

## CHAT 2 Partner Presentation

# Beyond the Conventional Terminology Work

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### Introduction

It has always been exciting to live and work in revolutionary times when everything is rapidly changing and science and technology are making particular progress. The time has come to have a different look also at the current trends in terminology work and to think beyond the conventional terminology praxis of language workers. Obviously, changes are required, and innovation is to be brought into focus. As a basis we are taking the communicative paradigm both in language work and software development, and we are re-considering the communication between a user and a system. All in all, it is a human being who works with the system and naturally wants to find it exciting, or interesting at least. The less time a language worker spends on routine operations, the more time he/she has for his/her core job and thus for his/her professional development.

### Terminology Work – Are We Aware?

#### User-Oriented

Who are the main players in terminology work? Being convinced that any application must first of all be user-oriented, we started our research with a profound user needs analysis and realised that terminology, as a language resource, is central for two big groups of users – language workers and language applications. Within the first group we count terminologists, technical writers, translators, interpreters, editors, and other representatives of language work. Within the second group we identified computer-aided translation tools, machine translation systems, and other language applications which deals with natural language processing, e.g., document management systems or language analysis systems etc.

#### Collaborative

What is the language worker's profile? In the present part of our research we share our vision of the language workers' environment and emphasise three main groups – terminologists, technical writers, and translators – involved in terminological data processing this or that way. While terminology work prevails for terminologists, technical writers and translators also spend up to one third of their time on terminology work and in some cases it can consume an even greater share of working time. A terminologist studies a concept and creates a term or identifies it in a text in a certain discourse and language. A writer utilises the term in the text he/she is creating and he/she is aware of terminology consistency to prevent contradictions at semantic or syntactic levels. A translator communicates the concept by means of a translation equivalent in a target language. Even two languages can pose a problem, and we are working with 23 official European languages. Thus, terminology work is a collaborative process, and a language worker is no longer alone in his task. Individual autonomous work leads to errors in term usage and affects not only translation productivity and overall costs but

also influences further phases of content life cycle, e.g., failures in product technical support, client request processing, marketing etc.

### **Portable**

What do language workers need? Each of the three users usually use computer-aided tools to save resources in terms of time and finance. However, our research has drawn attention to the fragmentation of existing tools. Although such tools help a lot, there is no single tool which could cover all the major steps within a term life cycle from identification to translation and further exploitation in other language applications. Existing and/or available tools are not adjusted to the new trends in terminology work, e.g., few tools integrate facilities for corpus work, most tools have limited language coverage, few tools have sharing facilities and are adherent to ISO standards, no tool is based on cloud computing etc. According to the LISA 2004 survey, more than a half of respondents were dissatisfied with the functionality of existing tools. The current situation hasn't changed significantly, however, we have to admit a positive change and the blooming of the language industry in general.

### **Interoperable**

Interoperability is the next point to linger over. Our users need interoperable systems not only within language working environments, but with capacity for inclusion into the World Wide Web technology, supporting the evolution of the Internet and an emerging Web 3.0 technology. It is therefore compulsory to implement standards that can be used to exchange terminological data between different applications and systems. More than this, XML-based standards such as TBX (TermBase eXchange ISO 30042) will also provide an RDF version of the terminology format that allows for interoperability with the Linked Open Data community. Terminological data will be an important part of the semantic web and be accessible not only by typical terminological applications.

### **Cloud-Based**

Diligent terminology work is time consuming and therefore expensive. The more persons make use of the existing terminology and the more people can be involved into the elaboration of terminology, the better will be the return of investment. Traditional media for managing and disseminating terminology such as printed glossaries or dictionaries, but also conventional computer tools such as desktop or even client-server terminology management systems are not ideal for involving many terminology workers and users of different profiles (see paragraph on collaborative terminology work above). Cloud-based technologies and working methods will be essential parts of future terminology efforts.

### **Multilingual**

And the last but not the least, multilinguality is one of the most important heritage features which people struggle to preserve, and our task is to support it also at professional level.

## **Next Generation Terminology Work**

How could TaaS help language workers achieve their goals and make their terminology work exciting? Speaking in terms of Martin Kay and John Hutchins who studied computer-aided translation and the concept of a translation workstation, or workbench, language workers need a terminology workstation based on modern computing technologies. This is vital to be understood not from the

language and/or knowledge science point of view solely. All in all, it is a human being who works with the system and naturally wants to find it exciting, or interesting at least. The less time a language worker spends on routine operations, the more time he/she has for his/her core job and thus for his/her professional development. For instance, a translator will have less time for terminology extraction and lookup and more for translation itself. To stimulate and maintain his/her intrinsic motivation, according to Maslow's triangle, it is important to support work with innovative solutions. Such an approach also cultivates a careful attitude to the language as a synergic system, endless in its development and valuable though centuries.

## **Conclusion**

We have analysed user needs and defined the next generation terminology work as user-oriented, collaborative, portable, interoperable, cloud-based, and multilingual. Following the above considered principles, terminology work is becoming a significant part of global multifaceted infrastructure of natural language processing, data, and Web technology.

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