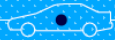


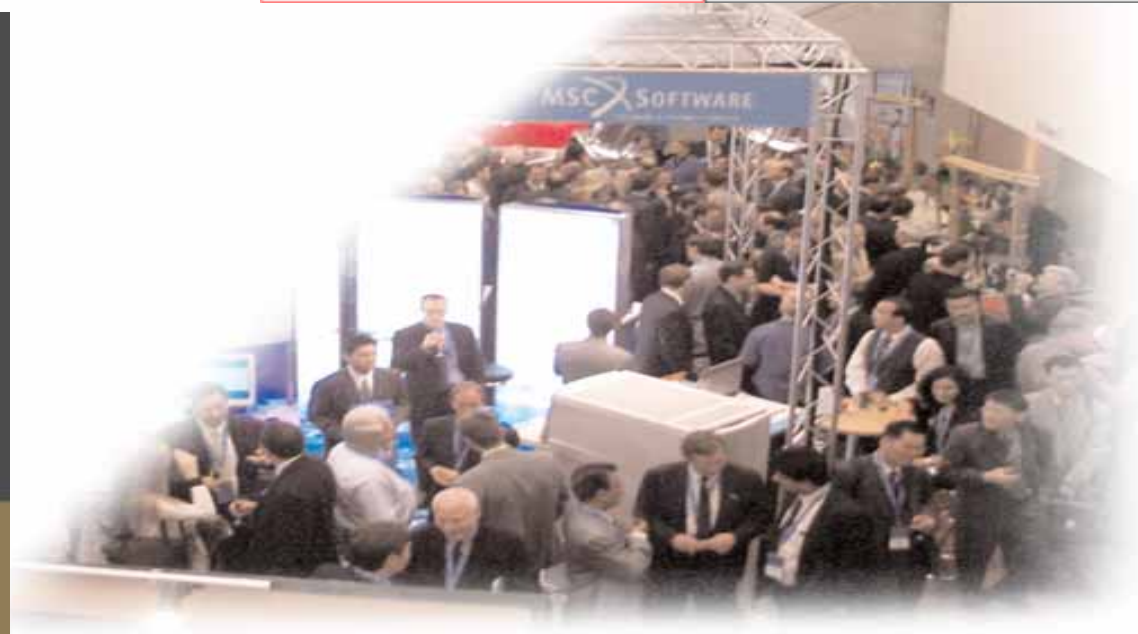
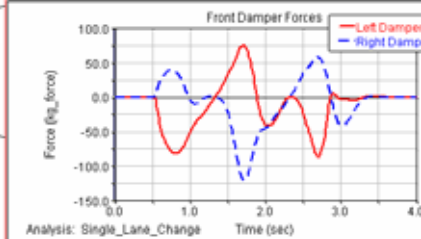
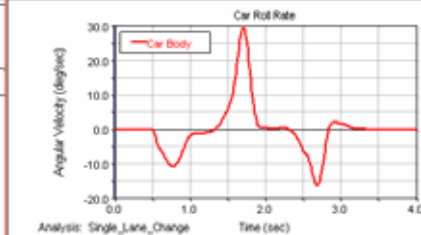
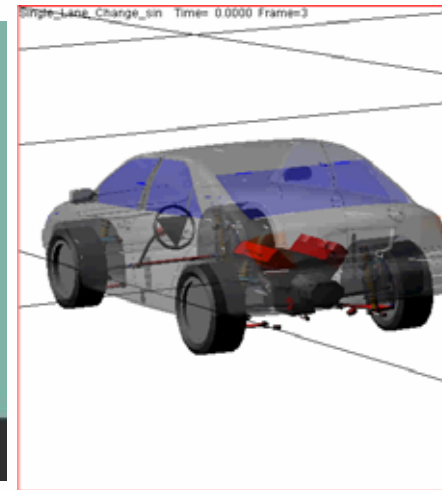


Welcome to the 2004 VPD Conference

Ken Blakely
Executive Vice President &
Master of Ceremonies



Welcome!



PRODUCT DEVELOPMENT CONFERENCE

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PRODUCT DEVELOPMENT CONFERENCE

2004 v[pd] • Huntington Beach, California

MSC.Software

***Virtual Product Development
Technology Conference
October 2004***

Welcome



Frank Perna,
CEO and Chairman

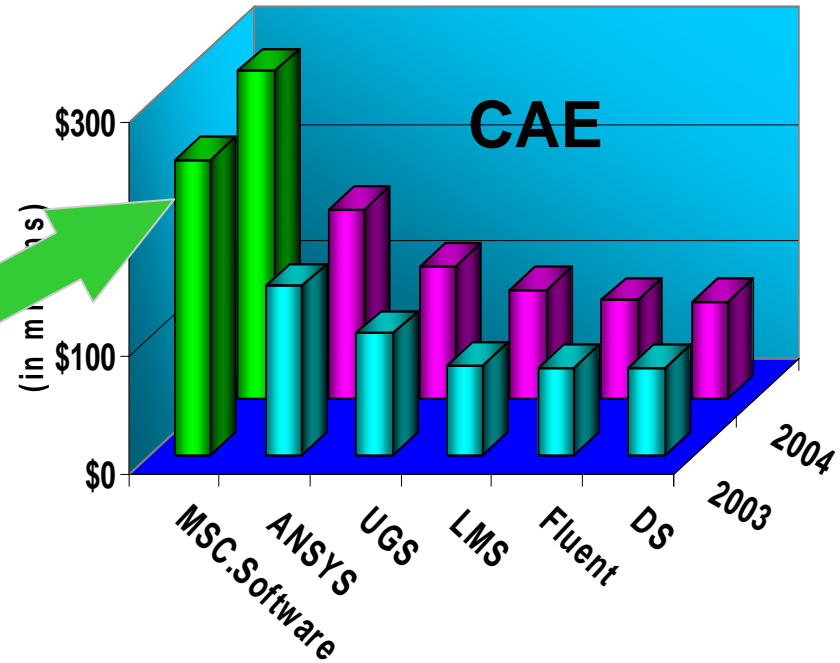
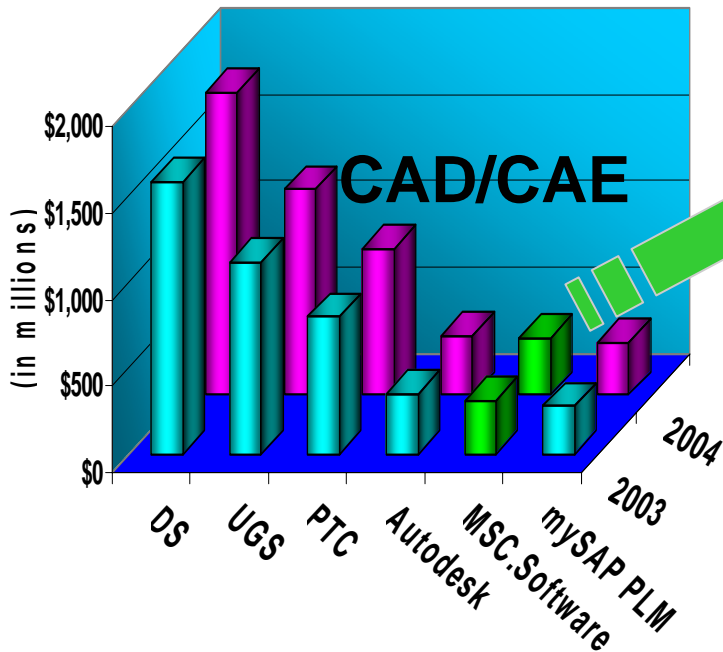


MSC Software Market Position



Total CAD/CAE Market 2004 Estimate = \$6.9 billion
 Total CAD/CAE Market 2008 Forecast = \$8.7 billion
 5-Year CAGR: = 6%

Total CAE Market 2001 Estimate = \$2.1 billion
 Total CAE Market 2008 Forecast = \$3.3 billion
 5-Year CAGR: = 12%



Source: Daratech & AMR Research

PRODUCT DEVELOPMENT CONFERENCE

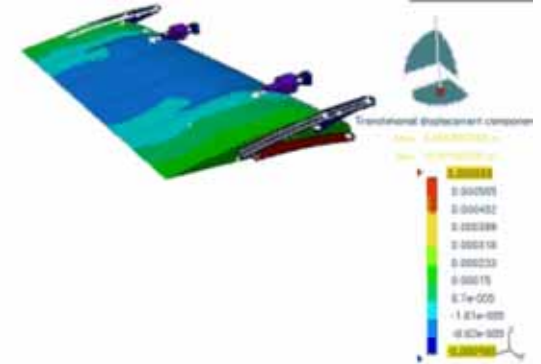


MSC Software Customers

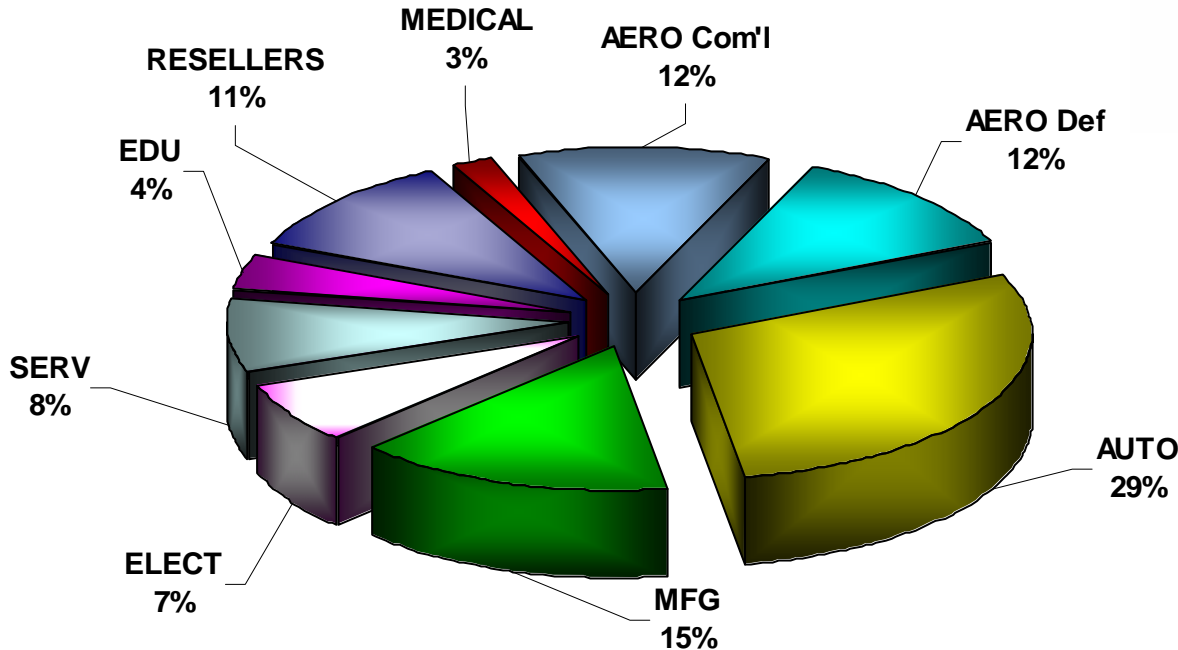


Customer base

- 8,000+ global accounts
- Diverse industry groups

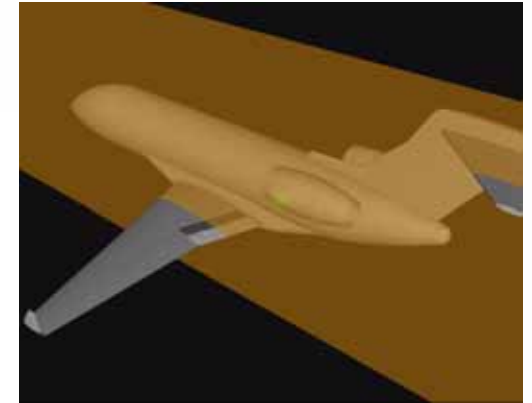
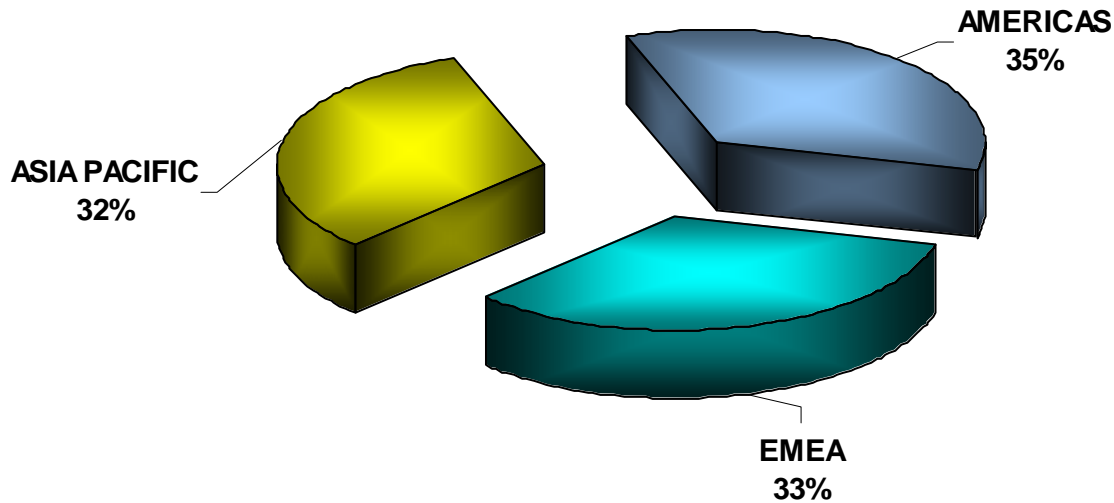


Revenue by Industry





Revenue by Geography



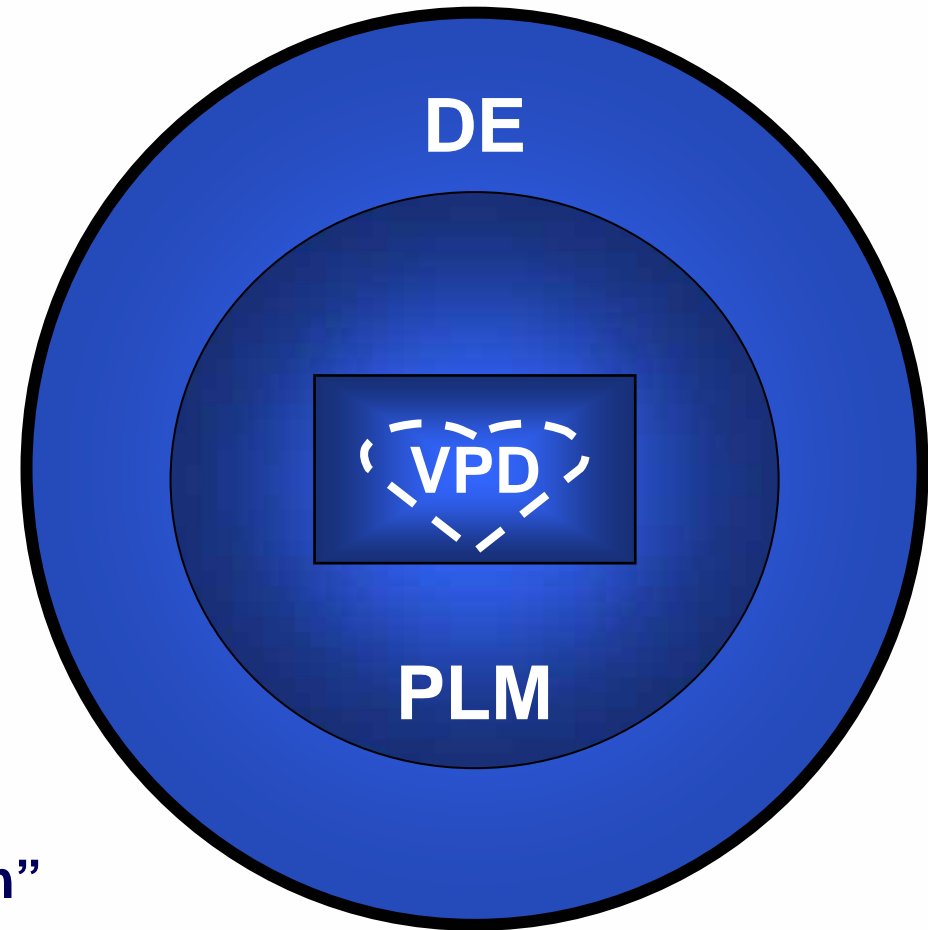


"The (manufacturers)...need to recognize the massive under-utilization of simulation. Simulation is the heart and soul of PLM. It's about making things that work and last. Sure you can create geometry and move files around, but building products that perform is far more important."

■ *Charles M. Foundyller, CEO - Daratech*

"...and the key element of Virtual Product Development is Simulation"

■ *Frank Perna, CEO – MSC.Software*





Virtual Product Development is an environment where all phases of the product design process use an integrated combination of both simulation software technology and traditional techniques.

Through VPD, cost effective designs with higher levels of reliability can now be achieved in less time than using only the traditional physical processes.

Making Investments To Bridge The Gap

- Our investments ensure your success
 - Technology
 - Education
 - Vision





Investments in Technology



We spend more than \$40M a year on R&D

SimOffice: The industry's best and most well-integrated virtual product development simulation software



SimDesigner: The industry's best CAD-Embedded VPD product suite



SimManager: Delivers product performance knowledge through out the design cycle



MSC.MasterKey: Flexible access, what you need, when you need it





Investments in Education



Industry's largest training organization

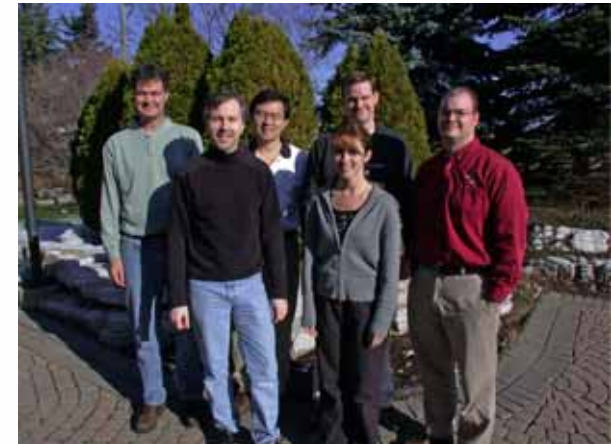
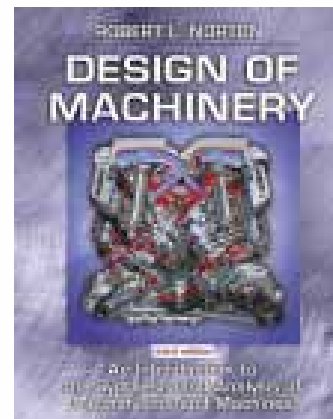
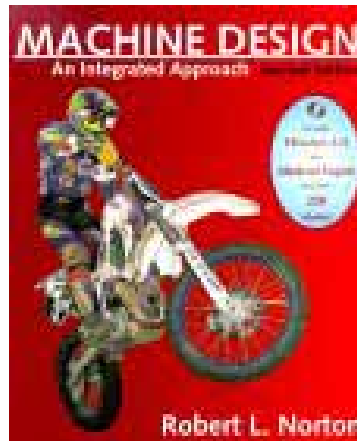
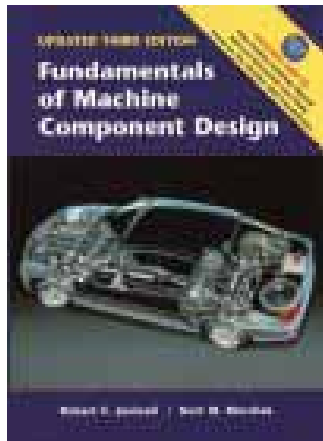
In 2003 alone

- 1000 total classes
- 110 unique courses
- >6,000 advanced the education

Textbooks

- High-school to universities
- Educational software in 12 languages

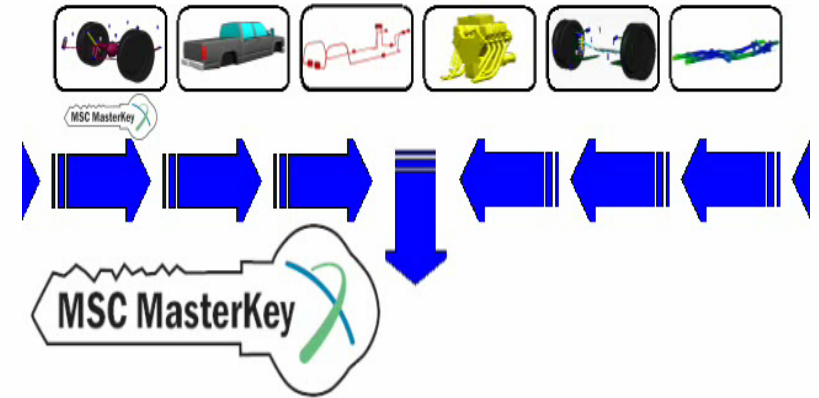
VPD Conferences



virtual PRODUCT DEVELOPMENT CONFERENCE

Investments in MSC Software's Vision

- To continue to play a significant part in advancing Virtual Product Development in all global markets
 - Listen carefully to our customers
 - Maintain our technical and market leadership
 - Provide the necessary internal and external educational and training environments



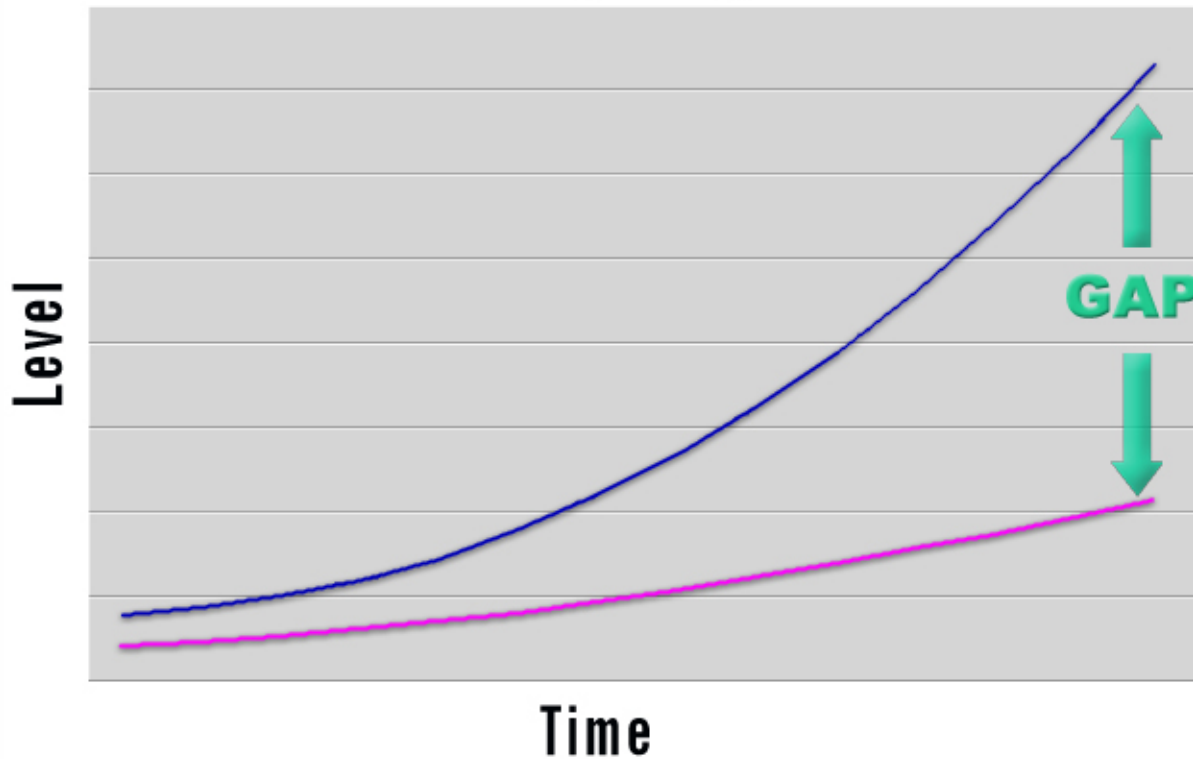


The "Gap"



Technology Adoption

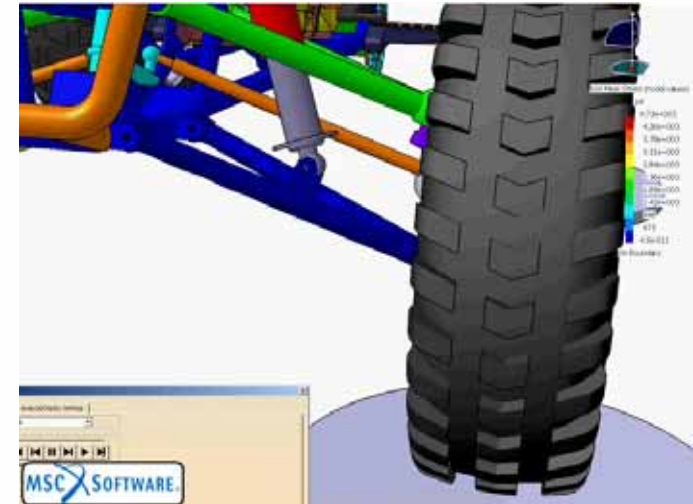
— Knowledge — Application



**Culture
+
Global
Dynamics**

A global imbalance

- 700,000 engineering grads in China
- 300,000 engineering grads in India
- 70,956 engineering grads in USA
 - ~ 30,000 in Germany
- Wages
 - ~\$6K/yr in China and India
 - \$10k/yr Masters
 - Production labor rates \$6 to \$10/day
 - 60 hr work weeks normal
 - ~\$60k/yr USA, Europe, etc.
 - 35 to 40 hr work weeks





USA technical workforce is shrinking

- Undergrad enrollments down 10% in 10 years
- Foreign nationals represent 55% of doctoral engineering grads
 - 25% return home “sea turtles”
- One half of the USA technical workforce is over 40
- Demands for productivity on an increase
 - Changes in educational programs



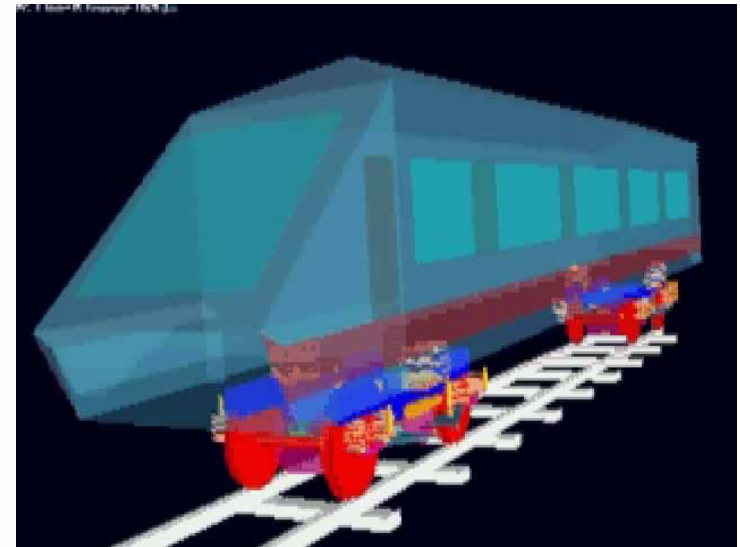
Cost Pressures on Global Resources

Impact on corporate budgets

- Product development investments challenged

Basic commodity issues

- Oil
 - \$15/barrel in 2000; today more than \$40
 - Up 65% in 2003 alone
 - China's oil imports up 7x since 1998
- Cement
 - Prices up 40% in 2003
 - China consumption 8x in 10 yrs
 - 50% of world production





Commodities (more)

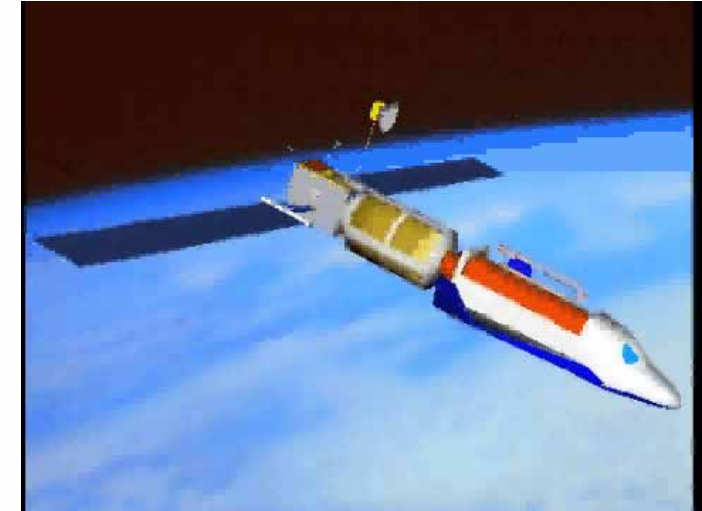


- Steel

- China demand increased by 40M tons
 - Canada and Mexico 40M tons
- Hot-rolled steel price up 70% since 2002

- SO WHAT!

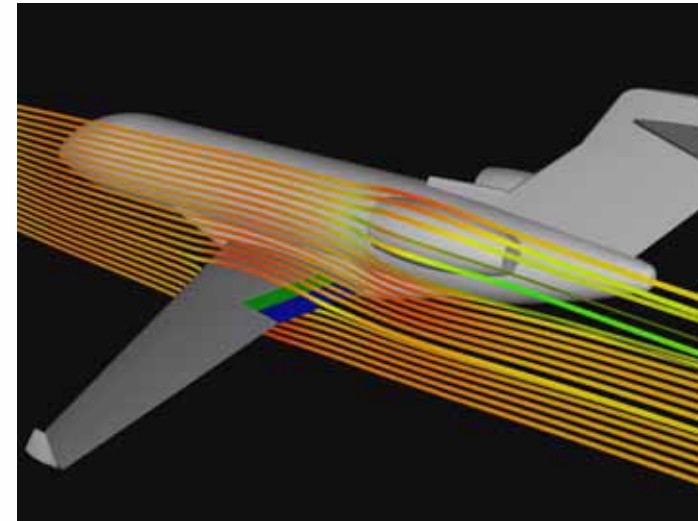
- USA housing costs up \$5000 to \$7000
- Steel now priced like “Lobster”
- Shipping cost up 4x over last 10 years





Commercial aircraft

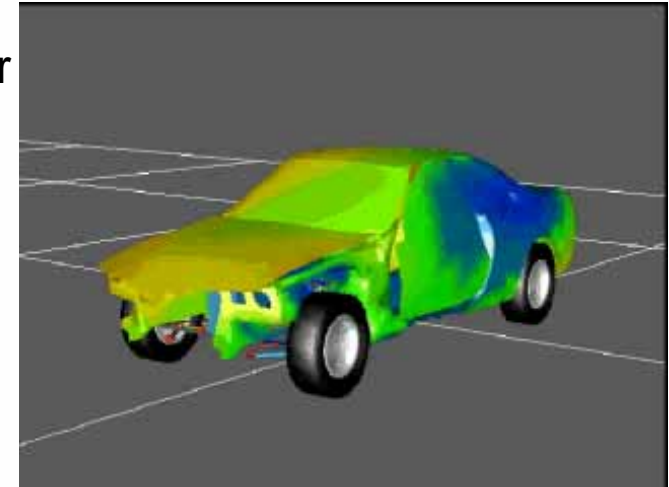
- Normal cycles not working
 - Passenger miles not increasing as expected
- War on terror
- High cost of fuel
- Profitability vs bankruptcies
 - Carrier consolidations and still no profits
- Looming air travel infrastructure revamping
- Impacts of major programs are unknown
- Demand for cargo transports on the rise
 - “Slow boat to china” no longer applies
 - Flights to China 2x, routes to 20 cities next year





USA competitive landscape

- Retiree cost burden on USA OEMs
 - GM retiree health benefit cost \$1,360 per vehicle vs \$107 for non-USA OEM
- Profit pressures are causing a chain reaction
 - OEMs are putting pressure on suppliers
 - Suppliers are going off shore
 - Major issues are occurring
 - » Distance and communication





Consolidations and joint ventures

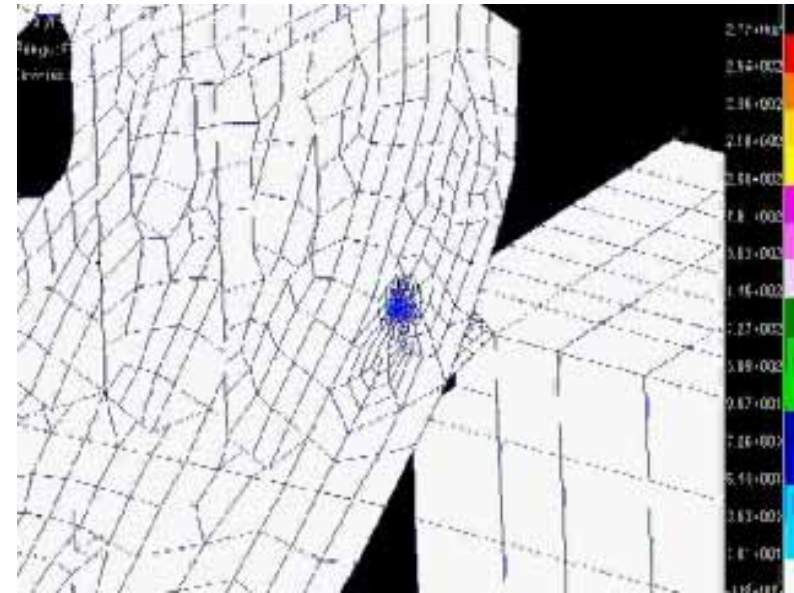
- Organizational stress

China

- Trade secret protection

Warranty Costs

- \$12.6 B for North America auto industry
- \$22.6 B for all US manufacturing companies
- First 6 months of 2004 21 million recalls
 - 2003 19.45 million recalls



Technology Adds New Dimensions

Communications

- Wireless access vs security
- Internet

Challenges with legacy systems

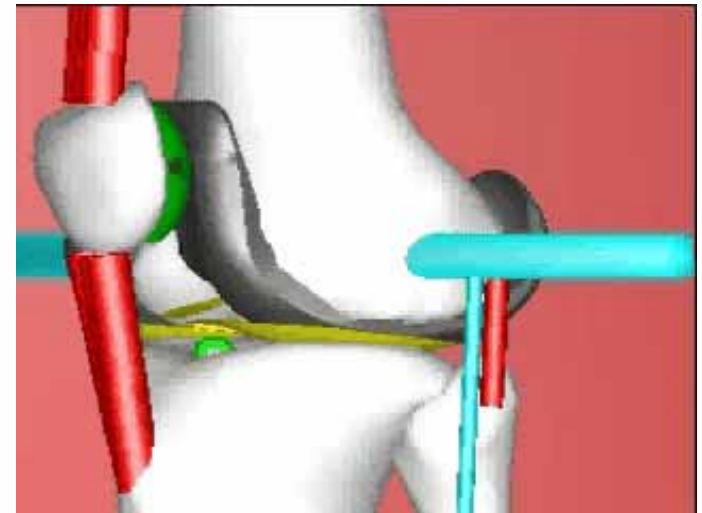
- Established data vs new data
- Knowledge capture
 - Few designs start with clean peace of paper

Materials

- New materials don't have a history

Mechatronics

- Increase electronics per vehicle
 - Auto 30 to 40 % of cost
 - More system engineering required
 - After sales service challenge





Conclusions



The only way to meet the challenges of:

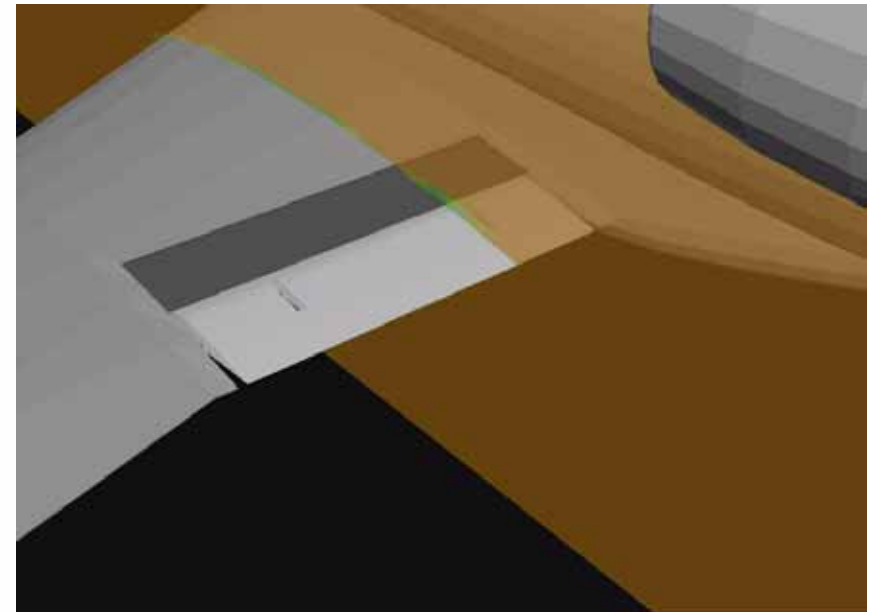
- Global imbalances
- Budgets constraints
- Product demands

Is to:

- Become more efficient
- Better utilize technology

Doing so will:

- Help release our most valuable assets
 - Our expertise
 - Our know-how
 - Our experience





Positive Actions Will Occur



By creating closer **STRATEGIC ALLIANCES**
between product creators and technology vendors

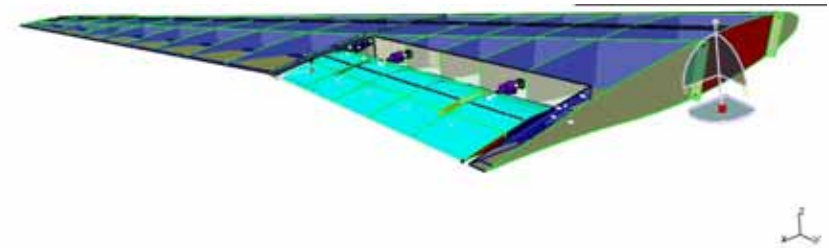
By being proactive in **EDUCATION**

By more effective **COLLABORATING**

By **EVENTS** like this

LET'S DO IT NOW

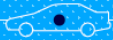
LET'S CLOSE THE GAP



Thank you

***Have a great
Conference***



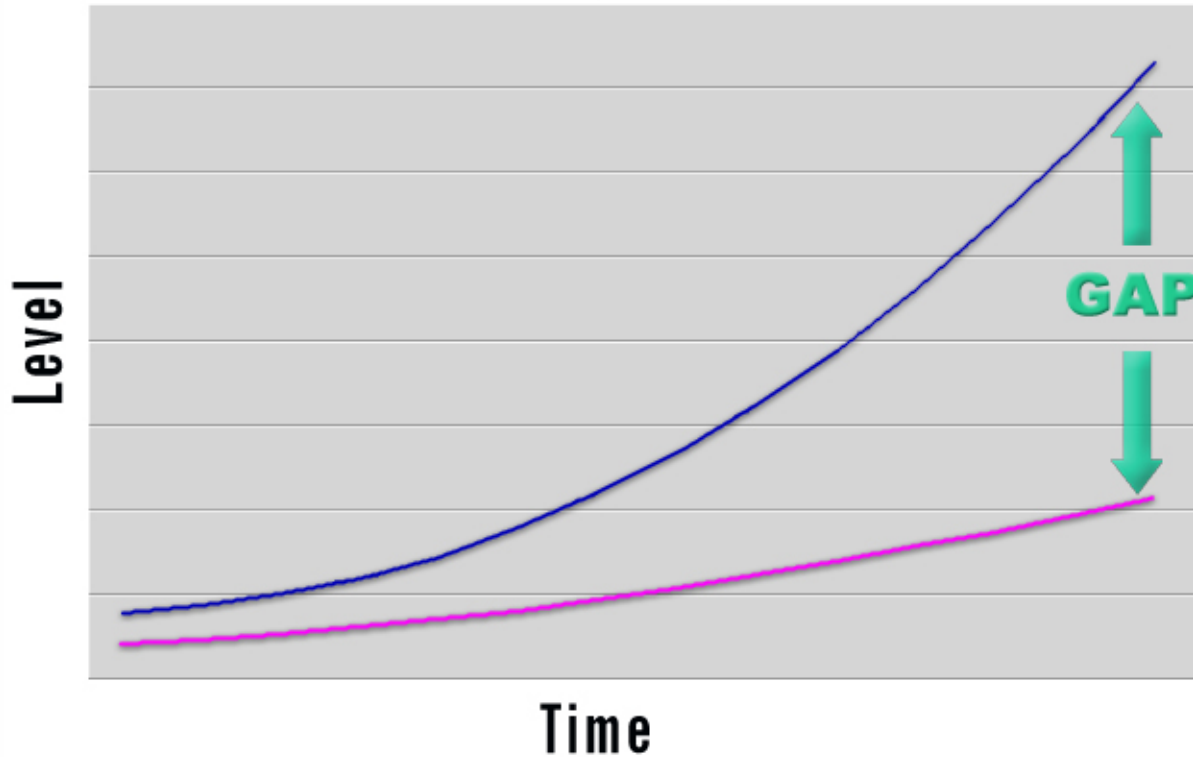


The "Gap"



Technology Adoption

— Knowledge — Application



Culture



Our mission is to be a trusted advisor to current and future customers and provide them with value-added products including Software and Services

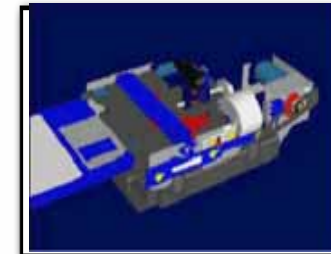
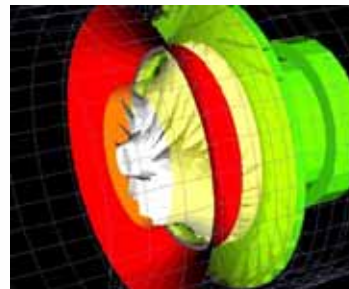
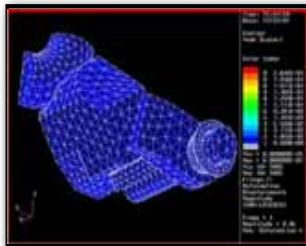
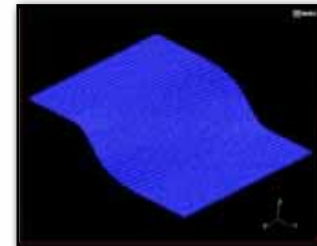
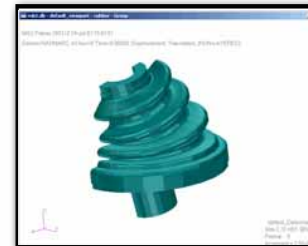
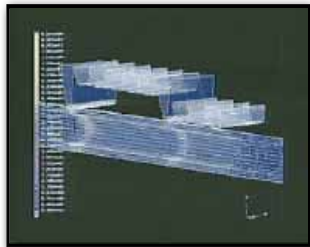
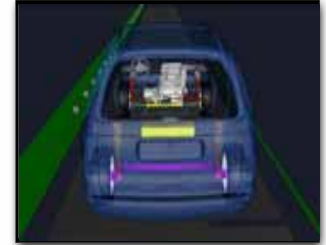
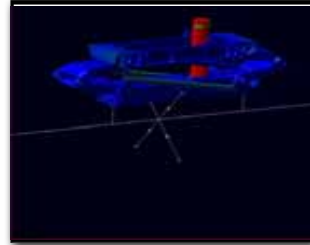
Our primary focus is to provide an efficient and rewarding employment environment that enables us to profitably grow and to satisfy the Virtual Product Development requirements of global manufacturers and related companies

Frank Perna

CEO & Chairman



Virtual Product Development





Defense Sector



Consolidations

- Efficiencies haven't been realized
- Investments in technology are challenged

Demands related to War on Terror

- New set of requirements
 - Billions in the budget
 - Different products
 - » Personnel expenses are higher

DOD expects \$68.9 Billion in FY 2005

- Research and development testing
- Up from \$37.9 B in 2001

