Trusted science for safe food

74th Advisory Forum meeting

Parma, Italy, 27-28.11.2019

Joining Forces at EU Level on the Implementation of AI

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Context

EU Communication Artificial Intelligence for Europe (2018)**

- **Boost AI uptake**
- **Prepare for socio-economic changes**
- **Ensure an appropriate ethical and legal framework**.

EFSA's strategy 2020

Project "**Joining forces at EU level on the implementation of Artificial Intelligence**"

1. Take stock of AI different feasibility studies at EU level
2. Roadmap on the implementation of AI at EU agency level

Methodology and Tools | Project Overview

Methodology and Tools | AI Trend Analysis

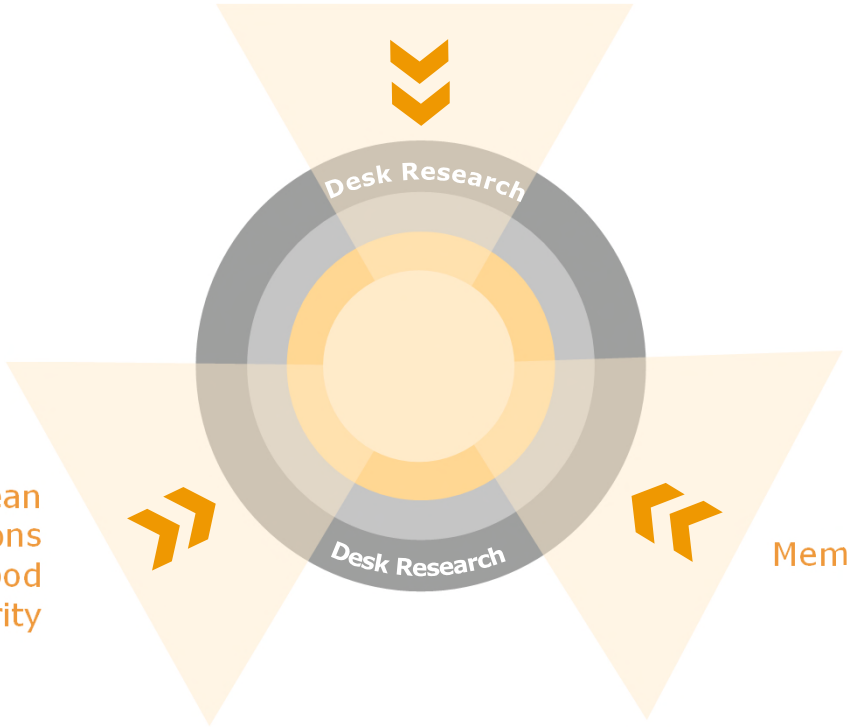
European Food Safety Authority

1st Phase
AI Trends Analysis

2nd Phase
Internal and External AI Assessment

3rd Phase
Roadmap Definition

EU Agencies and institutions with which EFSA already has a close cooperation



Non-European organizations dealing with food security

Member States

M&T | Internal and external AI assessment

European Food Safety Authority

1st Phase
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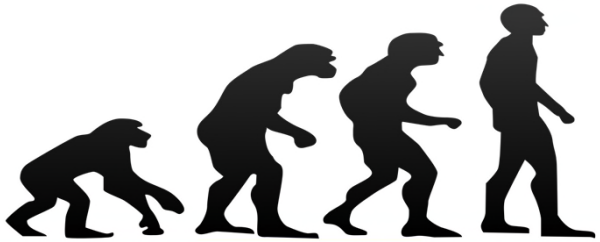
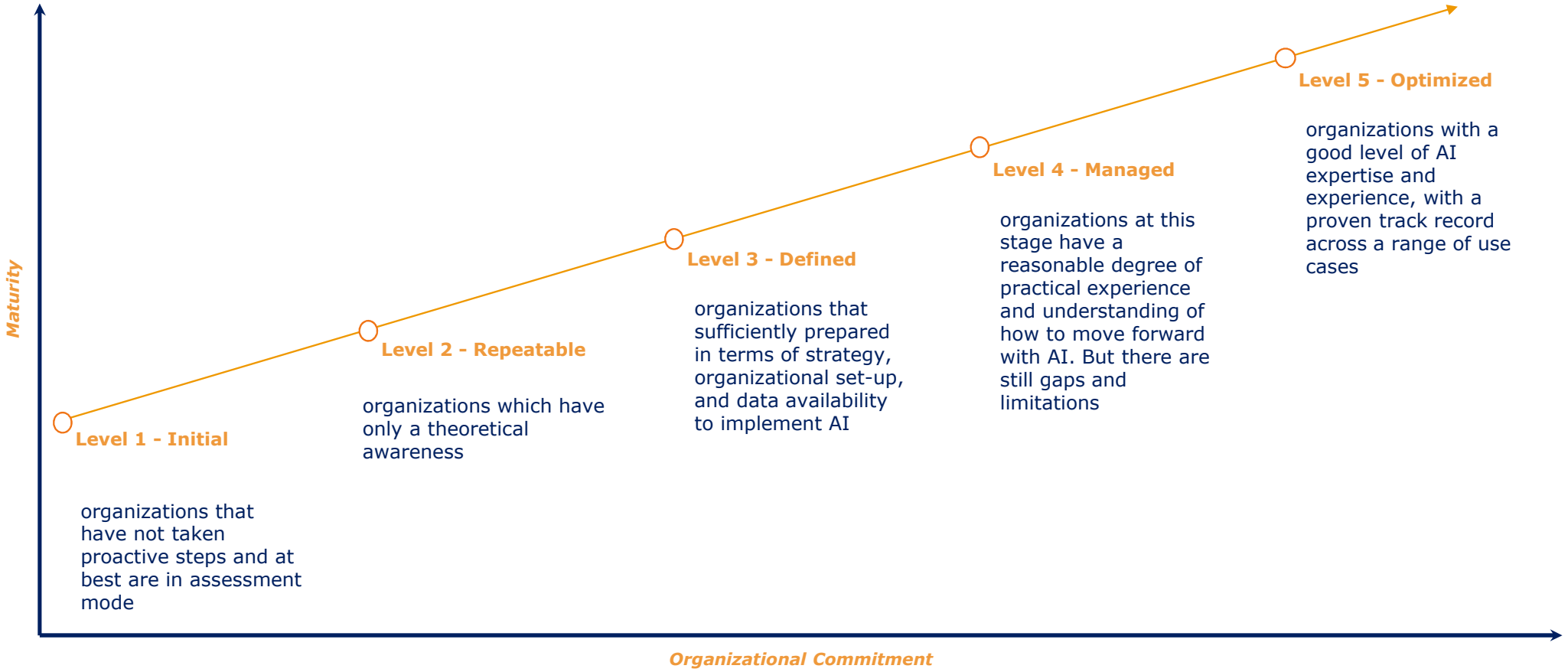
To assess and measure the **level of AI maturity & plan for the AI implementation**



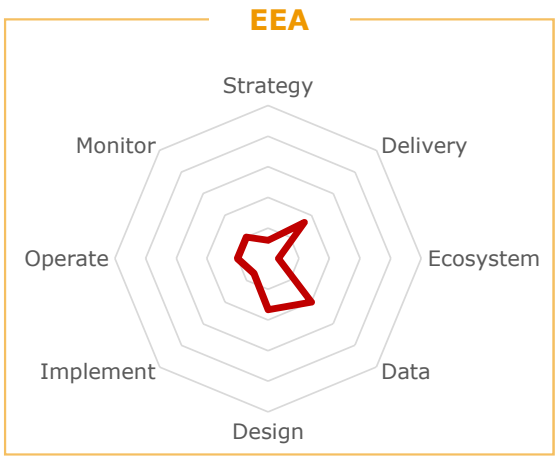
AI Phases

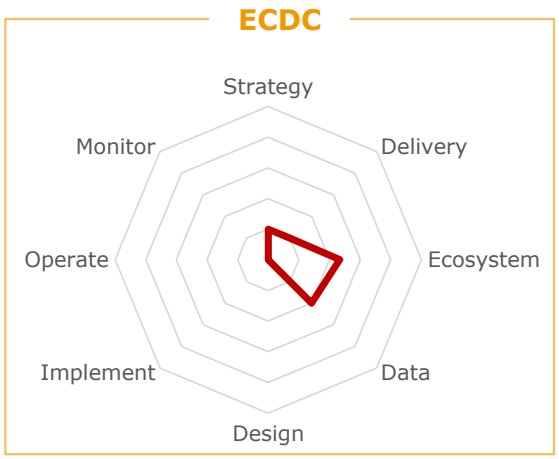
	AI Strategy	***AI Design***	***AI Implementation***	***AI Operating & Monitoring***
Drivers				

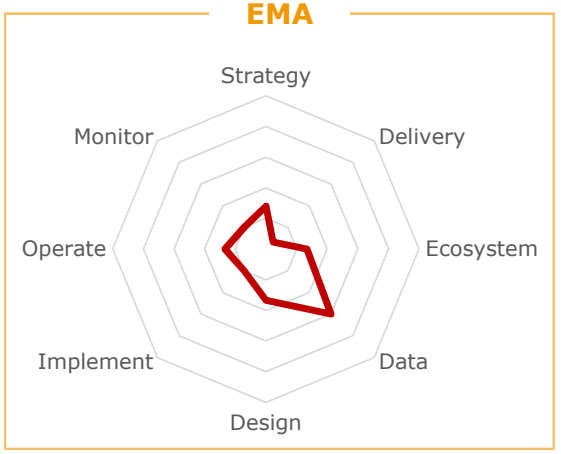
AIMM Introduction | Levels of Maturity

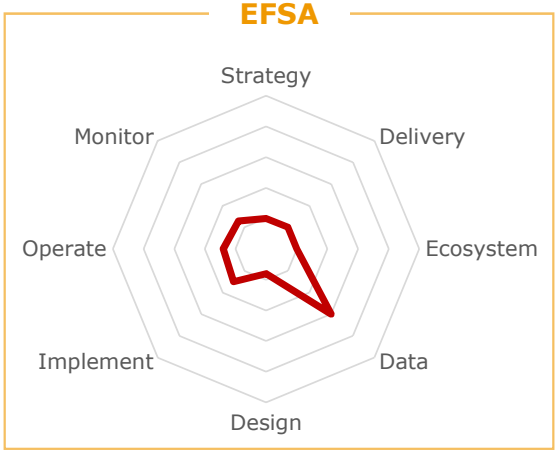


Summary of Agencies' AI Maturity









The Agencies' assessment highlighted **some common needs to all the organizations**:

- Clearly **defined roles and responsibilities**
- Have a **structured process for carrying out technology and use cases scanning**
- Have an **organizational change plan** in order to acquire the necessary skills for the adoption and implementation of AI solutions

Methodology and Tools | Roadmap Definition

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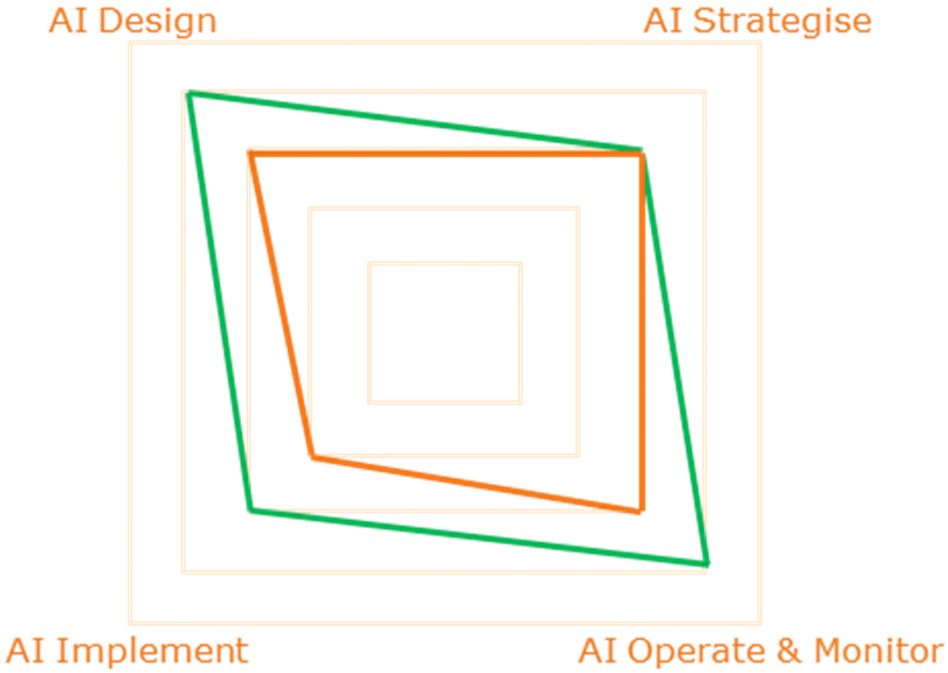
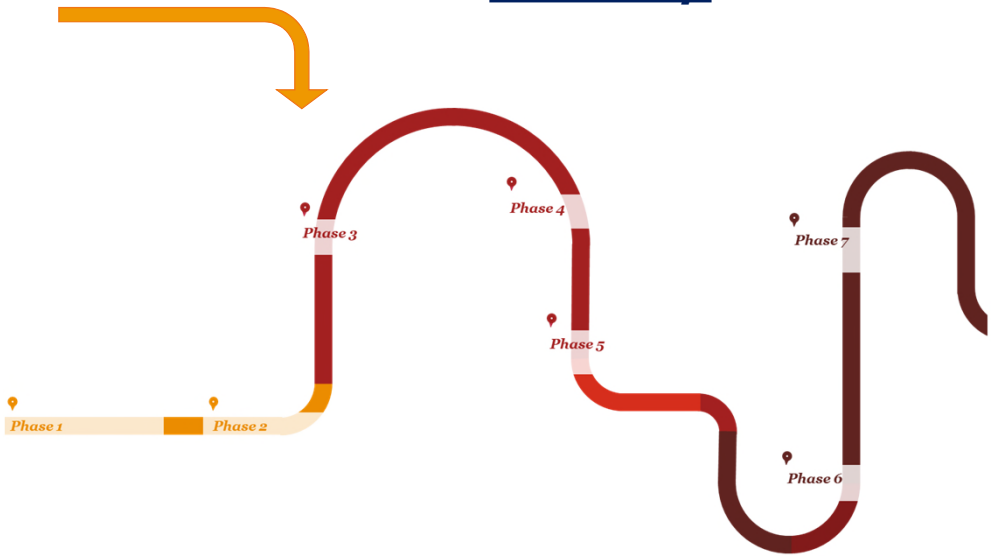
AI Maturity Model Scorecard



Roadmap



Start from the need: use cases at ENVI agency level

1	Low impact
2	Medium-low impact
3	Medium impact
4	Medium-high impact
5	High impact

	Efficiency	User Acceptance	Strategic relevance	Final value		Data type	Main AI techniques
#1 Signal detection: • Social media ++ • Content categorisation	4	5	4	4.17		Text	NLP Network Analysis
#4 Evidence management: • Identification of similar applications • Systematic Review	4	4	4	3.75		Text	NLP
#2 Forecasting: • Predictive analytics • Pattern detection	4	4	4	3.75		Numeric	ML techniques
#6 Automated reporting	4	4	3	3.6		Text	NLP + NLG
#7 Image processing & recognition	3	4	3	3.5		Numeric	ML techniques
#3 Content sanitisation	4	3	3	3.46		Text	NLP
#5 Expertee identification	3	2	3	2.67		Text	NLP

Methodology and Tools | Project Overview

today

opportunities for Member States?

Topics for possible workshop (Feb/Mar 2020)

- **Common needs?**
- **Use cases scanning?**
- **Experience sharing?**
- **…**

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