



Portuñol Translations



Lessons Learned



Our Project

- **Original objective:** Train a machine translation engine to translate ocean conservation reports, specifically a report from the Monterey Bay Aquarium
- **Post-meeting objective:** Train a machine translation engine to translate a 2016 report from the UN about progress towards the SDGs
- **Training data:** Environmental and conservation reports from various organizations, UN and UN affiliate organization reports on the SDGs, the environment, etc
- **Tuning data:** The 2017 and 2018 versions of the report used for testing data



Our Metrics Goals

- Efficiency: PEMT 35% faster than HT
- Cost: PEMT 35% cheaper than HT
- Quality:

Quality metrics have been adapted from error types on the MQM Scorecard, with weights and severities assigned by us.

Error Type	Minor	Major	Critical
Untranslated	x	x	10
Omission	1	2	3
Addition	1	2	3
Mistranslation	2	4	8
Terminology	2	4	8
Inconsistency	2	4	8
Spelling/ Grammar	1	2	3

If a text reaches 10 points per 500 words, it will not pass as acceptable.

Our Metrics Goals vs. Our Results

- Efficiency: PEMT 35% faster than HT → PEMT was 88% faster than HT
 - 1,000 words in 27.75 minutes vs. 1,000 words in 4 hours
 - 212.25 minutes saved
- Cost: PEMT 35% cheaper than HT → PEMT was 88% cheaper than HT
 - Proposal specified rate of \$40/hr for all our services
 - \$18.50 vs \$160
- Quality → Translation failed
 - 50 error points > 20 error points for 1,000 words
 - Our standards were high compared to what we saw in the example proposals, because we were working with UN documents

Improvement Over Course of Project

- Efficiency: 84% faster at first PEMT → 88% faster at last PEMT
- Cost: 84% cheaper at first PEMT → 88% cheaper at last PEMT
- Quality: 38.5 error points at first PEMT → 50 error points at last PEMT
- BLEU scores:
 - Lowest: 49.17 (Trial 1/10)
 - Highest: 51.76 (Trial 8/10)

How We Got There: Some Process Steps

- Data research
- Data alignment
- Troubleshooting Microsoft Custom Translator!!
- Data cleaning
- More data research
- More data cleaning
- File conversions
- Data substitution
- Switching data between Tuning and Training
- Glossary creation for official translations of committees, publications, etc.

Bleu Score
▲ 50.88
▲ 49.95
▲ 51.76
▲ 50.84
▲ 51.15
▲ 50.65
▲ 49.51
▲ 49.83
▲ 49.17
▲ 49.34

Biggest Challenges

- Character limits
- Platform rejecting TMX's
- Finding the right data
 - Need formatting conducive to alignment
 - Many reports very visual with creative layout
- Time constraints/balancing workload → letting go of perfectionism



Main Lessons Learned

- Should have budgeted troubleshooting and data cleaning into proposal
- Simple math can go a long way
- Trados alignment is sometimes very bad; auto alignment through YouAlign and WordFast actually works quite well
- We put an hourly rate in our proposal rather than a per word rate for cost; per word rate would have been more realistic

Main Lessons Learned, cont.

- BLEU score is not always the best indicator of usefulness of a translation for your goals (for ex., our quality metric comparisons differ from BLEU scores)
- Have had a clearer conversation about error severity/post-editing goals between post editors
- Microsoft Custom Translator is right to warn against glossaries

De conformidad con la resolución 70/1 de la Asamblea General, el Secretario General, en cooperación con el sistema de las Naciones Unidas, tiene el honor de presentar el informe sobre los progresos realizados en los **objetivos de desarrollo sostenible**.

El presente informe es el primer informe anual sobre el tema y ofrece un panorama mundial de la situación actual respecto **de los objetivos de desarrollo sostenible**, **sobre la base de** los últimos datos disponibles para los indicadores en el marco mundial propuesto.

Por último, el informe proporciona información sobre las metodologías utilizadas para la compilación de indicadores globales, así como una visión general de la disponibilidad de datos y los desafíos estadísticos.

I. Introducción

En la resolución 70/1 de la Asamblea General, **"transformando** nuestro mundo: **la agenda** 2030 para el **desarrollo sostenible"** se esboza una nueva agenda de desarrollo ambiciosa y universal para la comunidad mundial.

La implementación de ese plan de acción audaz y transformador en los próximos 15 años podría **trasladar** al mundo a un camino sostenible y resiliente, sin dejar a nadie atrás.

Our Recommendations for Our Engine

- Seems possible that engine, with more training, could be used by a UN translating division
 - Because of high quality needs, would still have to be carefully post-edited
- Cost-benefit analysis:
 - Estimated total project timeline and costs: 3x what pilot phase took, totalling at \$6,960
 - Would pay for itself after 174 hours of post editing (at our rate), or ~22 full days of work
- What we would do next:
 - Fix capitalization and article issues from glossary
 - Find out exactly where in the data grammar issues were coming from and clean out incorrect segments
 - “respecto de”