User Requirements and Specifications

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**Document description:** This deliverable provides an overview of results and activities executed during the user requirements survey period.
D7.1: User Requirements and Specifications

History

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Authors List

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Executive Summary

This deliverable provides an overview of the results and activities implemented during the user requirements survey period, covering the first six months of the SYNC3 project. As part of Task 7.1, example scenarios were developed, aiming to provide potential users with a good understanding of the intention, functionality and use of SYNC3. An on-line questionnaire survey was compiled, and several focus group discussions and structured interviews were organised to collect feedback and opinions, which would better identify the necessary features of the system.

In addition, monitoring of already existing systems and projects relevant to SYNC3 has begun, aiming to help the consortium identify the project’s unique positioning. Furthermore, initial exploitation activities were carried out, as part of the communication with the targeted user groups.

A SWOT analysis and overview of key issues were prepared based on the analysis of all quantitative and qualitative data in order to identify and highlight the key fields of focus as suggested by potential users.

This overview of User Requirements and Specifications will serve a crucial role mainly during the user interface development and prototype testing.
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<td>UI</td>
<td>User Interface</td>
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<tr>
<td>SWOT</td>
<td>SWOT Analysis is a strategic planning method used to evaluate the Strengths, Weaknesses, Opportunities, and Threats involved in a project.</td>
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<tr>
<td>Prototype</td>
<td>The result of project activities or processes. It may include service, hardware, processed materials, software or a combination thereof</td>
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1 Introduction

One of the critical success factors in the development of a high quality on-line software application is the deep understanding of the user real requirements, as opposed to perceived ones. This is where many projects fail; they do not correctly identify what the system should do, with respect to what the targeted users require and what the respective innovations should provide.

The user requirements survey and analysis is the process by which user desires, needs, and expectations are gathered in order to establish what users will actually use the application for.

Essentially, user requirements analysis [1] is about setting the baseline for developing the application and refining it as the implementation is in progress, so that it meets customer needs.

A user requirements survey can therefore be difficult because:

- The developers are not the final users, and ICT specialists typically find it hard to understand the real needs of the non-ICT enabled people
- Inadequate requirements information may be collected from users
- Each individual type of user may have their individual requirements, but cannot define the overall system requirements
- Users do not know what the particular system can and cannot do
- Too many "nice-to-have's" that would not actually be used

Once identified, user requirements effectively lay the foundation for developers, testers, and implementers to begin determining the functionality, responsiveness, and interoperability required for that system.

Unfortunately, many people consider gathering user requirements as a waste of time. However, the strategy is crucial to a project's success for developers and project managers to obtain accurate user requirements, as well as increase the level of end-user involvement in the project.

In light of the above, this deliverable is structured as follows:

- Section 2 introduces the available methods for capturing user requirements, which were used in the course of the SYNC3 project to accomplish the relevant activities.
- Section 3 presents the profiles of the potential users of SYNC3 who were also targeted during the user requirements survey.
- Section 4 describes the initial exploitation activities carried out as part of the user requirements survey.
- Section 5 includes an explanation of the SYNC3 example scenarios prepared as the basis for the user requirements survey. (Full text of the example scenarios is part of the Annexes.)
- Section 6 describes the results from the questionnaire, which was distributed for gathering user opinion on SYNC3.
- Section 7 analyses the results collected from the conduction of interviews with the various focus groups.
- Section 8 describes the activity of monitoring existing systems and projects relevant to SYNC3.
- Section 9 provides a brief summary of the collected user feedback.
- Section 10 highlights the consortium next steps based on the collected user feedback.
- Finally, at the deliverable annex, detailed information related to the user questionnaire and focus groups are provided.
2 Methodology

2.1 Expectations

A fundamental challenge for technology-oriented enterprises is to meet customer and/or user expectations, when developing applications and services. Due to strong competition, a successful approach should be the design of applications on the basis of the current state-of-the-art. In this direction, user requirements analysis is the foundation of a user-centred approach, creating applications that appeal to and meet user needs at the closest level.

User requirements analysis provides precise descriptions of the content, functionality and quality demanded by prospective users. For the identification of user needs, the user perspective must be assumed and result in:

- Functional requirements (what the users want the system to do)

  The goals that users want to reach, and the tasks they intend to perform with the new software must be determined. By recognizing the functional requirements, we understand the tasks that involve the abstraction of why the users perform certain activities, what their constraints and preferences are, and how they would make trade-offs between different software applications. The important point to note is that WHAT is wanted is identified, and not HOW it will be delivered.

- Non-functional requirements (the restrictions on the type of solutions that will meet the functional requirements)

  Specification of non-functional requirements includes the categorization of users (professionals and personal users), the description of user characteristics, such as prior knowledge and experiences, the possible special needs of professional (journalists, editors, etc) and personal users (bloggers), their subjective preferences, and the description of the user environment, in which the product or service will be used.

Legal issues, intellectual property rights, security and privacy requirements are also an issue.

2.2 Methods for User Requirements Survey

Methods such as observation, interview, document analysis, focus group and analysis, check-lists or questionnaires can be used for the collection of user requirements.

Different requirements analysis methods can be applied in parallel to complement each other in order to yield more effective results.

For carrying out the process of requirements identification and analysis, a variety of tools can be used in a complementary way. These tools are listed together with their benefits and drawbacks in the following:

- **Example Scenario – Use Cases**
  - **Description:** Detailed realistic examples of how users may carry out their tasks in a specified context with the targeted system.
  - **Benefits:** They can bring user needs to life and explain their vision about the future application.
  - **Drawbacks:** They may raise expectations too much and over-simplify the application.

- **User Surveys – Questionnaires**
  - **Description:** A set of written questions to a sample population of users. Surveys and questionnaires can help determine needs, current work practices and attitudes to the new system ideas.
  - **Benefits:** Relatively quick method of determining preferences of large user groups. They also allow statistical analysis.

- **Example Scenario – Use Cases**
Drawbacks: These methods may not capture in-depth comments and may not permit follow-ups.

- **Focus Groups – Interviewing**
  - **Description:** This technique brings together a cross-section of users in discussion group/multiple interviewing formats. Series of fixed questions with scope for the end users to expand on their response. A useful method for requirements collection.
  - **Benefits:** Allows rapid survey of a wide variety of user views and allows quick collection of ideas and concepts.
  - **Drawbacks:** Recruitment effort to assemble groups. Dominant participants may influence group disproportionately and some opinions might be suppressed.

- **Monitoring of Existing Systems**
  - **Description:** Comparison of expected product with existing systems.
  - **Benefits:** Effective in identifying current problems, possible new features and acceptance criteria.
  - **Drawbacks:** This method may lead to including too many new functions or make system too similar to a competitor’s one.

A mix of all above mentioned methods was employed in the SYNC3 user requirements survey in order to collect data from various target groups with different backgrounds and from different localities. Implementation details and results are described in the next sections.

### 2.3 Effectiveness of User Requirements Analysis

The effectiveness of user requirements analysis in the beginning of a development project depends to a large extent on the type of project.

Collecting user requirements for potential consumer products requires much effort, and the risk to fail is still very high. As long as consumers have no idea of the innovative product or service, it will be very difficult for them to state their needs. Creativity of designers is required for the transfer of user requirements into innovative consumer products.

For the development of professional applications, precise analysis and identification of user requirements is essential. Professionals often are available to perform the tasks under investigation.

Task analysis is obligatory for the development of safety critical applications. A characteristic of safety critical work domains is that tasks and procedures are precisely defined before new support tools are built. This is a good precondition for the specification of functional and non-functional requirements.

User requirements analysis is an error prone part of the development process. Errors not detected at this stage may lead to expensive system failures later. For this reason, user requirements should be verified as soon as design solutions and prototypes are available.
3 Target Audience

All potential user groups, as identified in the SYNC3 project description, were involved in the user requirements survey in order to disclose various opinions and views on SYNC3 and also provide different suggestions for solving the key issues.

A mix of professional journalists, citizen journalists and bloggers (non-professional journalists), communication professionals and policy makers, as well as the broader public, were approached.

Representatives of all these potential target groups took part in both key activities involving an external audience, namely the focus group discussions and filling out the user questionnaire.

The goal was to involve mainly professional journalists and bloggers who are technology savvy and are used to new on-line tools. This specific group was targeted facing the fact that there is no real prototype and it needs at least some knowledge of actual on-line tools to understand the aim of SYNC3.
4 Exploitation Activities

The extensive communication effort related to the focus groups organization and on-line questionnaire promotion was also employed as a starting point for initial exploitation activities with the goal of forming a group of interested people around SYNC3 (the “SYNC3 community”). This group is envisaged to contribute in the future to prototype testing, as well as become a SYNC3 ambassador within the scientific and journalism communities.

To meet this goal, a Twitter account, a Facebook group of friends, and a LinkedIn group of professionals, interested in sentiment analysis and exploring the blogosphere, were established. All these channels were used for proactive communication of relevant project news, such as future focus groups or interesting comments, articles, as well as promotion of the on-line questionnaire.

In addition, a Twitter feed has been placed on the SYNC3 website (http://www.sync3.eu) to inform the page visitors about the project latest news.

The actual SYNC3 community consisting of people grouped on social community websites and those who agreed to their future involvement via questionnaire reaches almost 300 people at this moment (mainly professional journalists and bloggers). The community gathers people from all EU member states and includes also several representatives of respected media (Deutsche Welle, Radio Free Europe/Radio Liberty, Bloomberg News), universities (Yale University, University Maastricht, King’s College London, University of Tampere, University of Birmingham), think-tanks and NGOs (International Crisis Group, People in Need), and commercial companies (Microsoft, Intel).
5 Example Scenario

To explore how potential users understand the aim of SYNC3, and how much they see the initial vision as useful and relevant to their requirements and expectations, an example scenario was developed describing all key SYNC3 functions and features both in text and in slidecast. (See Annexes.)

Two versions were created, a short and an extended one, to accommodate the need for a concise as well as a more detailed SYNC3 description. The extended version provides descriptions of a specific use case by each target user group, while the shorter version comes with a general basic overview describing key functions and features in general.

The slidecast consists of a PowerPoint presentation with a voice-over to help better understand the desired functions and use of SYNC3. The voice-over is identical with the shorter text version of the example scenario but is accompanied with a graphical visualization. This version was used as the starting page of the on-line questionnaire to provide respondents with the basic information in an easy to understand fashion and also as part of the focus groups while helping participants to get a quick understanding of SYNC3.

Based on the feedback received during focus groups as well as gathered via the on-line questionnaire, it is remarkable to say that all target groups understand the aim of SYNC3 as presented in the example scenario and view the described function and features as useful and relevant to their needs and expectations.
6 Questionnaire

A questionnaire survey involves administering a set of written questions to a large sample population of users. Surveys can help determine information on users, work practices and attitudes. This method was chosen because it allows quick determination of preferences for a relative large user group, but also supports statistical analysis. [2]

The SYNC3 questionnaire was prepared in an easy to use on-line format available on the project website (http://www.sync3.eu). The main goal was to gather information about the behaviour of people in consuming news, working with news sources and particularly to identify and quantify their interest in the blogosphere. The second part was focused in more details on the overall understanding of SYNC3 and particularly the usefulness of its specific functions and features.

A data collection system was employed providing a user-friendly interface as well as professional tools for further data analysis.

The questionnaire was disseminated via direct mailings by all consortium partners, the EJC newsletter that reaches journalists and media professionals, as well as through social community websites (Facebook, Twitter, LinkedIn). Focus groups also became a very effective way to get additional respondents.

In order to generate more interest and get more filled-in questionnaires, a competition was conducted, awarding 4 randomly chosen questionnaire respondents with a Flip HD Video Camcorder. The winners were: Alexander Krastev from Bulgaria, André Feldhof from Germany, George Jiglau from Romania, and David Keating from the United Kingdom. All of them received the Flip HD Video Camcorder during September 2009.

The questionnaire was publicly available from the 3rd of July until the 17th of August, 2009. All respondents during this period participated in the competition draw.

6.1 Preparations

The first version of the questionnaire was prepared by EJC in co-operation with RIA Novosti and underwent internal testing with selected employees in order to improve questions and its flow.

The updated set of questions was reviewed by all consortium partners (mainly ATC, NCSR’D’, and L3S). Following resulting revisions, the questionnaire was brought on-line.

We tried to keep the questionnaire short, as long questionnaires typically result in fewer responses. Therefore, we did everything possible to minimize the questionnaire’s length so as to maximize the response rate. Furthermore, we tried to give our questionnaire’s parts a title that is short and meaningful to the respondent. A questionnaire with titles is generally perceived to be more credible than one without.
6.2 Structure

The SYNC3 on-line questionnaire was divided into the following 8 parts, each of them focused on one particular topic:

1. **Personal information**
   Introductory part focused on the basic social-demographic data providing an overview about the background of the respondents.

2. **Media literacy**
   Four questions disclosing the key and most favourite news information channels.

3. **Social community websites**
   Three questions focusing on the popularity of social community websites and the respondent most frequent activities.

4. **Blogging**
   Five questions aiming to obtain information on the respondent general attitude towards blogging and whether they consider themselves as active content creators.

5. **Working with news information on the Internet**
   Four questions focusing on the behaviour of respondents when searching for news information. This part was designed to disclose key behaviour models that help to individualize SYNC3 features.

6. **Profession specific segment**
   One of the main parts of the questionnaire was partitioned into five tailored sub-parts, each focusing on a single SYNC3 target group, trying to get feedback on how the specific users work with the blogosphere, and where they feel a lack or need for help.
   - Professional journalist
   - Non-professional journalist (blogger/citizen journalist)
   - Communication professional
   - Policy maker
• Broader Public

7. **SYNC3 tool usefulness**

Seven questions disclosing how well respondents understand the presented example scenario, and how useful they view specific features, and if they can imagine for what purposes they would use them.

8. **Future involvement**

Final questionnaire part, inquiring about the possibility of future contact, regarding participation on prototype testing and desire for receiving news and updates on SYNC3 development.

### 6.3 Data Analysis

Data analysis and interpretation is critical. We needed to deduce answers to find out:

- What does this information mean and how can it be interpreted?
- Can we use the data in a constructive way to define user requirements?

After collecting all questionnaires we gathered and consolidated all responses and calculated statistics that could be useful for deducing results concerning user needs.

The total number of completed questionnaires was 173, which constitutes a sufficient number in order to produce statistically significant conclusions. In interpreting the results, it must be taken into account that, according to the project orientation, the questionnaire target groups were primarily people already interested in the blogosphere and in using novel on-line technologies.

#### 9.1 How useful would you find a tool like SYNC3 (structured mapping of blog posts by citizen journalists / bloggers)?

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<th>Response Percent</th>
<th>Response Count</th>
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<td>35.9%</td>
<td>56</td>
</tr>
<tr>
<td>It would probably be useful</td>
<td>59.6%</td>
<td>93</td>
</tr>
<tr>
<td>It would not be useful at all</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Indifferent</td>
<td>3.2%</td>
<td>5</td>
</tr>
<tr>
<td>I do not understand the goal of SYNC3 – feel free to describe why:</td>
<td>1.3%</td>
<td>2</td>
</tr>
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![Figure 2: Example of statistics used for evaluating data gathered by the questionnaire](image-url)
6.4 Results

As already mentioned, 173 fully completed questionnaires were collected that were used for further data analysis. This is the summary of the key findings:

**Personal information**

- Respondents were from all EU member states and various third countries such as Russia, Turkey, USA, Canada, and India.
- Respondents covered all key target audiences: professional journalists, bloggers, communication professionals, policy makers, and the broader public.
- Most respondents were in the age range between 18 and 35 years, and 60% of them were male.
- Over 79% held university degrees (BA or MA) and almost everyone was comfortable using English at work with German and French at the second place.
2.4 Which languages do you feel comfortable using in your everyday work? (multiple choice)

![Graph showing language preferences](image)

**Figure 3: Personal information about the on-line questionnaire’s respondents**

**Media literacy**
- On-line sources are the primary news information source for most of the respondents.
- 79% of the respondents read traditional on-line media every day and 50% follow blogs. This represents more than double the percentage of printed media readership.
- BBC is the most favourite news website regardless the nationality. On-line versions of CNN, Financial Times, and New York Times are among other English news media. The rest covers mainly the leading national news portals.

**Social community websites**
- 72% visit social community websites at least once a day, 18% at least once a week.
- Facebook is the most popular social community website (83%), followed by Twitter (51%) and LinkedIn (10%). The rest of the community websites have a share below 10%.
- Checking contacts’ updates, posting own updates or links to information, and chatting are among the most popular activities with similar percentages.
Figure 4: Social community websites – respondents’ preferences and behaviour

Blogging

- Most of the respondents are interested in blogger opinions. Only 6% stated to be “not at all interested”.
- 42% of respondents read blogs to get new angles on opinions and 26% to get complementary news information next to traditional media.
- Around 80% view blogs as a not completely credible source of news information. Nevertheless, only 9% ranked them as “not trusted”.
- Over 70% read blogs as a source of information related to their profession every week. The similar percentage (66%) also read with similar frequency forums and discussions under blog posts. Anyway, most respondents only rarely post comments (if at all).
- 61% regard blogs as less influential than the traditional media in their home country, but only 9% state that they are not influential at all. Most of the comments mention that there exists a limited number of blogs with a really remarkable influence.
- 51% have their own blog, mainly covering general topics relevant for the broader public or topics related to their work.
Working with news information on the Internet

- Almost every respondent visits the homepage of a favourite news website to get the latest news in general. Headlines generate most of the attraction in the news. 34% use the RSS feeds, and 25% check blogs to stay informed.

- When seeking news in a particular area, most users (56%) use search engines or go directly to their favourite news website (42%). 38% read blogs related to the topic, and 22% proactively search to find different opinions and conflicts. 10% are then interested more in the bloggers’ opinion than in the traditional media.

- Using keywords or following links from the read articles are the most frequently used ways of searching for news articles or blog posts. Only 20% use advanced search, and 15% follow the most favourite articles.

- Title of the article, source and time are among the top three categories, when searching for further information.
Profession specific segment
- Almost the same amount of respondents (50 people each) identified themselves as professional or non-professional journalists. Around 30 people chose the category of communication professionals or broader public. Two respondents included themselves among the policy makers. The most probable reason for the low number in the latter category is the disadvantage of the summer season when Task 7.1 was implemented.

- **Professional journalist**
  - 91% view non-professional journalists as a valuable source in general, while 76% regard them valuable also in their current position.
7.6% find blog posts a source for useful information for their news reporting, mainly thanks to the fact that they contain sometimes more information, but validation is still needed.

Anyway, most of them do not see blog posts as crucial for their work, but mainly as complementary.

29% monitor blog posts every day, 35% at least once a week. This shows that more than half of respondents check every week blog posts to find or check relevant information.

The majority does not see monitoring of blog posts as too difficult.

70% say that they do not use any specific tool for blog post monitoring. If they do, they mainly comment on using Google or Twitter search possibilities only.

47% used information from blog posts in their articles.

The majority (over 80%) regards it crucial or very important to know how non-professional journalists view news events described by traditional media.

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**Figure 8: Attitude of professional journalists toward citizen journalists / bloggers**
• **Non-professional journalist (citizen journalist / blogger)**
  
  o 92% are interested in the opinions of other non-professional journalists.
  o More than half of the respondents are active every week with contributing to discussions or searching for information provided by other bloggers. Nevertheless, most of them do not perform these tasks daily.
  o For 35% of the respondents traditional media sources are the key for inspiration, while on-line sources lead. Also colleagues and friends have a quite high level of influence (17%).
  o All respondents at least sometimes have quoted traditional media in their blog posts, most of them stating having done so "sometimes" (64%).

![Figure 9: Behaviour of citizen journalists / bloggers](image)

• **Communication professional**
  
  o 60% identify non-professional journalists as stakeholders and opinion leaders. But 12% have not thought about them in this way yet.
Compared to professional journalists, communication professionals do not monitor blog posts so often. Only 20% monitor them daily, 33% weekly, and 18% at least once every two weeks.

Not as many communication professionals regard monitoring of blog posts as equally easy as professional journalists. In particular, 28% of journalists but only 9% of communicators regard the task easy. On the other hand, the same percentage within the two groups view it as not difficult.

Only 21% state that they use some specific tool for monitoring blog posts, but are only aware of standard search engine services. 24% would like to use some tool, but are unaware of any.

The same percentage of communicators as journalists views opinions of bloggers important to their profession.

Only 30% have a list of the most influential non-professional journalists and most (48%) communicate with them only reactively, whereas a quite large percentage (24%) have never communicated with them. It is very important to highlight that all identify at least some reason why to communicate with them.

Figure 10: Attitude of communication professionals towards blogosphere
Policy Maker
- There were only two respondents who identified themselves as appropriately fitting this category.
- Both state that blog posts have influenced their attitude towards a particular theme, but nevertheless they rarely monitor proactively blogger opinions.
- It is believed that the small number of policy makers and analysts engaged in the questionnaire was influenced by the fact that Task 7.1 was implemented over the summer vacation period.

Broader Public
- 70% of the responders are interested in blog posts.
- 38% proactively search for blog posts at least once a week. Anyway, a quite high percentage of respondents (23%) have never proactively searched for blog posts or do not feel a need for doing so (15%).

SYNC3 Tool Usefulness
- 95% of respondents find SYNC3 somehow useful. Nobody sees it as “not useful”, and only two respondents do not understand the aims of SYNC3.
- 48% foresee that they would use SYNC3 at least once a week, 20% even daily. Only two state that would not use it – these are the same respondents who do not understand the SYNC3 goals.
- 89% have not heard about other projects similar to SYNC3. Only seven were able to name another relevant project.
- Half of the respondents regard the SYNC3 feature of connecting information in blogs and traditional media as the key and most useful one.
- The second most popular features are time and geography analysis, followed by sentiment analysis of blog posts at the third place. At least 40% ranked all SYNC3 features as useful.
- The highest percentages of “not useful” and “not relevant” were received by the features of communication and collaboration with other users. Still these percentages were about half of the ones of respondents that viewed these features as key or useful.
- The majority of respondents (65%) would use bookmarking and organizing to read the material later. Only 4% are not interested in this feature. It means that almost everybody finds some use of bookmarking.
- 92% would use grouping by topic or event. Only two people do not find any interest in this feature.
- 60% regard the tagging and recommendation features interesting for collaboration. 41% would use also the possibility of interconnecting with the social community platform. 10% is not interested in any features for collaboration.
9.1 How useful would you find a tool like SYNC3 (structured mapping of blog posts by citizen journalists / bloggers)?

- [ ] It would be very useful
- [ ] It would probably be useful
- [ ] It would not be useful at all
- [ ] Indifferent
- [ ] I do not understand the goal of SYNC3 – feel free to describe why:

9.2 How often would you use such a tool?

- [ ] At least once a day
- [ ] At least once a week
- [ ] At least once every two weeks
- [ ] At least once a month
- [ ] Never

Figure 11: Understanding of SYNC3
9.5 For what purposes would you like to bookmark and organise news articles and/or blog posts using SYNC3? (multiple choice)

9.6 How would you like to group news articles and/or blog posts together using SYNC3? (multiple choice)

Figure 12: Users’ preferences for specific tasks

Future Involvement

- It is a very positive result that over 80% of the respondents would like to proactively engage in evaluating SYNC3 in the future and to receive further information about the project development. We view this as a very positive result, especially in view of the fact that this segment was the final one in this comprehensive survey.
6.5 Conclusions from the Questionnaire

More respondents read blogs than traditional print media for their news updates. They are also a valuable way of learning about different angles of opinions but the respondents see a problem in their credibility. This is an important feedback proving that the actual SYNC3 vision matches the behaviour of users, but must provide also some kind of guidance on how to be good at discovering and validating the "hidden" information (e.g., through a feedback loop with dependable professional media sources).

There is no problem to identify the most readable and favourite on-line news sources, but it is more complicated to identify top favourite blogs that all respondents read. This feedback is important, when thinking about the definition of the list for the blog post sources to be treated by the project.

Almost every respondent is an active user of social community websites, most of them even daily. This clearly demonstrates the need of interconnecting SYNC3 features with relevant platforms (mainly Facebook, Twitter, and LinkedIn).

The possibility of keyword search is crucial for the success of SYNC3, because it is a way how users normally search for news or information.

The questions, focused on different target groups, provided evidence that for all groups the blogosphere is something of relatively high importance, but the lack of ease of use and reliable tools makes the work more complicated, with most of the analysis performed manually, first by the search engines and afterwards by reading all relevant news items.

It constitutes crucial feedback that 95% of respondents find SYNC3 somehow useful and almost half would use it at least once a week. This is a very positive result, especially in view of the fact that the SYNC3 features were presented only using example scenarios, instead of a real prototype. It is also valuable information that most of the people are not aware about any other system offering at least part of the presented features. This gives SYNC3 an excellent starting position for future exploitation.

At least half responders regard all presented system features as somehow useful. It is also valuable input that all key features including time, geographical and sentiment analysis received the highest ratings with respect to their usefulness.
7 Focus Groups

7.1 Essentials of Focus Groups

Focus groups can take many forms, but most frequently, they are a series of structured discussions around a specific set of questions that are explored with small groups of 5 to 10 people. The sessions typically last about two hours and are led by a moderator playing an impartial role in order to stimulate the discussion.

Focus groups are not polls, but in-depth, qualitative interviews with a small number of carefully selected people. Qualitative data derived from focus groups are extremely valuable when vivid and rich descriptions are needed. In fact, focus groups are an increasingly popular way to learn about opinions and attitudes.

According to the late political consultant Lee Atwater [3], the conversation in focus groups “gives you a sense of what makes people tick and a sense of what’s going on with people’s minds and lives that you simply can’t get with survey data”. Unlike the one-way flow of information in a one-on-one interview, focus groups generate data through the “give and take” of group discussion. Listening as people share and compare their different points of view provides a wealth of information – not just about what they think, but also why they think the way they do.

Among the advantages of focus groups are that a wide range of information can be gathered in a relatively short time, and that related unanticipated topics can be explored, as they arise during the discussion.

7.2 Goals of the SYNC3 Focus Groups

The goal of each of the SYNC3 focus groups was to uncover the needs of the potential users, so that the SYNC3 Consortium can design the necessary tools and technologies within the project in the most efficient way.

Throughout the open discussions with the representatives of potential users, we targeted to identify their priorities and constraints and gain as much as possible additional information for creating the user requirements towards the system specification process.

Furthermore, the SYNC3 focus groups aimed at building a common understanding and approach for the project between the consortium members which are organizations of different backgrounds and focus. Following that, all consortium members will investigate ways to design the SYNC3 system in line with the project orientation and the end user expectations.

Finally, the SYNC3 focus groups provided a very good opportunity to specify and explain a first set of terminology to be used during the project, in order to establish a common language among the partners.

Furthermore, in addition to the above described focus groups, short structured interviews during an informal gathering of bloggers from all EU member states organized by EJC in Rotterdam were employed in order to learn about the blogger needs and opinions in a more informal way and also to engage them in promoting SYNC3 in the blogger community.

7.3 Structure

All focus groups were moderated by the same person (Miroslav Hazer, Project Manager at EJC) to ensure consistency and comparability of the achieved results.

Representatives of selected consortium partners (ATC, NCSR’D’, L3S) were available via videoconferencing to participate in discussions concerning technical issues and tasks relevant to the workpackages they lead. English was the official language used during the sessions.

All focus groups were recorded in order to allow further analysis and sharing among consortium partners.
7.3.1 Agenda

Each session of approximately two hours in duration was divided into the following parts:

- Welcome note and introduction of the moderator
- “Ice-breaker” and introduction of participants
- Introduction of the agenda
- Introduction of SYNC3 consortium and nature of 7th Framework Programme
- Introduction of partner representatives
- Focus group purpose
- Terminology explanation
- SYNC3 general introduction
- Example scenario presentation
- Project objectives highlighting key innovations
- Overview of key features
- Discussion around the following questions:
  - Do you understand the aim of SYNC3?
  - What features and possibilities would you ideally expect from SYNC3?
  - How would you use SYNC3 in your organization?
  - Who and how could benefit from SYNC3?
  - What are you doing today, without SYNC3?
  - Have you heard about any other project similar to SYNC3? Did you try it?
- Information about future activities: information about sync3.eu, on-line questionnaire, possibility to follow news on Twitter, Facebook and LinkedIn as well as invitation to join the prototype testing next year.
- Closing note
- Serving of refreshments accompanied with informal discussion and networking

The project presentation used as the basis for every session is part of the Annexes of this deliverable and will be the basis for dissemination material to become available at the project Web Site.

7.3.2 Gifts for Participants

All participants donating their free time to attend a SYNC3 focus group received a small gift branded with the SYNC3 logo. This promotional item also served as an “ice-breaker” at the beginning of each session in order to create an open and friendly atmosphere, where people feel confident in sharing their opinions.

The gift was a photo stand with a cubicle containing a plastic fish inside, branded with the SYNC3 logo and accompanied by a postcard with a motto “Keep floating ideas...”. This motto not only highlighted the need for open discussion during the focus group, but also communicated the benefit of SYNC3 to the public debate presenting the hidden information lost in the unstructured blogosphere. The two fish were also a symbol of “Networked Journalism” as described by Charlie Beckett in his latest book SuperMedia [4], where he highlights the need of professional and non-professional journalists working closely together.
7.4 Venues

The SYNC3 focus groups took place at the following dates and venues:

- Maastricht, the Netherlands – 19. 3. and 26. 6. 2009 (internal trial and first external session)
- Rotterdam, the Netherlands – 15. 6. 2009 (structured 1:1 interviews)
- Moscow, Russian Federation – 15. and 16. 7. 2009 (four sessions)
- London, United Kingdom – 28. 7. 2009 (two sessions)
- Prague, Czech Republic – 14. and 18. 8. 2009 (two sessions)

It should be noted that the project had planned for another focus group in Brussels, but due to the summer period, the participation was not sufficient and therefore it was cancelled.

7.5 Description of Focus Group Sessions

Altogether, during the 10 focus group sessions, a mix of 80 potential users coming from all target groups participated, becoming exposed to the SYNC3 project goals. In addition, structured interviews with 81 bloggers coming from all EU member states were conducted.

The complete list of participants is included in the Annex 2.

Maastricht – 19. 3. 2009

In order to fine tune the prepared focus group agenda, one trial test focus group with EJC employees and affiliates was conducted. The trial test also detected possible topics that can mislead the core of discussion during future focus groups and helped the moderator to get prepared to lead the discussion in the most efficient way.

This group was also used to test the understanding of the prepared example scenario presentation and how much can potential users imagine the possibilities that SYNC3 would offer.
The first external focus group was organized at EJC’s headquarters in Maastricht during the consortium’s 2nd Plenary Meeting. Thanks to this, representatives of all partners could follow the discussion. Representatives of ATC, NCSR’D’, L3S, Google, and RIA Novosti also became active discussion participants. The group was a mix of mainly bloggers, but also included professional journalists and communication professionals coming mainly from the Netherlands and Belgium.

Moscow – 15. and 16. 7. 2009
RIA Novosti hosted four focus groups organized on Wednesday 15th and Thursday 16th July. Two morning and two afternoon sessions were attended by a well selected mix of 26 potential users. In each of the sessions one or two groups of potential users were in majority in order to speed up the discussion and exchange of different opinions.

Google hosted 2 focus groups with Google employees at its London headquarters. These groups were focused mainly on the user interface and concrete system features using the knowledge and specialization of the participants coming mainly from the department focused on partner channel and co-operation. The basic agenda for the session was the same as for the other groups, but the discussion was lead in a more concrete way, while L3S played a crucial role in the UI discussion.

Two focus groups were held in Prague. A session focused on communication professionals was organized on the 14th of August at Mmd Public Relations. A second group consisting of professional journalists and on-line experts from Radio Free Europe/Radio Liberty was organized on the 18th August. Both organizations hosted the sessions at their premises.

7.5.1 1:1 Structured Interviews
As already mentioned, in addition to the above focus groups, 1:1 structured interviews with 81 bloggers (3 from each EU member state) were conducted in Rotterdam on Monday the 15th of June. These bloggers attended an award ceremony of TH!NK ABOUT IT - the European blogging competition organized by EJC on the topic of elections to the European Parliament.

All participants received information leaflets about SYNC3 with the basic example scenario description and went through short structured interviews focused on the understanding of the project description and on the topic of how they would use SYNC3 and what kind of features they consider as the most useful and interesting for bloggers.

Thanks to this individual approach in an informal and friendly atmosphere most of the participants became very much interested in SYNC3 and also took part in the questionnaire and joined the SYNC3 groups and updates on the social community websites.

7.6 Conclusions from the Focus Groups
Regardless of the high number of focus group sessions and mix of potential users, the key discussed topics and issues brought into discussion by participants were very similar. This is a good indication of the common understanding of SYNC3 among various users.

Reliability of bloggers turned into the most discussed issue and appeared during every focus group. The main concern was how users of SYNC3 can be sure that they work only with trustworthy and credible blog posts. Various ways to address this issue were discussed, including a wide range of search facets: filtering for blog posts and blog authors based on readership, how long the blog has been running, number of blog posts and comments, how many
other bloggers refer to the author, etc. The possibility of displaying the blogger's profile was also brought up, as well as a ranking system showing the judgement of general public users and journalism professionals of the particular blogger.

The second topic of interest concerned the analyzed sources by SYNC3 in general. Feedback by the focus group participants indicated that it would be desirable to also include within the SYNC3 analysis microblogging platforms such as Twitter, as well as discussion forums and comments under news articles and blog posts. Communication professionals also raised the question if it is possible to include the official news releases and statements as the third monitored channel next to the news articles and blog posts. The profile of the sources – kept in a kind of dossier – was also viewed as very useful.

The third most discussed issue was the user interface that has to remain simple and easy to use, but at the same time offer a wide range of multi‐facet search and analysis, as well as intuitive news events grouping as described in the so called “My Sync” Page feature. Some participants commented that it might be difficult to get enough active users that will help to fine‐tune the results of machine learning process and will spend time on creating or checking the news events’ relations and outcomes of the sentiment analysis.

Privacy and public opinion engineering also appeared among the most discussed topics. However SYNC3 displays only information already existing on the Internet and hidden in the blogosphere. The search is identified by the users' unique needs and request.

Sentiment analysis became also one of the lively discussed topics, mainly by communication professionals and bloggers. Participants raised questions about how accurate the system will be when facing the issue of sarcastic and unstructured blog posts. On the other hand, professional journalists were interested more in the temporal and location based search features, with an expressed desire to enable for example search based on the geographic location of the blogger, or blog post reader. They were also interested in the differences of expressed sentiment comparing different regions and countries.

The possibility that the blog post will cover a news event earlier than any news article was also among the most discussed issues. In the current SYNC3 structure, the particular news event will eventually be discovered, only after it finds its way into the mainstream media. Facing this fact, the possibility to see how the news event was reported, who covered it as the first one and how the news event was spread in time and geography is seen as one of the crucial features.

Other comments by focus group participants were as follows:

- There are many news events covered in a highly interesting way via multimedia reporting, such as photos, videos, and audio coverage. The participants view as a useful extension to include also analysis of these sources, in addition to the currently planned, text‐only processing based system.
- Participants agreed that in order to attract a high number of users it is needed to interconnect SYNC3 features such as the “My Sync” Page with social community websites and offer possibilities to embed "My Sync" Page into blogs posts, news articles, presentations, etc.
- Participants view SYNC3 as an interesting tool that can help “sniff” the social environment, predicting the degree of interest in news events or topics, and in this way help both journalists and bloggers, as well as communication professionals, to tailor the information and communication to meet users’ actual needs and expectations.
- People also agreed that SYNC3 would help identifying the opinion leaders, experts in the given fields, as well as the real news and policy makers. In this way it is crucial to address the issue of blogosphere reliability. Anyway, SYNC3 can be used only as a tool that will help to carry out this kind of research, but will not provide it as a feature.
- There was also a comment (during the focus group at Google) that concerning the expectations that users themselves will create some content and provide feedback to the system, it might be more efficient to rely on the general public as the key target group for
this initiative, because professional users might not be interested in the additional work with the system and would expect only to get the analysis results.

- The user interface was discussed during the focus group at Google in more detail. Some participants recommended having only a single user interface with the possibility of separate views. Other participants suggested having radically different UIs for every target group in order to meet their unique demands.

- It was also recommended to build SYNC3 as the open-source platform in order to attract open-source community to help with the project development.

- SYNC3 could also offer an overview of the most important news articles and blog posts for the given day.

- Even though all focus group members were familiar using tools in the English language, they highly recommended extension to additional commonly used languages even through incorporation of machine translation at least for some SYNC3 features, so that the project can offer broader range of news and opinions.

- Participants also suggested that SYNC3 results should be open to everyone in the way of using open source tools.

- It was also suggested to take into consideration linking with other projects too, such as Pharos\(^1\).

- When aggregating news in SYNC3, it should be possible to read the specific article, combing info about author, time, location, source, etc.

\(^1\) http://www.pharos.tv/
8 Monitoring of Existing Systems and Projects Relevant to SYNC3

To be sure that SYNC3 will fulfil expectations of users and provide them with a unique tool for exploring the unstructured blogosphere, part of the user requirements survey was to find out what kind of tools are used nowadays, and if the users view some already existing services as similar or complementary to SYNC3. This was the first attempt to capture SYNC3 competitive landscape and its analysis will be an ongoing process throughout the project lifetime to feed the exploitation activities.

To meet this goal, the last part of the discussion during each of the focus groups meetings concentrated on the following two questions (note that the second question was also part of the on-line questionnaire):

- What are you doing today, without SYNC3?
- Have you heard about any other project similar to SYNC3? Did you try it?

Based on the answers it is remarkable that most of the respondents do not use any sophisticated tools, but mainly use the standard search tools provided by search engines such as Google or Yandex (relevant only for Russian market) in order to find relevant articles and then manually compare them.

Only a few people were aware about relevant projects to SYNC3 such as Newst in or Silobreaker, but do not use them regularly, because they do not provide them with features they find relevant, or are restricted only to some domain, region, or theme.

As part of the activities related to this deliverable, a list of projects relevant to SYNC3 was created and made available to all consortium partners on the SYNC3 wiki. All such projects will be evaluated in terms of technical structure as well as user experience, with the aim to learn from them for the benefit of SYNC3.

When the SYNC3 prototype will become ready for testing, specific tests will also be carried out against such relevant systems and tools to allow better side-by-side evaluation of features and usefulness.

**Table 1: Projects for further analysis as identified during user requirements survey**

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<thead>
<tr>
<th>Project</th>
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<tbody>
<tr>
<td>Blews</td>
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<td>Blogging Portal</td>
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<tr>
<td>Blogs Yundex</td>
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<tr>
<td>Buzz Tracker</td>
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<tr>
<td>Daily Perfect</td>
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<td>Icerocket</td>
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<tr>
<td>Mediacloud</td>
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<tr>
<td>My Geni</td>
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<tr>
<td>Newst in</td>
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<tr>
<td>Polymeme</td>
</tr>
<tr>
<td>Silobreaker</td>
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</tbody>
</table>
8.1 Categorisation according to relevancy to SYNC3

The following overview categorizes the above mentioned projects into 7 groups depending on how they relate to SYNC3 and what the learning points can be for SYNC3 and its positioning and functionality. Based on the initial analysis, none of these projects provide the same wide range of features and possibilities as planned for SYNC3 and very often focus only on some domain or have another limitation. The first group contains the most relevant projects that will be further analysed by the consortium as well as by potential users during first prototype testing.

1. Most relevant projects

Newstin
It is a multilingual news aggregator. It categorizes a vast array of news articles into categories and enables the user to search for news both according to key words and according to topic of interest, source language and geographical location of news sources. Information sources include news, blogs, press releases and other verified content. (http://www.newstin.com)

Silobreaker
Silobreaker is a search service for news and current affairs. Instead of returning just lists of articles matching a search query, Silobreaker finds people, companies, organisations, topics, places and keywords; understands how they relate to each other in the news flow, and puts them in context through graphical results in its intuitive user interface. (http://www.silobreaker.com)

Buzz Tracker
Buzz Tracker finds articles from news sites and blogs which discuss the particular story, but it does not provide the sentiment analysis. (http://www.buzztracker.com)

Media Cloud
It is an Open source project. Media Cloud automatically builds an archive of news stories and blog posts from the web, applies language processing, and gives ways to analyze and visualize the data. The visualization is either the most frequent terms in a source (e.g BBC), or a world map with the countries the articles talk about the most. (http://www.mediacloud.org)
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**Blews**
It uses political blogs to categorize news stories according to their reception in the conservative and liberal blogospheres. ([http://research.microsoft.com/en-us/projects/blews](http://research.microsoft.com/en-us/projects/blews))

2. **Only blog processing**

**Blogging Portal**
The Blogging Portal is a new way how to read blogs about EU affairs. It syndicates the content from more than 300 blogs about the EU in various European languages. It provides rating of the blog posts, giving a summary of the analysis of the EU in the blogosphere. ([http://www.bloggingportal.eu/](http://www.bloggingportal.eu/))

3. **Only news processing**

**FastFlip**
Google Fast Flip is a web application that lets users discover and share news articles. It combines qualities of print and the Web, with the ability to "flip" through pages online as quickly as flipping through a magazine. It also enables users to follow friends and topics, discover new content and create their own custom magazines around searches. ([http://fastflip.googlelabs.com/](http://fastflip.googlelabs.com/))

4. **Only sentiment analysis**

**What does internet think**
Given a person name or an event (i.e. global warming) it returns the number of sources they talk positively/negatively/neutral about this theme. ([http://www.whatdoestheinternetthink.net/](http://www.whatdoestheinternetthink.net/))

5. **Personalization sites**

**Bloglines**
Bloglines is an online service for managing web information, such as news feeds, weblogs and audio. Bloglines tracks the information the user is interested in, retrieves new stuff as it happens, and organizes them on the user personal web news page. ([http://www.bloglines.com](http://www.bloglines.com))

**DailyPerfect**
The internet contains a "digital footprint" with publicly available information about each of us on homepages, forums, social networks, alumni lists, etc. DailyPerfect uses this information to scan through thousands of feeds from around the world and compile a personalized news site for you alone. ([http://www.dailyperfect.com](http://www.dailyperfect.com))

**Twine**
A new way to collect content and connect with people who share the same interests. Twine can be used to track, find, and share what interests the user. Twine ties it all together by topic, and displays on one place. ([http://www.twine.com](http://www.twine.com))

6. **Blog search Engines**

**Text Map**
TextMap is a search engine for entities: people, places, and things in the news. The news analysis system automatically identifies and monitors these entities, and identifies meaningful relationships between them. ([http://www.textmap.com](http://www.textmap.com))
Twingly
Twingly is a blog search engine. It provides a widget to display information about which blog posts have links to a specific article. ([http://www.twingly.com](http://www.twingly.com))

Icerocket
Icerocket provides the standard features of blog search engines. ([http://www.icerocket.com](http://www.icerocket.com))

Blogpulse
Blogpulse is a search engine for blogs. It provides a set of tools that are applied to blog content daily to track blog activity on key issues, people, news stories, news sources, bloggers and more. ([http://www.blogpulse.com/](http://www.blogpulse.com/))

7. Other

My Geni
My Geni is a site where users can add manually websites and blogs they are interested in. It does basic clustering of content and groups and uses filters to display only the information that is most relevant to the viewer. ([http://www.mygeni.org](http://www.mygeni.org))

Polymeme
Polymeme uses a buzz-tracking approach to identify what is currently hot in 20 areas, ranging from economics to evolution, and presents it to the reader along with all sources that are currently talking about it. ([http://polymeme.com](http://polymeme.com))

Think Link
Think Link highlights snippets of text that make claims that users have identified as contentious. If a user clicks on a highlighted snippet, Think Link displays an argument graph showing the best evidence for and against the claim the snippet is making. ([http://www.berkeley.intel-research.net/rennals/thinklink/Think_Link.html](http://www.berkeley.intel-research.net/rennals/thinklink/Think_Link.html))

Value Added News
Value Added News adds semantic value to news by changing a few fields in the HTML templates. ([http://valueaddednews.org](http://valueaddednews.org))

Wonkosphere
Wonkosphere tracks blogs and websites on the topic of US elections in 2008. Its text analysis technology identifies posts that matter. If the user tracks individual candidates, the analysis will show their share of buzz in conservative and liberal blogs, highlight the most representative posts, and show whether the tone of discussion about the concrete candidate is trending up or down. ([http://www.wonkosphere.com](http://www.wonkosphere.com))
9 SYNC3 User Requirements Overview

9.1 SWOT Analysis

The following SWOT analysis is prepared based on input and data collected during the user requirements survey, interconnecting different issues raised and possible solutions discussed. The SWOT analysis is prepared in order to provide a clear picture of the potential user opinions about SYNC3. This overview will be further analyzed and serve as a check-list during further technical preparations of SYNC3 in terms of system functions and user interface creation.

Table 2: SWOT Analysis

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Opportunities</th>
</tr>
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<tbody>
<tr>
<td>• The SYNC3 project is seen as a potential answer to the problem of time efficient mapping of blogosphere by all target user groups.</td>
<td>• The biggest issue concerning the blogosphere is the problem of credibility of bloggers. If SYNC3 provides a solution to this issue it has a great potential to become a really valuable and wide-spread system. There are several ideas on how to help solving the problem of credibility, such as providing a ranking system of bloggers, presenting profiles of bloggers, availability of different search facets that will help find blog posts with relevant readership and impact.</td>
</tr>
<tr>
<td>• The existing SYNC3 concept includes all features seen as useful and important, including features for tagging, recommendation, and sharing.</td>
<td>• It might be a nice challenge to extend the SYNC3’s features in the way of providing a news picture of the day or the ego-centric map of news events relevant to the latest or given interest of the user.</td>
</tr>
<tr>
<td>• SYNC3 is a useful tool helping to understand the existing stage of public opinion as expressed in the blogosphere and identify trends and issues that are important for each of the target groups: for professional journalists to discover new information and sources as well as identify trends and interest in topics that should be covered, for bloggers to learn about opinion of other bloggers and see the blog posts in connection with news events and news articles, for communication professionals and policy makers to identify public opinion on the trends and issues.</td>
<td>• There exist several potential business opportunities such as consultancy on the issues and marketing research.</td>
</tr>
<tr>
<td>• Include search facets that will help disclose a real map of opinion building and shaping.</td>
<td>• A competition for bloggers can be used to attract more bloggers and broader public to use and explore possibilities of SYNC3 and provide feedback during prototype testing.</td>
</tr>
<tr>
<td>• A competition for bloggers can be used to attract more bloggers and broader public to use and explore possibilities of SYN...</td>
<td>• The addition of official sources of information (press releases and press announcements of public bodies, associations, etc.) might be an interesting addition next to news articles and blog posts.</td>
</tr>
</tbody>
</table>
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- Easily available profiles of the authors of news articles and blog posts might help users to better understand news events and source credibility.
- Possible revenue income in the context of data-driven journalism. [6]

<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>The existing example scenario does not take into account information and</td>
<td>SYNC3 faces the really high challenge of providing many kinds of analytics, search and collaboration features. It is crucial to have the user interface as simple as possible in order to help people gain fast orientation. There might be a need to focus on only one target group as the primary user group for the future requirements and leave others as complementary ones.</td>
</tr>
<tr>
<td>opinions expressed on social community websites and microblogging platforms which are leading to the news spread nowadays.</td>
<td>It is needed to get enough users attracted in order to disclose potential system defects and create the first “My SYNC pages” and activities that will attract other users to use SYNC3.</td>
</tr>
<tr>
<td>The existing example scenario does not include comments and forum discussions under news articles and blog posts, which might contain valuable information. However, the fact that most of the comments are not appropriate to the actual news event has to be considered.</td>
<td>There exist already some projects aiming to offer similar analysis as SYNC3. Most of them do not provide the whole range of experience as SYNC3 will be designed for, but it is needed to continually monitor their development and proactively learn from them.</td>
</tr>
<tr>
<td>SYNC3 is based on text analysis, which means that information expressed in videos, voice recordings, or infographics [5] cannot be included. However, this is also a potential opportunity for further development after the end of the 3-year SYNC3 research project.</td>
<td></td>
</tr>
<tr>
<td>SYNC3 bases its news event analysis on news articles; as a result, news events will not be discovered until after they’re reported in a news article.</td>
<td></td>
</tr>
<tr>
<td>To provide a tool helping to understand the blogosphere in its whole range, it will be crucial to extend it for other leading languages next to English, once the system is set up and successfully tested.</td>
<td></td>
</tr>
</tbody>
</table>

9.2 Key Open Issues

Based on the SWOT analysis presented above, we have identified a list of key issues that will be considered as the most urgent ones for SYNC3 to address:
D7.1: User Requirements and Specifications

- Help to grasp the uniqueness of the blogosphere while providing an opportunity for evaluating the credibility of blog posts as the information and news sources.
- Provide an easy to use interface which allows users to deal only with features they find relevant for them but at the same time showing the full range of options they can use.
- Include the major and most popular news sources as used nowadays in order to get the potential users attracted, while extending the SYNC3 features in synergy of social community websites’ possibilities.
10 Feedback Implementation and Conclusions

The results of this user requirements survey were shared among all consortium partners and discussed during the deliverable preparation phase.

The findings will be further discussed and analysed in order to drive the activities for drawing the eventual layout of the system architecture and support all features and possibilities identified as crucial or important in the user requirements survey.

At this moment there has not been identified any serious issue that would affect the planned system architecture and core features. Most of the findings are relevant mainly for the user interface which will be subjected to a users’ initial feedback in the upcoming months.

This document presented the process followed by the SYNC3 project to capture, analyse, and record the user requirements, as expressed by users who belong to the targeted groups.

The mechanisms used to achieve these objectives have been described in detail, along with the results the consortium reached and discussed.

Although this document describes a baseline of requirements, it is expected that subsequent refinements will be applied through the design and implementation phases according to a feedback loop connecting the users testing and evaluating the prototypes.
11 References


[5] Information graphics or infographics are visual representations of information, data or knowledge. These graphics are used where complex information needs to be explained quickly and clearly, such as in signs, maps, journalism, technical writing, and education: http://en.wikipedia.org/wiki/Infographics.

12 Annexes

12.1 Example Scenario

12.1.1 Short Version (Information Leaflet)

Introduction

Community news portals, the blogosphere, and work carried out by citizen journalists are valuable Internet resources freely available at all times. They could be more useful, however, if presented and delivered in a more structured way.

SYNC3 tackles this problem via a platform that aids searches between unstructured sources. It displays their connection to news events referred to by traditional media, which, in contrast to the blogosphere, are much more structured in their presentation. SYNC3 analyses these news items, clustering them into appropriate events, producing in the process a news thematology.

Furthermore, SYNC3 analyses the date, location, and causal relationships between news events in traditional media. SYNC3 also maps the opinions of blog authors in relation to news events, allowing further exploration of the blogosphere.

Project Impact
User Scenario

Using SYNC3 is very easy:

- First choose the **news event** that interests you. You may also pick other news events to explore how they relate to one another.
- When you have made your selection, you will be shown a graphical map of how the events of your interest inter-relate in terms of date, location, and dependence.
- For each of the news events of interest you can also view the specific news items referring to them from traditional media sources (e.g. news agencies) as well as corresponding entries from bloggers and citizen journalists.
- Choose one of the set criteria to go through news events or blog entries in more detail. You can explore news events and their corresponding news items based on time, location, and causal relations, or specific sentiment of the authors of blog entries relating to the corresponding news events of interest.
- You can also track how the news events were excerpted in traditional media and the blogosphere: view what is the first item reporting on the event, the sentiments of the bloggers reporting on it, and which traditional media are quoted in the blog posts.
- You can also become an active content creator by selecting news events, items, and blog entries that you find most relevant. With a drag & drop interface, you can create your own “MYSYNC” page to add your selections, comments and opinions.
- The system also enables sharing and collaboration. Users can create their own profiles, groups of friends and themed groups, and sign up for updates.

Wrap-up

SYNC3 will help journalists to exploit the unstructured blogosphere for their work; it will also give bloggers and citizen journalists a new platform to share their work and opinions with other content creators. Moreover, communication professionals and policy makers will be able to better follow the public debate.

All end-users will gain a user-friendly search tool for blogs and traditional media news. They will be able to create, comment and ‘sync’ their news in a virtually limitless network.

SYNC3 Consortium
SYNC3 project is co-funded by the European 7th Framework Programme and managed by a consortium of companies and organisations with vast experience in semantic analysis, content generation, web-programming, design and journalism:

- Athens Technology Centre
- National Centre of Scientific Research "Demokritos"
- Leibniz Universität Hannover
- The University of Edinburgh
- Xerox Research Centre Europe
- European Journalism Centre
- i-Sieve
- RIA Novosti
- Google

Contact Details
If you have any questions concerning SYNC3 project, please contact European Journalism Centre (www.ejc.net) – Miroslav Hažer, Project Manager, e-mail: hazer@ejc.net.


Co-funded by the European Union.

12.1.2 Extended Version

12.1.2.1 Basic Description Including All Functions

Target Group: Citizen Journalists/Bloggers
Key Role: Content Creator

- As a first step you select a news event you are interested in. For example, this can be "U.S. asks Europeans to increase their troop levels in Afghanistan". You can identify your news event by typing it into the search engine or by picking it up from a list of the latest most frequent events. These news events are automatically determined by a SYNC3 clustering algorithm of all news items appearing in traditional news media.

- After you identify the news event of your interest you can select other news events and explore their relations to the selected event – e.g. "Britain refuses serious force increase in Afghanistan", in terms of date, location and causal dependence. For example, the above event has such relations to the earlier mentioned event: "U.S. asks Europeans to increase their troop levels in Afghanistan". You can view these relations via a visualized graph.

- For each of the news events of interest you can view the specific news items referring to them from traditional media sources (e.g. news agencies), as well as the corresponding blog entries from bloggers and citizen journalists.

- You can also select to view blog entries exhibiting a particular sentiment towards the news event of interest – e.g. blog entries exhibiting a positive view towards the news event "U.S. asks Europeans to increase their troop levels in Afghanistan", thus being able for example to determine that there exist more blog entries "expressing support" than "expressing disagreement" to this event, and to browse through the corresponding clusters. During all these actions you are also presented with time and location-based views of the news events of interest and hence their corresponding news items and blog entries. For example, based on when the first news items strictly referring to the event of
interest appeared for the first time and the geographical location of the media carrying the news items.

- Thanks to this, you are able to see how the news events are excerpted in the traditional media and citizen journalism sphere, allowing the possibility to view what is the first item reporting on the event, the sentiments of the bloggers reporting on it, and which traditional media are quoted in the blog posts. E.g. you can see that the first blog post on the event “U.S. asks Europeans to increase troop levels in Afghanistan” was quoted by a blogger who spent time in Afghanistan and who provided a personal view expressing negative sentiment towards it.

- In addition you can also become an active content creator while selecting news items and events that you find most relevant. With an intuitive drag & drop interface, you can then create your own “MYSYNC” page, where you can add your own comments and opinion. This “deck” stays afterwards in the SYNC3 system and you are able to export it also to your own webpage or community pages (e.g. Facebook, MySpace, etc.). With this tool you can for example group together the positive and the negative blog entries about the news event of your interest and add your own comments describing your own opinion / sentiment about the event of interest or for example the more general theme of the “war in Afghanistan”.

- The system also offers you the possibility of collaboration. You can share your “MYSYNC” page with the fellow users which are able to comment on it and start using them for their own further work too.

- To enable and support the collaboration, users have the possibility to create their profiles, create groups of friends and groups of people interested in the same topics. The users have the chance to use notifications and subscription mechanisms to learn about new activities in the field of their interest or groups. While working with the specific news events you are able to see the other users interested in the same topic and what kind of visualizations of news events, items, and blog entries they have created.

12.1.2.2 Modifications

1) Target Group: Professional Journalists
Key Role: Search for Information Sources

Journalists will mainly use fewer functions than bloggers (as described above). They will be mainly interested in the overview of news items from traditional media and corresponding blog entries that refer to particular events of interest, together with their date, location and causal dependence as well as the sentiment of the citizen journalists. Professional journalists will be mostly interested in the news events that were first covered by bloggers and how they were excerpted in the traditional media and citizen journalism spheres. Most of them will not be using SYNC3 features for content creation and collaboration.

Key functions: 1st – 5th paragraph in the description for Target Group of Citizen Journalists/Bloggers.

2) Target Group: Communication Professionals / Policy Makers
Key Role: Following the Public Debate and Sentiment

- Political organizations such as political parties, governments, lobby groups, and other public institutions (such as the European Commission) become able to easily follow the public debate on key current issues by having access to aggregate public sentiment towards current issues, as well as how it is distributed across Europe and how it unfolds in time.
➢ Regular businesses are able to use the SYNC3 tool to research trends, in web-marketing efforts, and to obtain product feedback.

Communication Professionals and Policy Makers will use basically the same features as Professional Journalists. This Target Group will be mostly interested in the sentiment analysis, time and geographical features and authors/sources of the articles referring to the selected news items.

Key functions: 1st – 5th paragraph in the description for Target Group of Citizen Journalists/Bloggers.

Of course, the possibility to create a "MYSYNC" page could also be useful for internal purposes of this target group.
12.2 Participants of the Focus Groups

Maastricht – 19. 3. 2009

Participants (7 people):
- Wilfried Ruetten – EJC, Director
- Bianca Lemmens – EJC, Operations Manager
- Bernd Kapeller – EJC, Multimedia Producer
- Sueli Brodin – EJC, Freelancer and Media Monitoring Specialist
- Michal Musil – MF Dnes (leading newspaper in the Czech Republic), Deputy Editor-in-Chief
- Takashi Salzurayama – Kyodo News (Japanese News Agency), Editor and EJC’s Fellow
- Jaz Hyuk Lee – Korean Broadcasting System, Editor and EJC’s Fellow


Participants (10 people):
- Raymond Frenken – EUX.tv, Independent Media Professional
- Gina Vodegel – Blogger
- Amanda Potter – Blogger
- Susan Schaefer – Schaefer Communication Agency, Strategic Communication Consultant
- Nicolaas Pereboom – Independent PR and Marketing Professional
- Lucas Vroemen – L1/MediaManage, Professional Journalist
- Ron Aardening – Aardening Agency, Communication Professional
- Sueli Brodin – Crossroadsmag.eu, Freelance Journalist
- Dagmar Vorechovska – Solid Foundation, Communication Professional
- Hans Cardyn – Concentra publishing, User Generated Content Specialist

Moscow – 15. and 16. 7. 2009

Participants (26 people):

1st group (7 people) – major target group: bloggers
- Andrey Reznichenko – RIA Novosti, Head of Science/Ecology Desk, blogger
- Marina Pustilnik – RIA Novosti, Head of InoSMI.ru, Blogger
- Mikhail Tsyganov – RIA Novosti, Journalist, Blogger
- Alla Sokolova – RIA Novosti, Media Monitoring Expert
- Grigory Pasko – School of Bloggers, Director
- Milena Gitt – METRO Moscow, PR Director
- Alexander Fedorov – Green Cross Russia, Communications Director

2nd group (6 people) – major target group: on-line media professionals and PR
- Alena Kotlyarova – IABC/Russia, Green Advertising Group, General Manager
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- Andrey Malafeev – Insiders PR Agency, Director, Corporate Projects
- Alena Vasil'tsova – IABC/Russia, Executive Director
- Alexey Smirnov – RIA Novosti, Internet Projects Manager
- Alena Dushka – RIA Novosti, Internet Producer
- Cyrill Bessonov – Mosnews.com, Editor in Chief

3rd group (4 people) – major target group: on-line media professionals
- Alexandra Kulikova – Russo-British Chamber of Commerce, Deputy Editor in Chief, The Observer newsletter
- Lana Pinyaeva – RIA Novosti, Internet Producer
- Artem Agapov – RIA Novosti, Internet Analyst
- Margarita Grishanina – RIA Novosti, Internet Producer

4th group (9 people) – major target group: journalists and communication professionals
- Denis Daniliidis – European Commission, Delegation to Russia, Head of Press and Information Section
- Alexey Popov – IABC/Russia, Carte Blanche PR Agency, Communications Expert
- Elena Shuvalova – IABC/Russia, Council on Tall Buildings and Urban Habitat, Regional Director
- Samir Shakhbaz – RIA Novosti, Deputy Head, Integrated Newsroom, Head of Foreign Languages Service
- Irina Ryapolova – RIA Novosti, Head of English Language Desk
- Andrey Zolotov – RIA Novosti, Deputy Head of Foreign Languages Service, Editor in Chief of Russiaprofile.org
- Alexey Efimov – RIA Novosti, Deputy Head of Foreign Languages Service, Head of Chinese Languages Desk
- Tatiana Tikhomirova – Higher School of Journalism, Deputy Director
- Alla Nadezhkina – RIA Novosti, Communications Expert


Participants (16 people):

1st group (7 people)
- Damion Yates
- Nikos Ioannou
- Michel Charlton
- Paul Bartlett
- Sam Hickling
- Jim Blackler
- Julian Harris

2nd group (9 people)
- Peter Bentley
- Dewet Diener
- Daniel Wagner-Hall
- James Elson
Participants at Mmd Public Relations (12 people):
- Eva Nepokojova – Account Director
- Denisa Paurova – Account Manager
- Vladimir Stanek – Junior Account Manager
- Petr Jarkovsky – Account Manager
- Hana Blazkova – Account Executive
- Kamila Pavlistova – Media Monitoring Specialist
- Karolina Vaittinen – Account Executive
- Petra Appelbaum – Senior Account Executive
- Radka Horakova – Media Monitoring Consultant
- Tomas Kubik – Junior Account Executive
- Lucie Felcmanova – Account Executive
- Nika Frouzova – Junior Account Manager

Participants at Radio Free Europe/Radio Liberty (9 people):
- Luke Allnutt – Head of English News Section
- Rim Gilfanov – Head of Department, Tatar/Bashkir language service
- Andrius Kuncina – Editor, Belarus language service
- Andrej Pachomov – Editor, Russian language service
- Monika Samkova – Multimedia Expert
- Anton Chiriaev – On-line Strategist, Afghan language service
- Zachary Peterson – Communication Coordinator
- Illeana Breitenstein – Reporter, Russian language service
- Toumaj Tahbaz – On-line Specialist, News and Analysis service
12.3 Example Scenario Presentation
The presentations, both voice-over and without voice-over, are accompanied this file as appendix.

12.4 Focus Group Agenda
The presentation in ppt format is accompanied this file as appendix.

12.5 Results of the Questionnaire
The statistics results of the questionnaire are accompanied this file as appendix.