25 years of ITEA webinar – Spain

HI Iberia Ingeniería y Proyectos

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ITEA is the Eureka Cluster on software innovation

HI Iberia Ingeniería y Proyectos S.L.

- *Part of a small cluster of companies sharing a common owner (Seaplace [naval engineering], Howard [turnkey projects]) HI Iberia is since 1999 the software engineering part of the group. The company splits between consulting for major companies (Telefónica, Indra) and developing own products: **REVITA** for home hospitalization patient monitoring (used by major hospitals such as La Paz and Sant Joan de Deu) and **TAMUS** for restaurant management (used by over 100 restaurants including the LATERAL chain).*

  HI Iberia is around 120 strong with a R&D department of around 12-15 engineers that develop EU and national projects to push for innovations that are then taken to market by the products.

- Active in ITEA since 2015

  - Involved in 8 projects: SoMeDi (coordinators), RM4HEALTH, SYMPHONY, Mad@Work, COSIBAS, SCRATCh, PAPUD, ESTABLISH
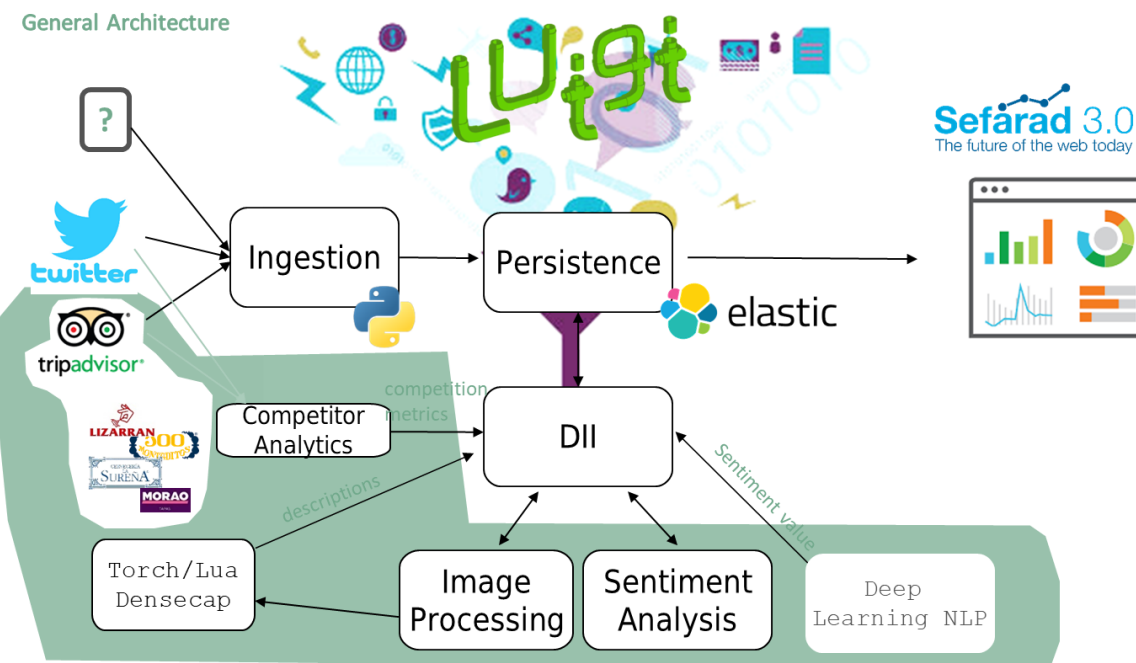
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Some examples of successful ITEA projects

SoMeDi (2016 – 2019)

- HI Iberia coordinated the European consortium
- The goal of SoMeDi is to research machine learning and artificial intelligence techniques that can be used to turn digital interaction data into Digital Interaction Intelligence and approaches that can be used to effectively enter and act in social media, and to automate this process.
- We benefited from having some partners (UPM, TAIGER) that proposed an architecture schema and several analysis techniques (Sentiment Analysis).

General Architecture

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Some examples of successful ITEA projects

Societal impact

- EU-centric, GDPR compliant tools and algorithms for Social Media analysis.
- Natural Language Understanding tools (e.g., sentiment analysis) for less developed languages in the community → Romanian, Turkish in addition to Spanish an English.

Business impact

- Tools were developed with SMEs in mind: can yield useful results in analysis and engagement improvement even in smaller campaigns (E.g., just a few hundred tweets).
- Main architecture and tools built on top of Open Source software:
- Integration of text-based analysis (NLP) with computer vision (scene descriptions using ML techniques) feed the common results.

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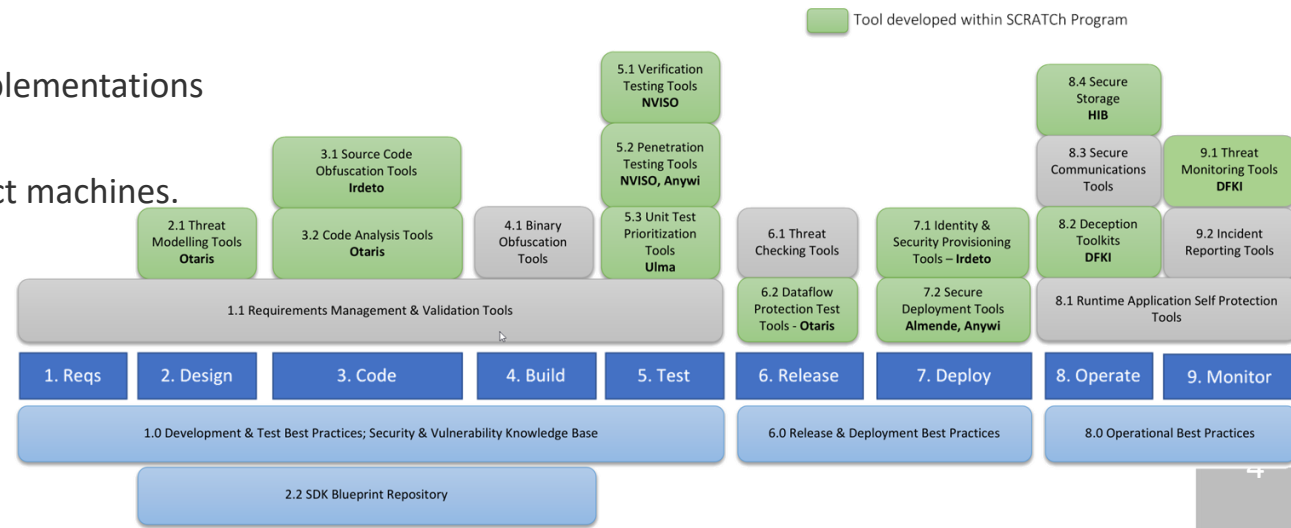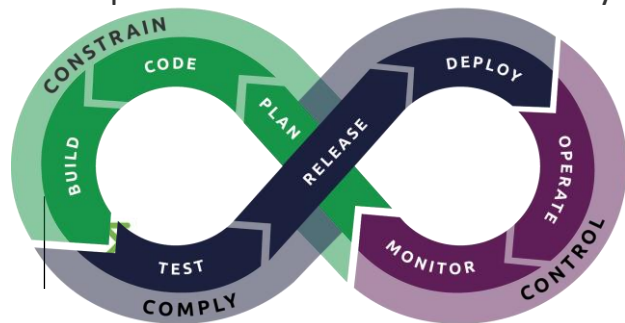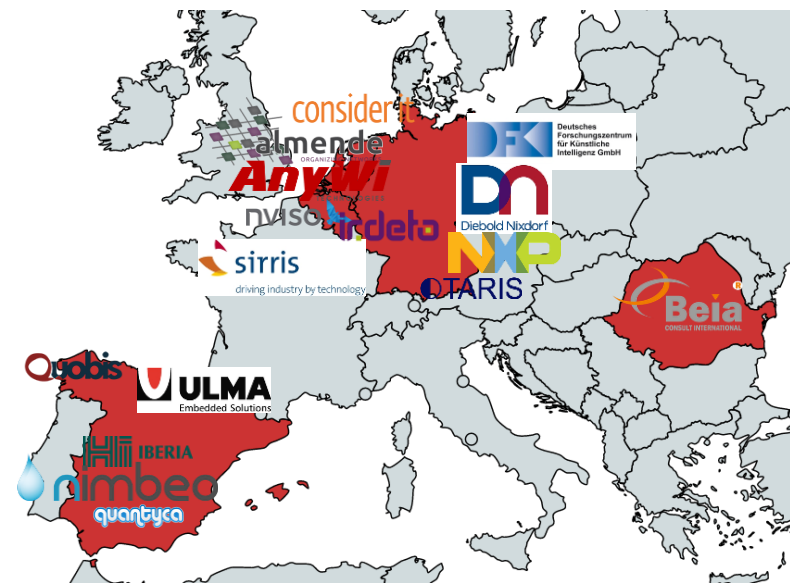## Some examples of successful ITEA projects

SCRATCh (2018 – 2022)

- HI Iberia coordinated WP1, a use case and the Spanish consortium
- SCRATCh proposes an integrative approach to IoT, security and DevOps practices through a set of interoperable tools (toolkit) based on a common conceptual architecture:
  - Security foundation
  - DevOps IoT tools
  - SecDevOps inspired process
- Use cases for:

Connected Retail: secure continuous deployment of apps running on POS terminals, smart trolleys, and electronic shelf labels.

Police: redesign of an existing mobile surveillance platform addressing secure storage, streaming and provisioning.

Smart Grids: development of anti-fraud algorithms, blockchain implementations and other security mechanisms.

Smart Machine: development of a smart and secure way to connect machines.

Tool developed within SCRATCh Program

				5.1 Verification Testing Tools **NVISO**				8.4 Secure Storage **HIB**	
		3.1 Source Code Obfuscation Tools **Irdeto**		5.2 Penetration Testing Tools **NVISO, Anywi**				8.3 Secure Communications Tools	9.1 Threat Monitoring Tools **DFKI**
	2.1 Threat Modelling Tools **Otaris**	3.2 Code Analysis Tools **Otaris**	4.1 Binary Obfuscation Tools	5.3 Unit Test Prioritization Tools **Ulma**	6.1 Threat Checking Tools	7.1 Identity & Security Provisioning Tools – **Irdeto**	8.2 Deception Toolkits **DFKI**	9.2 Incident Reporting Tools
		1.1 Requirements Management & Validation Tools			6.2 Dataflow Protection Test Tools - **Otaris**	7.2 Secure Deployment Tools **Almende, Anywi**	8.1 Runtime Application Self Protection Tools	
1. Reqs	2. Design	3. Code	4. Build	5. Test	6. Release	7. Deploy	8. Operate	9. Monitor
	1.0 Development & Test Best Practices; Security & Vulnerability Knowledge Base				6.0 Release & Deployment Best Practices		8.0 Operational Best Practices	
	2.2 SDK Blueprint Repository							

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Societal impact

- Security built on top of open standards and state of the art from scratch (OWASP, ENISA, IEEE) and current standards delivered in portal as part of open results.
- Application of security on transversal and specific fields: from police surveillance to retail and consumer electronics.

Business impact

- Produced open toolkit (https://github.com/SCRATCh-ITEA3/SCRATCh-Tools-Repo) and methodology targeting specifically SMEs in need of security solutions.
- All developments focused around common DevOps methodologies.

Unique aspects/benefits of the ITEA Programme

- Innovation is bottom-up: projects are free to explore widely ranging ideas.

- Medium-sized community and projects: not as big as KDT, not as small as some Horizon Europe projects. Wider range of involved countries compared to Horizon projects.

- Effective, unobtrusive coordination from ITEA.

- Helpful reviews: they are there to help you and steer your project – not audits trying to squeeze every fault from your activities.

- Very helpful events to showcase results or expand your network.

Advice for participants SME

Engage with the community

- Attend the events, interact with participants, read the ITEA Magazine → lots of information and contacts can be extracted.

Don't be afraid to coordinate

- Overhead is typically quite small compared to other programmes.

Interact with your NFAs

- In Spain, CDTI is there to help and are happy to move you in the right direction.

Focus on outcomes and impact from the start

- This is a market-oriented programme! Focus on solving problems and make useful research.

Contact details

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