

WE LOOK AFTER THE EARTH BEAT

ADCSS 2013

Software factory round table

Gérald Garcia & XXXX

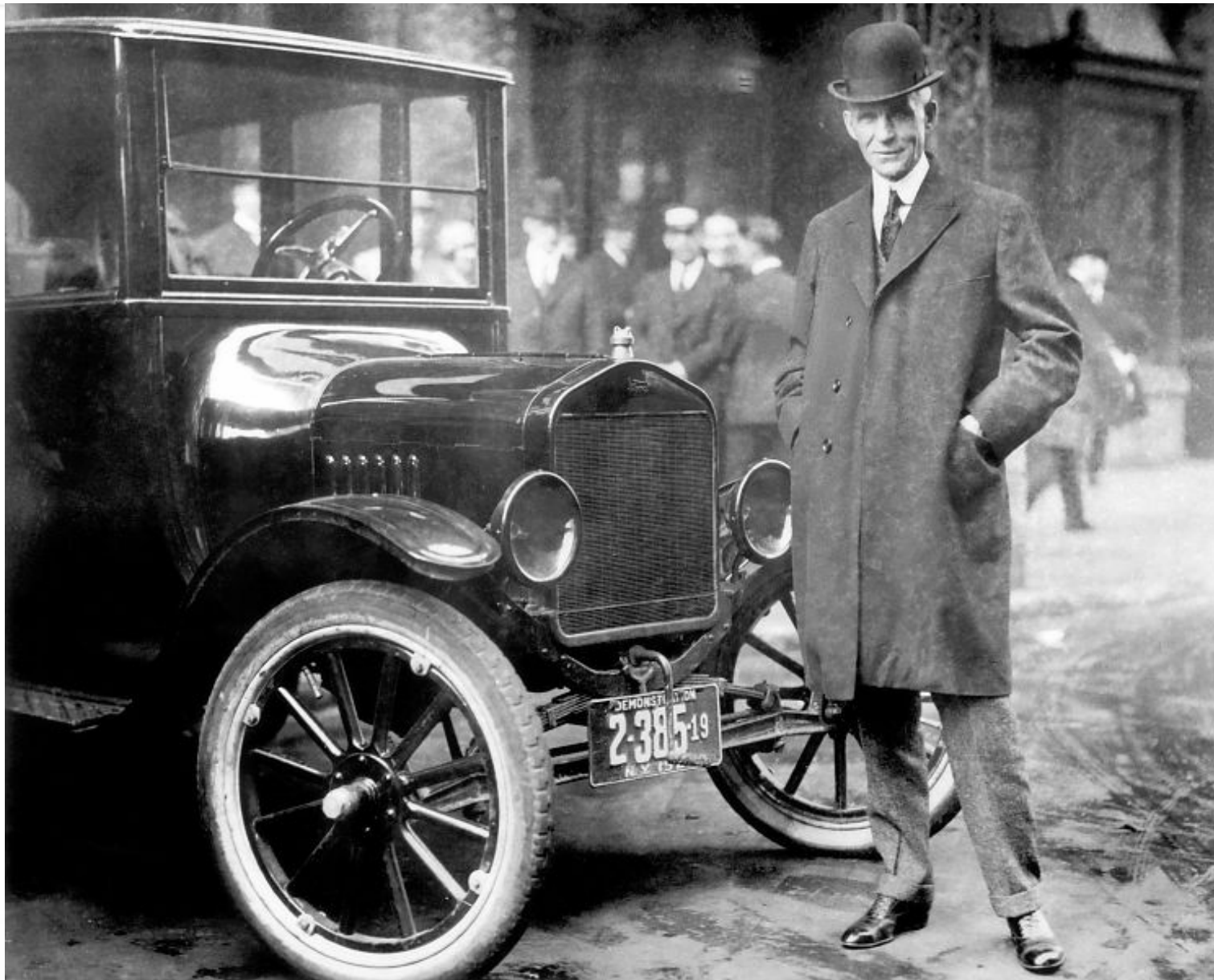
{name.surname@thalesaleniaspace.com}

024/11/2013
ADCSS 2013 - ESTEC

OPEN

ThalesAlenia
A Thales / Finmeccanica Company
Space

100 years ago...



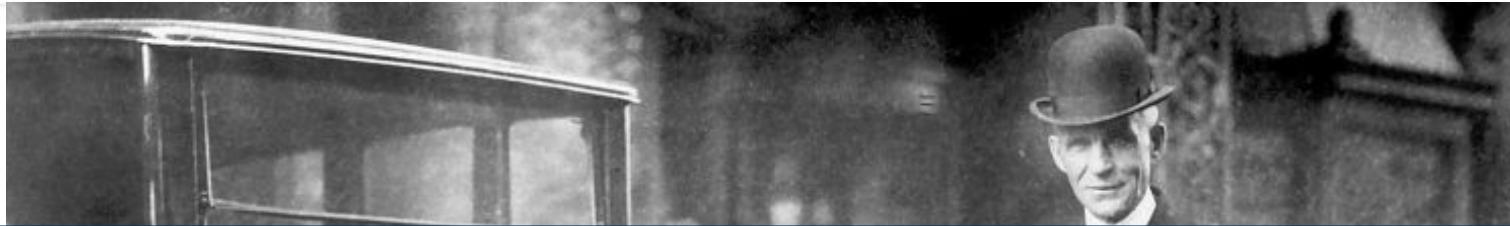
© 2008 Ford Motor Company

OPEN

This document is not to be reproduced, modified, adapted, published, translated in any material form in whole or in part nor disclosed to any third party without the prior written permission of Thales Alenia Space - © 2013, Thales Alenia Space

ThalesAlenia
Space
A THALES / FINMECCANICA COMPANY

100 years ago...



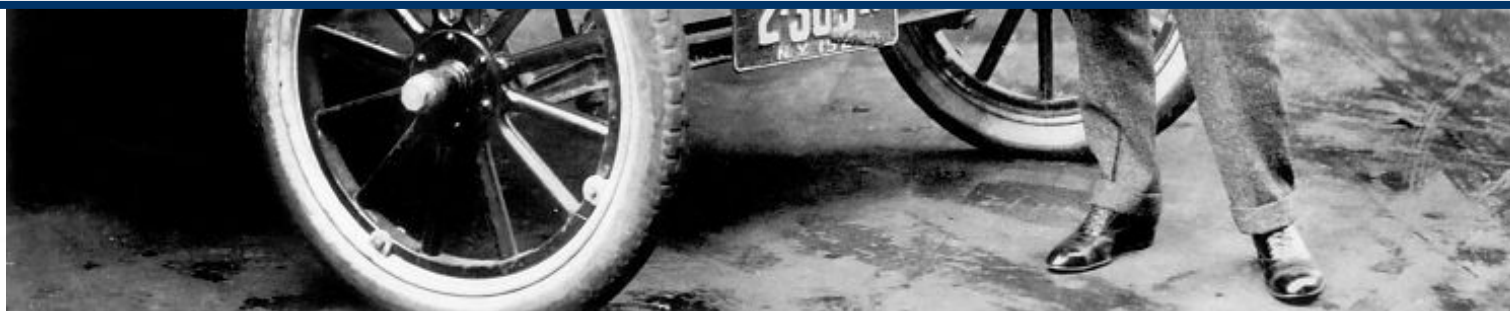
Two pillars :

Standardisation of the product :

- one model for all
- everything is done through machines and molds
- not by skilled craftsmanship

Use of special-purpose tools and/or equipments

- Permit low skill workers
- Enable assembly lines (each worker does one task)



<http://en.wikipedia.org/wiki/Fordism>

© 2008 Ford Motor Company

OPEN

This document is not to be reproduced, modified, adapted, published, translated in any material form in whole or in part nor disclosed to any third party without the prior written permission of Thales Alenia Space - © 2013, Thales Alenia Space

ThalesAlenia
Space

State of the practice (past)

Specialized Tools for certain aspects or isolated solutions (no „out-of-the-box“)



Text editor

Compiler

Excel

Makefile

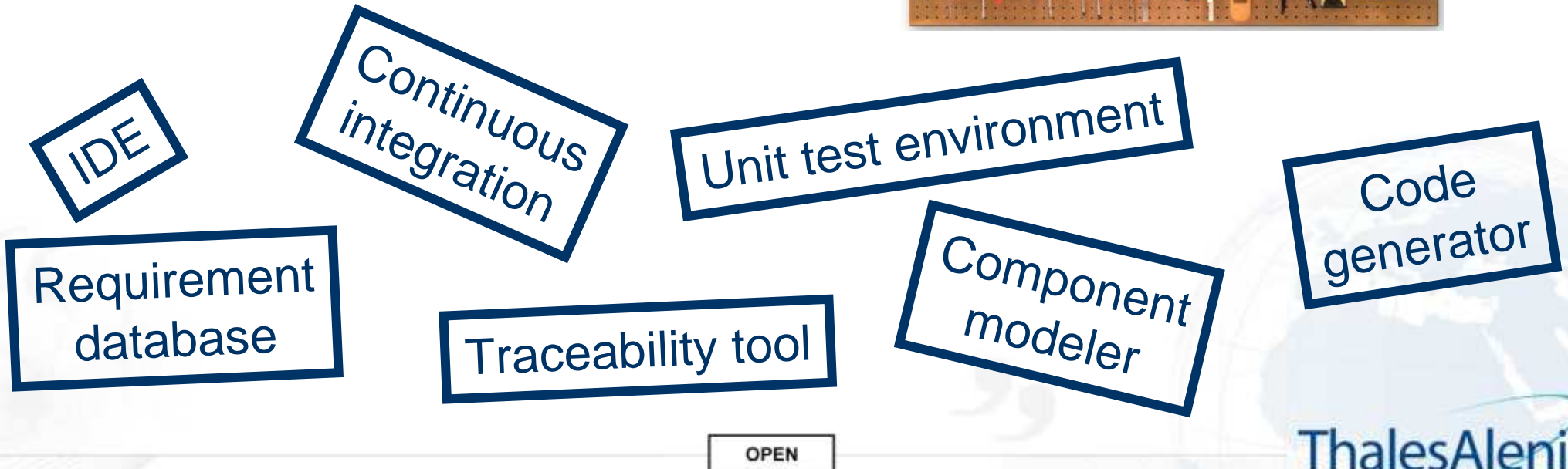
Powerpoint

Shell script

OPEN

State of the practice (now)

Tooling environments for specification, design, analysis, build and test, respectively



**No exchange format exists
between tools, specifically
between design, analysis and
test tools**

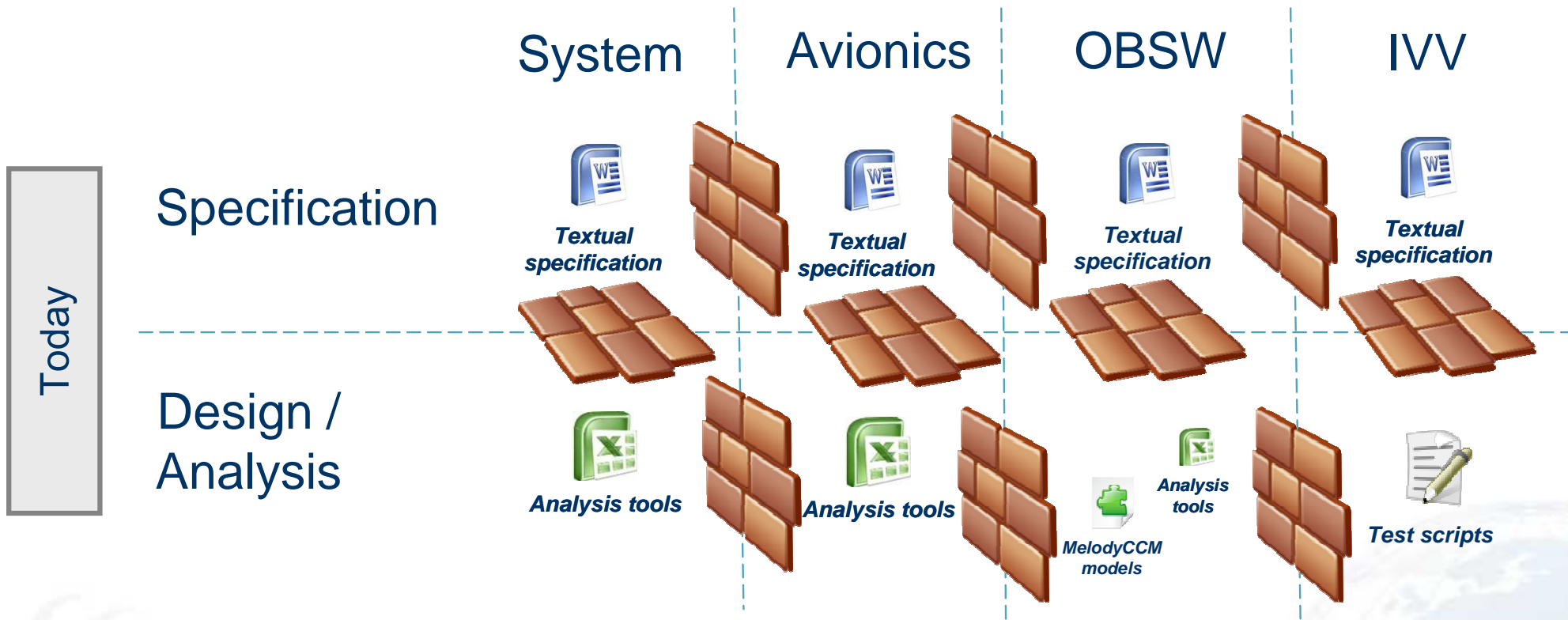


OPEN

Global objective

➤ Break the walls in development process !!!

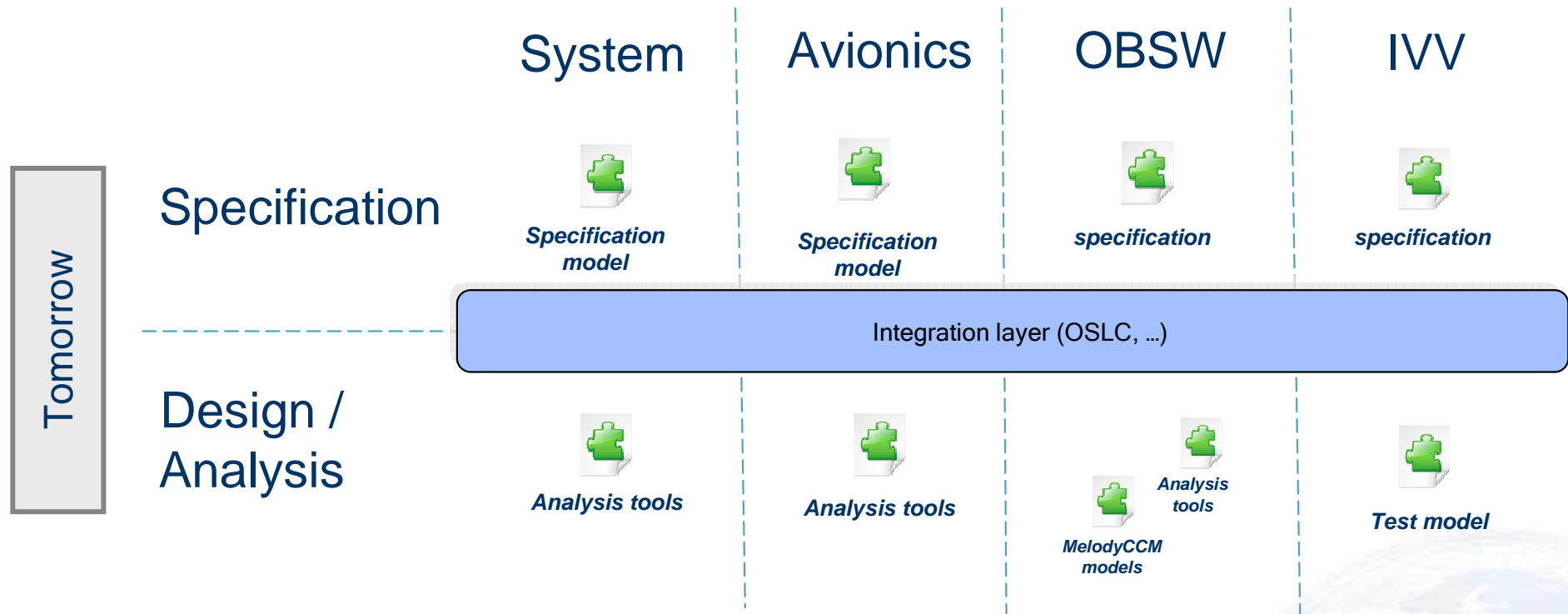
(and not only open  DOORS)



Duplication of work, consistency problem, efficiency, ...

OPEN

➤ Break the walls in development process !!!



Recipes : model based, reference architecture,
transparent tooling integration, ...

OPEN

Ways to achieve it

➤ Reference architectures

- One architecture for all => enable reuse and automation
- Agreed at european level => enable business creation

➤ Transparent tooling interoperability

- No vendor lock-in, market open to new comers
- Shared interfaces specifications (OSLC, ...)
- Cross domain standards (aeronautic, railway, automotive, ...)

OPEN



OPEN

This document is not to be reproduced, modified, adapted, published, translated in any material form in whole or in part nor disclosed to any third party without the prior written permission of Thales Alenia Space - © 2013, Thales Alenia Space



ThalesAlenia
A Thales / Finmeccanica Company
Space

Thank you for your attention!

Acknowledgments

MBAT: “Combined Model-based Analysis and Testing of Embedded Systems”

<http://www.mbat-artemis.eu>

ARTEMIS Joint Undertaking grant agreement n. 269335 and funding from the
ARTEMIS member states Austria, Denmark, Estonia, France, Germany, Italy, Sweden and United Kingdom

OPEN