# PROMT has developed the specialized translation system for Xerox's Russian office

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## The Case

The Russian branch of Xerox has faced the problem of adapting a significant volume of specialized literature to global markets. For such a large manufacturer as Xerox, the situation has been complicated by the necessity for regular information updating for a wide range of products. The main task of the Xerox specialists has been to manage this process in an efficient and cost effective way. The company has needed an effective and quick solution to solve the problem. Xerox has decided to invite PROMT, a world leading provider of translation technologies for European languages, to equip the corporation for today's multilingual marketplace.

# The Solution

Xerox was equipped with the expert version of PROMT machine translation software and Translation Memory provided by TRADOS. PROMT XT Professional is a fully functional translation software with advanced customization options and intellectual self-training capabilities. PROMT for TRADOS (P4T) was supplied as a part of a standard package special program for integration with TM system, which allows one to create, accumulate and use the translations made earlier. Experts of PROMT have undertaken the project in two stages. Firstly the machine translation system was introduced to employees of the Xerox service department, secondly - the integrated system PROMT-TRADOS was provided to translators of the corporation. PROMT had successfully achieved its goal: Xerox translation costs were considerably reduced, as the corporation was relieved of the need to use highly paid non-staff experts, productivity levels and time-savings were increased, as well as the quality of the translation. Thus, the development of PROMT has once again satisfied a corporate customer, requiring an effective machine translation system and was highly appreciated by Xerox.

Today corporations are challenged to communicate globally with customers, vendors, partners, and employees, located in different regions of the world. Thus, multinational corporations regularly face the problem of processing multilingual information flows. Companies that can efficiently manage this process are generating revenues more quickly, reducing costs, and increasing customer satisfaction. Xerox has faced a problem that is typical for the manufacturer promoting products in foreign markets - a need for fast and effective translation of a significant volume of specialized literature. To equip the company for today's multilingual marketplace, Xerox has made a decision to invite PROMT, which has already accumulated significant experience in the successful introduction of documents translation software to many foreign corporations.

As a result, the specialists of PROMT have found two main solutions for Xerox. Firstly, the company was equipped with a PROMT XT Professional machine translation system for the needs of Xerox service engineers and, secondly, the PROMT XT Professional technologies were integrated with the Translation Memory provided by TRADOS - for translators.

Xerox is one of the world's market leaders for office technologies, offering solutions, services and software, to help the company's partners increase their productivity in documents processing. The corporation has already been represented more than 30 years in the Russian market and, at the moment, has a network of 130 dealers and 20 distribution organizations throughout all CIS territories.

In developing its network of regional representation, the company carries out marketing actions jointly with its partners on a regular basis. The success of such actions aimed at the promotion of various product families depends greatly on the fullest and most timely information support in advertising, marketing and training materials in Russian.

Besides, as Xerox traditionally pays special attention to its quality of service, each regional office should provide the end user with a full spectrum of services on equipment maintenance. For this purpose, service engineers should have a constant access to qualitative translation of the necessary engineering specifications for each of 200 production items: printers, copy machines, faxes, printers and the software.

Thus, the corporation has faced a problem that is typical for a manufacturer that is promoting products in foreign markets - a need for fast and effective translation of significant volumes of the specialized literature. For such a large manufacturer as Xerox, the situation was complicated by the necessity for regular information updating for a wide range of products. During an average month, the company requires a translation of 1000 pages of text, 95% of which were initially submitted in English.

Taking into account the complexity of the task, and also the time required for its completion, Xerox experts have made a decision to adopt PROMT, which already has had significant experience and success in the introduction of systems of large scale documents translation to many foreign corporations (e.g., Miele, Deloitte&Touche, NASA, Inmarsat, Volvo Car International, SAP and many others). Another important factor in the choice of the partner has been the fact that PROMT has been the leader in the field of computer linguistics since 1991, successfully combining scientific activity with production. The technologies developed in the company are based on the latest achievements in linguistic science, modern programming and technology.

The first stage of work in the creation of the machine translation system for the Russian department of Xerox was predesign consultation, during the course of which experts of PROMT's department of linguistic technologies implementation of PROMT have analyzed the customer's system requirements. Then during the development stage of the project two technical solutions were created, focused on different groups of users. The @promt Professional machine translation system was proposed for the needs of Xerox service engineers. For translators, the automated chain of translation was based on the shared use of PROMT XT Professional technologies and Translation Memory provided by TRADOS.

TRADOS systems provide the tools for the creation and support of the multilingual documentation. They provide high translation quality of materials in all languages equally, carrying out standardization at the level of sentences. The systems enable one to organize the collective work of translators, and also to minimize the time and expense by control and analysis.

Translation Memory (TM) is the base of translations, a work technology, which enables one to create, accumulate and use the translations made earlier. The construction of "memory of translations" takes place very effectively due to the system of interaction between TM TRADOS and PROMT XT Professional systems.

PROMT XT Professional - is the machine translation system for professionals. The product gives the complex solution on the automated translation of the large arrays of the documentation. To facilitate creation of specialized dictionaries, a module named PROMT Terminology Manager (PROMT Term) has been included in the structure of the product, intended for automatic extraction and management of terminology. TRADOS is supplied as a part of a standard package PROMT for TRADOS (P4T), for integration with TM system.

The algorithm of integration of PROMT XT Professional and TM TRADOS is as follows: in the beginning, the TRADOS system analyzes the translated document, revealing segments for which the translation is not given in the base or for which the percentage of its coincidence with the base is too low. All segments revealed with P4T help are simultaneously transferred to PROMT XT Professional for machine translation. To raise the quality, the user can carry out a preliminary tuning of the system. For example, according to the topic of the translated document the user can attach specialized dictionaries, providing uniformity of terminology in the document. The segments translated by machine fill the TM base, bearing a mark that indicates that they have been created by PROMT.

During subsequent work with the document in the TRADOS system, the user needs only to edit them and to save them in the Translation Memory base. Thus, the shared use of systems results, not only in the translation of the document, but also in a TM base corresponding to it, which can be used in further work. This complicated technological process takes a few seconds and the user supervises it easily due to the convenient interface of interaction between (P4T) systems.

PROMT experts have divided *the project* into two stages. Firstly, it has been decided to introduce the machine translation system for employees of the Xerox service department and secondly, to provide the integrated PROMT-TRADOS system for translators of the corporation. Work on the creation of systems has begun with the development of the terminological dictionary. For this purpose, the PROMT Term.

Module which is included in a standard package, PROMT XT Professional, has been used. The module is intended for automatic extraction and management of terminology, which then will be added to the dictionaries of the machine translation system. The result has been that the general volume of the English-Russian dictionary, which contains the unique terminology of the customer, exceeds 10,000 lexical units.

After adapting the systems to the customer's technical requirements, they have been installed in workplaces of the experts of the Russian branch of Xerox. Then the customization of the systems, including integration of the customer's specialized means of use of the software and their modification, has been carried out.

Here is the opinion of Elena Afonina the head of translations department of Xerox in CIS: "I have been pessimistic, thinking that in fact no program can replace a qualified expert. I was sure that, in order to produce an excellent translation, it is not enough just to know how to apply this or that term. The creative approach is necessary, and the machine is not capable of this. However, despite of all my forecasts, the program has really helped, it has relieved us of the most unpleasant thing in our work - routine".

One of the service department experts of Xerox in CIS has provided a similar estimate of the system: "I was already familiar with PROMT products, even tried to use them in my work, but this machine translation system, because of its capabilities, has surpassed all of my expectations".

Consultation with the customer's experts, modernization and perfection of the established software, guaranteeing it and providing service - all these are necessary components of the last stage of the design work, which is called *project support*. Co-operation between the companies continues till today within the framework of this stage. Since 2000 when PROMT and Xerox - CIS became partners, more than 50 licenses of PROMT XT Professional translation software have been sold.

As a result of the specialized software application, the productivity of the corporation's translators has increased by 40 % due to a decrease in expenses for unification of style and terms, formatting and translation of repeating portions of text. The expenses for translation have been considerably reduced due to use of the system, as it was no longer necessary to use the highly paid services of non-staff experts before partner conferences, or at a release of the new equipment. The opportunity to receive fast and qualitative translation of documents allows the company's technical specialists to maintain service for the equipment at the highest level. Thus, developments of PROMT have demonstrated once again their commitment to corporate customers requiring an effective machine translation system.

"The opportunity for us to cooperate with the experts of the Russian branch of Xerox was very pleasant. The project demonstrates the apparent demand for our integrated technology, combining the advantages of PROMT machine translation systems and the Translation Memory of TRADOS". As Svetlana Svetova, director of the linguistic technologies implementation of the PROMT has stated: "We believe in the benefits' of continued co-operation between TM and MT technologies invite other companies to follow the examples of the market leaders and to turn their attention to the integrated technology of MT and TM".

### **About Xerox**

Xerox Corporation (NYSE:XRX) is a \$15.7 billion technology and services enterprise that helps businesses deploy Smarter Document ManagementSM strategies and find better ways to work. Its intent is constantly to lead with innovative technologies, products and services that customers can depend upon to improve business results.

Xerox provides the document industry's broadest portfolio of offerings. Digital systems include color and black-and-white printing and publishing systems, digital presses and "book factories," multifunction devices, laser and solid ink network printers, copiers and fax machines. Xerox's services expertise is unmatched and includes helping businesses develop online document archives, analyzing how employees can most efficiently share documents and knowledge in the office, operating in-house print shops or mailrooms, and building Webbased processes for personalizing direct mail, invoices, brochures and more. Xerox also offers associated software, support and supplies such as toner, paper and ink.

Headquartered in Stamford, Conn., Xerox is No. 130 among the Fortune 500 with 58,100 employees worldwide, including 32,100 in the United States (December 2004). The company's operations are guided by customer-focused and employee-centered core values -- such as social responsibility, diversity an d quality -- augmented by a passion for innovation, speed and adaptability.

More information about Xerox is available at www.xerox.com.

### **About PROMT**

PROMT (www.e-promt.com) is a world leading provider of machine translation technologies. The company was established in 1991 and its expertise spans over 13 years of machine translation technologies development. Combining the innovation and technological perfection, PROMT has developed the revolutionary machine translation (MT) technology and became the technological leader in MT industry. PROMT core technology powers customized translation solutions that bring together in-depth linguistic knowledge and cutting-edge computer technologies.

Nowadays PROMT provides the full range of translation solutions: machine translation systems and services, dictionaries, translation memory systems, data mining systems for all kinds of business, professionals and Internet/Intranet. Our policy of continuous innovation in software and service delivery has achieved market share growth in all these sectors. New translation software product line @promt consists of a wide range of sophisticated software products and solutions that leverage PROMT 13 plus years of enhancements. @promt translation software is rated as the most sophisticated on the market and ensures the highest possible quality and efficiency of translation processes.

Our customers appreciate our commitment to the continued research and investment in the fields of linguistics and Natural Language Processing: we have customers spanning consumer, SME and enterprise markets, including global industry leaders Xerox, SAP, Lukoil, General Motors, Volvo Car International, Deloitte&Touch and others.

PROMT mission is to enable global business by building new generation MT systems that provide high-quality translation.

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