

# A Compass to Drive Collaborative Design Practices within Private Organisations

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# ABSTRACT

Collaboration has currently become a must within design practices. Ranging from public to private sector, from social to business, the design activity is no longer commissioned 'for' the client, but is carried out 'with' the client and with all the stakeholders involved. This tendency introduces a reflection on the shift in design practice and the role of the designer within the community with which she is designing. This article focuses on collaborative design practices within the private sector, providing a set of case studies analysed through variables that define the main qualities of such processes. Those variables become lenses through which it is possible to zoom in on the peculiarity of the session and ultimately draw an evaluation. The correlations of the variables represent a first draft of a compass aimed at building awareness and providing guidelines for future practices.

*Keywords:* Codesign, Collaborative Design, Design Thinking, Private Organisations, Service Design.

## INTRODUCTION

Applying collaborative practices within innovation processes, both in the private and the public sector, is no longer a choice today. The spread of bottom-up problem-solving approaches is so frequent that codesign simply became the new way of doing design, outlining a landscape (Sanders and Stappers, 2008) where private organisations are no exception. That tendency is also leading to an apparently more democratic form of taking strategic decisions.

That does not always resolve into a real 'extension' of power, but at least enables the diffusion of information and sets the ground for the creation of awareness and consensus. In a recent study, sociologists observed the 'hackathon' formula as one of the new ways of doing innovation through collaborative performances. They reported as the main conclusion that they are "powerful strategy for manufacturing workers' consent in the 'new' economy" (Zukin and Papadantonakis, 2017).

The collaborative practices we are referring to usually draw their tools and principles from the design disciplines, falling into the general spectrum of 'design thinking' (Brown, 2009; Kolko, 2015).

Design thinking has increased its popularity in recent years, being already pointed out by various author as the new paradigm to face any kind of problems (Badke-Schaub et al., 2010; Dorst, 2010). This interpretation has sometimes led to a simplification of its adoptions, because organisations are likely to see it as a trendy 'magic toolbox' that can be replicated to tackle any sort of challenge (Selloni and Corubolo, 2017).

In this regard, many authors have raised their concerns about this misconception and the general meaning that design thinking is assuming.

Above all, Nussbaum (2011) called it a 'failed experiment' when it happens to meet the business world. He claimed that the reason for its failure is due to the distortions made by managers to the approach. In his own words: "in order to appeal to the business culture of process, it [design thinking] was denuded of the mess, the conflict, failure, emotions, and the looping circularity that is part and parcel of the creative process".

Kimbell (2011) argues that one of the biggest problems of design thinking lies in its common association with the more intangible part of the work done by designers. That lent to the general understanding of design that allure of fuzziness that made it become "not wellunderstood, either by the public or by those who claim to practice it" (Kimbell, 2011).

Recently, Jen (2017) during the popular 99U Conference made a provocation though a resonant speech entitled 'Design Thinking is Bullsh\*t' where she criticized the inconclusive character of this approach.

The issue is not only animating discussions in academia, but it is also drawing the attention of many practitioners, who are taking part in the debate.

A demonstration of the increasing interest of private organisations in design thinking is given by attendance of the 'Observatory Design Thinking for Business' of Politecnico di Milano. The 'Observatory' is a research program that throughout 2017 collected experiences coming from 47 companies in Italy that are exploring the approach.

This pool provides a first indicator of the scale of diffusion of such practices and the diverse nature of the organisations involved: 'design studios', 'digital agencies', 'strategic consultants' and 'technology developers' (Politecnico di Milano, 2018); many of them do not traditionally pertain to the design culture, but recently included design among their main business assets.

Such collaborative design activities, usually evidenced by workshops, are labelled in diverse ways by companies, recalling different disciplines under the design class, such as: service design, codesign, ux design, customer experience and more. Those titles are used with different levels of awareness, but they often identify very similar activities. However, this variety of terms demonstrates and contributes to a widespread confusion.

Despite the popularity of these practices, there is also confusion on how and when to adopt them. Authors are therefore studying the topic under different perspectives, trying to build a knowledge framework that could guide to understand and manage collaboration and design (Durugbo and Pawar, 2014; Meroni et al., 2018; Lee, 2008; Steen, 2013).

This article builds upon the discourse and proposes a comparative analysis of such practices within private organizations. The aim is to investigate the variables that insist on them, draw a comparison, and ultimately propose a reflection on the findings. Those reflections could be useful to generate awareness and knowledge on the adoption of such practices and ultimately to better address and frame future ones.

## 1. METHODOLOGY

The cases reported in this article are based on direct observations on the field made by the author, a doctoral researcher within the Department of Design in Politecnico di Milano, during the period from April 2017 until November 2017.

Observations have been made within a set of large companies (more than 250 employees according to EC SME/US Department of Trade classification) based in Italy, selected because they are among the ones experimenting with collaborative design practices in the Italian context. Those are workshops that vary for different aspects, defined here as variables that delineate the session and generate the framework through which the cases are analysed:

**Goal:** the goal is the brief the workshop deals with. It both embraces the reason why the workshop was run and defines its purpose. Therefore, the goal is the variable that determines the stage of the design process (fig.1) where the session is introduced. The design process here considered is the Double Diamond framed by the Design Council (2014) which defines the stages as: 'discover insight into the problem', 'define the area to focus upon', 'develop potential solutions' and 'deliver solutions that work'.



Fig.1: The Double Diamond by the Design Council

In this sense, the variable connects with the concept of 'subject matter', introduced by the 'Collaborative Design Framework' proposed by Meroni et al. (2018).

In this framework, the authors define the two poles of the Double Diamond as tensions towards design activities that are 'topic-driven' or 'concept-driven'. 'Topic-driven' activities are the ones that can be found on the left side of the process, connected with problem exploration and definition. The 'concept-driven' ones, instead, are the ones that start from the orientation given by the problem-solving brief and build upon it.

**Participants:** people involved in the workshops have diverse roles within the company. They can be internal employees, employees of another company, or end-users. When employees, the level in the organogram has also been considered, since it is interesting to understand the assortment of stakeholders involved in the session and how they were mixed during the activity.

**Style of guidance:** it is relevant to highlight the background and the professional role of the session moderators, because it relates to the 'style of guidance' adopted (Meroni et al., 2018). The 'steering' style of guidance differs from the 'facilitating' one, as it implies that the moderator contributes with her opinion and provides direction to be discussed within the group. Hence, expert designers, when in this role, leverage their envisioning skills to offer topics for discussion to the participants.

**Process and intended disciplinary approach:** it is meaningful to understand the course of action and the main design disciplines cited. As such, it is interesting to point out the terms

used by the companies to define the kind of activity compared to what actually happened, the tools adopted, and the process followed.

The researcher took part in those workshops, with different roles and different levels of involvement. This made it possible to collect insights trough different perspectives, get a more complete overview of the whole process, and be aware of possible biases.

In particular, in case 1 (see table 1) she was observing all the groups, in case 4 she acted as participant, and in case 2 and 3 she was part of the design team that conceived and run the workshop. In the latter cases, she also acted as moderator.

## 1.1. An Observation of Practices

## <u>Case 1</u>

**Goal:** This session was held on the 23th and 24th of November 2017. The company who commissioned the activity is a corporation in the automotive industry. The challenge that this company was facing is the relevant dip in sales of diesel engines, attendant on the raised awareness of consumers about polluting emissions.

One year before this session, the company was at a crucial turning point of its journey, since top management needed to take a strategic decision to stay competitive on the market. Moreover, the impact of this decision could involve the whole organisation, and they thus decided to ask a consultancy firm to help them find solutions. The output was a set of ideas that were supposed to be adopted and developed by the company: yet, this did not happen because of different obstacles that the projects encountered within the organisation.

For these reasons, the company engaged again the firm, Skillab, to support them to implement those ideas. At the same time, the company realized that the employees needed to acquire a more collaborative way of working and asked Skillab to train the participants toward this attitude. The session was suitably called 'Beyond creativity: engineering innovation from concept to execution'.

In this sense, the workshop can be considered 'concept-driven', because there were already some concepts as a starting point that needed to be better defined and ultimately harnessed into action plans.

**Participants:** the workshop was addressed and restricted to the top managers of the company, since the activity implied taking strategic and urgent decisions for the company.

**Style of guidance:** Skillab appointed two experts to design the session: a business researcher from the Università del Piemonte Orientale and one design researcher, the author, from Politenico di Milano. In addition, Skillab engaged also a teambuilding coach.

The two researchers worked collaboratively to design the workshop, merging business and design principles to develop a dedicated path and specific tools to lead the group toward practicable action plans. The coach, instead, planned some parallel activities to be performed during isolated slots throughout the workshop. The intention was to reinforce the principles that participants were applying to carry out each task with some teambuilding activities, which were however disconnected from the specific topics of the session and the core business of the company.

The style of guidance was a 'steering' one, because the researchers pushed the team toward a service-oriented approach, envisioning scenarios to stimulate the ideas of the teams. However, they were not moderating single teams but launching tasks and then suggesting directions if need be. Hence, that can be considered a case of 'light steering'.

**Process and intended disciplinary approach:** Since the process had the specific aim of guiding the implementation of concepts, it was conceived as an efficient mix of design and business methodologies and tools. There was not such an emphasis on specifying or promoting the names of the disciplines that were adopted, but the researchers clearly supported their instructions referring to design thinking and business.

In order to understand the starting point for the workshop and at what stage of maturity the projects were, the researchers prepared a 'pre-work activity'. In the 'pre-work' they asked participants to share some information about the project. The information was structured in a 'business model canvas' (Osterwalder et al., 2010) that is a good synthesis of the main features of the concepts. In addition, specific information was required regarding the stage of maturity of the project ('idea', 'prototyping' 'development', 'launch') and, most importantly, the barriers that the project team encountered along its way. The outputs were important for the researchers to understand which was the starting point of the session and, consequently, to design the following tasks.

What came out was that most ideas were not proposals of solutions, but they were still framed as challenges, hence they were not conceived yet. Moreover, the barriers reported by the project teams were mainly related to lack of commitment and approval from internal stakeholders. Hence, the process designed for the workshop was reframed, planning more time for the idea definition and a strong focus on stakeholder analysis.

Participants were split into groups of 5 people. The first activity was indeed repeating the 'idea generation'. All the ideas needed to propose possible solutions to overcome the challenge of the diesel underselling.

Once ideas were framed, the process went through the definition of the value proposition and then the definition of the project milestones of development. After that, the process went through the analysis of stakeholders, being the crucial aspect to focus on. Each milestone was therefore associated with the need to involve internal and external stakeholders to implement it. This task helped to state exactly 'who needed to do what'. Those statements gained an even higher significance when they were brought into the action plan template, where they were enriched as 'who needs to do what and when'.

#### <u>Case 2</u>

**Goal:** This session took place on the 12th and 13th of April 2017. Intesa Sanpaolo is one of the largest Italian banking group. In recent years, Intesa has been working to improve branch experiences for its clients, launching projects dedicated to changing the traditional concept of bank branch. Intesa wanted to offer to its clients a unique and immersive experience in terms of spaces and layout, services offered, communication and more. Therefore, Intesa set a partnership with Autogrill Puro Gusto, a fine food shops line of the multinational catering company Autogrill.

What they came out with was a place that could connect the two services, where people could enter and relax as in a bar and at the same time use the services of the bank. This was the concept conceived at the strategic level of the company, but it was still not completely

clear how this place would have functioned and served clients. Therefore, Intesa Sanpaolo engaged its internal Service Design Team, together with its consultancy supplier Experientia, to design the new branch service concept.

Prior to the workshop, Intesa and Experientia conducted an in-depth desk and field research, which led to the definition of preliminary service concepts and specific target users to focus on. The designers decided to concentrate on 3 different targets: 2 of them were ideal prospect clients the bank wanted to attract, while the other one was the profile of a typical client of Intesa Sanpaolo.

This choice was intended to envision both the new experience for an ordinary client and for potential ones that could be attracted by the new concept.

Anyhow, the workshop kicked into motion with some existing draft concepts. Hence, the workshop was still aimed at expanding and envisioning possibilities, yet it was somehow driven by some defined concepts ('concept-driven').

**Participants:** The participants were employees from Intesa, covering different roles with different hierarchical levels. They were selected as representatives from each department of the company that impacted on designing and delivering the new experience.

Designers from Experientia worked together with the Service Design Team of Intesa to develop and moderate the workshop.

A group of employees from Autogrill was also involved, selected with the same criteria as Intesa employees.

The participants worked in mixed groups, each of them focusing on a different target previously identified by Experientia.

**Style of guidance:** Each group was moderated by an expert service designer, who 'steered' it throughout the process, giving guidance and advices grounded on the preliminary research.

**Process and intended disciplinary approach:** The first part of the workshop was dedicated to reviewing the existing concepts and the profile of target users highlighted by the preliminary research. The target users were framed as 'personas', the format used by service designers to draft the behavioural features of people.

Then, the groups outlined an interaction storyboard for the assigned persona, envisioning an ideal experience path through the new branch.

The second part of the session was devoted to designing the 'service blueprint', which is a framework usually employed by expert designers. This task was indeed strongly guided by the moderator. The process and the tools used were derived from service design practice and discipline.

#### Case 3

**Goal:** This activity took place on the 9th, 10th and 11th of May 2017. A banking company based in Italy felt the need to digitalise some of its main services in order to stay competitive in a market more and more dominated by online banking providers.

The company asked for the support of the strategic consultancy firm Attoma. Attoma carried out an extensive research that led to the identification of 3 'personas' and 3 streams of services to be designed. The 3 personas referred to 3 levels of ease towards digital banking

services. The 3 design streams instead dealt with 3 different demands: 'opening a bank account', 'deferral of payments', 'saving' and 'insurances'.

Once the research was concluded, Attoma organized a workshop with the banking company to codesign new digital services that could satisfy the demands identified.

**Participants:** The session involved a variety of participants. Attoma gathered a group of employees of the company with different functions and hierarchical levels, a group of consultants and also a group of potential users to represent the personas identified.

Participants were split into mixed groups and each group worked on one stream. The groups were quite numerous, made up of around 10 heterogeneous members.

**Style of guidance:** The session was moderated by expert designers; the groups were working in different rooms with one moderator each. In addition to the moderators, there were people from the research team of Attoma to support them.

The moderators led the process guiding the group through every reflection and giving precise instructions when launching the tasks. Hence, they adopted a 'steering' style of guidance.

**Process and intended disciplinary approach:** The author observed just one of the teams, hence she will refer here to the group she observed. The process adopted was the same for all teams. The first part of the workshop was dedicated to sharing the results of the research and framing with participants the user journeys based on the personas. This created the bases of the 'codesign' part of the workshop, where participants were asked to imagine solutions to the 'key moments' of the experience highlighted in the user journeys. Each person was then asked to individually design the user interactions of the personas with an ideal digital service. Each participant was therefore provided with smartphone mockups to be completed with sketched interfaces, in order to structure the flow of user interactions with the service. That came out to be a highly technical and hands-on task, unfamiliar for most of the people in the room who were not designers.

This individual task was followed by a sharing moment, where everybody presented to the other his/her work and then voted for the favourite solution. This process was repeated for each of the 'key moments' and led to the convergence of the group toward the most voted solutions for each.

Case	1	2	3
Company and consultancy names	Automotive company with Skillab	Intesa Sanpaolo + Autogrill with Experientia	Banking company with Attoma
Goal (design subject matter: 'concept-driven')	Generate action plans on existing ideas + training	Refine existing idea on a new service concept	Design new digital services for customers
Style of guidance	Designers (steering) + training consultant (facilitating)	Designers (steering)	Designers (steering)
Disciplinary approach intended	Design Thinking, Business	Service Design	Service Design, Codesign, Design Thinking, Ux Design

Table 1: Summary of the case studies

### 1.2.The Compass

The described variables of each case can be evaluated by a compass that considers each one as an axis, of which the poles represent the opposite qualities that the variables can assume.

In this regard, we do not consider those qualities as absolute values, but as gradients that can acquire different levels of intensity.

The analysis zooms in on the shades that those qualities can assume, especially when private organisations are pursuing innovation achievements.

#### Goal: idea generation versus consensus

The first focus is on what is called the 'goal'. In all the cases, the company started with a challenge that was quite clear. In some cases, it was supported by a preliminary research, but the collaborative session was always planned as a subsequent step, to generate ideas once the problem was already framed.

Based on our experience in the cases presented here, we can argue that, considering innovation processes, collaborative activities usually fit in the right part of the Double Diamond, the one dedicated to finding solutions.



Fig. 2: The cases mapped on the Double Diamond

Within the 'second diamond' we can even position the sessions at different stages, according to the level of definition of the concepts at the beginning of the workshops. We are indeed in the 'concept-driven' area (Meroni et al., 2018), where the collaborative session begins with some phrased directions.

In the graph above (fig.2) we positioned the sessions according to their goal. To the left, we find the more divergent processes ('develop' phase of the Double Diamond), aimed at generating and expanding options; to the right, we find sessions aimed at converging on implementation plans ('deliver' phase of the Double Diamond). Therefore, we can argue that processes closer to the left polarity have as main purpose the generation of new solutions; while processes closer to the right have the aim of creating a consensus around a conceived direction.

#### Participants: low variety versus high variety

As regarding participants, the quality that interested us was the variety level. The workshop ranged from involving very similar participants to mixing completely diverse ones.

Style of guidance: facilitating vs steering

'Facilitating' and 'steering' stay at opposite poles, allowing many nuances in-between. From the above experience, it can be said that collaborative design practices for innovation, when led by designers, are characterised by a steering style of guidance. That is because, even if codesign is considered the new way of doing things, designers are seen as expert in the process, who own the ability to envision solutions (Manzini, 2015). Collaboration then comes into the stage to enrich and discuss the concepts with the experts in contents (employees of the company) and with the end-users.

#### Process: design-like versus designerly

The cases described above reveal how design tools and methods were adopted and interpreted for different purposes.

The sessions closer to the left polarity ('design-like') are those where the design approach was adopted in a lighter way (Robert and Macdonald, 2017). For example, in case no. 1, where the goal was to define action plans, most of the tools were inspired more by business studies than by design. The 'design thinking' approach pervaded the session for some general principles that have been introduced, such as collaboration, human-centricity, hands-on attitude and the importance of prototyping. However, the typical design tools were not adopted. We called it 'design-like' because it introduced some design principles into a process that was not design-specific.

On the other hand, we called 'designerly' the right side polarity, where sessions are characterized by the presence of design-specific tools, like service blueprints and interfaces, which are very technical and generally used by 'authorized personnel' (Cross, 2007).



Fig. 3: The compass of collaborative design practices elaborated through the study

## 2.CONCLUSION

From the cases observed through the variables, it is possible to recognize a pattern that draws a rough compass for collaborative design practices. Surely, 3 cases are too few to represent a significant panorama, but they own additional qualitative features that can be further analysed to draw other interesting considerations.

With regard to the compass, it can be argued that all the observations were characterized by a 'concept-driven' subject matter and the designers moderated in a 'steering' style. As stated, that is probably because this is the more congenial quadrant for a designer.

Considering the goal of the sessions, it is noticed that the more the session aimed at developing new solutions, which is the core of design, the more the people involved were varied. As such, the more the variety of participants increases, the more the style of guidance tends to be a 'steering' one. We can suppose that the more contributors are heterogeneous, the more they need a directing guidance.

A similar reasoning can be applied toward the type of process: when the goal deals with developing concepts, the whole process is characterised by design-specific tools and attitude. Sometimes it can even end up being too technical and ineffective if proposed to non-designers. That happens when designers, and especially service designers, focus more on the 'how' than on the 'what' (Stickdorn, 2016) "becom[ing] obsessed with the tools and methods and los[ing] sight of what [they]'re actually trying to do" (Drummond, 2017).

These are just some initial considerations that should be consolidated by adding more case studies to the data set on the one side, and on the other by deepening into some insights.

For example, based on the last reflection, the focus of collaborative sessions is often less on the ideas and contents produced and more on the process, so that the performance and the tools become more important than the output. In some cases, that is due to the fact that the session is organised around a concept that is already defined, and the aim is to generate commitment by the participants. That happens especially in those aforementioned contexts where the purpose is to either find a 'consensus' or alignment (Forrester).

Hence, the research question that arises is: can design be the right driver in activities that have such a purpose?

Moreover: are collaborative processes really lending more democracy to strategic decisions or is it just a way of building commitment and reaching 'consensus'?

Another topic that certainly deserves a deeper investigation deals with the relationship that training coach and designers can establish when guiding collaborative processes. In case 1, they experienced this alliance, being potentially valuable but actually ineffective.

Since the purpose of the company in that case aimed at both training and innovation, the designer and the coach could plan their intervention in a joint way, enriching their respective skills instead of carrying on their separate paths.

How can designers and training coach create valuable alliances to structure joint collaborative activities within organisations (Auricchio et al., 2018)?

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