$$\frac{I^{18}N}{(MT + TM)^2}$$

*Dirk Lueke*

## Abstract

The MLT (Multi-Lingual Technology) Group at SAP currently consists of 9 people permanently employed plus a total of 2 students, freelancers, and temporary personnel. We see ourselves mainly as service providers for our specialized translators, but we also supply preliminary versions and end versions in fields such as user manuals, training material, release notes, error messages, and online texts such as Fl help and hypertext. Today, machine translation at SAP is fully integrated into the translation process, totally accepted, has an excellent profitability rate, and yet we are looking into new fields of application as times are rapidly changing.

## MLT Group

There are a number of new areas which were considered in the early days as not being suitable for machine translation. This includes the translation of customer error messages (notes), R/Mail, communication, texts on various topics for information purposes throughout the company. Today these new areas have been established as separate projects requiring large-scale translations and almost exhausted our group capacity. Thus it becomes more and more important to exploit other means of translation.

In order to be equally successful in these new areas, certain additional tools and improvements of the existing programs are required. One of our outstanding projects of the past two years is the the translation of customer error messages, or notes as they are called internally. For the notes translation at SAP we had a new program written both by Sietec (for the machine translation with METAL) and by SAP (for the export from and import into the R/3 System). In the past two years we have translated almost 40,000 notes this way and today provide a translation service into English within 24 hours or less. One decisive means during this entire process is the integrated translation memory within METAL, called DoVer, which allows us to reduce the time required for a retranslation considerably. We also triggered the development of various macros within the MLT Group to allow for a better and faster dictionary maintenance. The translation quality and the fast turnaround time are even more important today as the translation into Japanese is largely based on this process. Here I should indicate that German and English are our company languages and, due to availability, the translation into Japanese is made from English.

Yet, there are still other requirements. For one thing, suitable tools are necessary to import large amounts of terminology or complete reference works into the

METAL dictionaries to use machine translation more effectively in a wider range of areas. Here, a powerful defaulter would be helpful. Another aspect is the integration of a translation memory into the machine translation process to handle the change management or to use it for less frequented languages. And, because of the increasing demand, SAP will also introduce new language pairs in machine translation, such as E-Sp or E-G, irrespective of the producer.

The most important factor, however, is that all these tools should be operable under ONE interface. It should not matter to the user whether he is using G-E from METAL and E-F from Logos as long as he gets the desired result. The same applies to translation memories and terminology databases. There is also no point in entering terminology in all sorts of databases that serve different purposes. They should all be linked together so that terminology is entered just ONCE regardless of whether it is being used for machine translation (and here again regardless of the underlying engine) or for reference purposes within a company such as SAP. In this respect I would like to draw your attention to the Otelo project, which is partially funded by means of the European Union and whose aim it is to meet the above requirements.


**Dirk Lueke**
In September 1991, Dirk Lueke graduated from the University of Mainz, Translation and Interpretation Department in Germersheim, with a Bachelor's degree in translation (English and Portuguese).
He spent an overall time of three years in the USA, including one year at a high school in Pittsburgh, PA, and two semesters as a teaching assistant in the English department at the Southern Illinois University in Carbondale, IL.
In August 1991, he joined the Machine Translation Department at SAP/Walldorf where he had a considerable share in successfully introducing the MT System METAL. Since October 1995 he is responsible for the company-wide coordination of the notes translation process.


## Facts & Figures of SAP

SAP was founded in 1972 and today is the world leader in integrated business software solutions with the two products R/2 and R/3. R/2 and R/3 stand for realtime systems of the second and third generation. Today SAP is among the four biggest software companies in the world with over 9,800 R/3 installations and over 1,700 R/2 installations in more than 80 countries. SAP currently has more than 10,000 employees and is represented in over 40 countries.


Documentation at SAP covers a variety of documentation types, such as manuals, training material, release notes, marketing brochures. This documentation is currently translated into 26 different languages in which case the translation depth varies from language to language.


The Translation Department presently holds a staff of 75 English translators (+ 15

freelancers) and 30 translators (+ 35 freelancers and translation bureaus) for the various other languages, and with well over 70 technical writers being involved in writing documentation. Before the new product R/3 was launched in 1991, it was clear that there would be an increasing demand for large-scale translations in the shortest possible time for the existing R/2 System and for the new R/3 System and with the release periods of upgrades being reduced drastically. Today SAP has reached a point where it becomes increasingly difficult to keep up with the pace in which documentation, that requires translation, is being written. This demand cannot be covered by human translators alone anymore. Thus, the MLT Group has been repositioned within the company to support further aspects of the translation workflow. We are evaluating new translation tools (e.g. translation memories), introduce new language pairs in machine translation (e.g. E-Sp and E-G), and provide internal technical support to facilitate the translation process and to meet the translation requirements within the company. Other challenges include the constantly growing number of customers, new information highways (e.g. Intranet and Internet), new tools, and so on.

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$$\frac{I^{18}N}{(MT + TM)^2}$$
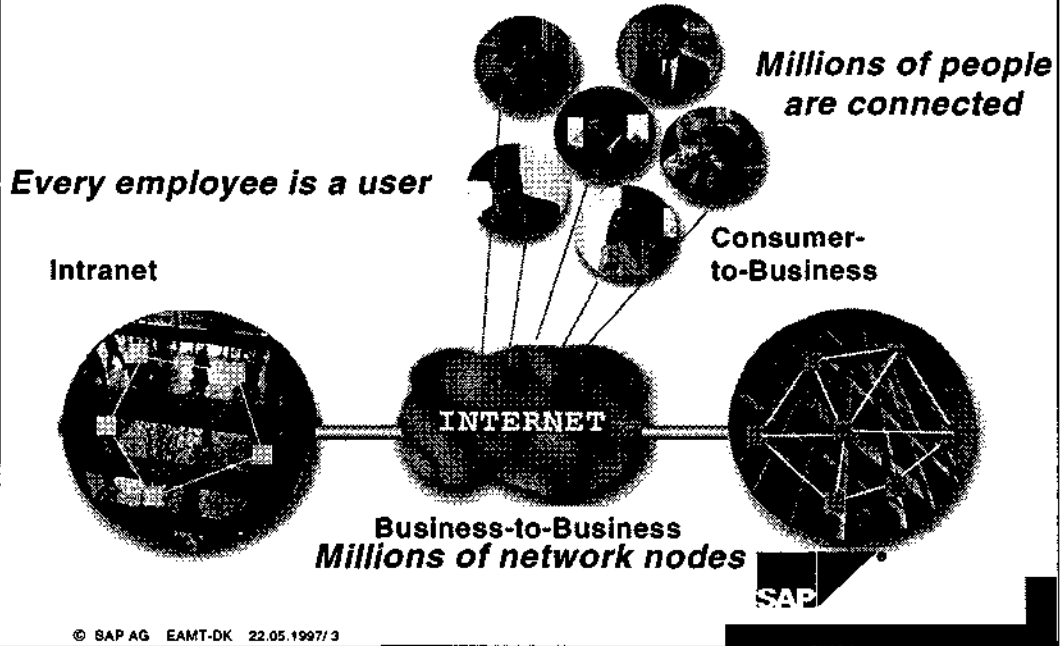
**Dirk Lueke**
**MLT Group**

## SAP Today

1 4th largest software vendor in the world

1 25 years of business experience

1 7,000+ customers in 80+ countries

    n  9,800+ R/3 installations *

    n  1,700+ R/2 installations *

1 10,000+ employees

1 Group sales totaled over $ 2,4 billion in 1996, 75% of which was generated outside Germany
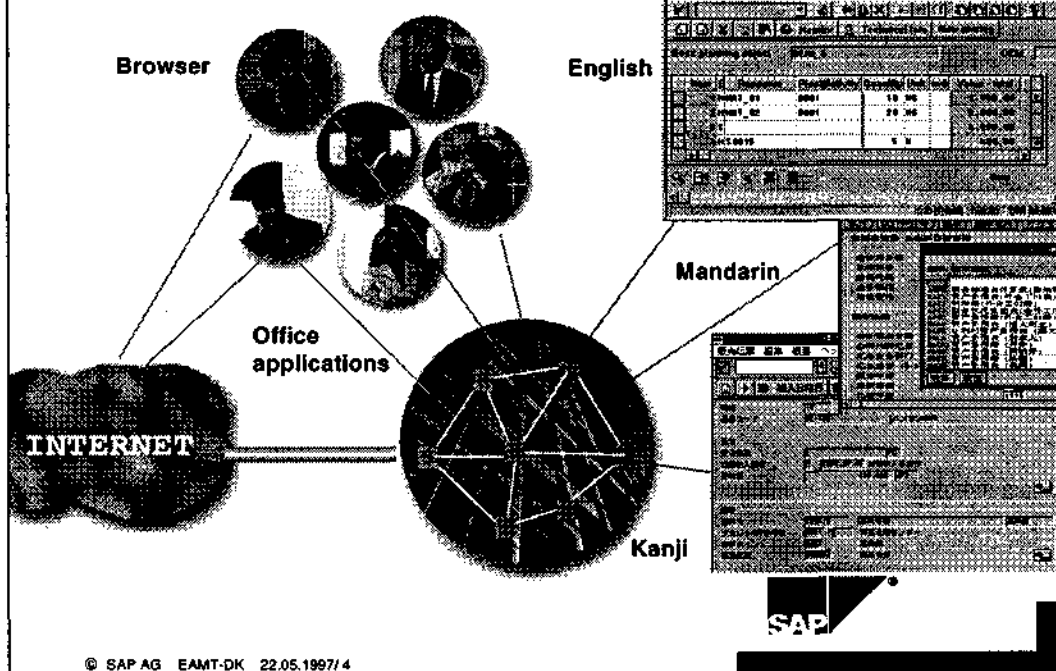
* Figures as of Dec. '96 (preliminary results)

# International Communication via Internet

*Millions of people are connected*

*Every employee is a user*

**Consumer-to-Business**

**Intranet**

**INTERNET**

**Business-to-Business**
*Millions of network nodes*

**SAP**

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# Individual user interfaces

**Browser**

**English**

**Mandarin**

**Office applications**

**INTERNET**

**Kanji**

**SAP**

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## Increasing translation demand at SAP - Still...!

1 **more customers**

    n 20,000 R/3 customers expected by the end of '97

1 **more users**

    n currently 1,500,000 users are using R/3

1 **more languages**

    n currently R/3 is translated in various depths into 26 languages

1 **more communication options**

    n Internet

    n Intranet

1 **shift in company language**

    n from German to English by '99

---

## Six main goals

1 **high customer satisfaction**

1 **top documentation quality**

1 **introduction of new technologies**

1 **open partnerships**

1 **highly qualified and highly motivated employees**

1 **increasingly faster turnaround time**

**Partnership**



**Innovation    Leadership**
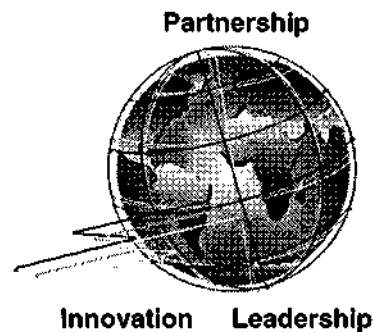
# MLT Group '97

1  9 employees

1  2 students

1  + 3 vacancies
   in 1997
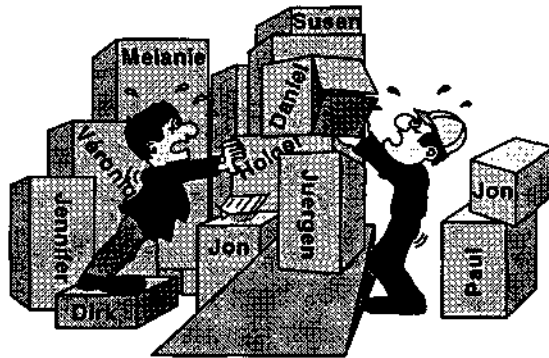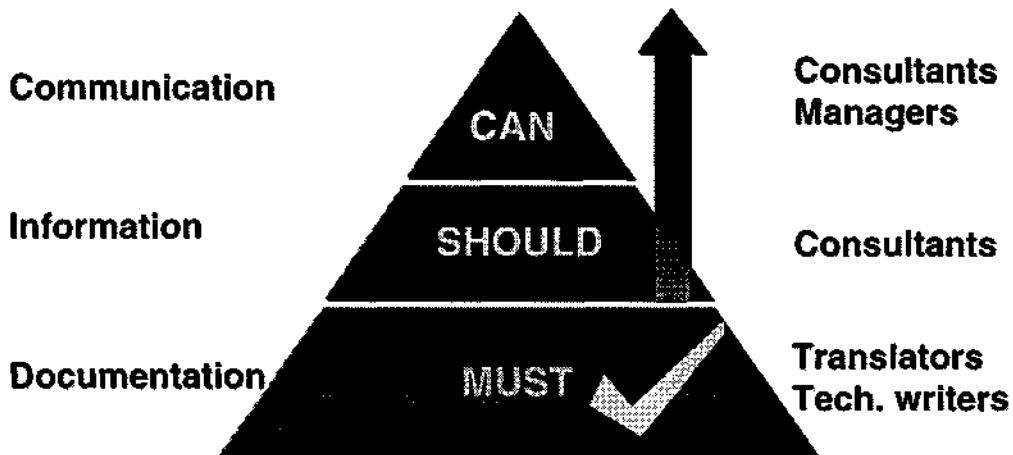
- assigned to Basis department
- shift in work area
- large-scale introduction of
  translation tools

# Areas covered with MT

Communication

Information

Documentation

CAN

SHOULD

MUST

Consultants
Managers

Consultants

Translators
Tech. writers

## Problem solutions provided by SAP

*SAP Error Notes ...*

n ... depict errors and problems that might occur when using the SAP Systems productively ➡ Symptom

n ... describe the causes in more detail ➡ cause

n ... provide solutions to the problems ➡ Solution

## Notes translation using METAL

1 How are error notes translated?

n METAL is fully integrated into the R/3 enviroment
n Notes are selected by means of a report
n Translations are provided by MLT Group within 24 hours
n Semi-automatic translation process
n Translation memory for updates

&SYMPTOM&
No English text
&CAUSE&
No translation
&SOLUTION&
Just press the
METAL button
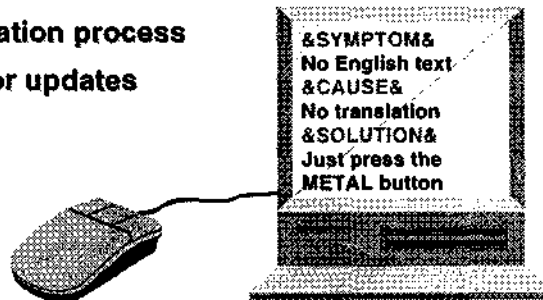
## So far we have...

1 ... translated 40,000 error notes over the past two years using METAL

  n  with a total amount of 15,000 pages of text

1 ... achieved a turnaround time of far less than 24 hrs

1 ... established a worldwide translation service

1 ... reached a higher degree of customer satisfaction

1 ... triggered measures to improve input/ouput quality

## Is this it ?   -
## Well, you know us !

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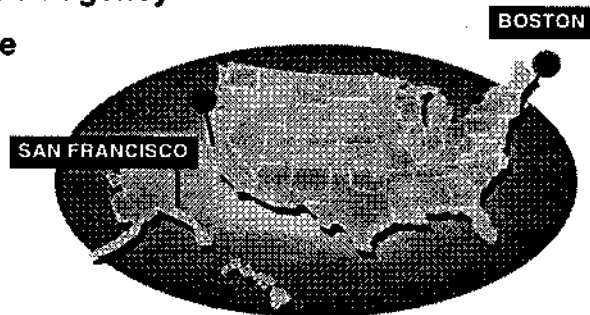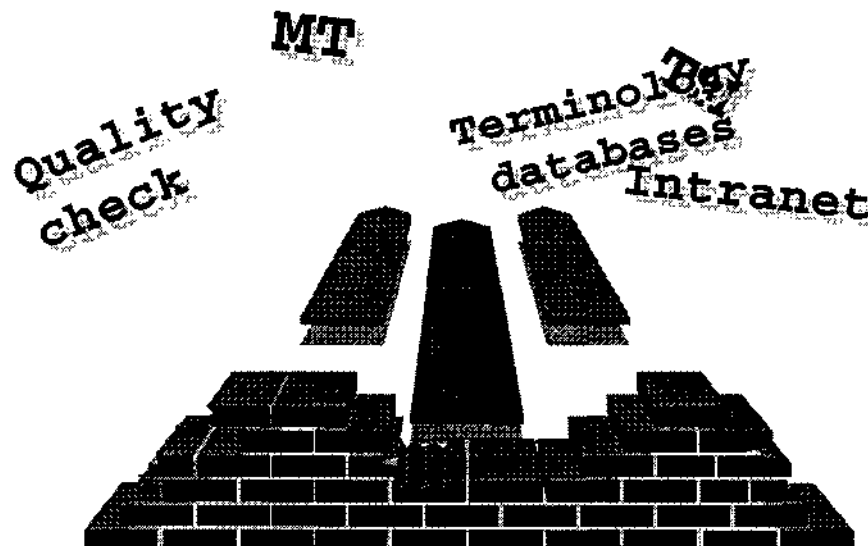## Notes Workflow - Under construction !!!
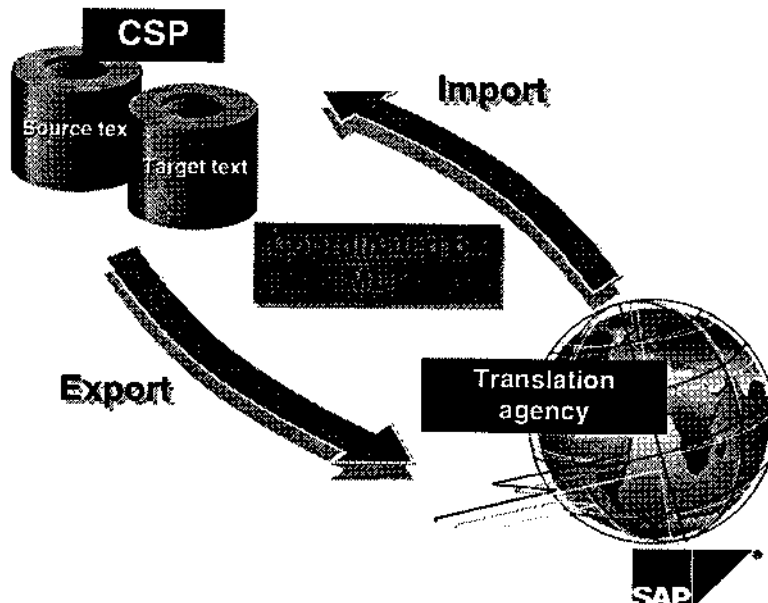
# So we will ...

1  ... **continue our efforts to shorten the turnaround
   times by increasing translation capacity in 1998 to**

   n  6 days a week

   n  19 hours a day

1  ... **collaborate with an internationally
   cooperating translation agency**

1  ... **help improving the
   quality**

BOSTON

SAN FRANCISCO

# Tearing down walls

MT

Quality check

Terminology databases

Intranet

SAP

EAMT Workshop, Copenhagen, May 1997

# TM ... and how the MLT Group is involved

1 **Extensive evaluation of various translation tools**

  n Trados          Star Transit

  n IBM TM2         Eurolang Optimizer

1 **Current TM language pairs inhouse**

  n E-F             D-E

  n E-R             D-R

  n E-CZ

1 **Company-wide implementation**

  n Memory maintenance

  n Technical support and training

  n Internal and external use

---

# We want to use TM ...

1  ... internally and externally

1  ... for every language required

1  ... to keep the range of re-translation as low as possible

1  ... to integrate it into the R/3 translation environment

1  ... to improve consistency and quality

1  ... as means for "cost control"

## Taking on new challenges

**Our motivation...**

### Virtual companies

#### New business relations

### Dynamic businesses

#### Fast turnaround times

### Globalization

#### Internet

### Technology

#### Corporate infrastructure

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## Where are we going?

### Involvement/services

- More throughput with the help of external translators/agencies
- Translation memory
- Step-by-step support of all SAP employees
- Further MT language pairs (E-G, E-Sp)
- Quality check (terminology, style & grammar)
- Translation tool evaluation & support
- Participation in international projects
  - w OTELO

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