

# Data Quality: How STE enhances your S1000D and iSpec Strategies



# About me

- **Berry Braster**

Technology Director

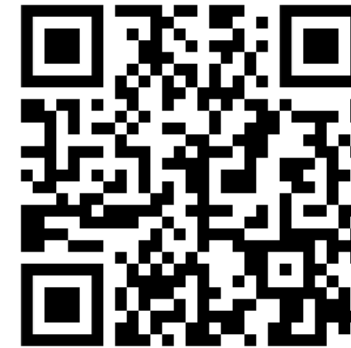
Technical Communication & Data Solutions, HyperSTE

- 25 years experience in technical publications, specialization in data quality



**Berry Braster** 

Technology Director, Technical Communication  
Solutions, HyperSTE at Etteplan

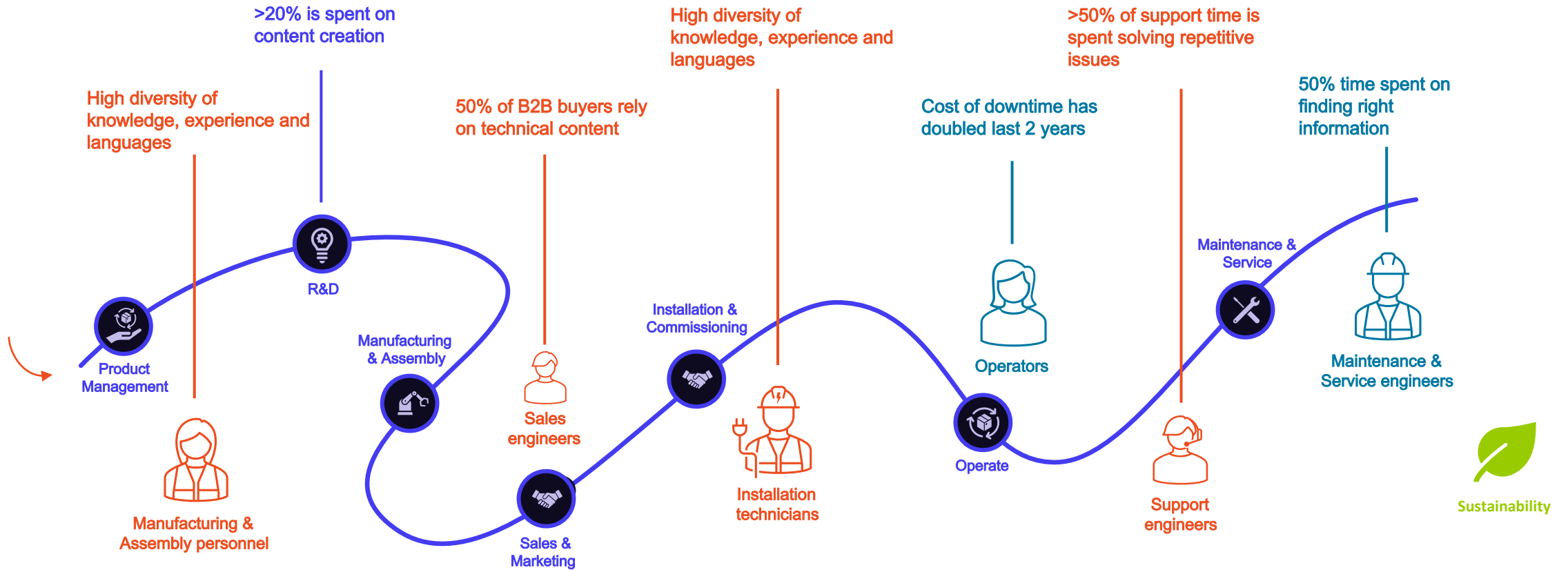


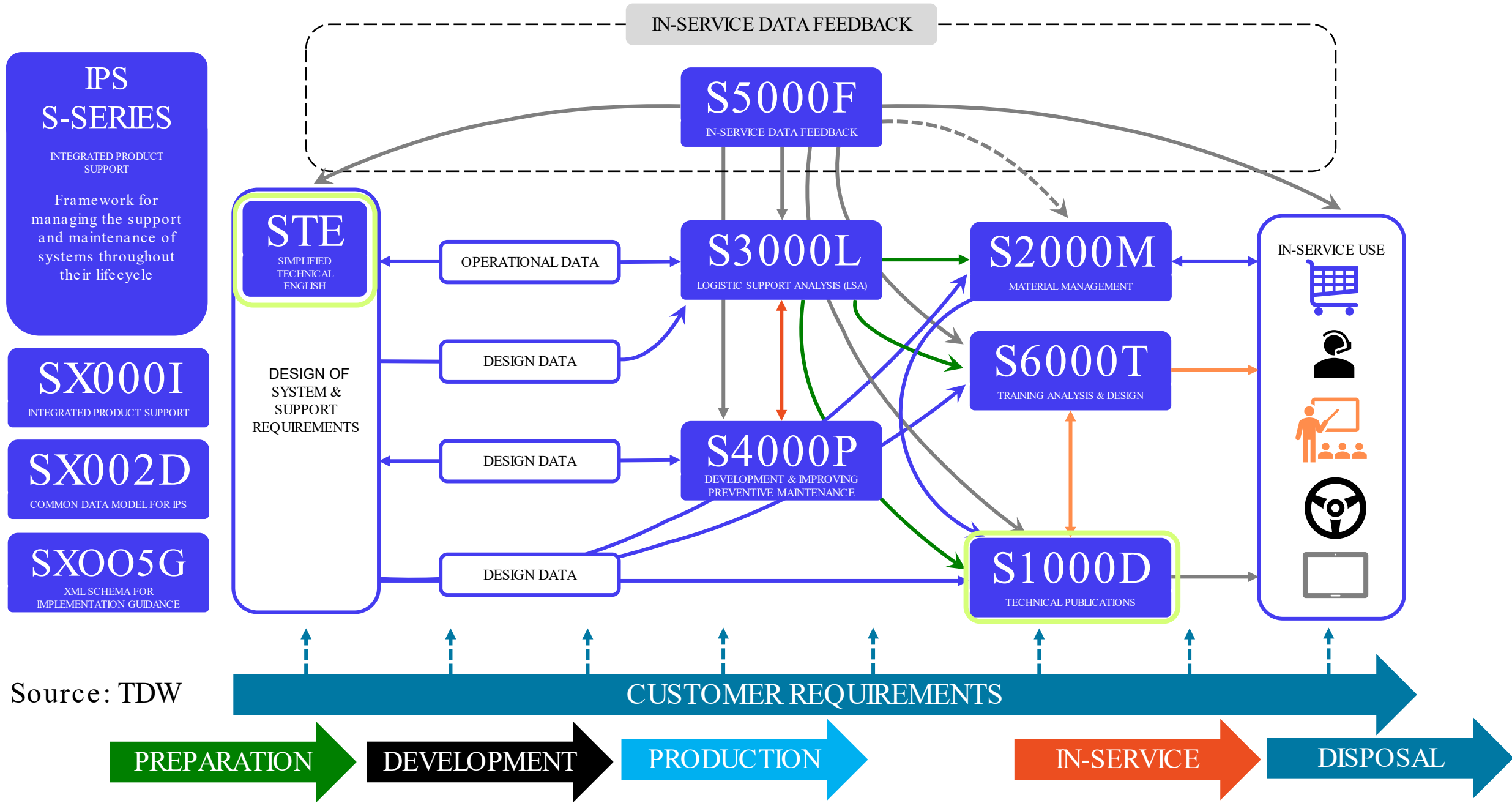


# Summary

- **Simplified Technical English (STE)** plays a significant role in enhancing your **S1000D** and other IPS specs strategies by improving the clarity, consistency, and global understandability of technical data, which is used in many Specifications that support the full lifespan of military and aviation platforms.
- This presentation will discuss the **importance of data quality** and how it facilitates compliance, streamlines processes, and enhances quality of data, as well as what important steps to take when implementing STE as part of your overall strategy.
- We will also dive into the role of **AI** for data quality.

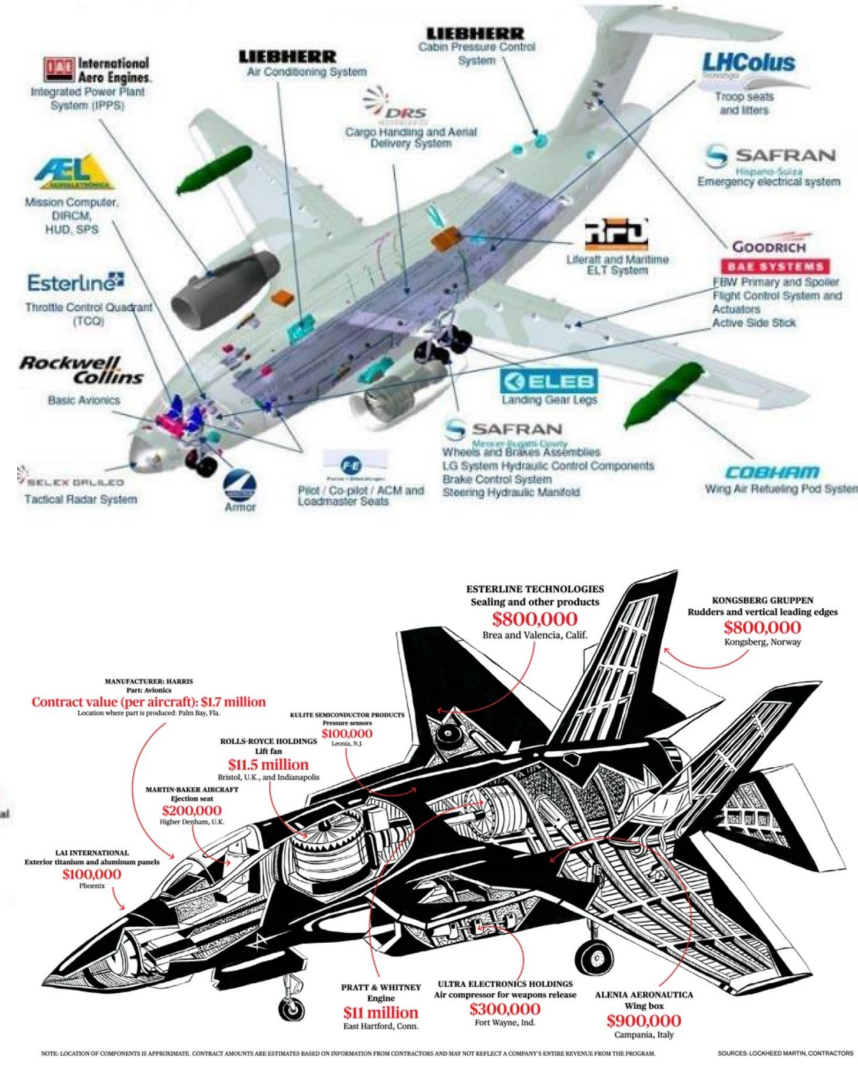
# Data is a Business Asset





Source: TDW

# Common standards ensure that quality data can be shared and understood across the supply chain



### 787 Dreamliner structure suppliers

Selected component and system suppliers.

Part name	Company (country)
Wingtips	KAA (Korea)
Fixed & movable leading edge	Spirit (U.S.)
Wing	Mitsubishi (Japan)
Centre fuselage	Alenia (Italy)
Forward fuselage	Spirit (U.S.) / Kawasaki (Japan)
Centre wing box	Fuji (Japan)
Landing gear structure	Messier-Dowty (France)
Lithium-ion batteries	GS Yuasa (Japan)
Engine nacelles	Goodrich (U.S.)
Engine	Rolls-Royce (U.K.) / General Electric (U.S.)
Wing/body fairing	Boeing (Canada)
Cargo access doors	Saab (Sweden)
Others	
Movable trailing edge	U.S., Canada, Australia
Horizontal stabilizer	Alenia (Italy)
Tail fin	Boeing (U.S.)
Rear fuselage	Boeing (U.S.)
Wing-to-body fairing	Boeing (U.S.)
Passenger entry doors	Latecoere (France)
Main landing gear wheel well	Kawasaki (Japan)
Fixed trailing edge	Kawasaki (Japan)

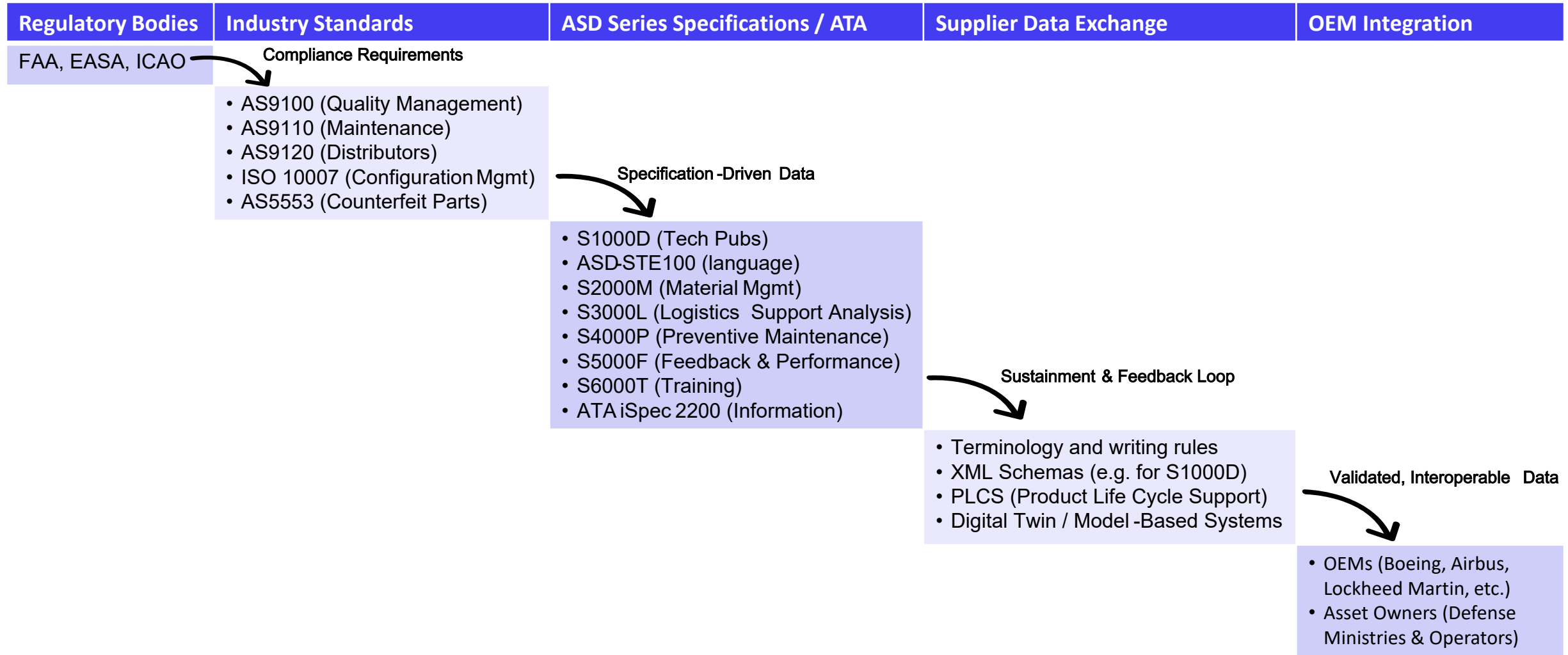
Sources: Boeing, Reuters  
RINGS Staff, 09/10/2013



# Approx. Page Count for 787

Document Type	Description	Approx. Page Count
Aircraft Maintenance Manual (AMM)	Detailed procedures for maintenance and servicing	30,000+
Wiring Diagram Manual (WDM)	Electrical schematics and routing	10,000+
Illustrated Parts Catalog (IPC)	Parts listings and exploded views	5,000–10,000
Component Maintenance Manual (CMM)	Vendor-specific component servicing	Varies widely

# Global Aerospace Ecosystem



# What is STE and why we should use it



ASD-STE100 Simplified Technical English (STE) is a controlled natural language to write unambiguous content for a global audience:

- Compliance
- Quality
- Reduce human errors
- Conciseness
- Facilitates S-Series and AI strategies

2	<b>General writing rules</b>
2.1	<b>Language</b>
	The project or the organization must specify the language in which the data modules are written. If that language is English, then it is recommended to use the writing rules and vocabulary in ASD Simplified Technical English, ASD-STE100® (formerly known as AECMA Simplified English, AECMA Document No. PSC-85-16598).
	<b>Business rule decision point BRDP-S1-00020 - Specify the language:</b>
	– Decide which language to use for producing data modules.
	<b>Business rule decision point BRDP-S1-00021 - Use of ASD Simplified Technical English:</b>
	– Decide whether to use ASD-STE100® when producing data modules in English.
	A standard dictionary must also be designated by the project or the organization. If the maintenance data for the data modules is required in the English language, it is recommended that the Merriam-Webster's Dictionary be used as the standard.
Applicable to: All	
S1000D-A-03-09-0100-00A-040A-A	
Chap 3.9.1	



*“Clear the runway before arrival of the aircraft”,  
can have two different meanings, and this snow plough operator understood it incorrectly.*



# S1000D and STE go hand in hand

## Pros

- Cost savings thanks to single -sourcing of quality data (great for translations).
- Efficiency through streamlined publication workflow.
- Improved consistency and quality.
- Improves collaboration.
- Enhanced interoperability through data exchange and easier integrations.
- Improved user experience.
- Facilitate the IPS S -Series and other standards.

## Cons

- Initial costs in specialized software, training, and infrastructure needed.
- Complexity.
- Training and skill gaps.
- Integration challenges.
- Potential for increased complexity.

# Best Practices for Implementing STE



Learning the rules – training



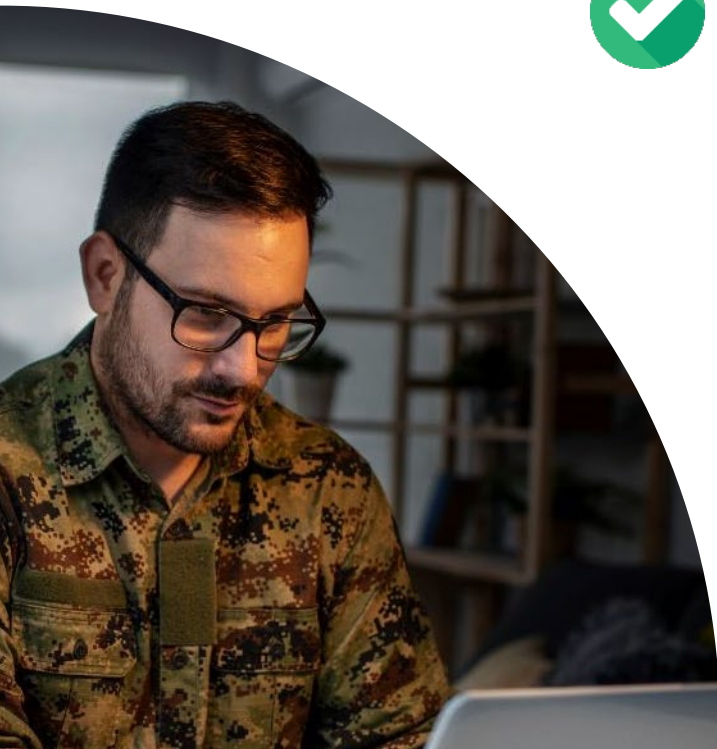
Standardizing on terms – dictionary



Checker software – to help automate and review for compliance



Continuous terminology management

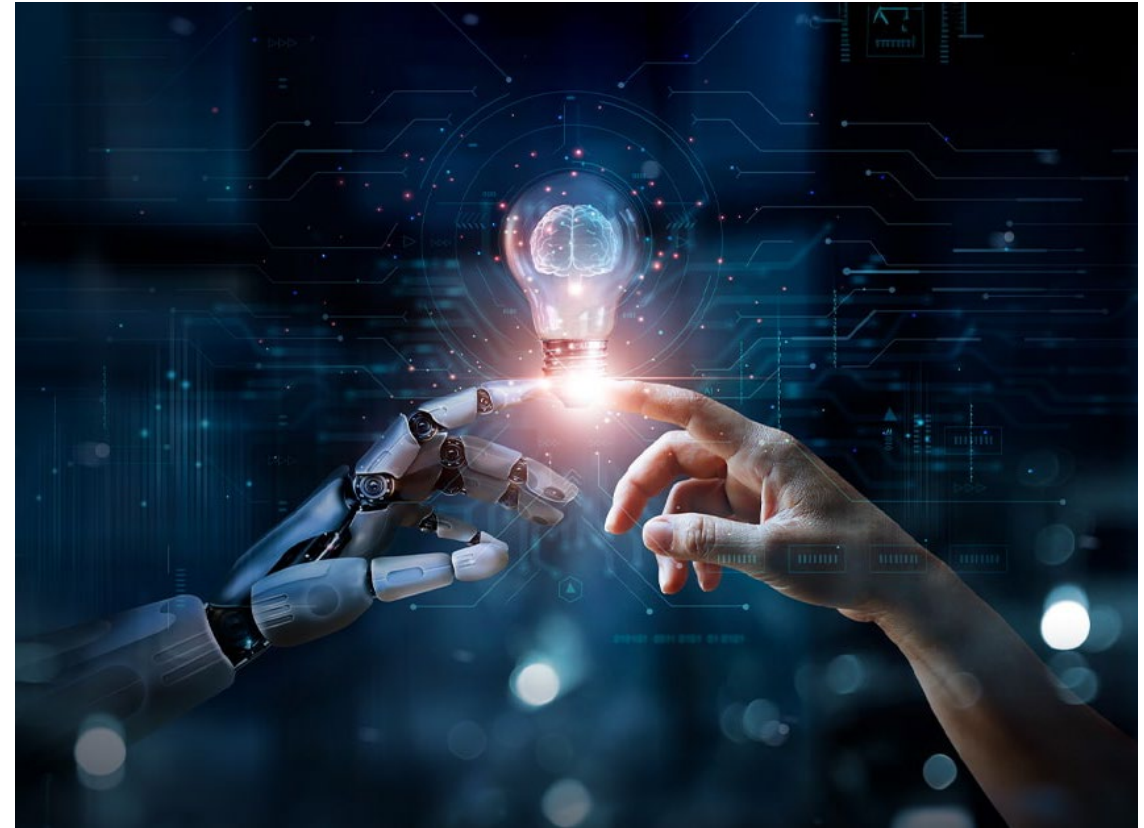


**Future -proof your data  
strategy for AI  
imperatives.**

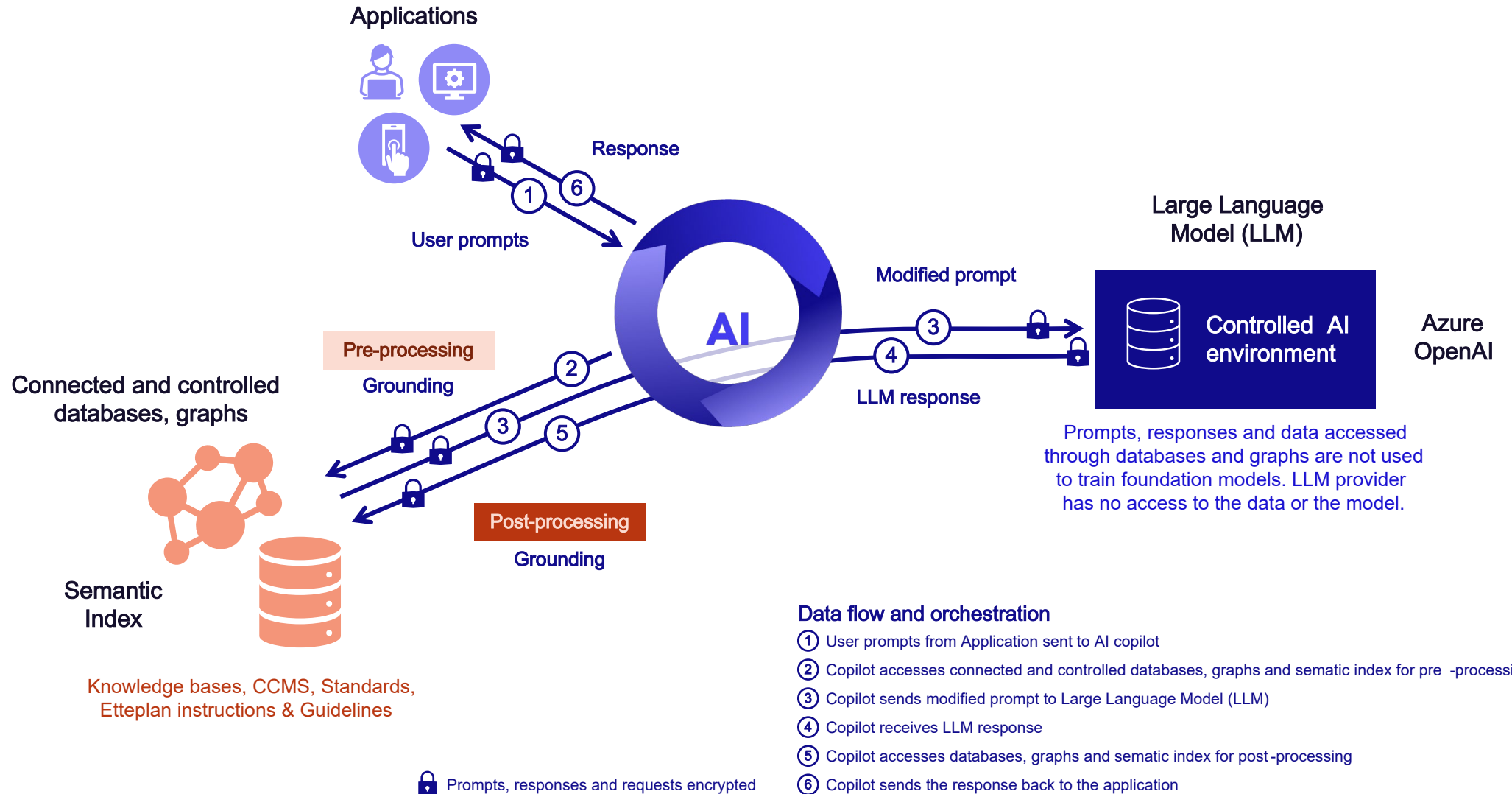


# AI & Technical Data

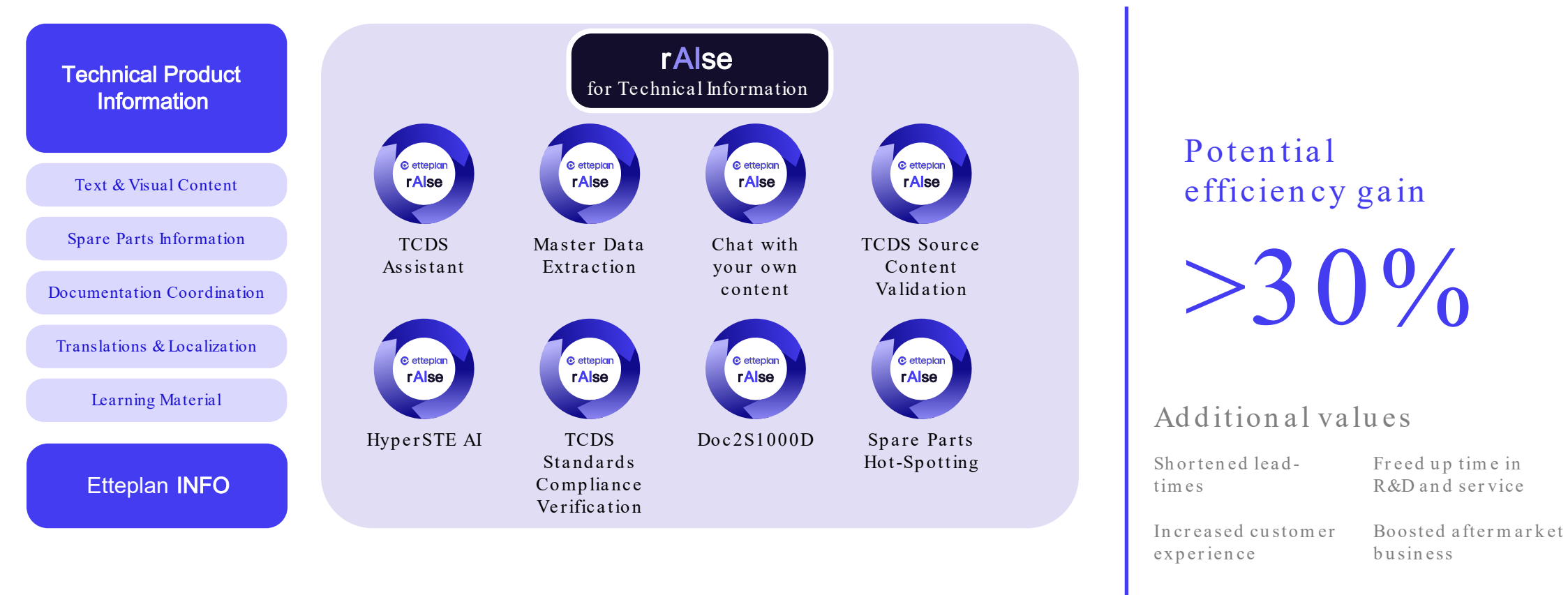
- A **collaborative partner** , not a substitute.
- **Data Quality and part of your knowledge base** as input largely improves the quality and accuracy of the AI output. Approved data typically undergoes review to ensure accuracy and consistency. This **avoids the risk of errors or discrepancies** that could arise if AI were to regenerate or rephrase it.
- Our customer's business does not leave room for 'hallucinations & plausible wrongs' because matters of health and safety (and efficiency) are involved. **Verified, factual output is key** .
- We achieve this through validation of our knowledge base (in order words, we need to clean up the source) used by the LLM, and through validation of newly generated or rewritten suggestions by the LLM.
- The role of a **technical writer will enhance** further with focus on information / LLM modelling & structuring and output verification.



# How does it work



# Technical Communication and Data services and solutions supporting the content value chain



# Come talk to us



**Berry Braster, Technology Director**

[berry.braster@etteplan.com](mailto:berry.braster@etteplan.com)



**Mikael Vatn, SVP TCDS**

[mikael.vatn@etteplan.com](mailto:mikael.vatn@etteplan.com)



**Risto Pukki, VP TCDS**

[risto.pukki@etteplan.com](mailto:risto.pukki@etteplan.com)



- 4000 experts
- Tech Pubs | Engineering | IoT
- Publicly Listed