Product Lifecycle Management (PLM) Workshop
Theme: Enabling Next-Generation PLM
February 26-27, 2004
Georgia Tech Hotel & Conference Center

Workshop Description
The goal of this workshop is to define promising directions for research and education in the area of product lifecycle management (PLM). PLM is a strategic approach to creating and managing a company’s product-related intellectual capital, from its initial conception to retirement. PLM exploits advances in information technology to improve a company's product development processes and its ability to use product-related information to make better business decisions and deliver greater value to customers. In the workshop, users, providers, analysts and researchers will present current issues, needs and opportunities in PLM, focusing on specific research areas, such as:

• Managing product innovation & portfolios
• Exploiting commonality of components, platforms, and other assets
• Managing product development across the supply chain
• Leveraging design methodologies
• Advancing systems engineering & stds.-based capabilities
• Creating virtual product development environments
• Designing & delivering services for mature products
• Managing PLM operations & systems
• Assessing cost/benefit implications of PLM
• Linking corporate business strategy to PLM strategy
• Improving PLM education & training

The workshop will result in a roadmap and white paper to guide research and education activities for a planned PLM Center of Excellence at Georgia Tech.

The workshop is being limited in size to promote closer interaction and deeper discussion among the participants. Participants have been invited to contribute short presentations emphasizing their particular PLM issues, needs, and best practices.

Organizing Committee
• Dr. Steve Danyluk - Mfg. Research Center - Co-Chair
• Mr. Andy Dugenske - Manufacturing Research Center
• Dr. Charles Eastman - College of Architecture
• Dr. Robert Fulton - Mechanical Engineering - Co-Chair
• Dr. Naresh Malhotra - College of Management
• Dr. Dimitri Mavris - Aerospace Engineering
• Dr. Leon McGinnis - Industrial & Systems Engineering
• Dr. Farrokh Mistree - Mechanical Engineering
• Dr. Chris Paredis - Mechanical Engineering
• Dr. Russell Peak - Manufacturing Research Center
• Dr. Jarek Rossignac - College of Computing
• Dr. Daniel Schrage - Aerospace Engineering
• Dr. Suresh Sitaraman - Microsystems Packaging
  Research Center and Mechanical Engineering

Workshop Registration, Information, and Hotel
Donna Rogers  Georgia Institute of Technology  Voice: (404) 894-9100
donna.rogers@marc.gatech.edu  Manufacturing Research Center, Rm. 312  Fax: (404) 894-3913

Georgia Tech Hotel - www.gatechhotel.com
Group Name = “PLM Workshop”  800 Spring Street NW, Atlanta, GA 30308  Voice: (404) 347-9440

Version: 2004-02-25 @ 4:00 PM
Agenda

February 25 - Wednesday Evening

7:00 - 9:00 - Registration and Reception

February 26 - Thursday Morning

7:30 - 8:00 - Registration and Continental Breakfast

8:00 - 8:10 - Introductions and Workshop Overview - Steve Danyluk - GIT

8:10 - 8:30 - Welcome to Georgia Tech
  • Steven Danyluk - Director, Manufacturing Research Center - GIT
  • Charles Liotta - Vice Provost for Research and Dean of Graduate Studies - GIT
  • Jean-Lou Chameau - Provost & Vice President for Academic Affairs - GIT

Morning Keynotes: Next-Generation PLM - Visions for the Future

8:30 - 8:50 - A View from Industry - Stas Tarchalski, Director of Global PLM Strategy - IBM/Dassault

8:50 - 9:15 - Industry Trends - Don Brown, Chairman - DH Brown

9:15 - 9:40 - Creating a “PLM Center of Excellence” at Georgia Tech - C. Paredis, R. Peak - GIT

Tributes to Bob Fulton and his vision.

Current & Envisioned PLM Research and Education at GIT

(10-minute overviews followed by Q&A)

9:40 - 10:10 - Thrust 1: Product Planning & Model-based Business
  • Product innovation for the near-tomorrow using PLM as an enabler
  - N. Malhotra, F. Mistree, and J. Allen

10:10 - 10:20 - Break

10:20 - 10:40 - Thrust 2: Product Development Technology
  • Simulation-based design (SBD) in PLM environments - C. Paredis

10:40 - 11:30 - Thrust 3: PLM Applications in Complex Systems
  • PLM applications in complex engineered systems - D. Schrage and D. Mavris
  • PLM-based microsystems - S. Sitaraman

11:30 - 11:50 - Thrust 4: Product Manufacturing & Supply Chains
  • Enhancing the PLM-based value chain - L. McGinnis and D. Bodner

11:50 - 12:20 - Thrust 5: Enabling Technologies
  • Core capabilities for next-generation PLM - C. Eastman
  • Interoperability & systems engineering knowledge standards for PLM - R. Peak
February 26 - Thursday Afternoon

12:20 - 1:30 - Lunch  
Co-Sponsor: Supply Chain Council

Keynote: *Enabling Digital Collaboration across the Value Chain*  
George Brown, Program Manager - Senior Software/PLM Architect - Intel Corp.

Afternoon Keynotes: *Next-Generation PLM - Visions for the Future (continued)*  
1:30 - 1:50 - EDS - Raj Khoshoo, VP - Strategic Planning  
1:50 - 2:10 - PTC - John Stuart, Senior VP - Education and Partners


**PLM Usage in Industry**
- Rockwell Collins - Kevin Fischer, Director - Enterprise Tool Integration  
- Philips - Elke den Ouden, Competence Manager - Innovation Consultancy  
- Lockheed Martin - Mike Jahadi, Senior Manager - Ft. Worth

**PLM Usage & Technology in Government**
- DOE - Kim Cobb, Group Leader - Product Information Management & Simulation - BWXT Y-12 National Security Complex - Oakridge  
- NIST - Kent Reed, Group Leader - Building Fire & Research Lab (BFRL)

3:30 - 3:40 - Break

**PLM Strategic Issues & University Recommendations**
- Dassault/IBM - Tony Hakola, Director - Enovia Marketing  
- Microsoft - Diego Tamburini, Program Manager - Engineering and Manufacturing ISVs

4:10 - 4:25 - Synopsis & Charge for Breakout Sessions - Richard Neal, IMTI

4:25 - 5:30 - Breakout Sessions - Issues and Solution Directions

Four parallel sessions:

**Thrust 1: Product Planning & Model-based Business**  
*Conference Room B*

**Thrust 2: Product Development Technology**  
*Conference Room C*

**Thrust 3: PLM Applications in Complex Systems**  
*Conference Room D*

**Thrust 4: Product Manufacturing & Supply Chains**  
*Conference Room E*

Agenda in each session:

Part 1 - PLM Issues, Needs, and Challenges (25 minutes)  
*Identify, characterize, and prioritize key concerns.*

Part 2 - PLM Research and Solution Directions (25 minutes)  
*Identify and prioritize candidate opportunities.*

Part 3 - Summarize Findings (15 minutes)  
*List findings and appoint a representative to present them Fri AM.*

5:30 - Adjourn
February 26 - Thursday Evening

7:00 - Dinner and Remembering Bob Fulton

The Pleasant Peasant
555 Peachtree Street N.E.
www.thepeasantrestaurants.com

6:30 - Shuttle departs from hotel

February 27 - Friday Morning

Georgia Tech Hotel - Conference Room B

6:45 - 7:00 - Continental Breakfast

7:00 - 8:00 - Additional PLM Perspectives and Open Forum
- Ford - Richard Riff, Henry Ford Technical Fellow - CAD/CAM/CAE & PIM
- NASA JPL - Jim U’Ren, Systems Engineering Project Lead; ISO AP233 Chair
- Engineous - Alex Van der Velden - Engineering Director
- PDES Inc. - Mike Stiteler - Program Manager
- Open Forum

8:00 - 9:00 - Reports from each Breakout Session

9:00 - 9:15 - Break

9:15 - 10:15 - Prioritization of Key PLM Research Topics

10:15 - 11:00 - PLM Educational Perspectives - C. Paredis
- Discussion on Undergraduate, Graduate, and Continuing Education Needs

11:00 - 12:00 - Action Items & Conclusions

12:00 - Adjourn

February 27 - Friday Afternoon

Opportunities for Tours and Further Discussions

Participants

Executive management and senior technologists including those from the following organizations:


1 Those attending Bob Fulton’s funeral will need to leave at this time.
## GIT Workshop Organizers & Speakers

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<th>Unit</th>
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<td>Steve</td>
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<td>MARC Director, Professor and Bryan Chair in ME</td>
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### Abbreviations
- **AE** School of Aerospace Engineering
- **CoA** College of Architecture
- **CoC** College of Computing
- **CoM** College of Management
- **CoE** College of Engineering
- **CEE** School of Civil and Environmental Engineering
- **ECE** School of Electrical and Computing Engineering
- **ECS** Engineering Computing Services (campus CAX services - under GIT CoE)
- **ISyE** School of Industrial and Systems Engineering
- **MARC** Manufacturing Research Center
- **ME** School of Mechanical Engineering (includes Nuclear and Health Physics)
- **OIP** Office of Interdisciplinary Programs
- **PTFE** School of Polymer, Textile & Fiber Engineering
- **ASDL** Aerospace Systems Design Lab
- **CBAR** Center for Board Assembly Research
- **EIS Lab** Engineering Information Systems Lab
- **FIS Group** Factory Information Systems Group
- **MISL** MARC Information Systems Lab
- **PLMCC** Product Lifecycle Management Center of Competence
- **PLM CoE** Product Lifecycle Management Center of Excellence
- **RPMI** Rapid Prototyping & Manufacturing Institute
- **SRL** Systems Realization Lab

### GIT Organization Charts
http://www.provost.gatech.edu/flowchart.html

Be aware that CoE has two meanings above: Center of Excellence and College of Engineering