



COIN Newsletter

I/III
June 2011

In this issue

Word from the editor	1
COIN Business Evaluation	1
COIN Final Conference	2
COIN Book	3
COIN Multipliers Prize	3
Past COIN events	4
Upcoming events	5

COIN Vision

"By 2020 enterprise collaboration and interoperability services will become an invisible, pervasive and self-adaptive knowledge and business utility at disposal of the European networked enterprises from any industrial sector and domain in order to rapidly set-up, efficiently manage and effectively operate different forms of business collaborations, from the most traditionally supply chains to the most advanced and dynamic business ecosystems."

The mission of the COIN IP is to study, design, develop and prototype an open, self-adaptive, generic ICT integrated solution to support the above 2020 vision, starting from notable existing research results in the field of Enterprise Interoperability and Enterprise Collaboration.

COIN has been awarded financial support by the European Commission through the contract No. 216256 in the EU FP7 area of "ICT in support of the networked enterprise"; work programme "ICT-2007-1.3 Enterprise Interoperability"

More about COIN at www.coin-ip.eu

Word from the editor

You are viewing the seventh issue of the biannual COIN newsletter. This biannual newsletter provides news on the COIN project and its members and information about project related events progress and results.

In this newsletter we will provide further news on COIN project progression in terms of presenting the COIN Business Evaluation Approach. We will also present the winners of COIN Multiplier Prize and introduce COIN Book and COIN Final Conference. In addition to this, we have collected information about COIN related events at the end of the newsletter.

Yours sincerely,
Editor-in-chief

COIN Business Evaluation Approach

In COIN, a business evaluation approach has been used to measure the business benefits using developed COIN services for targeted business use cases (BUC) and pilots in order to achieve an improvement of process performance. The basis for assessing COIN IT services impact is the user requirements. The capabilities of COIN services are developed according to the desired changes in process parameters, on which they in return have an impact. The changed process parameters should lead to an improvement of process performance and thus finally to the expected business benefits.

For the methodology used, the desired changes in process parameters are collected and process performance are measured following a reference model to validate the improvement by and thus the benefits of COIN services for potential users.

COIN Business Evaluation Approach

A new methodology has been applied to assess and maximize the impact of the COIN system, aiming to help the end users to choose the right priorities out of the multiple dimensions of COIN benefits.

The *COIN Business Evaluation Approach* is based on the [Value Reference Model \(VRM\)](#), which provides predefined measurable indicators for value chain goals in several dimensions. Following the model, COIN BUCs are used to select appropriate processes and dimensions, featuring the preferential goals and objectives for each end user. For each end user, internal tactical and operational priorities have been developed using the VRM. This allows the selection of appropriate *Key Performance Indicators (KPIs)*, and measurement criteria to evaluate the tactical and operational improvements in implementing the COIN system.

COIN business evaluation has been performed using a 4-step approach to indicate COIN benefits for selected BUCs. The following actions are performed during the steps:

- Selection of *VRM processes*, based on BUCs and the expected benefits.
- Definition of *VRM priority dimensions (adaptability, assets, cost, customer, innovation, reliability, velocity)* for each process or combination of processes.
- Usage of the *VRM framework for identification of KPI's* according to selected processes and priorities.
- Measurement of AS-IS situation before using the COIN services, also naming the expected improvements through COIN. And measurement of situation after using COIN. The *difference/delta* will give an indication for business benefits and verification in using COIN.

[>>]

The Value Reference Model Framework (VRM)

The VRM model is structured to support the integration of the three domains: *product development*, the *supply chain* and *customer relation* in a reference model for an integrated value chain. It provides descriptions of standard processes, their inputs and outputs, metrics and best practices. Input and output templates and guidelines for tactical level processes are also provided. The VRM does not only focus solely on managing the processes of a supply chain for a given product, but also incorporates the preceding and successive activities of product development and customer relations in the sense of a value chain.

By application of the VRM, value chain goals of horizontal and vertical collaboration are supported by a standardised “language” of syntax and semantics. Processes, activities and their dependencies are described and relationally connected throughout the value chain. The comprehensiveness of the Value Reference Model provides a suitable approach for visualization of the performance(s) of the total value chain, or parts thereof by providing standard metrics (key performance indicator’s) throughout the value chain.

VRM processes

The top level of the model encompasses all the high level processes in value chains, which are represented through the process categories *Plan – Govern – Execute*. The second level of the model contains “abstract” processes decomposed from the strategic level. The third level of the model represents specific processes in the value chain related to actual activities being executed. Performance measurement on the third level is the key to evaluate the improvements by using the COIN services and assessing the benefits.

VRM Priority Dimensions

The metrics provided by VRM are not only mapped to the processes of the framework, but also grouped into seven distinct dimensions (reliability, velocity, adaptability, cost, asset, innovation, and customer), each representing a different area for optimization. For the evaluation of the COIN system, indicators from each priority dimension have been selected to show the global nature of benefits that can be achieved with the COIN system.

VRM Metrics

After processes and priority dimensions have been identified for each of the COIN business use cases (BUC), the VRM gives information about possible metrics to measure business process improvements.

Selection of Metrics for the COIN BUCs

The selection of metrics for the various test cases in COIN SP6 and SP7 follows the methodology for business evaluation described above. It is structured into four distinct steps, related to methodology:

- Selection of VRM Processes
- Definition of VRM Priority Dimensions

- Identification of KPI's
- Measurement of Process Improvements

The BUCs describing the concrete interactions of the users from the test cases influenced by the COIN system have been analysed together with COIN end users and translated into the corresponding VRM processes.

Then, during a three day workshop, the end users have identified which priority dimensions are most important for their specific use case, targeting to achieve business improvement while using the COIN services. The VRM priority dimensions have been selected for each process or group of processes accordingly.

VRM provides a list of suggested metrics for the measurement of improvements. This has been presented to COIN end users who selected the KPI's, which they believe to give the best measurement of improvement and are possible to assess in the specific BUC. They have also had the possibility to suggest own KPI's. The identified KPI's are measured within the respective business processes by the end users before and after implementation of COIN services.

COIN Final Conference

COIN Final Conference will be co-located with *The Future Internet Symposium 2011 (FIS2011)* held in Vienna on November 8-9, 2011.

FIS2011 will be an intermediate event aiming to bridge the future alignment of the FIS with European Future Internet Assembly. In future, the FIS should become the premier scientific event at the FIA for the presentation of project-independent, scientific contributions to the area of the Future Internet and future networks.

The goal of the Future Internet Symposium is to bring together scientists and engineers from academia and industry and from three main disciplines in the area of *Future Internet* and future networks research (Future Internet architectures and protocols; semantic technologies; and Internet of services, things and content) to exchange and discuss their ideas, views and research results towards a consolidated, converged and sustainable view on the Future Internet respectively future networks.

COIN Final Conference

In the context of the *2020 vision*, COIN has developed an advanced integrated solution, made of a secure Generic Service Platform, providing the European Industry with Enterprise Interoperability (EI) and Collaboration (EC) services, under innovative business models inspired by the SaaS-U paradigm (Software as a Service-Utility).

The COIN EI/EC services are devoted to support the life-cycle of business-oriented collaborations from their preparation, to their formation, to their operations and management till to their dissolution. Moreover, COIN EC services will support the development of some Future Internet enterprise applications, namely collaborat- [>>]

ive product development, production planning and project management.

The objectives of the COIN final conference are to share and disseminate the novel concepts and approaches developed within the project, to contribute to a wide scientific recognition of them from the IT scientific community and to identify what the specific trends in this research area will be in the coming years. The conference covers both technical and business perspectives for the evolution of enterprise systems and explores the synergy between them.

The conference targets the following categories:

- Researchers and scientists from the Enterprise Interoperability and Collaboration domain, willing to understand and contribute to the evolution of the state-of-the-art of the ICT research in this domain;
- Future Internet Enterprise Systems (FInES) cluster members. FInES represents the enterprise interoperability and collaboration research domain in Europe, and is composed of FP6 and FP7 funded projects, as well as experts and stakeholders from all over Europe, working in the areas of enterprise software, Enterprise Interoperability and Collaboration applicable to enterprises.
- IT industry, willing to collaborate and contribute to implement and further develop COIN EI/EC servicing concepts and novel approach;
- Stakeholders relevant for Enterprise Interoperability and Collaboration research domain.

The Structure of COIN Final Conference

The COIN Final Conference will be structured in two half-day sessions: first day morning (Nov 8th) and second day morning (Nov 9th). The proposal of the sessions is as follows:

Session 1: "Interoperability and Collaboration IT services for Enterprises"

The objective of this session is to illustrate and disseminate the IT services developed within the project, as a means for paving the way to extend the scope and coverage of the services to an increasing number of industrial sectors.

The session will be initiated by a keynote speech by the COIN technical coordinator, providing an insight into the technical development work performed within the project. Examples of the developed services will be the provided, in order to describe the scientific challenges encountered and the contributions made to the advancement of the SOA in the relevant domains.

The session will be concluded by an open discussion, which will provide further information to the audience and identify the RTD and innovation opportunities arising from the results produced.

Session 2: "Interoperability and Collaboration Business Cases for Enterprises"

The objective of this session is to provide examples of COIN service instances and to describe how the COIN services can be exploited by and made available to

Industry, mainly to SMEs as potential providers and end users.

An overview of innovative use models of advanced IT services will be provided, with a view to relating the developed services to their delivery to final users, involving all the potential actors in the value chain. To this end, a number of business cases will be discussed, highlighting the collaboration and interoperability services acquired as well as the adopted and potential use models.

The session will be concluded by an open discussion to debate the prospect for EC/EI operational services from an industrial perspective, taking into account (1) the current maturity level in Industry for adopting new use models; (2) the emerging innovative business models for the IT service provision; and (3) the underlying service infrastructural requirements and trends for transforming service provision paradigms in the coming decade.

COIN Book

In order to support the scientific publication level, foster and allow the scientific recognition of COIN novel concepts and approaches and improve the dissemination process by collecting all these relevant information and achievement within a single dedicated initiative, the COIN project has launched the COIN Book.

The COIN Book will be officially presented at the Future Internet Symposium 2011 (see above), in COIN final conference.

The book has also been announced at the 2011 edition of the Conference for Concurrent Enterprising (ICE 2011) that was held in Aachen, Germany. Some of the book authors were invited to present and anticipate their contribution on a dedicated session on 21 June to give the audience an idea of the final work and prepare the ground for the official launch.

COIN Multipliers Prize

On 22 June, at the end of the International Conference on Concurrent Enterprising (ICE 2011), the three best ideas adopting COIN EI/EC services from the COIN Multipliers Prize context were awarded.

Among the new future adopters of the COIN platform and services, the COIN project is then glad to welcome:

- ITA & Capperinno – receiving the 1st prize for the idea *"Improving Supply Networks in Automotive Industry with COIN Adoption"*
- Università Cattolica di Milano – the 2nd prize for *"Opengenius and COIN: Steps towards the emergence of Science 2.0"*
- Kaunas Region Association of Small and Medium Entrepreneur's (KRASME) – the 3rd prize for *"Food industry in Lithuania: Interoperability in ordering and invoicing processes with COIN piloting adoption"*.

The organizers of the Multipliers Prize expressed great satisfaction with the good results achieved with the [\[>>\]](#)

initiative, registering interesting ideas arriving from different fields and domains including automotive, intellectual properties, food industry, energy, efficiency and environment, healthcare, manufacturing, collaborative design and virtual team/communities management, primatologist research.

Special thanks also to the ICE 2011 conference and workshop organizers, who intervened in presenting the COIN results in the respective domains, and also to all the numerous participants.

Past COIN events

IWEI 2001

Stockholm, Sweden. 22-24 March 2011

International IFIP Working Conference on Enterprise Interoperability (IWEI) – “Interoperability and Future Internet for next-generation enterprises” aims at identifying and discussing challenges and solutions with respect to enterprise interoperability, both at the business and the technical level, with a special focus on the use and realization of the Future Internet vision.

The conference promotes the development of a scientific foundation for specifying, analysing and validating interoperability solutions; an architectural framework for addressing interoperability challenges from different viewpoints and at different levels of abstraction; a maturity model to evaluate and rank interoperability solutions with respect to distinguished quality criteria; and a working set of practical solutions and tools that can be applied to interoperability problems to date.

IST Africa

Gaborone, Botswana. 11-13 May 2011

Part of the IST-Africa Initiative, which is supported by the European Commission under the ICT Theme of Framework Programme 7 (FP7), [IST-Africa 2011](#) was the sixth in an Annual Conference Series which brings together senior representatives from leading commercial, government & research organisations across Africa and from Europe, to bridge the Digital Divide by sharing knowledge, experience, lessons learnt and good practice and discussing policy related issues.

IST-Africa conference series aims at community building to facilitate EU-African research cooperation and successful exploitation of research results, to stimulate take-up of RTD results by industry, small and medium sized businesses and the public sector, to promote knowledge sharing between commercial organizations, government agencies and the research community, to exchange experiences about the current state of eAdoption at a sectorial, national or regional level, support international cooperation and open up the European Research Area (ERA) to Africa.

COIN Workshop: Networked Enterprises – Potential and Opportunities for Businesses in Africa

As a part of the IST-Africa conference a COIN workshop, titled Networked Enterprises – Potential and Op-

portunities for Businesses in Africa, was arranged. The objectives of the workshop were:

- To facilitate introduction and dialogue between European and African researchers and other stakeholders who are interested in the opportunity presented by networked enterprises in enabling, creating and operating businesses.
- To help identify potential business and investment opportunities and avenues for emergent, entrepreneurial ICT-enabled services.
- To raise relevant issues regarding the kind of economic framework and structure that might be needed for business innovation driven developments in Africa.

To reach the objectives four main discussion topics were set under the theme Networked Enterprises – relevance and opportunity for Africa:

- Apps for the Other Billions: new demands for a new cause?
- Dissemination, autonomy and ownership of knowledge and technologies for businesses.
- Leveraging Networked Enterprises research to support businesses in Africa.
- Potential areas of joint research interest between EU and Africa.

The workshop proved to be very successful, with over 50 attentive and enthusiastic participants from a broad variety of countries in Africa and beyond. The full room capacity was in use.

Given the outcome, highly encouraging feedback, and specific requests from participants, a similar workshop is planned to be organised jointly with African stakeholders, for IST Africa 2012.

COIN @ ICE Conference 2011

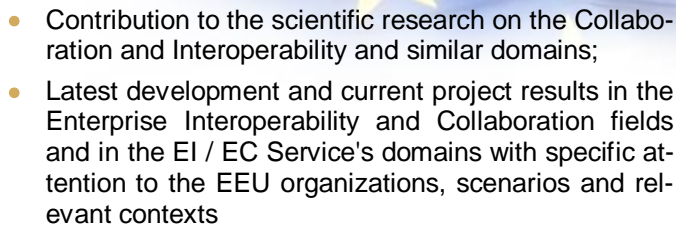
Aachen, Germany. 20-22 June 2011

COIN EI / EC Services for Collaborative networks

The International Conference on Concurrent Engineering (ICE) is a premier forum to enable practitioners, researchers as well as tool vendors to present, demonstrate and share the results and achievements of their work in the broad domain of Concurrent Engineering and can be considered both a scientific forum and an Industry event.

ICE 2011 conference was focused on Innovating Products and Services for Collaborative Networks. COIN was directly supporting the conference with three dedicated workshops providing:

- Announcement of the COIN Book: the initiative developed with the COIN project to support the scientific publication level, foster and allow the scientific recognition of COIN novel concepts and approaches and improve the dissemination process by collecting all these relevant information and achievement within a single dedicated volume. [\[>>\]](#)

- 
- Contribution to the scientific research on the Collaboration and Interoperability and similar domains;
 - Latest development and current project results in the Enterprise Interoperability and Collaboration fields and in the EI / EC Service's domains with specific attention to the EEU organizations, scenarios and relevant contexts

- Learn and understanding on EI / EC Services adoption experiences in the EEU and in other cases;
- COIN's planned contribution to the Commission's EI Cluster and relevant developments;
- Presentation of winning ideas and organizations from the COIN Multipliers Prize;

Upcoming events

IFAC 18th World Congress 2011 invited session on Next Generation Networked Enterprises Models and Toolkits

Milano, Italy, 28 August - 2 September, 2011.

The IFAC World Congress is the forum of excellence for the exploration of the frontiers in control science and technology, attended by a worldwide audience of scientists and engineers from academia and industry. It offers the most up-to-date and complete view of control techniques, with the widest coverage of application fields. For more information, visit: <http://www.ifac2011.org>.

12th IFIP Working Conference on Virtual Enterprises (PRO-VE 2011)

São Paulo, Brazil, 17-19 October, 2011.

PRO-VE, as the most focused scientific / technical conference in the area of Collaborative Networks, offers a major opportunity for the presentation and discussion of both latest research developments and industrial practice case studies. Following the IFIP international mission, the PRO-VE conference offers a forum for collaboration among different regions of the world.

The main theme of PRO-VE'11 – Adaptation and Value Creating Collaborative Networks – focuses on crucial aspects to empower Collaborative Networks as a main actor of change in society. For more information visit: <http://www.pro-ve.org/>.

eChallenges 2011

Florence, Italy, 26-28 October 2011.

The twenty-first in a series of Annual Conferences supported by the European Commission, which regularly attracts delegates from leading commercial, government and research organisations around the world to share knowledge and experience, lessons learnt and good practice in the areas of eInfrastructures, ICT for Networked Enterprise & RFID, eGovernment & eDemocracy, eHealth, Collaborative Working Environments, Living Labs, Digital Libraries and Cultural Heritage, Technology Enhanced Learning, Intelligent Content & Semantics, High Performance Computing Applications, Security and Identity Management and Mobility.

The goal of e-2011 is to stimulate rapid take-up of Research and Technology Development (RTD) results by industry and in particular SMEs, and help open up the European Research Area (ERA) to the rest of the world. For more information, visit: <http://www.echallenges.org/e2011/>.

Future Internet Symposium (FIS 2011)

Vienna, Austria, 8-9 November, 2011.

The FIS2011 will be an intermediate event and should bridge the future alignment of the FIS with European Future Internet Assembly. In future, the FIS should become the premier scientific event at the FIA for the presentation of project-independent, scientific contributions to the area of the Future Internet and future networks.

The aim of the Future Internet Symposium is to bring together scientists and engineers from academia and industry and from three main disciplines in the area of Future Internet and future networks research (Future Internet Architectures and Protocols; Semantic Technologies; Internet of Services, Things and Content) to exchange and discuss their ideas, views and research results towards a consolidated, converged and sustainable view on the Future Internet respectively future networks.

COIN Newsletter No. 7, June 2011, edited by Mikko Uoti, and contributed by Stefan Wiesner, Kim Jansson, Man-Sze Lee, and Andrew Faughy. Whilst every care has been taken, the publisher does not accept any liability for errors that may have occurred. You can subscribe for this newsletter and find the archive of past editions online at <http://www.coin-ip.eu/>.

