

Great Idea Competition

DoD Maintenance  
Symposium

October 25-28, 2004

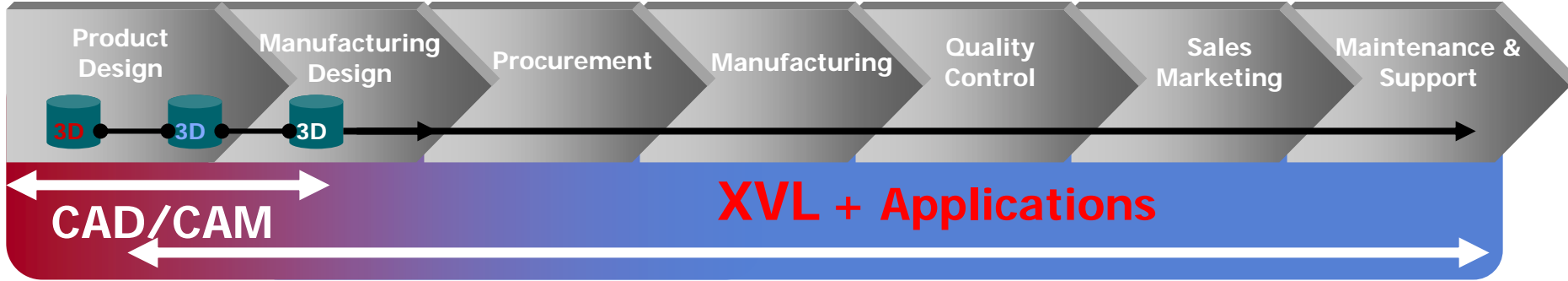


# Revolutionizing IETMs and Parts Lists for DoD Maintenance and Training



# The Idea: Provide 3D Data and 3D Applications to users

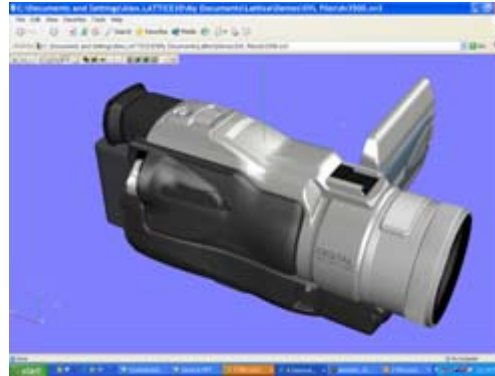
## Utilize rich, 3D Design Data across the Enterprise



### 3D Data - XVL format files (typically 1/50-1/250 compression)



25MB -> 360KB (98.6%)



75MB -> 580KB (99.2%)



1.5GB -> 1.5MB (99.9%)

### Applications – for 2D & 3D Publishing and 3D Engineering



# Customers are leaders in Automotive, Aerospace, Discrete Manufacturing & Consumer Electronics...

**Canon**

**HITACHI**  
Inspire the Next

 **TOYOTA**

**ONKYO**  
MAGNATIVE SIGHT & SOUND

**Panasonic**

**SANYO**

*“ We decreased procurement errors by 30%  
using Lattice technology. ”*

**NASDA**  
宇宙開発事業団

- Toyota

**SONY**

 **Victor · JVC**

**PENTAX**

**SHARP**



NATIONAL AERONAUTICS  
AND SPACE ADMINISTRATION

**OLYMPUS**

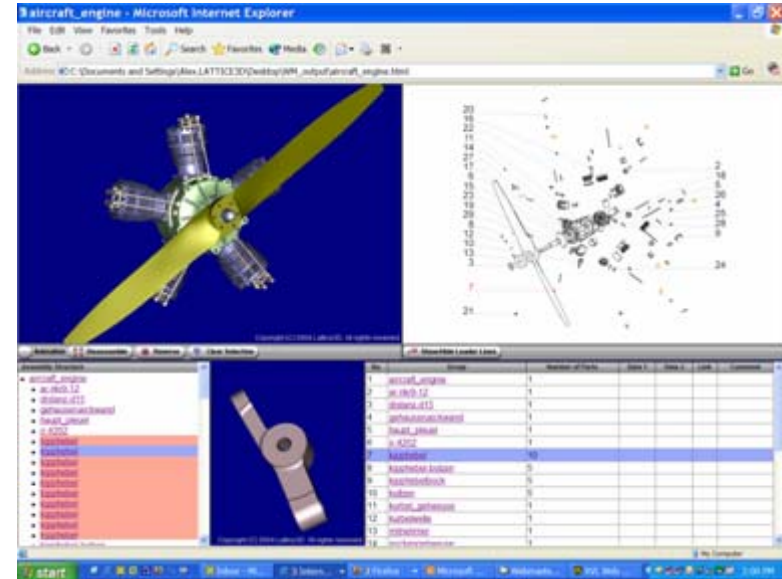
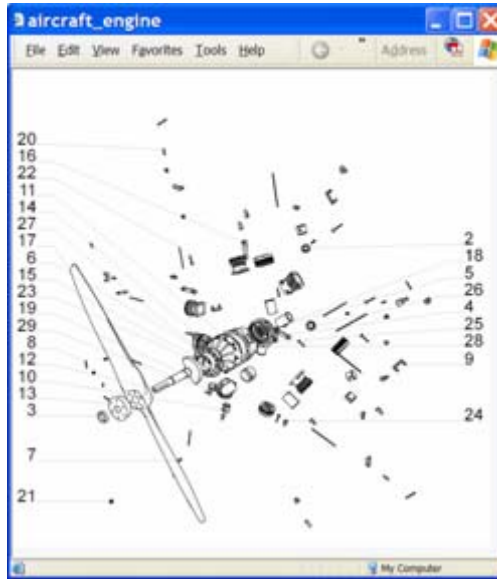
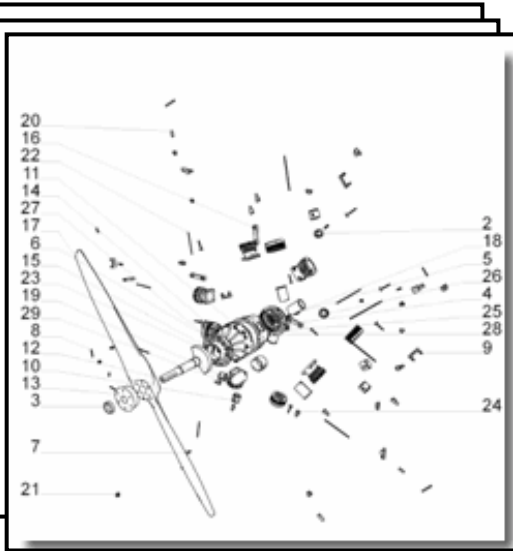
**TOSHIBA**

  
MINOLTA



# From Paper to 3D IETMs

From Paper.....to 2D IETMs.....to 3D IETMs

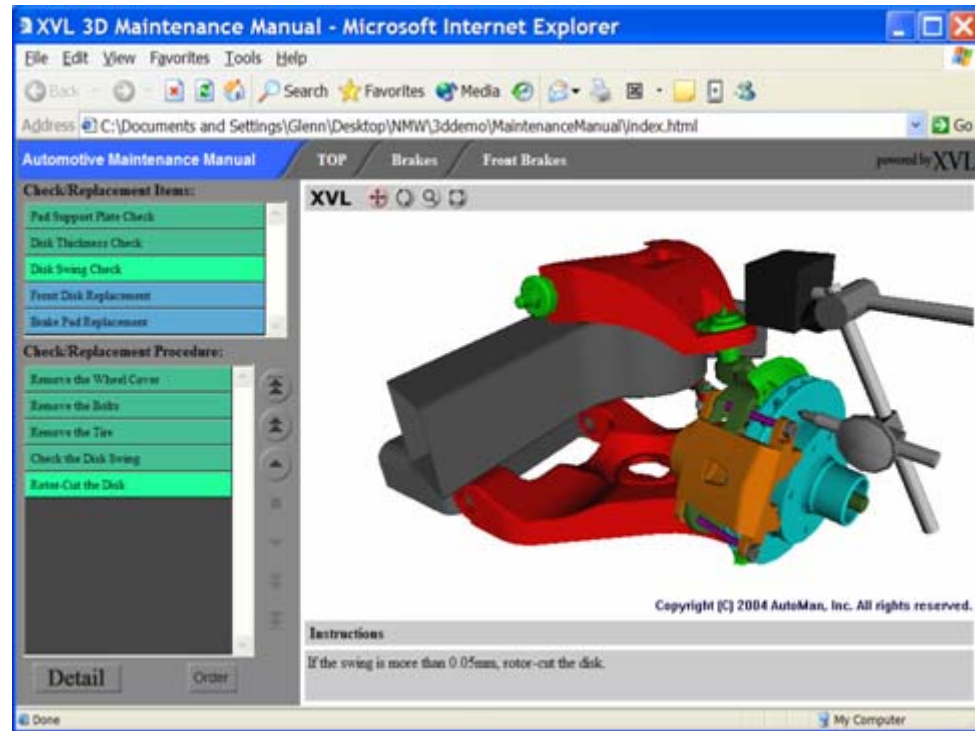


10.7MB → 244KB (97.7%)



## Advantages:

- Interactive, easy to understand
- Highly compressed, browser-based solution
- Leverages existing CAD/CAM data
- Fully animated step by step procedures
- Stop, play, zoom, examine at any point
- Reduces errors
- Speeds learning process
- Increases retention



## Sample Maintenance Uses:

- Training
- Maintenance instructions
- Field operation support

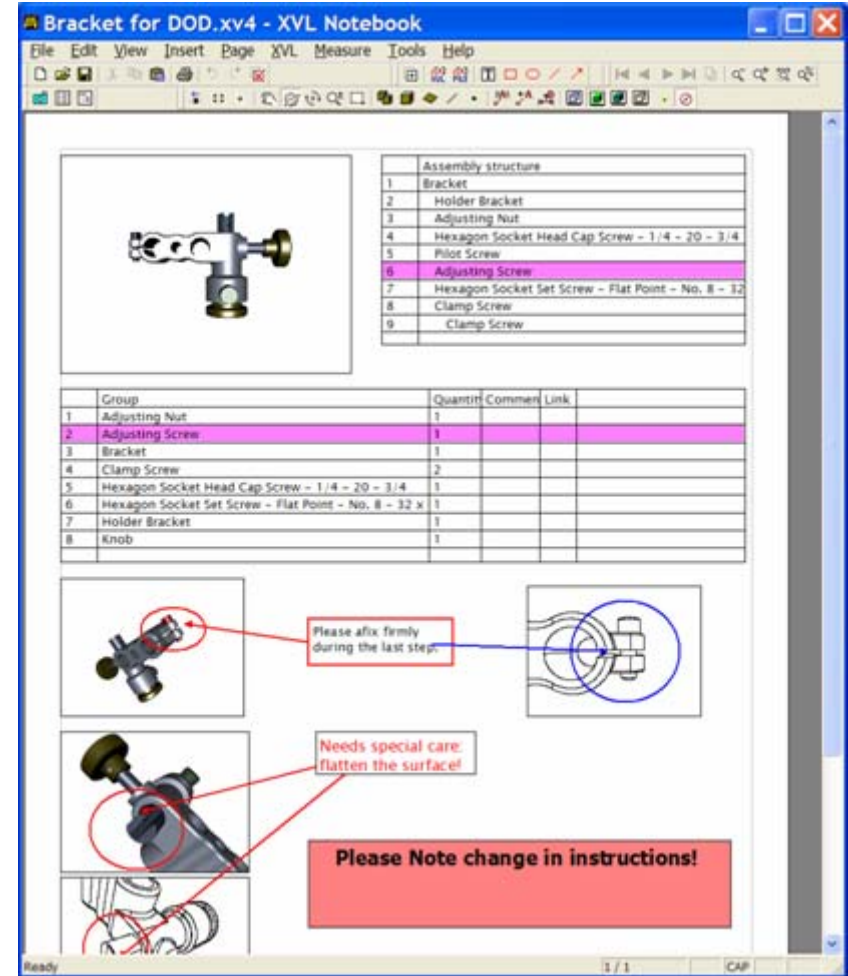


## Advantages:

- Created from original CAD
- Highly compressed, easy to use
- 2D & 3D all in one view
- One click assembly/part lists
- Create 2D snapshots with a click
- Share, mark up, collaborate
- Interactive, fully linked data
- Eliminates the need to recreate

## Sample Maintenance uses:

- Assembly
- Disassembly
- Troubleshooting collaboration



# Embed 3D into your workspace

Compression + Ease of Integration = Better Collaboration



# Why 3D via 'lite' XML?

- **Faster Learning  
+20%**
  - **More Retention  
+20%**
  - **Less Mistakes  
-30%**
- = **Increased mission effectiveness & Operational Readiness**



# Getting everything in it's Prop-er place..

## Conclusion: Network-Centric DoD Maintenance using 3D Data is an idea whose time has come

- Technically ready to go today
- Will increase 'Operational Readiness'
- What's needed next?
  - Executive sponsorship to leverage DoD 3D assets
  - 3D data from DoD suppliers/OEMs
  - Funded pilot programs with clear objectives and milestones





Thank You

# The Process: From 3D data...to XVL...to 3D applications

