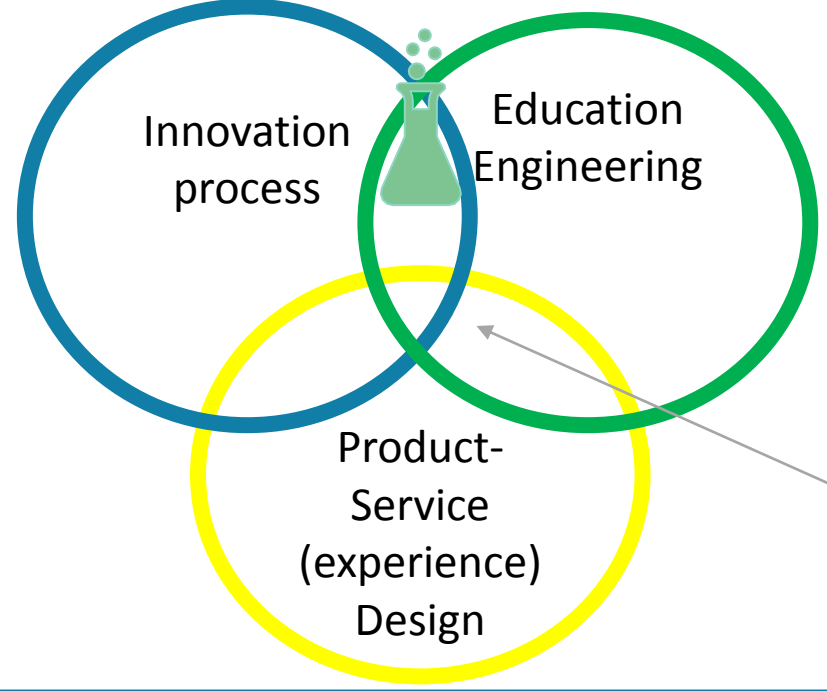


OBJECTIVE DEFINITION

How to design a learning experience supporting Need Seeker innovation process ?

We consider a learning offer design as a project - service design process.



Research project positioning

RESEARCH PARADIGM DEFINITION

- NEED SEEKER:**
 - Deep End User Understanding
- MARKET READER:**
 - Market research and competitive intelligence
- TECHNO DRIVER:**
 - Leading-edge new technology

'Global Innovation 1000' study : B. Jaruzelski, V. Staack, and B. Goehle, 'Proven paths to innovation success', 2014.

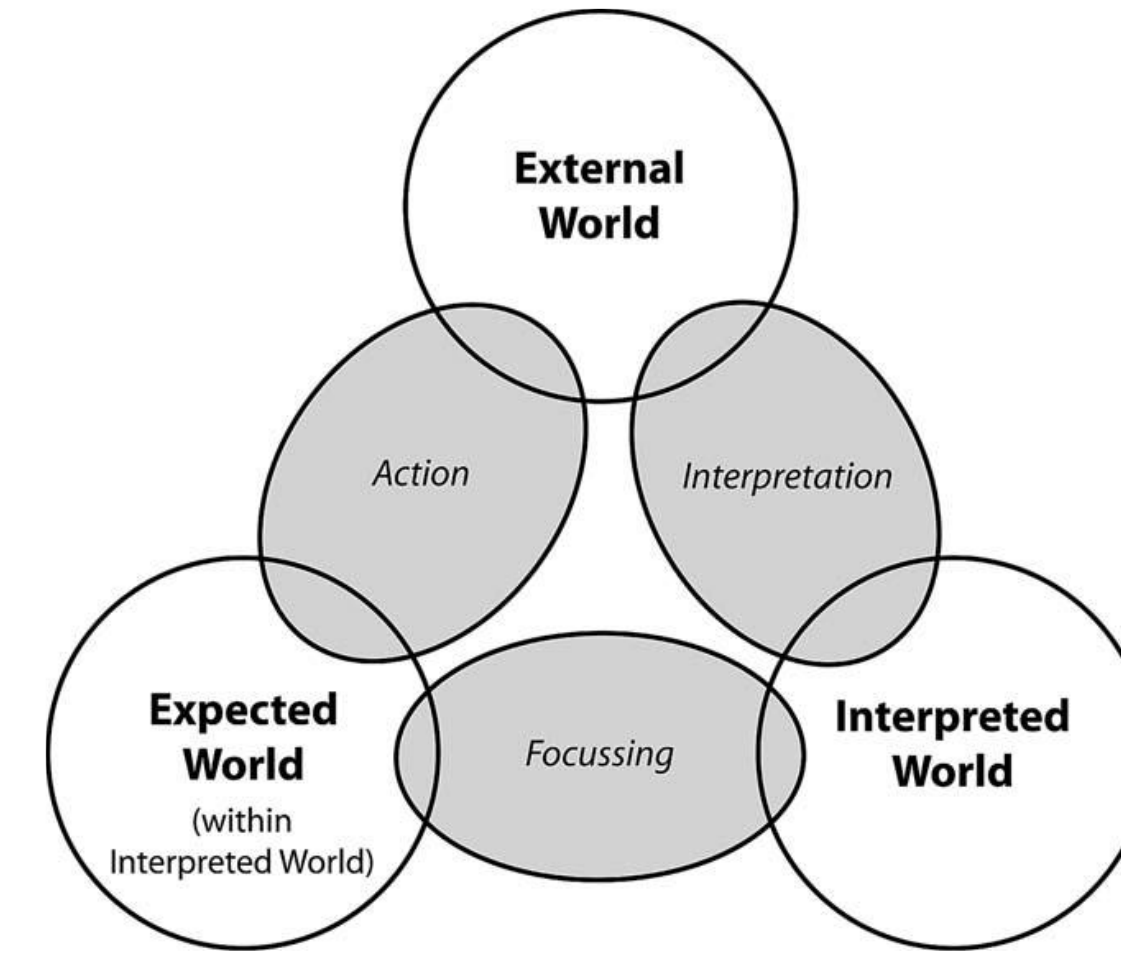


Figure : Situatedness as the interaction of three worlds

Gero, J. S., & Kannengiesser, U. (2004). The situated function-behaviour-structure framework. Design studies, 25(4), 373-391.

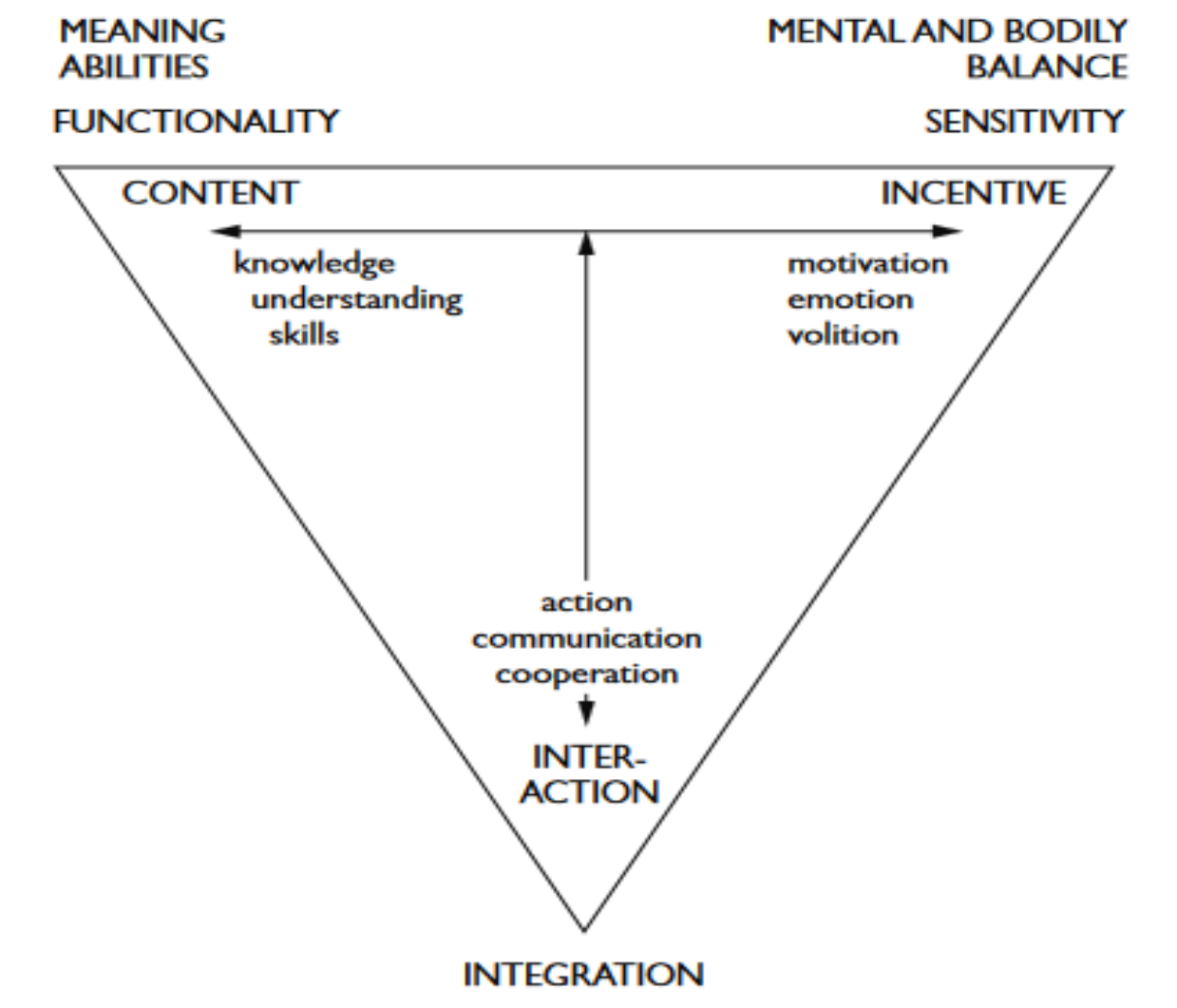


Figure : The three dimensions of learning and competence development

Illeris, K. (2018). A comprehensive understanding of human learning. In Contemporary Theories of Learning (pp. 1-14). Routledge.

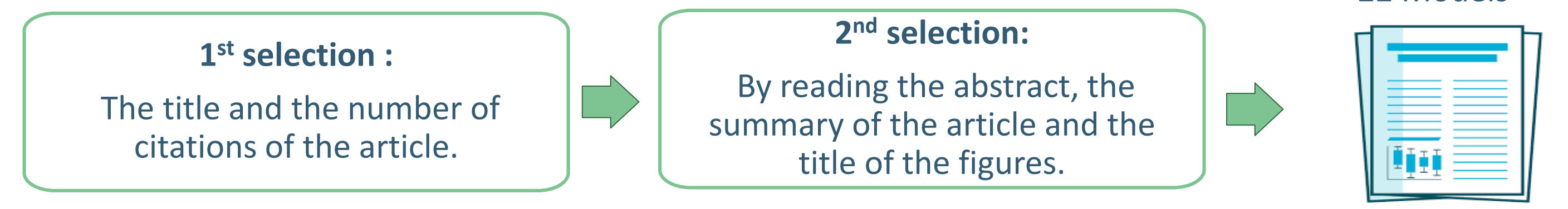
FIRST RESULTS

NEED SEEKER INNOVATION CONTEXT: TWO MAIN CHALLENGES

- DEEP END USER UNDERSTANDING** (Subject of Innovation: Unknown)
 - UNEXPLORED MARKET** (To develop specific skills for achieving this superior performance)
- "radical innovation (...) for which the market is not clearly identified or developed (...) riskier and more uncertain efforts (...) with the potential to move the organization in new directions that provide rich platforms for growth." (McDermott & O'Connor, 2002)

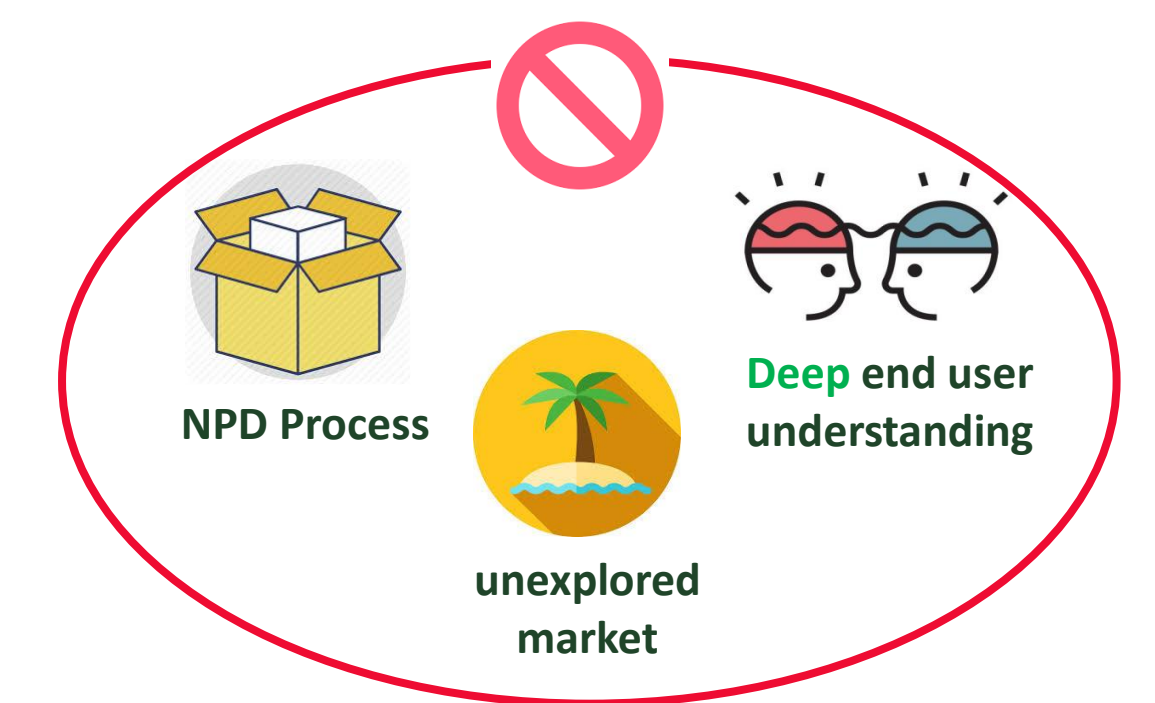
METHODOLOGY 1. : ANALYSIS OF THE LITERATURE

THE ANALYSIS PROCESS OF THE LITERATURE REVIEW



EXISTING MODELS

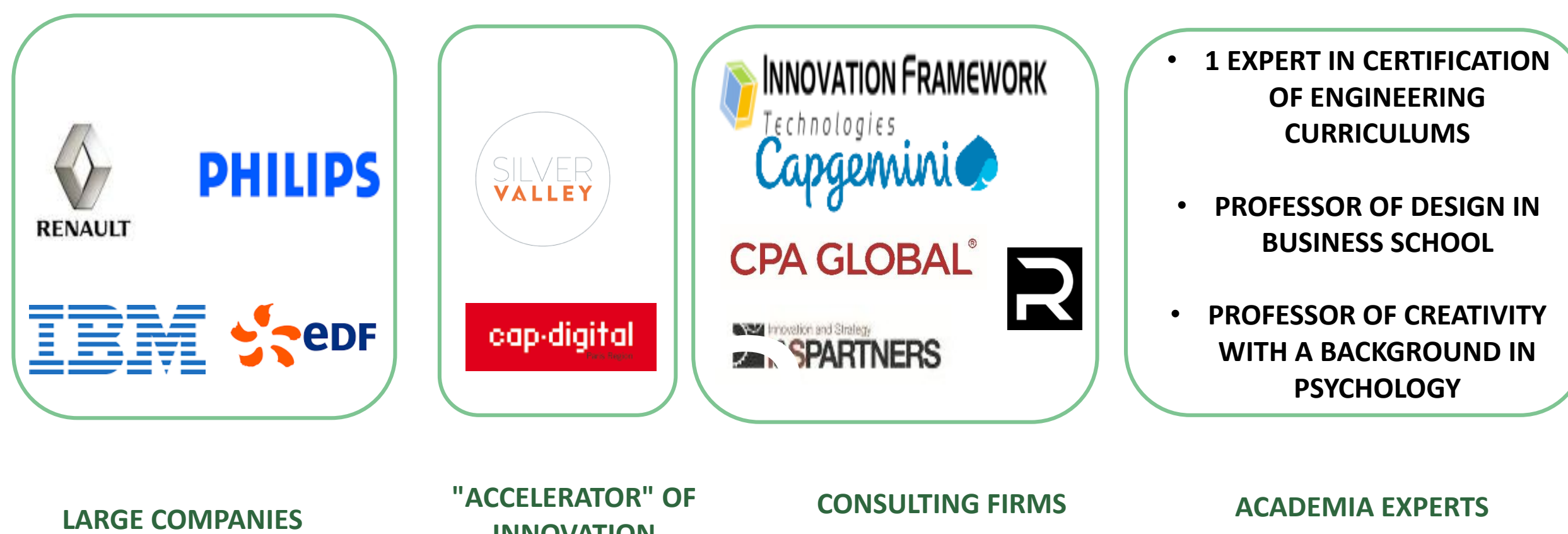
- [1] Dyer J., Gregersen H., and Christensen C. M. The innovator's DNA: Mastering the five skills of disruptive innovators, 2011 (Harvard Business Press).
- [2] O'Connor, G. C., & McDermott, C. M. (2004). The human side of radical innovation. Journal of engineering and technology management, 21(1-2), 11-30.
- [3] McAloone, T. C. (2007). A competence-based approach to sustainable innovation teaching: Experiences within a new engineering program. Journal of Mechanical Design, 129(7), 769-778. [3]



METHODOLOGY 2. : THE EXPERTS INTERVIEWS



THE EXPERTS INTERVIEWS

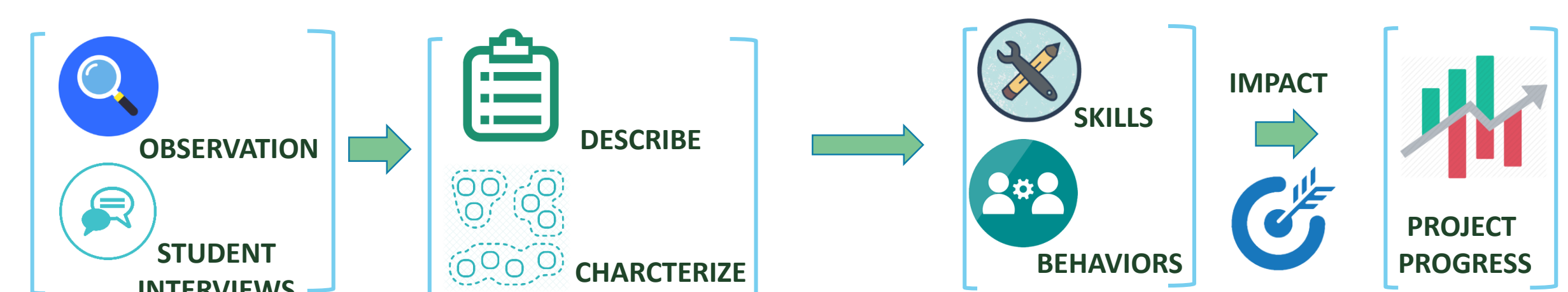


METHODOLOGY 3. : THE EMPIRICAL STUDY _ Project Based Learning



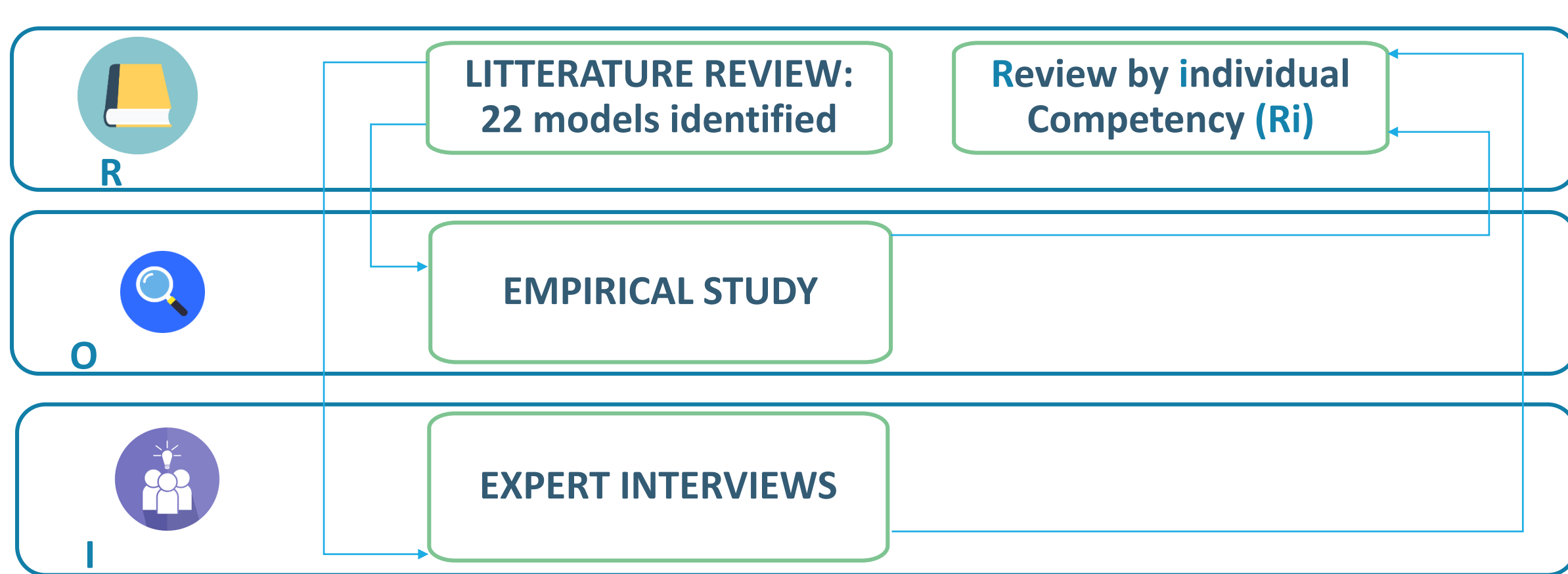
THE EMPIRICAL STUDY

- 4 months project-based learning, applying the **Radical Innovation Design Methodology**
- 29 students from **business school, engineering school and design school**
- 6 real need seeker innovation projects: 4 major companies and two research institutes

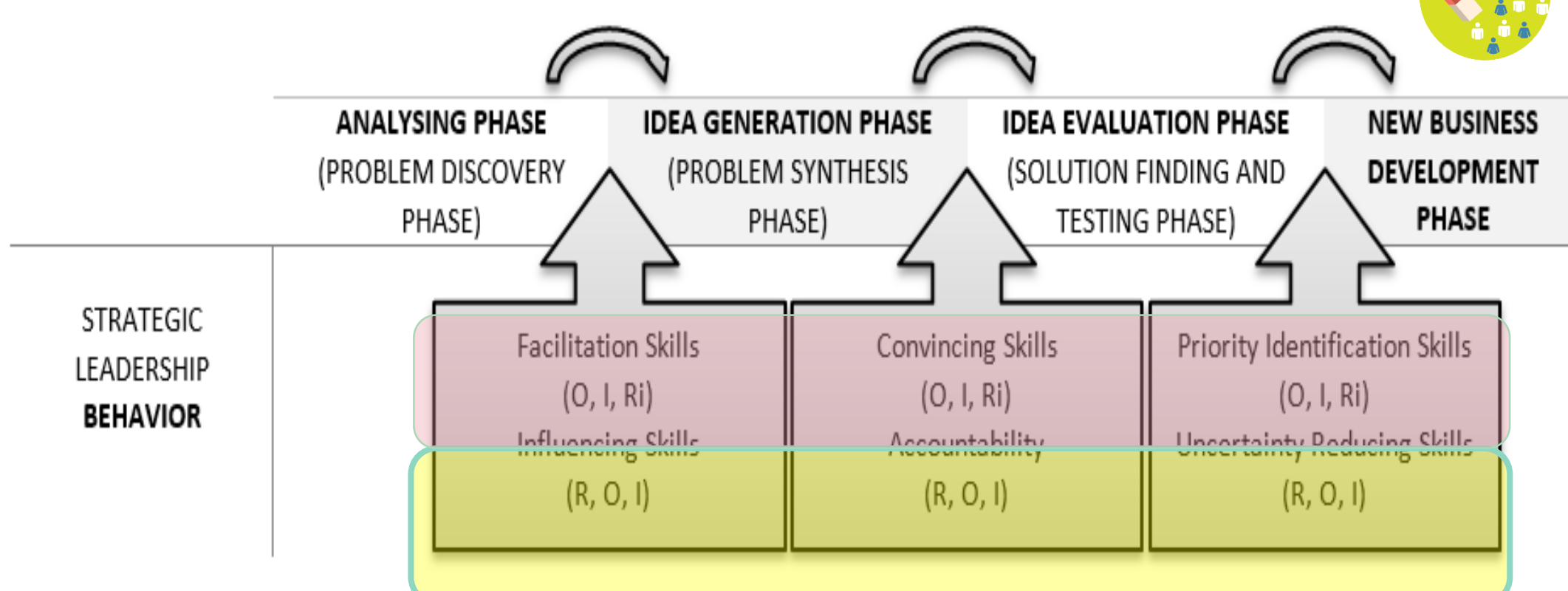


METHODOLOGY SUPPORTING A GROUNDED APPROCH 4.

ALL THE POSSIBLE PATHS TO IDENTIFY A COMPETENCY



RESULTS 2. : STRATEGIC LEADERSHIP COMPETENCIES

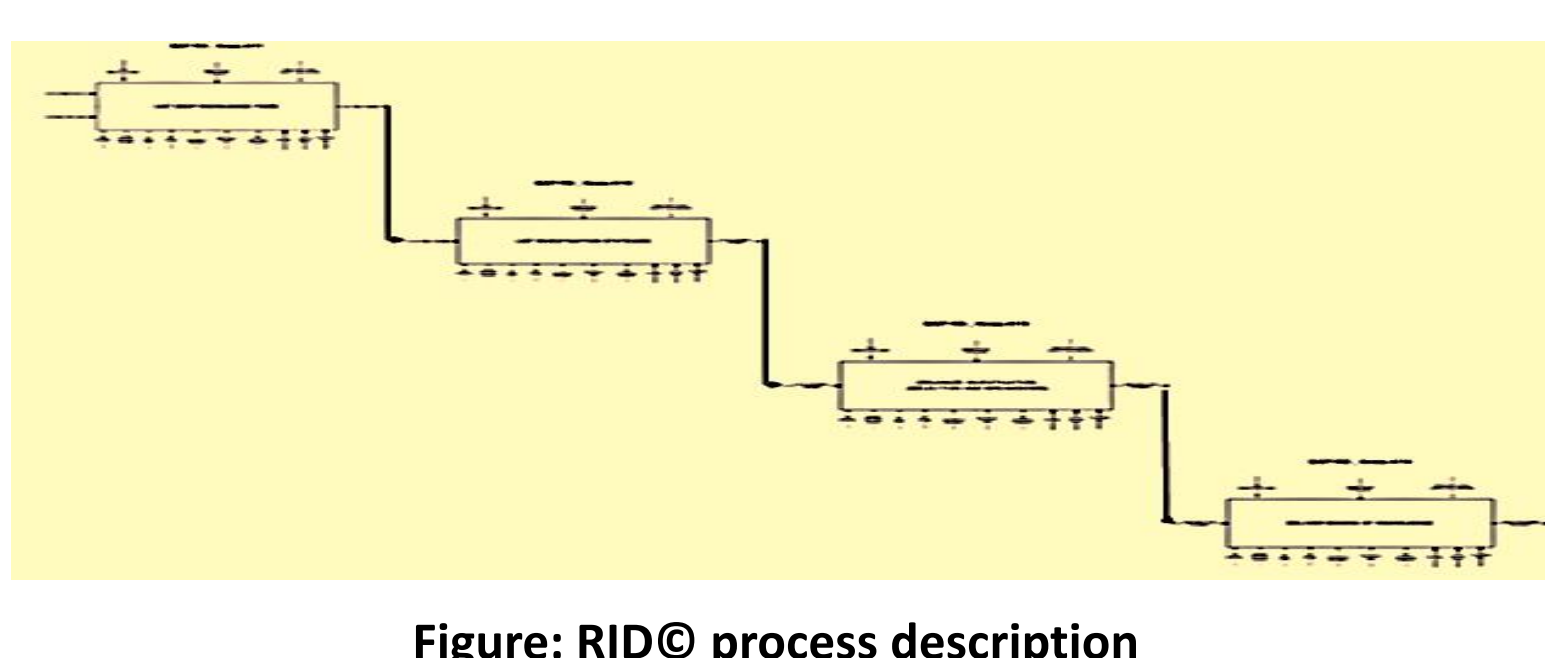


RESULTS 1. : INDIVIDUAL AND COLLECTIVE COMPETENCIES

	ANALYSING PHASE (PROBLEM DISCOVERY PHASE)	IDEA GENERATION PHASE (PROBLEM SYNTHESIS PHASE)	IDEA EVALUATION PHASE (SOLUTION FINDING AND TESTING PHASE)	NEW BUSINESS DEVELOPMENT PHASE	
ABILITY TO EXERCISE A KNOWLEDGE	ability to tackle ill structured problem (O, Ri) empathy skills (R, O) analytical skills (R, O, I)	synthesizing skills (R, O, I) knowledge management skills (R, O, I) project portfolio management skills (I, Ri)	ability to grasp aspects of intellectual property (R, I) experimenting and prototyping skills (R, O, I) problem-solution pairing (R, O, I)	opportunity recognizing skills (I, O, Ri) system thinking skills (I, O, Ri) project time management skills (R, O, I)	NEW COMPETENCIES DISCOVERED
ATTITUDES BEHAVIORAL COMPETENCIES	Curiosity (R, O, I) Perseverance (R, O, I) communication Skills (R, O, I)	Networking (R, O, I) Creativity (R, O, I)	'idea association' skills (R, O, I) independent thinking (O, I, Ri) priority management skills (R, O, I)	Assertiveness (O, I, Ri) Responsibility (R, O, I)	COMPETENCIES NON OBSERVED
COLLECTIVE COMPETENCIES	collective motivation by the strategic intent of the project (O, I, Ri) openness (R, O, I)	mutual Trust (R, O, I) collective knowledge sharing (R, O, I)	collective learning (R, O, I) collective intelligence (R, O, I)	team focused effort (O, I, Ri) team networking (O, I, Ri)	COMPETENCIES FOUND IN REVIEWED MODELS

PERSPECTIVES

SADT RID@ PROCESS



PAINS OCCURING DURING NEED SEEKER PROJECT : IDENTIFICATION



DESIGNING LEARNING JOURNEY TO SUPPORT INNOVATION PROCESS

