

# **Computer-Aided Translation**

Trento, 12th September 2014
MT Marathon 2014

## Company overview



10 years of experience in Localization

[,laukalai'zeiSn] process of adapting a product to a specific language and culture

#### Language Fanatics

[fə'nætık] a person marked or motivated by an extreme enthusiasm

#### Computer **Scientists**

['saiəntist] a person having expert knowledge of one or more sciences

### 90+ Languages

[læŋgwidʒiz] a system of communication used by a particular country or community

#### 90,000+ native language translators

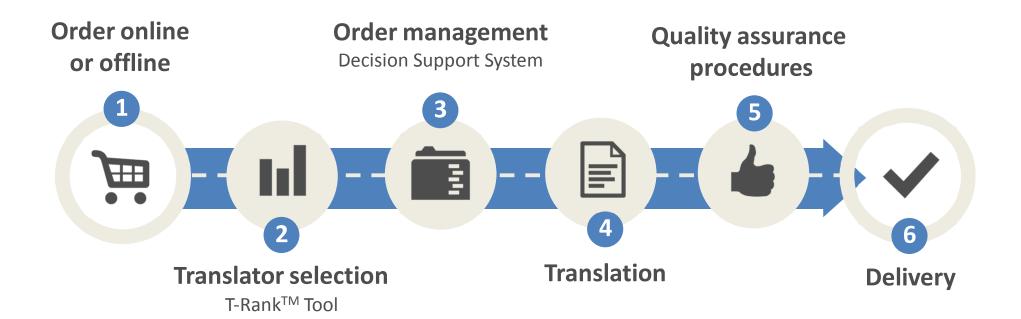
['neitiv læri.gwid3] the language that a person has spoken from earliest childhood

40,000+ satisfied customers

['sætisfaid] happy because something happened in the way they expected

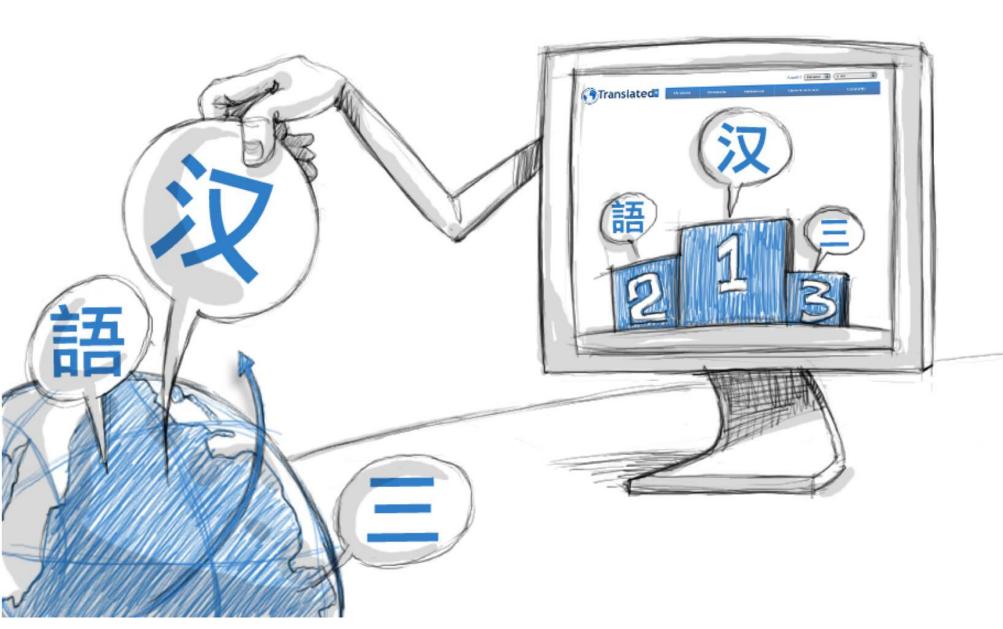


### How we work

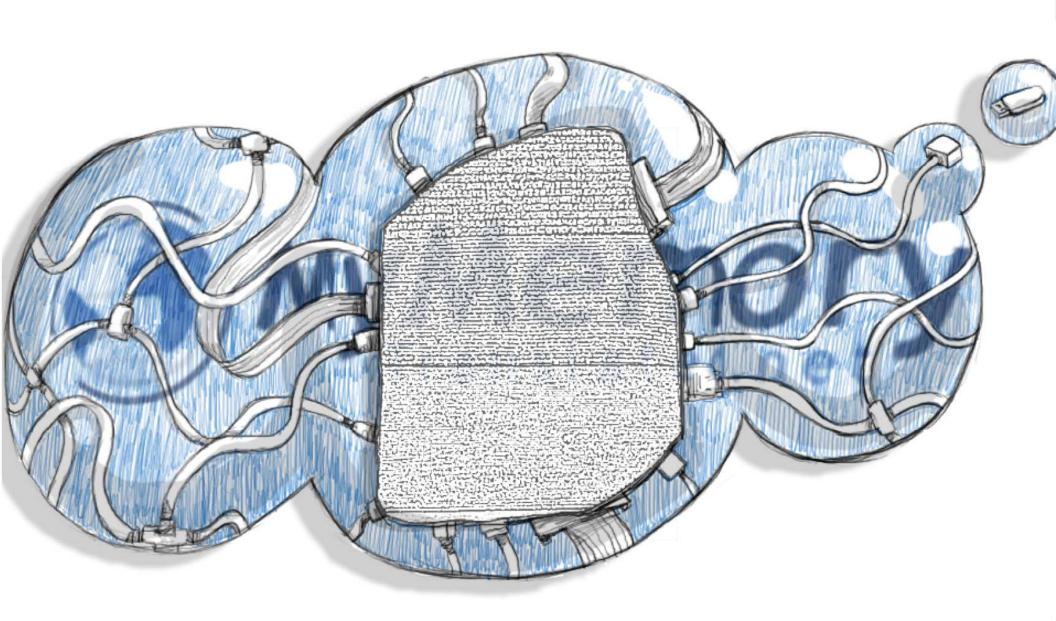




### T-Rank™



### MyMemory, Organize all the language knowledge



### 40,000+ clients

TRANSLATED is one of the few Google approved vendors for AdWords translation and one of the few official partners for YouTube paid captions translations and Android apps on Google Play Store.

























































### What's a CAT tool?

1. Helping **translating faster** by reusing content and automating common tasks

2. Helping **translating better**, by managing terminology and quality assurance



## Most common steps

- 1. Extracting translatable content from different file formats (doc, html, xml...)
- 2. Segmentation into sentences.
- 3. Translation Memory Management
- 4. Concordance Lookup & Terminology
- 5. Quality Assurance
- 6. Converting back to original format



# **CAT Fuzzy Matching Algorithm**

I <b>probably</b> like this little red house.	Industry Fuzzy Match	100 – TER%
I <b>probably</b> like this little red house.	100%	100%
I like this little red house.	84%	66%
I <b>probably</b> like this little red house	99%	89%
I probably like this little red house.	98%	78%
i <b>probably</b> like this little red house.	98%	89%



## A Brief History

**1970 Martin Kay**. *Idea of Lookup previous translation for suggestions.* 

1978 Alan Melby. First Tool: ALPS. Repetition Processing

1988 Brian Harris. Bi-Text. Partial Matches.

**1990s** Trados. Desktop Software

**2005** MyMemory & Taus TDA. Web Collaborative TMs

**2006** Lingotek. Web-Based

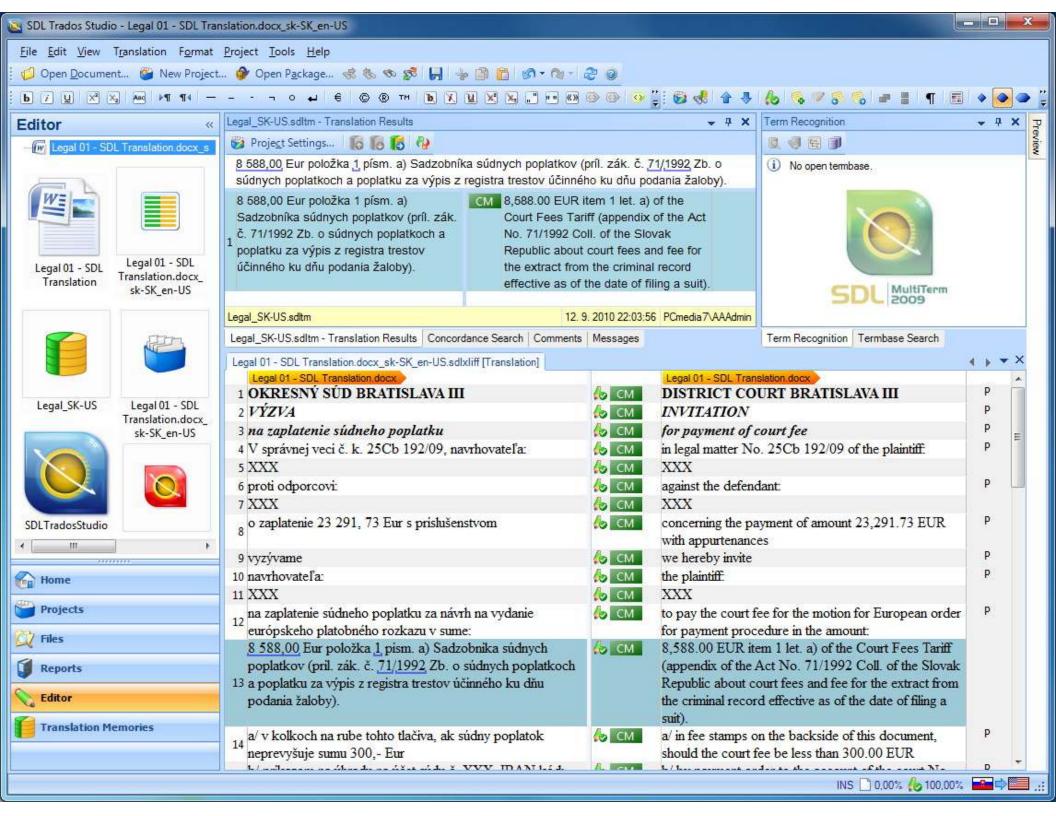
**2014** ???. Collaborative TMs + Enhanced Machine Translation

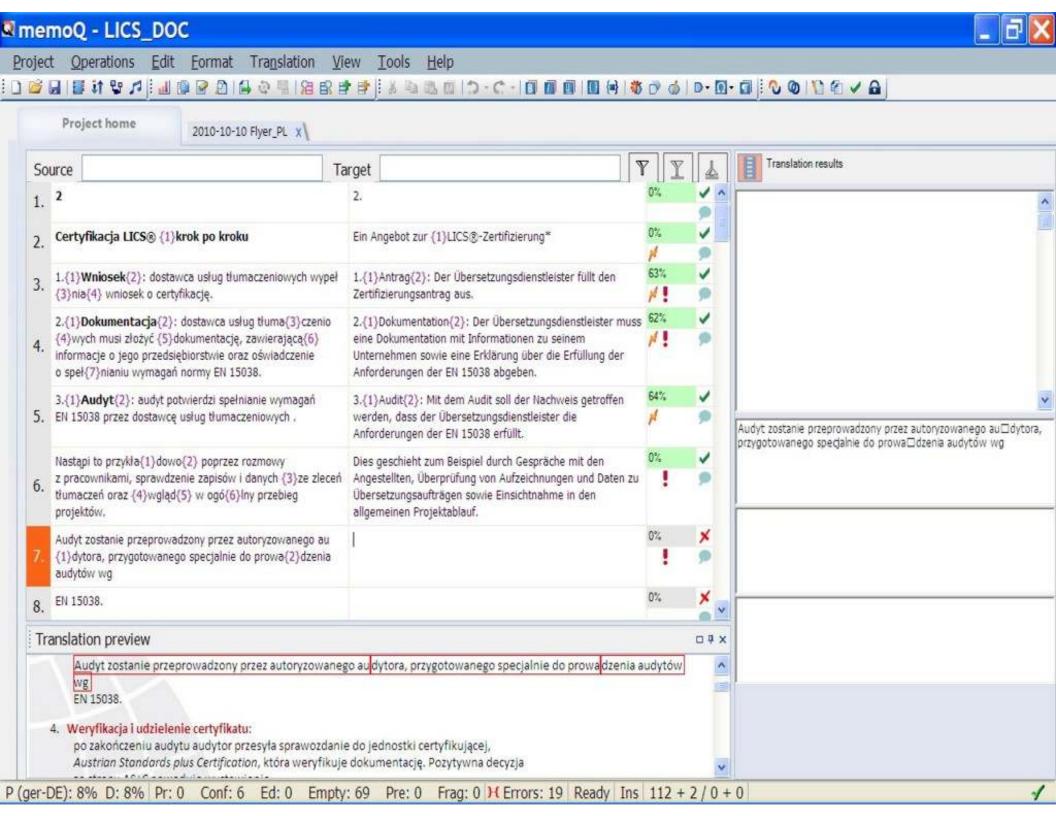


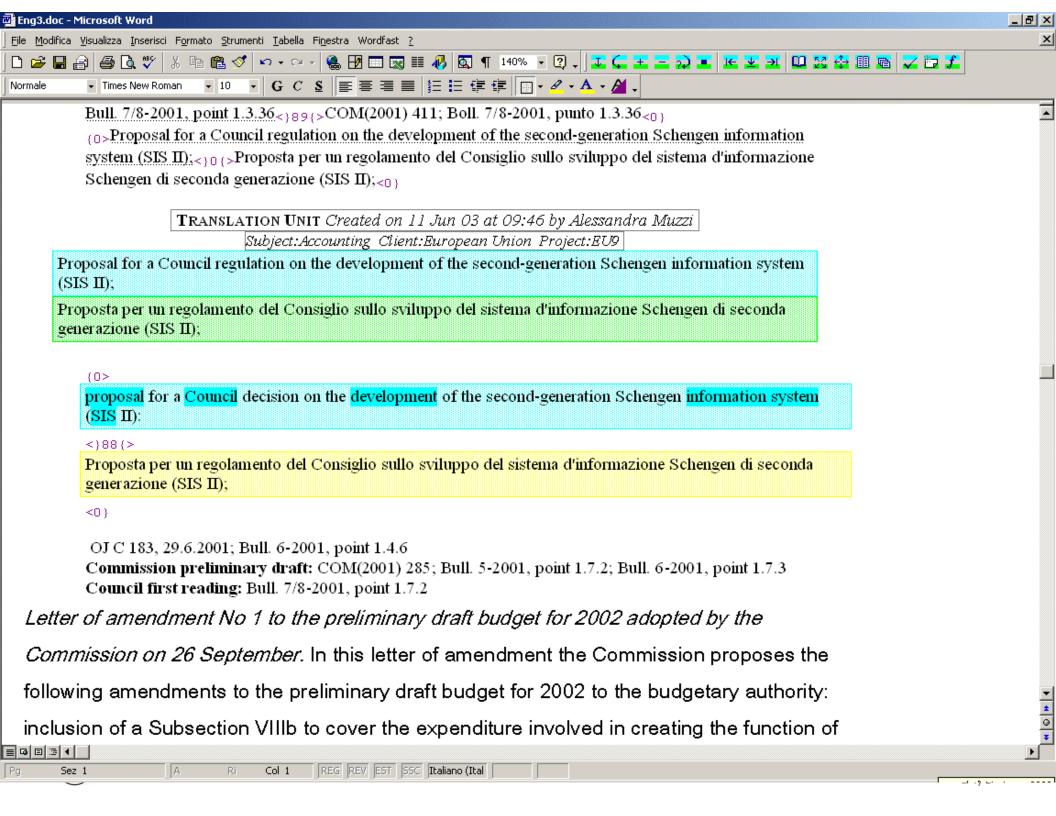
# Machine Translation vs Translation Memory

	MT	TM
Learning time	Training	None
Exact Recall	Not guaranteed	Yes
Response time. 1M sentences, same HW.	>500ms	<50ms
Generation of unseen sentences	Good	Limited
Designed Human Interaction	Replace	Assist

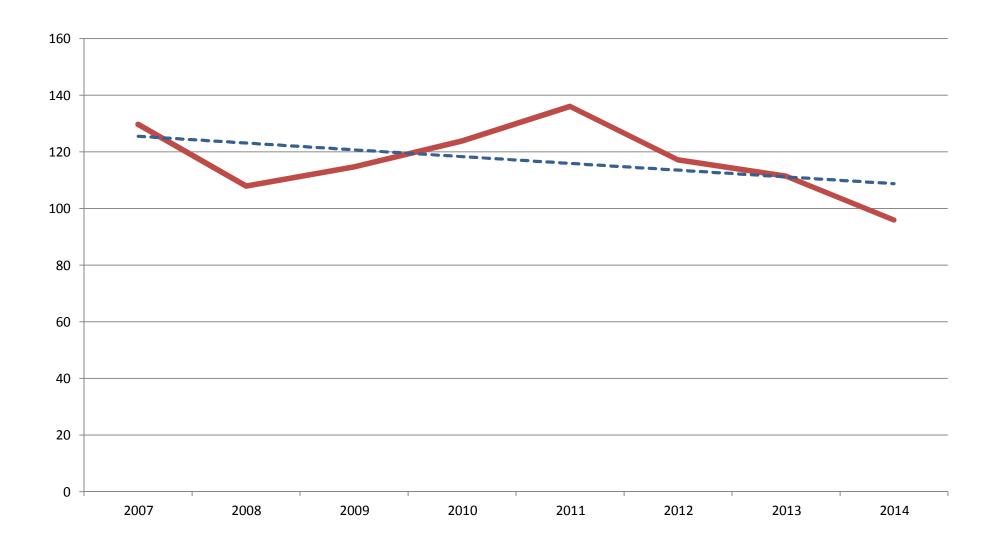








# Average Translation Job - 2007-2014





# Challenges



Simpler UI, Open Source and Secure	
Commercial Machine Translation	
Large Scale Collaborative TM	
Moses Easy Integrated	
Collect post-editing data	
Domain Adaptation	
Online Learning	





### **Partners**









THE UNIVERSITY of EDINBURGH

### **Sponsors**





## Google Translate – Post Editing Data

#### 6 million words un-filtered sample translated with Matecat

Lang	PPE %	TTE sec	Lang	PPE %	TTE sec	Lang	PPE %	TTE sec
ar-SA	50,25	12,09	hi-IN	42,91	30,00	pt-PT	26,78	10,72
bg-BG	29,26	22,37	hr-HR	38,32	9,26	ro-RO	38,02	17,02
bn-IN	39,25	6,31	hu-HU	37,67	15,93	ru-RU	46,87	16,2
bs-BA	57,29	9,26	id-ID	37,81	7,86	sk-SK	22,85	10,65
cs-CZ	36,30	18,87	it-IT	30,47	10,09	sl-SI	39,51	8,39
da-DK	27,49	11,97	ja-JP	57,14	15,91	sr-Latn-RS	84,52	15,73
de-DE	36,40	13,54	km-KH	66,68	38,69	sv-SE	33,87	7,65
el-GR	37,36	10,8	ko-KR	53,29	16,41	te-IN	45,71	14,56
es-ES	30,10	20,07	It-LT	53,30	12,62	th-TH	57,25	13,94
es-MX	25,51	13,01	ms-MY	32,61	23,43	tl-PH	39,21	6,53
et-EE	57,19	9,53	nb-NO	24,33	12,2	tr-TR	46,75	10,88
fi-FI	45,06	12,19	nl-BE	29,27	10,74	uk-UA	41,87	65,17
fr-CA	31,93	10,76	nl-NL	30,50	8,62	vi-VN	32,78	18,34
fr-FR	31,20	12,44	pl-PL	40,21	19,42	zh-CN	47,02	16,68
he-IL	81,49	21,78	pt-BR	26,66	8,68	zh-TW	57,33	18,71

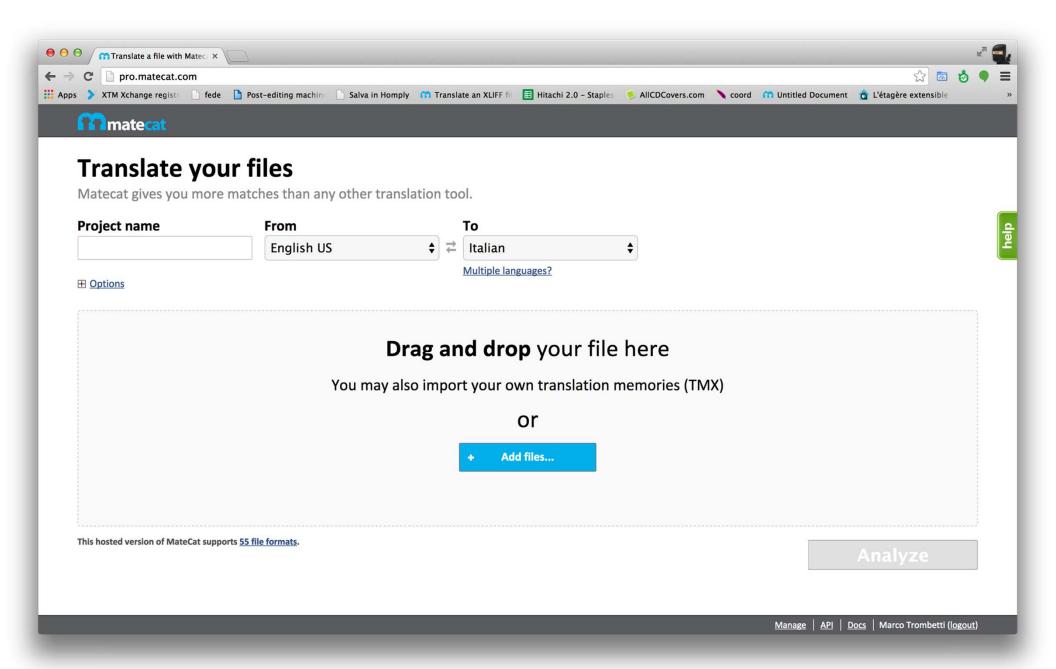


### Demo

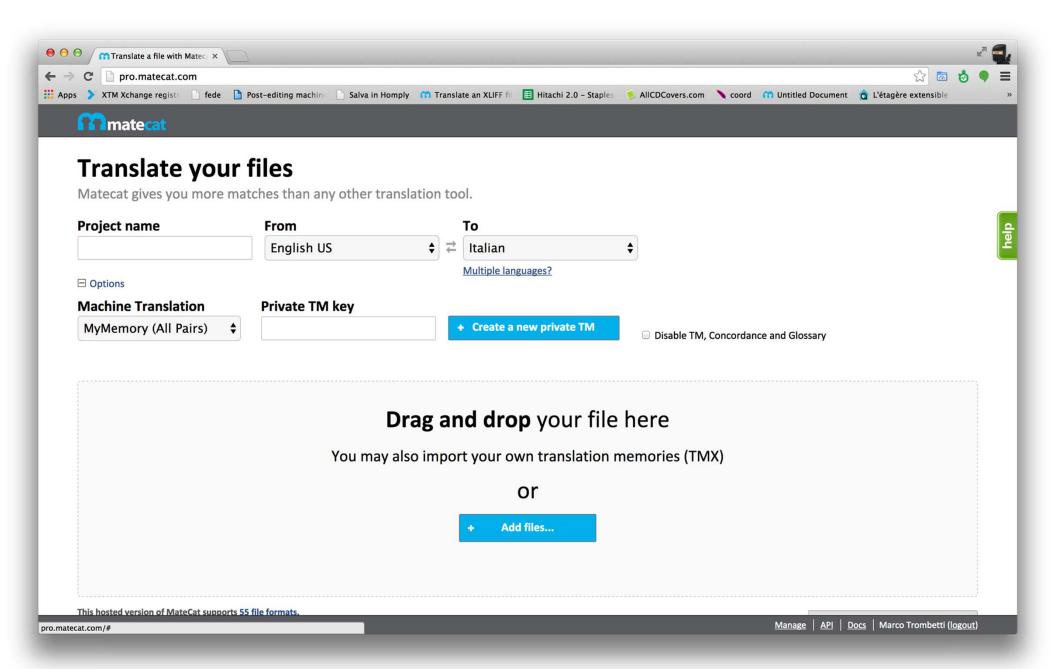


pro.matecat.com











#### NONE

#### √ MyMemory (All Pairs)

FBK Legal (EN->IT) - Ad.- Experimental

FBK Legal (EN>FR) - Ad. - Experimental

FBK TED (IT>EN) - Experimental

FBK Legal (EN>IT) T1

FBK Legal (EN>IT) T2

FBK Legal (EN>IT) T3

FBK Legal (EN>IT) T4

FBK InfTech (EN>IT) T1

FBK InfTech (EN>IT) T2

FBK InfTech (EN>IT) T3

FBK InfTech (EN>IT) T4

FBK Legal (EN>FR) T1

FBK Legal (EN>FR) T2

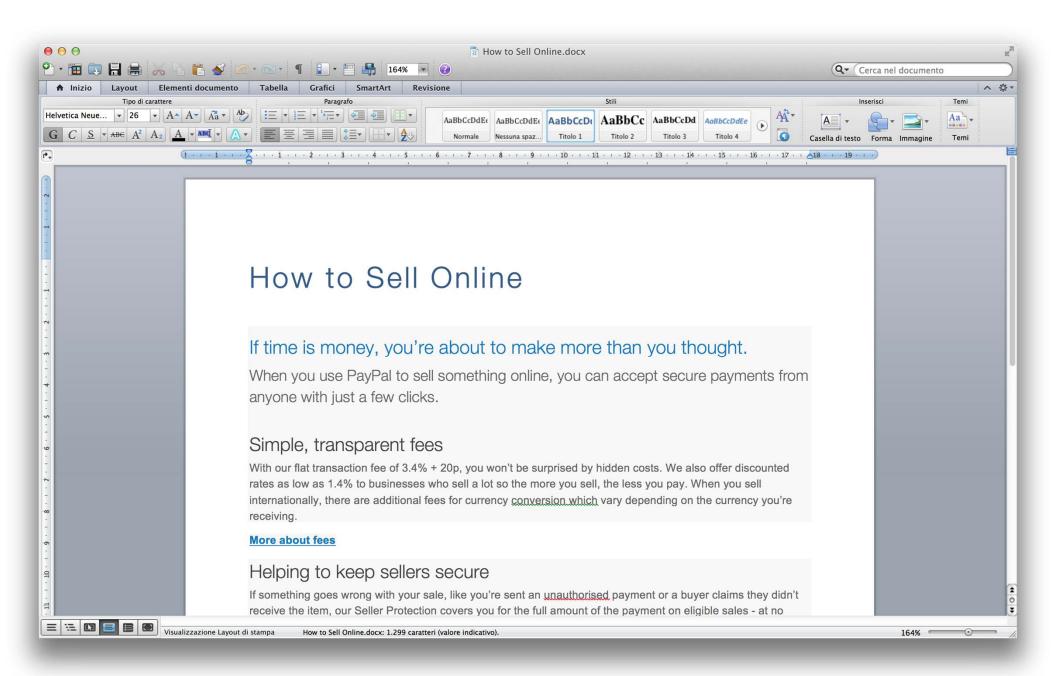
FBK Legal (EN>FR) T3

FBK Legal (EN>FR) T4

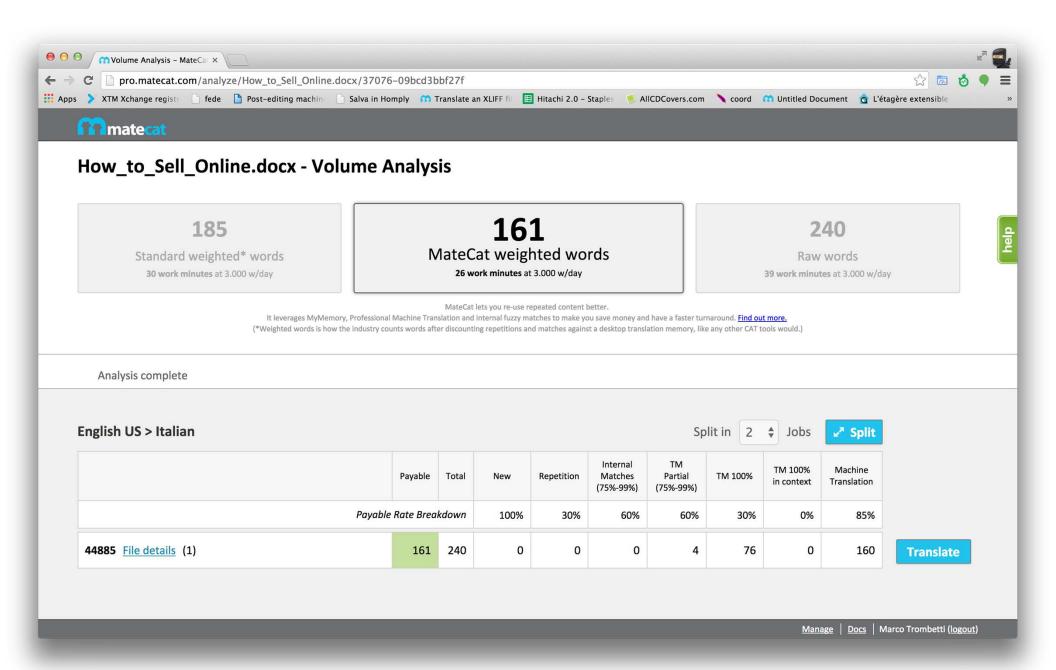
FBK InfTech (EN>FR) T1

FBK InfTech (EN>FR) T2

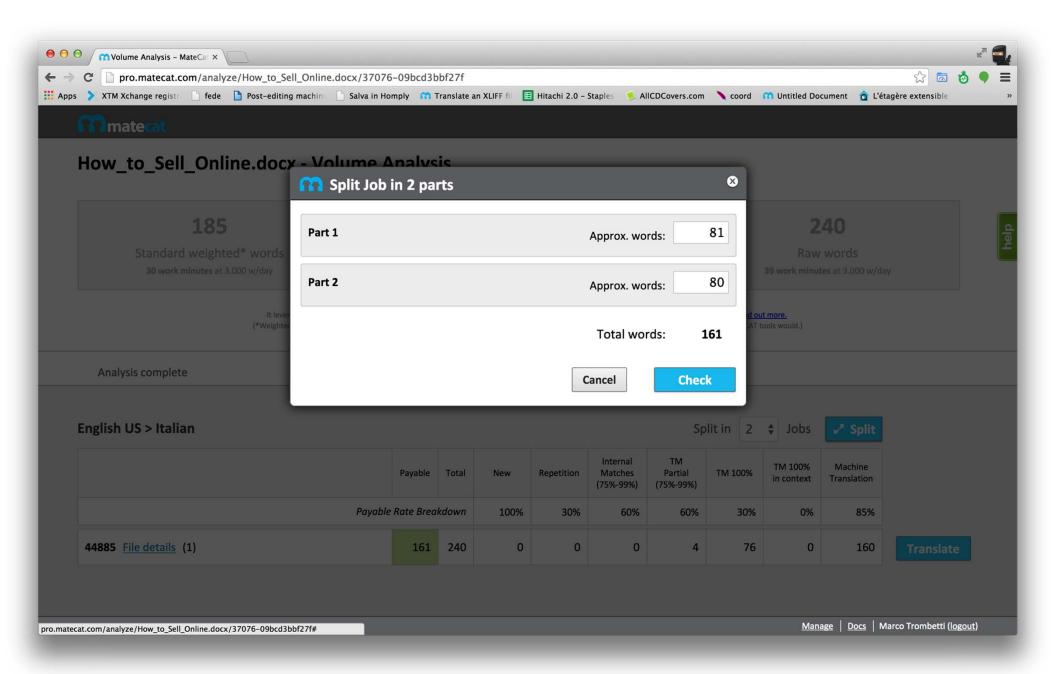




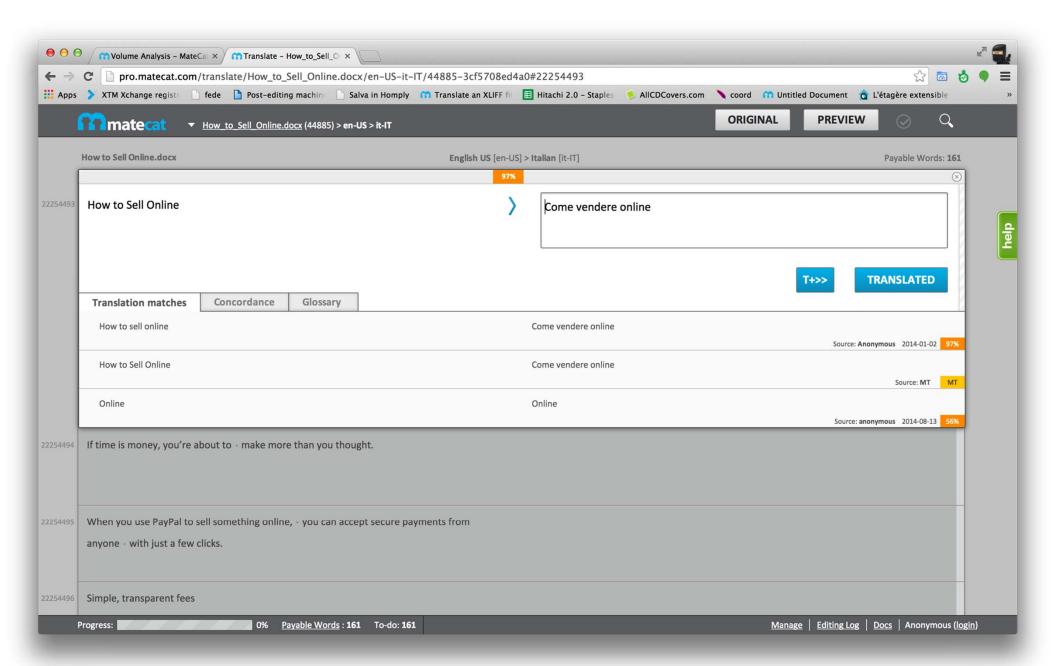




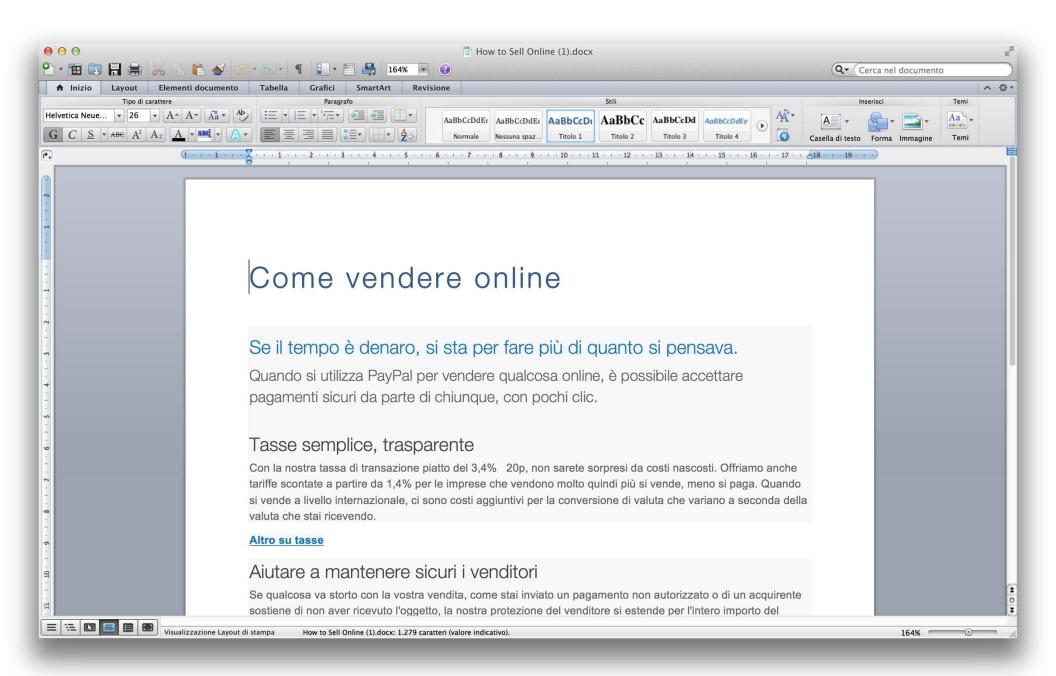




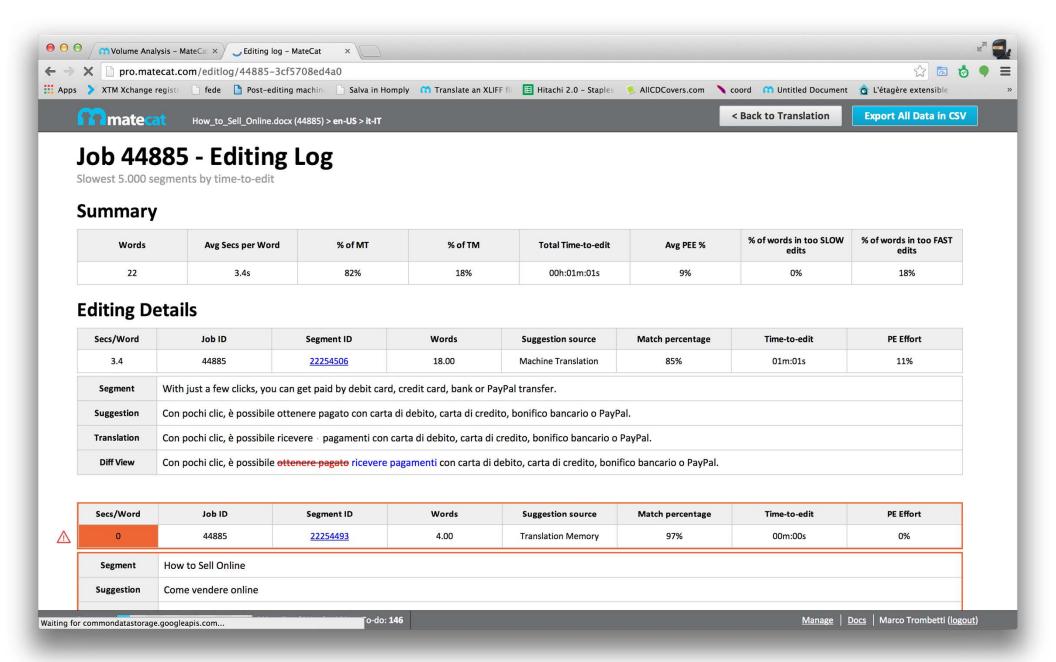














### **Contacts**

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