

Social Product Development & Collaboration Knowledge Council

Strategic Decision Analysis & Support for Product Development and Collaboration

CIMdata’s Product Lifecycle Management (PLM) Knowledge Councils conduct in-depth research for both industrial organizations and PLM solution providers. They emphasize strategic as well as practical, tactical options for companies to follow as they further adopt PLM. The research defines best practices for topics of interest to industrial companies who use PLM to support their ongoing product development business strategies and for PLM solution providers interested in understanding and defining their PLM strategies and directions, and associated offerings.

Council through the added coverage of new collaboration technologies and techniques, collectively known as social technologies.

Design creation and the way people work is changing rapidly, offering an enormous competitive advantage to those who embrace the new tools and processes that enable contextual, agile, and simplified information exchange and collaboration by distributed workforces and networks of partners and customers. A set of new collaboration applications and information infrastructures is enabling radical collaboration.

In addition to its focus on the architecture, implementation, and methodologies of CAD and traditional design collaboration, the expanded SPD&C Knowledge Council represents the authoritative industry source for addressing collaboration and decision making issues by applying emerging social media technologies and processes to PLM. The Council will explore how the new collaboration technologies, collectively known as social technologies, can be applied to product development. Social media and networking have already impacted sales and marketing groups in most companies and disrupted the publishing and music industries. Trends such as global distribution of product development resources and issues such as improving supplier collaboration, product development efficiency, and target costing create a compelling need to address collaboration.

The SPD&C Knowledge Council will also explore how radical collaboration can support trends in lean product development and produce dramatic cost reductions in software and infrastructure due to adoption of cloud, Software as a Service (SaaS), and similar technologies. The emerging shift to cloud computing from what has been traditional desktop CAD design will be examined.

Product development companies are finding that co-location, when all product development team members are working in the same room, is no longer a sufficient or affordable alternative for developing complex products. To be profitable, products must be developed for global markets which demands knowledge be sourced from locations and regions where it is most cost effective. Competitive advantage is achieved by bringing together knowledge and capabilities from different places. Information Technology can provide a



CIMdata currently offers five PLM Knowledge Councils, as shown in the figure above. Council topics are developed from CIMdata’s PLM Community as technology evolves and industry requirements dictate. Additional information related to CIMdata’s PLM Community is located at www.CIMdata.com.

Social Product Development & Collaboration Knowledge Council

The previous Design Creation & Collaboration (DC&C) Knowledge Council has been expanded to create the Social Product Development & Collaboration (SPD&C) Knowledge

means to implement effective and efficient virtual co-location but so far, the results have been less than satisfactory.

Enterprise 2.0 is the term for the technologies and business practices that liberate the workforce from the constraints of legacy communication and productivity tools such as email when it comes to collaboration. Enterprise 2.0 provides business managers with access to the right information at the right time through a web of inter-connected applications, services and devices. Enterprise 2.0 makes accessible the collective intelligence of many, translating to a huge competitive advantage in the form of increased innovation, productivity, and agility.

These shifts in product development collaboration are further complicated by the expanded choice of product modeling methodologies now prevalent in the industry. The reemergence in the last decade of direct modeling approaches working side by side with the more traditional history-based approach offer unparalleled opportunities for product developers to optimize their processes. The SPD&C Knowledge Council provides deep technical expertise in the full range of computer-aided modeling methodologies and guidance in their use.

Necessary changes in the ways in which people work and the impacts of new technologies create compelling reasons to join the SPD&C Knowledge Council.

SPD&C Knowledge Council Member Deliverables

Current SPD&C Knowledge Council Research Topics

Under the guidance of collaborative members, the Social Product Development & Collaboration Knowledge Council's agenda for the current research year is concentrating on the following critical issues:

- **Model validation:** In order to promote design consistency, adherence to company standards, and boost leveragability downstream in the development process, companies are increasingly relying on the use of processes and tools to validate the geometric and data attribute content of CAD models. The Council will address best practices in the industry and document use cases that include the creative application of tools to validate that CAD models meet company standards during the design process.
- **Mechanical mechanisms and simulation:** The simulation of mechanical mechanisms has transcended its previous role in merely demonstrating product operation to provide true physics-based simulation of product design function. The Council will explore and identify user requirements with a particular focus on mechatronics control systems and to document use cases, business cases, and metrics for simulation of mechanical mechanisms.

- **Social collaboration in design:** Social technology tools are rapidly taking hold in product development environments. The Council will explore practical and useful applications of social collaboration within the end user community to help drive software requirements for the PLM solution providers.
- **Collaboration Maturity Model and Assessment:** Before considering new collaboration strategies and implementing social technology tools, it is important to assess organizational readiness and potential barriers to adoption. This assessment provides insights into an organization's current status from which a roadmap towards the desired state can be developed. The CIMdata collaboration maturity model and assessment methodology will be developed with input from The Council members.

2015 Events

- CIMdata PLM Road Map™ conferences
- Social Product Development & Collaboration Knowledge Council Workshop October 7 & 8, 2015

Publications

- Archived publications and reports
- Any additional reports generated during the membership term.

PLM Presentations and Audio from all PLM Road Map Conferences

All presentations from the year's PLM Road Map events are provided to council members.

Membership Levels

Corporations who sponsor the SPD&C Knowledge Council include both **industrial companies** and **PLM solution providers**. Two levels of membership are offered: Enterprise and Individual. The benefits for each level of membership are described below.

Enterprise Members

Enterprise members receive the following benefits:

- Two primary contacts who receive all SPD&C Knowledge Council deliverables.
- Four secondary contacts.
- Redistribution rights within the company of archived reports from past CIMdata PLM Knowledge Council research activities as deemed appropriate by the SPD&C Knowledge Council's Practice Lead.

- A one-hour web conference with CIMdata consultants to cover specific ongoing issues critical to the member company that CIMdata’s collaborative analysis may effectively address.
- Each primary contact has telephone and email inquiry privileges to the SPD&C Knowledge Council’s Practice Lead.
- Participation in surveys and discussions that help drive and shape the critical issues that are researched.
- Each primary and secondary contact has web access to reports issued by other CIMdata programs, where the SPD&C Knowledge Council’s Practice Lead has determined they are of direct interest to SPD&C Knowledge Council members.
- Each enterprise member receives two registrations to CIMdata-organized SPD&C Knowledge Council events (e.g., PLM Road Map, SPD&C Knowledge Council workshops, seminars, regional briefings, and teleconferences). Additional registrations are available at a discount.

Individual Members

Individual members receive the following benefits:

- One primary contact who receives all SPD&C Knowledge Council deliverables.
- Redistribution rights within the company of archived reports from past CIMdata PLM Knowledge Council research activities as deemed appropriate by the SPD&C Knowledge Council’s Practice Lead.
- Telephone and email inquiry privileges with the SPD&C Knowledge Council’s Practice Lead.
- Web access to reports issued by other CIMdata programs, where the SPD&C Knowledge Council’s Practice Lead Manager has determined they are of direct interest to SPD&C Knowledge Council members.
- Access to executive summaries from all PLM Knowledge Councils’ research.
- One registration to seminars, regional briefings, and teleconferences scheduled at CIMdata’s discretion, on

timely topics of interest to SPD&C Knowledge Council members.

- One registration to the PLM Road Map conference.

About CIMdata

CIMdata, an independent worldwide firm, provides strategic management consulting to maximize an enterprise’s ability to design and deliver innovative products and services through the application of Product Lifecycle Management (PLM) solutions. Since its founding over thirty years ago, CIMdata has delivered world-class knowledge, expertise, and best-practice methods on PLM solutions. These solutions incorporate both business processes and a wide-ranging set of PLM-enabling technologies.

CIMdata works with both industrial organizations and solution providers of technologies and services seeking competitive advantage in the global economy. CIMdata helps industrial organizations establish effective PLM strategies, assists in the identification of requirements and selection of PLM technologies, helps organizations optimize their operational structure and processes to implement solutions, and assists in the deployment of these solutions.

For PLM solution providers, CIMdata helps define business and market strategies, delivers worldwide market information and analyses, provides education and support for internal sales and marketing teams, as well as overall support at all stages of business and product programs to make them optimally effective in their markets.

In addition to consulting, CIMdata conducts research, provides PLM-focused subscription services, and produces several commercial publications. The company also provides industry education through PLM certificate programs, seminars, and conferences worldwide. CIMdata serves clients around the world from offices in North America, Europe, and Asia-Pacific.

To learn more about CIMdata’s services, visit our website at www.CIMdata.com or contact CIMdata at: 3909 Research Park Drive, Ann Arbor, MI 48108, USA. Tel: +1 734.668.9922. Fax: +1 734.668.1957; or at Oogststraat 20, 6004 CV Weert, The Netherlands. Tel: +31 (0) 495.533.666.