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Organizer:  **TESTING
SOLUTIONS
& SERVICES**

USING TDL AND AI (Artificial Intelligence) FOR BUSINESS SCALING

Presented by Francesco Oppedisano

Who we are

- Born in 2006 from the research group in telecommunication networks at University of Pisa (Italy)
- Official spin-off of Pisa's University
- SME with strong skills in VoIP/MoIP and network performance testing
- People: 20
- with degree: 15/20
- with PHDs: 2/15

R&D in a Scaleup

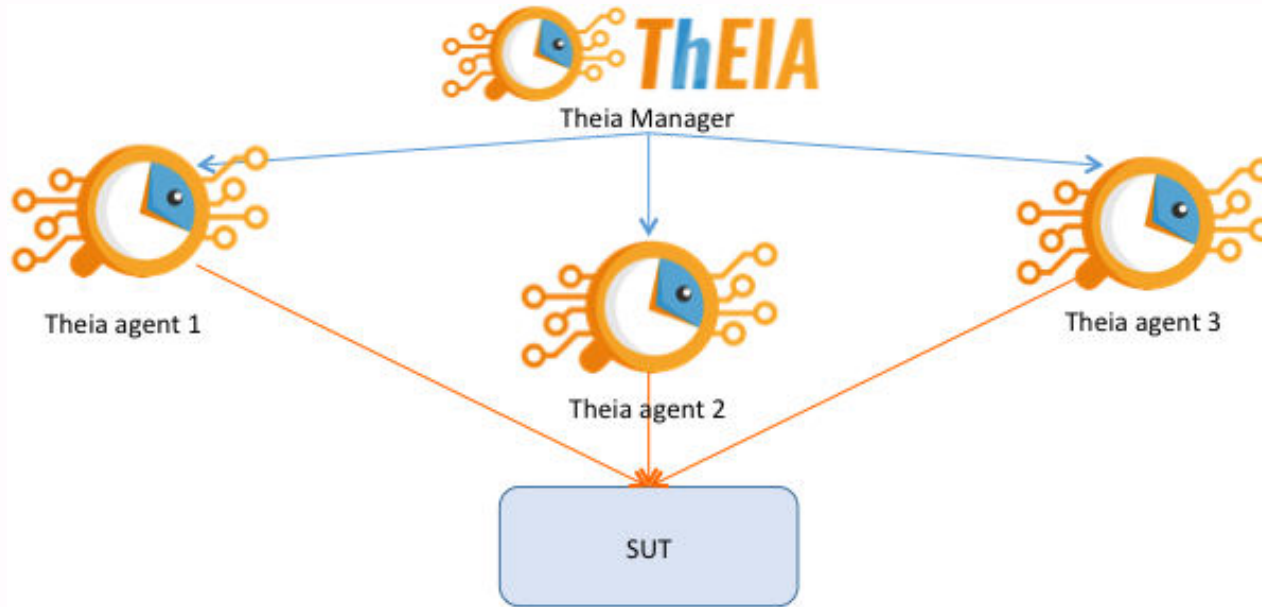
- Today's most important activity in startups and scaleups is “product discovery”.
- PD is heavily inspired by the “lean thinking” movement and in particular by the “Lean startup” approach. (Ref: “INSPIRED: How to create tech products customers love” by Marti Cagan)
- ZLRD – Zero Latency R&D
 - Test automation engineer
- Testing automation is key and it is also very important to scale the job of the TAE



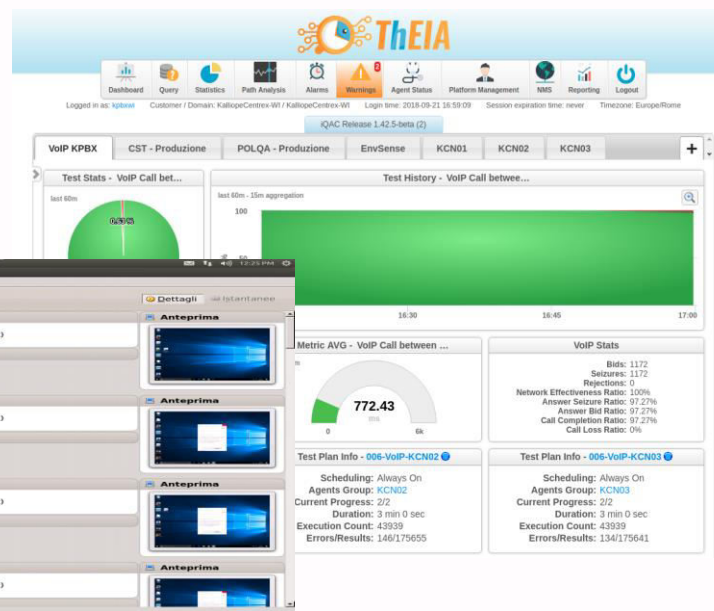
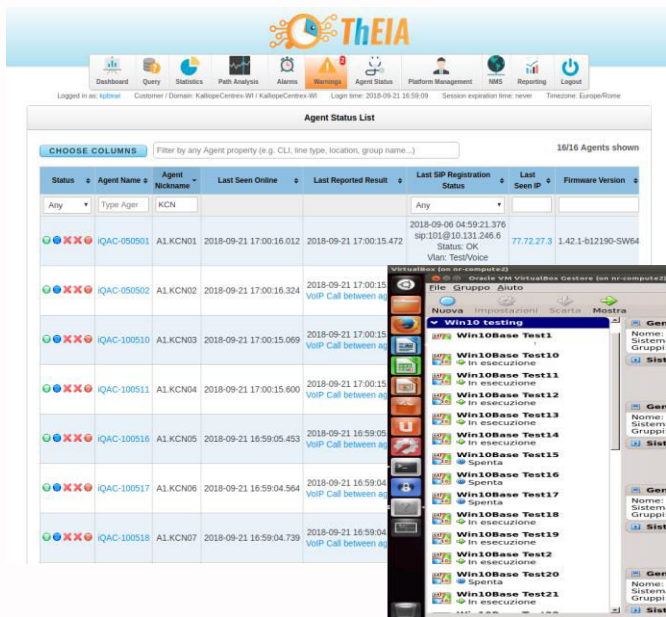
What is ADA Project

- ADA is a research project founded by Tuscany Region (Italy)
- It aims at augmenting human driven processes by the use of advanced data and document analysis
- Our role is to contribute to the enhancement of the testing process trying to make more efficient the test automation activity carried out by the TAE (Testing Automation Engineer)

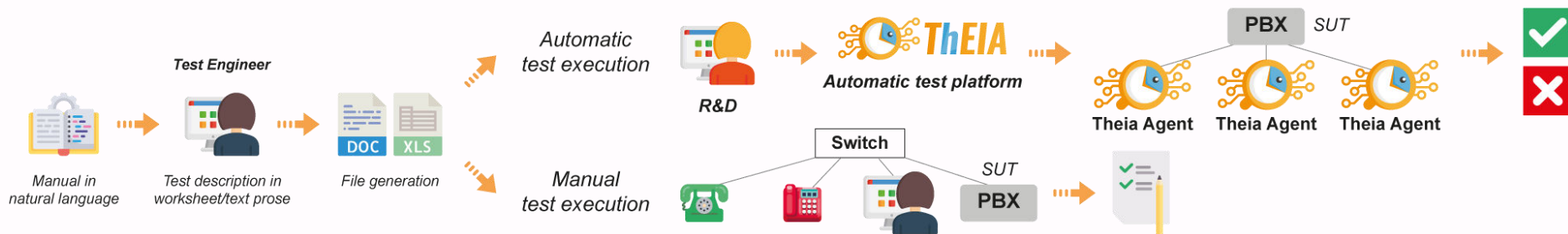
ThEIA - Testing Environment for Internet Applications



The ThEIA platform



« As is » testing process



Target testing process



Use of AI in ADA

- Natural Processing Language
- Image Analysis
- Document Analysis
- Structured Data Analysis
- Output
 - Better matching between testing and business expectations
 - Proactive Maintenance
 - Data Driven Testing
 - Automated Testing

Use of AI – 1



Correct TDL



Test Automation Engineer



NL – Test description



Entity
Extraction

Ontology

Relation
Extraction

Translation

Corpus

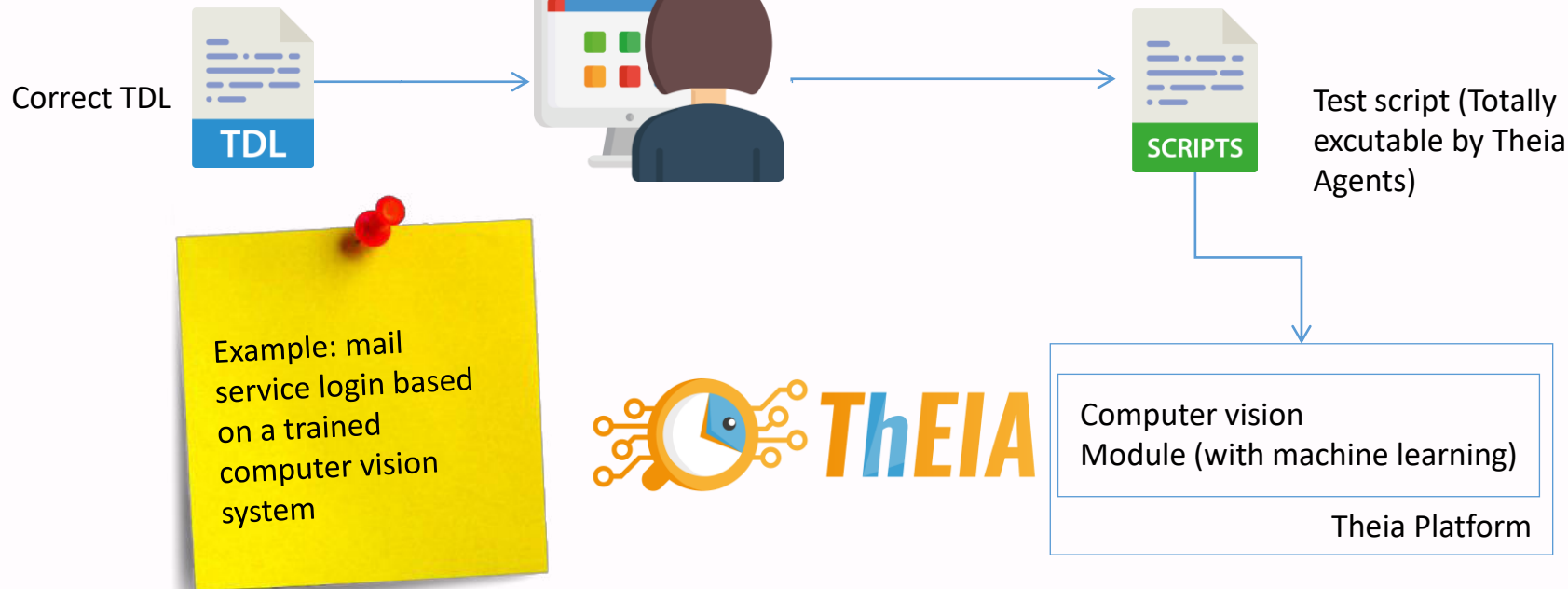


Tentative TDL
Translation



Use of AI - 2

Primitive disambiguation (R&D)



Conclusions

- ADA is at its early stages, hence we have only preliminary info
- TDL is the “Center of Gravity” of our part of the project
- We are still struggling to apply TDL to our scenarios (see our Poster)
- AI is a new tool for us so absolutely don’t know how the real performance we are going to achieve
- Nonetheless we strongly believe that testing is the “immune system” for tech scaleups that need fast “build-measure-learn” cycles

Q&A Contacts

- Q&A
- Thank you
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