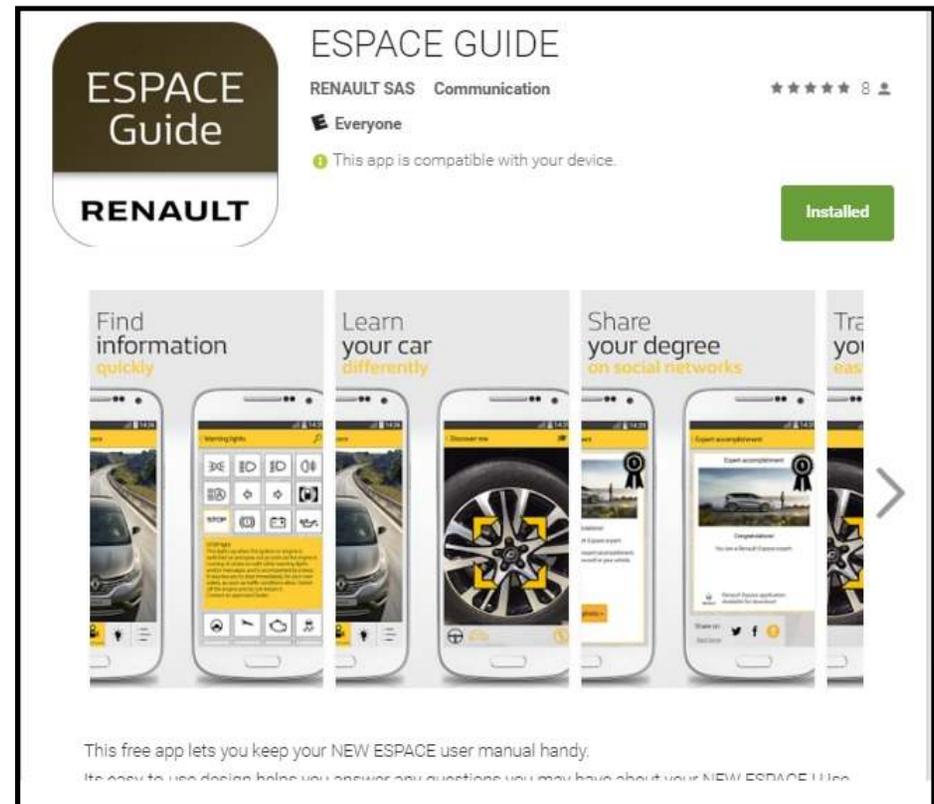
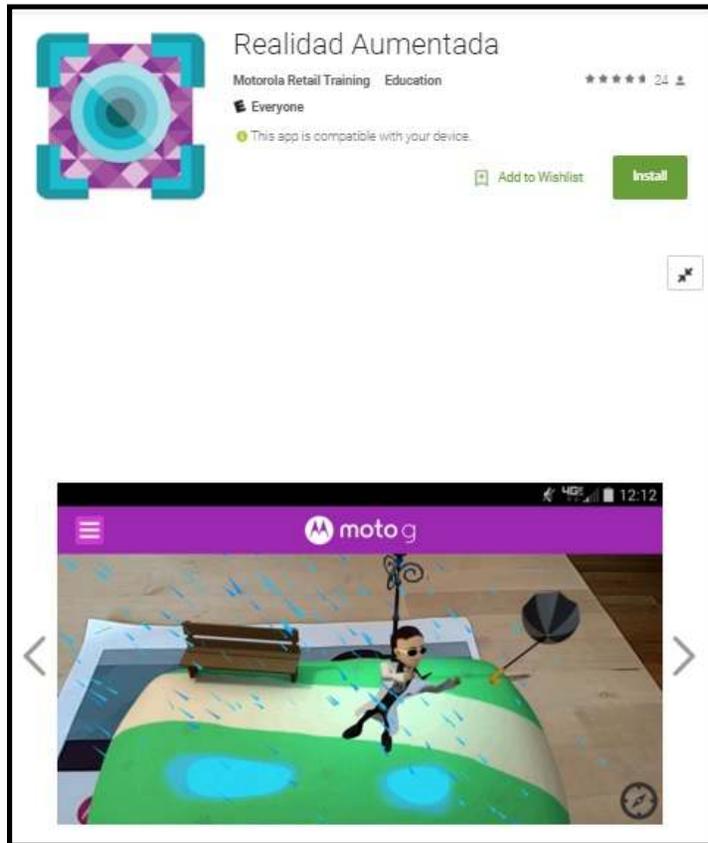
Inspection/Quality

Process & Procedures - show where to go or what to do

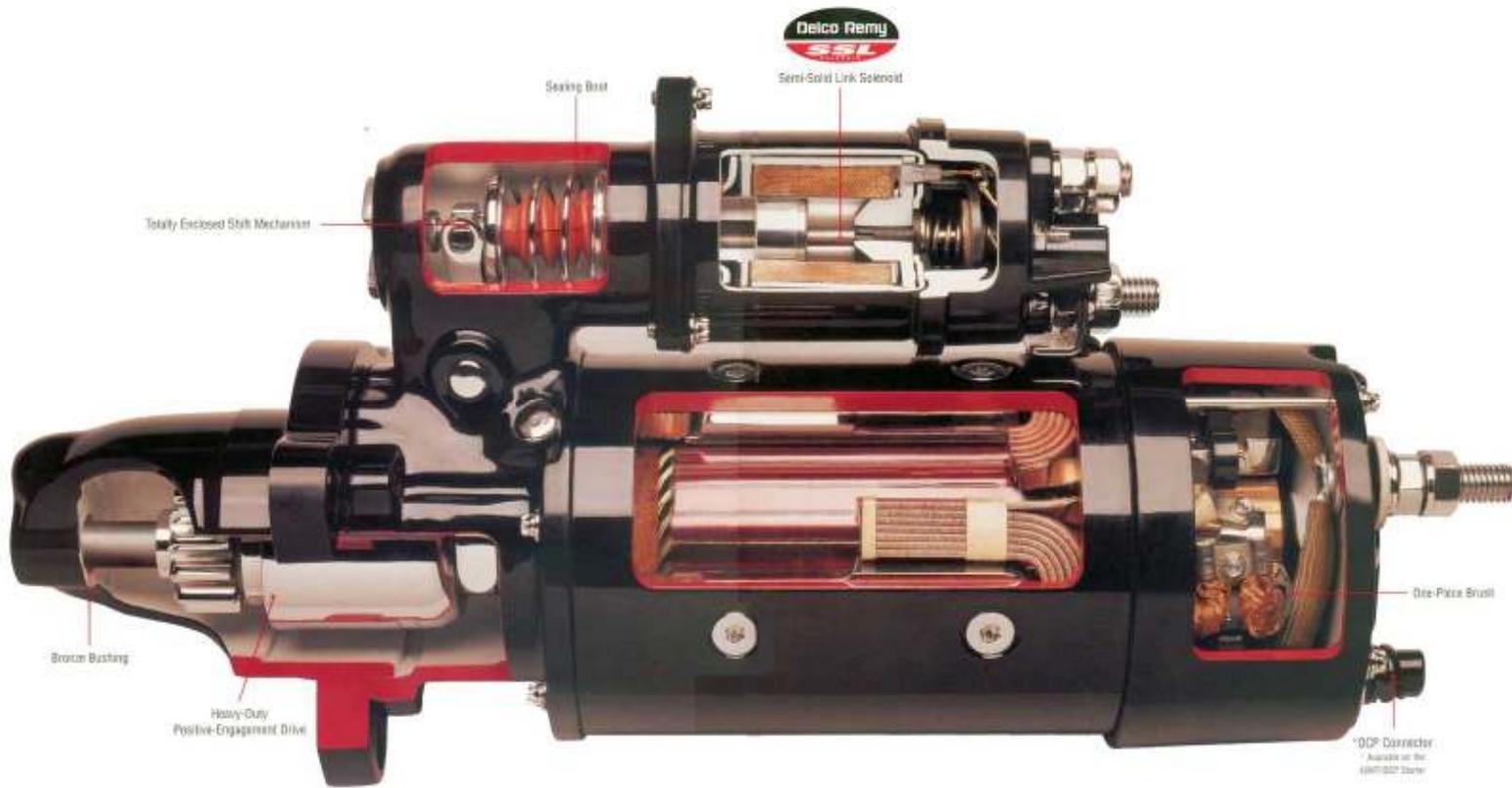
# Technician Training & Support



# Sales & Customer Training



# Technician Training & Support



**Augmented Reality:**

**Isn't this just the latest fad?**

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## Interesting Facts

75

- Percent of World's Population with Access to a Mobile Device

864

- Millions of Mobile Phones Enabled with Augmented Reality in 2014

103

- Millions of AR-Enabled cars by 2020

# Industry Trends

Google



Microsoft



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- Technology widely available
- More developers, apps, tools, head-mounted displays
- More affordable

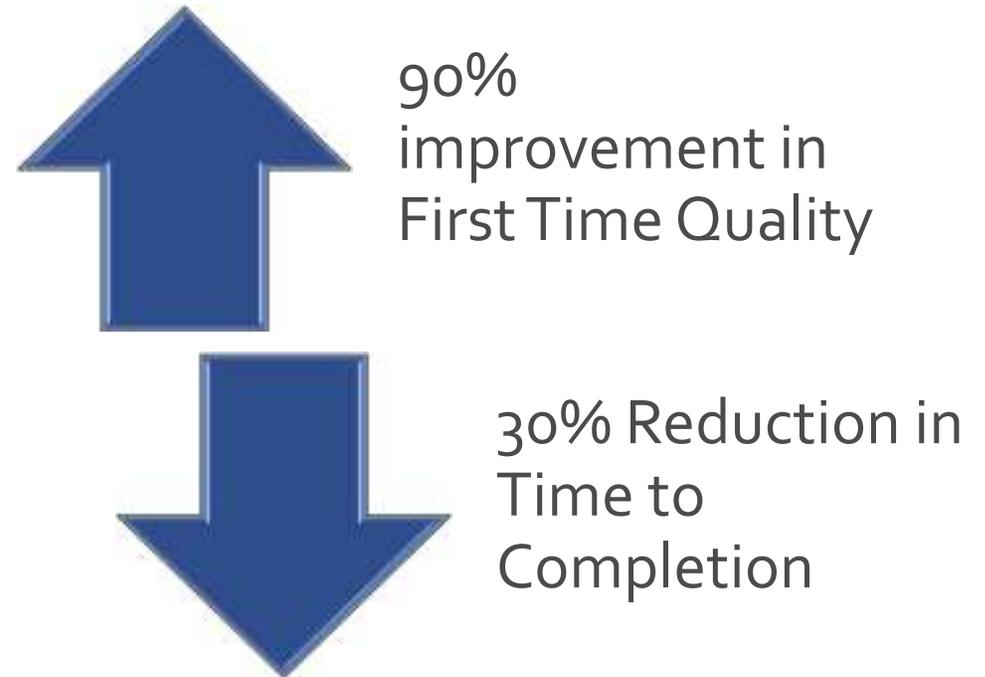
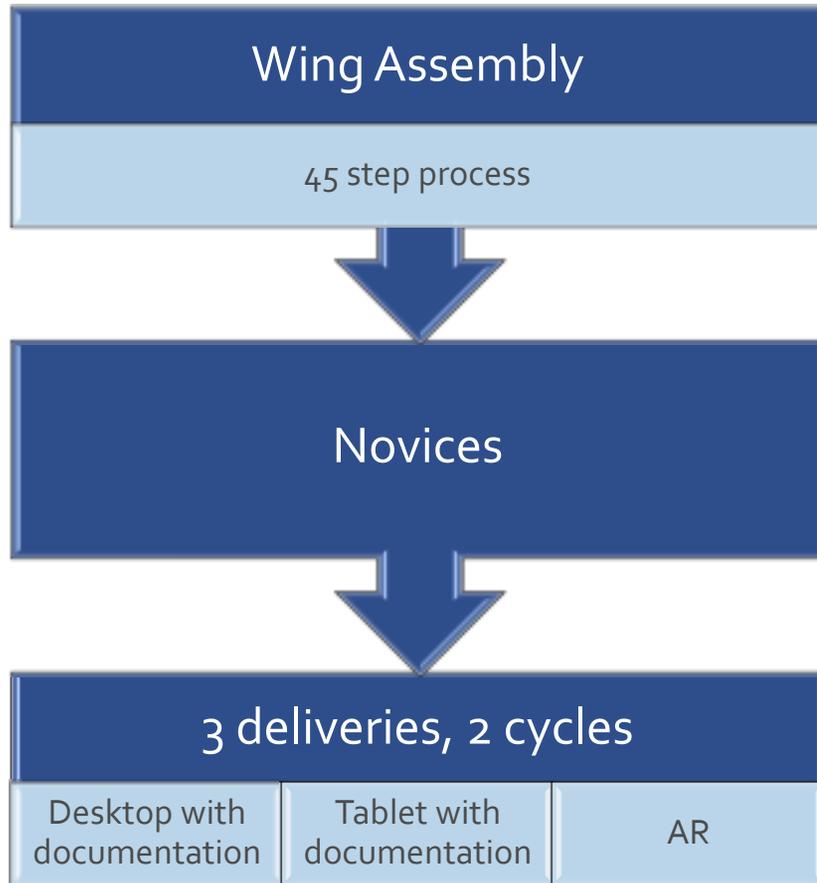
**Augmented Reality:**

**It's Cool, But Is It Worth It?**

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# Research: Boeing/Iowa State University



# We Know It Works

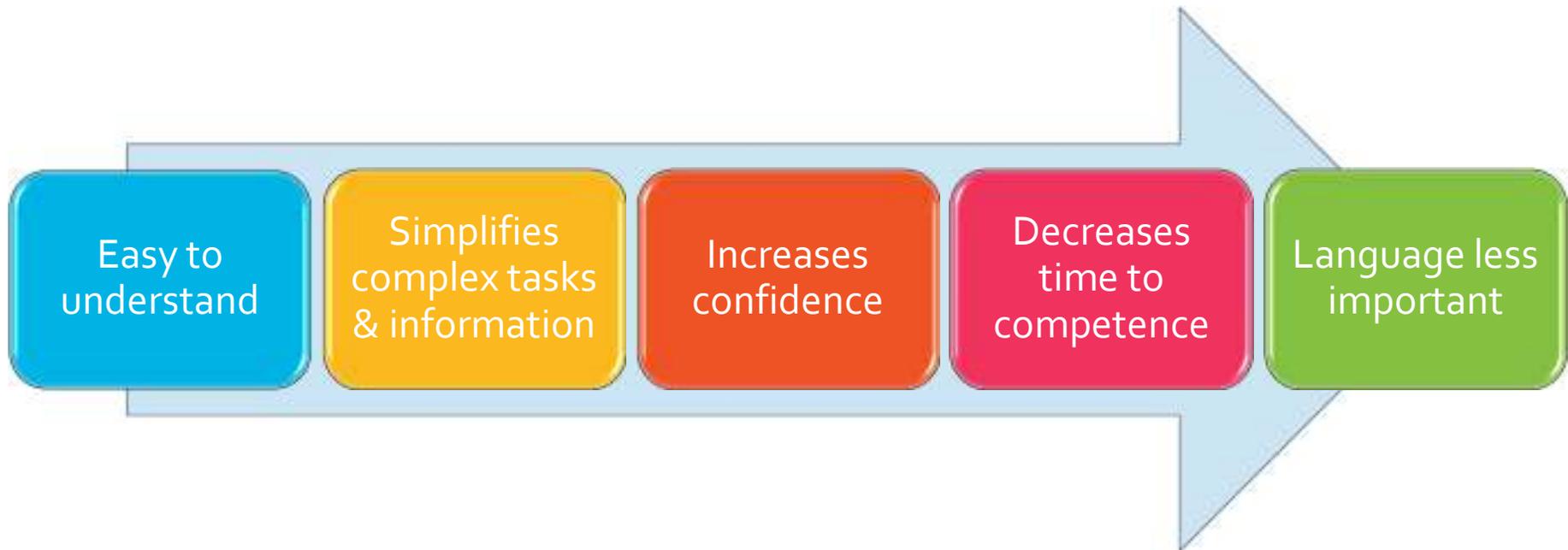
**Gartner Research:**

- “AR provides the highest benefit to efficiency. It has the potential to improve productivity, provide hands-on experience, simplify current processes, increase available information, provide real-time access to data, offer new ways to visualize problems and solutions, and enhance collaboration.”

**Columbia University:**

- “Participants were able to complete assembly tasks significantly faster and with significantly greater accuracy with AR than when using 3D-graphics-based assistance presented on a stationary LCD. Qualitative questionnaire results indicate that participants overwhelmingly preferred the AR condition, and ranked it as more intuitive than the LCD condition.

# What Does This Mean for our Audiences?



# What Does This Mean for Training and Organizations?

Reduced training requirements



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graph TD; A[Reduced training requirements] --> B[Increased recall of work instructions]; B --> C[Increased first time quality]; C --> D[Decreased cost/rework]; D --> E[Better support for global audiences];
```

Increased recall of work instructions

Increased first time quality

Decreased cost/rework

Better support for global audiences

# Benefits Beyond Training

- Reduces need for physical prototypes (training, sales, etc.)
- Acts as performance support tool after training
- Helps error-proof performance
- Provides opportunities for improved learner/customer experience
- Like having an expert coach by your side at all times

# Wrap-Up

We need to find ways to improve the training & support we provide

Augmented reality provides significant benefit

- Access to devices
- Results are strong
- Works for global audiences

Come see us for live demos