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Del 30.4.1 Training Delivery Report



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Executive Summary

This report provides the details of training delivered during Phase 1 of the training programme. The purpose of the report is to account for the training and two-way knowledge transfer effort of the partners with SMEs towards the achievement of the objectives of WP30.4. It includes sections by the regional catalysts and other partners associated with this activity.

The report is organised into sections which summarise the work conducted by the respective partners. Each has considered the work and results that was envisaged in earlier plans such as D28; their achievements of planned goals; experiences and learning from this phase of our work; and plans for the next phase. We have chosen this structure because it reflects our roles as regional catalysts and enables us to evaluate shared and coordinated achievements.

During the period covered by this report we have seen significant progress towards meeting the aims and objectives of the project. Integration between the domains of the project that has been enabled by more frequent face-to-face meetings of cross-domain groups. This has meant that our messages and communications and training agendas have increased in their internal and external consistency and validity.

The presence at regional events of science, computing and business partners has assisted integration and feedback between architects and SME drivers, including, at Aragon, a demonstration of the DBE architecture in operation. Integration across regions has been effective in coordinating plans, e.g. for calls for interest, workshop design, and in exchanging experiences amongst European SMEs that will shape further training and development within the DBE.

1. Phase 1 has seen the preparation of initial messages and communications. These have been mostly successful, though DBE language needs to be simplified and differentiated for various SME groupings.
2. The initial division of SMEs into four groupings appears to have provided a suitable vehicle for early adoption .
3. Each of the regions has made a successful start in SME recruitment and early training.
4. SMEs appear to be understanding and valuing the DBE concept even if some of the science and technology aspects are difficult at times. We have also benefited from inputs of ideas and suggestions from SMEs about the project.

5. The project partners now consider that they are in a better position to recruit and train, as well as work collaboratively with new SMEs, and to achieve the critical mass required by the project.
6. We have developed several approaches from our experiences in Phase1 which we feel will make a constructive start to Phase 2.
7. SMEs have begun to make positive and proactive responses to the DBE opportunity.
8. Whilst our focus is on regional growth, we need to attend to the longer-term picture of inter-regional knowledge sharing and collaborations.
9. Evaluation has been a regular and frequent part of our work to date.
10. We also wish to track the development of SME applications through the project.
11. There should be some simplification and standardisation of our messages.
12. It is critical for the regional catalyst to receive information explaining the SW tools and how to use them, and what it is expected from the SW Developers in order to be able to be in line with the dates proposed.

1. Introduction

This is the first of a series of reports providing details of training delivered to SMEs and others. It concentrates on the training actions delivered at all levels as specified in Deliverable D28.5 during the phase 1 training plan.

Training is a key action in the DBE project supporting the flow of knowledge and information between the researchers and the SMEs. The project partly enables SMEs to gain a range of potential benefits e.g. adoption of new business models to exploit commercial opportunities, collaborations and partnerships to tap new markets and to enhance business growth. Yet commercial gains may be achieved only after the initial project period. Therefore it has always been crucial that our relationships with SMEs have been cooperative and open about our respective agenda.

The training plan for phase 1 was tactical in nature being formulated to support the build up of a small community of early adopters. The early

adopters includes a small group of Driver SMEs and Discoverer SMEs who will be involved in the familiarisation of the DBE architecture, initial testing of its capabilities, pilot implementation and testing of services, developing early knowledge and supporting the expansion of SME involvement through an evaluation of the needs of the regional opportunity spaces.

The three regional catalysts and the training project partners have made individual training implementation plans to support this small community build up in the regions. The regional plans have been formulated based on the regional context using a variety of learning blocks and learning content employing different delivery methods. This variety enables the adaptive planning of learning activities. During phase 1 training, the focus was on one-to-one interactions, small workshops and public seminars under the following learning blocks:

- Message and communication
- Induction
- Service development
- Bootstrap strategy and processes
- Business potentials and practices
- Learning philosophy and methods

The report is structured to provide a brief overview of the training plan proposed in D28.5 and subsequently provides a description of the actions performed for each of the three regional catalysts and the training project partners.

The project has reached an important stage where training content and format are now evolving through interactions with SMEs. This is in accordance with the DBE training philosophy. The feedback loops that have been established through recruitment and engagement activities now mean that the flow of knowledge is two-way. 'Co-learning' has become an increasingly important aspect of training as knowledge and information is gathered from SMEs.

The evaluation methodology described in 28.1 sets out two distinct kinds of evaluation. The first is focused on knowledge creation through establishing feedback loops and the second is based on 'outcome judgement' and 'process improvement'. An important aspect of Phase 1 Training has been the support and development of feedback loops that have allowed the SME view of DBE to be understood and incorporated into training materials and formats. In terms of communicating the DBE vision and message this has led to continuous process improvement. Whilst it is difficult to evaluate the outcome of this process, the fact that SMEs have been successfully engaged through workshops, seminars and one-to-one interactions means that we have been able to start developing business scenarios based on their own products and that is in itself a measure of success.

2. Partner Reports

T-6

Introduction

The purpose of the DBE Message and Communication learning block is to enable Regional Catalysts to present a common understanding of DBE vision, objectives, project timelines and key milestones. T-6 have implemented with partners the evaluation rationale described above and set out in 28.1. This has included facilitation and leadership of meetings in Paris and London between regional catalysts to plan and evaluate coordinated actions and emphasise project messages. T-6 has also had responsibility for deliverables concerned with the production of learning materials supporting message and communications.

T-6 have supported the DBE Message and Communicating learning block partly through the collection of materials developed in each of the regions. This has facilitated a constant re-evaluation of how the DBE message is being communicated, incorporating new ideas from each of the regional catalysts. Collecting documentation from across the regions provides an audit trail for social processes in the project e.g. interactions among participants in the e-learning system. and facilitates an outcome judgement regarding what information assists SME audiences in understanding the DBE and what is considered too theoretical.

Following this main statement, the DBE Consortium has produced and collected into Collabnet (into the Training folder) several key documents that provide initial learning resources to be used by the Regions and Trainers to share a reasonably common vision of the project's goals and outputs with local SMEs.

T6 has collected documents, dividing them into the following topics:

- Present a common understanding of DBE vision, objectives, workplan and strategy.
- Understand and be able to convey the scope, purpose, cross-thematic alignment and the expected outputs of the four research themes.
- Appreciate and explain high-level technical and scientific aspects of the DBE project.
- Explore the capabilities of OSS Open Standards and present OSS business models for SME adoption
- Business analysis of the region and of the entire project, present the DBE implementation plan for its business self-sustainability.
- Create and agree an action plan for inter-regional collaboration and agree the scope of tasks and responsibilities for Phase 2 of the project.

Several other documents, in addition to the ones already collected and divided into the previous research topics (sub-section2), will be collected into the next couple of months, as in sub-section3.

Completed Work

This follows the list of documents of achieved work and produced on DBE Message and Communication learning block. As previously defined, T6 has produced and collected documents according to the previous segmentation:

Present a common understanding of DBE vision, objectives, workplan and strategy

This first set of documents shows the main project milestones and expected outputs of the project.

Within this topic, T6 has collected information that shows standard presentations of the DBE project objective, outcomes and implementation plan.

The target audiences of this area are the DBE users. The Regional Catalysts can use them to train the SMEs to the main DBE concepts

Understand and be able to convey the scope, purpose, cross-thematic alignment and the expected outputs of the four research themes.

This set of documents is mainly focused on the definition of the multi-disciplinary approach of the project. This topic is strongly related to the complexity of the DBE Research Plan. Its objective is to understand and be able to convey the scope, purpose, cross thematic alignment and the expected outputs of the four research themes into a unique vision, showing the interdependencies of the DBE activities with respect to the research domains involved. Due to its nature, the themes of these topics have a restricted area of potential users-the scientific community on distributed architectures, and Regional Catalysts (but not SMEs) should be trained on Languages, Business models, EC representatives.

Appreciate and explain high-level technical and scientific aspects of the DBE project.

The main purpose of this topic is to explain high-level technical and scientific aspects of the DBE project through simple and understandable language.

Following this mandate, T6 has collected several scoping documents focused on this issue. Due to the fact that the **alpha** version of the platform has been released only at month 18, the core set of documents have been released between months 17 and 19.

As presented below (section3), several learning documents on these topics are expected in these months.

Due to its nature, the target audience of this area are the Scientific community on distributed architectures, Languages, Business models, EC representatives, Regional Catalysts and the IT personnel of the involved SMEs.

Explore the capabilities of OSS Open Standards and present OSS business models for SME adoption

The main purpose of this topic is to explore the capabilities of OSS, Open Standards and present OSS business models for SME adoption. It is clear that the nature of this topic is to support SMEs in finding, through the OS approach, business and technically possible new paths.

According to this model, T6 has produced and selected several documents showing a business process underlying the project, from the parallelism between the DBE approaches to the Commons, up to the definition of the benefits of the DBE for the local environment and SMEs.

Business analysis of the region and of the entire project, present the DBE implementation plan for its business self-sustainability

This topic has been considered the most important one to support the SMEs adoption of the DBE solutions. Indeed, it shows directly all the links between the SME core business and activity and the DBE integration phase.

Several documents have been collected and several are still under production, expected to be delivered by the end of May.

The collected documents analyse and present the strategic alignment of the DBE project to the their regional development strategy, showing to the stakeholder the benefits through engagement with the project

The targets of these documents are, of course, the SMEs and the local nodes, the Regional Catalysts.

Create and agree an action plan for interregional collaboration and agree the scope of tasks and responsibilities for Phase 2 of the project

This topic is focused on the definition of the plan for the Phase II. The description of this plan will be used by Regional Catalysts and Training group to align the integration process of SMEs with the project release, both from technical and business points of view.

Next Steps

As previously said, significant work is under way in order to produce effective documents and learning blocks for SMEs. The reason of this “document production period” is due to the fact that the first version of the DBE Platform has been released and published in April 2005, as presented into the Deliverable19.1

Documentation is an important issue for the SMEs and is something that ultimately may be produced as a collaborative effort between SMEs and project partners. Whilst there is still a need for devolving expert knowledge, forthcoming deliverables should assist in this process. The following work, is then under production:

Present a common understanding of DBE vision, objectives, workplan and strategy:

- New Brochures (Updated overview of DBE project): Months 19, 25, 36 – INTEL
- DBE Digest 2, 3, 4 (Updated overview of DBE project): Months 18, 25, 30 - T6
- DBE Business Case video & demo - SUN & SOLUTA (May 2005)

Appreciate and explain high-level technical and scientific aspects of the DBE project:

- Del19.1: DBE Nervous System – SUN (April 2005)
- Del21.1: Architecture Scope Document – SOLUTA (April 2005)
- Del21.3: High level Architecture – SOLUTA (April 2005)
- Article of High level architecture and MDA: Month 19 – SOLUTA

Explore the capabilities of OSS Open Standards and present OSS business models for SME adoption:

- DBE OSSD License and policy: Month 19 - SUN

Business analysis of the region and of the entire project, present the DBE implementation plan for its business self-sustainability:

- Position Paper of the Digital Ecosystem Cluster Workshop (18th of April 2005): Month 19 - TCH
- Deliverable: DBE integration with European and local policies: methodology and first actions: Month 19 - T6
- Deliverables: SWOT analysis: Month 19 - TCH
- Deliverables: Business model and strategy of the DBE: Month 23 – TCH
- Position paper of the 2nd Digital Ecosystem Cluster Workshop (18th of May 2005): Month 19 – TCH
- Deliverable: Regional Model growth: Month 24 - T6
- Del 31.2: First version of the operational model of Regional Catalyst in DBE – TCH (April 2005)

IBM

Proposed Plan in D28.5

In the detailed regional training plan specified in D28.5, the training planning of the non-regional partners was not explicitly elaborated on. IBM however had accepted the leadership role for the learning block relating to the DBE Learning Philosophy and Methods. The materials to support this learning block were planned to be available as of October 2004.

This learning block is aimed at Regional and other partners who are responsible for implementing the DBE. Its aim is to help participants to implement the DBE Training strategy in their regions with the use of the proper teams, tools, techniques, standards and delivery channels.

The planned delivery channels proposed were:

- Workshops
- Articles and documents for private reading or shared discussion
- Courseware.

The learning philosophy we have adopted is closely related to the metaphor of the natural ecosystem adopted in the wider project. That is we expect growth to occur through adaptations between the elements in our system (people, organizations, agencies, the activities we undertake) and the environments of users and markets. We recognize the inherent variability within the SMEs and the markets they face and wish to make full use of this as a strength in system evolution, i.e. survival of that which is flexible and suited to a given niche or habitat.

The SMEs are approached as active partners in learning, able to shape and design learning for themselves and others and planning and able to collaborate with us throughout the ongoing evaluation of learning. Evaluation is regarded as both a goals -orientated and agenda- building activity, capable of discovering points of view held by actors and stakeholders and responding actively to them as well as judging progress against pre-established parameters.

IBM have supported the development of sub-communities at regional level by attending and taking an active part in regional workshops, and by helping the regions to integrate with one another and across scientific and business domains during planning meetings.

Actual Delivery

The materials were developed and used by the instructor teams (IBM, Intel and Mediamasteri for Hermia) in two workshops:

1. DBE Learning Philosophy, Strategy and Methods Workshop in Paris – November 2004
2. Moodle & Knowledge Platform implementation Workshop – April 2005

The materials are stored in the Collabnet system and in the DBE Moodle e-learning platform.

The meetings were well attended by representatives from all regional partners, Intel, LSE, T6 and IBM.

Additionally the regional training teams were coached in group and individually. Individual sessions focussed e.g. on SME recruitment strategies, required skills, best practices for content development. Group sessions focussed on assistance by members of the training team and subject matters from Computing and Science in Regional workshops and seminars:

- Tampere: SME DBE kick-off meeting – February 2005
- West-Midlands: DBE Recruitment Event – March 2005
- West-Midlands: Regional Technical Workshop – May 2005
- Aragon: Regional Technical Workshop – May 2005

Experiences and our learning

There are a few lessons that can be drawn from the first delivery experiences of the materials developed in this learning block:

1. Although the learning needs and challenges for this topic are similar for the different partners, specific regional situations and differences in team skills and capabilities require a more personalised approach to knowledge transfer.
2. It is important to respect assigned roles. It is very tempting to cross the barrier of facilitation and move to an interventionist role, e.g. where you spot working practices that are not 'best practice' or where the work is so exciting you want to engage deeper. Giving in to that urge would however conflict with the adopted philosophy of open knowledge and evolutionary learning.
3. Learning happens gradually. Even if we would be capable of capturing and codifying all that the target audience is required to know about the DBE, it is not possible to transfer it in a batch of knowledge during a workshop, seminar or training.

For all of the above reasons it is advisable to make 'one-to-one' an additional delivery channel for this learning block. The training team in that role acts as coach for the regional catalysts and their partners.

Changes made to the plan and rationale

For practical reasons, the workshop delivery was integrated with DBE Training partners meetings. That ensured that the project team was up-to-speed with the latest project developments and that the workshops were held in the right context for the participants

For the reasons outlined in the actual delivery and in the experiences above, the planned delivery channels were supplemented with face-to-face delivery in the form of coaching and contributions to regional events. It is advised that that continues in the following phases.

Due to the focus on workshops, interactivity and personalisation, as well as the unavailability of the Moodle platform at the time, this content has not been delivered via courseware. It is foreseen that at the start of phase 2, the core messages will still be captured in this format, mainly to enable new team members to brush up on their knowledge and to give new associate regions to get up to speed quickly.

A proposal for Phase 2

For phase 2, few changes are required in addition to what was discussed above. In summary, it is advisable to:

- Work with a core set of presentation materials (PowerPoint and speaker notes)
- Keep subject matter experts available as coaches
- Have at least 1 local subject matter expert available for first-line help
- Package the core message in a SCORM course and make it available on Moodle.

TCH

Training Planned

For the first period (18 months) of the DBE project TCH had identified the following main objectives for training in the Tampere region (as presented in the deliverable 28.5):

1. Attract a sufficient number of potential driver companies
2. Integrate 3-4 driver SME to work with the consortium with a strategic business vision that is in line with DBE vision
3. Integrate the regional intermediate organisation and programmes (Regional Catalysts) with the project
4. Ensure the support of regional policy makers for DBE
5. Attract 10-20 potential discoverer SMEs
6. Make local software business companies generally more “DBE ready” by increasing their knowledge and awareness about Service Oriented Architectures (SOA), Web Services and Open Source technology and business potentials.

The main goal of phase 1 training was to interact with local software producer SMEs, e Business service providers and their customers, leading to the identification of potential driver and discoverer companies. The main criteria in the preliminary evaluation of the candidates (companies) was their knowledge and experience in

- Providing e business services, applications and solutions
- Using SOA, web-services and related middleware in their products and services
- Using open source components, products and applications in their businesses.

The delivery of phase 1 training was planned to be done mainly through one-to-one meetings and multiparty workshops. Also public seminars were planned both organised by the DBE regional team and visible attendance in seminars organised by other parties. There were also numerous learning activities planned to be held to train the regional team members. Concerning the knowledge platform (e-learning system) to be developed in the DBE project, a proactive implementation was planned. The aim was to utilise e-learning in the early phases of the learning activities, even before the systems is finalised.

Training Delivered

The most important part of phase 1 training has been the clarification of the DBE message and communicating DBE vision and the technology and business opportunities for the different target groups. As the final technical architecture has undergone a strong development phase at the same time, the DBE message that is very much dependent on the technical implementation, has been concurrently revised during the phase 1 training.

TCH's activities have had a strong emphasis on one-to-one meetings. Seminars and workshops have been utilised to communicate the larger vision of the DBE and also the technologies used in it such as Web services, service-oriented architecture and open source.

The phase 1 training delivery began with a preliminary seminar in January 2004 in which the DBE was first introduced to the local community. Based on the interest from the seminar, a series of small group workshops were held to build relationships with the local software business SME's and to begin the building of the DBE network in the Tampere region. At the same time there were numerous internal workshops held. Preliminary readings preceded these workshops that were aimed in discovering the different approaches to find, engage and train the local SME's as well as political influencers. The planning of future training activities was also made in an internal workshop involving the regional team and close partners.

Open source software (OSS) was chosen to be the larger phenomenon to which the DBE were to be linked and put into context. In February 2004 the traditional SW Engineering Symposium, organised jointly by TCH and Tampere University of Technology, was focused on Open Source Development. In November 2004 a public international seminar “Open Mind” was held to bring together Finnish SME’s, researcher sand other actors with open source interest. In December 2004 DBE was strongly present in the “Oliopäivät” – a technology conference on object-oriented software development in Tampere. DBE was introduced in the event and the project had also an exhibition stand where contacts with the SME’s and also larger companies were made through one-to-one discussions.

Large companies in Finland have been very interested in the DBE from the beginning. Even though they can not participate in the DBE, meetings with Nokia Plc. and Mobile operator Elisa Plc. have been held both to communicate the DBE approach to the future technologies and to acquire knowledge of the large company activities in the field and to link DBE with these activities.

There have been a few strong potential Driver candidates from the beginning of the project, namely Anilinker Ltd. and Gofore Ltd. In addition to one-to-one discussions, a few company-specific workshops were held with these SME’s. The purpose of these activities was both to engage the SME’s more closely to the DBE and to get to understand the SME approach to DBE and related technologies and key points on which they make the decisions whether or not they will be applying to have a role in the DBE. These discussions and workshops were very fruitful in widening the understanding of DBE to include the SME’s and their needs and also the challenges DBE will meet when compared to other technologies with similar functionalities.

The engagement of the potential driver SME’s was one of the main objectives of the phase 1 training. That objective was achieved through numerous one-to-one discussions with a large group of potential SME’s. As a result of these discussions, most potential SME’s were invited to participate in a two-day technology workshop in which the DBE technology team introduced their work to the SME experts. A group of prominent Finnish company and university speakers were present at the workshop and they were given one-to-one sessions to introduce the DBE to them beforehand. They were also provided with preliminary readings on the DBE.

Collaboration with the Tampere University of Technology has been very close during the Phase 1 training, particularly with e-Business Research Centre (eBRC), the Institute for extension studies (Edutech) and the Hypermedialaboratory at the Digital Media Institute.

eBRC has been the most important research partner and Edutech has contributed to the training planning and implementation. DBE was

presented in two academic conferences, eBRF 2003 and eBRF 2004. The academic dimensions of the DBE were thus presented to an international audience of Business researchers. eBRC has supported the DBE training strongly also by inviting DBE to give presentations in different events held for its interest groups. These events include an evening-seminar for local companies and policymakers in December 2004 and a Business Board (consisting of influential regional company actors) meeting in January 2004. Hypermedialaboratory has been very active in researching web services, service-oriented architecture and other DBE-related technologies. They also host the Finnish W3C office and are the major partner for TCH in the technological evaluation of the DBE in Tampere region.

DBE was presented to an influential national audience in the DetectIT-event for Finnish ICT professionals, which was held in Helsinki in February 2005. The presentation aroused immediate interest from potential Driver candidates that were present in the event.

The knowledge platform was planned to be utilised in training in a very early stage. Due to matching the schedules of different domains of DBE, the knowledge platform could not be released to SME's during the phase 1 training. The platform has been prepared thoroughly and will be released very early in the second phase of training.

Listing of the seminars and workshops that have taken place in Finland

Event	Audience	Results
Seminar to communicate DBE	SMEs	Awareness of DBE
Workshops	Small groups of SMEs	Preparation for planning proposals
Regional partner workshop	Partners	Detailed regional plan-pilot version; informed other regions plans.
National ICT event	SME drivers	Expressions of interest
2 day technology workshop	SME drivers	Proposal from SME drivers.

Our Experiences and Key Learning

The most important finding of phase 1 training has been the fact that it is very difficult to communicate a new way of making business for the SME's until the message is very clear and real business cases are identified. That has been very challenging, but in the end the phase 1 training has been very successful and the main objectives have been achieved.

Seminars and conferences have been excellent events for communicating and marketing the idea and key message of the DBE to larger group of actors. These presentations have aroused the interest of Driver and Explorer candidates and also policy makers, the academic world and other interest groups in the region. One-to-one training have been the most effective way to deliver the training to the SME's as in the Finnish context it is very important to build a trust relationship between actors before any true engagement can be expected. After the trust relationship exists, professional workshops have been reckoned valuable by the SME's and the DBE training was delivered as part of a larger technological context.

Open source, web services and service-oriented architecture are all very hot topics in Finnish software companies. The DBE will not have an easy walk-through in them. Our challenge is to make DBE an attractive, although not the only, choice for the SME as a technological platform enabling networked and highly efficient business processes.

Changes between planned and actual delivery in Phase 1

The engagement of Discoverers was changed in all regions with the agreement of partners and thus the Discoverers will be engaged through the Drivers and Explorers. Also the support of regional policy makers is not yet clearly articulated even though the DBE message is by now well known by them. On the other hand, DBE has close links to different development organisations and projects and the regional support can be achieved through them.

The knowledge platform has not yet been released, which was the plan. The actual use for the knowledge platform (Moodle) will be launched when the Drivers and Explorers and especially Discoverers are familiarising themselves with the DBE technology and that requires that at least a functioning part of the technology platform (Servent) has been released. That will happen during May 2005 and in that sense the knowledge platform is going to be at use in the right time.

Phase 2

The Phase 2 training delivery plan will be made in line with D28.5. The main goal is to support the training of SME's to make use of the DBE platform and use their experiences to develop further the training for following SME's. The key actions in Phase 2 training are:

- Familiarisation with the DBE concept and architecture
- Integration of pilot services to DBE by the Driver and Explorer SME's
- Testing the capabilities of the architecture and the pilot services by Discoverers recruited by the Drivers and Explorers
- Creating business cases from pilot services and using them in training modules

- Regional opportunity space exploration and mapping of services required supporting value chains.

The approaches we will use for this training are:

- eLearning using Moodle
- Collaborative work between the Driver SME's, DBE technology group and Hypermedialaboratory of Tampere University of Technology
- One-to-one meetings with the SME's to tackle the challenges faced during the engagement
- Workshops with tight focus, eg. DBE code or DBE business cases, to engaged SME's
- Transferring SMEs' experiences into training content
- Seminars to support tendering and developing the knowledge on DBE and attracting SME's to get involved in the DBE
- Internal training workshops to plan the training further and deliver the experiences to the DBE team and partners
- Creating a databank of SME's that are potential and interested in the DBE and their services that could be implemented in the DBE.

ITA

Proposed Plan in D28.5

The main original objective of this first phase was to select and enrol Driver SMEs and Discoverer SMEs from the selected tourism sector in order to create sub-communities. We also planned some lateral activities, which will help to reach the previous objectives, and they are related to one-to-one lobby actions with the influencer agents in the region.

In D28.5 we set out a particular delivery plan of training activities for each of the agents defined in the DBE project, i.e. Driver SMEs, Discoverer SMEs and Influencers, in order to reach the previously defined objectives.

Summarizing, for SW developers, it was planned to make a list of potential Drivers and Implementers, then, pre-select some of them, and conduct one-to-one interviews explaining the project and the activities they should execute once enrolled. Related to the technical activities it was planned that ITA would receive training from SUN about the platform to teach those concepts to the Drivers.

It was planned to present the project to the main politician responsible of TIC and his department in the Government of Aragon - Technology for Information Society of the Aragonese Government Department. The

objective of these actions was very important since they are impartial leaders in the region towards the SMEs, obviously including the TIC sector (DBE Developer SMEs) and the tourism sector (first DBE User SMEs). One important activity regarding these political agencies was to be able to align some political objectives with the objectives of the DBE. Consequently, we could gain synergies and boost the impact of the DBE project.

The main activities planned were to present the project with one-to-one personal meetings to key leaders from economic and technological departments of the Aragonese Government and to study the current strategic objectives of the Government. Then, we would try to align their strategy with some concepts of the DBE project. In that way, we could decrease the risk of non-acceptance of the project and ensure that other entities cooperate in a way that directly or indirectly helps the introduction of the DBE in the region.

The planning for users has varied with respect to what was planned because of a change in strategic approach that we will explain below. The plan was to select 3 towns (sub-communities) outside the main city of Zaragoza with a strong tourism sector and profile following the selection criteria already defined in D28.5, and to deploy the DBE there.

Every time a new DBE sub-community would be started, it would be necessary to develop a detailed study of the SMEs in the region. The Induction process would begin only after the DBE platform were ready to deploy services. We should have increased the technological background and SW tools of the Users that were willing to join the project.

We could have introduced services over the DBE platform connecting the travel agencies with the SMEs in the regions. Some services would be those explained in the document regarding the Scenarios in the Aragon Region provided by FZI.

Actual Delivery in Aragon

In this phase we have concentrated on the selection and recruitment of Drivers and in searching the support of regional influencers in the DBE project.

Following the previous structure, we define below the activities for each agent.

Drivers. We have followed the plan quite closely. Based on our experience and surveys in 447 TIC companies in our region, we have captured information about TIC company profiles to help in the selection of the Drivers and Implementers. Then, we have contacted 8 of them, and we have held several one-to-one meetings in order to have the interviews totally under control and to be sure about their feedback.

Some of the interviews were done together with Mr. Miguel Vidal, Technical coordinator of the project, in which some more detailed technical aspects were discussed.

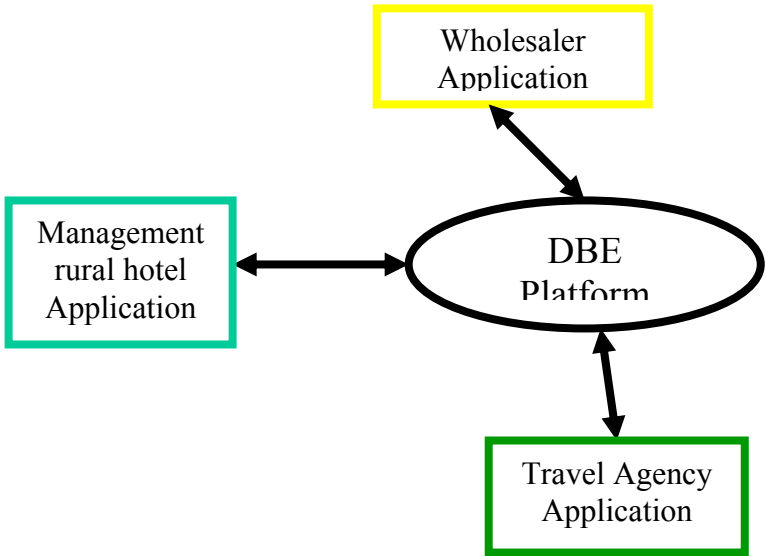
We have used the presentation “DBE Presentation ITA Spanish V1.0.ppt” (this is a presentation included in the Induction content block in D30.3). This presentation has been updated during the first phase. It deals with the concrete activities requested of Driver SMEs and the planning of future integration of Implementers and Users (including Discoverers) in the project. The selection criteria have also been introduced as they were defined in D30.1 “Plan for SME recruitment including formal channels and selection criteria”.

Since month 16 of the project, ITA has been installing the platform and maintaining contacts with SUN in order to resolve uncertainties (even before the first beta version is deployed) with the main objective to learn how to use the platform so that when Drivers come across a problem, they will ask us to help and we can act as a first level of support.

At the same time as we have been learning about the platform and what applications the companies could provide, we have been building the first deployment we would like to complete with the Drivers. Two very important variables we have always had in mind are the management of their expectations and the limited resources the SW Developers and users will have in the project. We have tried to find optimal solutions.

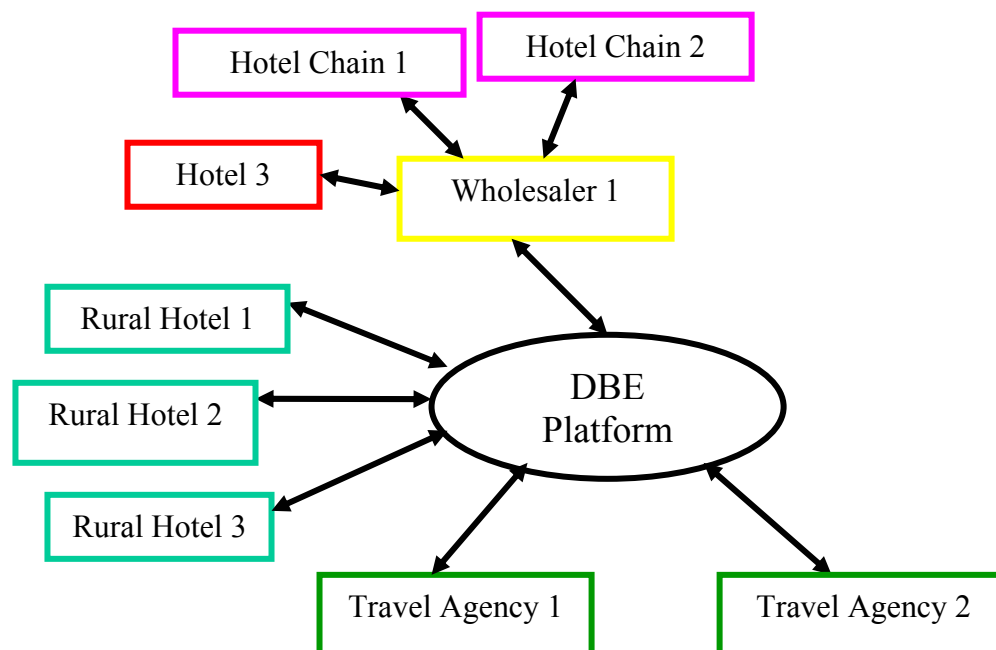
When selecting the Drivers, it has been important to keep in mind the objective to create small networks among the SMEs through the DBE project as indicated since D28.1. In order to create those sub-networks, when talking to potential Drivers, we have asked them about applications they have deployed with real users already and discussed how the DBE could make them go one step further and provide additional features. Then we have tried to create scenarios in which different applications from different SMEs would be integrated.

Those applications selected from different companies may provide the following configuration:



The travel agency may connect directly from his application to the Wholesaler and the Rural Hotel applications through the DBE. Different B2B scenarios may be defined there.

The Drivers already own real Users for every application. Once the deployment of the service to DBE had been made, then we would have the following situation :-



Regarding **User SMEs**, it was planned to make a deployment in three different places as stated before.

However, it has been necessary to make a strategic change. We have identified a better way to reach final user SMEs than the previously planned approach. Every SW Developer (both Drivers and Implementers) will bring 2 final users to the project and will enable them to use the updated application. One of the criteria for engaging a SW Developer is that the company already has real customers using the application and will encourage them to use the DBE. In this way, resources are optimised since DBE partners do not spend resources in searching for User SMEs and additionally, User SMEs are introduced to the project by the agent they trust more from a technological point of view, namely, their TIC provider. User SMEs also know the application quite well and they have to learn how to use the new modifications introduced by the DBE project.

Regarding Influencers, we have followed the plan rather reasonably. We have held continuous one-to-one meeting with the main political responsible of TIC and his department in the Government of Aragon - Technology for Information Society of the Aragonese Government Department. We have studied and worked together with the “Director Plan for the following 3 years” (strategic plan). That Plan, and concretely, the Digital Business Program plans to increase the penetration of TIC in SMEs. In that line, the department will promote projects deploying digital business ecosystems, which will allow SMEs access global markets and obtain new advantages.

Listing the seminars and workshops that have taken place in Aragon.

Events	Audiences	Results
ITA May	SMES and Government	SME applications to join project
1-1 meetings with drivers	Drivers and project partners	Requirements of SMEs captured; proposals encouraged.

Experiences and our learning

Very briefly, the feedback received from the Developer SMEs has been positive about the potential of the project, but SMEs have been requesting continuously to “touch” the platform to obtain a Guidance Manual, an Installation Manual, main blocks of the architecture and description of each of them and how they can be used, and an example of “how to adapt a service to the DBE” and “how to create a service in the DBE”. About the Software Factory, they have asked which are the tools available and how to use them. About the BML, what is exactly the BML and how to use it? Then according the Driver SMEs, the training and documentation of the Technical Contents are very important in the second phase.

Following our initial planning for User SMEs, we also visited the Benasque Valley in order to have a feedback for the project from Users, at the same time that FZI searched for User requirements. Users are more impatient than SW Developers and they want concrete answers to their business needs. Then, our new approach fits very well, because we work with the SW providers of those companies directly who know very well their customer business needs and have a continuous update. And we have to reach all those objectives optimising resources from the DBE consortium point of view.

Politics need to be very clear about the activities that the project will ask of SW Developer SMEs, so that they can present to them a structured plan for the project. In addition, it is also important to know the “Indicators” that the project will affect and help them to reach their objectives in their strategic plan, so it is important to know their strategic plans and integrate the project there. Obtaining their support decreases the uncertainty of the project success in the region.

Changes made to the plan and rationale

The main changes to the original plan have been related to the way User SMEs are recruited to the project.

In general, there have no been major changes. As the project progresses we are making small adaptations to keep close to the aims of the project.

A proposal for Phase 2

The dates for recruitment Drivers and Implementers, Discoverers and Users have been provided in D30.1 as well as the way Users are recruited.

Once the Drivers have been selected they will work in building the previous scenario integrating the different applications.

Once their adaptations are finished, by October 2005, they will install the new version of that SW in their two most trusted customers (Discoverers) and explain to them how to use the new features.

It is critical for the regional catalyst to receive information explaining the SW tools and how to use them, and what it is expected from the SW Developers in order to be able to be in line with the dates proposed.

Once the business team receive that information, it will be elaborated and adapted to the needs of the SW Developers through the Moodle platform and courses will be provided. Also, there will be continuous support for Drivers and we will host a meeting every two weeks in order to check their feedback on different aspects of the project.

Regarding the Implementers, a call of interest has been issued to them and one workshop is planned to be held on May 11th, 2005. Regional politicians will support the workshop and the project will be presented to potential Implementers.

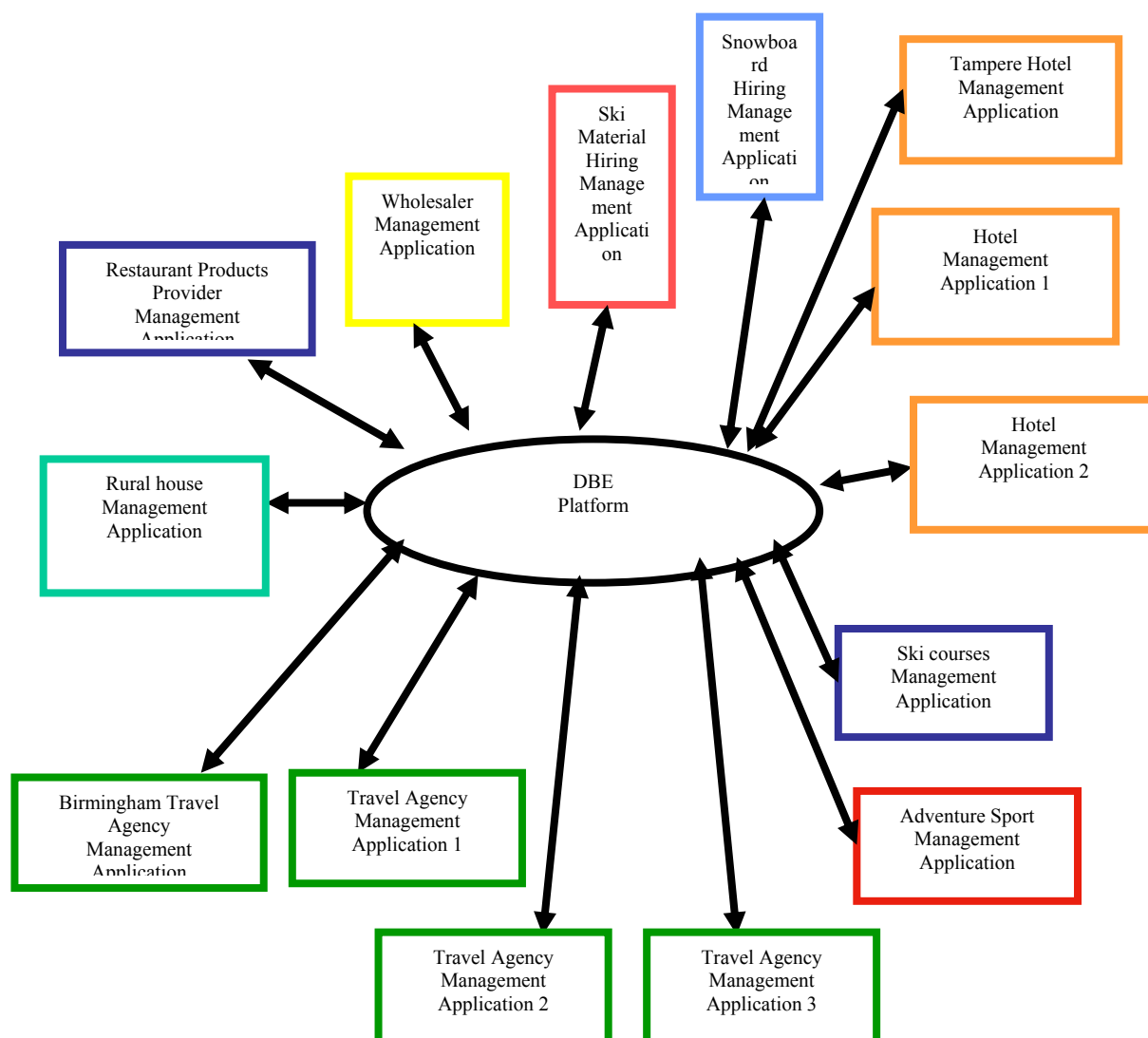
We will search for Implementers that will go on with the activities started by the Drivers. Implementers will be required to:

Integrate applications in the tourism sector with:

- A similar profile and characteristics of those integrated by the Drivers sharing the same interface so that the different applications from different SW providers will behave in the same way with regards to the DBE, and then, new sub-networks will be created. In this way, the number of different applications and users integrated through the DBE will be increased.
- In the future, when a critical mass is produced, SW providers will be able to change those interfaces to the DBE and the DBE platform will evolve.
- A different profile and characteristics of those integrated by the Drivers. The number of functionalities and applications of the tourism sector integrated through the DBE will be increased and new sub-networks will be created. Possible applications may be ski and snowboard material hiring, business management systems in the tourism sector (restaurants, ski stations, parachuting, adventure sports, courses...), car hiring, typical product stores, and others.
- We are also open to integrate new applications in other sectors if they are interesting, for example, the management system of a hotel may integrate its purchase module of the ERP with their providers.

- Following the computing team recommendation, we are also open to enrol SW companies that may integrate what it has been called basic services, such as a payment platform, digital sign, which are horizontal services which may be used by other applications.

After the call of interest, workshops and other contacts with potential Implementers, it is expected that we will receive proposals for integration scenarios. At the end of the project we expect to have the following scenario.



It may be possible to integrate applications in the tourism sector from the other regions.

Finally, after the end of this project, it is expected that once the SW SMEs know how to use the platform and exploit all its possibilities, then they may start to aggregate services and use the evolutionary features so that new business models may be created over the DBE platform which was not possible to appear before the DBE exist.

As indicated in D30.1, Implementers will be recruited in two stages in order to keep the recruitment under control. For more details about recruitment, refer to Deliverable D30.1.

West Midlands, UK

Training Planned

The Phase 1 training plan was formulated by UCE to align to the SME recruitment strategy presented in D28.1 and to support the following actions:

- Push the early adoption of the DBE concepts in the region.
- Selection of 5-10 Driver SMEs and enable active engagement in the DBE project.
- Integrate influencing regional organisations and funded projects with the DBE project and ensure continual support and backing to the DBE intervention in the West Midlands region.
- Create attractive DBE services for the selected 'opportunity spaces' to invite 10-20 Discoverer SMEs through the Driver SMEs to use these services. Explore jointly the potential benefits of these services to the SMEs and derive the opportunities for regional development.
- Support the continual interaction and knowledge transfer to the SMEs and regional organisations.

The delivery of Phase 1 training had been planned mainly through one-to-one interactions on a monthly basis, holding three workshops and two seminars. The focus has been on the following learning blocks identified in D28.1:

- DBE vision
- Engagement models
- Strategic benefits of participation
- DBE technical architecture
- Services development
- Open source business models
- Web services and
- Service oriented architectures

Usage of Moodle virtual learning environment hosted by UCE on a test basis and later the Moodle e-learning environment hosted by Intel was proposed.

Training Delivered

UCE Business School has managed the Phase 1 training delivery through building direct relationships with the SMEs and also through the Regional Intermediaries, i.e. Regional Catalyst Associates. Being a Higher Educational Institution in the area of Business Studies the role in building relationships with SMEs has been different compared to the other two regional catalysts.

The primary focus during this phase has been to evaluate the ICT sector in the West Midlands through multiple contact points, share the DBE vision, explain the technology initiatives and the business opportunities the project could offer. This has led to the exploration of the business model of each individual SMEs who have shown interest in the project and to map their skill sets and software application offerings to the objectives of DBE in the region.

Multiple one-to-one meetings, four workshops and three seminars to transfer knowledge in the region supported the training delivery during Phase 1. This has been done through developing and using appropriate learning content and also reusing content available in the public domain. These are in the forms of Web Articles, Journal Articles, News Publications, White Papers and Public Presentations.

One-to one meetings played a major role in the training delivery. This mode was found to be very helpful to customise the discussions and to focus on the needs of the individual recipients, their strategic objectives, creation of a match with their capabilities and resources. Also these events provided an opportunity for UCE to gather greater amount of information about the SMEs and the Regional Intermediaries in order to manage the selection process of the Driver SMEs. The discussion process adopted during for these one-to-one meetings is provided below:

1. DBE vision and objectives
2. SME business model, products, services and skill sets
3. Technology watch – Web services and SOA
4. Business opportunities
5. Open source business models
6. Migration of legacy services through a wrap
7. SOA services development
8. Engagement options and roadmap

The seminars and workshops have supported the wider communication of DBE vision and objectives, to form and enlarge the community of software developers who are interested in the emerging service oriented architectures and to be actively involved in forthcoming events. These events have also led to the identification of local experts from both the industry and research perspectives.

Seminars and workshops were organised from the time UCE was ready with the DBE Message and Communication. Two early events for different regional stakeholders were held in March 2004 and were organised in collaboration with ICentrum and West Midlands IT Association (WMITA). Events for the Regional Catalysts Associates were held in August 2004 and along with SMEs in February 2005. These were in collaboration with Business Link and Pronovus. Exclusive Driver SME events were held in October 2004, March 2005 and in the beginning of May 2005. The Media Cluster Manager at Advantage West Midlands (AWM) has showed keen interest in the DBE project and has expressed interests in following up with the developments.

Expert speakers both from the project partnership and from the collaborating organisations were involved in delivering the DBE message.

Listing of the seminars and workshops that have taken place in England

Event	Audience	Results
Icentrum technology centre	SMEs with interest in project	Recruitment of SMEs to consider roles.
Moor Lane,UCE.	SMEs and agencies in region	Appreciation for SMEs of possible roles SMEs could play
Ramada Jarvis Hotel Solihull	SME drivers	Proposals from SME drivers
Coventry Business Link;Mustard.com;WMITA	Regional support organisations	Guidance on next steps.

Our Experiences and Key Learning

The three different training delivery methods have been found useful and have supported the training activities in Phase 1. One-to-one training delivery has been found to be most productive as it was highly customised to suite the recipient. Towards the delivery of training through Seminars and Workshops, it has been felt that strong attractors are required for each of these events to be successful in meeting the set objectives. This was required in the form of interesting things that each of the participants can take back from the event which can be in the form of technology and service demonstrators or simulators, industry endorsements and support and expert speakers on key subjects to the SMEs, new business opportunities and individual consultancy for business growth and benefits.

The training programmes have supported the development of knowledge within the project partnership. This has particularly led to a wider development of knowledge in technology, business and legal aspects concerning DBE within UCE project team. Some of the discussions have led to complex areas and with the cooperation with the regional stakeholders rich insights have been gained in such areas. The text box below provides a list of the key points that have emerged during the discussions with the SMEs and regional stakeholders.

SMEs have explained to us that practical demonstrations of the DBE architecture and working environments are essential to them taking the decision to join the project. Driver SMES have also requested direct contact with DBE developers in order to coordinate their participation and porting into the DBE of their existing services. These are seen as some of the key requirements for success during initial engagement stages. We have designed ways for them to achieve these aims i.e. through further workshops involving DBE developers.

Moodle e-learning platform has been very helpful in collating and distributing content during and after meetings and events. UCE is keen to use this platform for all virtual learning and collaboration needs.

Changes between planned and actual delivery in Phase 1

We planned to create attractive DBE services through the Driver SMEs to encourage 10 – 20 Discoverer SMEs to join the project. During internal discussions it was decided that it would be more efficient and effective to recruit the Discoverer SMEs through the Driver SMEs with whom they were already engaged in business relationships. Also this would align with the plans made by the other Regional Catalysts and also with the DBE development roadmap. We continued the usage of the internal Moodle platform and will port the contents to the DBE e-learning platform when ready.

Phase 2

The Phase 2 training delivery plan will be made in line with D28.5. This will be designed to support the SME recruitment plan presented by the regional catalyst in D30.1. This covers the next five months from April 2005 to September 2005. The key actions to be supported through this training phase are:

- Familiarisation with the DBE concept and architecture
- Pilot integration of services from SMEs to DBE
- Testing the capabilities of the architecture and the pilot services through involvement of 10 Discoverer SMEs
- Regional opportunity space exploration and mapping of services required to support value chains.
- Tendering activity.

During phase 1 meetings Driver SMEs have shown keen interest in developing services for the opportunity spaces selected in the region. The focus is likely to be divided into two areas: basic services and value added services. Basic services include financial transaction management, currency conversion management, etc. while value added services provide customised services to the users. Though this is the view these terminologies need to be standardised across the project. The value added service development is likely to be in for the furniture industry, automobile industry and the tourism industry. Also keen to initiate interaction with Tampere and Aragon for identifying common development and learning needs to foster collaboration in services development.

The approaches we will use for this training are:

- Classroom meetings to instruct SMEs in common techniques eg. Wraps.
- Creating electronic content to facilitate e-learning
- e-learning using DBE Moodle platform
- Knowledge sharing meetings every two weeks

- One to one meetings in SMEs
- Workshops and seminars to support tendering

3. Conclusion

This report has explained the progress we have made in delivering training and encouraging learning with SMES and amongst partners. We have shown how partners have been involved in the creation of awareness and of the DBE amongst SMEs. Subsequently they took part in the key process of selecting drivers. Evaluation with SMEs and partners showed that this practice was mutually helpful-especially in clarifying points of detail about DBE architecture, and in assessing the operational needs and capabilities of SMEs and the potential synergy with others.

During this phase we have advanced our sense of the appropriate use and timing of the various available ways of working with SMEs. Each partner for example, has emphasised the significance of one-to-one interaction in this phase of training. This has given SMEs a detailed grasp of what the DBE project will mean for their businesses, e.g. commitments of time and expertise, specific skill and knowledge requirements, and a sense of trust and confidence in the project to deliver long term value to them.

Region specific approaches have been taken to the involvement of influencers e.g. in Tampere the significance of the Open Source movement to DBE has been reflected in their choice of influencers, in Aragon involving local politicians and government agencies has been significant in gaining further resources for the SMEs who take part. In the West Midlands a focus has been high growth and high innovation software development companies as well as some who have not previously been involved with the catalyst or with European Projects of this kind.

The report has identified some areas for response from partners, particularly the first wave developments of services. Several partners remarked on the current absence of the DBE knowledge platform, pointing out specific areas where an active knowledge platform would bring distinct benefits to training and engagement activities, e.g. providing distributed resources for learning and enabling asynchronous discussions between regions and sectors such as tourism.

Partners have voiced and responded to the pressing need to make aspects of the technology visible to driver SMEs through demonstrations and coding workshops e.g. in Aragon by Sun.

1. Phase 1 has seen the preparation of initial messages and communications. These have been mostly successful, though we need to use language that is appropriate to the audiences in mind. DBE language needs to be simplified and differentiated for various SME groupings.

2. The initial division of SMEs into four groupings appears to have provided a suitable vehicle for early adoption by driver SMEs and suggests that later adopters will be introduced and assisted by the drivers in turn.
3. Each of the regions has made a successful start in SME recruitment and early training though it is too early to measure actual receipt of proposals against target (12-15 plus 24-30).
4. SMEs appear to be understanding and valuing the DBE concept even if some of the science and technology aspects are difficult at times. We have also benefited from inputs of ideas and suggestions from SMEs about the project e.g. their proposal outlines in response to the DBE opportunity have expanded our views of what is possible for them.
5. The project partners now consider that they are in a better position to recruit and train, as well as work collaboratively with new SMEs, and to achieve the critical mass required by the project.
6. SMEs have joined the project in all three regions (27 registered in West Midlands). Their inputs have enabled partners in all domains to improve the closeness of their fit with SME expectations and vice versa.
7. We have developed several approaches from our experiences in Phase1 which we feel will make a constructive start to Phase 2. These include the proposals made by SME drivers for services they will integrate with DBE, and the prospect of their bringing in SME user companies in Phase 2.
8. SMEs have begun to make positive and proactive responses to the DBE opportunity. We need to maintain their commitment and enthusiasm by keeping in tune with their needs and being ready with demonstration material. This implies continued work across the project on the production of communications and training materials eg training in the software, videos, CD-roms, as well as live demonstrations, and on opening up more channels for dialogue within the growing DBE community.
9. Whilst our focus is on regional growth, we need to attend to the longer term picture of inter-regional knowledge sharing and collaborations, as well as the post project funding of work within current and future regions. Training should incorporate this message and assist SMEs and public agencies in preparing for it.
10. Evaluation has been a regular and frequent part of our work to date. We wish to remain alert to shifting and emerging properties of our relationship and development as a community. To do so we have opened discussion about the possibilities for a balanced score card approach to the performance of the partners. This may focus on the regional catalysts who can be regarded as a focal point for training activity. Such an approach would enable the measurement of outcomes on a consistent basis across the project.

11. We also wish to track the development of SME applications through the project. This means conducting regular and frequent meetings with SMEs and using occasional one to one interviews. SMEs will be asked to prepare reports on their progress. An area of interest will be to what extent the later groups of SMEs can differ from the earlier driver groups in what they need from the project and can contribute to it.

12. After the final regional workshop, the review discussion amongst partners noted the variety in SME responses to the DBE-from the highly challenging responses of the technically informed, to the necessarily acceptant approaches of the less technically informed. This argues for a similar differentiation in our capability to respond to such variety.

13. The use of small groups eg code camps to work on specific SME issues would be one way of taking this notion forward into the next Phase.

14. There should be some simplification and standardisation of our messages. We noted the tendency for nuances in meaning to produce some differences in understanding, e.g. in terms such as use case. We have now agreed on some standard terms. In presenting our material we have agreed we should first seek a simpler overview of the project and then work towards greater detail. Presentations should be reliable even when working in demonstration mode e.g. by balancing the need for live material with the need for a risk free initial presentation of the technology. Fewer speakers and more responsive listening could be suitable policies in subsequent sessions. We recognised the need to work up some real success stories that could act as encouraging signals to prospective candidate SMEs in future-while maintaining the emphasis on research rather than exploitation at this half way stage in the project.

15. It is critical for the regional catalyst to receive information explaining the SW tools and how to use them, and what it is expected from the SW Developers in order to be able to be in line with the dates proposed.