

# Why Alfatroll technology?

[www.alfatroll.com](http://www.alfatroll.com)



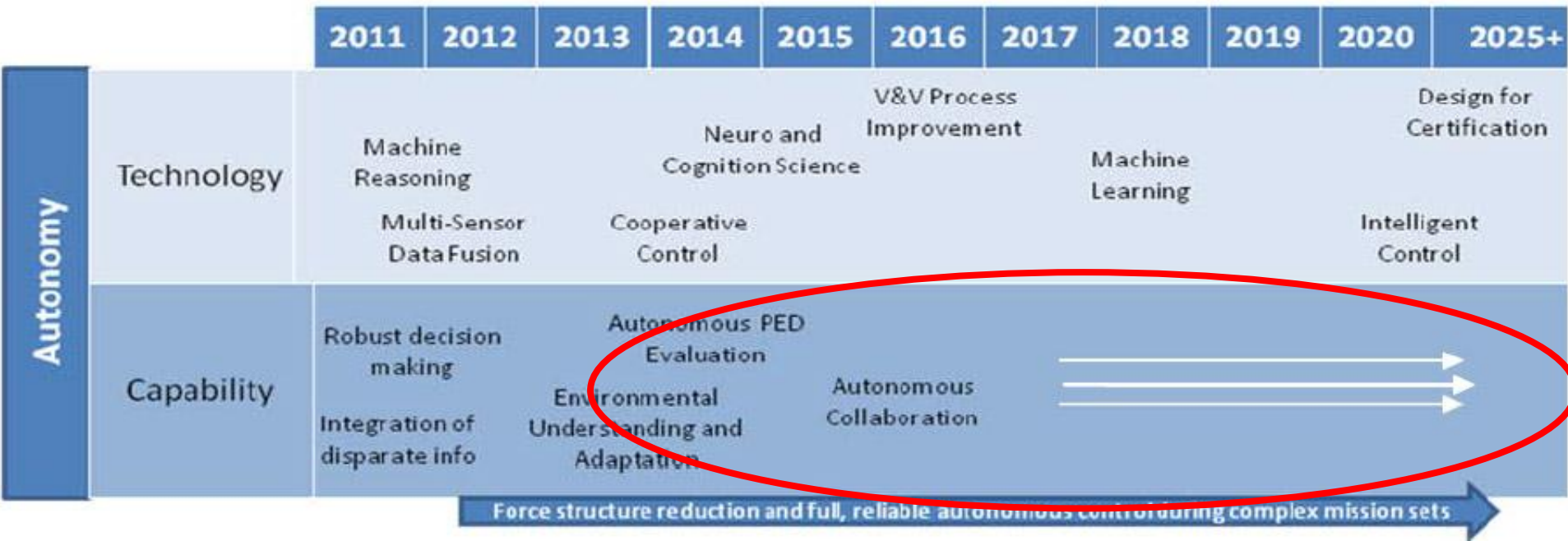
- **Alfatroll: strong competence and rich experience.**
- **Sub-contracts experienced consultants and hires only the best.**
- **Cooperation with respected players in the aerospace industry ensures quality and sales.**
- **Clear focus on the real challenge: *Software!***
- **Focus on small to medium size systems.**



# Alfatroll AS

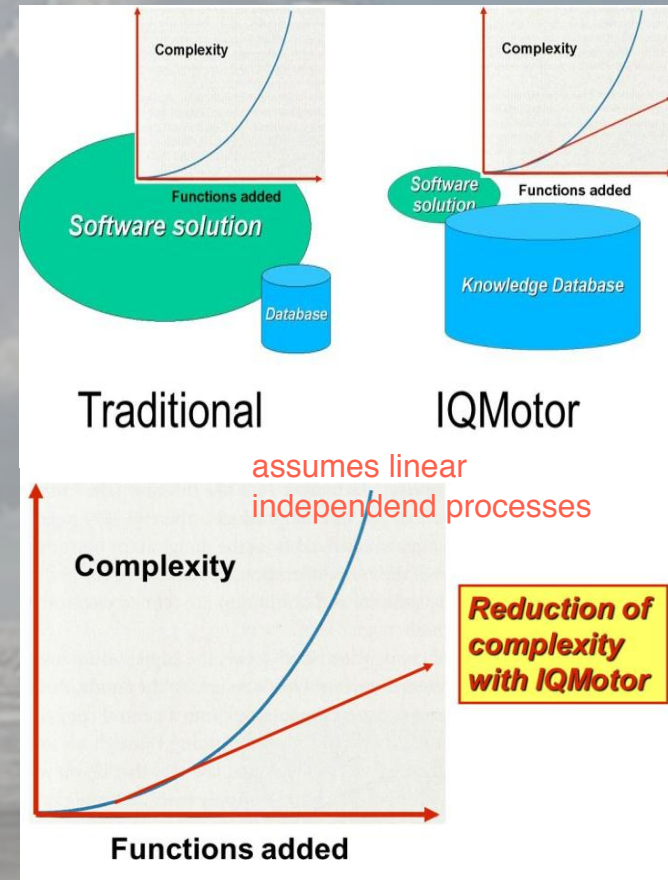
## Patented technology for autonomous systems

- Increased autonomy is the real challenge!
  - Some mean it is limited by computer power
  - The real limitation is the complexity!
- Miniaturization and downscaling a clear trend, requiring...
  - Fast and efficient software
  - Lower development costs
- There seem to be no real solution to the challenge, other than to postpone the intro of fully autonomous systems
- Alfatroll has an alternative:
  - Small, precise and efficient decision making
  - Low development costs
  - Based upon heavy expertise



# What is so unique here?

- **Unique Technology:**
  - Compact software solution – independent of the amount of decisions required.
  - Decision engine, based upon stored knowledge
  - Smart data organization yields fast and precise response, almost unaffected by the amount of knowledge added.
- **Lowered development costs:**
  - Changes and additions are applied on a layered basis.
  - No changes in software necessary when new knowledge is added.
  - Certification of initial version and new releases is less expensive.
- **Step-by-step progression:**
  - Allows verification of knowledge platforms to be built upon
  - New functions are added on top of already existing knowledge.
- **Low level of complexity**
  - The software and the knowledge are totally separated.
  - New knowledge can be added without affecting the software.
- **Fits both SMALL and LARGE autonomous systems**
  - Systems developed by traditional methods may require heavy computer systems.



# What do the experts say?

“Affordability will be treated as a key performance parameter (KPP) equal to, if not more important than, schedule and technical performance” (p. v).

“DoD must continue to pursue technologies and policies that introduce a higher degree of autonomy to reduce the manpower burden and reliance on full-time high-speed communications links while also reducing decision loop cycle time.

The introduction of increased unmanned system autonomy must be mindful of affordability, operational utilities, technological developments, policy, public opinion, and their associated constraints» (p. vi).

“In 2010, the USAF released the results of a year-long study highlighting the need for increased autonomy in modern weapon systems, especially given the rapid introduction of UAS.

This study, “Technology Horizons,” identified the need for greater system autonomy as the **“single greatest theme”** for future USAF S&T investments.” (p. 43)

“... the ability to understand and control future costs from a program’s inception is critical to achieving affordability requirements.”

–Under Secretary of Defense Memorandum for Acquisition Professionals, Better Buying Power, September 2010 (p.46)

