Common Sense Advisory



Augmented Translation: A New Approach to Combining Human and Machine Capabilities

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Background

- In 2016, CSA research predicted that post-edited machine translation (PEMT) will be the fastest-growing segment of the *enterprise* translation market (36% CAGR from 2016–2019 vs. 25% for raw MT and 7% for HT)
- Human linguists do not like PEMT:
 - It leaves them at the end of the chain with no way to fix things: They see the same mistakes over and over
 - Prices tend to be 65% of the total for HT, but do not account for effort, so many translators feel they are getting paid less for the same amount of work
- Traditional CAT tools have embraced MT as an optional information source
 - This is **not** post-editing: Linguists can use MT or not as they see fit
 - Most implementations are one-way: The MT provides segments, but only learns from changes if/when the engines are retrained



Business challenge

- Human linguists alone cannot scale to meet demand
 - Enterprise content volumes are growing much more quickly than the supply of human translators is
 - Much of the growth is in on-demand content where traditional human processes are too slow and expensive
- Current-generation technology treats various technologies as discrete entities and cannot deliver needed efficiencies
- Language service providers (LSPs) that embrace MT grow more quickly than those that take a "wait and see" approach, but struggle to define their MT-centric business models



Large LSPs that adopted MT grew 3.5 times faster than others



LSP Growth (2013–2015)

*The difference between these figures is not statistically significant.

Source: "Fast-Growing LSPs Turn to Machine Translation," © Common Sense Advisory, Inc.



Agenda

In the presentation, based on more than a decade of independent research and analysis on machine translation, CSA Research discusses and analyzes:

- 1. Overview of current technology approaches to MT in human-translation centric environments
- 2. Defining "augmented translation" and its components: sub-segment TM, adaptive (neural) MT, automated content enrichment (ACE), improved terminology management, AI-driven project management
- 3. Detailed discussion of adaptive MT and ACE
- 4. Overview of technology providers in this space
- 5. Discussion of the future of augmented translation



Augmented translation overview



Source: "How AI Will Augment Human Translation," © Common Sense Advisory, Inc.



Research referenced in this presentation

- "How AI Will Augment Human Translation"
- "The Calculus of Global Content"
- "MT's Journey to the Enterprise"
- "The Language Services Market: 2017"
- "Fast-Growing LSPs Turn to Machine Translation"
- "TechStack: Automated Content Enrichment"
- "TechStack: Machine Translation"
- "TechStack: Terminology Management Tools"
- "Neural MT: Sorting Fact from Fiction"
- "The Winds of Content Are Changing"



Thank you.

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