Transforming the Translation Environment A Paradigm Shift in Productivity
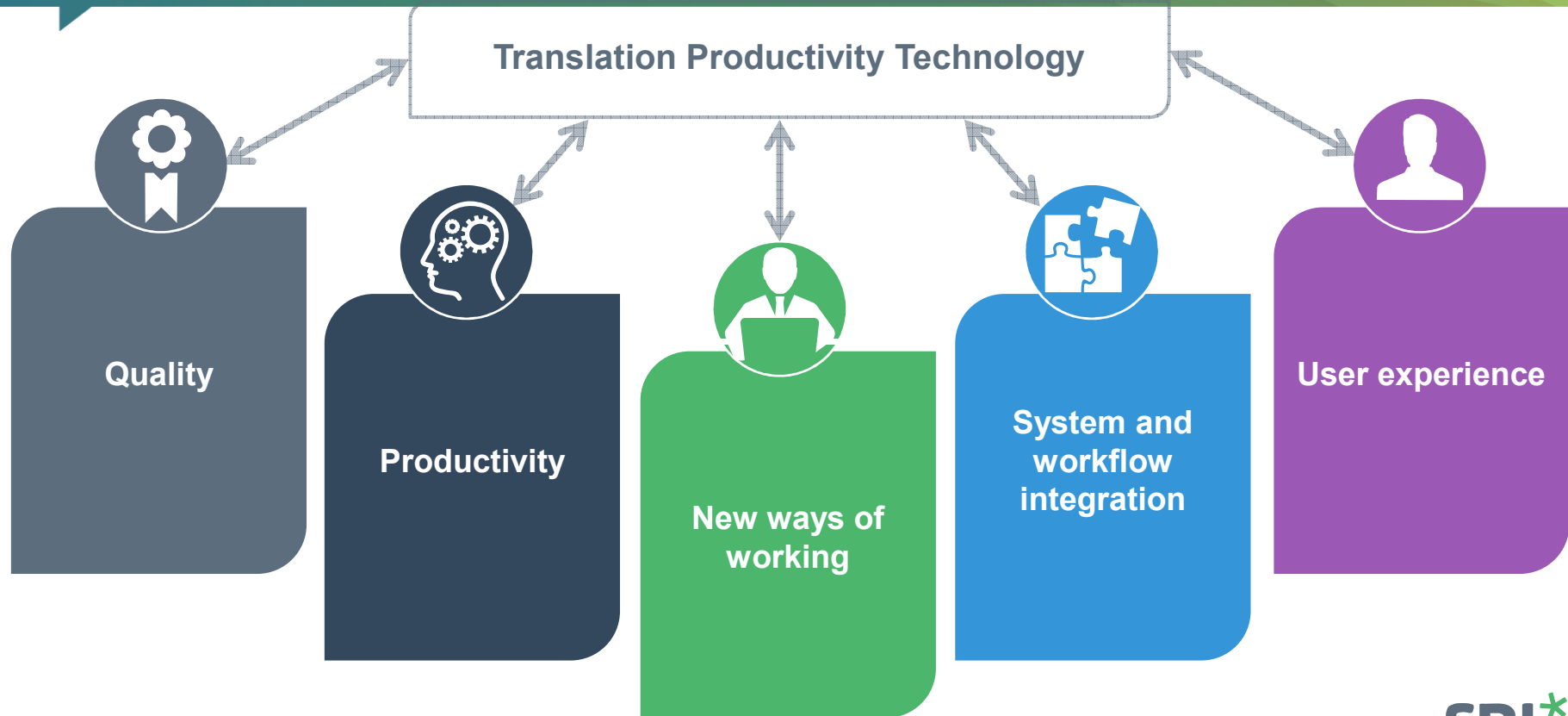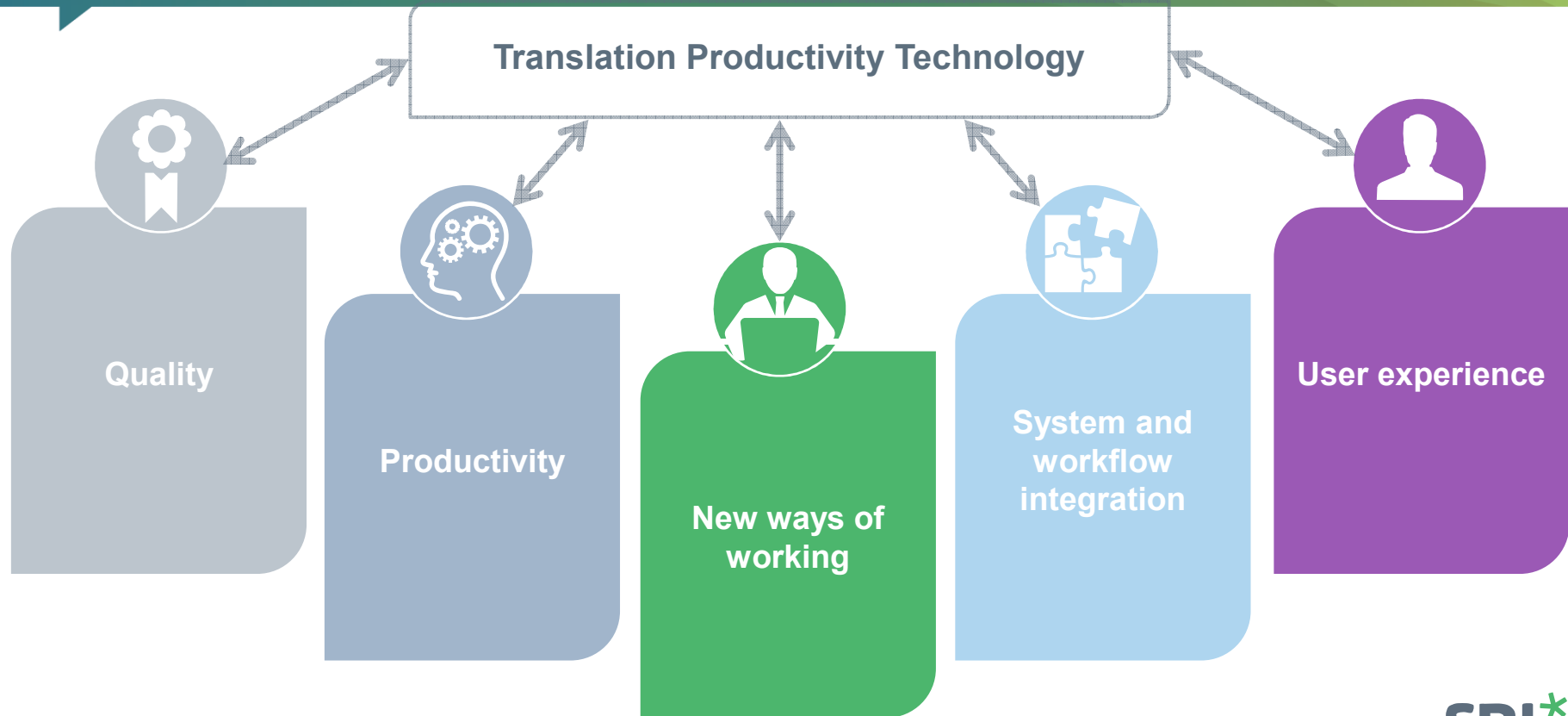
Matthias Heyn – It-accelerate 2016

Explosion of Digital Content Drives MT Adoption

- In general the evolution of digital content drives the adoption of post-editing of MT (PEMT)

- This has a major affect on the translation environment for professional as well as the occasional translator.

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Significant Translation Technology Trends

Translation Productivity Technology

Quality

Productivity

New ways of working

System and workflow integration

User experience

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Current Perception of MT

- Translation Technology Insight (TTI) survey found that:
  - 40% of respondents use Machine Translation, of whom 64% say it makes them more efficient
  - More than half of those who use MT believe that it is the future of Translation Productivity
  - Almost three quarters of users are more likely to recommend it than not, with corporates leading the charge

- Whilst only 40% currently use MT, they see significant value

- External research shows that automation is essential to scaling operations – Machine Translation enters every discussion

MT Status Quo

- MT adds value despite not being universally welcomed and used

  – MT integration in professional translation editor is key part of translation productivity technology
  – One of the top choices to cope with increase in translation demand

- Huge potential for localization industry despite common concerns/complaints
  – Little or no ability to influence MT output quality
  – Limited ability to personalize MT

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Post-Editing Machine Translation

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PEMT

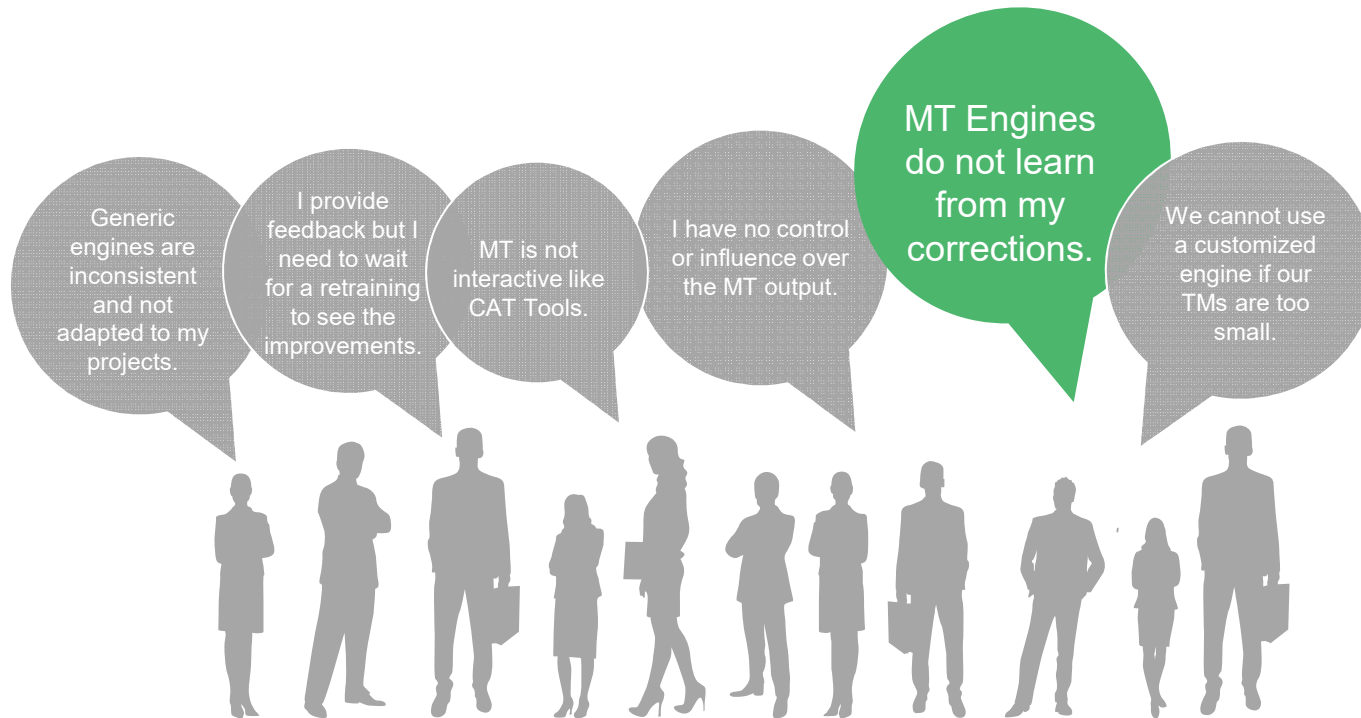Clients increasingly ask for MT and post-editing

Post-editing is a valuable skillset for trained linguists

PEMT still has an image problem

User experience is not always positive

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Post-Edit Frustrations

AdaptiveMT

Integrated in Professional Translation Editor

Collaborative effort with Language Offices to fine-tune AdaptiveMT

Addresses the balance between MT technology and user experience
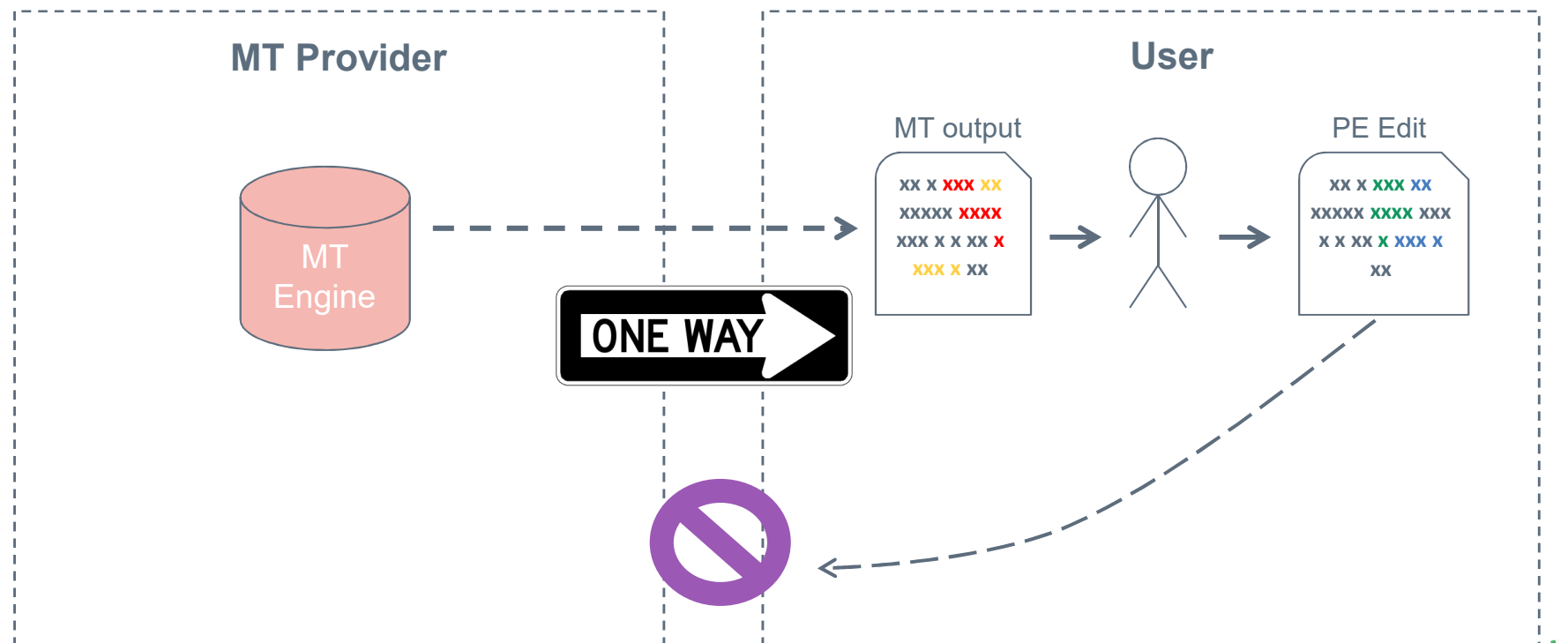
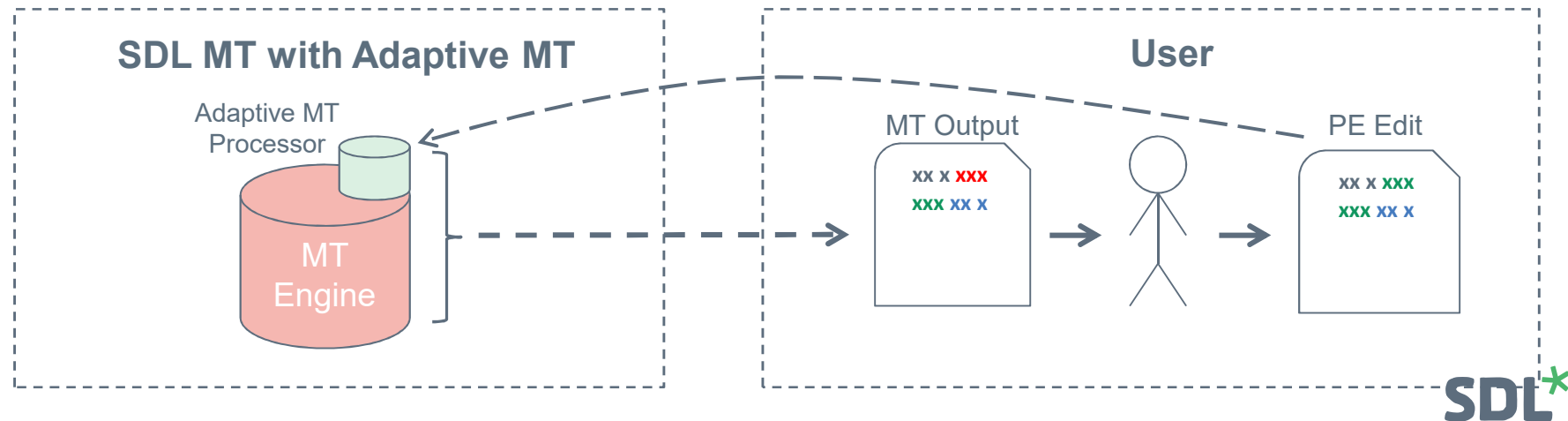The post-editor takes center stage

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AdaptiveMT: Innovative Machine Learning

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SMT systems are Static

MT Provider

User

MT Engine

ONE WAY

MT output

PE Edit

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MT Innovation – AdaptiveMT

- New technology developed by Research
- An adaptive MT engine that learns interactively from the post-editor's edits

Examples of what AdaptiveMT can learn – 1

	English Source	Status	Italian MT Output	Italian Post-Edited Version	Comments
1	Refer to the electrical circuit diagrams and check the **driver front side impact sensor**.	✏️ AT	Fare riferimento agli schemi elettrici e controllare il *driver parte anteriore del sensore urti laterali*.	Fare riferimento agli schemi elettrici e controllare il ~~*driver parte anteriore del sensore urti laterali*~~ *sensore urti frontali lato conducente*.	
2	Refer to the electrical circuit diagrams to learn more about the **driver front side impact sensor**.	✏️ AT	Fare riferimento agli schemi elettrici per saperne di più circa il *conducente sensore d'urto laterale anteriore*.	Fare riferimento agli schemi elettrici per saperne di più circa il ~~*conducente sensore d'urto laterale anteriore*~~ *sensore urti frontali lato conducente*.	
		✏️ AT 💡	Fare riferimento agli schemi elettrici per ulteriori informazioni circa il *sensore urti frontali lato conducente*.		Specific terminology which is not in the baseline

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Examples of what AdaptiveMT can learn – 2

	English Source	Status	Italian MT Output	Italian Post-Edited Version	Comments
1	Using **Lime for Business 2017** is very easy.	🖊 AT	Utilizzando *calce per Affari 2017* è molto facile.	Utilizzare ~~*calce per Affari 2017*~~ *Lime for Business 2017* è molto facile.	
2	You can download **Lime for Business 2017** by clicking this link:	🖊 AT	È possibile scaricare *la calce per Affari 2017* facendo clic su questo link:	È possibile scaricare ~~*la calce per Affari 2017*~~ *Lime for Business 2017* facendo clic su questo link:	
		🖊 AT💡	È possibile scaricare *Lime for Business 2017* facendo clic su questo link:		New product names which need to be kept as per source

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AdaptiveMT: Practical Information

- Support for English -> French, German, Italian, Spanish, Dutch
  - Reversed language direction and other language pairs to follow soon after initial release (planned for H1 2017)
  - Japanese <-> English planned for H1 2017
- Available for Baseline only to start with
  - AdaptiveMT for customizations and verticals in the pipeline
- Adaptive Engines are personal in the first version
  - Plans for sharing Adaptive Engines across translators in the pipeline
  - It is already possible to share Adaptive Engines through the same Language Cloud account

Available in Studio as part of updated Language Cloud user interface

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User Experience

Key Benefits of AdaptiveMT

Reduced frustration	Interactive	Improved productivity	Cumulative learning	Personalized

- Reduces the frustration of editing the same incorrect MT

- Works as the translator post-edits
- Post-editors will not need to wait for a retrained customised engine to see improvements

- Increases translation productivity over time

- Continues to learn from job to job

- Creates a personal adaptive MT engine for the user
- Allows to create multiple "Custom" engines from a Baseline MT engine, one for each project

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Productivity Improvements

Test setup
- MT with AdaptiveMT enabled in Studio 2017
- Productivity improvements measured with Qualitivity
- Languages tested: NL, FR and ES
- Life Sciences domain
- Testing completed by SDL LO resources with domain experience
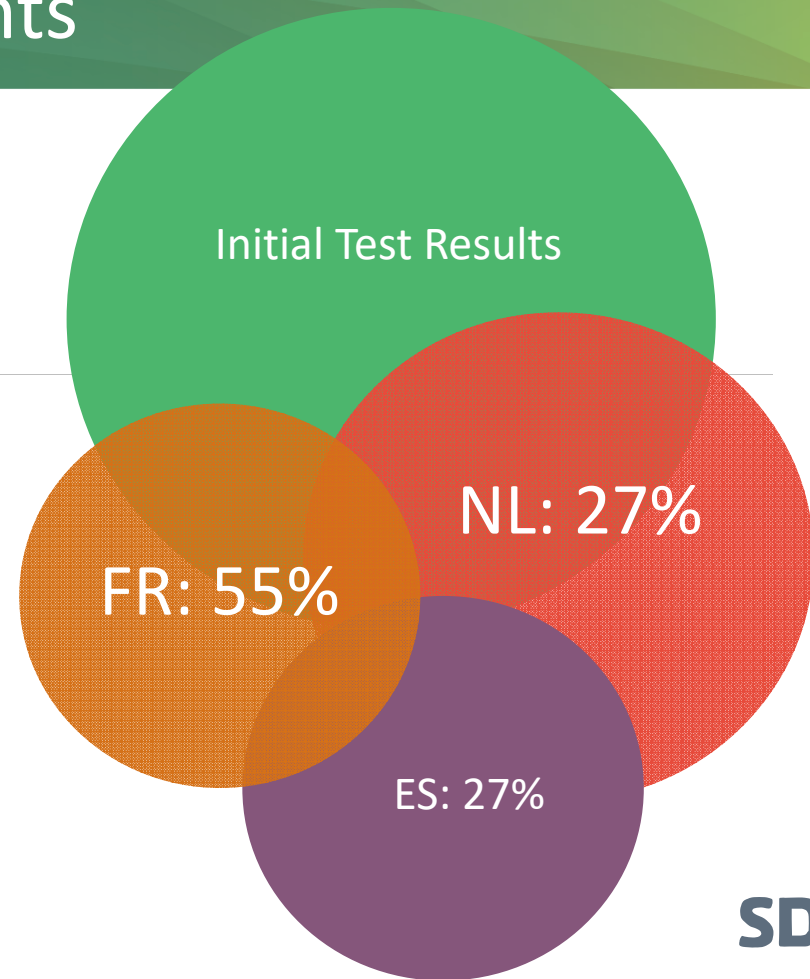
Initial Test Results

FR: 55%

NL: 27%

ES: 27%

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Shaping the Future of AdaptiveMT

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How will AdaptiveMT change the way we work?

Release of AdaptiveMT just a **starting point** leading to new ways of working for translators and LSPs and new MT solutions and scenarios

Currently delivered at **individual level**, giving control to post-editors and recalibrating the relationship between MT and translation experts

Move to a **higher level** of translation teams, LSPs and organizations through integration into workflow and translation process

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AdaptiveMT Integration

AdaptiveMT takes focus on post-editor and ease of post-editing to the next level, integrating seamlessly with Trados Studio to drive MT quality

MT technology and innovation add most value when embedded in a well-designed process, not just in a tool

AdaptiveMT needs to evolve within the MT ecosystem to address future needs

Our responsibility is to drive AdaptiveMT integration to deliver the best possible results for future applications

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AdaptiveMT within the MT Ecosystem

- Support through post-editing trainings

- Define new best practices for efficient use of Adaptive Engines

- Support organizations to integrate AdaptiveMT efficiently into their MT strategy

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QUESTIONS & ANSWERS

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Software and Services for Human Understanding