Capability as a Service in digital enterprises

Collaborative Project Number 611351

Deliverable 8.3: Final Plan for the Use and Dissemination of Foreground

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Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

Versioning and Contribution History

Version	Description	Comments
0.1	Initial draft	UPVLC
0.2	Contributions from RTU and EVR. Added Section 2 and new structure to Section 3	EVR, RTU, UPVLC
0.3	Review and introduction Contributions from UR & SU	SU, UPVLC, UR
0.4	Final release	All

Contents

List of Acronyms

BPO	Business Process Outsourcing use case from SIV
CaaS	Capability as a Service
CDD	Capability Driven Development
IS CLMS	Industrial Symbiosis use case
EAB	Exploitation Advisory Board
EVR	Everis
IUG	Industrial User Group
PMO	Project Management Office use case
RTU	Riga Technical University
SIV	SIV AG
SME	Small and medium enterprises
SOA	SOA use case
SU	Stockholm University
UR	University of Rostock
UPVLC	Universitat Politècnica de València

Executive Summary

Deliverable D8.3. “Final plan for the use and dissemination of foreground” is a part of work package 8 in the EC FP7 project “Capability as a Service in digital enterprises” (CaaS). The main goal of this deliverable is to present a plan regarding the dissemination of CaaS results after the project conclusion. Therefore, this plan reports about dissemination of project outcomes, expected future events related with the project, ongoing and future research publications and establishes the availability of the media related with the project in the future (slides, public deliverables, etc.)

The document is structured as follows. Section 2, introduces the foreground to be potentially disseminated. Section 3, describes the future dissemination activities that will be carried out for the scientific community, for industry and for the general public. This section follows the guidelines presented in the project dissemination plan (D8.1). Finally, Section 4 presents the conclusions and a brief summary of the expected dissemination indicators.

1. Introduction

According to the DOW, the main goal of this deliverable is to present “the outlook on dissemination activities after the end of the project, such as, for example, future workshops and publications”. Therefore, this deliverable reports about future dissemination activities of the relevant foreground, such as assistance to industrial events and conferences, organization of industrial seminars or ongoing research works. These dissemination activities are based on the strategy defined in the dissemination plan (D8.1). It is out of the scope of this deliverable to report about the exploitation of the foreground, goal addressed by deliverables D7.3 and D7.5.

Section 2 overviews the main foreground to be disseminated as a result of the CaaS project. We focus on summarizing the main results and explain how the partners will use and access to this foreground. Specifically, we focus on the CDD Methodology, the CDD environment, the Pattern Repository, the CaaS Introductory Package and the Public Deliverables. Section 3, describes the future dissemination activities that will be carried out for each partner. We have structured these dissemination activities according to the already defined guidelines from the dissemination plan. Finally, Section 4 presents the expected dissemination indicators as a result of the plan defined in this deliverable.

2. Foreground to be Disseminated

2.1 The CDD Methodology

One of the main results of the CaaS Project is the CDD Methodology which has been developed mainly in WP5 with contributions from WP2, WP3 and WP4. The CDD Methodology establishes a novel approach to develop organizational capabilities by means of a set of method components to address several concerns. From the initial version published in deliverable D5.2, the core methodology has evolved to support the use cases requirements. The result is the final version of the methodology presented in D5.3.

The CDD Methodology is made up of a set of pieces or method components to address a specific concern of capability modelling: how to address context, how to establish goals, how to specify adjustments, etc. It is not mandatory to apply the whole methodology to support the capability development in an organization. In other words, each method component could be assembled to define a custom methodology for a specific organization. In the context of the project, we have defined the Full CDD approach, if all method components are used, and the Light CDD approach, an expressive enough method assembly to define capabilities aimed to enhance the methodology adoption.

Following this reasoning line, the foreground of the CDD Methodology is made up of a metamodel, which formalizes the capability domain and the relationships between concepts, and a set of method components. Both metamodel and method components are publicly available in the CaaS website and in the aforementioned deliverables, according to the GPL license. Therefore, the CDD Methodology will be open to external partners to use it in their own developments. This strategy improves the acceptance of this paradigm by the scientific community and enhances its industrial adoption. It is worth to mention that several partners will extend the methodology or apply it in future research projects.

The next table provides an overview of the method component developed in the CaaS Method and also presents which ones correspond to the Light CDD approach.

Method Component	Light CDD
Getting Started	No
Capability Design Process	No
Context Modeling	Yes
Enterprise Modelling	No
Goal Modelling	Yes
Business Process Modelling	Yes
Business Rule Modelling	No
Actors and Resources Modelling	No
Concepts Modelling	No

Technical Components & Requirements Modelling	No
Pattern Modeling	No
Adjustments Modeling	No

Additionally, to the previous method components, each use case has defined its own method extensions to address specific concerns of their organizations. These extensions to the methodology have been already documented in deliverables D2.2, D3.2 and D4.3. These method extensions complement the Full CDD Methodology to solve domain specific concerns. Next table summarize the method extension available and the use case which required such extension.

Method Extension	Use Case
Capability Ready Business Services	BPO
Prepare Local and Global Optimization	BPO
Evolutionary Development of Business Information Exchange Capability	BPO
Integration of CDD and MDD	IS CLMS
Analysis of Capability Relationships and Mapping to Delivered Services	IS CLMS
Predictive Analysis	SOA
Capacity Evaluation	PMO

2.2 The CDD Environment

The CDD Methodology is supported by a set of tools to help in the task of defining capabilities, monitoring their context and adapt service delivery accordingly. This set of tools compose the CDD Environment and establishes the technological foreground of the project. The development of these components has been addressed in WP6. Next we describe the four components that made up this environment:

Capability Design Tool (CDT): A modelling editor based on the Eclipse Modelling Framework in order to describe and deploy capability models according to the CDD Methodology. This tool is a CASE editor which can be used in several desktop OS. The development has been leaded by CROZ, who has added several plug-ins and editors to support the CDD models. The license is proprietary, so beyond the project external partners should contact with CROZ.

Context Platform (CCP): A context monitoring platform which registers context information provided by sensors or context providers, and informs subscribers about relevant changes. The platform developed by Altice Labs (former PTIN) is accessible using a Web Application to define relevant context elements and providers for a capability, which is accessible to everyone at: https://smartdata.ddns.net/portal/caas/login

The CCP also includes and API which provides the possibility of publishing and requesting data and is accessible to everyone who has previously registered at the CCP Portal. Besides protocol based interfaces (AMQP, MQTT, CoAP) the CCP offers a REST end-point for publishing data which accepts plain text or JSON. Another end-point is offered to clients which may request data in a reactive way (query based), in a proactive way, i.e. as soon as it arrives (pub/sub based) or on-demand (by indicating the end-point and parameters to filter the request).

Additionally the CCP Virtual Machine (CCP core + CCP API) is accessible to the project partners and to everyone who requests it upon evaluation of the support team (smartdata.ucn@gmail.com). Finally, the CCP source code (CCP core + CCP API) is accessible everyone who requests it upon evaluation of the support team.

Context Navigation Application (CNA): A web dashboard to monitor the capability execution at runtime and inform to the stakeholders about relevant changes such as context conditions not met, KPIs or adjustments required. This application has been developed by CROZ using a common JAVA technology stack and can be deployed using a Java Application Server such as Tomcat Server. Its license is proprietary to CROZ.

Capability Delivery Application (CDA): This component integrates the previous components with the technological services running in an organization. The CDA is an "ad-hoc" implementation for each use case that uses the API provided by the CDT, CNA and CCP. Both Everis and SIV have developed their own CDA for the developed use cases. Due to the CDA is coupled to the technological infrastructure of an organization, these components are neither public nor relevant for dissemination.

2.3 Research Publications

During the three years of the project the consortium has developed a noteworthy number of research publications in several forums related with the areas of enterprise modelling, software engineering and information systems development. These research publications are a valuable foreground of the project as represent a concise view of the project results. To guarantee the visibility of this foreground, they will be referenced as electronic documents (when possible) in the CaaS website. Additionally, draft or final versions of the papers will be available for all CaaS partners in the shared documentation repository. However, the access by external entities depend on the publishing policies of the journal or conference publishers. Next we summarize this list of publications:

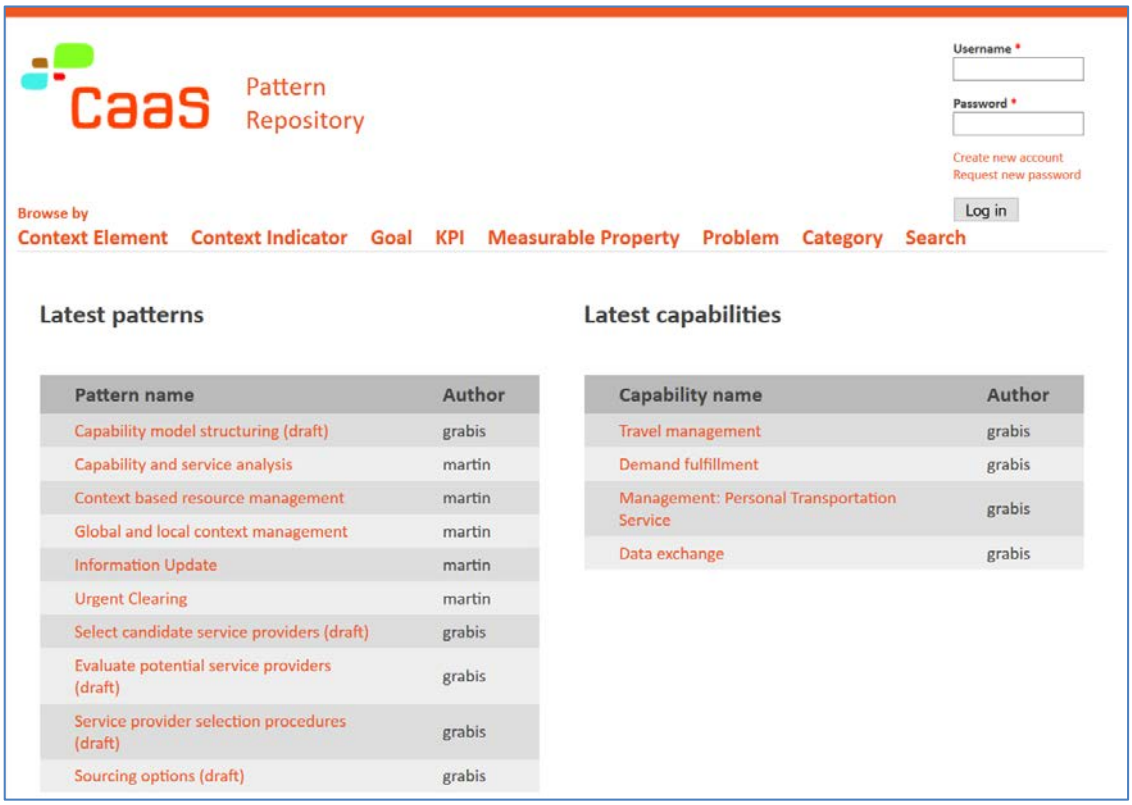
1. Modeling Business Capabilities and Context Dependent Delivery by Cloud Services.
2. An Empirical Evaluation of Capability Modelling using Design Rationale: George Bravos, Pericles Loucopoulos, Christina Stratigaki and Dimitris Valvis.

3. Designing a Meta Model as the Foundation for Compliance Capability: Christina Stratigaki, Pericles Loucopoulos and Mara Nikolaidou.
4. Capability-based Business Model Transformation: Martin Henkel, Ilia Bider and Erik Perjons.
5. Capability-driven development of a SOA platform: a case study; Sergio España, Tania González, Jānis Grabis, Lauma Jokste, Raúl Juanes and Francisco Valverde.
6. On the Applicability of Concepts from Variability Modelling in Capability Modelling: Experiences from a Case in Business Process Outsourcing: Kurt Sandkuhl and Hasan Koç.
7. State of the Art in Context Modelling – A Systematic Literature Review. Hasan Koç, Erik Hennig, Stefan Jastram, Christoph Starke.
8. An Outlook on Patterns as an Aid for Business and IT Alignment with Capabilities: Janis Stirna.
9. Component-based Method Development: An Experience Report. Kurt Sandkuhl and Hasan Koç.
10. Requirements Engineering for Capability Driven Development. Jelena Zdravkovic, Janis Stirna, Jan-Christian Kuhr and Hasan Koç.
11. Supporting Evolving Organizations: IS Development Methodology Goals. George Bravos, Jānis Grabis, Martin Henkel, Lauma Jokste and Janis Kampars
12. Capability Modeling: Initial Experiences. George Bravos, Tania González, Jānis Grabis, Martin Henkel, Lauma Jokste, Hasan Koc and Janis Stirna
13. Advanced Context Processing for Business Process Execution Adjustment. Jānis Grabis and Janis Stirna.
14. Strategies for Capability Modelling: Analysis based on Initial Experiences. Sergio España, Janis Grabis, Martin Henkel, Hasan Koç, Kurt Sandkuhl, Janis Stirna and Jelena Zdravkovic.
15. Investigating the potential of Capability-driven Design and Delivery in an SME case study. Kurt Sandkuhl.
16. Capability-as-a-Service: Investigating the Innovation Potential from a Business Model Perspective. Kurt Sandkuhl and Janis Stirna
17. Capability Patterns as the Enablers for Model-based Development of Business Context-aware Applications. Janis Stirna, Jelena Zdravkovic, Martin Henkel and Janis Kampars.
18. A Reference Model Based Design of Supply Chain Management Capabilities. Jānis Grabis and Solvita Bērziša.
19. Applying Capability Modelling in the Genomics Diagnosis Domain: Lessons Learned. Francisco Valverde and Maria Jose Villanueva.
20. Including Gesture-based Interaction in Capability Design Tool. Otto Parra Gonzalez, Sergio España and Oscar Pastor.
21. Methods in Designing and Developing Capabilities: A Systematic Mapping Study. Hasan Koç

22. LightCDD: a lightweight capability-driven development method for start-ups. Hasan Koç, Marcela Ruiz and Sergio España
23. Selection and Evolutionary Development of Software -Service Bundles: a Capability Based Method. Jānis Grabis and Kurt Sandkuhl
24. Extending Capabilities with Context Awareness. Martin Henkel, Christina Stratigaki and Janis Stirna
25. Continuous validation of a modelling tool in an industrial setting. Francisco Valverde and Oscar Pastor.
26. Design of Capability Delivery Adjustments. Jānis Grabis and Janis Kampars
27. Comparison of Tool Support for Goal Modelling in Capability Management. Kurt Sandkuhl
28. A Method for Context Modelling in Capability Management, Hasan Koç, Felix Timm, Sergio España, Tania González and Kurt Sandkuhl
29. Towards a Flexible Solution in Knowledge-Based Service Organizations: Capability as a Service, Hasan Koç, Kurt Sandkuhl and Michael Fellmann
30. Supporting Perspectives of Business Capabilities by Enterprise Modeling, Context, and Patterns, Janis Stirna, Jelena Zdravkovic
31. A Method for Situating Capability Viewpoints, Anders Tell, Martin Henkel, Erik Perjons
32. Development of a Modeling Language for Capability Driven Development: Experiences from Meta-modeling, Janis Stirna, Jelena Zdravkovic.
33. Capability Driven Development – an Approach to Design Digital Enterprises: Solvita Bērziša, George Bravos, Tania Gonzalez Cardona, Ulrich Czubayko, Sergio España, Jānis Grabis, Martin Henkel, Lauma Jokste, Jānis Kampars, Hasan Koç, Jan-Christian Kuhr, Carlos Llorca, Pericles Loucopoulos, Raul Juanes Pascual, Oscar Pastor, Kurt Sandkuhl, Hrvoje Simic, Janis Stirna, Jelena Zdravkovic.
34. Capability Management im Geschäftsprozess-Outsourcing: Eine Einführung in Konzept und Methodik am Beispiel der Energiewirtschaft. Kurt Sandkuhl, Jan-Christian Kuhr, Hasan Koç und Ulrich Czubayko

2.4 Pattern Repository

The pattern repository presents a set of reusable patterns developed in the project. The knowledge about these patterns is accessible through a public content management system available at: http://patterns.caas-project.eu/. The goal of this repository is to grow as new partners or external collaborators contribute with new capabilities and patterns. This repository is also accessible via a JSON API that allows the automatic retrieval of the managed knowledge. Currently the repository has 53 patterns and 4 capabilities available, mainly gathered from the use cases developed in the project. Next picture briefly summarizes its current contents.



2.5 CaaS Introductory Package

The CaaS Introductory Package provides a set of materials in order to disseminate in a concise way the CaaS Project. This introductory package is made up of a set of printed an online materials which overview the project goals and how could be useful to several IT domains. The introductory package is made up by a one-page leaflet to be distributed as printed media, a set of slides (already available in the slideshare site) and a report with a project summary and the frequently asked questions. Also this introductory package also references the Light CDD is a simplified version of the Full CDD to support the capability-based design in small companies. It reduces the set of modelling constructs and guidelines of Full CDD to facilitate its understanding and adoption. CaaS partners are encouraged to use these materials to disseminate the project in future events. Materials are included in D8.2 and they will be also publicly available in the website.

2.6 Public Deliverables

Finally, public deliverables developed along the project also constitute an important resource of foreground. These deliverables will be referenced in the CaaS website and they will be available as PDF documents. Next we list them and provide a brief summary of their aim.

WP1: Foundations of CDD for Digital Enterprises

D1.2 Initial version of requirements specification for CDD	This deliverable presents the objectives and scope of the CaaS approach as well as to identify the general requirements for the use cases and the CDD methodology
D1.3: Vision of the CDD methodology	The goal of this deliverable is to provide a complete vision of the CDD methodology for all CaaS partners according to the use cases defined
D1.4 Requirements specification for CDD	This deliverable presents the requirements gathered from the industrial survey and the Use Cases. Also, this deliverable establishes the KPI to measure the project progress.

WP2: Context Aware Business Process Outsourcing

D2.1: Capability Models for Business Process Outsourcing (BPO)	This deliverable reports the use cases and capability models that have been selected in order to validate the capability driven development (CDD) approach in the specific business domain of the project partner SIV
D2.2 CaaS method extensions for BPO	This deliverable presents a method extension specifically designed for the BPO use case. From the dissemination perspective, it provide interesting guidelines to adapt CDD methodology to the requirements demanded by other industrial use cases.
D2.3 BPO case validation report for the CaaS approach	This deliverable presents the lessons learned and feedback gained from the BPO use case deployment. Therefore, it is an useful resource to understand the benefits and expected pitfall regarding the use of CDD in an industrial scenario.

WP3: Context aware collaborative software development

D3.1: Capabiltity Models for Business Compliance Controlling and Auditing	The deliverable contains business compliance controlling and auditing models developed using the methodology and tools developed in WP5 and WP6
D3.2 CaaS method extension: Capability Modelling for Collaborative Development of Capability Delivery Applications	Following the initial CDD methodology, this deliverable describes the CaaS method extension for collaborative development of capability delivery application using the zAppDev platform.

WP4: Capability Management for Open eGovernment SOA Community

D4.2: Capability Models for SOA technological platform	This deliverable reports a set of Capability Models developed in the everis use case, thus it provides an illustrative example of the real application of the approach .
D4.3: CaaS method extension: capability modelling for PMO and SOA technological platforms	This deliverable presents method extension for the Everis use case, following a similar approach that the one presented in D2.2
D4.4 PMO and SOA case validation report for the CAAS approach	This deliverable presents the lessons learned and feedback gained from the PMO and SOA use cases deployment. Therefore, it is an useful resource to understand the benefits and expected pitfall regarding the use of CDD in an industrial scenario.

WP5: Capability Driven Development Methodology

D5.2: Initial version of Capability driven development methodology	The main goal of this deliverable is to present the first release of the CDD methodology. This deliverable establishes a milestone for academic/industrial dissemination as it is the main guideline to apply the CaaS vision.
D5.3 The final version of the Capability driven development methodology	This deliverable details the methodological foundation of CDD and provides the main resource to apply the methodology. This deliverable provides an academic vision of the methodolog to be disseminate in research forums. The industrial one is addresed by D7.5
D5.4 Contribution to the standardization bodies	This deliverable reports the consortium's experiences in interacting with relevant standardization organizations

WP6: Capability Driven Development Environment

D6.2: First Release of the CDD Environment	The main goal of this deliverable is to document the first release of the CDD environment, specifically the CDT tool. The deliverable includes an user manual to guide the development of Capability models
D6.4 The final relase of the CDD Environment	This deliverable contation the final release of the environment to support the CDD methodology. This software will be disseminated and tested by future CDD adopters.
D6.5: Tool evaluation plan	The main goal of this deliverable is to establish the evaluation plan for the CDD environment implemented in the WP6

D6.6 Environment documentation	This deliverable is linked to D6.6 and present the guides and user manual to use the aforementioned environment

WP7: Packaging, Exploitation and Business models

D7.3 The CAAS approach packaged for exploitation	This deliverable packages the main results and tools from the project in order to deliver a solution ready for exploitation. From the dissemination point of view, this deliverable will be the main result to disseminate after the project concludes
D7.5 Exploitation Plan	The goal of this deliverable is to depict the expected plan of the consortium to exploit CAAS results.

WP8: Dissemination

D8.1: Dissemination plan initial report	The goals of this deliverable are to identify the target audiences, to define the dissemination activities, and to establish evaluation indicators about the success of the dissemination.
D8.2 Final report of dissemination activities	This deliverable reports all the dissemination activities caried out in the three years of the project
D8.3: Final plan for the use and dissemination of foreground	The current deliverable

3. Future Dissemination Activities

3.1 Website and Social Networks

The website of the CaaS project (http://caas-project.eu/) will be maintained by Stockholm University without foreseeable time limit. This will include the availability of research publications, slides, public deliverables, public software tools from the CDD environment and interesting foreground that could be made public. Therefore, the website will be still the main information hub of the project. When the project is finished, our goal is that the website would evolve to a primary resource of information about the CDD paradigm. This aim also applies to the LinkedIn group (https://www.linkedin.com/groups/5187982) in order to strengthen the online community around the CDD vision. We will continue targeting industrial users in order to be part of this community and disseminate ideas around the capability topic. We also expect to add additional presentations to the Slideshare

(http://www.slideshare.net/fp7_caas) site as novel results relevant to the CDD community are presented by partners.

3.2 Research Publications

During the three years of the project the consortium has developed a noteworthy number of research publications. However, there is still some results to be published as result of the final outcomes of the project. We expect those ongoing works to be published along 2017:

- **UR** and **UPVLC** are involved in a collaborative journal paper to present how CDD and Communication Analysis, an innovative approach for organizational modelling, could be integrated and benefit from each other. This work has been submitted to the Enterprise Modelling and Information Systems Architectures (EMISA) journal, an open access journal with a focus on novel and innovative conceptual modelling and enterprise modelling research and its applications.
- **RTU** continues its work on extending the CDD methodology for project management purposes. This work is funded by RTU Internal research grants as a part of the “Adaption of Project Management Information System According to Project Environment Needs” project. The results of this research will be published in the Proceedings of International Conference on on Product-Focused Software Process Improvement (Springer LNCS series, to appear in December 2016) and *International Journal of Project Management* (to be submitted in April 2017).
- **RTU** will publish a work on capability delivery patterns and the paper “Pattern Governance for Capability Driven Development” which will be submitted to the ICEIS 2017 conference in November 2016.
- **UR** and **SU** submitted a paper to the International Journal of Information Systems in the Service Sector (IJISSS), which introduces the CDD methodology and the CDD environment as an approach to adapt business services to changing business needs. The IJISSS is an open access journal, which examines current research in the area of service sectors and their interactions, linkages, applications, and support using information systems.
- The organizers of the ASDENCA workshop series (**SU**, **CLMS**, and **UPVLC**) will organize a special issue of selected papers of ASDENCA 2014, ASDENCA 2015, and ASDENCA 2016 for the issue on "Advances in Capability-oriented Information Systems Development" of the Complex Systems Informatics and Modeling Quarterly Journal (https://csimq-journals.rtu.lv/). The journal is open access and the special issue is planned for 2017.
- **SU** and **UPVLC** will publish an experience report and a position statement on linking CDD and MDD tools, to be published at a relevant conference on

information systems development such as ESEM, CAiSE or EMMSAD. This publication is expected for 2017

- **UPVLC** will create a series of experiments with MSc students on the usability of the CDD Environment and publish the next year the results at INTERACT or HCI conferences.
- **SU** and **UR** are currently negotiating a book proposal with the publisher Springer to provide general overview of CDD.

3.3 Conferences and Workshops Organization

Attendance to conferences and workshops has been a relevant dissemination activity. CaaS results have been presented in noteworthy forums such as the CAiSE, PoEM and ER conferences. Specifically, the organization of **ASDENCA** and **CoBI** workshops have highlighted the CaaS approach and created a lively community around the topic. Because of the good reception, we will continue organizing these workshops with a slightly change in their primary audience. On the one hand, the **ASDENCA** workshop will be focused on publishing theoretical and innovative results related with the CDD methodology and the CaaS vision. On the other hand, the **CoBI** workshop will be co-organized with ER 2017; it will be focus on showing practical application of CaaS and industrial experiences regarding the practical development and deployment of capabilities. Therefore, the latter will focus on an industrial audience.

Additionally, **UPVLC** will organize the 36th International Conference on Conceptual Modelling (ER) in 2017. It is planned to include theoretical and practical applications of capability driven development among the conference topics.

3.4 Courses, Theses, and Guest Lectures

As capabilities is a novel topic, it requires to be introduced into the MsC and PhD programs in order to train future professionals. During the project, the consortium has created tutorials and slides which will be used as training material for this purpouse. This slides are available at the Slideshare site: www.slideshare.net/fp7_caas/presentations.

Academic partners will introduce such topic in advance courses related with Software Engineering and Information Systems. For instance, **UPVLC** will include the capability notion in a course from the “Master's Degree in Software Engineering, Formal Methods and Information Systems”. **SU** has already included principles of CDD in a course on Enterprise Systems

Prof. Jelena Zdravkovic (**SU**) will present the CDD methodology at NEMO 2017 summer school on Next Generation Enterprise Modeling.

Prof. Oscar Pastor (**UPVLC**) will give a keynote on the topic “Model-driven Development in Practice: From Requirements to Code” in the 43rd International

Conference on Current Trends in Theory and Practice of Computer Science (SOFSEM 2017, see http://www.sofsem.cz/sofsem17/). Lero, Limerick (Ireland)

Here, we also present several MsC and PhD theses related with the CDD methodology that will be finished in the following years:

"A model-driven method and a tool support to include gesture-based interaction in user interfaces" PhD Student: Otto Parra, Advisor: Oscar Pastor (UPVLC)

This thesis proposes a method, called gestUI, based on a model-driven paradigm to include gesture-based interaction in software system user interfaces. A technical action research was performed to apply gestUI in Capability Design Tool (CDT) in order to use gestures to draw diagrams from the CaaS project.

"Enterprise Modeling Methods for Analysis of Context-Aware Systems", PhD Student: Lauma Jokste, Advisor: Jānis Grabis (RTU)

The thesis deals with context-aware adaption of enterprise applications with focus on redesign of legacy capability delivery applications to enable integration the CDD environment.

"A Capability-based Context Modelling Method to Enhance Digital Service Flexibility", PhD Student: Hasan Koç, Advisor: Kurt Sandkuhl (UR)

The thesis aims to improve the flexibility of digital services that are provided in changing environments by developing a context modelling method based on enterprise capabilities.

3.5 Participation and Collaboration with R&D projects

RTU will use the CDD methodology in two industrial collaboration projects scheduled to start in September 2017:

1. Joint innovation project "Adaption of Information Systems According to Context Data Extracted from Usage Logs" with a Latvian company ZZ Dats. The methodology will be used to design context-aware adaptations and these developments will be incorporated in information systems run by Latvian Municipalities.
2. Joint innovation project "Green and Cost Efficient Vehicles Routing" with PriceWaterhouseCooper. The methodology will be used to identify context factors affecting vehicles routing. The project result will be an information system for context–aware optimization of vehicles routing at the fleet level.

RTU has submitted a project proposal "CLOUT: Cloud platform for big data processing through context-aware decision-making and knowledge management" for funding by the European Regional Development Fund as a part of the Industry Driven

Research initiative. The project is submitted jointly with two companies from the green energy sector. The funding decision is due in October 2016. The project would use the CDD methodology as its development approach. The project partners intend to prepare a project proposal for Horizon 2020 call EE-07-2016-2017 Behavioural change toward energy efficiency through ICT.

UPVLC is currently working in the IDEO project, "Innovative services for Digital Enterprises with ORCA", funded by the Valencian Regional Government until 2017. This project is currently applying the CDD methodology in use cases from two Spanish SMEs. UPVLC is also developing some method components to improve and adapt the current CDD Methodology, mainly introducing research ideas from the MDD community. Further details can be found here: http://www.pros.upv.es/projects/ideo-innovative-services-for-digital-enterprises-with-orca/

UPVLC has submitted a project proposal to the Spanish National Research Program named "DataME: A Model-driven method for the development of Big Data applications". In this project the CDD methodology will be applied to support the development of Big Data services and data integration capabilities. Specifically, the ontological foundations behind the CDD metamodel will be integrated in this new method. Additionally, some method components are potential candidates to be part of the proposed method. Acceptance of the project proposal is expected by the end of the current year.

The CCP developed by Altice Labs (former PTIN) is currently being used in two other European Projects:

- UCN (User Centric Networking) - https://usercentricnetworking.eu/ - the focus of Altice Labs (former PTIN) in this project was to develop recommendations on top of the CCP – It will end in September 2016
- Smartie (Secure and smarter cities data management) - http://www.smartie-project.eu/ - the focus of Altice Labs (former PTIN) in this project was to enhance the platform with privacy and security modules – it will end in December 2016

Since the beginning of 2016 the CCP is also being considered and evaluated to be part of the "Sharing Cities Project" - http://www.sharingcities.eu/

3.6 Participation in Industrial Events and Seminars

We will continue presenting the CaaS results and, specifically the CDD methodology and the environment, in industry-oriented events such as business IT conferences or software industry association meetings. We will address specifically ICT events related with H2020 and ITEA3 in order to look for future project proposals. Also, industrial partners will disseminate to their contact network about the benefits of using solutions based on the CDD approach.

RTU Business and Innovation Department maintains a list of valorization proposals developed at RTU and actively promotes these proposals. The CDD Methodology is included in the list of valorization proposals, and RTU together with the partners offers consulting services for development of capability driven applications. These proposals are promoted at all business innovation events attended by RTU.

UPLVC and **EVR** as associate members of the Big Data Value Association (BDVA: http://www.bdva.eu/) will participate in the BDVA Valencia Summit 2016 . In this event, they will disseminate the benefits of using CDD to manage capabilities supported by Big Data Services. This event will also include an ICT Infoday, so it would be an opportunity to establish collaborations and define novel projects related with the CDD topic.

EVR and **UPVLC** will organize an industrial workshop to present to the local industry the CDD Environment and its benefits. The event will take place in early spring 2017.

CROZ annual industrial conference, Quality in Enterprise Development (May, 2017) with their customers and business partners will include a presentation of the CDD methodology and CDD Environment. The event is usually attended by ca 300 participants.

UPVLC and **SU** will attend the ICT Proposers Day (September, 2016) and present the CaaS results to interested parties during the networking sessions.

RTU will continue the organization of Industry Days at the RTU Department of Management Information Technology what was initiated by the CaaS project. The Industry Day will be used to present the latest developments at the department. The CDD methodology will be part of these presentations because of the continuation of the innovation projects.

3.7 Future Media Releases

We expect to disseminate future events and results of the partners involved in traditional press media, like newspapers, research magazines and online resources. Partners will be responsible of the distribution of press releases among their specific local media to inform about the final results achieved by the CaaS Project. These media releases will be also published on the CaaS website and, if possible, with direct links to the media releases.

Currently **EVR** is working in an interview for a Spanish magazine called Economia3 (In Spanish: http://www.economia3.com/). In this interview they will show how the CaaS project could help to improve the innovation in the industry. This interview is expected to be published in September 2016.

4. Conclusions

This deliverable has presented the future plan to disseminate the foreground and the expected dissemination activities to be carried out by the partners beyond the project ends. This plan proposes several goals to fulfill:

- To improve the acceptance of the CDD Methodology as a main approach to develop capabilities. We expect to publish the final outcomes of the use cases in relevant conferences and journals of the Enterprise Modelling domain. Also courses and academic seminars are planned
- To establish an industrial community around the CDD and capability topic. We will organize the CoBI workshop to address this goal and we will increase the participation in events related with the ICT industry.
- To place the CaaS website as the main information hub of the capability topic. Main results of the project will be available for the next years and we will continue our dissemination strategy in social networks.
- To introduce the capability topic in MsC and PhD courses to train professionals in this novel area.

Finally, we present the expected dissemination indicators for the next years:

Dissemination Activity	Number
Research publications	8
Industrial events attendance	4
MsC and PhD theses	3
Organization of industrial events	3
Organization of academic events	2
Participation or collaboration with R&D projects	6
Press releases	10
LinkedIn members	100