Product Animations

QuickTime™ and a TIFF (Uncompressed) decompressor are needed to see this picture.
Learning Effectiveness
(Understanding & Retention)

Manuals: 10%
Lecture: 20%
Video: 50%
Simulation: 90%

Teacher-Centric vs. Student-Centric
Objectives

Objective 1: Market research into highly customizable and mass market (.asp model) application of PAI product.

Objective 2: Determine screening criterion and select best prospects

Objective 3: Quantify value propositions for products selected from Objective 2

Objective 4: Create a deliverable simulation example

Objective 5: Recommendations for future work on this IPRO

Objective 2b: Research the idea/design of a “prototype” .asp site

Objective 3b: Test the .asp website for security and function.

Objective 4b: Use milkshake or other machine to show application of the .asp.
Criteria for New Products

- Specialized Techniques, difficult/complex to operate
- High cost from lost time, trainer time and/or safety
- Multi-use, Multi-purpose equipment
- User turnover, expensive operator
- Routine practices

*Service industry training for smaller applications utilized by many people.*
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From Opportunity to Product

Knowledge Capture
  Capture & Refine

VRTrain™
Technical Training Aid
  Train

VRReference™
Technical Job Aid
  Assist

Best Practice Feedback

Opportunity
From Opportunity to Product
Initial Research Topics

Trade School Applications

**ASP development**

**Agricultural equipment** > use, maintenance, production

Food packaging and processing industry

Computer/microchip processing

Nuclear Power Plants

Do it yourself, home improvements.

Heavy Manufacturing

Energy Industry

**Construction**

Military

Online Lab
John Deere Agriculture

Team Members
- Erik Doolittle
- Jeong Shik Kim
Why John Deere?

- Multi-purpose machinery
- User turnover
- High cost/yield company and product
- Specialized technology
The Necessity

- Harvesting downtime due to maintenance
  - Lost product -> lost income
- Only option: Leasing machinery
  - Availability
  - High cost
- Evident need: John Deere University/Parts
vs.

- **JDU:**
  - Glorified, enhanced manual
  - Non technical
  - Restricted to online use
  - Minimal visuals

- **PAI:**
  - Highly detailed
  - Easily integrated
  - Applicable on various levels
  - Maximizes retention
Conclusion

John Deere farming equipment provides a strong value proposition for Product Animations, as reinforced by the recent additions of JDU and JDParts.
Operator Training

♦ Team Members
  ♦ Nick Cantoni
  ♦ Erik Mead
 Contacts

- IUOE = International Union of Operating Engineers
  - Trade union that primarily represents Operating Engineers
  - Steve Brown Director of Training for IUOE.
- Power Construction - David Baker, VP of External Affairs
Benefits

- Allows for quicker training of clients by up to 30%
- Money is saved on rental of machines because it’s faster
- Ability to teach larger classes at once
- Can be used as a continuous training method
ASP Team

♦ Team Members
  ♦ Mark Malanowski
  ♦ Kyle Knopp
ASP Goals

- ASP = Application Service Provider
- Investigate the Web as a means to deliver PAI product
  - Greatly expands potential client base
  - Reduces cost of software distribution
  - Provides 24x7 availability
- Search for a suitable business model or design our own
- Define screening criteria for ASP-compatible application
- Conduct market analysis and find potential competitors
- Write design of a PAI ASP website
ASP Subteam Results

- Goals of ASP design:
  - Security
  - Flexibility
  - Robustness
- Implemented design
- Proof-of-concept
- Conclusion:
  - Great opportunity to enter new markets

http://omega.cs.iit.edu/~productanimations
Just-in-Time training for Homeland Security/Emergency Response Application

Team Members
- Shane Steward
- Ah Reum Jeong
What we did

- Researched emergency response training such as:
  - Evacuation of a building/city
  - Setting up an emergency command center
  - Setting up an emergency medical tent
  - Etc.
What we found

- The Red Cross has lots of training programs
  - All programs found were focused on the family or individual
- Various training programs for Emergency Response
  - Citizen corps
  - Community Emergency Response Training
  - Medical Reserve Corps
  - Volunteer Training
Benefits

Trainers – State, Government and organizations
- Training time saving
- Support various situations from hazmat to natural disaster

Trainees – Citizen, Volunteers
- Ease of access
- Effective training
  - People can go through similar experience
Questions