

1,000 Web Pages 12 Languages 50% Faster?



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1,000 Web Pages, 12 Languages, 50% Faster?

- Scenario 1
 - Conventional translation from scratch
- Scenario 2
 - Conventional translation and Translation Memory (TM)
- Scenario 3
 - Trained Machine Translation (MT) and post-editing (PE) and Translation Memory (TM)
- Average words per web page = 500
- Project size
 - $-1,000 \times 500 = 500,000$ words



Scenario 1 – Conventional Translation (no TM)

- Volume of content = 500,000 words
- Conventional translation average daily rate = 2,500 words per day
- Translation cost per word = €0.17 (indicative example rate)
- Volume to translate = 500,000 words
- Project schedule with 5 translators per language
 - -500,000/2,500/5 = 40 days
- Project cost
 - -500,000 x €0.17 = €85,000 per language



Scenario 2 – Conventional Translation with TM

- Volume of content = 500,000 words
- Conventional translation average daily rate = 2,500 words per day
- Translation cost per word = €0.17
- Translation Memory leverage = 50%
- Volume to translate = $500,000 \times 0.5 = 250,000 \text{ words}$
- Project schedule with 5 translators
 - -250,000/2,500/5 = 20 days
- Project cost
 - 250,000 x €0.17 = €42,500 per language

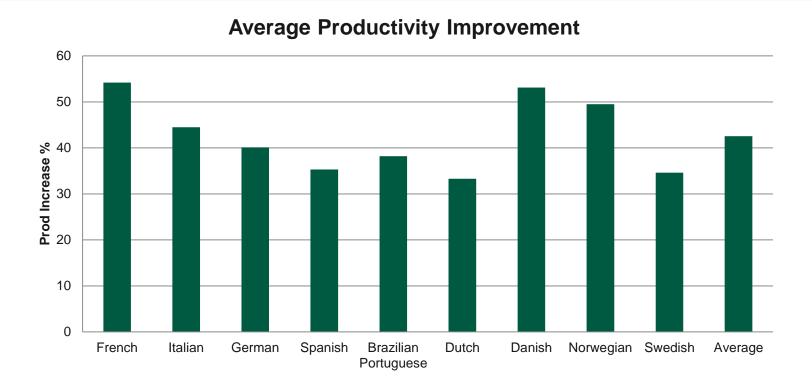


Data for Scenario 3 - Trained MT + PE

- What is the efficiency improvement with Trained MT + PE?
- Many variables affect overall productivity
 - MT output quality: technology, language, source content, training content
 - Translation environment (tools and technology)
 - Human resources



Snapshot of Trained MT Productivity Improvement



- Average improvement in productivity is 43%
- Average time reduction is (1 1/(1+0.43)) = 30%



Scenario 3 – Trained MT with Post-editing and TM

- Volume of content = 500,000 words
- Post-editing average daily rate =1.43 x 2,500 = ~3,500 words per day
- Post-editing cost per word at 30% discount = 0.7 x 0.17 = €0.12 per word
- Translation Memory leverage = 50%
- Volume to post-edit = $500,000 \times 0.5 = 250,000 \text{ words}$
- Project schedule with 5 post-editors per language
 - -250,000/3,500/5 = 14 days
- Project cost
 - $-250,000 \times €0.12 = €30,000 \text{ per language}$



Summary of Results

	Translation	Translation + TM	Trained MT + PE + TM
Words to translate per language	500,000 words	250,000 words	
Words to post-edit per language			250,000 words
Project Schedule, 5 translators per language	40 days	20 days	14 days
Cost per language	€ 85,000	€ 42,500	€ 30,000
Project cost for 12 languages	€1,020,000	€ 510,000	€ 360,000
Project saving compared to Translation + TM			€ 150,000

- Trained MT + PE + TM
 - Reduces time by 30% compared to Translation + TM
 - Cost saving, €150,000, provides budget for five more languages



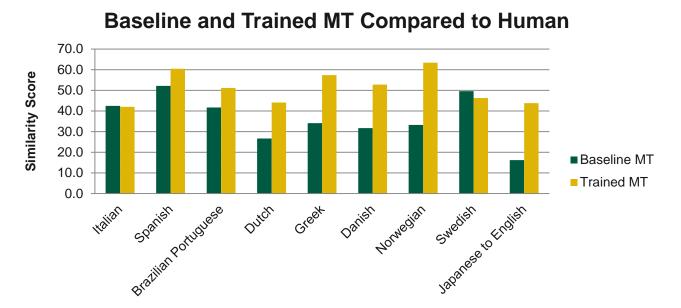
What do you Need to Achieve this Performance?

- High performance MT technology
 - MT output quality
 - Baseline language set to match requirements foundation for trained engines
 - Easy to administer, reliable, secure
- MT engine training ability to tune MT for a specific application
- Integration fully utilise existing translation tools and technology
- Human resources experienced professionals to optimise MT performance



Why MT Engine Training is Important

- The MT output is trained so that the terminology and style are appropriate for the content
- Improves post-editing efficiency and productivity



• Measure productivity improvement before release to production



Integration of MT with the Translation Environment

- Require an MT platform that is:
 - Easy to connect and administer, reliable, secure
- Current generation of translation tools have many features and functions that ensure high quality and productivity
 - Easy to use interface
 - Translation Memory
 - Automated workflow
 - Support functions: terminology, spell checkers, QA tools, reporting
 - Open api connectivity
 - MT integration specifics, tag handling, punctuation
- Retain these benefits and add the efficiency savings of MT



Integration with Translation Editor with Baseline MT

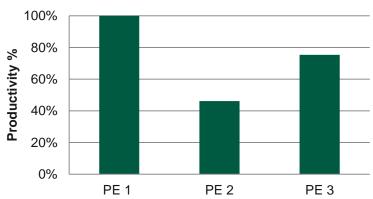
La carte européenne d'assurance maladie	∂ AT	The European health insurance card
Avant de vous rendre dans un autre a pays de l'UE a pour un bref séjour - pour affaires, vacances ou études - demandez une a carte européenne d'assurance maladie a img à votre organisme d'assurance maladie.	AT	Before you travel to another country of the a <u>EU</u> a for a short stay - on business, vacation or studies - ask for a <u>European health</u> insurance card a img to your health insurance organization.
Cette carte vous permettra de bénéficier de tous les soins de santé dont vous pourriez avoir besoin durant votre séjour.	AT AT	This card will allow you to enjoy all the health care you may need during your stay.
Dans ce cas, les 27 États membres de l'UE + l'Islande, le Liechtenstein, la Norvège et la Suisse	∅ AT	In this case, the 27 member States of the EU + Iceland, Liechtenstein, Norway and Switzerland
carte européenne d'assurance maladie	<i>§</i> 82%	Health insurance card
Elle prouve que vous avez droit à des soins médicaux et constitue la preuve matérielle que vous êtes assuré dans un pays de l'UE.	AT	It proves that you have the right to medical care and constitutes the physical evidence that you are insured in a country of the EU.
Si vous tombez malade lors d'un séjour à l'étranger, la carte européenne d'assurance maladie vous permet de bénéficier des soins de santé publics dans les mêmes conditions que les personnes assurées dans le pays en question.	∂ AT	If you get sick during a stay abroad, the European health insurance card enables you to benefit from the public health care in the same conditions as the insured persons in the country in question.
Vous pouvez donc aller consulter un médecin local.	<i>§</i> 91%	So you can consult a a doctor a.
médecin	& 100%	Doctor
Sachez que les ressortissants de pays non membres de l'UE ne peuvent utiliser leur carte européenne d'assurance maladie pour bénéficier d'un traitement médical au Danemark.	AT	Be aware that the nationals from non-member countries of the EU may not use their European health insurance card to receive medical treatment in Denmark.
En outre, les ressortissants bulgares et roumains ne peuvent pas actuellement utiliser leur carte européenne d'assurance maladie en Suisse.	AT ■	In addition, the Bulgarian and Romanian nationals cannot currently use their European health insurance card in Switzerland.
Dans le cas peu probable où votre carte européenne d'assurance maladie serait refusée, vous pouvez a demander de l'aide	AT	In the unlikely event that your European health insurance card would be refused, you can a <u>ask for help</u> a.
demander de l'aide	Љ 100% П	Ask for Help
Même si vous n'avez pas votre carte européenne d'assurance maladie avec vous, vous avez droit aux soins de santé.	AT	Even if you do not have your European health insurance card with you, you are entitled to health care.
Les modalités de paiement et de remboursement pourront toutefois être plus compliquées.	AT ■ AT ■ ■ AT ■	The arrangements for payment and reimbursement may however be more complicated.
En cas d'urgence - si vous êtes hospitalisé, par exemple - votre organisme local d'assurance maladie peut vous aider en envoyant par fax ou par courriel un certificat provisoire de remplacement.	AT	In case of emergency - if you are hospitalized, for example - your local agency of health insurance can help you by sending by fax or by e-mail a provisional replacement certificate.



Human Resources

- MT developers
 - To advance MT technology
 - Develop an environment that make MT easy and efficient to use
- MT linguists
 - To train, optimise and maintain MT engines
- Post-editors
 - Post-editing is a professional skill, training and experience are very important

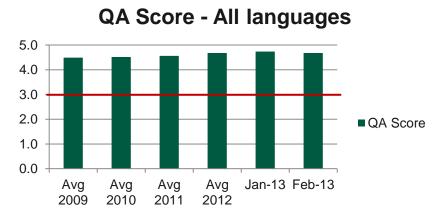
Comparison of PE Productivity

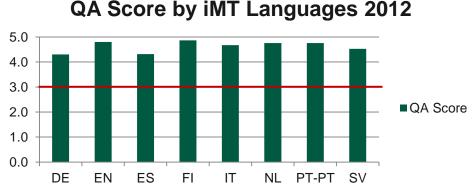




How to Guarantee High Quality

- Post-editors review all MT output and post-edit as necessary to full publishable standard
- Use the same QA checks and tools as for conventional translation
- Include a linguistic review of the post-editors work
- Use the same QA standards as conventional translation same threshold scores
- Reviewer Grading for European automotive customer







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- Trained MT + PE + TM
 - Time and cost reduced by 30% compared to Translation + TM
 - Do more for less
- How to achieve...



High Performance Solution

Language Technology Infrastructure Platform

- State of the art translation environment
 State of the art statistical machine
 - High-performance translation editing tools
 - » Productivity: comprehensive TM match, auto-suggest, auto-propagate
 - » Quality: Terminology, Spell, QA Check
 - Automated workflow

- State of the art statistical machine translation (SMT)
 - Comprehensive set of high performance baselines
 - Fast and cost efficient training
 - Easy to deploy MT platform

Human Resources – experienced and professional: Developers, MT Linguists, Project Managers, Post-editors

