T-D1

Awareness-Raising Campaign for REWERSE Research and Technologies in the European Industry

Abstract

The goal of this report is to give an overview of the strategic considerations and planned activities for technology transfer for the Network of Excellence REWERSE. Important aspects for all promotional activities are the definition of the target audience, the objectives behind the activities and the criteria for evaluating the success of the promotional strategy. The strategy itself is based on the so-called AIDA principle, which stands for creating Attention, Interest, Desire, and Action. It is important to keep in mind that while researchers are interested in the technologies themselves, the focus of companies is on the solutions offered by the technologies. Consequently, the task of technology transfer lies in supporting the exchange between these two perspectives. For dissemination purposes of newly emerging technologies as in REWERSE the face-to-face channels and personal contacts such as networking play an important role. The first awareness event is scheduled for the end of the year 2005 and an outline for this event is given. As presently all transfer activities are dependent on the content being delivered by the REWERSE members, awareness for technology-transfer activities has to be raised also within the REWERSE community.

Keyword List

semantic web, reasoning, rules, promotion, technology transfer, industry, dissemination, channels, awareness, event

Awareness-Raising Campaign for REWERSE Research and Technologies in the European Industry

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Abstract

The goal of this report is to give an overview of the strategic considerations and planned activities for technology transfer for the Network of Excellence REWERSE. Important aspects for all promotional activities are the definition of the target audience, the objectives behind the activities and the criteria for evaluating the success of the promotional strategy. The strategy itself is based on the so-called AIDA principle, which stands for creating Attention, Interest, Desire, and Action. It is important to keep in mind that while researchers are interested in the technologies themselves, the focus of companies is on the solutions offered by the technologies. Consequently, the task of technology transfer lies in supporting the exchange between these two perspectives. For dissemination purposes of newly emerging technologies as in REWERSE the face-to-face channels and personal contacts such as networking play an important role. The first awareness event is scheduled for the end of the year 2005 and an outline for this event is given. As presently all transfer activities are dependent on the content being delivered by the REWERSE members, awareness for technology-transfer activities has to be raised also within the REWERSE community.

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CONTENTS

1. Strategic Considerations

1.1 Target Audience for Technology Transfer

- technology experts
- researchers in companies' research and development departments
- executives/managers/project leaders[1]
- software architects, software developers, application designers
- professionals interested in research and academics
- open-source community[2]

Experience from other Networks of Excellence[3] suggests that it is important to also have client companies[4] as cooperation partners because these companies, in contrast to technology-push[5] companies who might regard REWERSE as their market place, could most likely provide business scenarios[6] and real application fields for REWERSE technologies. Therefore, a good mix of technology-pull (client) and technology-push companies has to be considered.

Potentially interesting industry sectors for application scenarios of REWERSE technologies are the telecommunications sector, Bioinformatics and the pharmaceutical industry, the financial and the insurance sector, mobile computing. E-learning and E-government activities. Several reasons account for the fact that the above mentioned sectors are particularly relevant for REWERSE: experience from industrial conferences yields some of the sectors as early adopters (e.g. banking) and as potentially interesting topics for industry (e.g. mobile computing and E-government activities), there are the financial means of the pharmaceutical industry to invest and working groups in REWERSE are dealing with the respective topics.

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[1] It is important to pay attention to the hierarchical organisation in a company to get acceptance for a new technology.

[2] Although the open-source community is not an industrial target group per se, it is considered important to include this community in the awareness-raising campaign. One reason is that very often open-source software is used in companies as an alternative to more pricey commercial products. Also the public sector considers open-source software. The City of Munich, for instance, plans the migration to Linux of 14,000 desktop PCs.

[3] E.g. OntoWeb and Knowledge Web.

[4] Client or technology-pull companies are defined as companies which would employ REWERSE technologies to improve their processes. An example for such a process could be an online sales configuration system which is used for handling the sales of the company.

[5] Technology-push companies are defined as companies producing software products and which would use REWERSE technologies to improve their products. As it is important for them to have a market for their software products, it is likely that they might regard REWERSE as an opportunity to promote their own products.

[6] Business scenarios are illustrating application needs provided by companies.

1.2 Objectives of Technology Transfer Activities

A) Awareness, Take-up, and Feedback

Widespread awareness on how REWERSE technologies can help companies deliver new products and services and create new business value in the European industry.

- The name of the network REWERSE, what it is about, and a positive image of the network and its research has to be transmitted.
- The focus is on a wider audience who receives more general information.
- The goal "widespread awareness" should be reached by the end of year 2.

Efficient support to faster take-up of our technologies in the European industry.
- The focus here is on a smaller audience who receives more detailed information on research results and technologies.
- Research problems are to be posed as challenges to this audience.
- First signs of the implementation of REWERSE technologies should be visible by the end of year 3, with increasing tendency throughout year 4.

Getting feedback from industry for REWERSE research by facilitating the transfer of user requirements from industry to researchers in the REWERSE community. It is essential to build up a dialogue between industry and the REWERSE community, in particular between industry researchers and REWERSE researchers. The dialogue can be started by REWERSE (We have the following technologies. What scenarios/requirements do you have for these technologies?) and can be started by a company (We have the following scenarios/problem cases/requirements. Can you offer any solutions for these with your technologies?) Consequently, feedback will be provided initially in the form of business scenarios/problem cases from industry from which the requirements for REWERSE technologies can be derived. An exchange of ideas between industry and REWERSE researchers needs to follow.

B) Cooperation Levels

The ultimate goal of technology-transfer activities is the strengthening of the European industry through the adoption of REWERSE technologies and ideas. The adoption can be fostered by providing different **levels of cooperation possibilities between REWERSE and industry.** The possibilities are presented in the following: levels A – D which represent incrementally increasing steps of cooperation. Particularly for the cooperation level C (cooperative research on use cases), the benefits and practical value for companies need to be brought out as counterbalance for their time and effort when cooperating. Incentives for companies can be to acquire specific knowledge in cutting-edge technologies and to build scientific and industrial partnerships. As companies will put special emphasis on solutions it is necessary to offer (potential) solutions which justify the time and effort they have to invest. Furthermore, one needs to emphasize that companies associating themselves with REWERSE have the possibility to influence developments in their favour and gain an innovative image. Additionally, they can gain awareness by using the REWERSE dissemination channels. For this it is important to build up a good image of REWERSE.

A) Receiving up-to-date information on REWERSE technologies and developments

Companies are interested in REWERSE results and TTA[7] provides quick up-to-date information on what is happening in REWERSE research. REWERSE is an information resource for reasoning on the Web and also on more general Semantic-Web technologies. If a company becomes interested in a specific issue they can continue on cooperation level B, C, or D.

B) REWERSE as an ideas and learning-resources provider

Companies use REWERSE as a resource for learning on reasoning languages for the Web and related issues. They have access to ideas, results, and techniques being developed within REWERSE and they are provided with learning material by REWERSE.

C) Cooperative research on use cases[8]

In contrast to the situations described in A) and B) where a company is the recipient of information and learning material provided by REWERSE, the **cooperative research on use cases** incorporates a direct involvement of the company in REWERSE research.[9] The involvement of a company can vary in intensity. 1) to 4) represent incrementally increasing levels of cooperation on use cases. Besides the need to be able to present benefits and practical value for companies, a challenge for cooperation on use cases also lies in the fact that the working groups in REWERSE are developing their own use cases and they also need an incentive to switch to a different focus. Industry contacts might be particularly interesting for younger researchers who are still considering the possibility of a career in industry and who could benefit from industry experience and contacts.

1) Companies provide use cases for application possibilities of REWERSE techniques. The use cases are evolving from existing "real-business problems" and are a challenge for REWERSE. Use cases provided by companies are focused on practical issues and feasibility. Requirements for the reasoning languages being developed in REWERSE arise out of these use cases.[10]

2) REWERSE takes up the ideas for the use cases and focuses its research on these real-business problems. Together with relevant contact persons from the companies the draft use cases are elaborated till one has solid use cases. The goal for companies can be to influence developments in REWERSE to their advantage. Furthermore, they gain contacts, an innovative image and awareness by using REWERSE dissemination channels.

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[7] TTA stands for the technology transfer and awareness coordination group of REWERSE.
[8] Use cases illustrate typical application needs by describing a set of sequences (flows of events). For instance, the use case "Hire employee" can have several variations. You might hire a person from another company, you might transfer a person from one division to another (common in international companies), or you might hire a foreign national (which involves its own special rules). Each of these variants is called a scenario and illustrates a specific sequence of actions that illustrates behaviour. A use case therefore might expand out to several dozen scenarios. (Booch 1997, p. 224-225)
[9] Although A) and B) describe to some extent mere unilateral situations, they are still included in the description of cooperation levels as they constitute one of the steps leading to a mutual exchange between industry and REWERSE.
[10] There is also a use case available from the European Business Rules conference. The use case "EU-rent" has been developed by Model Systems, a sponsor of the conference.

3) Dependent on the research capabilities of the companies, the companies are also involved in doing research on the use cases and the solutions provided by applying REWERSE technologies. The relevant REWERSE research groups and the research contact persons from the company need to collaborate closely. The goal is to find better solutions for companies products and processes. They gain close contacts to the research groups, an innovative image and publicity by using REWERSE dissemination channels.

4) Test applications of REWERSE techniques in a test environment of the company: Companies implement REWERSE techniques and ideas in test environments. REWERSE members consult companies in projects where REWERSE techniques could be or are employed. REWERSE members also consult on feasibility issues for implementing REWERSE techniques. Additionally, REWERSE members can give presentations on issues relevant for a company. The incentive in this context must be very concrete and demonstrate the profitability of employing REWERSE technologies. Profitability derives from reduced costs, reduced time, that is increased efficiency in their processes, and more value of their products.

D) Participant of REWERSE

A company could become an additional participant of REWERSE if close cooperation in REWERSE research and activities which contribute directly to the REWERSE deliverables[11] is planned. For becoming a participant, a company would have to offer manpower for REWERSE deliverables. In return they would be a part of the REWERSE community which includes 27 leading institutions in 14 European countries doing research on reasoning on the Web with Rules and Semantics. They would profit from cooperative research and the relevant contacts and insights they thereby gain. To become a member, an application procedure with approval from the REWERSE general assembly is necessary.

For REWERSE the most interesting levels of cooperation are level C and D as these levels constitute a real involvement of companies in REWERSE research. Besides the above explicitly mentioned forms of cooperation, many other different and more informal forms of cooperation between REWERSE researchers and researchers from industry are conceivable. One can assume that informal networks will play an important role. Consequently, also these forms of cooperation are encouraged by TTA. The goal is to facilitate and create possibilities for researchers from industry and REWERSE to meet and exchange ideas.

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[11] The deliverables are reports, prototypes, applications, and pre-standards.

1.3 PR-Strategy Overview

For promotion purposes, it is important to associate REWERSE research and technologies with so-called hot topics for industry such as interoperability, information retrieval, web services, and security. Solutions for business problem cases draw the interest of companies as these solutions lead to time and money savings and increased product value of the company. Consequently, it is important for promotional activities regarding REWERSE, that the solutions (and also potential solutions) which can be achieved by the technologies are presented. The important assumption in this context lies in the fact that even a good technology will not sell itself. Instead, the focus must be on the business or consumer problem which can be solved with the REWERSE technology.

Likely incentives for companies to get involved with REWERSE are to acquire specific knowledge in the short term (quick access to research results, good and reliant information), to build stable scientific and industrial partnerships for future web-application development and service provisions in the long term, to receive consulting, training, and education, to find solutions for their business problems and to be able to gain relevant contacts.

To address companies and to gain visibility in the business world, the appropriate and most effective channels need to be found. For selection purposes we collected ideas and evaluated the channels following the criteria impact, durability, costs in time and money investment to foster a solid decision making process. The criteria impact and durability will be described below. Additionally, we included feedback from REWERSE members, exchanged experience with other Networks of Excellence with similar topics (e.g. KnowledgeWeb), and are learning from the example of other technology-transfer oriented organisations (e.g. Fraunhofer Gesellschaft). Most importantly, we included and are including feedback from companies as the habits and perceptions of our audience have to be taken into account. The inclusion of the feedback of the companies is still in process and represents a vital part of evaluating and adjusting our strategy.

The following criteria were used for evaluating the channels:

Focus on media with high impact concerning our objectives but relatively low cost (in money and time investment)[12]: the term impact in this context needs to be defined in two ways. On one hand, there is the quantitative aspect which denotes how many REWERSE target group members are reached by the use of a channel. For instance, a magazine with a high circulation and matching the REWERSE target group would have a high impact. In this context, it is also important to make sure that a good variety of media is employed to reach a wider range of people, organisations, and institutions. On the other hand, there is the qualitative aspect which denotes more the intensity of the influence on the target group. Impact in this context is defined as the degree of achievement of our objectives (ref. Chapter 1.2). Achievement of our objectives can be described as levels of cooperation which are achieved. The biggest impact is the implementation of REWERSE's technologies in products, projects, and processes of companies. Personal contacts are intensive contacts and therefore have a high impact. Such contacts are made at conferences, through workshops, events, networking, etc. Messages transmitted via such channels are most likely to lead to a long-lasting interest of professionals and companies in REWERSE and eventually also to cooperations between REWERSE and industry.

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[12] Due to limited resources (one full-time employee and 20k Euro annual budget).

As mentioned above, one of the most durable channels with high impact is networking as this channel is based on personal contact and information is to an important part distributed by people on a more informal level. Consequently, we have to find professionals in companies or other organisations who then in turn can spread information on REWERSE and therefore create a domino effect. Our network of companies will be small at the beginning (quality is more important than quantity) and will be extended over the course of the project. Our first contacts are collected the following way:

- companies and contact persons out of, associated with and known to the REWERSE network and companies associated with W3C working groups and projects
- contacts through our presence at fairs and conferences
- potentially interested professionals chosen on the basis of our market-research activities

About 11 companies from the financial, IT, and telecommunications sector including large client companies and also SMEs[13] have been contacted and contacts are going to be fostered in the following months. The focus presently is to a large extent on German and Swiss companies (as contacts to these companies could more easily be made), but the list of contacts will be extended to other European countries end of this year/beginning of next year. The quality of the contacts will always play an important role and attention will be paid to this aspect.

The goal for contacting the above mentioned companies is to reach one of the levels of co-operation REWERSE-Industry as described in the objectives of technology-transfer activities (ref. Chapter 1.2 B)

Focus on durable channels: durability is defined for our purposes as long-lastingness, that is, durable channels transmit our message over a long time. In contrast to impact which denotes the influence on the thinking and acting of our target group, durability denotes how long information provided by a certain channel is available. Examples for durable channels are the website and digitalised webcasts. Also channels which can be used repeatedly with decreasing effort for dissemination purposes would count as durable channels. One such example would be a magazine which can be used as a dissemination channel repeatedly as contacts with a reporter of the magazine has been established. Channels also can become durable as, for instance, a publication which is stored in a library after having been published.

For effectiveness and maximum impact, we aim at transmitting one produced piece of content (e.g., a press release) using many different channels available (one input leads to several outputs). Furthermore, we try to use channels which exist already and have a good audience fitting our definition of target audience (e.g., newsletters of specific companies).

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[13] Small Medium Enterprises.

1.4 Road Map of Promotional Activities

The road map of promotional activities is designed following the principles of the so-called AIDA strategy. The acronym AIDA stands for Awareness, Interest, Desire, and Action and is based on the assumption that customers must 1) be aware of a product's existence, 2) be interested enough to pay attention to the product's features/benefits, 3) have a desire to benefit from the product's offerings, and 4) action would come as a natural result of movement through the first three stages; i.e., desire leads to action. In 1898 St. Elmo Lewis presented this model which attempted to explain how personal selling works, that is, the process a salesperson must lead a potential customer through in order to achieve a sale. Although this model was dedicated to the singular goal of helping salespeople understand his approach to salesmanship, with few exceptions, the AIDA model, and similar, derivative models were widely adopted by advertising theorists for the next sixty years[14] and still are valid and adopted in many contexts including e-marketing activities.

REWERSE research and technologies are not a product in the salesman's sense, but the different steps described in the strategy can nevertheless be adopted to our purposes. It is important in that respect not to forget that all technology-transfer activities are a mutual process as feedback from industry is important for REWERSE research. Furthermore, for this strategy to work well it is essential to know thoroughly the target audience. Consequently, it is important to conduct market research on the following questions: Who is the target audience most likely interested in REWERSE research and technologies and to adopt REWERSE technologies? In what departments of companies can they be found? What positions do they hold? What are their preferred information channels? What interest do they have in REWERSE and, most importantly, what are their needs in reference to REWERSE research?

In the following, the road map for technology-transfer activities is outlined for the time period of four years. The outline contains more general issues and content issues. A graphical representation of the outline as described below can be found on page 10.

Year 1: **Awareness**

In the first year, we have to draw attention to REWERSE by making ourselves known and presenting a positive image of REWERSE. It is essential to focus on name recognition so that people can recognize the logo and wonder what it is. Content is more general REWERSE-related information. Relevant channels are the website which includes measures to increase the visibility on the Web, publications in magazines and networking and presenting REWERSE at conferences and other occasions where suitable. The focus for the first year is on the conferences EBRC and the KM Europe and the fairs CeBIT and Systems. In the first year also the work on business scenarios/use cases has to be started and TTA needs to set the basis for awareness within the REWERSE community.

Year 2: **Awareness and interest** in REWERSE research

In the second year, the focus shifts more on creating interest for REWERSE research by focusing on REWERSE results and challenges. Content is focused on the state of the art, use cases, goals and visions (for industry), challenges, and results so far obtained in REWERSE. An article in a magazine now contains more details on REWERSE technologies and examples of use cases. An example for content of such a publication could be answering the question

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[14] Barry, T. (1987)

"What is the Semantic Web and what is reasoning on the Web?", demonstrating an example application and giving reasons why this technology helps companies to deliver new business value. The article needs to arise out of the REWERSE deliverables and has to be written by experts out of the REWERSE community, by external experts, or jointly by both.

The main planned channels for the second year are publications in professional magazines and presentations of REWERSE at industry conferences (e.g. EBRC) and other industry-related events. The final decisions for REWERSE presence at conferences and industrial events still need to be taken. A list of potential conferences can be found in chapter 2.2 A. Workshops will be offered where feasible. Also the introduction of an electronic newsletter will be considered. An important event is the awareness event organised by REWERSE in cooperation with KnowledgeWeb. More information on this event can also be found in chapter 2.2.D) Feedback from industry needs to be increasingly included and used for evaluating the need for adaptation of the PR strategy and the channels used.

Year 3: **Interest and Desire** for technologies developed within REWERSE

In the third year, the focus of our work shifts more on creating desire for REWERSE research and results. The content includes now concrete uses cases (arising out of problem cases) and solutions obtained so far in REWERSE. Companies present their use cases and their solutions obtained so far. Discussions of different solutions can be initiated. Where possible and efficient, synergies with other Networks of Excellence[15] are sought. The focus is very strongly on workshops and the awareness event II. Also publications are still important and the use of company channels where possible. Workshops at organisations such as the DIA in Germany will be considered.

Year 4: **Action**: Application of REWERSE technologies in companies

In the fourth year, the focus is more on applications of REWERSE technologies. Close cooperation with other Networks of Excellence[16] in the organisation of events (particularly Awareness Event III). Content is now strongly focused on solutions for business use cases in companies. Which channels are going to be used needs to be decided based on the feedback from the previous years. Most likely, these will be industry-related workshops, publications in professional magazines, the newsletter if successful and the Awareness Event III.

On the following page, the AIDA strategy is represented graphically based on the timeline of four years. For each year, the focus and content of transfer activities and the channels employed are given. Many channels are used over the course of the four years (such as the website) and will be enhanced with increasing time. Prominent are the face-to-face channels as these channels are more suitable for a research-intensive project such as REWERSE and facilitate the inclusion of feedback coming from industry.

Rows with the colour ☐ denote digital channels.
Rows with the colour ☐ denote print and audiovisual channels.
Rows with the colour ☐ denote face-to-face channels.
Rows with the colour ⬚ denote optional channels.
          …. denote that channels used in the year before are continued.

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[15] Cooperation is also sought when effective with other EU projects/organisations/institutions.
[16] Cooperation is also sought when effective with other EU projects/organisations/institutions.

Year 1: Awareness

In the first year, we have to draw attention to REWERSE, by making ourselves known and presenting a positive image of REWERSE.

Content: more general REWERSE-related information + prototypes as far as available

Year 2: Awareness and Interest in REWERSE Research

In the second year, the focus shifts more on creating interest for REWERSE research by focusing on REWERSE results and challenges.

Content: focused on state of the art, use cases, goals (vision for industry), challenges (and results so far obtained in REWERSE) + prototypes as far as available. Inclusion of company feedback.

Year 3: Interest and Desire for results achieved with REWERSE technologies

In the third year, the focus of our work shifts more on creating desire for REWERSE research and results.

Content: Concrete use cases and solutions obtained so far in REWERSE + prototypes as far as available. Companies can present their use cases.

Year 4: Action: Application of REWERSE technologies in companies

In the fourth year, the focus is on applications of REWERSE technologies. Contributions for events (e.g. speakers) are coming increasingly from industry.

Content: solutions for business use cases in companies + prototypes as far as available.

Year 1	Year 2	Year 3	Year 4
			Consulting for companies
		Presentations at companies	...
	Webcast	Webinar based on developed industrial courses (TD5/7) and feedback from companies	...
	Electronic newsletter	...	...
	Other institutions and channels of companies: Logon info days, DIA	…+ hands-on Workshops (at DIA and others)	...
	Awareness Event I	Awareness Event II	Awareness Event III
	Increased industry contacts + networking + cooperation (based on use cases provided by industry)	Increased industry contacts + networking +first implementations of REWERSE technologies	Increased and solid pool of industry contacts (a core of industry contacts which have a real interest in REWERSE and an outer ring of more loosely associated companies) + various implementations of REWERSE technologies
Other institutions and channels of companies: Logon info days, DIA			
Industry contacts and networking			
Fairs: CeBIT '04, SYSTEMS '04	... + others	... + others	....
Conferences: EBRC '04, KM '04	... + others (ISWC '05, OTM '05, XML Europe '05)	… + others	...
1 press release and 1 publication	2 – 3 press releases + 2 publications	...	...
Flyer / poster	...	...	...
Website and visibility on the Web	...	...	+ E-learning material offered

1.5 PR-Strategy Evaluation

By staying in touch with our most important external audiences and by carefully monitoring their perceptions about the REWERSE project, by staying in touch with our internal audiences (REWERSE members) and by carefully monitoring their perceptions about our transfer activities, the PR strategy can be evaluated.

Quantitative indicators:

- number of industry contacts gained and number of cooperations between industry and REWERSE[17] (this indicator has to be taken in account in parallel with the qualitative indicator "degree of cooperation")
- log files of the web server for the REWERSE main website and TTA website
- number of reactions following the use of a channel (e.g. e-mails, phone calls, website access after press release)
- number of REWERSE content contributions to TTA activities and reactions/feedback to TTA requests
- participants at events
- requests from industry for information and consulting offered by REWERSE

Qualitative indicators:

- degree of cooperation REWERSE – industry achieved
- intensity of interest and reaction following the use of a channel
- quality of content contribution and reactions by REWERSE members following a TTA request

Based on the feedback, the PR strategy and the use of channels will be adapted. Therefore, the present deliverable can be regarded as work in progress and at the same time a solid starting basis for technology-transfer activities for REWERSE.

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[17] The challenge here is to monitor also more informal cooperations and contacts between REWERSE members and industry researchers.

2. Channels for Dissemination Purposes

The following chapter provides a detailed description of the different channels. For all channels the target audience, content considerations, technical aspects and infrastructure are given. Additionally, the channels are evaluated separately based on the criteria impact, durability, time investment and costs. The concrete use of the different channels based on the timeline of four years[18] is listed more in detail in the previous chapters 1.3 and 1.4. The chosen preferred channels are presented in a short synopsis at the end of chapter 2.

The channels for dissemination purposes can be divided into electronic, print and audiovisual channels, and face-to-face channels. As already mentioned in the road map of promotional activities, the face-to-face channels are very essential and one of the primary channels. The face-to-face channels such as networking and workshops at conferences are characterised by the intensity of the contact. Especially in the context of newly emerging technologies which are not established yet, personal contacts facilitate addressing relevant professionals in companies directly and thereby creating awareness and interest for the REWERSE project. Additionally, face-to-face contacts facilitate receiving feedback for REWERSE research and the promotional strategy. Channels such as the website provide information anytime and anywhere and therefore constitute a very fundamental and complementary channel.

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[18] Duration of the IST project REWERSE.

2.1 Electronic, Print, and Audiovisual Channels

A) Website

Target Audience and Content Considerations

Target audience of the TTA[19] website (http://rewerse.net/TTA) are professionals surfing the Web for information on cutting-edge technologies in the field of web technologies (in particular on smarter web applications and systems, reasoning languages, and other REWERSE-related topics). Target audience are also people who have been directed to our website through other channels. It is important to keep in mind that the audience for the TTA website is different from the audience of the general REWERSE website. Currently, the main audience of the website http://rewerse.net is the REWERSE community and the academic community in general. Consequently, although measures to support visibility in reference to the industry have to concentrate on the general REWERSE website, one has to make sure that the TTA website can be easily found and its link is prominently placed on the general REWERSE website.

Content: the TTA website interface has to be concise and it should include: final conclusions or results, which were accepted by the REWERSE community, events calendar, articles, news, reports, success stories, demonstrations of implementations, educational resources, and contact details. The website must provide a quick way to get an overview of REWERSE and technology-transfer activities and navigators of the TTA website must also be able to obtain more detailed information.

Target audience for the protected internal area are REWERSE members.

Content (protected area): channel to facilitate the communication between the REWERSE members for collaborative work which includes requests for information from participants and documentation of the TTA work. The internal website has also the function of supporting the content creation (e.g. members can upload and download content). Furthermore, the protected area includes a repository of PR material (such as flyers and posters).

Technical Aspects and Infrastructure

A website was set up and is online since 15 April 2004: http://rewerse.net/TTA
Regular updates: last major update 11 June 2004.

Server: Apache Web Server
Hosting: currently hosted at webXcerpt's web-hosting provider, soon hosted at the server of our project partner Munich (increased flexibility, synergies and reduced costs)
Content creation: currently static HTML pages created with the commercial authoring tool Dreamweaver

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[19] Technology Transfer & Awareness.

Future plans:

- Dynamic websites such as a contact form are planned and will be implemented.
- Cooperative tool for content creation and dissemination within REWERSE community (located in protected area): Subversion, an open-source version-control system designed to supplant CVS, which can be used with a WebDAV[20] interface. Subversion is currently already used by the TTA group for their internal exchange of information. Access will be provided for the REWERSE community soon.

Evaluation

The website does not offer an active marketing strategy due to the fact that its URL can only be reached by people who already know it or who find the REWERSE/TTA website through search engines. The reach of the TTA website and the navigation of its visitors should in regular intervals be evaluated using the log files of the web server. These log files can be used to collect statistical material on questions such as "How many visitors come from which domains?", "How do they navigate?" and "Which pages are their favourites?". As navigators of the website remain anonymous, a website cannot provide detailed information on our target audience except how they navigate. However, reverse DNS lookup (i.e., determining the domain/host name from the IP address occurring in the log files) can provide some information on the organisation/company of the visitors of the website. Another solution for this problem is the creation of a contact form.

Measures to support reach/visibility:

- registration with major search engines, if registration is possible. It is important to keep in mind by which requests we want to be found and to consider the search habits of our potential customers/cooperation partners as far as possible. Also, we have to decide which rank we want to have at certain requests. For example, searching Google for "technology transfer" and "Semantic Web" puts http://rewerse.net on place 16. An important principle is that the keywords by which the REWERSE website should be found are included in the index page of the REWERSE website.
- registration with the open-directory project
  (http://dmoz.org/World/Deutsch/about.html): when registering with DMOZ we are automatically also listed in the Google Directory.
- banners on other websites such as http://whatis.com or pages with related topics such as Semantic-Web websites or websites on the topic "standardization": a short and effective slogan for REWERSE could be used there, but one has to be careful with using banners in general as there is the question if they fit the image of REWERSE as a serious research centre.
- Promotion of website through other channels (see below).

Costs: for the web infrastructure, we used LAMP (Linux Apache MySql PHP) tools with open-source software. For the creation of content, free tools suffer in quality. Commercial tools such as Dreamweaver, FrontPage, and GoLive were compared (e.g., a test in c't 5/04) which yielded Dreamweaver as the favourite product. Costs amounted to 400 Euro. The web design was done with our own personal resources as the necessity for frequent changes made this solution more feasible. Therefore, no additional costs did arise.

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[20] Web-based Distributed Authoring and Versioning.

Time investment: time investment for a good web presence (for content and web design) is relatively high, but moderate and low once set up. Permanent personal resources are necessary for keeping a website up-to-date.

Impact: general information source anytime and anywhere providing contact details. Nowadays a website is a must as a channel. The absence of a website would be noticed as something negative.

Durability: the website is a very central, durable and basic dissemination channel which has the potential to reach a lot of people. Additionally, a lot of other promotional material such as teaching material, flyers, newsletters, webcasts, and webinars can be distributed through the website. One of the advantages is also that information on a website can be updated very easily and quickly.

B) Mailing Lists and Electronic Newsletters

Target Audience and Content Considerations

The target audience are professionals who are members of our mailing list (they learnt about REWERSE and Technology Transfer and want to be up-to-date).

The focus of a newsletter is on news, recent developments, results and progress of REWERSE activities, and special events in the REWERSE framework. Problems in REWERSE research and applications can be broadcasted as industry challenges. As for the form of the newsletter, we are opting for a simple e-mail newsletter as, for instance, provided by the airline company Lufthansa, the Software Initiative Bavaria and the W3C-Newsletter[21], which consists of simple text listing different topics and which is included directly in the e-mail.

Internal newsletter: For the REWERSE community a newsletter could contain a brief description of technologies and solutions developed up-to-now, promotional activities/possibilities and information on industry contacts and feedback. The form would as well be simple and based on the use of plain text. The newsletter would be distributed on request which allows to get an overview of the general interest of the REWERSE community in technology transfer activities.

Technical Aspects and Infrastructure

For the purpose of a mailing list, a web form will be designed for subscribing to the newsletter. The interested professionals will be asked for information on the company name, their department, their interests in the REWERSE project, city, and phone number. Suggestions for mailing list names are companies@rewerse.net and tech@rewerse.net.

Evaluation

The effect of the channel "newsletter" depends on the number of subscribers and their interest in getting news about REWERSE as the newsletter is only distributed on request. A newsletter is a good way to foster contacts. As a newsletter is distributed on request we have detailed information on contact persons, which is an advantage compared to the website in

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[21] http://lufthansa.com, http://software-offensive-bayern.de/ and http://www.w3.org/ .

general. But at the same time we do not have any knowledge about the fact if they read the newsletter. A website, in contrast, offers the possibility to analyse the website's log files.

It is possible to distribute single events or specific news via the mailing list without the effort of constructing a newsletter. For a good e-mailing initiative we have to build up a solid list of contacts interested in the subjects related to our project. Furthermore, newsletters depend on availability of industry relevant information.

E-mailing frequency is still under consideration (depending on the interest and news), but it would be feasible to send a newsletter every three months.

Costs: no external costs
Time investment: moderate when there is enough information available.
Impact: good channel for transmitting news and keeping already acquired contacts up-to-date
Durability: in general no durable channel but can become durable when newsletters are archived

C) Channels of Companies and other Organisations

Target Audience and Content Considerations

Companies distribute information on REWERSE using their channels to their customers. Therefore, target audience are users or a subgroup of the users of the respective promotion channel of the company.

Examples

- announcement to company newsletter of ILOG company[22]
- promotion on CORDIS website[23] which addresses SMEs interested in European projects
- promotion through the channels of the IRC network (Innovation Relay Centres)[24]
- banners on other websites which are related to our project (e.g. ERCIM news[25])
- promotion on the website and in the newsticker of the Heise magazines publishing house[26]
- small feature stories on websites covering the topic science (e.g. BBC science & nature website[27])
- Gartner Group[28] channels (they have a very good reputation as a research and analysis company)
- Presentations at company specific/internal events

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[22] ILOG offers enterprise-class software components and services for business rule management, optimizations and visualization.
[23] http://sme.cordis.lu/home/index.cfm .
[24] http://irc.cordis.lu/ .
[25] http://www.ercim.org/ .
[26] http://www.heise.de/ .
[27] http://www.bbc.co.uk/sn/ .
[28] http://www3.gartner.com/ .

Evaluation

Very effective when focused and well-planned. Websites of open-source communities[29] are also a very good channel to reach the open source community.

Costs: no external costs
Time investment: moderate, but high when building up the contacts to the respective companies is considered.
Impact: high but dependent on the reputation of the channel
Durability: dependent on the respective channel of the company, can be durable when contact with company is fostered

D) Webcasts

A webcast is the use of the internet to broadcast live or delayed audio/video transmissions, much like traditional television and radio broadcasts. For example, a university may offer on-line courses in which the instructor webcasts a pre-recorded or live lecture, or an enterprise may webcast a press conference in lieu of or in addition to a conference call. Users typically must have the appropriate multimedia application in order to view a webcast.[30]

Target Audience and Content Considerations

Target group are professionals who are interested in news about REWERSE or in particular topics which are the focus of the specific webcast. It is the quality and topicality of the content which must draw their attention. They learnt about the webcast through other means (e.g., website, newsletter, magazine, or newspaper).

The goal is to transmit news and other topics through lively means, showing the people behind the scenes. As this channel is very people focused, we need an interesting speaker/s to draw attention. We could include news summarizing last year's development within REWERSE. As REWERSE content most likely will be produced later, it is difficult to present achievements right now and we could broadcast interviews concerning more general but REWERSE related topics.

Technology and Infrastructure

There are several ways to distribute data in video format via the internet. These techniques depend on the previous format of the information, or the way it was acquired. In the following life streaming using a webcam, streaming information stored in a video file and streaming using WMX files are described more in detail.

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[29] E.g. Linux weekly news on http://lwn.net/ .
[30] Jupermedia's small business computing online dictionary.

- Life streaming video using a web cam[31]

Data from the cam is sent to a PC or server and then is broadcast to everybody through a website. This process is called life streaming and is a technique for transferring data such that it can be processed as a steady and continuous stream. With streaming, the client browser or plug-in can start displaying the data before the entire file has been transmitted[32]. Software is necessary to broadcast video content acquired by the web cam. An example for such software would be Diqicam (www.diqicam.com). By using the software, visitors are able to view a live webcast. It is possible to specify certain criteria like frame size, quality etc. and also use an FTP upload method instead of the local server. The program also comes with an additional feature to password protect access to the webcast through a user list that can be specified.

- Streaming information stored in a video file

The most common formats employed to transmit video are Windows Media and Real Media.

The information on the video file can be distributed in two different ways:
Download, watch and remove automatically (The information remains in the user's computer the time needed to be watched.)
Download and then watch the video (also can be seen while it is being downloaded).

For this last option, it is required to compress the video using formats such as QuickTime (*.mov), WindowsMedia (*.wmv), RealPlayer (*.rm) or XviD (.xvid) which is an open-source solution. The compressed file has to be stored in a web server and include its link in a website. If a user clicks on the link, he/she will see the video in the browser or player at the same time as it is downloaded. Both ways mentioned above require that the user download the video file or pieces of it. Also, the user needs to have the player (such as QuickTime Player or WindowsMediaPlayer) installed which can deal with the compressed video format used.

- Streaming using WMX files

The difference of using wmx files is that not the whole file has to be downloaded. The wmx file includes a link to the video file (.wmv) and both files, wmx and wmv are stored in the web server.

Equipment

Depending on several features of the video recordings which are to be offered, as video duration or resolution, the following tools can be employed:

Image tools:

- Webcam
  Advantage: cheap, easy + automatically compressed video data
  Disadvantage: low resolution

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[31] Webcam is a video camera, usually attached directly to a computer, whose current or latest image is requestable from a website.
[32] Streaming technologies are becoming increasingly important with the growth of the data on the Internet because most users do not have fast enough access to download large multimedia files quickly.

- Advanced cams used for videoconferencing
  Advantage: quality images and streaming video through a network. Can operate alone or be placed wherever there is a LAN or Internet connection. They are usually connected through USB ports.
  Disadvantage: more expensive than web cams.
- DV-cams (also miniDVs)
  Advantage: high quality cam
  Disadvantage: more expensive + a lot of processing needed after recording to cast the video images through the Web. PC or server need a Firewire input (IEEE1394) to store the video images in it, and they should be recompressed for webcasting. To reduce the processing needed, memory cards can be added to DV-cams, but the memory cards cannot store high quality video images of a long duration.

Consequently, advanced cams are a good solution.

Sound tools: it is sufficient to connect a microphone to the PC or the video cam

Evaluation

Webcasts could solve some of the disadvantages of seminars, conferences and meetings of being very focused on a small group of people as with a webcast an unlimited number of people can follow the event online. Companies or institutions we consider relevant can be invited and people interested in the webcast could register through our website in order to follow the webcast. The faces of people shown in a webcast turns it into a lively means to present REWERSE, but no interaction is possible. Due to the high time investment for producing a webcast, it is advisable to make the use of this channel dependent on the status of the project REWERSE (for instance, when major results are achieved) and the personal resources available.

When creating a webcast, it is important to have experience with using a camera, finding good motives and transferring information via the medium video. Therefore, support from an experienced partner such as the Learning Lab Lower Saxony in Hannover[33] should be sought.

Costs (equipment): initial costs amount to 50 Euros or cheaper for web cams and about 600 Euros for DV-cams. It might be possible to rent equipment or use equipment provided by cooperation partners (such as the Learning Lab Lower Saxony in Hannover)
Time investment: high
Impact: depending on quality of content of the webcast. A webcast of very high quality can have a wide influence as many people can be reached.
Durability: durable channel as webcasts are recorded and can be presented on the website.

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[33] REWERSE participant.

E) Webinars

Webinar is the short form for **w*eb**-based **sem*inar**, a presentation, lecture, workshop or seminar that is transmitted over the Web. A key feature of a webinar are the interactive elements - the ability to give, receive and discuss information in contrast with a webcast in which the data transmission is one way and does not allow interaction between the presenter and the audience.

Target Audience and Content Considerations

Target audience are people who are interested in a particular topic and want to learn about this topic, but do not have the time to take part in a face-to-face workshop. Similar to webcasts, webinars live through showing people. In contrast to a webcast, a webinar is more like a seminar and there are life discussions going on. A webinar is always a life event, but can be recorded and presented on a website for demonstration purposes.

Content have to be topics which are suitable for discussion. Current and topical issues should be chosen. At the moment, these have to be REWERSE related topics. Later one, more specific REWERSE results can be presented. It is important to invite known and/or respected and interesting speakers as it is not only the topic of the webinar which draws the people, but also other participants and the reputation of the speakers.

Technology and Infrastructure

A provider of technology for organising a webinar is Microsoft with Microsoft Life Meeting, a placeware software[34]. The only tools necessary are the computer, the software and an audio connection such as a phone line.

Evaluation

For evaluation purposes, the participation at one of the free webinars with Microsoft Life Meeting was tested. The webinar with the topic "The What, How and When of Blended Learning" took place on 14 July 2004 and lasted for an hour. There were two presenters and about 600 participants mostly from the US. During the course of the webinar more than 200 of the participants dropped out. It was possible to ask questions electronically and to vote at polls. Although these possibilities for interaction were given, real interaction taking place was very limited due to the high number of participants. Therefore, many questions could only be answered after the webinar had finished. The learning effect experienced was very low.

After the webinar another seminar online on "Getting started with Microsoft Life Meeting" took place for another forty minutes. This time, there were only about 25 participants and many interactive possibilities were demonstrated such as writing or painting/sketching on the screen, chatting 1:1 with other participants, voting in a poll, suggesting a website to be presented for discussion.
To conclude, webinars are in our opinion more suitable for fewer participants as otherwise a webcast could do roughly the same job and the goal should be to allow interaction to take place which is very difficult to handle when there are hundreds of participants. Moreover, it is very essential that a webinar is prepared thoroughly as otherwise the learning effect can be

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[34] http://www.placeware.com/ .

neglected and the participant is most likely not left with a favourable impression of the event. The advantage of a webinar, therefore, is not so much to be able to address a huge audience, but to bring together geographically disperse people in a seminar type situation without having the effort to travel. Once a webinar has been conducted, it can be repeated an unlimited number of times to reach a wider audience as the preparation is already done and the material is there. The use of the channel webinar will be based on the need of professionals and companies for such an event.

Costs: For Microsoft Life Meeting costs vary depending on the member countries taking place in the webinar, the total number of participants and the length of the webinar. For instance, 10 seats can be bought for $750.00 per month which means that you can collaborate with 10 countries at once or one can base the pricing on actual usage per participant which would amount to $0.35/minute per user.

Time investment: initially very high

Impact: depending on quality of content and speakers, but a successful webinar can have a long-lasting learning effect on the participants.

Durability: similar to a webcast it is a durable channel as webinars can be recorded and then presented on the website. One has to keep in mind though that a recorded webinar would loose the interactive part which would turn it more into a webcast. Durability would exist for the prepared material as the material can be easily updated and reused also for organising other webinars.

F) Computer magazines

Target Audience and Content Considerations

The target group are professionals who search for and read information about developments of new technologies (in particular web technologies) in computer magazines. They become aware of and interested in REWERSE research, and they could be directed to the REWERSE website to check for more detailed information on results of REWERSE research.

The scope of the content of the magazines should encompass the internet and WWW related topics. Interesting for REWERSE is also the focus on technology and business.

The below list of magazines is not extensive, but provides an excerpt and working list. The examples for the magazines with a regional focus would have to be extended with examples from other regions in Europe. Additionally, information on the readership of the respective magazines still need to be collected.

Examples

Global and European focus

name	online	print	target audience	Reader-ship[35]
Network Computing (formerly DATACOM) http://www.networkcomputing.com/	v	v	worldwide – also European local sites	50.300
Computer (IEEE magazine) http://www.computer.org	v	v	worldwide	
Computerworld http://www.computerworld.com/computer/	—	v	worldwide – also European local sites	80.000[36]
Wired News http://www.wired.com/	—	v	worldwide	
PC Magazine http://www.pcmag.com/	v	v	worldwide – also European local sites	1.4 Mio[37] USA
InformationWeek http://www.informationweek.com/	—	v	worldwide – strong US focus	440.000[38]

Regional focus

Name	online	print	target audience	Reader-ship
Redes&Telecom	—	v	Spanish market	
01 Informatique	—	v	French market	
Internet Magazine (formerly PC Online)	—	v	German market	56.114[39]
C't	v	v	German market	385.000[40]
iX	v	v	German market	55.752[41]
IHK-Magazine	—	v	German market	100.000[42]
Computerwoche	v	v	German market	54.642[43]
Computerzeitung	v	v		58.435[44]
Informatie	—	v	Dutch market monthly to members of association (similar to DIA in Germany)	
Automatiserings Gids	—	v	Dutch market	
InfoWeek.ch	v	v	Swiss market	8.494[45]

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[35] The readership is expressed in numbers per printed copy.

[36] Source: http://www.computer.org/ .

[37] Source : http://www. heise.de/ .

[38] Source: http://www.informationweek.com/ .

[39] Source : http://www.editorix.org/ .

[40] Source: http://www.heise.de/ct/ .

[41] Source: http://www.heise.de/ix/ .

[42] IHK-Magazine Oberbayern, source : http://www.ihk-muenchen.de/ .

[43] Source: http://www.computerwoche.de/ .

[44] Source: http://www.fachzeitschriften-portal.de/ .

Infrastructure and Content Creation Aspects

Content can be provided to the above mentioned magazines as in the following:

- Press release about 2-3 times a year
- Press announcement for events
- Articles: authors for the articles can come from within the REWERSE community and also from outside the REWERSE community (it is advisable to have names recognised and accepted by industry). Therefore, it is important to identify relevant authors. For instance, authors of articles with a REWERSE related topic in one of the above mentioned magazines can be addressed. They should be supported content-wise by a REWERSE member for writing the article. The topic of the articles is REWERSE research and technologies or a more general topic including the REWERSE topic. The audience are professionals in industry and not the academic community. An incentive for the REWERSE members to write an article is the fact that an article in a computer magazine also counts as a publication for the author.

Evaluation

Computer magazines distribute fine-grained information about REWERSE developments. This method spreads awareness further than conferences and meetings because it encompasses a wider audience, but it does not offer a learning as intensive and effective as in workshops.

Computer magazines are one of the main information channels of IT professionals for information not directly related to their current project. Many companies subscribe to one or several publications of this kind, however not all of them read them. It is very important to reach all of Europe (the magazines and websites therefore need to have a European focus).

The Semantic Web topic has already been addressed in many of the magazines listed above. For instance, a very recent edition of the iX magazine[46] contained an article on Semantic Web and data extraction and another article on rule-based systems and processes. In general, it is a lot of work to get contact to the editorial staff of magazines. As professional magazines usually work with free-lance journalists, it might be easier to publish an article by providing an in-depth article which would have to be written by REWERSE members (or jointly with external journalists interested in Semantic Web topics)

Costs: no external costs, but costs would arise when PR agencies, who work with journalists and are paid by the hour, are contacted.
Time investment: high as contacts with journalists have to be made, high for writing an article
Impact: dependent on the fact if target audience is reached and articles are read, dependent also on the quality of the article and the reputation of the magazine. When topic becomes established in a magazine, the impact is very high.
Durability: durable as article can be stored. Many magazines also provide archives online and CD-ROMS /DVDs with stored articles to subscribers of their magazines.

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[45] Source: http://infoweek.ch/   8494 sold copies, print run 14 000.
[46] 7/2004.

G) Newspapers

Target Audience and Content Considerations

The target group are professionals interested in reading the sections knowledge, economics, technologies, events and news in newspapers.

Newspapers are particularly suitable for announcement of events (such as webcasts, workshops, awareness events)

Infrastructure and Creation Aspects

Press announcements for events or press release can be used. An additional option is to send an article to the contact person in the editorial office once a year about the advances achieved.

Evaluation

The target audience of a newspaper is usually quite general and only a small subgroup of the newspaper readers are the target group of REWERSE technology transfer activities. Consequently, newspapers are in particular useful for reaching awareness for REWERSE on a more general public level. One advantage of newspapers is that the attention can be immediately drawn to certain developments or events. To be able to advertise a REWERSE related event in a newspaper, it is necessary to provide a very good news story for the editorial staff to be interested in advertising for REWERSE.

Costs: no external costs
Time investment: high as contacts to the editorial staff have to be made
Impact: general public awareness
Durability: article can be stored, but is much less likely to be stored than an article in a magazine.

H) Press Releases

A press release serves the above mentioned media and has to be constructed according to press release guidelines. It is important to build up a good list of press contacts to magazines and newspapers. Besides sending press releases to the editorial office of magazines, they also should be sent to news agencies such as the dpa[47].

A press release needs to have news value to be taken-up by newspapers or magazines. News value is expressed in the following phrases:
REWERSE is the biggest….
REWERSE is the first….
REWERSE is desperately needed by most…(that is, in general words ending on "st")
Or facts such as ..% of research is devoted to… and ..% of companies are in need for…

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[47] http://www.dpa.de/ .

I) TV and Radio

Target Audience and Content Considerations

The target group are professionals who listen/watch research sections of the mass media programs TV and radio. As with newspapers, the target group is very general and encompasses a much broader audience.

There are potentially many programs about computer science and new technologies in which the results and capabilities of the REWERSE project can be shown. These channels can be a quick way to spread the awareness of REWERSE, as they are watched and listened by many people. As the audience is very broad, this channel is more suitable for creating awareness towards the REWERSE project on a more general public level.

Intermediate steps in REWERSE research would not draw enough attention to be included in the programs, but major steps in REWERSE research could be presented in the above mentioned programs and might justify the effort of using such a channel. Also the awareness events themselves could be broadcasted on TV. Another option would be to send an article about the advances achieved about once a year to the program directors of the respective channels.

Examples

Spanish radio station/channel: SER Program/ SER digital
Spanish TV station/channel: TV 2 Program/Redes
German radio station/TV channel: Bavarian broadcast/BR Alpha
English radio station/channel: BBC radio station/BBC world service and BBC radio 4

Evaluation

TV and radio channels can call the attention immediately to certain developments or events which makes them very suitable for promoting events and important developments. As they are mass media one has to select the programs carefully. Like newspapers the target audience is very broad and cannot be narrowed down. One can say that, in general, REWERSE´s topics are too special for the broad audience. Therefore, REWERSE would have to be one of many topics to draw enough attention. For instance, REWERSE could be a subtopic of the broader topic "Semantic Web". One of the advantages of TV and radio are that they are lively means of presenting REWERSE by showing faces/voices.

Costs: no data available yet (will be evaluated when relevant)
Time investment: high
Impact: reach of a lot of people, but not very specific regarding the target audience and no interaction with the audience
Durability: no durable channel as one-time event, but can become durable when recorded

J) Flyers and Posters

Target Audience and Content Generation

Target audience are professionals at conferences, fairs, and other events. Flyers can also be sent to selected companies or downloaded in digital form from the website. Furthermore, posters and flyers can be exhibited or put up at other organisations/companies.

Regarding the content, flyers should give a good overview of REWERSE and contain information which draws the interest of companies: what is REWERSE about, who is REWERSE, statistics about performance and relevance of research, challenges and results in research, why companies should be interested, what they can gain, how they can get involved and where they can find more detailed information. From their visual appearance, flyers and posters need to be appealing to draw attention.

For more specific target groups and events, it would be sufficient to produce a very limited number of flyers tailored directly to the specific target group/event. For such a situation, A4 pages can be designed and used as flyers or fact sheets which can be distributed. Those pages should contain information on: what is REWERSE, an image with the topic "the network for you", statistics and numbers supporting the importance of REWERSE and a reference for receiving further information.

Examples

1st flyer produced in March 2004[48] and distributed at the CeBIT '04, Semantic Web Conference '04, Bioinformatics '04 and the European Business Rules Conference '04.

Evaluation

Flyers have visual appeal and are something people can hold in their hands and take home.

Costs: moderate (costs for the 1st flyer: costs for professional designer 200 Euro and costs for printing, which depends on paper quality, printing technique and print run, but is on an average 50 cent per flyer)
**Time investment:** depending on the scope and the type of information included in the flyer or poster. In general moderate (1 week), less when there is enough information available
Impact: good when contacts have been made and the purpose of the flyer is to provide the contact person with more information
Durability: durable to some extent as flyers can be kept by addressed professionals/ researchers and digitalised copies can be downloaded from the website. Furthermore, flyers can be used on several occasions. In general, however, flyers are not kept for a long time and they need to be updated for which new flyers need to be produced.

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[48] Download at http://rewerse.net/TTA/Documents/rewerse%20flyer-low.pdf .

2.2 Face-to-Face Channels
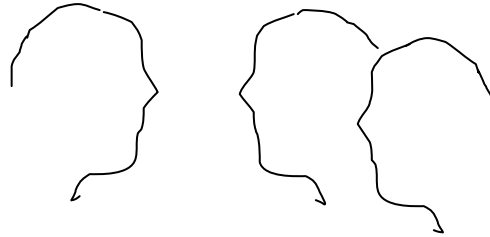
A) Presentations and Workshops at Conferences

Target Audience and Content Generation

The target group are professionals in companies who are interested in a specific topic related to REWERSE research. As a conference participant they are looking for new technologies for research and development projects, they want to get to know the state of the art, they hope to learn something interesting and relevant for them, they want to get to know people, they want to network and they want to promote themselves.

The preferred conferences are the ones strongly focused on business issues and companies. These conferences in general do not have a separate industry track as they are industry conferences per se. The average length for a presentation has to be limited to about two hours and involve practitioners (hands-on-exercises if possible and start from bottom-up). The specific content of a presentation is dependent on the particular target group present at the conference. Executives and managers need different information than software developers. Possible are also demonstrations of REWERSE technologies during a presentation, in a workshops and at a stand. We should also keep in mind that it is advisable to take into account companies like LibRT, LIXTOR and Telefónica as they have experience with courses. External course providers and speakers should be involved whenever possible.

The goal of using the channel "presentations and workshops at conferences" is to provide a more intensive learning experience , to network and to get feedback from professionals.

Examples

2004	2005
EBRC[49] ´04 June 16-18, Amsterdam, NL	EBRC ´05 Amsterdam
KM Europe[50] '04 Nov 8-12, Amsterdam, NL	KM Europe ´05
(EWIMT [51]´04 Nov 25-26, London, UK)	EWIMT ´05
XML Days Berlin ´04	XML Days Berlin ´05, XML Europe '05, XML Open ´05
	ISWC[52] '05 Nov 6-10, Galway, IRE
	OTM[53] '05
	ESWS[54] '05
	DEXA[55] '05

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[49] European Business Rules Conference.
[50] Knowledge Management Conference.
[51] European Workshop on the Integration of Knowledge, Semantic and Digital Media Technology.
[52] International Semantic Web Conference.
[53] Federated Conferences.
[54] European Semantic Web Symposium.
[55] International Conference on Database and Expert Systems Applications.

We participated in the EBRC '04 and evaluated our possibilities of using this conference as a promotion channel in the year 2005. Presently, our efforts are concentrating on the possibility that REWERSE members give a presentation in the section "techniques and technologies" (the state of the art of business rules technology and methodology: the track includes case studies of applying business rules technology in user organisations). The presentation can be based on two parts: Business rules (something practical and relevant for companies) and the add-on Reasoning/Semantic Web. It would be necessary to demonstrate then why the additional feature Reasoning/Semantic Web makes sense and is profitable. Most effective is the possibility to make contacts on such an event. Business people inform themselves on new developments on an event such as the EBRC and cooperations and joint projects develop based on personal contacts. Presently there are mainly ideas for use cases developing out of the contacts. The prospective companies and the relevant REWERSE members for the development of the use cases will be contacted to start the development of the use cases. Furthermore, it is very important to keep regular contact to the relevant companies met at the conference. In the coming months a more concrete plan for a participation at the EBRC '05 has to be elaborated in cooperation with relevant REWERSE researchers.

For the other conferences listed for 2004 and 2005, the possibilities of participation also need to be evaluated. Most likely these will presentations and/or workshops/tutorials, but some of the conferences will only be used as a channel for networking, which means that a TTA representative (maybe together with a REWERSE researcher) will participate at the conference without submitting a paper. In such a case, contacts are made and information is distributed in the form of flyers. The final decisions for taking part in the listed conferences will be taken in due time.

Currently, we are also trying to identify other relevant events/industrial conferences/fairs focused on industry. Conferences touching the sectors telecommunications, bioinformatics/ pharmaceutics, E-learning, financial and insurance sector, mobile computing and E-government would be particularly interesting for REWERSE as these areas were identified as interesting sectors for application scenarios for REWERSE (ref. Chapter 1.1). Potentially interesting are also conferences on industrial hot topics such as information retrieval, Web services, interoperability, security and compliance with legal regulations. For identifying the relevant conferences and events, company feedback is necessary and shall be sought in the following months. The goal is to identify two to three business relevant and REWERSE suitable conferences/events/fairs by the end of the year 2004 as further possible channels. Among all conferences identified, the most promising conferences will be selected for dissemination purposes.

Evaluation

Presentations and workshops are not a mass medium. Therefore, one can only embrace a limited number of people. Nevertheless, they are a very good way to promote the implementations of REWERSE technology as presentations and workshops when well-done are very intensive and effective in terms of knowledge learnt by the audience. The intensity of the contact and the possibility to meet the target audience face-to-face provides a good background for networking and for gaining feedback. Due to the high time investment, the use and effectiveness of conferences as dissemination channels have to be considered carefully and need to be weighed against other dissemination possibilities.

Costs: travel expenses are the minimum expenses, often there is also a conference fee which need to be paid (the fee is particularly high for business oriented conferences). Costs for a stand at a conference amount to 3-4 K Euro minimum.
Time investment: high (for organiser TTA and REWERSE member delivering content)
Impact: in general high due to the intensity of the contact
Durability: durable influence past life-span of project when contacts are fostered. Information is distributed via people. Seminar or presentation content can be reused at another event.

B) Presentations and Workshops at IT related Organisations

Target Audience and Content Consideration

The idea behind presentations and workshops at IT related organisations is to profit from the experience from other organisations. An important aspect is that the target audience of a specific event of an IT related organisation matches the target audience of REWERSE. If that is the case, the good reputation of another organisation can be used for promoting REWERSE.

Examples

DIA Informatik Akademie (Germany): further education for information science professionals in industry
Focus Conferences (Netherlands): conferences and seminars on business topics
LogOn (Germany): creation, promotion and execution of IT events such as the LogOn info days on the topics web services, XML, SAP, etc. in Europe and worldwide

Evaluation

The DIA Informatik Akademie has a very good reputation in Germany and therefore is a good channel for promoting REWERSE research, but its range is limited to Germany. The LogOn info days, in contrast, are so far not very promising as a promotional channel as at past events such as the XML days on the 17th of June in Munich, only few companies were present. IT related organisations in other European regions have to be identified. Feedback from companies and contacts to other IST projects and organisations in Europe will support the identification process. The channels of IT related organisations are of particular interest as we assume that these channels are more frequently used than conferences by industry professionals.

Costs: travel expenses
Time investment: organisational time investment by TTA and the time investment for the provision of content by REWERSE member who leads the course/tutorial are high
Impact: high as intensive learning experience
Durability: durable when topic is established and seminar content can be reused at other events.

C) Stands and Presentations at Fairs

Target Audience and Content Consideration

Target audience are professionals who want to get an overview of new technology developments. Depending on the topic of the fair, particular industry sectors are addressed. For instance, ICT fairs address professionals in the telecom and information technologies field. At fairs the progress and advantages of REWERSE technologies can be made visible by providing demonstrations of REWERSE technologies and short presentations.

Examples

CeBIT (18-24 March 2004, Hannover, Germany; annual trade show for information and telecommunications technology) = world wide focus
SIMO TCI (09 – 14 Nov. 2004, Madrid; Spain's international Office Equipment Show on computers, telecommunications, computer networks, multimedia technologies). = regional focus
Systems (18-23 Oct. 2004, Munich, Germany; business to business fair for IT, media and communications. The fair "Internet World" is part of the Systems.) = regional focus

Evaluation

ICT fairs are a good dissemination channel for the fields which the REWERSE project covers. Many professionals visit the fairs as the fairs are very business orientated and focused on practical issues. Consequently, the fairs offer a good chance to spread the awareness of the REWERSE project. The fair locations Hannover and Munich are suitable as a number of project members are located there, but also other European locations will be considered. Regarding the fair audience, one has to keep in mind that the audience is rather broad and not as focused on a particular topic as on conferences. Furthermore, the projects and information offered on a fair such as the CEBIT is overwhelming and the effort to draw attention is higher than on smaller scaled events. As fairs are focused on practical and business relevant issues, the best chance and time to use the fairs for promoting REWERSE results is when prototypes and technologies are developed within REWERSE which can be demonstrated. Additionally, fairs offer a good opportunity to contact representatives of companies directly. Therefore, fairs can also be used for networking.

Costs: very high when proper stand of one's own is considered as costs can amount to several thousand Euros (a 15 square meter classic stand at the Systems costs € 5k – 6k). Therefore, it is more feasible to be part of a joint stand (at the CeBIT ´04 REWERSE was presented at the stand of the participant Learning Lab Lower Saxony, Hannover). A joint stand has its advantages as a prestigious partner will draw the attention of the visitors to the respective stand.
Time investment: high as investment into flyers and other promotional material need to be made, time for travelling and being present at stand (time investment for having presentations are a lot higher), high for preparation[56] and wrap-up.
Impact: dependent on the contacts made and the effort put into preparation and wrap-up.
Durability: promotional material and networking is durable, but otherwise channel is not durable.

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[56] Professionals from companies have to be invited to visit the stand before the fair starts.

D) Events

Target Audience and Content Considerations

The goal is to attract attention of foremost industrial but also academic communities. In particular, potential partners from outside REWERSE shall be attracted to contribute to our work and thereby spread the ideas. One can distinguish between one-day awareness events at one location and road shows which are one-day events taking place at different times at different locations in Europe that combine a variety of presentations with demonstrations of technologies. Depending on the scope of the events, a road show might involve a lot more work, but in cooperation with other Networks of Excellence the costs and effort can be reduced. There is also the question if an event should be associated with a major conference such as the ISCW on a more international level or if the event should constitute a stand-alone event on a more local level. In the latter case, the event would mainly serve to attract local companies.

The REWERSE content available for the Awareness Events are the following:

Awareness Event I: 1-3 specific deliverables in REWERSE work-packages are presented as challenges and solutions obtained so far in the course of REWERSE (plans and achievements on tangible instances of problems and solutions). Speakers from companies will be included.

Awareness Event II: REWERSE deliverables different from the Awareness Event I are presented as new challenges, report on the developments on the front of challenges introduced by Awareness Event I and solutions obtained so far in the course of REWERSE for novel challenges. The second Awareness Event also gives the floor to companies for presenting their solutions and ideas related to REWERSE

Awareness Event III: REWERSE deliverables different from the Awareness Event I and II are presented as new challenges, report on the developments on the front of challenges introduced by Event II and the solutions obtained so far in the course of REWERSE for the novel challenges. Awareness Event III gives increasingly floor to partners from companies and the public for presenting their solutions and ideas related to REWERSE.

Evaluation

As with conferences, events are a very good way to promote the implementations of REWERSE technology as they are very intensive and effective in terms of knowledge learnt by the audience. The intensity of the contact and the possibility to meet the target audience face-to-face provides a good background for networking and for gaining feedback. Contacts to companies have to be made prior to the event so that they have a higher incentive to participate in the event.

It is important to note, that an awareness event does not need to be a localized event as web casts or major articles in a magazine could also be defined as an awareness event. Based on the feedback from the first awareness event, the forms for the next events will have to be decided.

Costs: depending on the scope of the events, the costs will vary. In general, the cost will be higher than for any other promotion channel. The costs for promotional material, organisation of the event, infrastructure such as rooms, catering and additional staff for organising the

event are necessary and need to be covered. The costs can be reduced when the infrastructure of a participant can be used, but extra funding will always be necessary.

Time investment: very high

Impact: high as event is based on intensive contacts and is learning intensive

Durability: durable when presentations are recorded and presented digitally afterwards. Furthermore, the events are a good means to foster contacts.

Draft Plan for Awareness Event I

Goal: Awareness and Interest

The focus is on creating interest for REWERSE research by focusing on REWERSE results and challenges. Cooperation with other Networks of Excellence/organisations is aimed for. Cooperation with local institutions is necessary. The objective of the event is to attract local companies and to exert an European influence.

Content: focused on state of the art, uses cases, goals (vision for industry), challenges (and results so far obtained in REWERSE). The topic of the event should also encompass a broader scope such as Semantic Web and/or more company focused topic.

Time: October 2005

Overview of the deliverables provided by REWERSE community by the time of Awareness Event I:

- I1: First-version visual rule language, first-version controlled English rule language, first version rule markup languages, (beginning Rule modelling tool)
- I2: State of the art in rule-based policies, Policy language specification, ACE parser extension for rules, (beginning automated negotiation mechanisms and ACE parser extension for simulation)
- I3: Composition Technology for web Reasoning, Types for Web Rule Languages: a preliminary study, combining rules and ontologies: a state of the art survey, types for REWERSE reasoning and query languages, (beginning: prototype component models and composition technology toolset for integration of logic-programming-like REWERSE languages)
- I4: survey over existing query and transformation languages, identification of design principles, development of uses cases (12^{57}), initial specification of the language declarative semantics, (beginning: initial specification of the syntax of the language and the main principles of a language processor) COOPERATION with I5!
- I5: state of the art on evolution and reactivity, use-cases on evolution (12), uses-cases on reactivity (12), (beginning models to deal with evolution and definition of syntax for reaction rules and initial specification of the main principles of a language processor)
- A1: Geotemporal reasoning: basic theory, geospatial reasoning: basic theory (12), appointment scheduling system: requirement specification, (beginning appointment scheduling system: general system design and topical reasoning: systematics)
- A2: Summary of the state-of-the-art, usage of bioinformatics tools and identification of information sources (12), (beginning requirements and specification of use cases)
- A3: adaptive functionality I, personalization: scenarios and requirements, personalized portal REWERSE: scenarios & requirements, (beginning adaptive functionality II, personalized portal REWERSE: prototype)

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[57] Month for submitting the deliverable.

Location (stand-alone event):

The objective of a stand-alone event is to attract local companies and to exert a European influence. Essential is the possibility to organise something together with local organisers. Therefore, it is necessary, in particular for the first awareness event, to find a location where a participant involved and/or interested in transfer technology activities is present. Relevant criteria for choosing the location are:

- concentration of companies as described in the target audience section (ref. chapter 1.1).
- innovative regions regarding cutting-edge technologies
- good scientific infrastructure (which entails links between industry and research institutions)
- concentration big enough to have a European influence
- good infrastructure in terms of transportation, rooms and accommodation
- participant is located there who can give support for the organisation of the event and provide infrastructure for the event
- attractive location to draw the interest of companies which are not directly located at the particular location

Considering the given criteria our choice is presently concentrated on the options Dresden, Zürich, Hannover and Munich. In Dresden there are two working group coordinators located and support for transfer technology activities is possible. Furthermore, Dresden is an innovative region, but further information on the clustering of industries in that area has to be collected and evaluated. Another option and attractive location for an event is Zürich. Support could be provided by local organisation such as the Greater Zürich Area AG. In Hannover there would be support and infrastructure provided by the Learning Lab Lower Saxony. The fourth option is Munich as many REWERSE members are located there including the TTA group and Munich provides an excellent location in reference to the criteria listed above. The final decision for the location will be taken in September 2004. The involvement of other partners will also have an influence on the final choice of the location for the event.

Locations considered for events in the following years are: UK (London, Edingburgh), France (Ile-de-France), Spain (Madrid or Barcelona), Italy (Venice), Poland, Czech Republic and Sweden.

The following program could be offered at the events:

- Presentations, demonstrations, exhibitions, workshops/tutorials
- Panel discussion: present visions and challenges

To enhance the attractiveness of the events, it is important to have interesting speakers. For this purpose a list of potential speakers for presentations and the panel discussion has to be assembled in the coming months. Companies to which contacts have been made so far will be invited.

An additional/alternative event considered is the alignment with a major conference on a more international level. Possibilities are the KM Europe '04 in Amsterdam, the International Semantic Web Conference (ISWC) ´05 in Galway, Ireland, the EBRC ´05 in Amsterdam or the XML Europe`05. The advantage of the ISWC is the possibility to align our activities closely with our cooperation partner KnowledgeWeb. In contrast, the other conferences are more promising with respect to participation from the industrial side. In the coming months

the given possibilities have to be evaluated and final decisions will be taken in September/October.

E) Presentations and Consulting for Companies

Target Audience and Content Considerations

Presentations and consulting can be offered to professionals providing a solid business case and interest in REWERSE research. Contacts with these professionals have to be built up well in advance. A potential target group are also researchers in companies who are already in contact with researchers in the REWERSE community. Presentations and Consulting will be offered for companies only on demand.

Evaluation

In a lot of companies, particularly consumers of technology, concrete knowledge transfer is done very often through consulting. Therefore, consulting is a very suitable channel for disseminating knowledge about REWERSE.

Costs: for consulting, companies can be charged which could even yield gains.
Time investment: high
Impact: high when close cooperation results from consulting
Durability: durable when contacts are fostered

F) Networking

Target Audience and Content Considerations

Networking, that is building up a network of contacts, is very vital for technology transfer activities as networking facilitates many activities. The task of TTA is to build up good contacts to researchers within the REWERSE community, to professional in companies, to contact persons of the respective channels and contact persons from other projects and institutions. Also very important is the fostering of relationships with other organisations such as the Gartner Group, Fraunhofer Gesellschaft and W3C as these organisations can be very helpful concerning technology transfer activities.

The task of TTA is also to encourage researchers to network. The more researchers are actively engaged in technology transfer activities, the greater is the impact. There is the simple rule that more people can achieve more[58]. Guidelines and advice can be offered to researchers to encourage this process. Consequently, there must be a high interest of TTA in creating awareness among the REWERSE members for the engagement in technology transfer activities.

The main means to network are face-to-face meetings, but contacts always also have to be supported by other means such as phone and e-mail.

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[58] Of course, there are exceptions to the rule, but in the context of networking the above mentioned rule is particularly applicable.

Evaluation

Personal contacts are very essential for starting cooperations. The best forum for networking are conferences, fairs and events. Personal contacts also guarantee a high impact.

Costs: travel expenses and costs for communication media (e.g. phone)
Time investment: high
Impact: high
Durability: high when contacts are fostered.

2.3 Synopsis – Preferred Channels for Technology Transfer

As the task of technology transfer consists in creating a dialogue between industry and REWERSE research, the informal, that is, more personal channels gain in importance. A preferred channel is therefore **networking** which presupposes among others the participation at IT related and for REWERSE relevant application focused events. As the goal is to foster cooperations and to include feedback from companies, the quality of the contacts made plays an important role. Important in this context is also the **awareness event** which will be organised by TTA in the year 2005.

As business orientated events look most promising regarding technology transfer activities**, business focused events and seminars** organised by companies and IT organisations are potential good channels for promoting REWERSE. For instance, REWERSE workshops could be offered through organisations such as the DIA in Germany. Also the use of **newsletters provided by companies** and well-known IT organisations are potentially promising channels. Additionally, the presence at relevant business focused **conferences and fairs** will be considered. For the year 2004 the focus lies on the European Business Rules Conference, KM Europe, CeBIT and SYSTEMS.

To create broader awareness, the **website and its visibility** on the Web are considered very important and have to be build up over the first year. Industry relevant material will be distributed through the website as well as **flyers, fact sheets and posters** of REWERSE, which will be created and distributed in print and digital form. A further essential measure for broader awareness are **articles in professional magazines** such as Computer, Computerzeitung and InfoWeek.ch and the issuing of **press releases**.

From the second year onwards, channels such as an **e-mail newsletter** in simple text form and **webcasts** will be considered. While a newsletter can be created without a lot of effort, a webcast requires more time and money investment. In this respect, the experience and support provided by the Learning Lab Lower Saxony can be very valuable for TTA and make a webcast feasible. Based on the experience from the first and second year, the use of dissemination channels and the promotion strategy have to be evaluated and adapted to insure successful technology transfer activities.

3. Plan of Content Creation for Dissemination Purposes

The content for dissemination mainly has to come from the REWERSE community. With increasing time the content will also be sought from contact persons such as professionals in companies and researchers outside of REWERSE.

Requirements for the content creation for technology transfer activities:
- we (=TTA)[59] need to be informed about new developments
- we need to be informed as early as possible
- relevant documents besides the deliverables created have to be sent to us.

The information is there, but the vital step is that the REWERSE members have to make the additional effort to inform us. Most likely, even a central storage place will not solve this problem as REWERSE members still need to put the information into the central storage place which might be different from the place where they store the documents usually. In technology transfer the disparity between information needed and information available is a general issue which needs to be solved.

Consequently, it is important that we build up good relations to vital key players within REWERSE. Key players are those people who have very good access to the information within their working group and are interested in cooperating with us. Consequently, our access to information depends on our contact to those key players. The personal level is important in this respect. To reach this goal, we have to make ourselves known and transmit a positive image of ourselves as TTA. Furthermore, REWERSE members have to notice the usefulness and the need of informing us. Hence we have to inform them about our work and the benefits for them. In fact, it is very essential that REWERSE members see the benefits they gain by contributing to technology transfer activities. In this sense, the fact that technology transfer activities are a way to promote themselves plays an important part. Moreover, particularly for younger researchers industry experience can be a necessary part of their career.

Our contact means to REWERSE members are mail and phone and more rarely face-to-face, but we should use as many possibilities to meet them in person. For instance, we can attend working group meetings and demonstrate there our interest in their work. Therefore, during the first year a big emphasis of the TTA work lies on setting a basis for our work by fostering relations with REWERSE members.

As the Project Manager[60] needs contact persons within REWERSE and needs to be informed about important developments as well, there is an overlap with our tasks. PM receives from all working groups a report every two months. The report has two sections: 1. formal aspects such as personal changes, 2. work and developments. The second section "work and developments" will be published on the internal REWERSE page. The goal is also to have developments and highlights coming up between two reports to be send to PM and TTA as soon as possible. Both, PM and TTA, therefore need contact persons (minimum 1 per working group) who can provide the information promptly and reliably. Most likely, these will be the coordinators and deputy coordinators of the working groups, but depending on the structure of the working group also other members of the working group might be appropriate

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[59] In the following the pronouns us and we refer to TTA.
[60] In the following referred to as PM.

contact persons. To create synergies, PM and TTA collaborate and make use of each others contact persons and the information received.

Information gathered can be distributed across the REWERSE community to get feedback and push motivation. Once a new Semantic Web method or technology is developed it should be spread. Each time a new result is achieved, the following actions lines are carried out: PM and TTA receive information and spread the information across the REWERSE community. Feedback is collected and TTA disseminates the methods and technologies to industry outside of REWERSE. Feedback provided by industry can be directed towards TTA and PM, the REWERSE community/specific working groups and the results. Any feedback received by TTA will be forwarded to the REWERSE community/relevant working groups. The following graphic visualizes the above described process of information distribution.
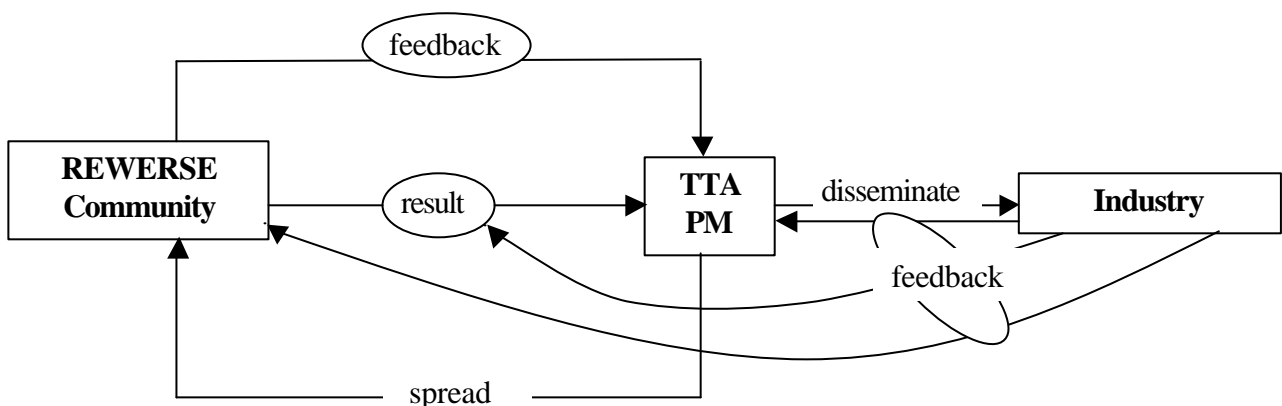
As mentioned above, with progressing time, content contributions will be sought increasingly from industry. Researchers/professionals from industry can be speakers at events and conferences and also deliver content for publications. Consequently, they will be integrated more intensively in the content creation cycle.

The internal channels and contacts for receiving information on results and developments within the REWERSE community have to be developed within the first year of REWERSE and need to be improved over the course of the project. Regular reminders "Are there any new developments/news in your working group?" have to be communicated to the contact persons at monthly intervals. Additionally, there will be specific requests. One example for such a request is a call for demonstrations of REWERSE technologies. These demonstrations of applications of REWERSE technologies are, for instance, needed for presentations at a stand. For TTA it is important to have a repository of these demonstrations to be able to decide quickly if to become active when a situation for dissemination purposes lends itself as a platform for promoting REWERSE. Another example for requests is asking for fact sheets on the work done in the different working groups. These fact sheets can be used at conferences and other events.

In a future scenario, one could imagine that the results are fed by REWERSE members into a content management system/portal and from there the results are distributed to PM and TTA and spread over the REWERSE community. Nevertheless, personal contacts to REWERSE members will most likely always be necessary and constitute an important part. Experience also shows the more targeted the questions are at the e-mail recipient and the more specific

they are, the more likely it is to get feedback for an e-mail request. Very useful are also phone calls as with a phone call the respective REWERSE member is very concretely addressed.

Current technical infrastructure for the internal channel:

- Protected area on the TTA website for communication purposes: requests for work contributions (important requests can also be put onto the REWERSE website), TTA work plan, material for download
- Cooperative tool for content creation and dissemination within the REWERSE community: Subversion, an open source-version-control system designed to supplant CVS. Subversion is used with a WebDAV interface. As it is also important to be able to attach notes to the documents, additional tools, such as provided by some word processing programs for attaching notes to components of the documents, are encouraged to be used as well.

Examples for content creation for dissemination channels:

For publications in magazines TTA has to check which topics could be relevant[61] and at the same time monitor the developments within REWERSE. Then TTA has to find writers for articles (REWERSE internal or external researchers or professionals in companies). A good guideline is to monitor and be therefore aware of writers of articles to REWERSE related topics in magazines such as listed in chapter 2.1 F.

Press releases are written by TTA in cooperation with a selected member of REWERSE. While REWERSE members are delivering the content, TTA is giving support in presenting the content.

Similar scenarios are conceivable for other channels (such as webcasts, flyers, talks, workshops).

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[61] This can be done by monitoring the topics coming up in professional magazines.

4. Cooperation with other Networks of Excellence

The goal of cooperation is to maximise impact and reduce efforts by creating synergies. Cooperations can be considered when one of the following two criteria are valid:

1) The potential cooperation partner has a closely related aspect of their research, that is, the basis technologies overlap. Such a case exists with CologNet, an FP5 program and their experience might be very valuable for REWERSE. Other examples are KnowledgeWeb, Agentlink III and Acemedia which also have reasoning aspects in their research.

2) The project of the potential cooperation partner addresses an application domain which is of interest for REWERSE. The domain could be, for instance, bioinformatics or personalisation. On a more general level, cooperations are always of interest when through the cooperation a combination of aspects can be offered to the target audience which would be of interest for them.

The following activities could be organised jointly in cooperations:

- **Joint events**
  Effect: costs and effort $\downarrow$ impact$\uparrow$
  Topics are more comprehensive (-> audience is wider)

- **Joint flyers**
  Effect: costs and effort $\downarrow$
  Demonstration of cooperation and distribution to a wider audience

- **Joint articles/Press release**
  When more than one cooperation partner sends an article/press release to a magazine, the topic gains more importance and it is even possible that the magazine devotes a whole section or issue to a REWERSE related topic.

- **Sharing industry contacts**
  By sharing industry contacts each cooperation partner gains contacts.

- **Sharing experience**
  By sharing experience and exchanging information on best practices each cooperation partner can profit from a bigger pool of experience in technology transfer activities. The important issue is to find out which activities and which channels work and which do not work in respect to industry.

Our key cooperation partner for technology-transfer activities is KnowledgeWeb. KnowledgeWeb and REWERSE can cooperate on many levels including the deliverable T-D2 on the industrial education infrastructure. While these cooperations are strongly encouraged on both sides, it is important to note that both Networks of Excellence have different needs and a different focus. KnowledgeWeb is more advanced in its research phase and is therefore more focused on outreach activities. For REWERSE research is still in an earlier phase. Therefore, outreach activities are not yet as advanced and have a different character than for KnowledgeWeb. Nevertheless, industry contacts and feedback have to be integrated into REWERSE research as much and as soon as possible, as feedback is necessary for research, in particular when the focus is on creating useable technologies for industry.

Regarding specific cooperation activities, presently joint events (in particular the Awareness Event I) and joint flyers are under discussion.

The experience with KnowledgeWeb is guiding further cooperations with other Networks of Excellence, Integrated Projects and other institutions. To evaluate potential cooperation partners, the different projects have to be analysed in reference to the above given criteria. To be able to judge the overlap on basis technologies, the relevant REWERSE members have to be identified for judging the overlap. An important issue is always that the cooperation is effective and leads to lower costs and effort and to higher impact.

Acknowledgement

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