

Creative Problem Solving and Design Thinking as collective tools to foster new viewpoints on creativity: a preliminary study

Adeline Cornet
ID-CAMPUS¹, ULg
adeline.cornet@ulg.ac.be

Catherine Elsen
LUCID, ULg
catherine.elsen@ulg.ac.be

1 Introduction

United Nations' 2010 report on Creative Economy (CNUCED) observed that creative industries globally did resist better than others to the global crisis: their capacity to leverage creativity as an economic, environmental and social boost was highlighted as one of the initiatives undertaken to tackle such critical contexts². Tools and methodologies to initiate or structure collective creativity were among the diverse strategies these creative industries build up to overcome the challenges.

Following this example, the Walloon government designed the "Creative Wallonia" plan³ whose goal is to foster creativity and innovation through the Walloon territory, hoping to insufflate a new, sustainable dynamism to the region. Nest'up⁴, one of the tools that emerged from this initiative, is a twelve weeks acceleration program first hosting, and then launching, innovative start-ups. A pool of experts (with diverse backgrounds and expertise, including the two

¹ <http://www.idcampus.be/>

² http://unctad.org/fr/Docs/ditctab20103_en.pdf

³ <http://www.creativewallonia.be/>

⁴ <http://www.nestup.be/>

authors) was created in order to build trainings relevant to this community of young entrepreneurs.

Creative Problem Solving and Design Thinking are among the methodologies tested in this context as ways to diversify viewpoints on collective creativity and provide start-ups with various creative tools, possibly helpful to their projects. Creative Problem Solving (or “C.P.S.”) is a three macro-steps methodology, progressively structuring problem re-definition and re-framing; organization of collective knowledge; ideation and collective selection of ideas and planning implementation on the business market (Treffinger, 1995; Isaken et al., 2011; Koestler, 2011). Design Thinking (or “D.T.”) distinguishes from other creative approaches by putting a strong emphasis on empathy and “quick and rough” prototyping, integrating feedback loops at each step of the collective creative process (Brown, 2008; Johansson-Sköldberg et al., 2013).

This paper focuses on the Nest’up 2013 Spring edition, and more specifically on a two-days theoretical and practical workshop introducing these two creative methods. We question here how these methods for collective creativity might have impacted both personal creative mindset and project perception given the logistic constraints.

2 Methodology

Nine young entrepreneurs, with different backgrounds and expertise (software engineers, designers, historians, managers, commercial engineers...) took part to our workshop. They were representatives of six different start-up projects selected for the 2013 Spring edition, each of these start-up projects essentially developing innovative services through websites and apps.

We designed a 23 questions survey to assess the participants’ personal viewpoints on both their creative mindset and the creative nature of their start-up projects. Some questions offered single choice possibility, some others offered limited but multiple-choice possibility. Four questions were about personal beliefs in terms of creativity (such as “do you consider yourself as someone creative?”, “do you think creativity is useful to your start-up project?”) while the remaining questions more specifically focused on their on-going start-up projects: 3 questions were about current use of creative tools or methodologies; 6 questions investigated the project’s flexibility (time-to-market pressure, possibility of future evolution, ...); 8 questions were about relationships to end-users and external representations (used either as mediation of creativity or as project’s communication) and the two last questions concerned personal level of satisfaction in terms of project’s evolution.

The participants took the survey twice: a first time a week before the workshop (Questionnaire 1), a second time 4 days after the workshop (Questionnaire 2). The goal of the first questionnaire was to assess mindset and project perception at a

time where no collective creative sessions had yet been organized. This first questionnaire included two additional questions, inquiring any prior knowledge of C.P.S. or D.T. methods. The second questionnaire aimed at understanding how short collective, creative workshops could make the viewpoints evolve. Six questions were added to this questionnaire to gather information about personal satisfaction regarding dispensed trainings and potential future re-use of the trained methods. The main goals of the research were disclosed to the participants by email, and they were asked to fill-in the survey online. They weren't told at first that they would have to fill-in the survey a second time a few days later, as to diminish as much as possible any memorization effect.

The workshop was organized as follows: after a first half-an-hour of team-building and “energizer” activities, participants were explained during 90 minutes how creativity and innovation articulate and how they can be initiated and/or structured through tools and methodologies. The next two hours were dedicated to a theoretical presentation of both C.P.S. and D.T. methods (respectively 60 min.). The next day, participants were asked to collectively build a summary of the main theoretical points learned the day before. A two hours simplified design session then incited the participants to put D.T. principles into practice (they were asked by groups of two to re-design the social and practical experience of gift-giving⁵), and after lunch they worked into two larger groups on a 4 hours C.P.S. hands-on workshop (about re-designing the next generation creative space). The day closed on a 60 minutes debrief and feedback session.

3 Selected Results

A side-by-side analysis of the questionnaires informs us about how the C.P.S. and D.T. workshop impacted both personal creative mindset and teams' viewpoints on projects' evolution. These preliminary results of course have to be considered with care (given the limited sample), but nevertheless constitute an interesting peephole on how a generation of young entrepreneurs, naturally more inclined to take part to collective creativity, might think and behave (creatively speaking) once being theoretically and practically trained.

Starting with the overall satisfaction level, 8 out of the 9 participants considered the workshop as at least “useful”, both in regard of their running start-up projects or of more general creative contexts. Five of them “certainly” planned to reproduce the techniques, while three others stated that it could perhaps be the case. Three argued that it would be easy for them to reproduce them, while four would need additional support to proceed again. Eight of them had not heard about Design Thinking before; 6 of them were unaware of Creative Problem Solving techniques. Among the techniques they practiced during the workshop,

⁵ for more information please visit <https://dschool.stanford.edu/dgift/>

mind-mapping, “motivating inquiries” and open-ended interviews were the most new to them.

In terms of personal creative mindset, while 2 participants still considered creativity as a “gift” in the first questionnaire (7 considering it as a potential, simply needing revelation through practice), only one said so after the workshop. On the other hand, personal representation of their “level” of creativity remained stable: 5 considered themselves as “somewhat” creative, 4 as “completely” creative.

In regard of their start-up projects, the techniques and questions raised during both theoretical and practical sessions seemed to soften a little bit some of the participants’ beliefs. Eight of the nine for instance acknowledged possibility to integrate new ideas to their projects after the workshop, instead of six before. Starting from 7 participants considering their projects as “absolutely innovative” (2 as “somewhat innovative”), it went down to five (4 as “somewhat innovative”), perhaps revealing some post re-evaluation of creative potentials.

Eventually asking them what aspects of their start-up projects they considered as decisive, Figure 1 shows what kind of impacts the two-days workshop might have had.

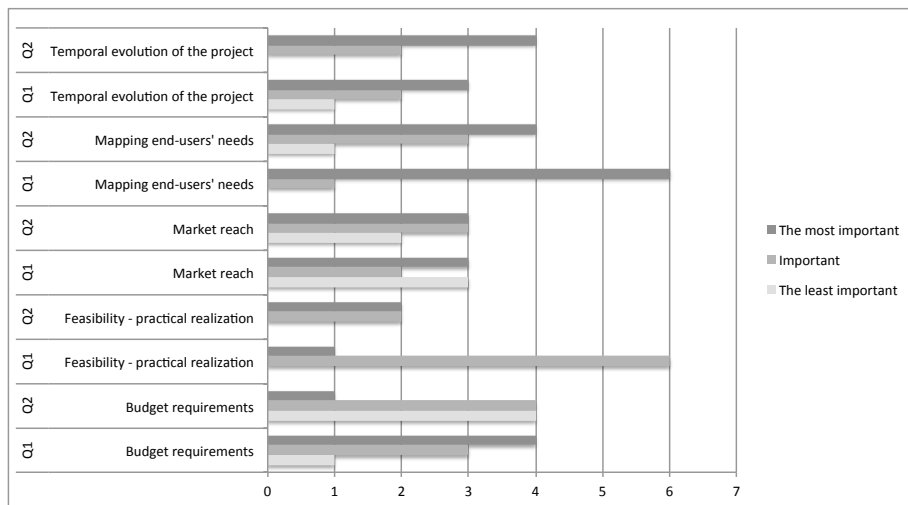


Fig. 1 – the most decisive aspects for the 9 participants’ start-ups, from “most important” to “least important” - and their evolution between the first (Q1) and second (Q2) questionnaire.

Interestingly, when comparing side-by-side the most decisive aspects and their pre- and post-workshop evolution, budget requirements and feasibility seemed to foster less attention, contrary to market reach that remained more or less equal and temporality that (quite naturally) became a growing worry with time passing by (8 weeks being left at that time to proceed with their projects).

Mapping end-users’ needs, surprisingly, did not foster growing interest even though it was repeatedly presented as essential during the workshop. Moreover,

when asked if they considered their project as “already adapted to end-users needs”, the proportion of respondents went from “4 – absolutely; 4 – more or less; 1 – not at all” to “5 – absolutely, 3 – more or less; 1 – not at all”, showing a stable or growing confidence in users’ needs fulfillment.

4 Discussion and Conclusion

Adding to a good level of satisfaction and reasonable hope to reproduce trained creative techniques, it seems that the two-days workshop did positively impact the personal and social representations of creativity. Participants’ attitude towards creativity evolved, but even though some project flexibility was gained after trying out techniques of collective creativity, it seems that participants still lacked reflexivity on their own creative project.

Two aspects might explain some of the workshop’s moderate impacts (for instance in terms of market reach and mapping end-users’ needs). The first one relates to the timing of organization: the workshop happened quite late inside the Nest’up program (on the fourth week) and in relation to quite mature start-up projects. The second one is linked to the overall time-to-market pressure: the program being very intense, teams might not have had enough time neither to reflect and re-question some of their decisions nor to incubate and apply efficiently the creative techniques on their projects.

On a more general viewpoint, it seems that only some of such workshop’s goals are reached inside such constrained environments: the session does generate a positive evolution of representations when it comes to creativity and its generic practice, as well as changes in mindsets and attitudes, but nevertheless does not fundamentally anchor inside a partially developed start-up project. These observations call for more research about how to make trainings to creative methods and mindsets more impactful, regardless of the status of the project or the context.

5 References

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