DIGITAL SOLUTIONS FOR SSBD

INTEGRATE AND BALANCE

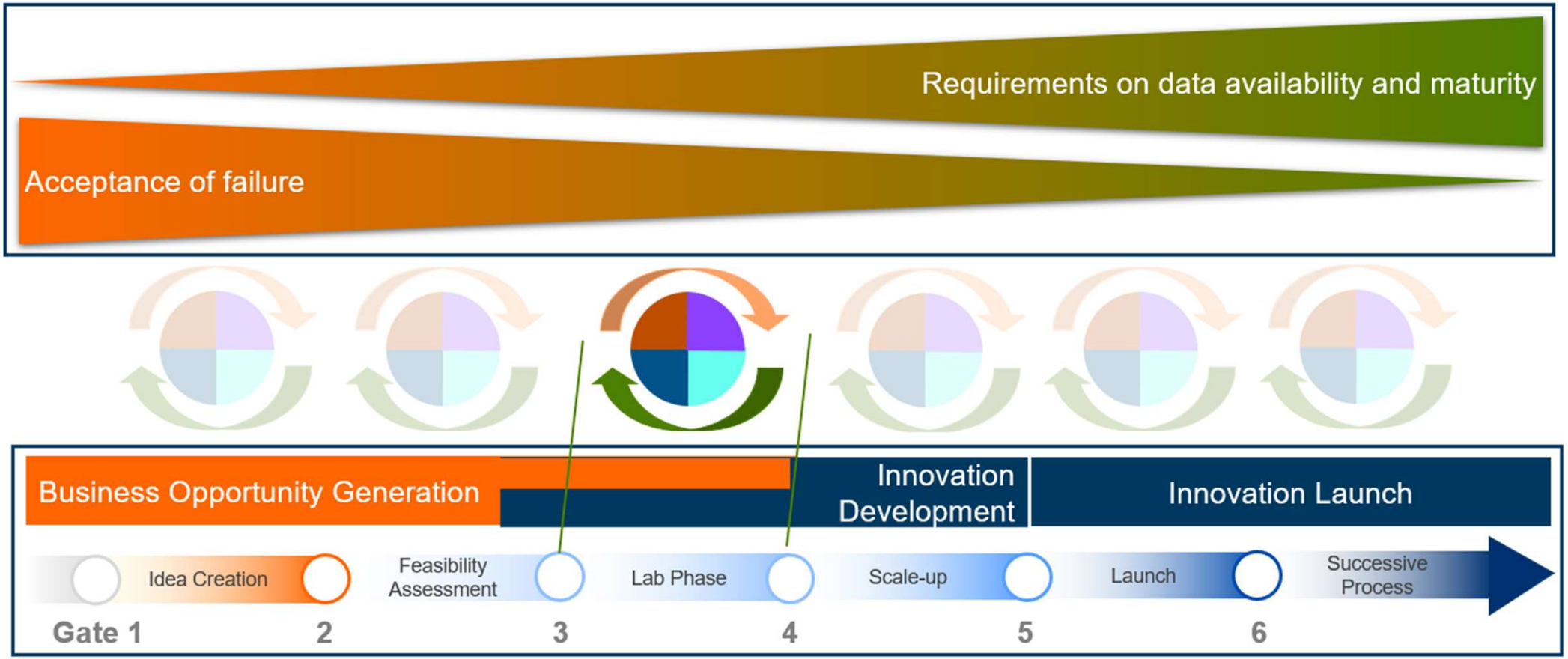
6th SSbD Stakeholder Conference,

Brussels, 19 March 2026

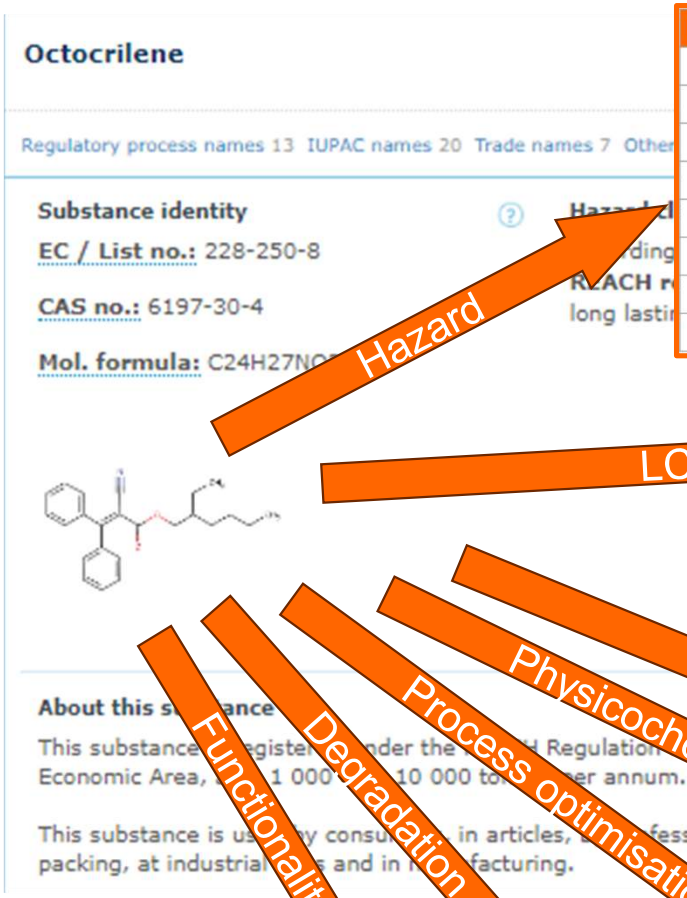
THE PINK PROJECT HAS RECEIVED FUNDING FROM THE EUROPEAN UNION'S HORIZON EUROPE RESEARCH AND INNOVATION PROGRAMME UNDER GRANT AGREEMENT NO. 101137809.

ASSOCIATED PARTNERS (I.E. (A) SWISS PARTNERS AND (B) UK PARTNERS) HAVE RECEIVED NATIONAL FUNDING FROM (A) THE SWISS STATE SECRETARIAT FOR EDUCATION, RESEARCH AND INNOVATION (SERI), AND (B) INNOVATE UK.

PINK's tiered approach



Case Study 1: Organic synthetic UV-filter



substance	molecule	Ames mutagenicity (predicted)	Ames mutagenicity (measured)
Octocrylene	CCCCC(CC)COC(=O)C(=C(C1=CC=CC=C1)C2=CC=CC=C2)C#N	negative	negative
[redacted]	[redacted]	negative	negative
[redacted]	[redacted]	negative	negative
[redacted]	[redacted]	positive	negative
[redacted]	[redacted]	negative	negative
[redacted]	[redacted]	positive	negative
[redacted]	[redacted]	negative	negative
[redacted]	[redacted]	negative	negative

Impact category	SMILES to impact prediction	BASF report
Acidification [Mole of H+ eq.]	0,0211	
Climate Change - total [kg CO2 eq.]	5,53	
Climate Change, biogenic [kg CO2 eq.]	0,00497	
Climate Change, fossil [kg CO2 eq.]	5,72	
Climate Change, land use and land use change [kg CO2 eq.]	0,00380	
Ecotoxicity, freshwater - total [CTUe]	124	
Ecotoxicity, freshwater inorganics [CTUe]	77,1	
Ecotoxicity, freshwater organics [CTUe]	3,13	
Eutrophication, freshwater [kg P eq.]	0,00159	
Eutrophication, marine [kg N eq.]	0,00752	
Eutrophication, terrestrial [Mole of N eq.]	0,0606	
Human toxicity, cancer - total [CTUh]	0,000000004	
Human toxicity, cancer inorganics [CTUh]	0,000000001	
Human toxicity, cancer organics [CTUh]	0,000000003	
Human toxicity, non-cancer - total [CTUh]	0,000000064	
Human toxicity, non-cancer inorganics [CTUh]	0,000000045	
Human toxicity, non-cancer organics [CTUh]	0,000000006	

Hazard

LCA

Mechanistic knowledge

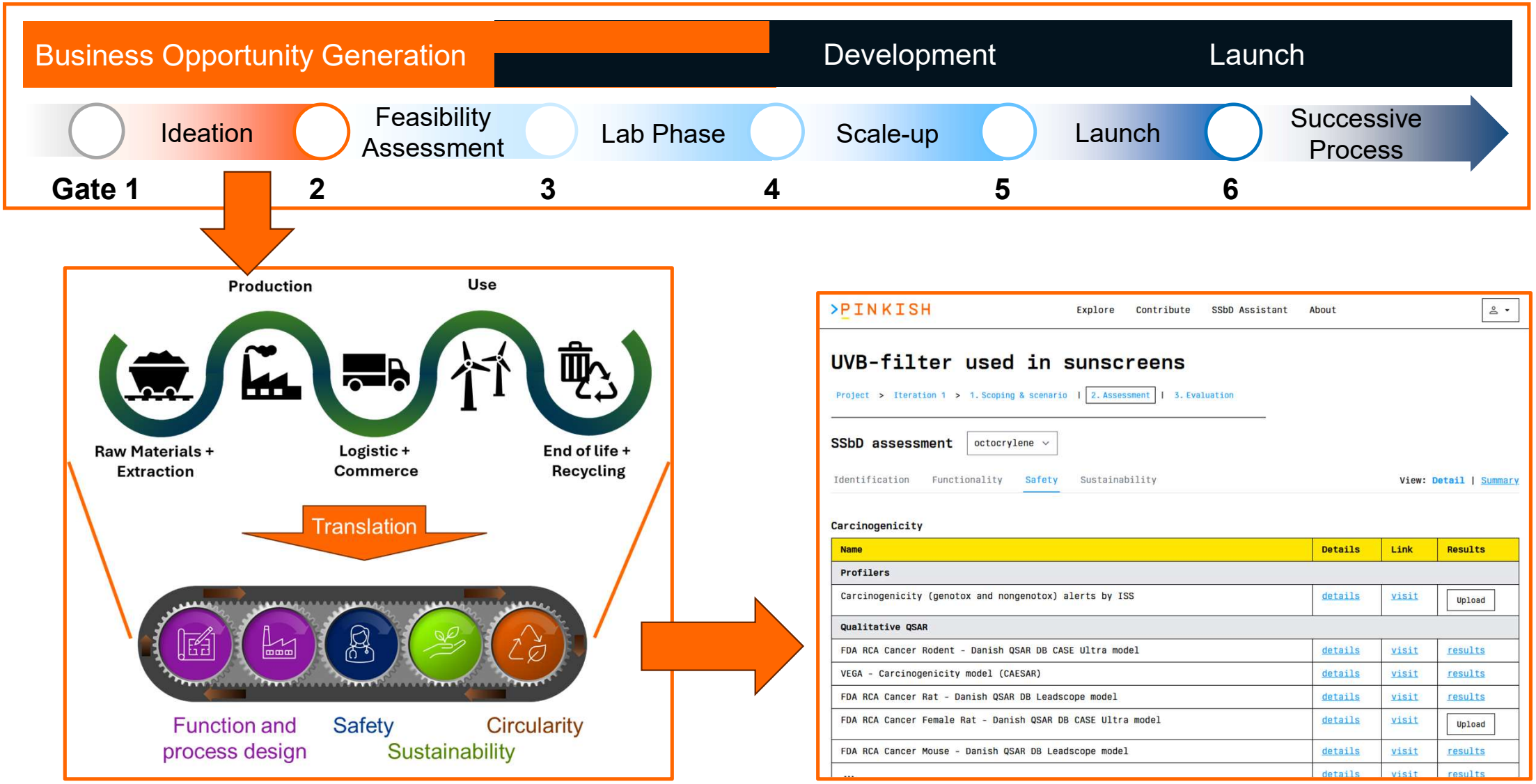
Physicochemical characterisation

Process optimisation

Degradation

Functionality

Source: ECHA substance information


Business Opportunity Generation
Development
Launch
Ideation
Feasibility Assessment
Lab Phase
Scale-up
Launch
Successive Process
Gate 1
2
3
4
5
6
Production
Use
Raw Materials + Extraction
Logistic + Commerce
End of life + Recycling
Translation
Function and process design
Safety
Sustainability
Circularity

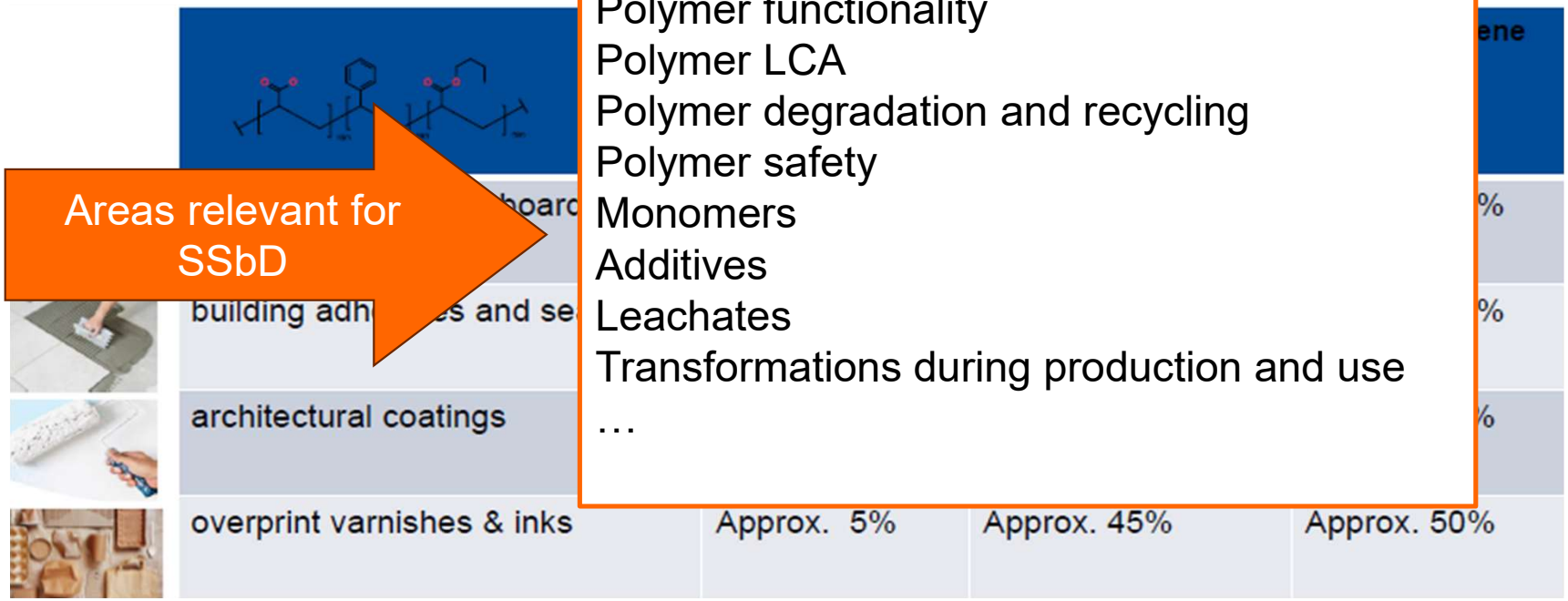
>PINKISH
Explore
Contribute
SSbD Assistant
About
UVB-filter used in sunscreens
Project > Iteration 1 > 1. Scoping & scenario | 2. Assessment | 3. Evaluation
SSbD assessment
octocrylene
Identification
Functionality
Safety
Sustainability
View: Detail | Summary
Carcinogenicity
Name
Details
Link
Results
Profilers
Carcinogenicity (genotox and nongenotox) alerts by ISS
details
visit
Upload
Qualitative QSAR
FDA RCA Cancer Rodent - Danish QSAR DB CASE Ultra model
details
visit
results
VEGA - Carcinogenicity model (CAESAR)
details
visit
results
FDA RCA Cancer Rat - Danish QSAR DB Leadscope model
details
visit
results
FDA RCA Cancer Female Rat - Danish QSAR DB CASE Ultra model
details
visit
Upload
FDA RCA Cancer Mouse - Danish QSAR DB Leadscope model
details
visit
results

Case Study 2: Styrene/acrylate copolymers

Styrene/acrylate copolymers are structurally similar polymers that result from the polymerisation of acrylate, methacrylate and styrene monomers.

Acrylate polymers biodegrade slowly under environmental conditions

Generic examples:



Iteration in the PINKISH SSbD Assistant

Planning and prioritisation

Scoping analysis

Divide

- Raw material groups
- Material production
- ...
- Exposure during use
- Recycability

Define scenario

Overall topic: specialised polymer
Function: Plasticisers
Molecule class: small molecule
Description: safety and sustainability assessment of different alternatives
Required certainty level: Tier 2

...

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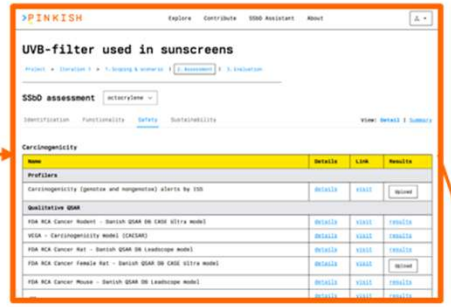
...

Conquer: Propose methods and execute



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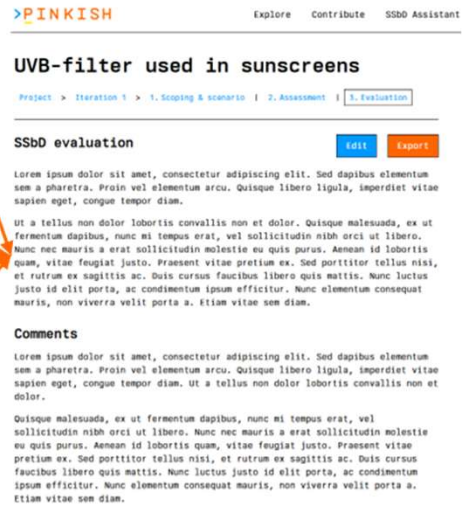
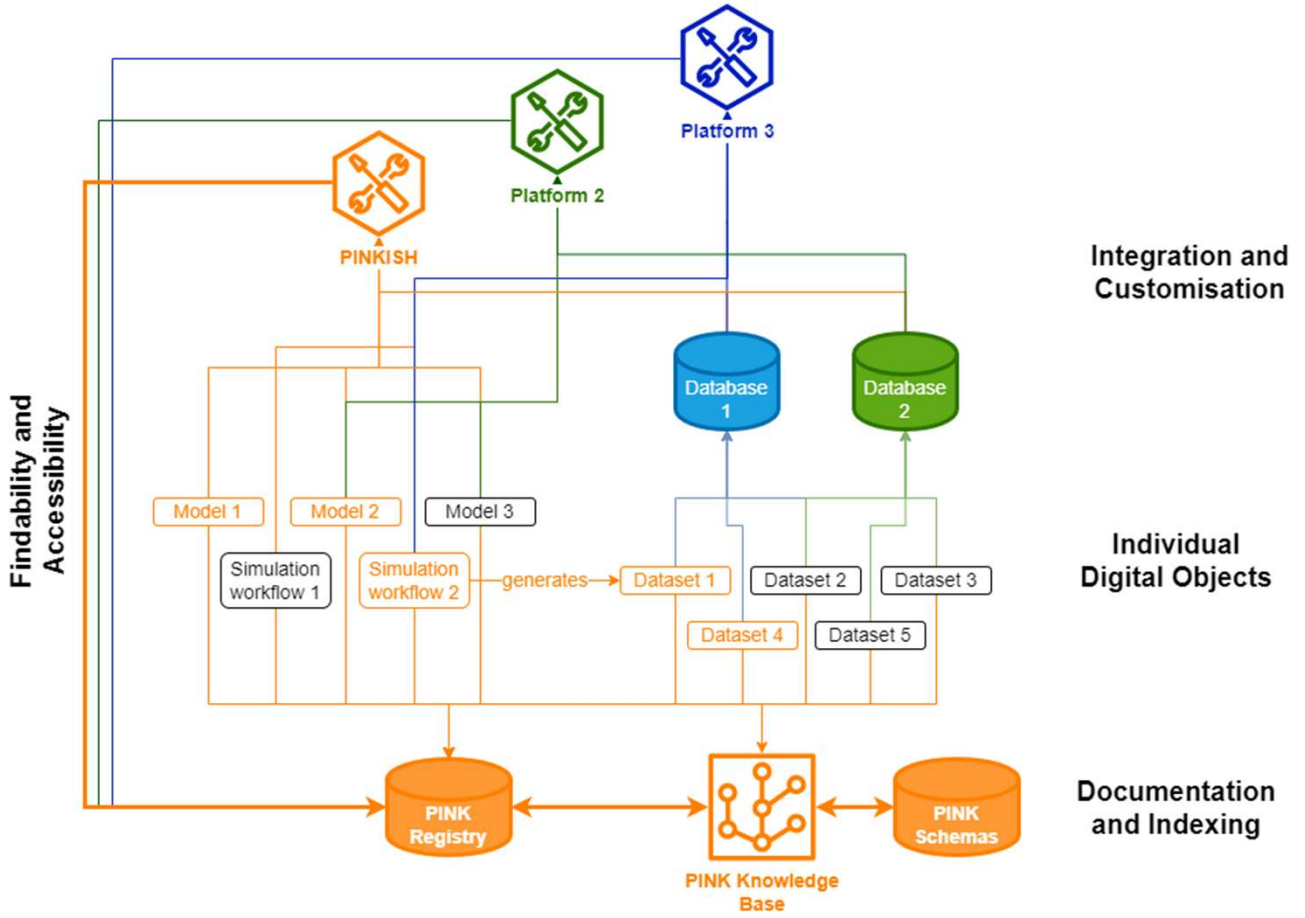
Collect and evaluate



Working towards an interoperable ecosystem



1 Thomas Exner

2 Seven Past Nine

>PINK

>THANK YOU!

WWW.PINK-PROJECT.EU

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