

QTLaunchPad: Preparation and Launch of a Large-Scale Action for Quality Translation Technology

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List of partners
German Research Center for Artificial Intelligence, Germany (coordinator)
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Summary

QTLaunchPad is dedicated to overcoming quality barriers in machine and human translation and in language technologies. It is preparing for a large-scale translation quality initiative for Europe. One of the key contributions of QTLaunchPad is the Multidimensional Quality Metrics (MQM), a customizable system that provides analytic methods to assess machine translation output. This system has been used to assess results from top-performing WMT systems and customer data provided by language service providers. Analysis in the project has focused on "almost good" translations, those segments where MT systems produce results that can be easily fixed, to understand the barriers that impact the best MT systems. It has also worked on the development of quality estimation and linguistic evaluation techniques to assist MT processes to identify those segments that are good enough to use as is, those that can be easily repaired by human post-editors, and those that should be discarded and translated from scratch.

Key findings include the identification of linguistic structures in English that are particularly likely to trigger problems for MT systems of different types (e.g., use of -ing verb forms, nongenitive uses of of, and differences across languages in permissible positions within sentences). These findings were only possible by combining the insights of human evaluators and the output of computational tools. The insights gained from this analysis will be of use to developers seeking to improve MT systems and to implementers seeking to integrate MT into "real world" production chains that include MT, human translators or posteditors, and other technologies.