



PILOT PROJECT PROPOSAL

FOR THE LEGEND OF ZELDA: BREATH OF THE WILD

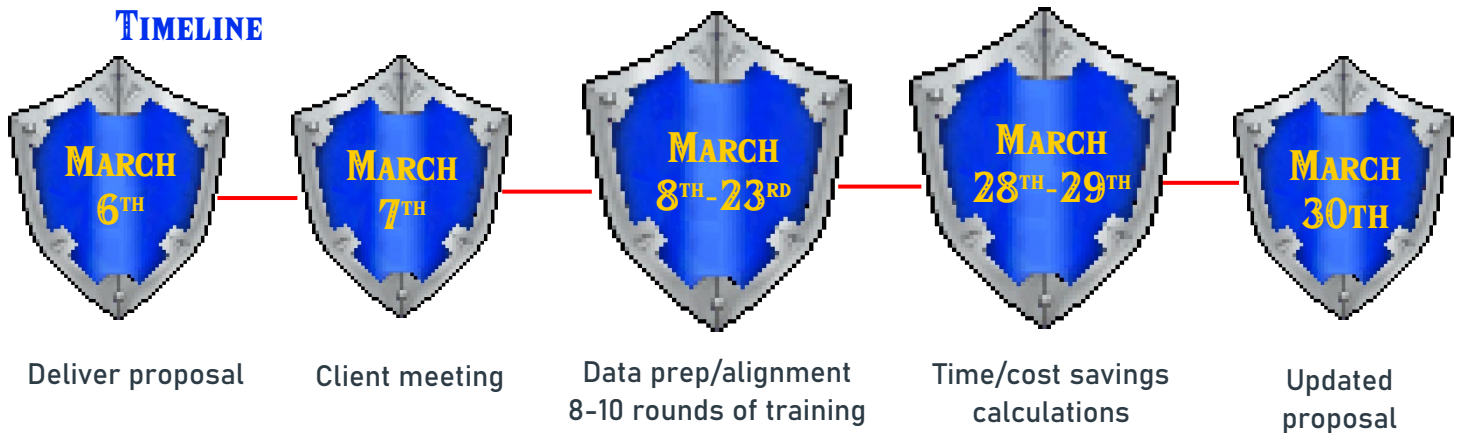
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OBJECTIVE

The purpose of this pilot project is to estimate the resources required in training a neural machine translation (NMT) engine to translate Zelda games from Japanese to English to demonstrate the feasibility of using post-editing of machine translation (PEMT) for future Zelda titles. PEMT will be determined viable for the project if the following criteria are met:

- Efficiency: PEMT 30% faster than human translation
- Cost: PEMT 30% savings over human translation
- Quality: PEMT quality deemed acceptable through player evaluation of factors such as story and consistency in character speech style. The Dynamic Quality Framework (DQF) QA Metric model will also be used to assign numerical values to quality.

TIMELINE



DATASETS

TRAINING

Previous series of The Legend of Zelda (approx. 10k segments, will be added on during the training)

TUNING DATA

The Legend of Zelda: Breath of the Wild (approx. 500 segments, might be added on during training)

TESTING DATA

The Legend of Zelda: Breath of the Wild (approx. 500 segments, exclusive from tuning data segments)

GLOSSARY: A glossary containing important proper nouns throughout the Zelda series (including, but not limited to, character names, place names, weapons, items, etc.) will also be included in the datasets.

PROCESS

FILE PREPARATION:



TRAINING:

Microsoft Custom Translator

- 🛡️ 1st round training, human post-editing & evaluation
- 🛡️ Iterative rounds of training
- 🛡️ The best round of training, is post-edited & evaluated

BLEU scores are analyzed after each round and strategies are adapted accordingly.

ASSESSMENT:

POST-EDITING

250 translated segments will be used as MT samples in post-editing.



Timed post-editing of the first and best rounds of training, using DQF metrics



Assess PE_{MT} time against approximate time for human translation



Calculate estimated costs of PE_{MT} vs. human translation (assuming \$0.12/word)

HUMAN EVALUATION

Two groups of evaluators would be sourced – one of people familiar with the Zelda franchise and games, and one group of people who have never played the games. Evaluators will be surveyed on different criteria based on their respective group. Survey questions will be based on quality metrics as established in the Dynamic Quality Framework (DQF) model.

FAMILIAR WITH ZELDA

- 🛡️ Consistency – do characters and game elements seem consistent with other games in the franchise?
- 🛡️ Terminology – is game-specific terminology understandable and translated correctly?

UNFAMILIAR WITH ZELDA

- 🛡️ Usability – is the user able to play the game successfully without needing outside resources or knowledge
- 🛡️ Understandability – does the story make sense to someone with no background knowledge?

COSTS

TASK	ESTIMATED HOURS	RATE/HOUR	COST
Source/Target Text Collection	10	\$40	\$400
Segmentation/Alignment	20	\$40	\$800
Glossary Creation	3	\$40	\$120
Data Cleaning	3	\$40	\$120
MT Training/Troubleshooting	8	\$40	\$320
Post-Editing & Quality Measurement	4	\$40	\$160
Subtotal	48	-	\$1920
Project Management Fee		10% of total	\$192
TOTAL			\$2112

DELIVERABLES

Upon completion of the pilot project, the following deliverables will be provided to the client in an updated proposal:

- 🛡 Evaluation of whether efficiency, cost, and quality goals stated in the objectives were met
- 🛡 Projected time and cost for a full Zelda MT training project
- 🛡 Recommendations for further training the MT engine
- 🛡 Details of training, tuning, and testing data used for pilot training
- 🛡 Reports on results of training rounds (BLEU scores, iterative changes between rounds)