Enterprise Innovation Management Solutions: Connecting the Dots! CIMdata Webinar Series

11 November 2015

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Agenda

- CIMdata Research Approach and Outcomes Dr. Suna Polat
- The Sponsors Panel facilitated by Dr. Ken Versprille
 Panel members
 - Christian Fernando, Chief Technology Officer, e-Zassi
 - Carrie Nauyalis, NPD Solutions Evangelist, Planview
 - William Lewis, Director of Marketing, Siemens PLM Software
 - Huub Rutten, Vice President of Product Research and Design, Sopheon
- Answer questions from the attendees



Questions?

Please use the GoToWebinar Question panel

- Please enter questions in the GoToWebinar Question panel
- We will answer as many questions as time allows...
- Those that can't be answered live will be answered by email





Suna Polat, Ph.D.

Director, Collaborative Innovation & Social Product Development Practice

- 24+ years of experience in technology and product development, innovation management, implementation of strategic innovation capabilities, including modeling and simulation (M&S), open innovation, knowledge management and social technologies, and driving change and adoption through her career at P&G and consulting practice there after
- Worked with or benchmarked best-in-class companies in diverse industries including consumer goods, material suppliers, IT technology, auto, airline, and pharmaceuticals, to source technology and to identify best practices and new approaches for cultivating innovation and innovation productivity
- Education background: Chemical Engineering



Ken Versprille, Ph.D.

Executive Consultant

 Over 35 years of experience in the application of computer-based solutions for engineering and manufacturing. Research spans geometric design, design collaboration and automation, and PLM standards and openness



- During 15 years at Computervision, became the equivalent of CTO, and was R&D Vice President of core applications. As General Manager of CV-Doors, led the group that introduced and managed the CAD industry's first geometric kernel business
- Is recognized for publishing the first description of NURBS, the mathematical curve-and-surface formulation, now an international standard in CAD and Computer Graphics
- 2005: received a Lifetime Achievement Award by The CAD Society



Our Mission...

Strategic management consulting for competitive advantage in global markets

CIMdata is the leading independent global strategic management consulting and research authority focused exclusively on the PLM market.

We are dedicated to maximizing our clients' ability to design and deliver innovative products and services through the application of PLM.



EIM Research Context

Making Sense of a Crowded Landscape to Open up Market Opportunities

- Enterprise innovation suffers from inefficiencies due to disjointed processes, solutions, and data
 - Pace of innovation accelerating due to a networked economy
 - Product complexity increasing with smart and connected products
- Enterprises are hesitant to invest in new solutions
 - Because of confusion, uncertainty, and ambiguity caused by differences in terminology, solution approaches, strategies, obstacles, best practices, and benefits claimed from the plethora of innovation solution providers
- Problem: Lack of a common innovation system framework and clear terminology to explain how solutions fit into this framework
 - Hindering industrial companies in their adoption of solutions and solution providers in expanding their markets



EIM Research Approach

Sponsorship and Research Methodology

- Research first announced at CIMdata's NA PLM Market Forum (31 Mar, 2015)
- (New Insights, Ideas & Concepts) Defined a simple EIM activity system model and solicited solution providers in quadrants 1-3 for sponsorship
- Four sponsors signed up to partially fund the research
 - e-Zassi
 - **Planview**
 - Siemens PLM Software
 - Sopheon



Innovation Strategy, Roadmap & Portfolio

quadrant 1

Front End Innovation

quadrant 2

Thought leadership interviews and briefings

quadrant 4

New Offering Development

(Design and Delivery)

quadrant 3

Enterprise

Innovation Management

Demonstrations of their current solutions

CIMdata interviewed Chief innovation executives who

- Lead, promote and measure innovation
- Lead choice of solutions and drive adoption of their use
- Lead Open Innovation





CIMdata Knowledge Council Workshop

Oct 7 and 8, 2015; Louisville, Kentucky

"The New Age of Collaboration, Innovation, and Product Development"

- Keynotes:
 - Product Development in the Age of the Internet, Taylor Dawson, Product Evangelists at FirstBuild, GE Appliances
 - The Third Industrial Revolution: The story of Local Motors and the 3D Printed Car, John B. "Jay" Rogers, Jr., Co-Founder & CEO, Local Motors
 - PLM and New Manufacturing in a Networked World, Oleg Shilovitsky, Entrepreneur,
 Consultant and Beyond PLM blogger
 - Unleashing Innovation with External Partners: From a Corporate Initiative to a Global Movement, Dr. Svetlana Dimovski, Senior Manager for Innovation Excellence, BASF
- Industry and Solution Providers panel discussions
- Discussed improvements to the EIM Framework model as part of the Solution Providers Panel





Mark Your Calendars!

Join the conversation

The next CIMdata "Collaborative Innovation and Product Development" Workshop



Date: 25 May 2016

Location: Biltmore Inn and Suites in Santa Clara, CA

Following the CIMdata High Tech PLM Road Map on May 24



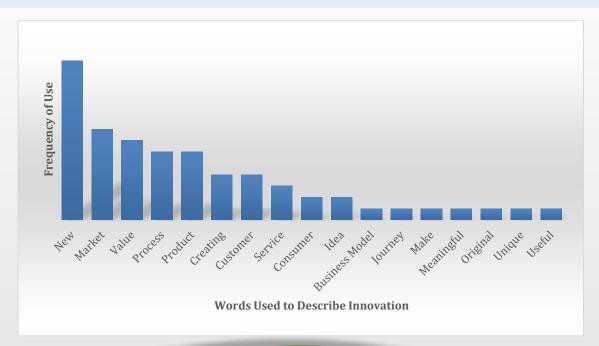
Key Outcomes

The White Paper will be available to download at cimdata.com in December

- Definition(s) for Innovation
- A classification approach to EIM Solutions
- A framework to show how solutions fit with each other
- Clients' key innovation challenges and concerns
- Effective strategies and approaches to deal with these challenges
- A glossary of EIM terms

Two Definitions of Innovation

New to the market, customers value, but don't forget the journey



"All the journey that would be needed for an idea to become a product or service in the market. Not only the time where we thought about it, but it's also at the time we have been able to solve all the technical or scientific or business models related issues that would allow us actually to bring that product to the market to the right customers."

Outcome-based...

Innovation is a product, process, or service new to the market that the customers value.

Journey-based...

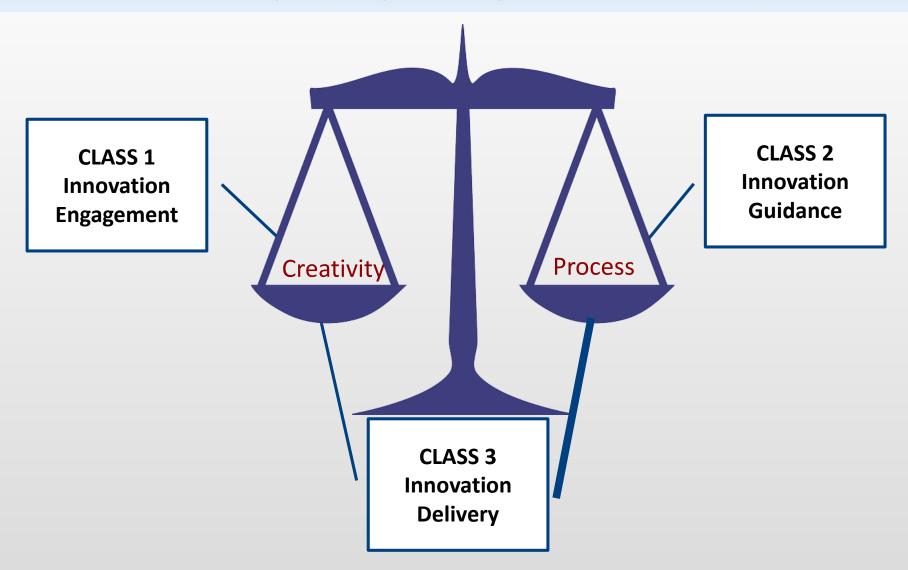
Innovation is the definition and realization of a new solution, i.e., a process, product, service, and/or business approach, to a need, issue, or problem that performs better or delivers more value than any previous solution





Classification of EIM Solutions

Innovation is a balance of Creativity and Discipline

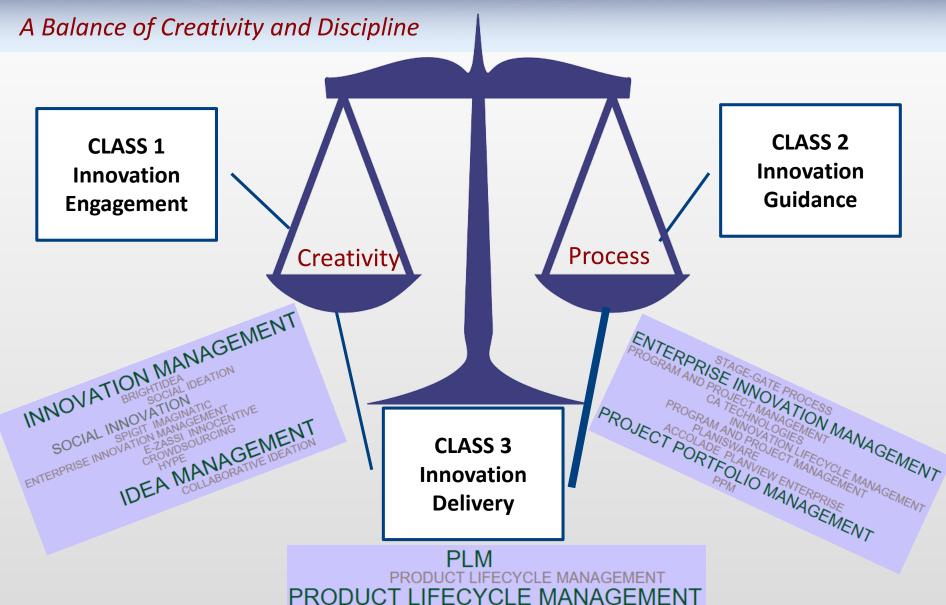


Definition of CLASSES of EIM Solutions

Engagement, Guidance and Delivery

- CLASS 1 Innovation Engagement: Solutions that allow large networks to engage on innovation needs of an enterprise to offer ideas, insights and solutions
- CLASS 2 Innovation Guidance: Solutions that structure and support business strategy, planning and decision making to realize on target and profitable innovation
- *CLASS 3 Innovation Delivery*: Solutions that support the collaborative creation, management, dissemination, and use of product definition information across the extended enterprise spanning concept through life

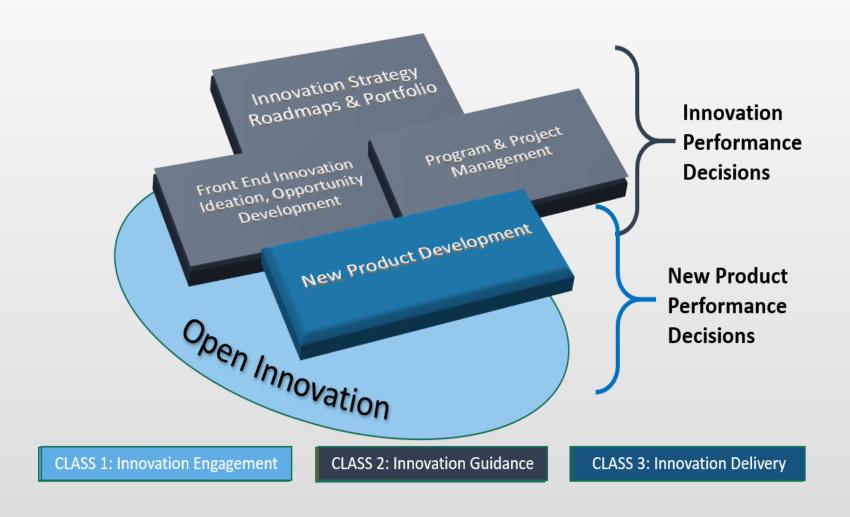
Classification of EIM Solutions





EIM Framework

How CLASSES of solutions fit with each other





Key Innovation Challenges & Concerns

Based on Interviews with Chief Innovation Officers and Sponsors

- Culture and mindset
 - Difficulty in adopting new ways of working
 - NIH is still around when doing Open Innovation
 - Traditionally top down, but need to add ground-up innovation
- Fragmented processes and systems makes information sharing difficult and slow
 - No single source of truth → Longer cycle times & cannot compare promised versus delivered
 - Battling gigantic MS Excel spreadsheets that are crashing
- Managing ever increasing product complexity
 - Need for modeling and defining product digitally
 - Has to collaborate across the supply chain



Effective Approaches to Deal with Challenges

Culture change; Goals and Metrics & Early wins (1 of 2)

- Embrace the culture change. That's the only constancy!
 - Sign up an executive champion who can move people and remove barriers
 - Establish a dedicated team to lead the change
 - Support people by providing training and guidance
 - A network of "ambassadors"
- Set Goals and Metrics
 - Start with analytics, help executives make better decisions
 - Quantify current state, address pain points, set goals for the future state
 - Three key metrics: Cycle time; Cost and Value of the innovation portfolio
- Set time for pilots, but don't get stuck there
 - Pilots should be about creating quick, early wins. Have a scale up strategy
 - Keep it simple: No big-bang deployment of solutions gets too complex, people give up



Effective Approaches to Deal with Challenges

Meaningful conversations and Technology Enablers (2 of 2)

- Create Meaningful Conversations
 - Develop a common framework and terminology
- Technology enablers
 - CLASS I and II solutions offered in the Cloud; makes implementation easier
 - More PLM solution providers are providing cloud solutions
 - Arena, Autodesk, Oracle, PTC and Siemens PLM Software
 - Clients' hesitancy to move to public Cloud is limiting advantages of some solutions
- User friendly interfaces are a must
 - Example: Google like search



Conclusions

- Enterprises can no longer afford inefficiencies in their innovation processes due to a demanding innovation environment in a networked economy and increased product complexity
- Modern EIM solutions can help enterprises to innovate faster and better by making innovation activities more visible and the data more connected across their innovation ecosystem
 - However, tools themselves are not sufficient
 - A culture aligned with the new strategies and solutions, and a work force with the right mindset and skills are just as critical

The Panel of Research Sponsors

Facilitated by Dr. Ken Versprille



Christian Fernando
Chief Technology Officer
e-Zassi



Carrie Nauyalis

NPD Solutions Evangelist

Planview



William Lewis
Director of Marketing
Siemens PLM Software



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Vice President of
Product Research & Design
Sopheon

Christian Fernando

Chief Technology Officer, e-Zassi





Integrated Solution

Idea Capture

disclosure control

Knowledge Engine

automated filtering

Innovation Analytics

> business intelligence

Innovation Management

consensus decision-making



Carrie Nauyalis

NPD Solutions Evangelist, Planview





Analytics and Reporting

- · Executive dashboards show the product pipeline
- Reports on projected product P&L

Stage-Gate® process management

Deliverables processes

- Metrics detailing gate deliverables and status
- Graphics comparing innovation versus incremental enhancements
- Analytics revealing the cost of maintaining declining products
- KPIs covering risk versus reward

Product Portfolio Management

- Portfolio analysis from idea through end of life
- Integrated strategic, product, and project portfolios
- Portfolio optimization against risk tolerance
- Strategic buckets

Product Commercialization Product Lifecycle Management Pipeline Prioritization Launch Strategic alignment Collaboration Product marketing Brand impact Research Release management · Competitive comparison Cross-functional readiness Sustainability analysis Ideation Execution Product development · Voice of the customer In-Market Analysis Idea capture and Capacity Planning · Project execution Open Innovation collaboration Product performance Organizational resource Resource management capacity planning Idea source tracking for IP Market analysis Time reporting · Financial planning & analysis · Idea alignment, status, and · Change, risk, and issue scorecarding · Efficient frontier optimization End-of-Life Concepts Post mortem Partnership Roadmapping · Close-out workflow · Product and technical roadmaps Financial transition Product dependencies Process and Best Practices

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· Workflow and lifecycle management

Process assessments and reviews





Nova for PPM leading practices

Planview PRISMS® best practices and enablement

William Lewis

Director of Marketing, Siemens PLM Software



The Role of Siemens PLM Software:

Key investment themes for Teamcenter

SIEMENS

Engaged Users

Usability with Active Workspace

Reach more stakeholders with role based, use case driven interaction

Adaptive System

Platform Innovation

Drive quality, deployability, and extensibility to enable a robust partner ecosystem

Systems Driven Product Development Smart Innovation Portfolio Intelligent Models

Intelligent Models

Closed-loop product planning And virtual validation for complex products

Realized Products

Integrated Product Definition

Clearly align the virtual with the physical to streamline upstream and downstream processes





Realized

Products

Adaptive

System

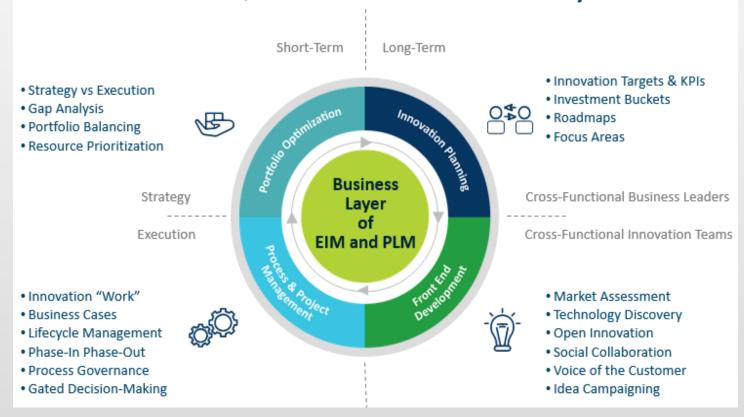
Huub Rutten

Vice President of Product Research and Design, Sopheon





End-to-End Innovation Lifecycle Management from Sopheon: Software, Best Practices and Consultancy





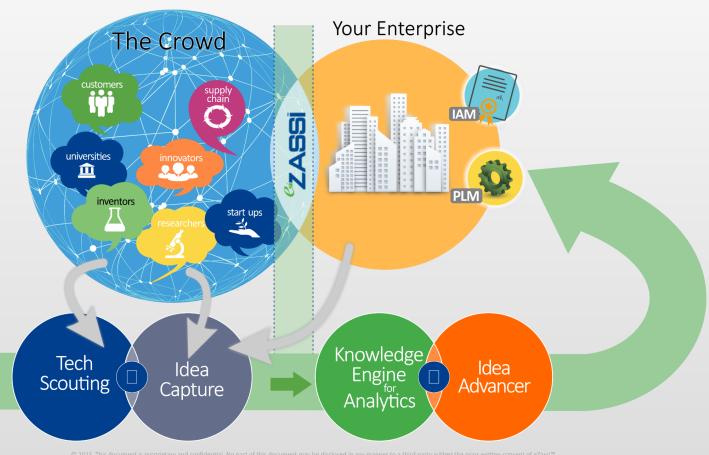


Christian Fernando

Chief Technology Officer, e-Zassi



Expanding the Ecosystem of Innovation





Patent-Pending

Carrie Nauyalis

NPD Solutions Evangelist, Planview





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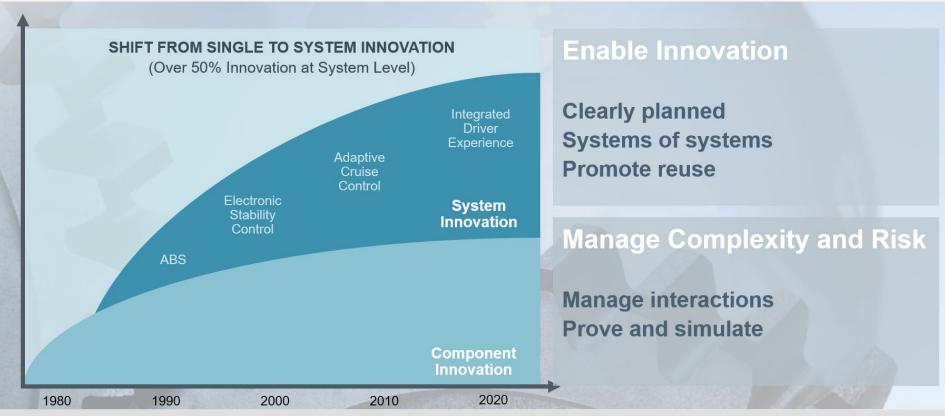




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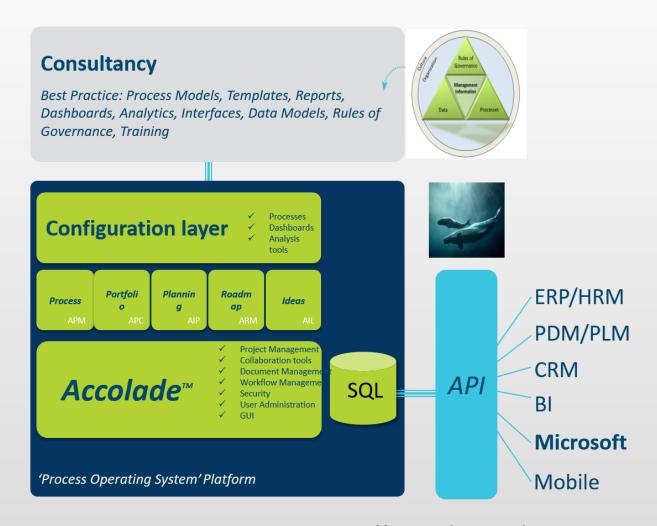




Huub Rutten

Vice President of Product Research and Design, Sopheon





Innovation Management Offering by Sopheon





Q&A

Let's hear what's on your mind?















For More Information, Contact...

We look forward to hearing from you

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THANK YOU!

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