

How the UX Challenge impacted European SMEs

Results from a Randomized Controlled Trial

Final Event

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FBK-IRVAPP



IRVAPP

RESEARCH INSTITUTE FOR
THE EVALUATION OF PUBLIC POLICIES

- A research institute of the **Bruno Kessler Foundation**, based in Trento, Italy
- Scientific mission is **program and public policy evaluation research**
- Specialized in **experimental and quasi-experimental evaluation studies** in the fields of education, social policy; innovation policy and labor market policy

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The evaluation question

(The population)

(The treatment)

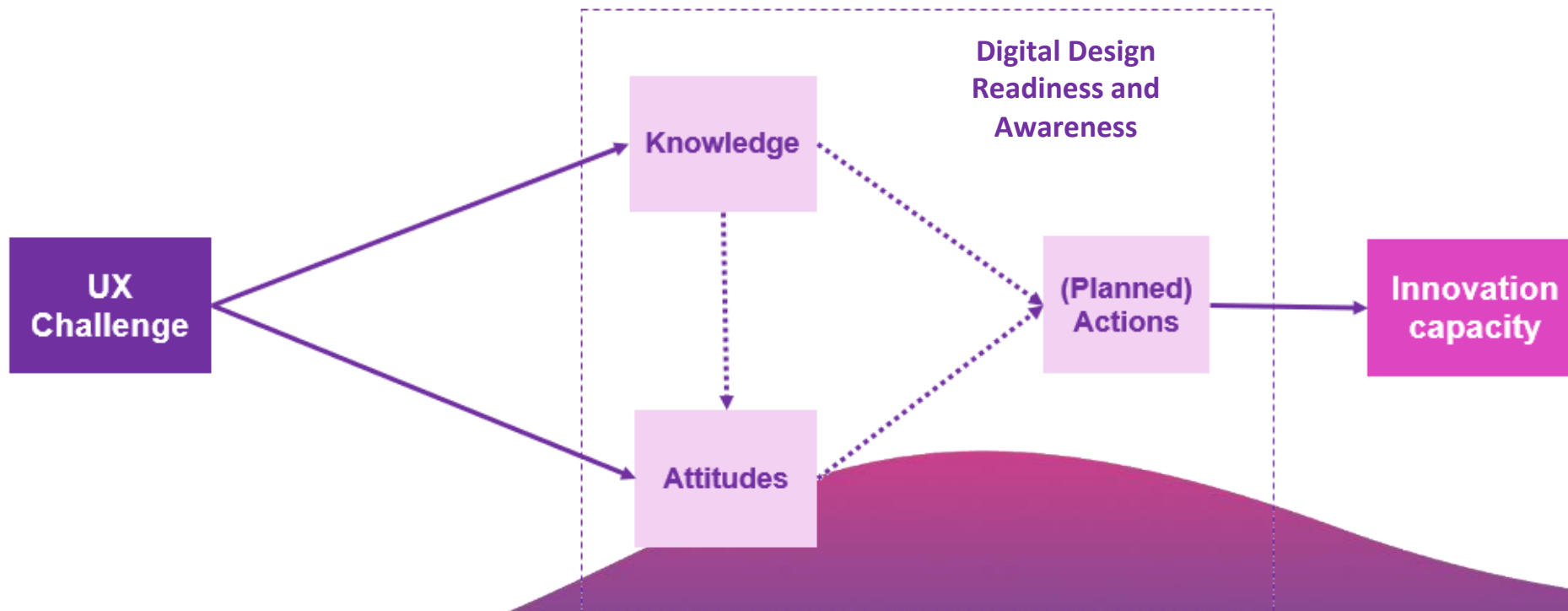
For **digital industry SMEs** does participating in the **UX Challenge** improve **Digital Design Readiness and Awareness**?

(The outcome)



The evaluation question

For **digital industry SMEs** does participating in the **UX Challenge** improve **Digital Design Readiness and Awareness**?



Two necessary conditions

1. Recruit a **sufficiently large sample** of eligible companies
2. Build **two comparable groups**: a **treatment group** (taking part in the UX Challenge) and a **control group**

Research sample

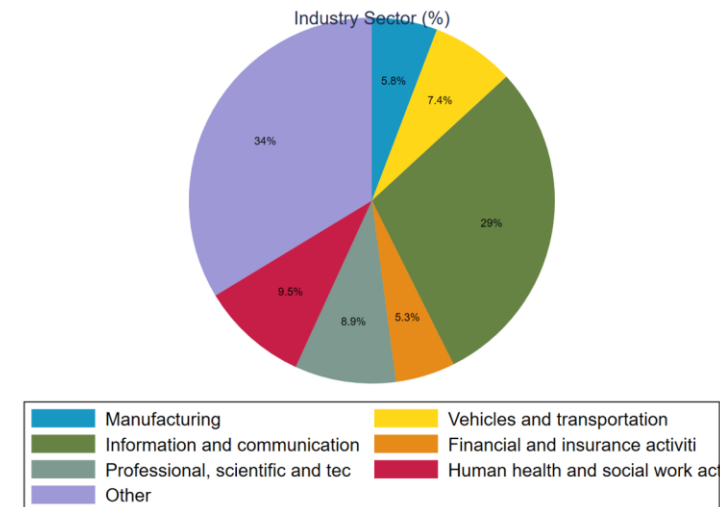
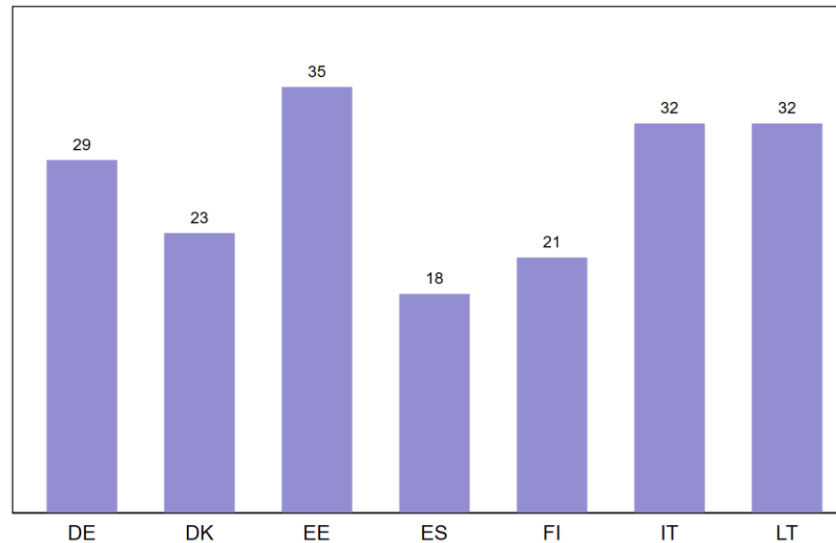
Applications collected (N=208)



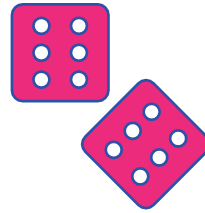
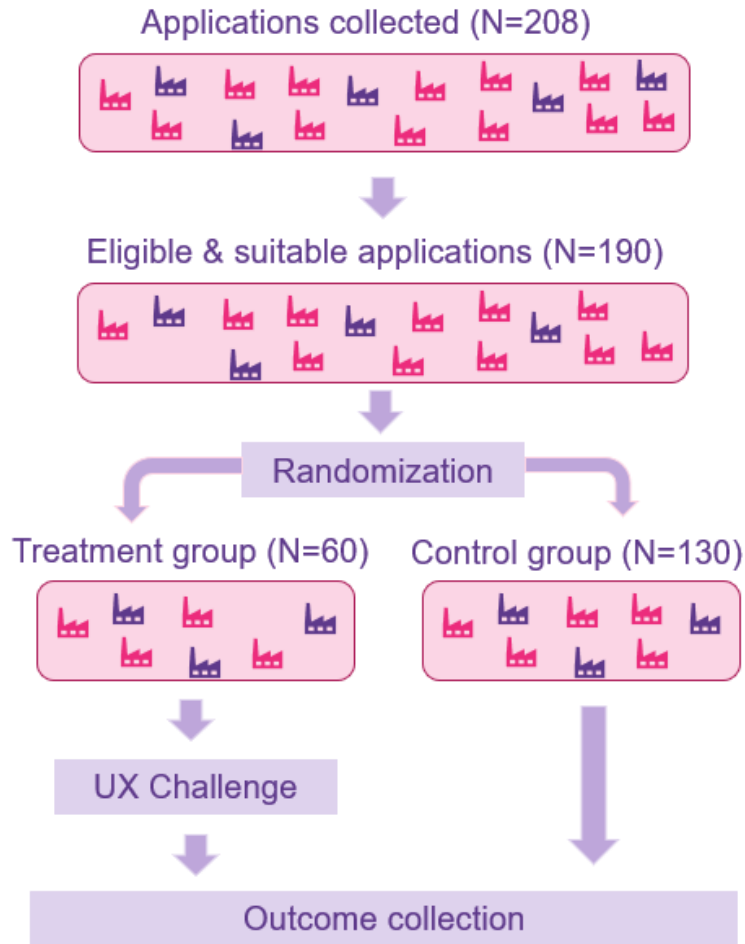
Eligible & suitable applications (N=190)



208 collected applications
190 eligible & suitable applications



Randomization



Randomization creates **two identical groups (on average)** → this allows attributing any difference observed after the treatment between the groups to the UX Challenge



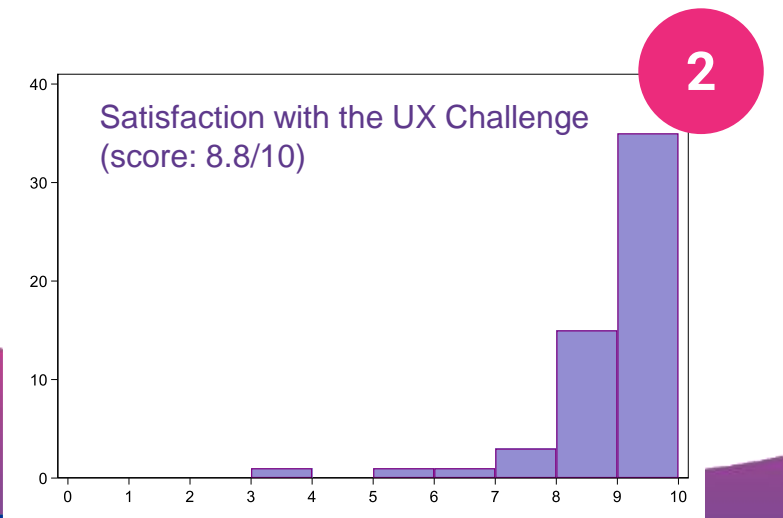
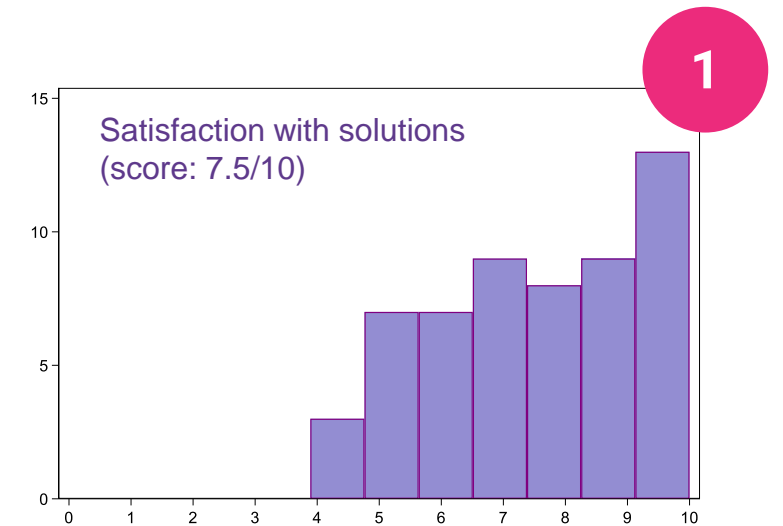
Participant satisfaction

Treated companies were...

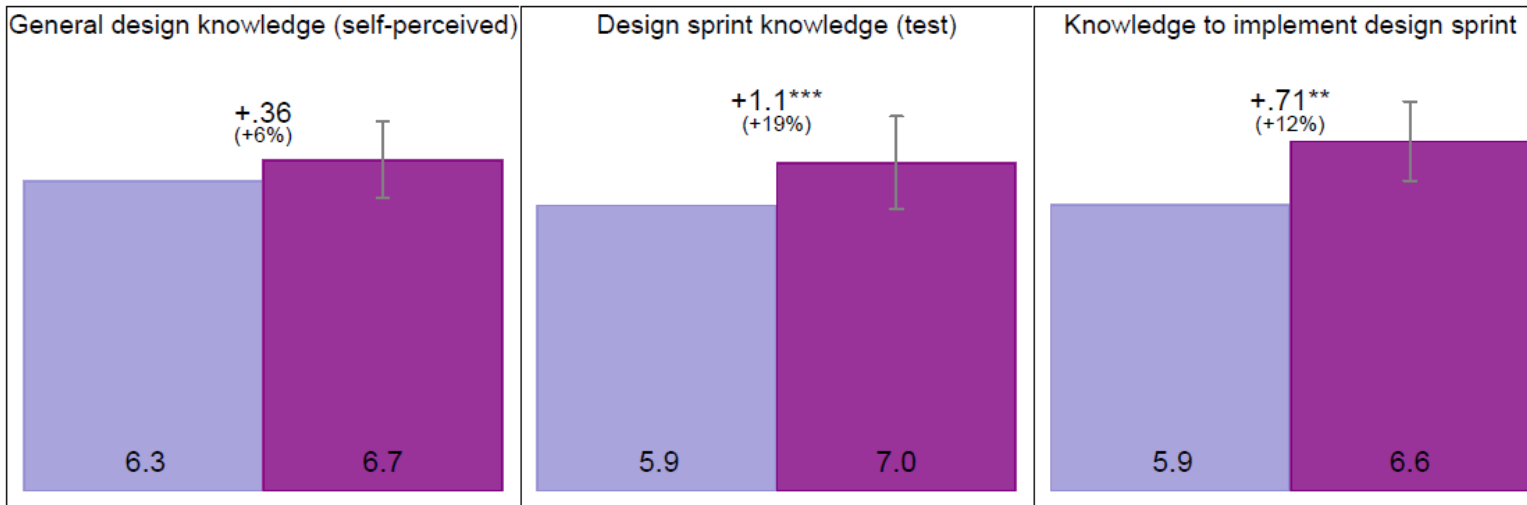
1. satisfied with the **solutions** developed
2. overall very satisfied with the **UX Challenge**

SMEs shown clear intention to **take follow-up actions:**

- 9 out of 10 would apply to the next edition of the UX Challenge
- 6 out 10 will stay in touch with solvers
- 7 out of 10 will utilize the “Design Sprint” in future projects

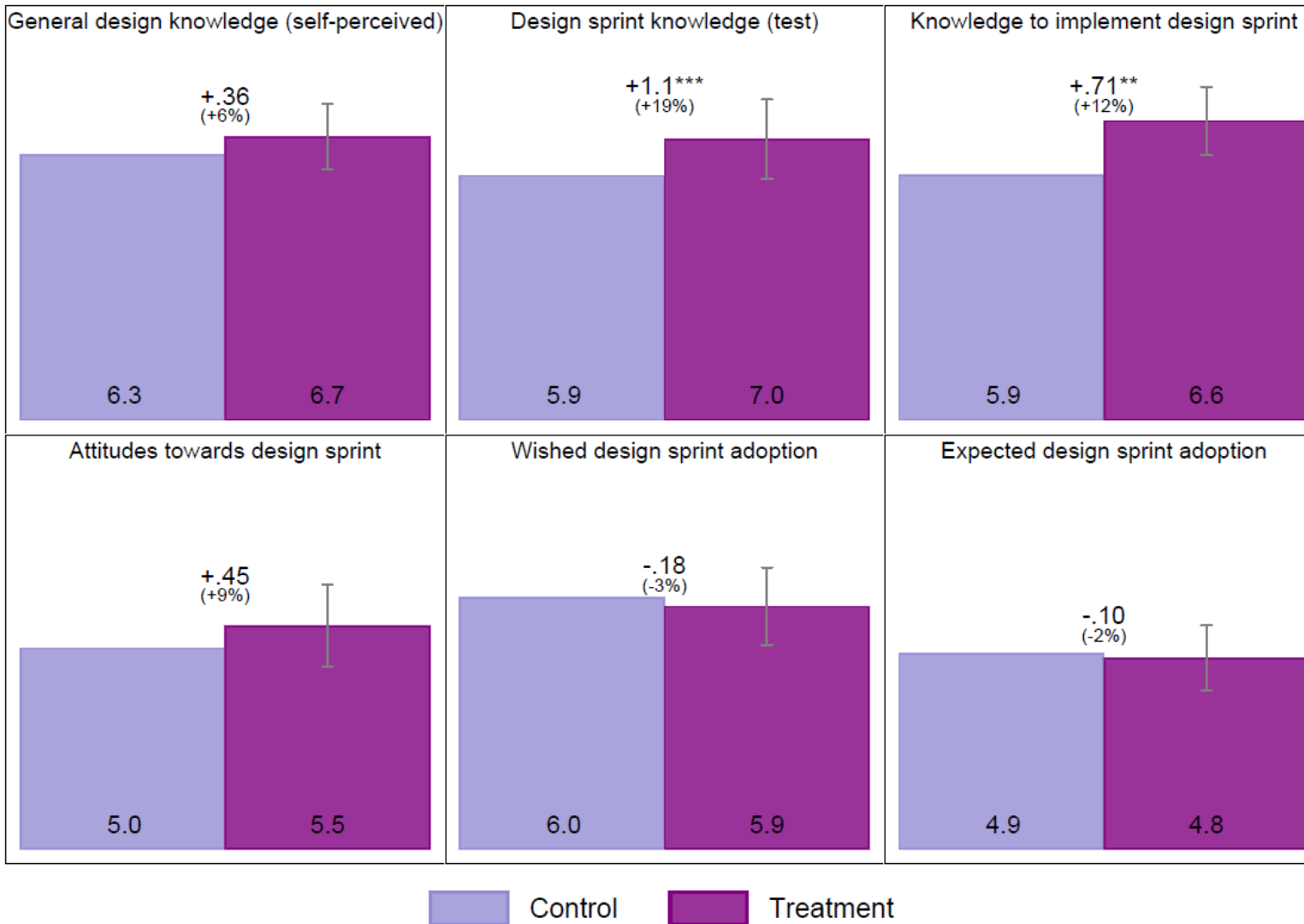


Experimental impacts



- Positive (3/3) and (2/3) significant impacts on the **knowledge** outcomes

Experimental impacts



- Positive (3/3) and (2/3) significant impacts on the **knowledge** outcomes
- Positive but insignificant impact on **attitudes**
- No effects on **desired/expected adoption**



Perceived obstacles to digital design

	Treated (%)	Controls (%)
Prior investments	33.3	34.1
Market conditions or excessive perceived economic risks	26.3	18.3
Lack of qualified personnel capable to coordinate and drive such initiatives	8.8	23.2
Lack of information on how user-centered design methodologies work	5.3	18.3

Note: % of respondents answering “probably”, “very probably” or “definitely”

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Factual constraints for companies to “invest” more in digital design, as a possible explanation for the no effects on intended actions



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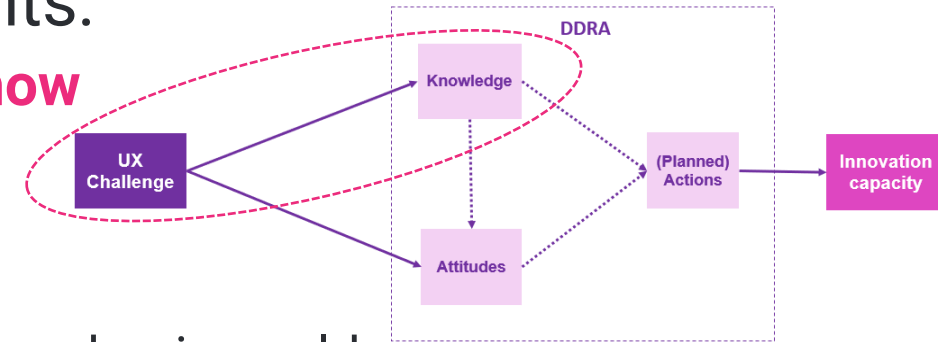
The only **significant differences between treated and controls** confirm the results on knowledge

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Key takeaways

The UX-Challenge triggered a change in participants:

→ increased **knowledge about digital design & know-how**



Future studies are needed to:

- **replicate these results** in bigger samples and in a post-pandemic world
- Investigate **longer-term impacts**

The **experimental method** can be used to evaluate innovation agencies' interventions

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Innovation Challenge design Canvas

What's inside

Innovation agencies can organize *Innovation Challenges* to help SMEs find ideas and solutions to business and technological problems through the involvement of external contributors (e.g. other companies, researchers, freelancers, or students).

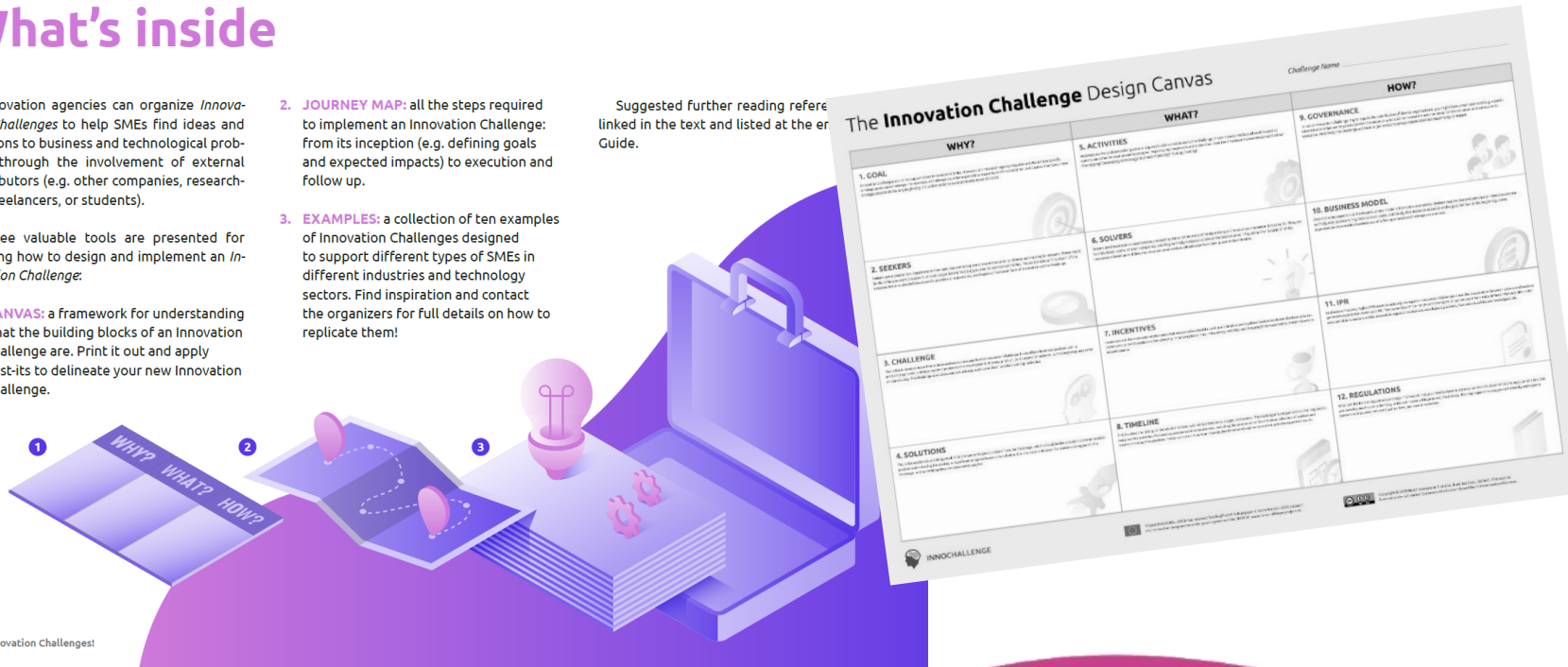
Three valuable tools are presented for learning how to design and implement an *Innovation Challenge*:

1. CANVAS: a framework for understanding what the building blocks of an Innovation Challenge are. Print it out and apply post-its to delineate your new Innovation Challenge.

2. JOURNEY MAP: all the steps required to implement an Innovation Challenge: from its inception (e.g. defining goals and expected impacts) to execution and follow up.

3. EXAMPLES: a collection of ten examples of Innovation Challenges designed to support different types of SMEs in different industries and technology sectors. Find inspiration and contact the organizers for full details on how to replicate them!

Suggested further reading references are linked in the text and listed at the end of the Guide.



www.innochallenge-project.eu



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