Translation and Post-Editing Productivity

The below charts present the results of a 2-day translation and post-editing productivity test with 37 participants that Autodesk held in August of 2011. The machine translation was produced by Autodesk’s in-house Moses engines trained exclusively on Autodesk data. The test was carried out in a purpose-built browser translation interface which recorded the time spent on each and every segment. The content for the productivity test consisted of typical Autodesk content – software strings as well as documentation, general CAD as well as multimedia software.

Productivity per Language – Translation vs Post-Editing
For all languages tested – in fact for all 37 test participants –, post-editing productivity was significantly higher than translation productivity.

Translation and Post-Editing Productivity vs Post-Editing Experience
Our test results suggest that experience, especially in post-editing, is the single most important factor in translation productivity, particularly in relation to post-editing.
Believes to be faster at translation/post-editing vs. actual productivity

Most test participants either had no or a wrong perception of their own productivity. The most productive post-editors and the ones who benefitted most from MT proposals were those translators who believed to be faster at translating.

Preference and Productivity

In our test, there was no strong correlation between post-editing productivity and the preference for one or the other translation method. The minority of translators who preferred to work with TM matches however were the least productive.

Productivity per chapter – translated from scratch, fuzzy, MT
For some of the languages, our test included three chapters which contained content of a similar nature but were all three to be translated in a different way: the first chapter had to be translated from scratch, the second was entirely pretranslated with fuzzy matches of all categories including below 50%, and the third chapter was to be post-edited.

The chart shows that for the languages with presumably “best” MT output, post-editing beat fuzzy match editing.

Productivity per category
A break-down by match categories shows that post-editing of MT was roughly as productive as working from matches in the 85-94% category. Note however that this varies significantly across languages, as already reflected on the previous chart.

Productivity and segment length
Post-editing typically yields higher productivity no matter the number of words a given segment contains. The gain is higher for shorter than for longer segments and then increases again for extremely long segments. This variation is however mainly due to translation productivity as opposed to post-editing productivity; the correlation between post-editing productivity and segment length is low whereas translation is quite clearly proportionally slower for shorter (and extremely long) segments. The ideal segment length for translation is around 21 words and 25 words for post-editing.
Note that these numbers are generally in line with results from our previous productivity tests.
(The red curves on the first chart are polynomial trendlines.)

All languages

Portuguese

Korean

Chinese