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IFIP was founded in 1960 under the auspices of UNESCO, following the First World Computer Congress held in Paris the previous year. An umbrella organization for societies working in information processing, IFIP's aim is two-fold: to support information processing within its member countries and to encourage technology transfer to developing nations. As its mission statement clearly states,

IFIP's mission is to be the leading, truly international, apolitical organization which encourages and assists in the development, exploitation and application of information technology for the benefit of all people.

IFIP is a non-profitmaking organization, run almost solely by 2500 volunteers. It operates through a number of technical committees, which organize events and publications. IFIP's events range from an international congress to local seminars, but the most important are:

- The IFIP World Computer Congress, held every second year;
- Open conferences;
- Working conferences.

The flagship event is the IFIP World Computer Congress, at which both invited and contributed papers are presented. Contributed papers are rigorously refereed and the rejection rate is high.

As with the Congress, participation in the open conferences is open to all and papers may be invited or submitted. Again, submitted papers are stringently refereed.

The working conferences are structured differently. They are usually run by a working group and attendance is small and by invitation only. Their purpose is to create an atmosphere conducive to innovation and development. Refereeing is also rigorous and papers are subjected to extensive group discussion.

Publications arising from IFIP events vary. The papers presented at the IFIP World Computer Congress and at open conferences are published as conference proceedings, while the results of the working conferences are often published as collections of selected and edited papers.

Any national society whose primary activity is about information processing may apply to become a full member of IFIP, although full membership is restricted to one society per country. Full members are entitled to vote at the annual General Assembly. National societies preferring a less committed involvement may apply for associate or corresponding membership. Associate members enjoy the same benefits as full members, but without voting rights. Corresponding members are not represented in IFIP bodies. Affiliated membership is open to non-national societies, and individual and honorary membership schemes are also offered.

Shuichi Fukuda Alain Bernard
Balan Gurumoorthy Abdelaziz Bouras (Eds.)

Product Lifecycle Management for a Global Market

11th IFIP WG 5.1 International Conference, PLM 2014
Yokohama, Japan, July 7-9, 2014
Revised Selected Papers

Volume Editors

Shuichi Fukuda

Keio University, Systems Design and Management

4-1-1, Hiyoshi, Kohoku-ku, Yokohama, 223-8526, Japan

E-mail: shufukuda@gmail.com

Alain Bernard

École Centrale de Nantes, Laboratoire IRCCyN UMR CNRS 6597

1, rue de la Noë, 44321 Nantes Cedex 3, France

E-mail: alain.bernard@ircyn.ec-nantes.fr

Balan Gurumoorthy

Indian Institute of Science, Centre for Product Design and Manufacturing
and Department of Mechanical Engineering

Bangalore 560012, India

E-mail: bgm@mecheng.iisc.ernet.in

Abdelaziz Bouras

Qatar University, Department of Computer Science and Engineering

P.O. Box 2713, Doha, Qatar

E-mail: abdelaziz.bouras@qu.edu.qa

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Preface

The International Conference on Product Lifecycle Management started in 2003 and since then, it has been held yearly around the world and has served to exchange and discuss the most up-to-date information on product lifecycle management among academia and industry.

Product lifecycle management, also known as PLM, is an integrated business approach to the collaborative creation, management, and dissemination of engineering data throughout the extended enterprises that create, manufacture, and operate engineered products and systems.

This is the official conference of the IFIP Working Group WG 5.1 “Global Product Development for the Whole Lifecycle” (www.ifip-wg51.org) and PLM 2014 was held in Yokohama, Japan, as its 11th international conference under the theme of “Product Lifecycle Management for a Global Market”.

A doctoral workshop was held prior to the conference. PhD candidates presented their on-going works and received feedback from mentors. Four plenary keynote presentations from academia and industry were made during the conference days. In addition to the academic presentations of the conference, a day was devoted to industry panels and presentations from various sectors of industry in Japan. This industrial presence has characterized the conference since its creation and serves to establish continuous ties between academia and industry.

This book, organized in 12 chapters, is composed of selected papers presented at the PLM 2014 conference. It is part of the *IFIP Advances in Information and Communication Technology* (AICT) series that publishes state-of-the-art results in the sciences and technologies of information and communication.

In addition to this conference, the *International Journal of Product Lifecycle Management* (IJPLM) is the official journal of the WG 5.1 (www.inderscience.com/ijplm).

Sincere thanks go to all authors, participants, and those who helped to organize and run the conference.

We hope this book serves to make a step forward in this exciting area of PLM and we look forward to meeting you at the next PLM conference in Doha, Qatar, during October 19–21, 2015 (www.plm-conference.org).

November 2014

Shuichi Fukuda
Alain Bernard

Organization

The conference is promoted by the International Federation for Information Processing (IFIP) Working Group 5.1 on Global Product Development for the Whole Lifecycle (www.ifip-wg51.org).

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Table of Contents

BIM Operations, Maintenance and Renovation

Building Information Modeling (BIM) for Facilities Management – Literature Review and Future Needs	1
<i>Mehmet Yalcinkaya and Vishal Singh</i>	
Maintenance of Facilities and Aircrafts: A Comparison of IT-Driven Solutions	11
<i>Karoliina Parhiala, Mehmet Yalcinkaya, and Vishal Singh</i>	
Towards a BIM Approach for a High Performance Renovation of Apartment Buildings	21
<i>M. Aldanondo, A. Barco-Santa, E. Vareilles, M. Falcon, P. Gaborit, and L. Zhang</i>	
Similar Concepts, Distinct Solutions, Common Problems: Learning from PLM and BIM Deployment	31
<i>J.R. Jupp and Vishal Singh</i>	
BIM and PLM: Comparing and Learning from Changes to Professional Practice Across Sectors	41
<i>J.R. Jupp and M. Nepal</i>	
Preliminary Study Impact of Building Information Modelling Use in Malaysia	51
<i>W.I. Enegbuma, A.C. Ologbo, U.G. Aliagha, and K.N. Ali</i>	

BIM Concepts and Lifecycle Management

BIM for FM: A Case Support for Business Life Cycle	63
<i>Ricardo Codinhoto and Arto Kiviniemi</i>	
Fostering the Link from PLM to ERP via BIM: The AEC Industry in Transition	75
<i>Dominik Holzer</i>	
The Turning Point: MEP Contractors as the Key to Achieving Lifecycle BIM	83
<i>Sumit Oberoi and Dominik Holzer</i>	

Design and Education

A Design Method for Product Upgradability with Different Customer Demands	91
<i>Masato Inoue, Shuho Yamada, Tetsuo Yamada, and Stefan Bracke</i>	
Integration of Design Intent during the Product Lifecycle Management	101
<i>Min-Jung Yoo, Jumyung Um, Ian Stroud, Soumaya El Kadiri, and Dimitris Kiritsis</i>	
A Short Portable PLM Course	111
<i>Joel Sauza Bedolla, Javier Martinez Gomez, and Paolo Chiabert</i>	
Product Lifecycle Management in Education: Key to Innovation in Engineering and Technology	121
<i>Priyanka Gandhi</i>	

Naval Engineering and Shipbuilding

Knowledge Management: A Cross Sectorial Comparison of Wind Generation and Naval Engineering	129
<i>Gary Ford, Joel Iqba, Chris McMahon, Kazem Alemzadeh, Chris Rowley, and Keld Henningsen</i>	
Information Resources for the Identification of Complex Asset Condition: A Naval Engineering Case Study	139
<i>Gary Ford, Chris McMahon, and Chris Rowley</i>	
A Requirements Evaluation Method for Ships to Maximize Operational Value under Uncertainty	149
<i>Kazuo Hiekata and Bryan Moser</i>	

Aeronautical and Automotive Engineering

Using the Product Lifecycle Management Systems to Improve Maintenance, Repair and Overhaul Practices: The Case of Aeronautical Industry	159
<i>Alejandro Romero and Darli Rodrigues Vieira</i>	
Integrating Eco-design and PLM in the Aviation Completion Industry: A Case Study	169
<i>Natalia Moreira, Daoud Ait-Kadi, Darli Rodrigues Vieira, Alejandro Romero, Luis Antonio de Santa-Eulalia, and Yi Wang</i>	
Decomposition Analysis Resolution Process (DAR) of Systems Engineering Applied to Development of Countermeasure on Leakage of Engine Head-Gasket	181
<i>Satoshi Ohkawa, Hidekazu Nishimura, and Yoshiaki Ohkami</i>	

Industry and Consumer Products

Introduction to a Model for Life Cycle Optimisation of Industrial Equipment	193
<i>Daniele Cerri, Valerio Contaldo, Marco Taisch, and Sergio Terzi</i>	
Integration of Environmental Assessment in a PLM Context: A Case Study in Luxury Industry	201
<i>Djamel Yousnadj, Guillaume Jouanne, Nicolas Maranzana, Frédéric Segonds, Carole Bouchard, and Améziane Aoussat</i>	
Escalation of Software Project Outsourcing: A Multiple Case Study	213
<i>Hsin-Hui Lin and Wen-Liang Wang</i>	
Design Information Management for Product Sound Quality: Requirement Definition	225
<i>Kazuko Yamagishi, Koichi Ohtomi, Kenichi Seki, and Hidekazu Nishimura</i>	
Thermal Management of Software Changes in Product Lifecycle of Consumer Electronics	237
<i>Yoshio Muraoka, Kenichi Seki, and Hidekazu Nishimura</i>	
A Study for Building a Comprehensive PLM System Based on Utilizing the Japanese Strength of Industry	247
<i>Akio Kamoshita and Hiroyuki Kumagai</i>	

Interoperability, Integration, Configuration, Systems Engineering

PLM Reference Model for Integrated Idea and Innovation Management	257
<i>Manuel Löwer and Jan Erik Heller</i>	
Unification of Multiple Models for Complex System Development	267
<i>Nesrine Ben Beldi, Lionel Roucoules, François Malburet, Tomasz Kryszinski, and Pierre Gauthier</i>	
Performance Indicators for Configuration Management	277
<i>Tanja Minzenmay, Maximilian Zeiss, Masoud Niknam, and Jivka Ovtcharova</i>	
System Lifecycle Management: Initial Approach for a Sustainable Product Development Process Based on Methods of Model Based Systems Engineering	287
<i>Martin Eigner, Thomas Dickopf, Hristo Apostolov, Patrick Schaefer, Karl-Gerhard Faißt, and Alexander Keßler</i>	

Interoperability Framework for Supporting Information-Based Assistance in the Factory 301
Mohamed Anis Dhuieb, Farouk Belkadi, Florent Laroche, and Alain Bernard

A Socio-technical Approach to Managing Material Flow in the Indonesian Fertiliser Industry 311
Issa D. Utami, Raymond J. Holt, and Alison McKay

Change Management and Maturity

PLM Serious Game Approach Available Both for Change Management and Knowledge Assessment 323
P. Pernelle, T. Carron, S. Elkadiri, A. Bissay, and J.-C. Marty

PLM Maturity Evaluation and Prediction Based on a Maturity Assessment and Fuzzy Sets Theory 333
Haiqing Zhang, Aicha Sekhari, Yacine Ouzrout, and Abdelaziz Bouras

Towards an Enhancement of Relationships Browsing in Mature PLM Systems 345
Marianne Allanic, Thierry Brial, Alexandre Durupt, Marc Joliot, Philippe Boutinaud, and Benoit Eynard

Comparison Framework for PLM Maturity Models 355
Tom Stentzel, Masoud Niknam, and Jivka Ovtcharova

Knowledge Engineering

How to Improve PLM Approach Efficiency Based on Knowledge Engineering, Knowledge Management and Semantic Web Technologies Domains? 365
Bernard Chabot, Philippe Gautreau, and Brice Sommacal

Future Product Development Cost Prediction Model for Integrated Lifecycle Assessment 377
Jan Erik Heller, Manuel Löwer, and Jörg Feldhusen

Product Data Management – Defining the Used Terms 387
Merja Huhtala, Mika Lohtander, and Juha Varis

Knowledge Management

Assessing the Role of Knowledge Management in the New Product Development Process: An Empirical Study 397
Romeo Bandinelli, Elisa d’Avolio, Monica Rossi, Sergio Terzi, and Rinaldo Rinaldi

A Study on Developing a Decision Support Agent for Project Management	407
<i>Shinji Mochida</i>	

Segregating Discourse Segments from Engineering Documents for Knowledge Acquisition	417
<i>Madhusudanan N., B. Gurumoorthy, and Amaresh Chakrabarti</i>	

Service and Manufacturing

Study on Improving Accuracy for Edge Measurement Using 3D Laser Scanner	427
<i>Kazuo Hiekata, Hiroyuki Yamato, Jingyu Sun, Hiroya Matsubara, and Naoji Toki</i>	

Lifecycle-Based Requirements of Product-Service System in Customer-Centric Manufacturing	435
<i>Jorma Papinniemi, Johannes Fritz, Lea Hannola, Andrea Denger, and Hannele Lampela</i>	

Product-Service Lifecycle Management in Manufacturing: An Industrial Case Study	445
<i>Margherita Peruzzini, Michele Germani, and Eugenia Marilungo</i>	

Process Information Model for Sheet Metal Operations	455
<i>Ravi Kumar Gupta, Pothala Sreenu, Alain Bernard, and Florent Laroche</i>	

Skill-Based Asset Management: A PLM-Approach for Reconfigurable Production Systems	465
<i>Kiril Aleksandrov, Viktor Schubert, and Jivka Ovtcharova</i>	

New PLM

Sustainable Product Lifecycle Management and Territoriality: New Structure for PLM	475
<i>Kiyam Vadoudi, Romain Allais, Tatiana Reyes, and Nadege Troussier</i>	

Intelligent Information Technologies to Enable Next Generation PLM	485
<i>Rainer Stark, Thomas Damerau, Haygazun Hayka, Sebastian Neumeyer, and Robert Woll</i>	

Reframing of Product Position Rescues the Strategy at the Lifecycle Management	497
<i>Makoto Takayama and Tadashi Takayama</i>	
How Developers Explore and Exploit Instant Innovation from Experiment to Implementing New Product Development	507
<i>Masayoshi Fukushima, Tadashi Takayama, and Makoto Takayama</i>	
Author Index	519