



APPLICATION SERVICES

Doing the right things right

AVL List GmbH

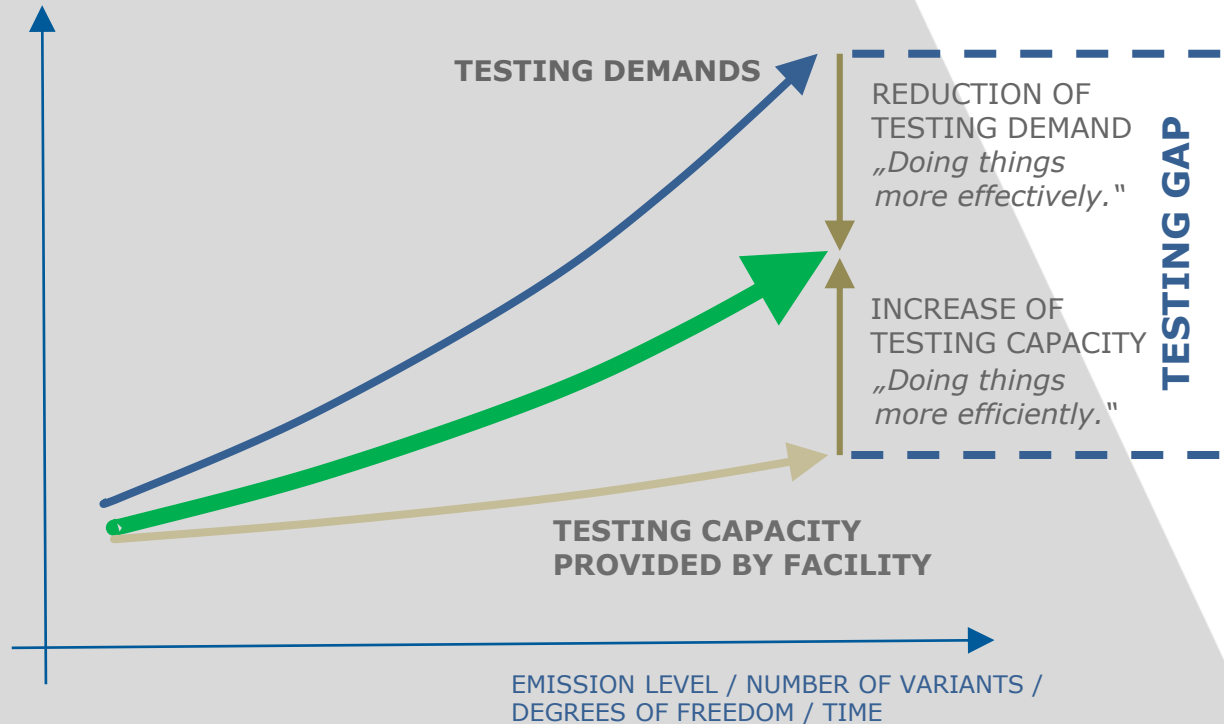
Public

CUSTOMER CHALLENGES



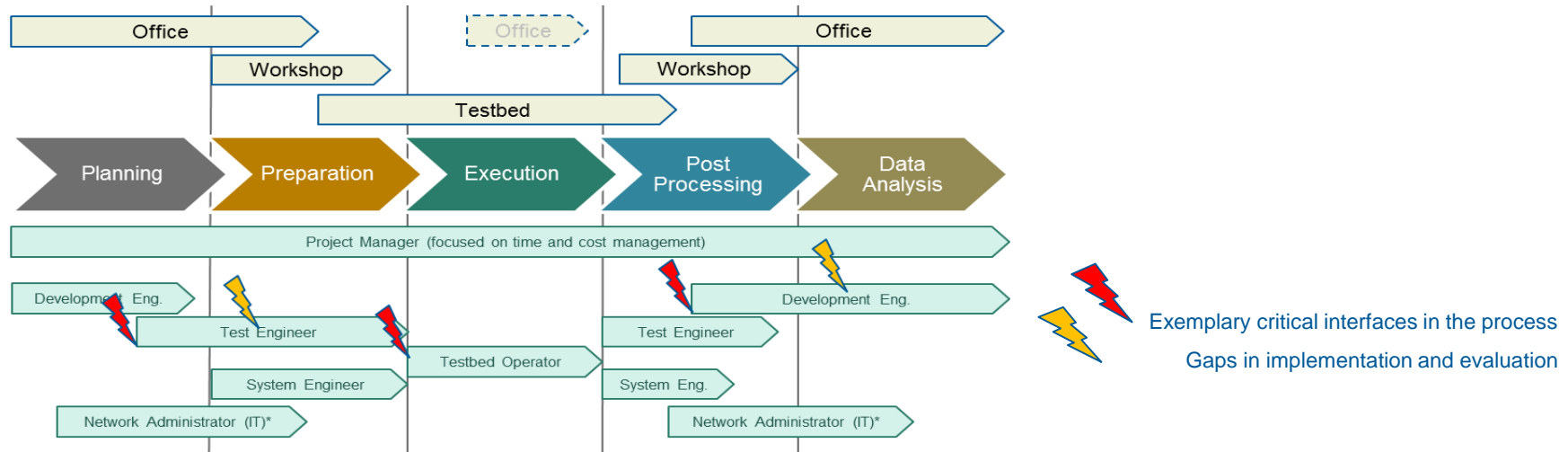
WITH
APPLICATION SERVICES
CHALLENGES CAN BE HANDLED
BY
DOING LESS MORE INTELLIGENTLY

THE TESTING GAP



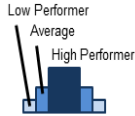
Doing less
more intelligently.

TESTING GAPS IN THE DEVELOPMENT PROCESS

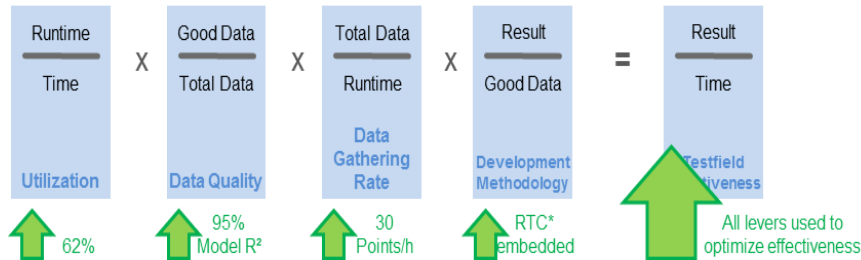
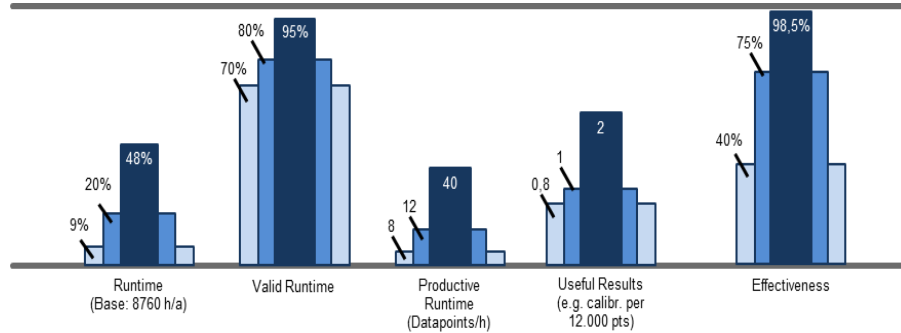


- Application Services help to tone down or even eliminate these gaps
- AVL can provide a “long-term expert” to support and/or improve the whole process
- Or assist punctually (short-term) in specific tasks to find a good solution
- Always in cooperation with the customer

REDUCED TESTING GAPS – HIGHER EFFICIENCY



EXAMPLE:



Runtime:

- System is running (engine turning)
 - one shift 5 day/week up to 24h for 365 days

Valid Runtime:

- Engine/UUT is tested, measurements are done – no warm-up / idle / cold run ...

Productive runtime:

- How many data points per hour are measured

Useful results:

- How many of the measured data can be used for the testing result / evaluation / development

CONCRETE OPTIONS FOR IMPROVEMENTS BY AVL

Stages of improvement:



Areas for improvements:

Cost- and time-saving

with application of intelligent methodologies



Increased testing output

due to high degree of automation



Sound development decisions

based on high quality test information



Mastering the development complexity

through know-how transfer and standardization



Effective integration of new methods and tools

into the customer specific applications & processes



Optimization within the organization

regarding workflow, qualification and interfaces



GLOBAL FOOTPRINT OF AVL APPLICATION SERVICES



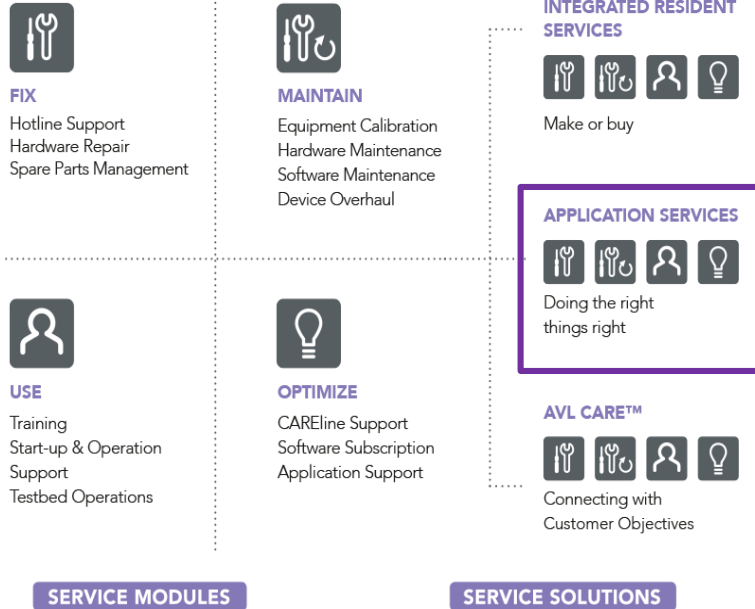
= Knowledge Hub



1	AS for testbeds (PO automation, stationary, dynamic testing)
2	AS for model based calibration / Cameo (Doe, automation with Cameo)
3	AS for powertrain testbeds (gearbox, powertrain testing)
4	AS for hybrid testing / electrification (BTS/E-Motor / InMotion)
5	AS for productive testing / optimized testbed set-up (increasing testing output / efficiency / new methodologies in testing)
6	AS for test field standards (test field harmonization / intelligent data handling / standardized workflows)
7	AS for Chassis Dyno with Cameo, PO Vehicle (automation, methodology)
8	AS for Emission / iGem (automation, customer specific adaptation)
9	AS for indicating post processing with Concerto (system adaptation, macros)
10	Others (state type)

THE AVL CUSTOMER SERVICES PORTFOLIO

EXPERIENCE THE ADDED VALUE.



Application Services
Improving the overall efficiency
by doing the right things right

Contact
customer.services@avl.com
or your next AVL customer
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EXPERIENCE THE ADDED VALUE.
CUSTOMERS OBJECTIVES ARE OUR MISSION