



GenAI as a Collaborative Creativity Booster for Innovation



“How can AI support the identification of innovation potential and the development of innovation performance?”

Experiment 1

Individual Task

Transformation of a digital business
model into a sustainable one

nothing
(control
group)

pdfs

RIXA

ChatGPT

Experiment 2

Group Task

Creation of a sustainable innovation
for a Generation X problem

nothing
(control
group)

ChatGPT
+
Video
GenAI

ChatGPT
+
Pic
GenAI

ChatGPT
+
Video
GenAI



Desirability
Viability
Feasibility
Originality
Sustainability

Stage 1



Individual Profile

- Personality
- Giftedness (Creativity as part of it)
- Context
- Pre-knowledge
- Intrinsic Motivation
- Thinking Style
- Social Competence

Stage 2



Individual Performance

- Experimental design (see p. 2)
- Thinklet method
- Evaluation of the product based on 5 criteria (originality, sustainability, desirability, feasibility, viability)
- Evaluators are an interdisciplinary Jury, Peers, a bot

50% learn about their giftedness profile

Stage 3



Group Performance

- Experimental design (see p. 2)
- Thinklet method
- Each group member has an individual role
- Evaluation of the product based on 5 criteria
- Evaluators are an interdisciplinary Jury, Peers, a bot

50% learn about in-teams personalities

Stage 4



Individual Support

- Coach: collaboratively identifies goals and generates a plan for effective execution
- Mentor: gives advice to transform potential into performance

Contributions of our research to the field

Identifying the effectiveness of different GenAI tools.

Insights into the impact & relationships between GenAI, personality, giftedness, context and group settings to drive innovation.

Creation of two personalized versions of the chatbot to enhance personality and performance development.

Transparent and objective measurement of innovation performance based on a 5 factor assessment of the solution.

Long-term study involving diverse high school students, college/university students and young professionals aged 16-30.