

How AI can help you to get from Content Delivery to bi-directional Content Engagement

Jörg Schmidt – *Solution Consultant Structured Content*

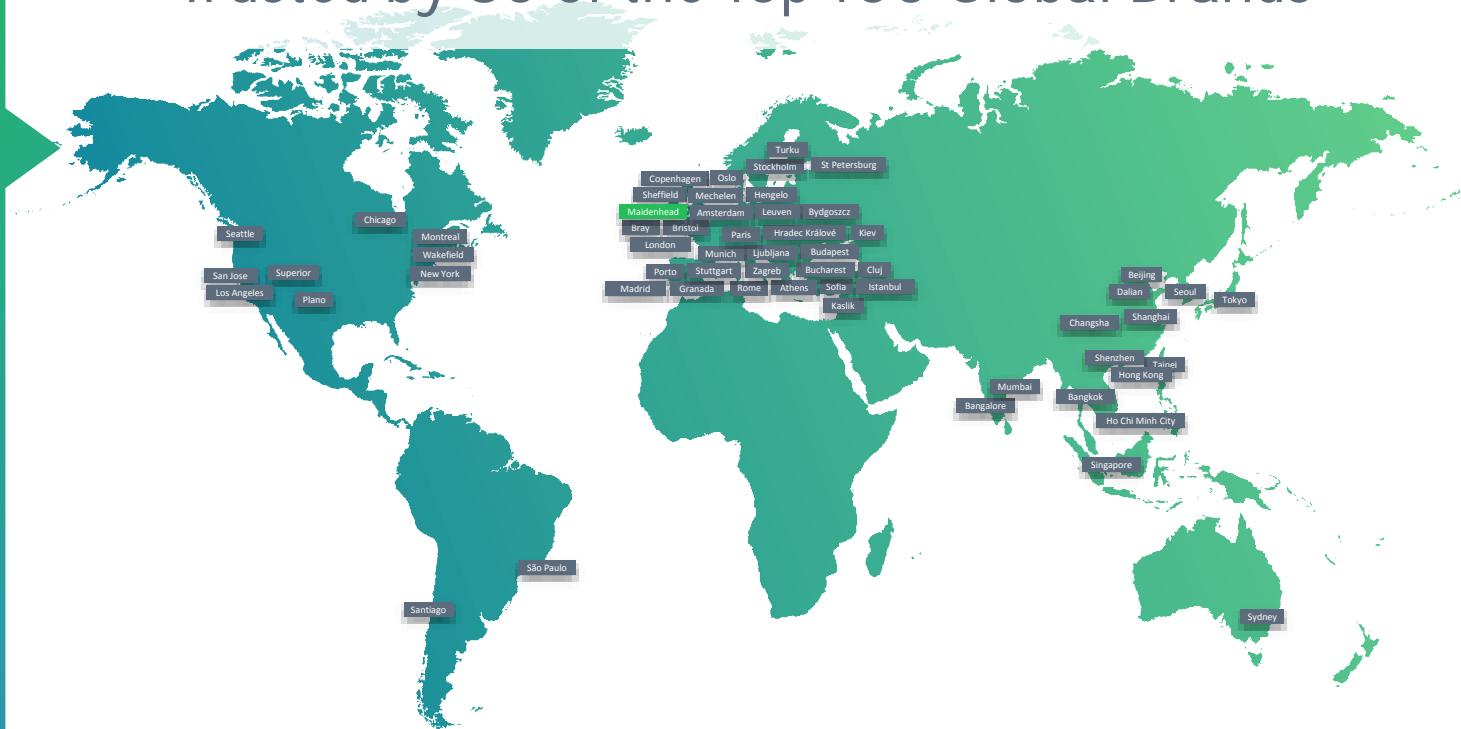
1.11.2018

SDL*

Publicly traded company (LSE:SDL)

- Founded in 1992
- Annual Revenue: £341m
- HQ: Maidenhead, UK
- 4000+ Employees
- 59 Offices
- 39 Countries
- 400 Partners
- 3300 Enterprise Customers
- 1200+ In-House Linguists
- 15,700+ Freelancers

Trusted by 85 of the Top 100 Global Brands



Top 15
automotive
companies



51/68
of the top
mfg.
companies



27/36
top retail &
eCommerce



Top 11
consumer
electronics



Top 14
IT/software
companies



Top 20
travel
companies



19/20
top law
firms



9/10
top
insurance
companies



19/20
top pharma
companies



19/20
top banks



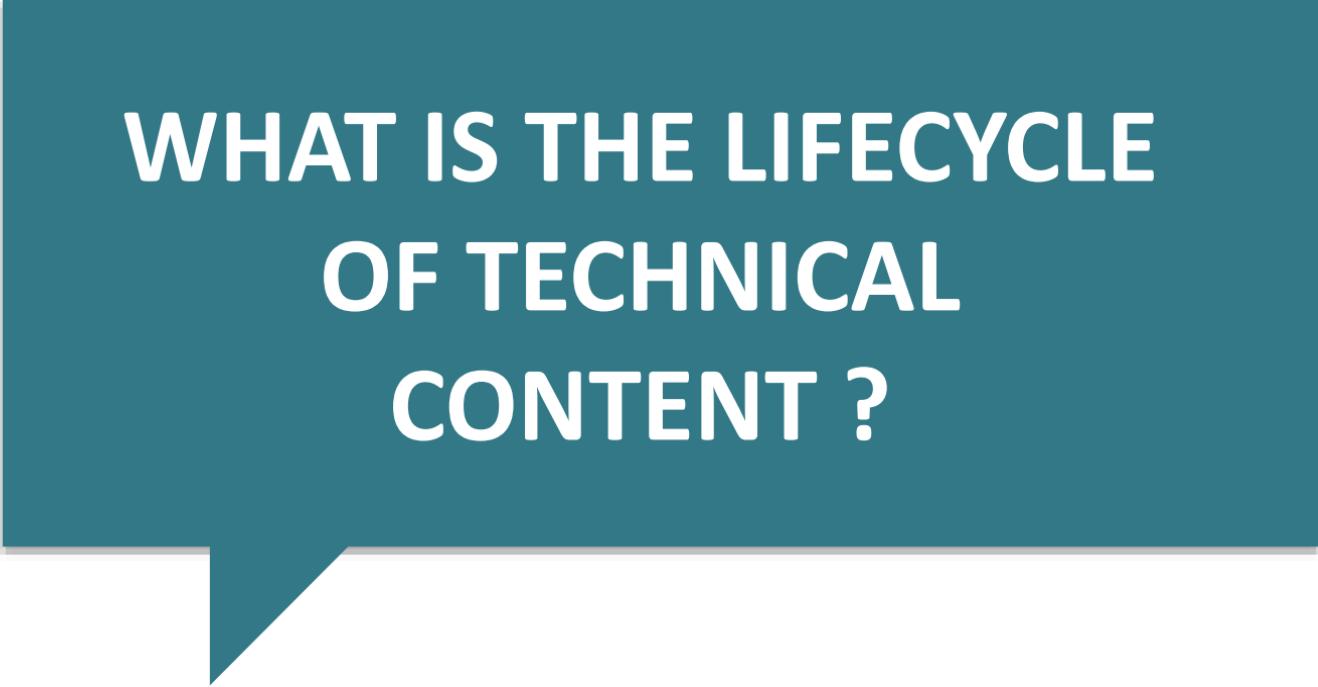
19/20
top medical
device
companies

Technology to allow companies to go global faster



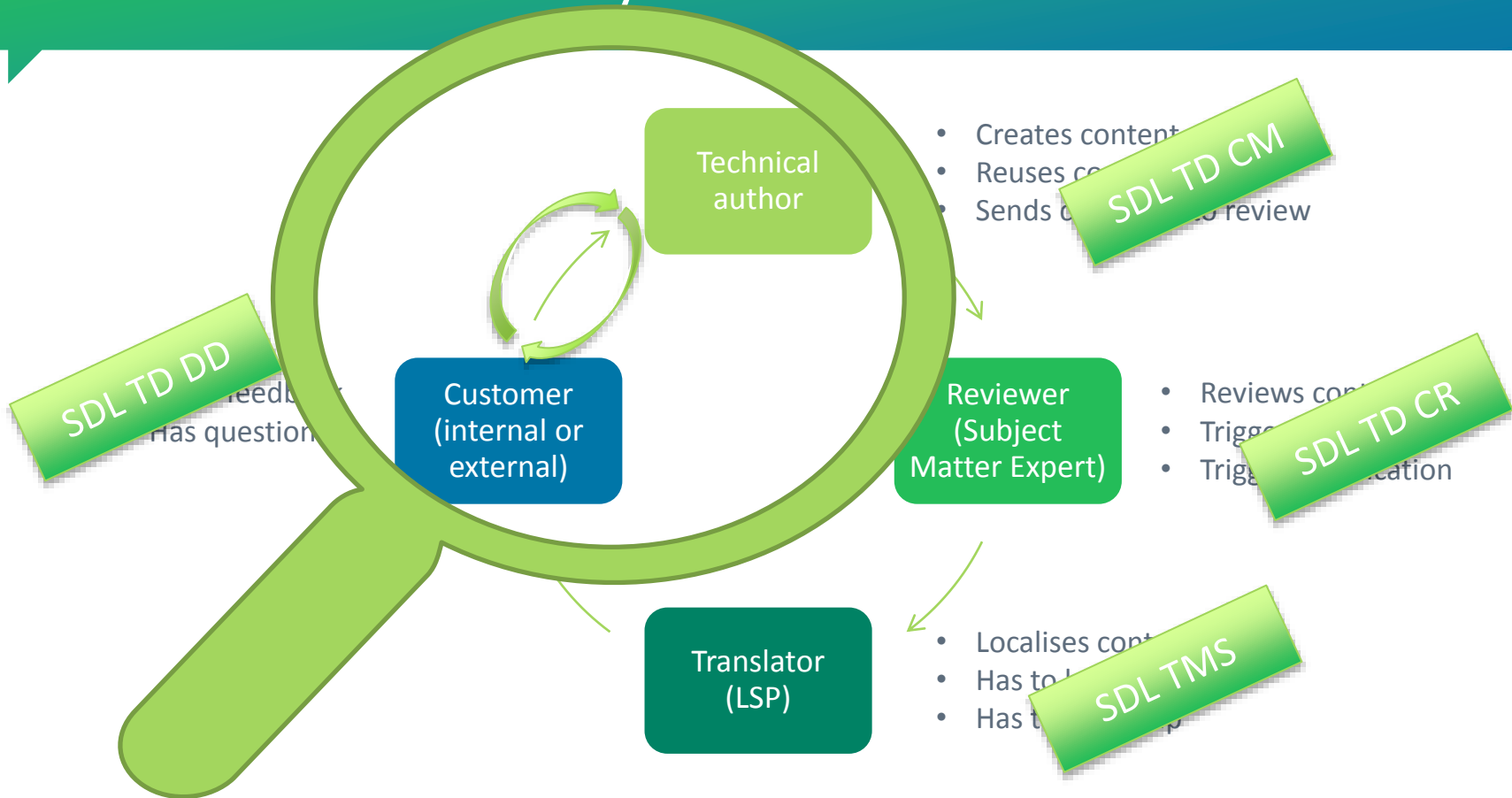
... fully integrated to cover the full content lifecycle



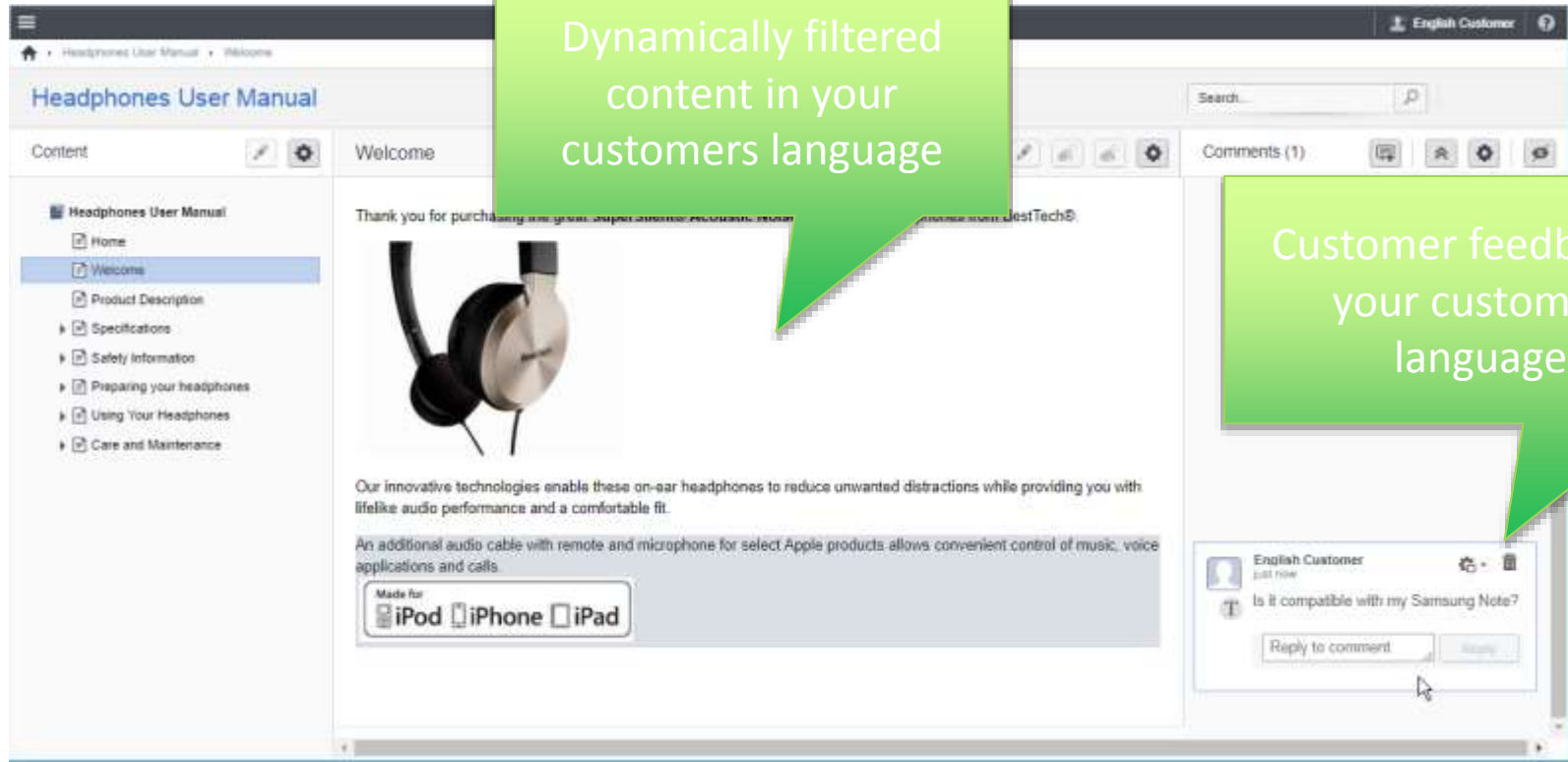


**WHAT IS THE LIFECYCLE
OF TECHNICAL
CONTENT ?**

Technical content lifecycle



SDL Tridion Docs Dynamic Delivery



SDL Tridion Docs Content Manager

[illegible]

German
technical
author



**WHAT CAN THE
AUTHOR DO NOW?**

Translation options for user generated content

Use existing translation management platform

- Too complicated
- Too expensive
- Too slow



MACHINE TRANSLATION

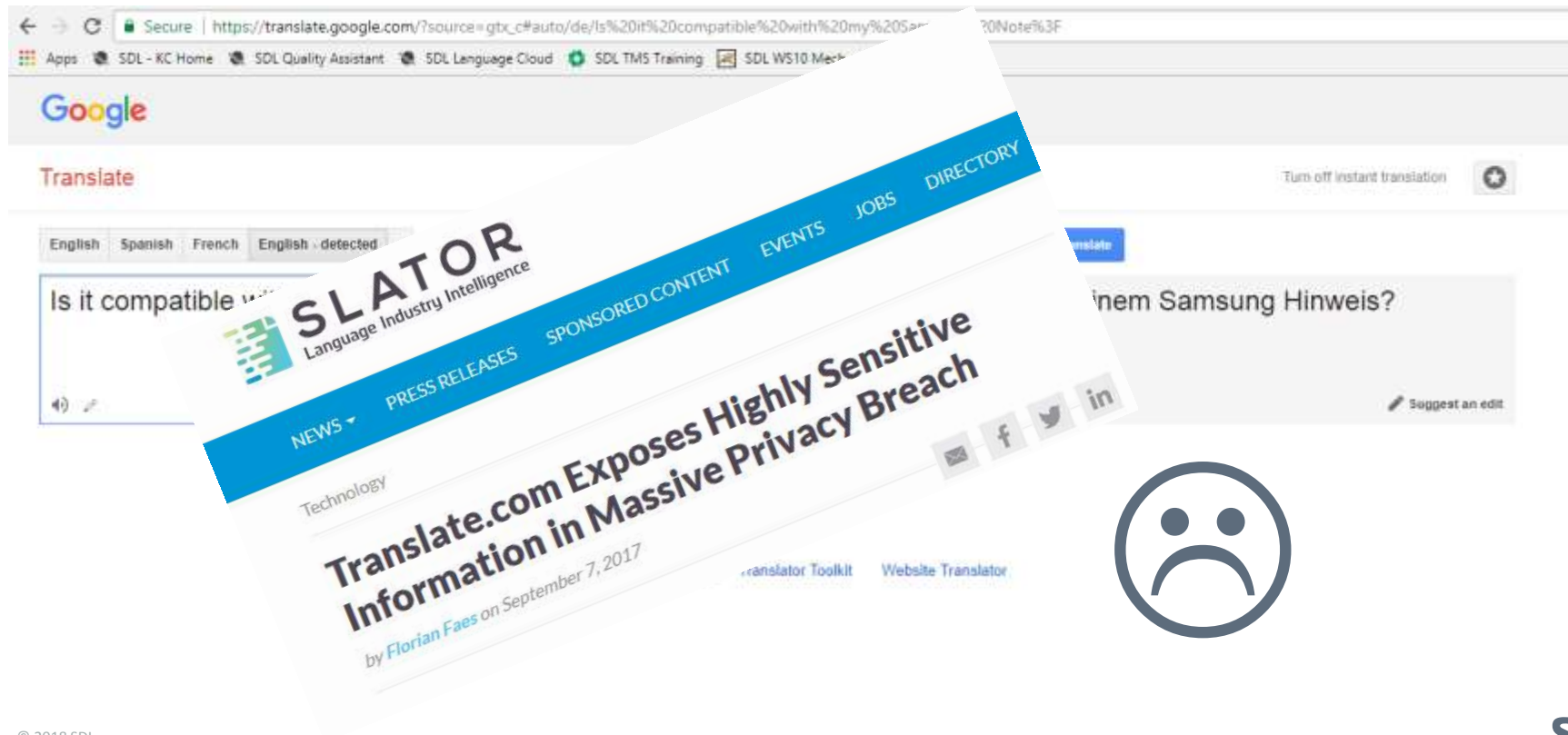
Translation options for user generated content

Machine translation

- Easy to use
- Very fast
- For free



Google, Microsoft, ...



Free MT tools – Security?

- <https://slator.com/technology/translate-exposes-highly-sensitive-information-privacy-breach/>

- Google:

<https://www.google.com/policies/terms/>

- Microsoft:

You grant to Microsoft a worldwide and royalty-free intellectual property license to use your content, for example, to make copies of, retain, transmit, reformat, display, and distribute via communication tools your content on their services.

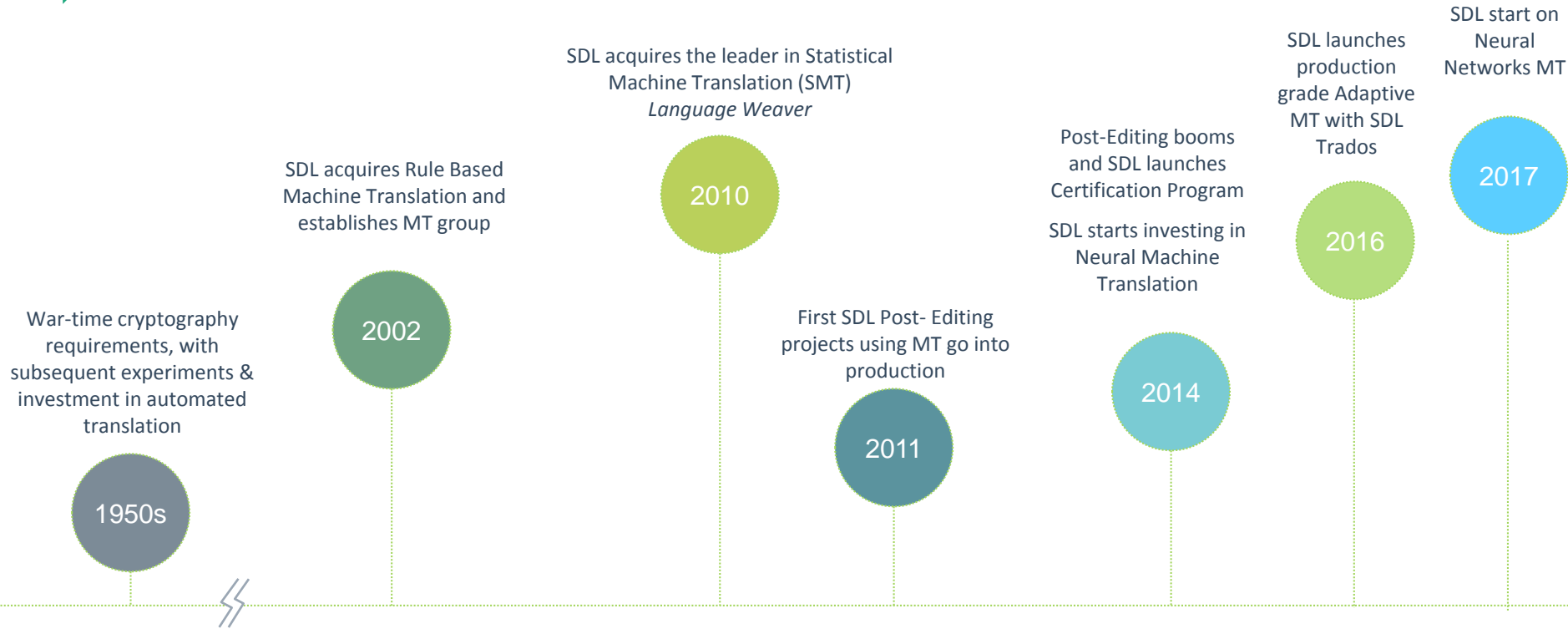
<https://www.microsoft.com/en/servicesagreement>





MACHINE TRANSLATION

Brief history of Machine Translation @ SDL



SDL's strategic focus on Machine Translation



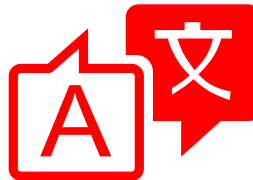
45 Patents
200+ scientific
publications



Pioneers of
Statistical MT
since 2005



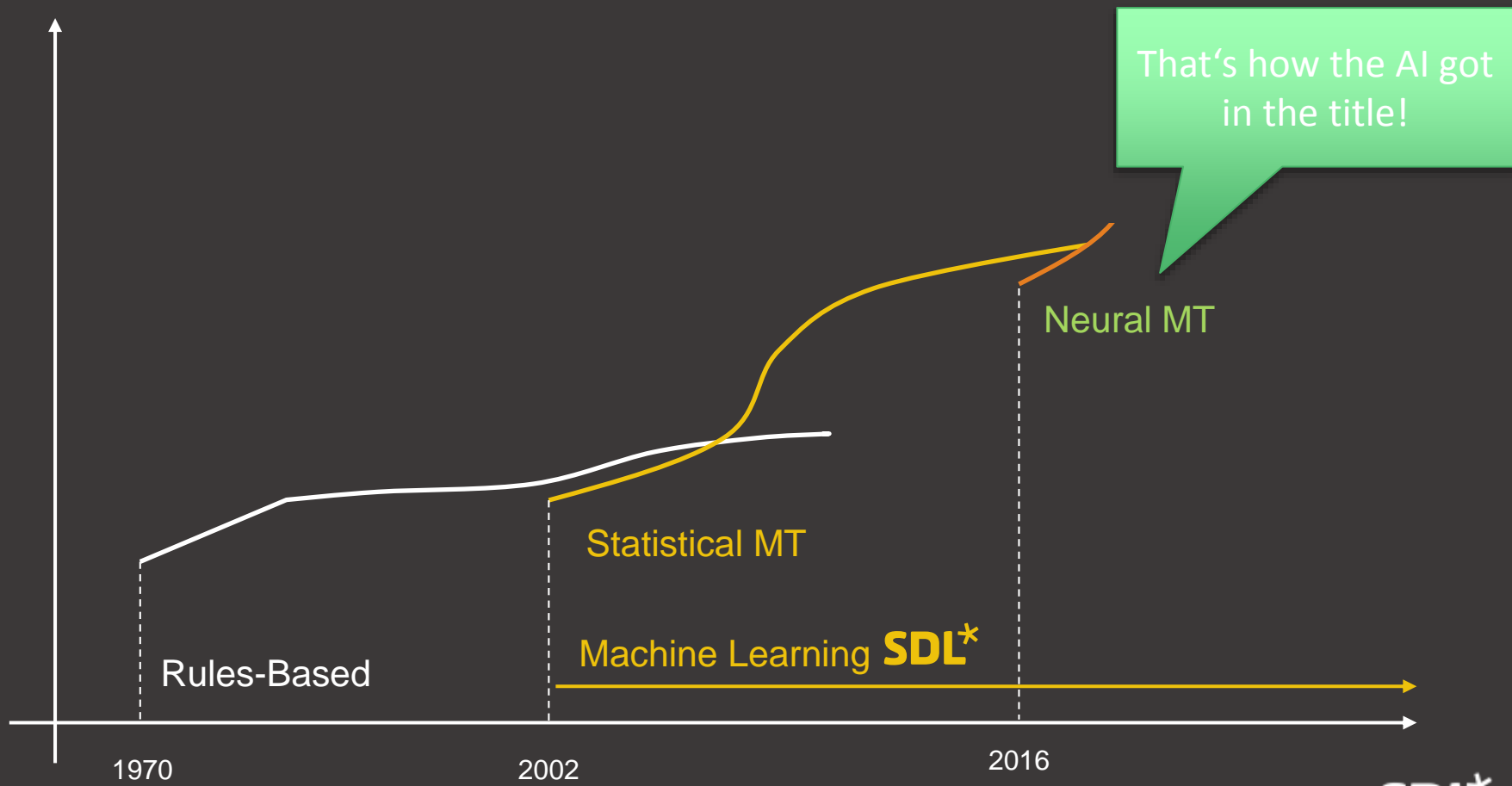
Leading research
on Neural MT



Translating 20+
billion words/m!



Human +
Machine Better
Together



NMT does make a difference!

SMT

Japanese (auto-detected) → English Dictionary None Settings Translate

今日は近隣の住民は避難し、高校も閉鎖されました。

Today the neighboring residents are closed in the high school was also evacuation.

Copy as Text Download as HTML

The SMT mixes up the two clauses ("neighborhood today is closed", "high school was also evacuation").

NMT

Japanese (auto-detected) → English Dictionary None Settings Translate


今日は近隣の住民は避難し、高校も閉鎖されました。

Today, the residents of the neighborhood were evacuated and high schools were closed.


Copy as Text Download as HTML

The NMT doesn't have this problem: it's clear that the residents were evacuated and the high schools were closed, as the source states.

Human vs. Machine Translation

- 
- Very high speed
 - Very high volume
 - Low cost / word
 - Actionable quality

**100k words
per minute**

- 
- Low speed
 - Low volume
 - High cost / word
 - Superb quality

Reasons to use MT



Empower Human Translators

Using MT as a tool to increase the productivity of humans

Translate a Mass of Content

Translating a Mass of documents or data that are too voluminous for investments in professional translation



Translate Quickly

Use the Speed of Machine Translation to eliminate language barriers and triage customer problems.

SDL MT Offering - Languages

Western Europe

- Danish <> English
- Dutch <> English
- Finnish <> English
- French <> English
- French <> Arabic
- French <> German
- French <> Spanish
- German <> English
- German <> French
- German <> Spanish
- Greek <> English
- Italian <> English
- Italian <> Spanish
- Norwegian <> English
- Portuguese <> English
- Spanish <> English
- Spanish <> Arabic
- Spanish <> French
- Spanish <> German
- Spanish <> Italian
- Swedish <> English

Eastern Europe

- Albanian <> English
- Bulgarian <> English
- Czech <> English
- Estonian <> English
- Hungarian <> English
- Latvian <> English
- Lithuanian <> English
- Polish <> English
- Romanian <> English
- Russian <> English
- Serbian <> English
- Slovak <> English
- Slovenian <> English
- Turkish <> English
- Ukrainian <> English

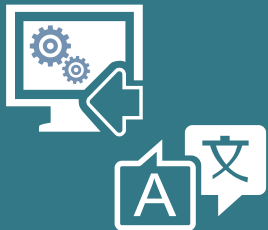
Middle East & Africa

- Arabic <> English
- Arabic <> French
- Arabic <> Spanish
- Dari <> English
- Hausa <> English
- Hebrew <> English
- Pashto <> English
- Persian <> English
- Somali <> English

Asia

- Bengali <> English
- Hindi <> English
- Indonesian <> English
- Japanese <> English
- Korean <> English
- Malay <> English
- S Chinese <> English
- Thai <> English
- T Chinese <> English
- Urdu <> English
- Vietnamese <> English

Generic Machine Translation



Generic engines
for each language
pair



Trained with
hundreds of
millions of words
of bilingual data



Quality Data
mined from
reliable sources



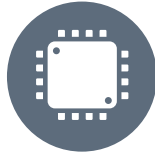
Applicable for
general & varied
content

Industry Specific Machine Translation

Automotive



Electronics



IT



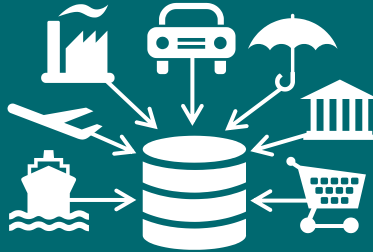
Life Science



Travel



Engines trained for a specific domain or vertical



Data selected from sources within a domain or industry



Machine Translated output more likely to follow technical terminology



Applicable when client-specific data not available or not enough

Customer Specific Machine Translation



Optimize the
Machine
Translation output
for customer
projects



Training based on
customer-specific
bilingual data



More data usually
has a positive
effect on the
translated output



Quality &
consistency
of data is as
important as
quantity



Adherence to
client-specific
terminology
and style

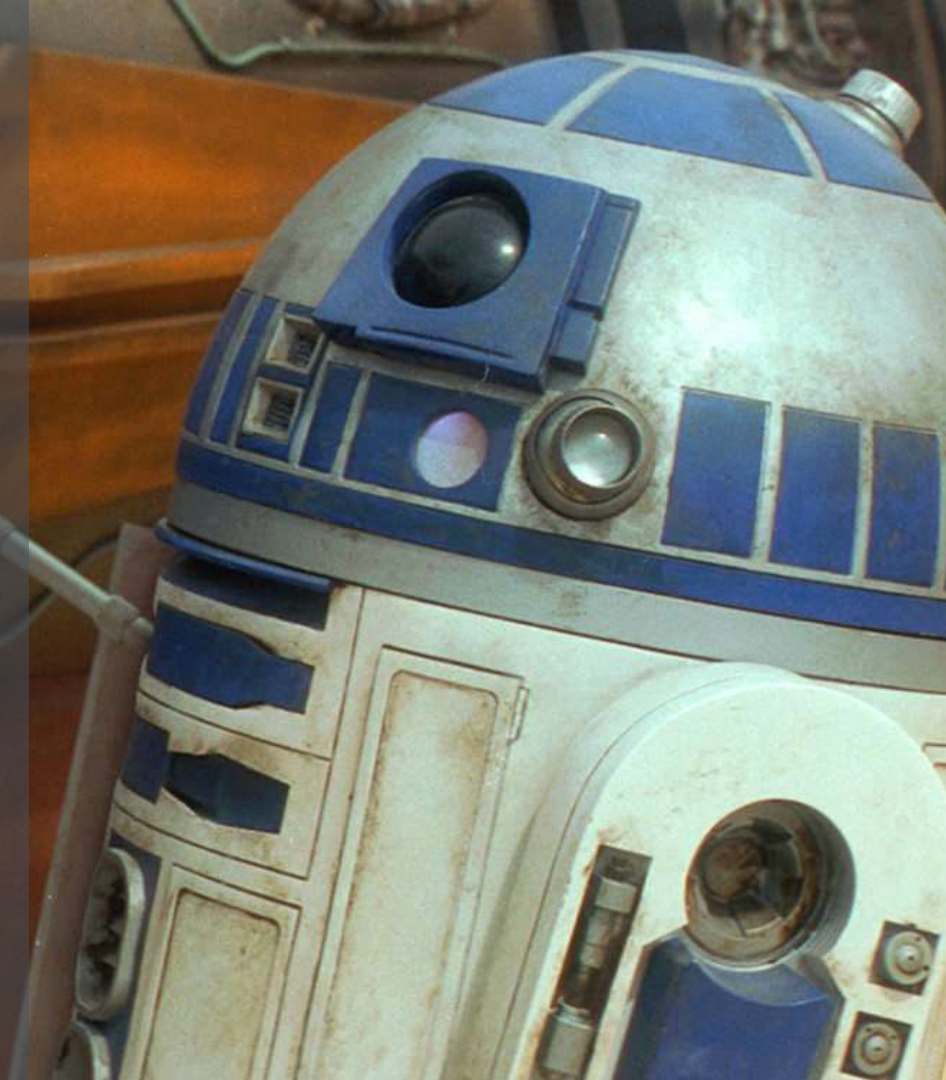
Machine Translation

- Is good but not perfect
- Does not replace human linguists
- Is not a universal fit for all content types and use cases
- Does not conform to a single notion of QUALITY
- It is not C3PO



Machine Translation

- It can do what humans cannot do
 - Is relatively inexpensive and expendable
 - It can be tweaked and customized for specific use cases
 - It can interface with external systems
-
- Think UTILITY, like R2D2



Right translation method, right price, right time



SDL Machine Translation Products



- Scalable cloud platform for real-time automated translation
- Multiple interfaces for various audiences
- Management and reporting
- Enterprise scalability and security
- Baseline and custom-trained engines
- Now with neural MT language pairs!
- Built-in quality assessment mechanism
- Pre-integrated or easily integrated; REST API

SDL Machine Translation Products

SDL* Language Cloud



- Simplified cloud solution for end-users
- Built-in translation editor and TM
- Baseline, vertical and custom-trained engines
- Self sign-up & trial options
- Support for SDL Adaptive MT
- REST API

SDL Machine Translation Products



- Secure on premise deployment
- Scalable architecture for low and high throughput
- Optimized footprint and modular architecture
- Full language pair coverage
- Rich REST API for easy integration
- Simple UI for installation, administration, operation
- The only scalable on premise MT product
- Now with neural MT language pairs

SDL ETS

The screenshot displays the SDL Enterprise Translation Server (ETS) interface. At the top, a green header bar contains the text "SDL* Enterprise Translation Server" on the left and a user profile "Jörg Schmidt" with a dropdown arrow on the right. A left-hand sidebar lists navigation options: "Quick Translate" (highlighted with a lightning bolt icon), "Browse Translate", "Translation Queue", and "Dictionaries". The main content area is titled "Quick Translate" and features a language selection dropdown set to "English" pointing to "German", a "Dictionary" dropdown set to "None", a "Settings" dropdown, and a blue "Translate" button. Below these controls are two text boxes. The left box contains the English text "Is it compatible with my Samsung Note?" and has a small back arrow icon to its left. The right box contains the German translation "Ist es kompatibel mit meinem Samsung Note ?". At the bottom right of the German text box are two buttons: "Copy as Text" and "Download as HTML". Below the text boxes is a yellow instruction box that reads: "Drag and drop files here, or click here to choose files to translate". At the bottom center of the interface, the copyright notice "© 2017 SDL plc" is visible. A mouse cursor is positioned near the bottom right corner of the interface.

SDL BeGlobal



1 billion

words / month of web

User Generated Content

translated into

13 languages



SDL*

Same-day
turnaround for

99.9%

of marketing
projects



SDL*

Machine
Translation
of inbound content
6 billion
words



SDL*



QUESTIONS

&

ANSWERS



Software and Services for Human Understanding

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