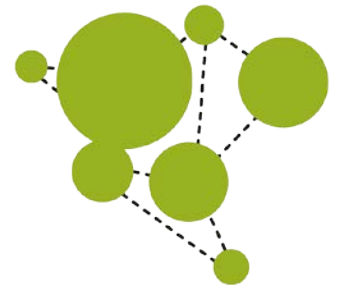


Research Impact Assessment: from ex-post to real-time assessment

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Outline

- Introduction
- State of the art, concepts and approaches
- Sketching out the ASIRPA (rt) approach
- Implementation

Figure 1. A general overview of research impact assessment landscape (LERU 2018)

Impact assessment and enhancement	Ex-ante	During	Ex-post		
			short-term (end of project +1 year)	medium-term (+1-7 years)	Long-term (+7-15 years)
Call and project level	Pathways to impact statement	Follow-up/impact funding			
			Quantitative and qualitative assessment of outputs, outcomes and pathways to impact		
At the level of FP components (clusters, programmes, societal challenges, missions, ...)	Description of broad expected impact by the EC in WPs, or targets to meet (for missions)	Clustering			
			Assessment of interaction and communication patterns between research and societal context at the level of clusters or programmes		
			Synthesising projects		

Table 1. A first overview of approaches and tools available for real time assessment

Les apports de la littérature sur le pilotage avec une vision impact

Comment les approches	abordent...		
	Le chemin d'impact	La complexité	L'incertitude
Processuelles Chemin d'impact ++ Complexité +++ Incertitude +++	Découpage analytique du processus en séquences Etude conjointe des configurations des différentes variables (acteurs, etc), des séquences, des moteurs (mécanismes), et des bifurcations (turning points)	Dans les phénomènes sociaux les lois causales ne sont pas constantes, les résultats sont imprévisibles. Complexité relationnelle, technologique et temporelle	Le temps est une dimension structurante de l'action qui génère des lock-in. Différents types d'incertitude. Pilotage de l'innovation: apprendre à naviguer dans un ensemble de futurs possibles
Exemples d'outils affiliés à l'approche	FORTH innovation expedition Constructive Technology Assessment et outils d'animation d'ateliers participatifs		
Theory of change Chemin d'impact + Complexité ++ Incertitude +	Permet une analyse de la configuration des acteurs et du contexte Si la nature de l'intervention est prédéfinie : étoffer les étapes logiques vers l'objectif du programme selon une démarche assez linéaire (logframe).	Est adapté aux situations compliquées : prend en compte le contexte, l'expérience passée, les hypothèses logiques entre actions et entre la production des résultats et l'atteinte des objectifs. Nécessite un consensus des acteurs sur la théorie générale à tester.	Dimension formative de l'évaluation : apprentissage basé sur l'expérimentation, la coordination des expertises, la création de relations et de bases communes pour atteindre un consensus Prend en compte un nombre fini de futurs possibles
Exemples d'outils affiliés à l'approche	LogFrames ; Cadres logiques avec inventaire des conditions nécessaires aux impacts Participatory Impact Pathway (PIPA) ; Approche Vianéo		
Conception innovante Chemin d'impact Complexité+ Incertitude +++	Processus de conception : définir des concepts C et des connaissances K et caractériser les opérateurs nécessaires au passage d'un espace à l'autre. Méthodes qui ne considèrent pas explicitement les phases avalées du chemin d'impact (ex : généralisation)	Les concepts sont hiérarchisés pour réduire la complexité. Les nouveaux concepts doivent susciter la production de connaissances nouvelles. Les identités des objets et de leurs écosystèmes ne sont pas fixes.	L'inconnu est un moteur pour définir de nouveaux paramètres de conception. Les techniques ET les fonctions des objets à concevoir sont inconnues ; et les objets et leurs écosystèmes ont une identité variable.
Exemple d'outils affiliés à l'approche	Ateliers de créativité ; Triz et Creative Problem Solving sur la résolution de problèmes ; méthode STUR sur l'analyse stratégique de partenariat ; méthode CCAID sur la recherche-action-participation... ; KCP workshop ; Outils IDEAS		

Main concepts

- Developmental evaluation (Patton 2016)
- Strategic intelligence (Kuhlman 2003)
- Innovation journey (Van de Ven et al. 2007)

SKETCHING OUT THE ASIRPA (RT) APPROACH

What do we draw on? The main lessons from ex post RIA (ASIRPA approach)

Impact pathway revisited:

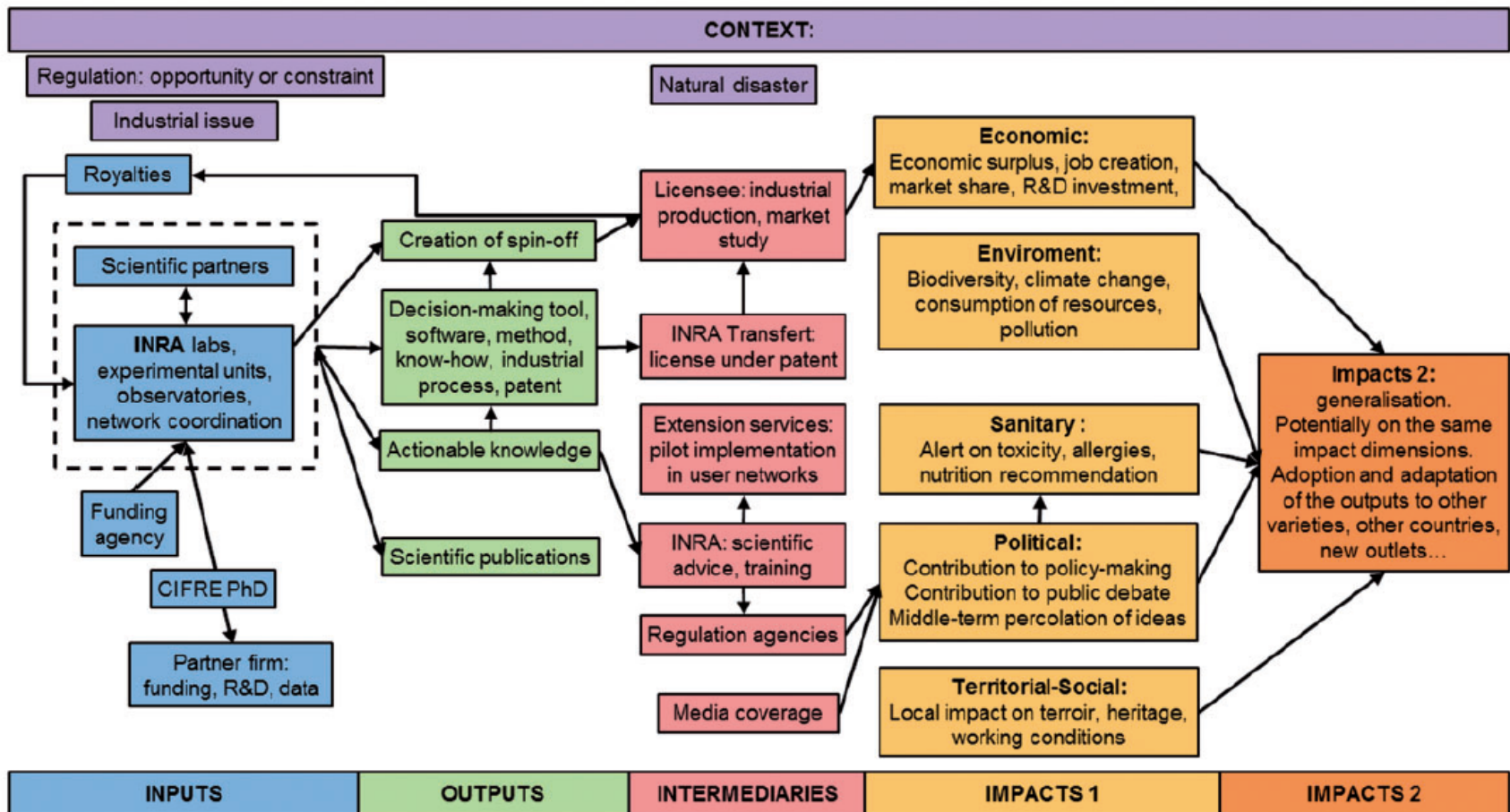


Figure 2. A fictive impact pathway according to ASIRPA.

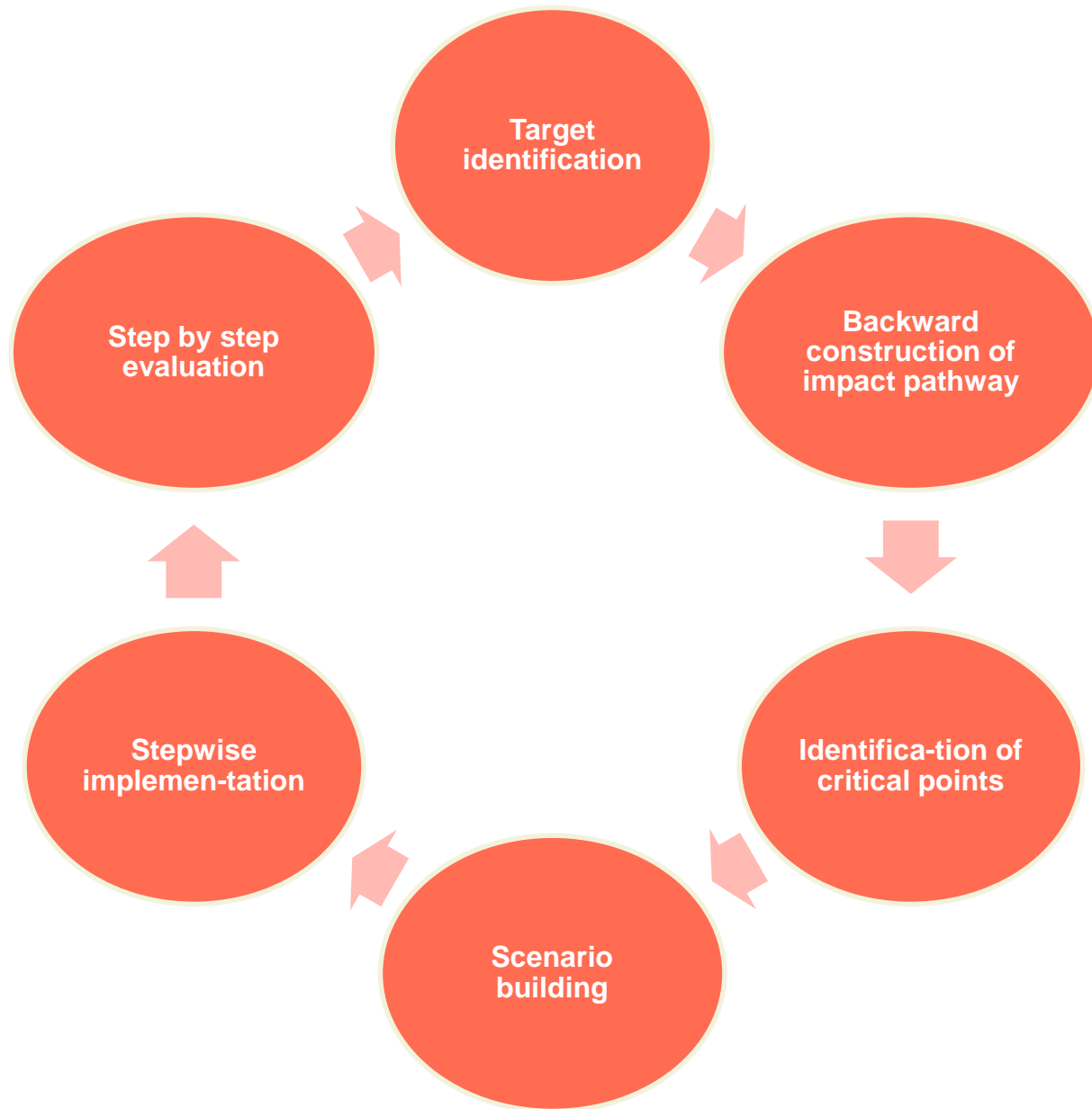
What do we draw on? The main lessons from ex post RIA (ASIRPA project)

Main lessons identified were the following:

- The complexity of the genesis of impacts, generally produced by a set of activities rarely brought together in a single project;
- The importance and diversity of configurations of actors and material resources that produce impacts;
- The identification of critical points along the impact pathway, with a special role of intermediaries and the process of generalization;
- The transformations of the network of actors during the process (an adoption network is generally different from a design network)
- The role of the external context which can have facilitating or blocking effects, and open or close, sometimes suddenly, windows of opportunity

Identification of potential critical and lock-in points

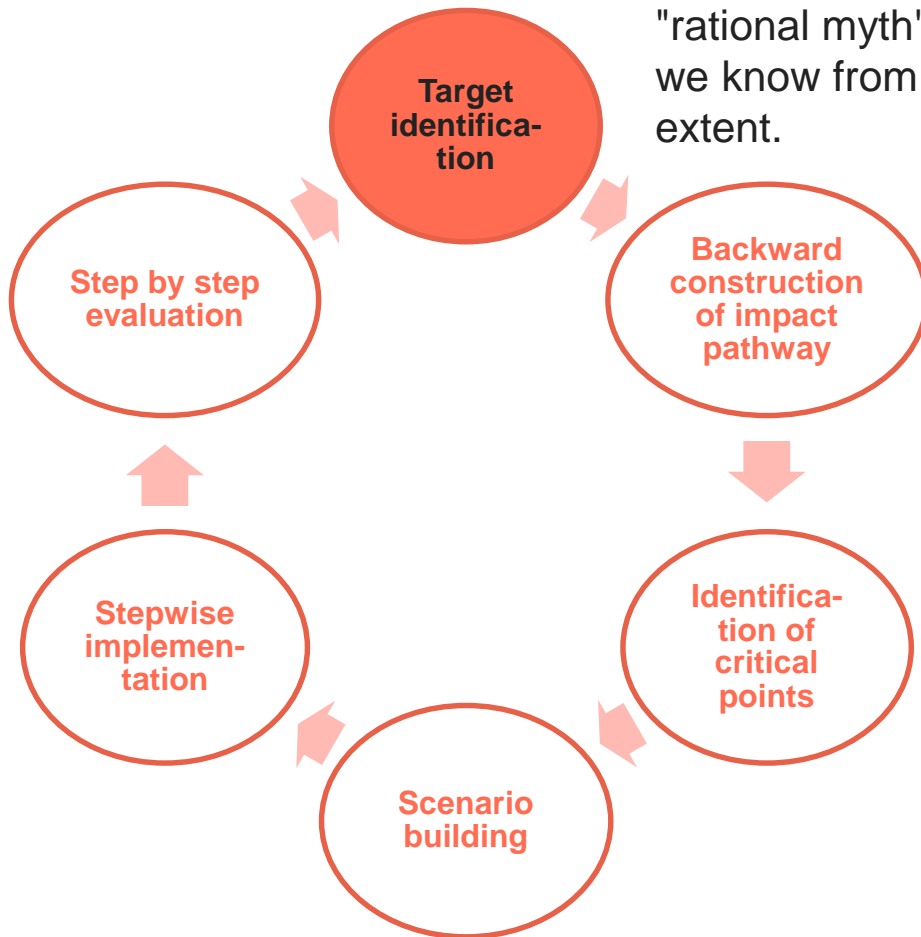
- The existence of 4 types of impact paths with different properties and effects;
- The long temporalities of the impact (20 years on average between the initiation of research and the first impacts, with important variations).



What are the anticipated transformations that justify commitment to research? What are the different issues involved in these transformations? What is the magnitude of these transformations in the 5 dimensions of impact?

Who are the potential users? How will they be interested in/affected by the transformations?

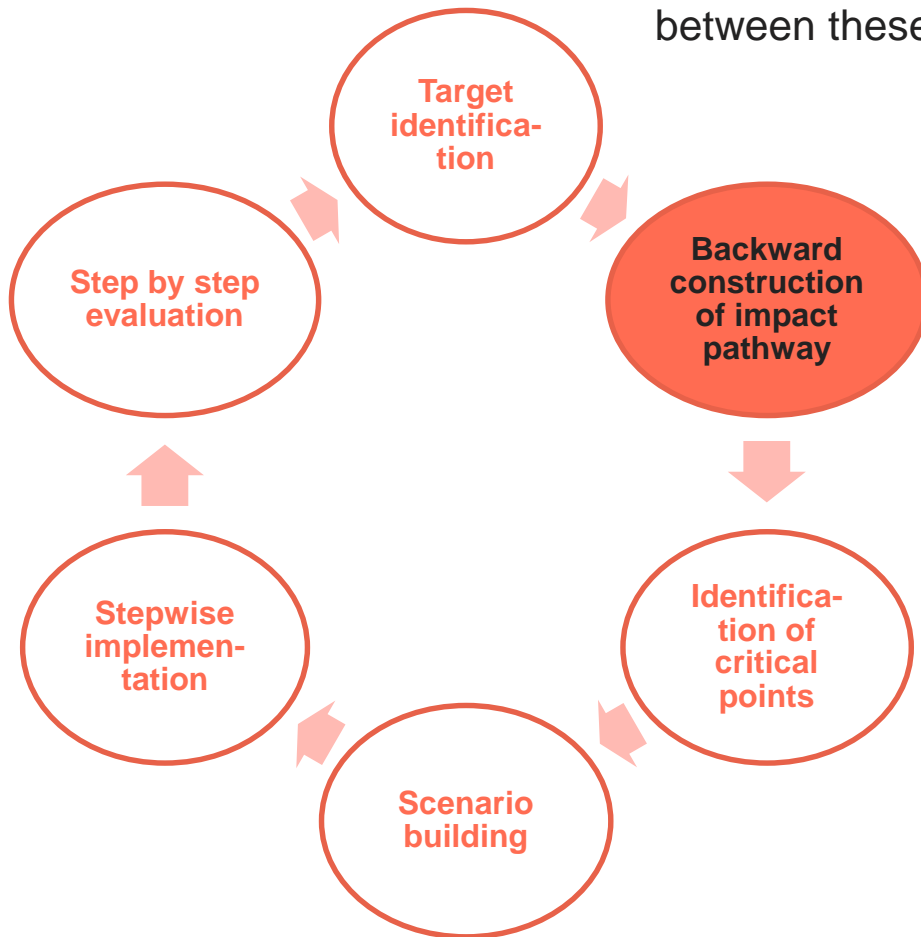
It should be noted that, given the uncertainties inherent in research, this target often constitutes what may be called a "rational myth": an objective in which we must believe but which we know from the outset is likely to change to a greater or lesser extent.



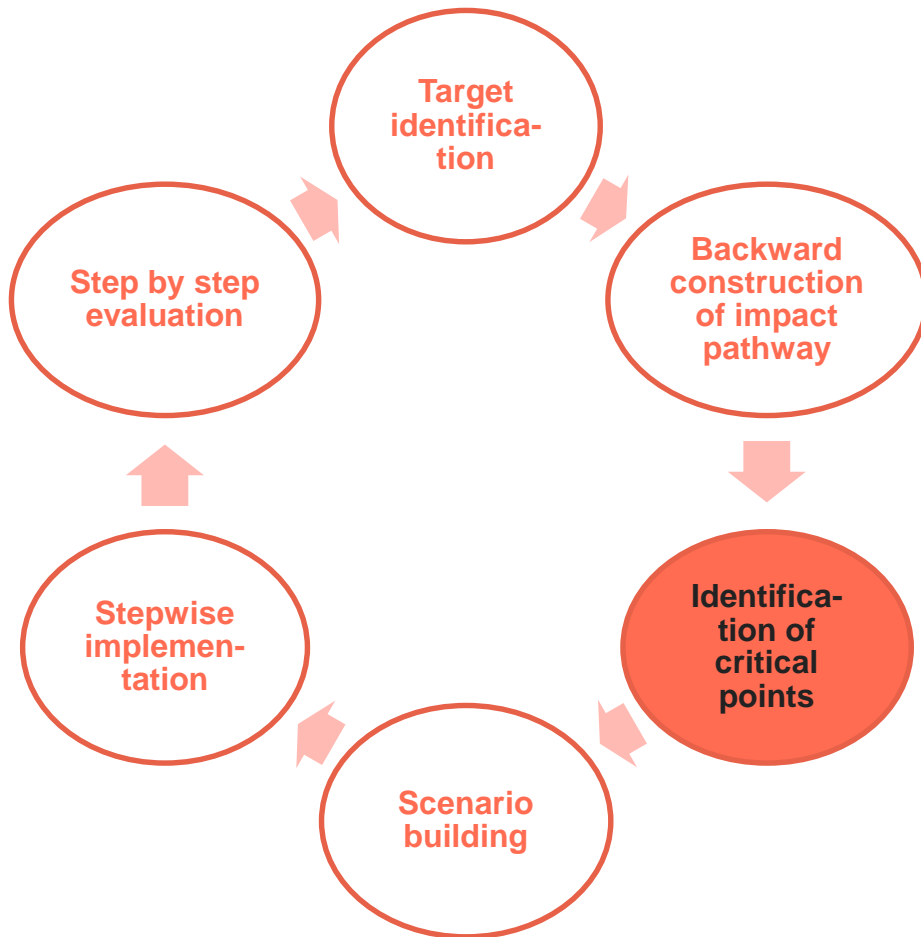
Who are the key actors and mechanisms involved in the mainstreaming process? What are the blocking and facilitating factors?

Which intermediaries (organisations, technical objects, devices) will enable implementation by the first users?

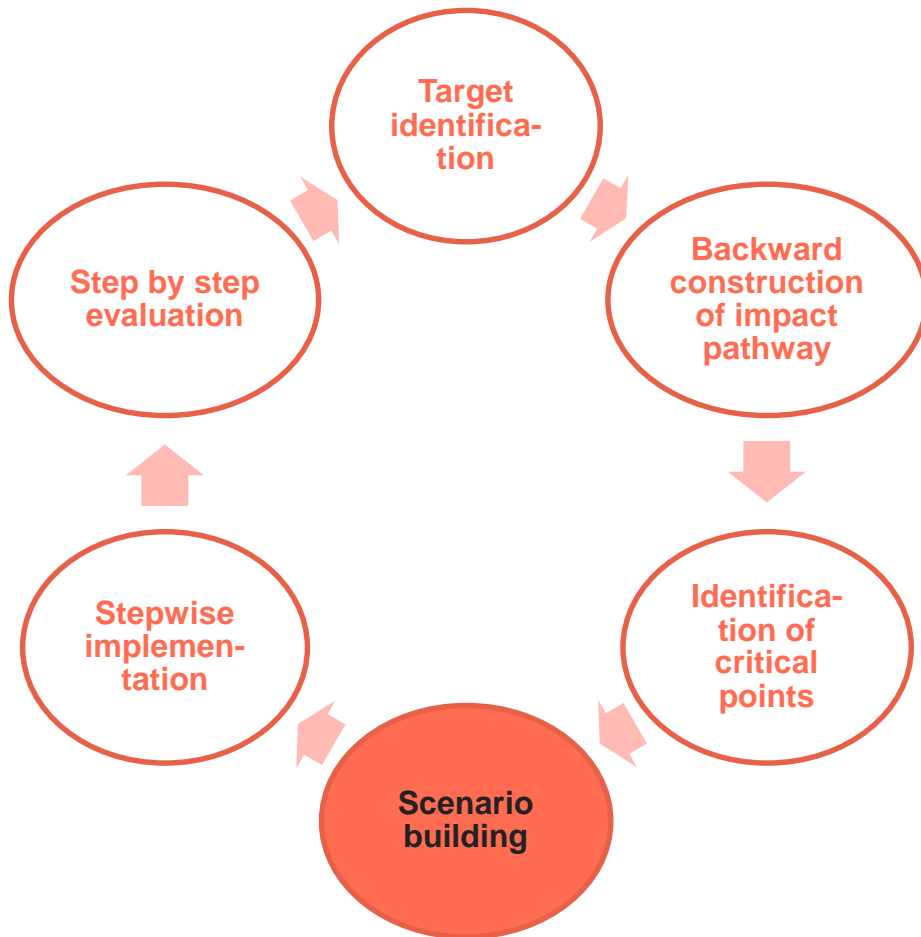
Who are the knowledge-producing actors? what are the adjacent projects (ongoing, completed, in gestation), by whom are they carried out? what are the complementarities and competition between these projects?



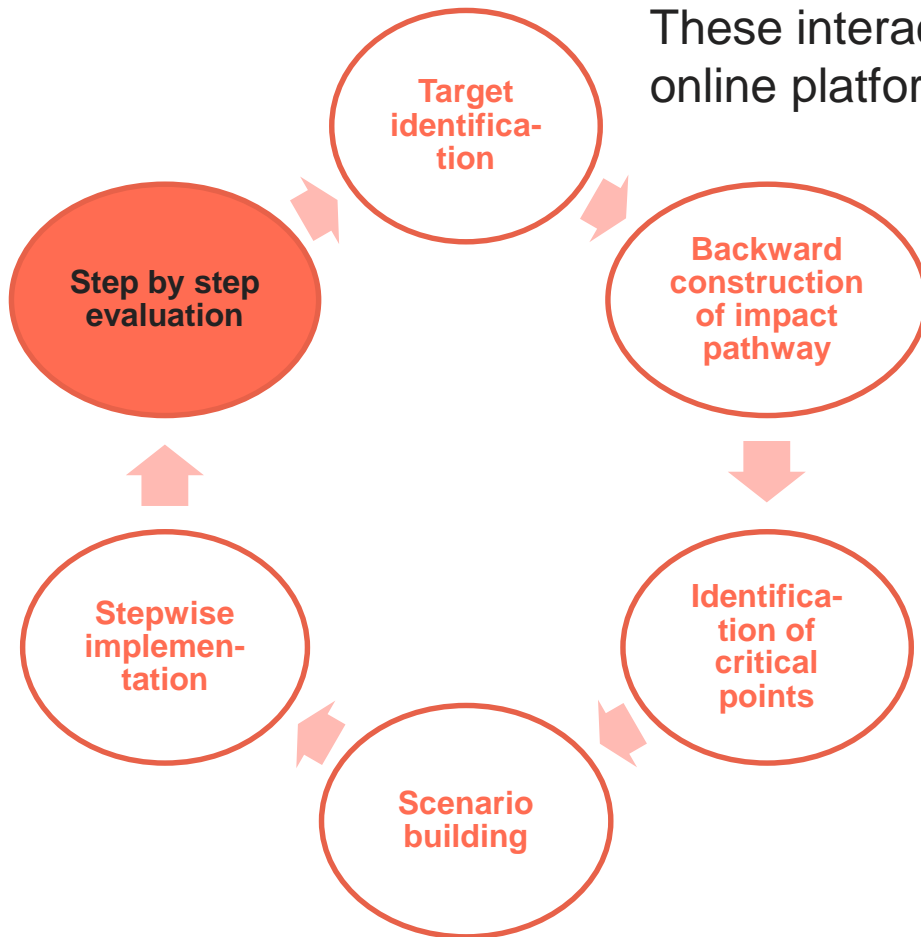
Identification of internal and external critical points
What are the critical points associated with the different stages of the impact path? On whom do they depend?
What are the influences of these critical points on the envisaged process?



Taking into account the main elements above, construct the main scenarios of the project (or group of projects), with the main stages, critical points, bifurcations. From this, deduce the main meeting points and the anticipated follow-up elements.



This iterative model is constructed and used by the project manager or program manager, often supported by project engineering specialists. It is usually the result of a collective design, with the teams involved and, as necessary, with external partners and potential users. These interactions are based on tools accessible on an online platform.



IMPLEMENTATION

ASIRPA^{rt} uses a co-design strategy. We have formed a group of c. 15 experts who represent potential users, with strong experience in the coordination of big research projects (e.g. European H2020 projects) or coordination of research programmes of clusters of activities. This working group will be involved in the following process:

Workshop 1: User representatives are invited to share their experience (skills, possible tools...) in real time and express their needs;

//Creation of the prototypes of tools;

Workshop 2: the prototype is proposed to the participants, the tools are selected, adapted or, collectively designed;

//The methodology and its tools are tested by participants on pilot cases supervised by the ASIRPA team;

Workshop 3: Feed backs on first use, collective learning



Thanks for your attention!