

The creation of professional empathy during multi-stakeholder collaboration

Citation for published version (APA):

Steenbakkens, J. J. H., Lu, Y., Brinkema, M., & Gültekin, P. (2015). The creation of professional empathy during multi-stakeholder collaboration. In L. Valentine, B. Borja de Mozota, & J. Nelson (Eds.), *The Value of Design Research, Proceedings of the 11th International Conference of the European Academy of Design, 22-24 April 2015, Paris, France* Université René Descartes.

Document license:
Unspecified

Document status and date:
Published: 22/04/2015

Document Version:
Publisher's PDF, also known as Version of Record (includes final page, issue and volume numbers)

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.tue.nl/taverne

Take down policy

If you believe that this document breaches copyright please contact us at:

openaccess@tue.nl

providing details and we will investigate your claim.

11TH EUROPEAN ACADEMY OF
DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY
INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT
FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

Steenbakkers, Jim
Lu, Yuan
Gultekin-Atasoy, Pelin
Brinkema, Marloes

Technical University Eindhoven,
Netherlands, The

j.j.steenbakkers@student.tue.nl

ABSTRACT

The increasing complexities of societal problems require the involvement of multiple stakeholders, in both business and governmental processes. A lot of personal ice-breaking exercises, which create empathy amongst stakeholders, have been proposed to improve results of collaborative processes. Next to this, tools have been developed to inform multi-stakeholder collaborating groups about their value network. However, there is lack of methods and tools to facilitate 'professional empathy' among different stakeholders, which means stakeholders do not know of one another what they are willing to give and take within this collaborative environment. This paper synthesizes research from both organizational theories and case study results, in which the prototype 'Empathy Hive' was used, to propose optimal conditions for the creation of 'professional empathy' in the early stages of multi-stakeholder collaboration.

Keywords: multi-stakeholder collaboration, professional empathy, give and take relationships, stakeholder commitment, value network, transparency, trust, conflict

1 INTRODUCTION

New business models in these challenging economic times [1] require a different way of working. More and more we see stakeholders collaborating [2]. Next to solely focusing on production, companies need to add value for their customers through product service systems. Especially in the creative industry, focusing only on design output is not enough anymore [3]. Also (semi) governmental organizations are forced to forge alliances and foster collaboration due to budget cuts and several societal challenges, such as the increasingly aging population [4, 5].

Initiating collaboration is challenging, especially in the early stages of design/problem solving: in which each stakeholder wants something different and has his/her own perspective on the common enigma. Furthermore, stakeholders often have hidden agendas when in a meeting, which makes collaboration even more challenging [6]. A lot of conducted research focuses on the factors of successful collaboration, of which team composition is perhaps the most discussed [7], [8], [9]. The interpersonal relationships of the collaborating stakeholders are vital for the initial take off of any collaborative process.

There are a lot of known personal empathizing (ice-break) group exercises, to get to know one another more, in terms of age, hobbies etc., which are proven to be beneficial for collaboration. [10] The research however targets topics that relate to the understanding of one's *professional profile* [11,12], *Knowledge, Skills, Resources, Needs, Goals, Position, Power etc. and one's role in the collaborative process*. From now on referred to as 'professional empathy'.

PROFESSIONAL EMPATHY: THE MISSING KEY IN MULTI-STAKEHOLDER COLLABORATION

Steenbakkens, Jim; Lu, Yuan; Gultekin-Atasoy, Pelin; Brinkema, Marloes

There is a real gap between using tools to inform stakeholders in multi-stakeholder collaboration about their mutual value network & personalities versus really providing them with the experience of insight in willingness to give and take within the collaborative environment. Collaboration is not only about what the possibilities are, on which stakeholders can work together. More so it is about whether stakeholders want to make a commitment in working together.

Our objective is to close this gap using a design solution, a tool, and to evaluate this tool in different contexts.

2 BACKGROUND LITERATURE

To create a better understanding of the research landscape, background research has been gathered and synthesized on the topics of: collaboration, empathy and available tools and case studies regarding these topics in the context of multi-stakeholder collaboration.

'Collaboration is a mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals' [13]. The most important element of collaboration is having a common goal. Next to that, the relationship, especially trust amongst the collaborating stakeholders is crucial for the collaboration to succeed. Finally it is vital that all stakeholders share resources, risks and rewards (responsibility, mutual authority and accountability for success) [14].

Many people think that anytime they're working together, they're collaborating. There are many ways to work together other than collaboration. These different forms have different varying levels of intensity in the relationship between stakeholders. Cooperation, coordination and collaboration can be distinguished in order of the intensity of working together, of which the latter is the most intensive manner of working together [14]. During intensive collaboration, stakeholders need to be committed to the common goal they want to reach as a collective. Interpersonal relationships will be put to the test. Ruling out assumptions can be of help in the early stages of multi-stakeholder collaboration, to later on avoid clashes [15]. To help stakeholders understand one another's perspective, empathy can be used [16].

Empathy starts at a very young age [17] - Early theorists suggested that young children were too egocentric or otherwise not cognitively able to experience empathy (Freud 1958; Piaget 1965). However, a multitude of studies have provided evidence that very young children are, in fact, capable of displaying a variety of rather sophisticated empathy related behaviors [18]. Creating empathy for other people can be difficult whenever situations are not equal. Feeling personal distance or even revolt towards other people can seriously block the feeling of empathy towards others [19]. Which undoubtedly will result in terrible collaboration. Collaboration amongst doctors and nurses is a well-researched topic. The Jefferson scale of empathy and JSAPHC Jefferson Scale of Attitudes toward Physician-Nurse Collaboration [20] are examples of how empathy is measured in a professional environment to eventually improve collaboration. On the other hand, the term 'clinical empathy' is much issued to describe the doctor-patient relationship [21, 22]. This type of empathy enables doctors to identify with their patients and therefore be more considerate.

PROFESSIONAL EMPATHY: THE MISSING KEY IN MULTI-STAKEHOLDER COLLABORATION

Steenbakkens, Jim; Lu, Yuan; Gultekin-Atasoy, Pelin; Brinkema, Marloes

The world of business has picked up on the importance of empathy in relation to performance. Empathy in the workplace [23] focuses especially on how empathy amongst colleagues and in an employer-employee situation is vital for performance. [24]

Within developmental literature a number of processes commonly referred to as empathy were identified and defined [25].

- **Cognitive role taking:** when the person identifies the thoughts of another person.
- **Affective role taking:** when the person identifies the feelings of another person.
- **Sympathy:** when the person responds to the other's emotion with an affect that is not identical to but is congruent with his or her state or welfare, for example concern.
- **Personal distress:** when the person experiences self-orientated anxiety or worry over the other's feelings.
- **Empathy:** when the person shares the emotional state of the other.

The scope of this research lies within the process of 'role taking' or 'perspective taking' [26], which frames either the cognitive or affective ability of a person to identify with the thoughts and feelings of another person. Outside of the scope are more emotional elements, such as empathy or sympathy towards another person, caused by factors like concern or personal distress. Therefore it can be stated that *professional empathy is the ability to identify with the professional thoughts and feelings of other stakeholders in a collaborative context.*

The 'Value Pursuit' tool [27], is a tool that can be used in workshops to clarify how stakeholders in a specific PSS (product-service system) can be of value to each other and thereby identify shared goals within the project. The tool provides transparency to stakeholders, showing the value network. There are also various tools & frameworks [28, 29, 30] that provide stakeholders with pre-knowledge before they start collaborating, and data tracking while they are collaborating.

In conclusion, one of the most fundamental elements for creating trust amongst stakeholders in collaboration is openness and sharing of information [13, 14]. People tend to make assumptions and think they know about the person or organization they are working with, while they actually do not. When creating trust it is vital that assumptions are ruled out and stakeholders are as open as possible to each other about their own, and their organization's intentions [13, 14, 15, 16]. This will establish the right sort of interpersonal communication based on empathic behavior [30]. Having a shared common goal that needs to be realized (with resources of the members) is as important as the ability for members to fulfill their self-interest (needs) [31].

Opposite to 'regular' empathy, which is more spontaneously evoked as a human trait [32], professional empathy is to be more viewed as a constructed competence, stakeholders need to acquire in collaborative processes. Professional empathy therefore has much resemblance with clinical empathy, although clinical empathy has a stronger connection to sympathy.

11TH EUROPEAN ACADEMY OF DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY
INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT
FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

3 METHOD

We iteratively designed for professional empathy [33]. In an educational environment, we looked at positively influencing multi-stakeholder collaboration through professional empathy, using design solutions. We generated scientific knowledge and raw data evaluating the 'Empathy Hive' tool. We evaluated this tool in multiple test simulations and eventually two different case studies. These two cases are different in context, with the first case having a local, more familiar, focus (Eindhoven), and the second a more international, less familiar, focus (European scale). We chose to test the tool in two different contexts, because we wanted the data to represent a generalized reflection of the creation of professional empathy using the tool.

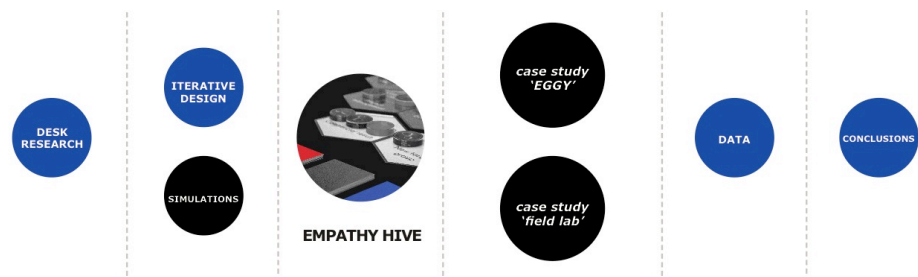


Figure 1 – Our process

We conducted qualitative research [34] using respectively questionnaires, observation, video analysis and in-depth interviews. Through triangulation of this raw data, we were able to measure the creation of professional empathy in the early stages of multi-stakeholder collaboration.

3.1 PROTOTYPE DESIGN

The 'Empathy Hive' toolkit is made up of a set of tiles, in which the dark tiles relate to common resources and the light tiles relate to common needs stakeholders have when collaborating. With different colored sets of tokens, which on their turn represent the different stakeholders in a meeting, participants are asked to step into the other stakeholder's shoes. Each stakeholder receives a set of cards corresponding to the needs and resources on the board to first see for themselves what needs and resources they have and are willing to give/take in light of the common goal.



Figure 2 – 'Empathy Hive' in use

Steenbakkens, Jim; Lu, Yuan; Gultekin-Atasoy, Pelin; Brinkema, Marloes

11TH EUROPEAN ACADEMY OF DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

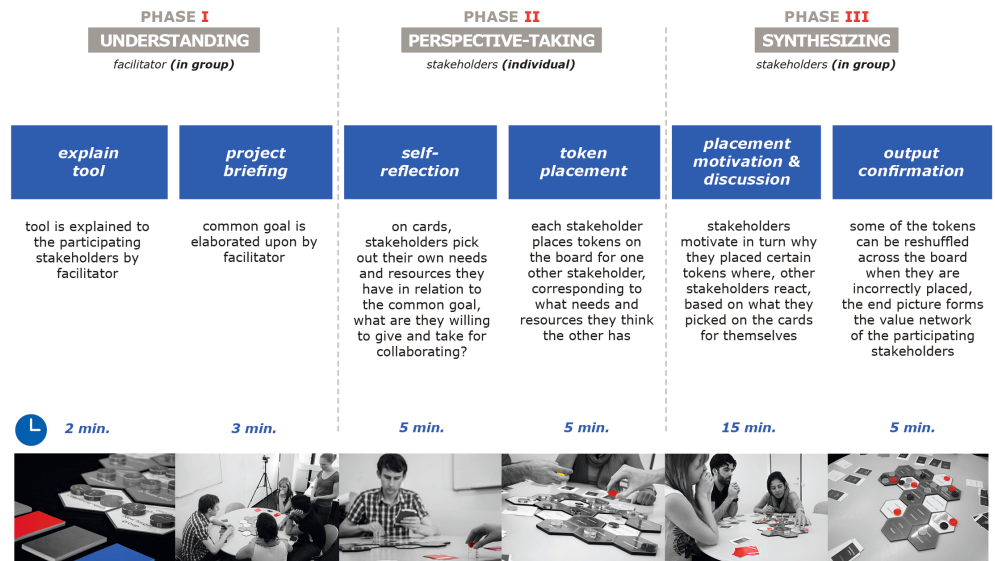


Figure 3 – Workflow 'Empathy Hive'

3.2 CASE STUDY SETUP – USER TEST

In both case studies we used the 'Empathy Hive' at the beginning of the collaboration, the initial first meeting of the stakeholder group for 30 minutes.

INDICATOR OF PROF. EMP.	ELABORATION	EXAMPLE
(Mis)understanding	Accuracy of assumptions by other stakeholders	A stakeholder assumes another stakeholder is going to fund the project, while this is not the case
Similarity	Match in each other's professional profile	Both stakeholders have research capabilities
Opportunity	Discovering opportunities in another stakeholder (apart from common goal)	When a stakeholder needs an IT specialist for another project and he/she is present
Goal alignment	Mutual connection to common goal	Stakeholders both need to get this project done fast
Commitment	Feeling responsible for part of the project (claim)	A stakeholder wants to become the project manager/take ownership

Table 1 – Indicators of Professional empathy - elaboration

Based on the output of our test simulations and desk research we categorized five indicators of measurement for professional empathy. The indicators are backed up with examples and provided with elaboration per indicator.

11TH EUROPEAN ACADEMY OF
DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY
INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT
FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

During the use of the tool we made thorough observations based on these five indicators, the observations we made were especially in the stages of self-reflection, token placement and the placement motivation & discussion. Afterwards, to deepen out our dataset we used video-analysis. We scored each of the participating stakeholders whenever they mentioned anything within these categories.

Before and after working with the 'Empathy Hive' stakeholders we asked to fill out respectively a preview and review questionnaire. These questionnaires consisted out of 4 questions to be answered on a scale from 1 to 10. The other 3 questions were open questions. The questions were created to respectively assess the baseline knowledge each stakeholder has upfront concerning the professional profile of the other stakeholders and assess outcome knowledge. We used in-depth interviews with the participants afterwards to enrich the data.

4 RESULTS

Our results are presented per case. The cases have similar setups as elaborated upon in the above method section.

4.1 CASE EGGY

EGGY is a prototype that is developed by Martijn Peeters as a means of communication for elderly people, through light. The stakeholders were invited to see how they could add value to the service platform of EGGY. We used the 'Empathy Hive' to start the meeting and initial conversations between the stakeholders.

4.1.1 CASE STUDY DESCRIPTION

We carried out a user test with 4 stakeholders with backgrounds in health care (Zuidzorg), IT (Onsnet) and education (Summa College, TU Eindhoven) all active within the local network of Eindhoven.

4.1.2 CASE RESULTS

	Do you know what these people/ organizations do? (resources/needs)		Do you know what they are willing to give/take to/from the project?	
	Preview	Review	Preview	Review
ZUIDZORG	7	8	4	7
ONSNET	6	9	6	7
SUMMA COLLEGE	7	9	5	7
TU EINDHOVEN	7	8	7	8

Table 2 – preview & review comparison, 1-10 questions – EGGY case study

11TH EUROPEAN ACADEMY OF
DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY
INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT
FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

In this stakeholder meeting the stakeholders knew some of the other stakeholders already, since the stakeholders were all active either in the city of Eindhoven, or its vicinity. However, as table 2 shows, it was not very clear to all of the stakeholders what the role of the other stakeholders could be in this project.

	SIMILARITY	(MIS)UNDER- STANDING	OPPOR- TUNITY	GOAL ALIGNMENT	COMMITMENT
ZUIDZORG	I	III	I	-	-
ONSNET	II	I	I	II	II
SUMMA COLLEGE	III	II	I	I	I
TU EINDHOVEN	I	-	II	III	-

Table 3 – indicators of Professional empathy scoring – EGGY case study

In the beginning of the meeting, the common goal of the stakeholders in light of EGGY was not present yet. The meeting was very explorative as a design meeting. The 'Empathy Hive' was used to see what the stakeholders could potentially mean for the concept and vice versa. In the self-reflection stage of usage, especially Zuidzorg wanted to express resources, but was not per se willing to share. During the placement motivation & discussion stage, a lot of conflict was posed as other stakeholders saw opportunities for Zuidzorg, but instead of commitment, misunderstanding occurred. The misunderstanding caused a conflict, it was not that the stakeholders were wrong about the resources and needs of Zuidzorg, but they were wrong about the willingness to give/take. This deepened insights in each other's professional profiles to a great extend, as it caused other stakeholders to reflect about their own commitment. Onsnet committed to some of the posed tasks and next steps within the collaborative space for instance.

4.1.3 CASE ANALYSIS

The 'Empathy Hive' took out all the assumptions within the meeting and eventually pinpointed each of the stakeholders sharp on each other's professional profile. The way in which the tool facilitated the learnings was really important for the participants, as they constantly referred to placed tokens when they were discussing in the placement motivation & discussion stage. As both table 2 & 3 show, the stakeholders were really aware of each other's professional profile in the end, but less aware of what the eventual commitment or give/take relationships were. There was no collective plan of action in the end, but some of the stakeholders formulated their own goals on possible collaboration with EGGY.

4.2 CASE FIELD LAB

The purpose of this session was to come up with a service design for the 3 stakeholder groups for the Field Lab in the context of Ulster a county in Northern Ireland, UK. The field lab is a physical space in which end users, business and knowledge institutes all come together to respectively have fun, test equipment & gather data and do research.

11TH EUROPEAN ACADEMY OF
DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY
INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT
FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

The Field Labs are an idea of the European funded organization Profit. We used the 'Empathy Hive' to start the meeting and initial conversations between the stakeholders.

4.2.1 **CASE STUDY DESCRIPTION**

Representatives from the areas of Business, Knowledge Institutes and (local) Government were present. In total we designed with 5 stakeholders. An independent architect, a director in the council of the Ulster Municipality, a University PHD researcher (health), a University sports director and a mobile app developer SME (Mob Starts).

4.2.2 **CASE RESULTS**

	Do you know what these people/ organizations do? (resources/needs)		Do you know what they are willing to give/take to/from the project?	
	Preview	Review	Preview	Review
ARCHITECT	4	8	7	8
MUNICIPALITY	8	9	8	10
UNIVERSITY PHD	7	8	5	7
UNIVERSITY SPORTS	9	9	8	9
MOB STARTS	6	8	7	8

Table 4 – preview & review comparison, 1-10 questions - Field Lab case study

The local stakeholders (university and municipality) knew one another well, whereas the other two stakeholders were not as informed about one another, however, they did know about the project beforehand, so they were still able to shape an image of give/take relationships of the other stakeholders before the meeting.

	SIMILARITY	(MIS)UNDER- STANDING	OPPOR- TUNITY	GOAL ALIGNMENT	COMMITMENT
ARCHITECT	III	I	-	I	-
MUNICIPALITY	II	III	II	III	IIII
UNIVERSITY PHD	I	II	I	I	I
UNIVERSITY SPORTS	IIII	I	I	-	II
MOB STARTS	-	II	I	-	-

Table 5 – indicators of Professional empathy scoring – Field Lab case study

THE VALUE OF DESIGN RESEARCH

PROFESSIONAL EMPATHY: THE MISSING KEY IN MULTI-STAKEHOLDER COLLABORATION

Steenbakkers, Jim; Lu, Yuan; Gultekin-Atasoy, Pelin; Brinkema, Marloes

11TH EUROPEAN ACADEMY OF DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

Especially the municipality had a very strong vision for the field lab and really wanted to get the project going as soon as possible. Other stakeholders had to be convinced of their role as the stakeholder from the municipality took the lead. It was the municipality representative who could agree to a lot of commitment posed to her in the placement motivation & discussion stage. Striking was that participants referenced to a great extent to the cards they had picked out for themselves beforehand. They used the cards as a sort of reward-system [35], the more the empathizing (other stakeholder) tokens were correct the more they seemed to enjoy using the tool. This also accounted for higher scores in the indicators of similarity, (mis)understanding and opportunity.



Figure 6 – real-time - value network representation – Field Lab case study

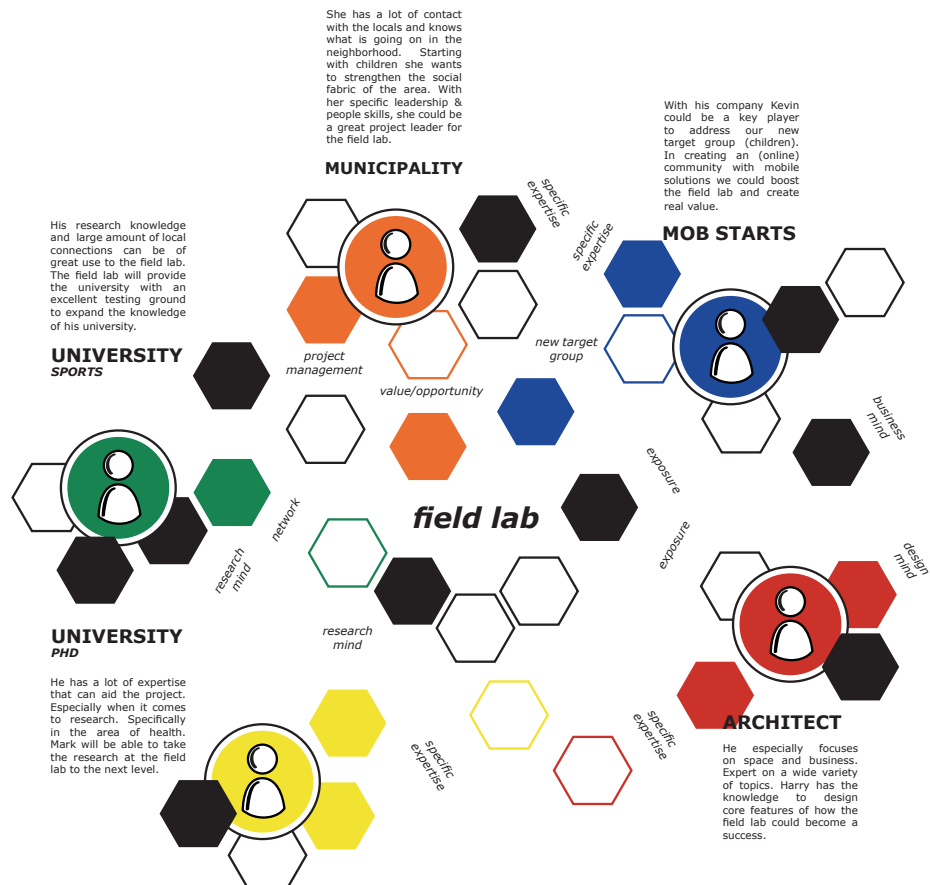


Figure 7 – afterwards - value network representation – Field Lab case study

Steenbakkens, Jim; Lu, Yuan; Gultekin-Atasoy, Pelin; Brinkema, Marloes

11TH EUROPEAN ACADEMY OF DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

We created this representation as a design outcome for the session with the 'Empathy Hive'. The visualization shows give and take relationships based on the categories provided in the tool. Empty tiles stand for a need and coloured ones stand for a resource.

4.2.3 CASE ANALYSIS

The stakeholders were very aware of why they were invited to join this collaboration and therefore had little struggle in expressing commitment. Also they suggested roles for others to have. Clearly the stakeholders in the region of Ulster had a lot more knowledge about the area and were therefore more able to express needs and resources, not being business owners, they could commit themselves more to the project than the independent architect and the mobile apps builder.

4.3 OVERALL ANALYSIS

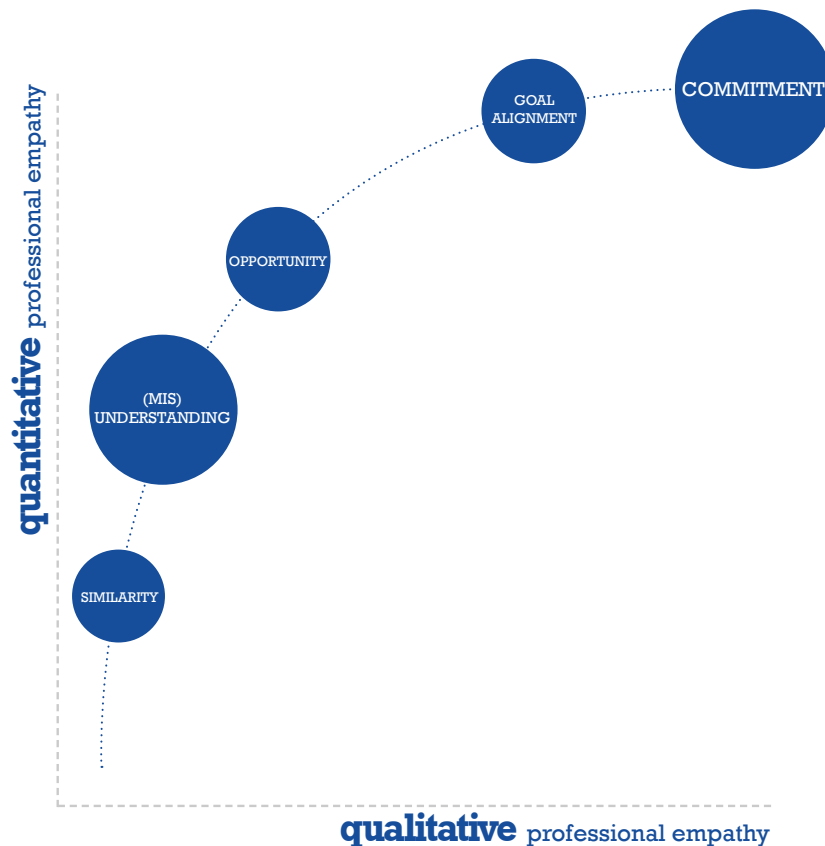


Figure 8 – abstract graph of professional empathy creation

In both case studies and in simulations in previous iterations a common trend was discovered. We have seen that participating stakeholders could only really show commitment to the project when they had a *profound baseline knowledge/overview of each other's professional profile*.

11TH EUROPEAN ACADEMY OF
DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY
INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT
FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

We have described this phenomenon in our overall analysis as '*quantitative professional empathy*'. This specific type of professional empathy strongly correlates with the cognitive role taking process and was generally to be identified with the indicators: similarity, opportunity and (mis)understanding. It is mostly created because of the knowledge exchange on topics like resources and needs.

On the other hand indicators like goal alignment and commitment strongly showed another type of professional empathy, more aimed towards *feeling what a stakeholder is willing to give and take within the collaboration*. We call this type of professional empathy '*qualitative professional empathy*'. This type of professional empathy can be linked to the affective role taking process.

Based on these findings we have been able to extrapolate an abstract graph (figure 8) that shows how professional empathy is created in terms of the order of quantitative and qualitative professional empathy and the corresponding indicators. In our second case study: the 'field lab' case study, the quantitative state was reached faster, as there was already a rather clear baseline knowledge of one another's professional profile amongst participants. This allowed the case study to show more indicators in the commitment and goal alignment field and thus more designed give and take relationships.

In comparison to case study EGGY, the 'field lab' case study had a strong leader in the group, which also helped the stakeholders to converge more easily in the decision making process. In both of the case studies, the stakeholders wanted to express about their own organizations and make sure that the other stakeholders had the correct information. The stakeholders could more easily express themselves when another stakeholder had made a completely wrong assumption about them, than in situations in which all assumptions made corresponded to some extent to the stakeholder's own reflection.

5 DISCUSSION

For the creation of professional empathy in the early stages of multi-stakeholder collaboration certain optimal conditions can be proposed:

- **Communication:** open and honest communication about what stakeholders are willing to give and take.
- **Transparency:** a clear overview of resources and needs in the collaborative space.
- **Trust:** the feeling that stakeholders tell the truth and have no hidden or unknown agenda.

The 'Empathy Hive' is an example of how the openness can be achieved across these fields, but next to that, the role of the facilitator of the tool is also a meaningful and important addition. As the tool mostly provides overview and willingness for collaboration, it does not push participants to deliver maximum output. Asking additional questions during discussions, something that was automated by participants in the second case study, led to a deeper understanding of one another, especially in the field of qualitative professional empathy.

Before give and take relationships in the qualitative professional empathy field can be design amongst stakeholders, quantitative professional empathy has to be established to a certain minimum (baseline). There is no real endpoint for the

PROFESSIONAL EMPATHY: THE MISSING KEY IN MULTI-STAKEHOLDER COLLABORATION

Steenbakkens, Jim; Lu, Yuan; Gultekin-Atasoy, Pelin; Brinkema, Marloes

creation of professional empathy, however at a certain point the relevant topics concerning one another's professional profile had been discussed and therefore this could be seen as 100% quantitative professional empathy. Professional empathy always needs to be updated as certain roles change throughout any process.

Commitment in the collaborative space and goal alignment are really important indicators for qualitative professional empathy. Strong discussions, even conflict, arose whenever stakeholders made wrong assumptions about one another in these areas. This was very different when wrong assumptions were made about the professional profile.

These conflicts led to some very clear decisions in the collaborative process, even when it came to stakeholders not participating at all anymore, or with a very different role than anticipated upon. It is meaningful to confront these 'deal-breaking' situations early on in the stages of collaboration, to avoid false expectations.

The identification and definition of professional empathy through the design intervention of the 'Empathy Hive' brings a new dimension to multi-stakeholder collaboration. It illustrates the relevance of what empathic behaviour, both in the cognitive and affective field, can imply for the specific business context.

The indicators used in this paper account for the scalability and repetition of research in the field of professional empathy, furthermore they can serve stakeholders in context to identify whenever professional empathy is used amongst them.

6 CONCLUSION

It must be stressed that professional empathy is a skill, which must be acquired as a competence by any professional entering the collaborative environment. The Empathy Hive provides clarity before or during collaborative engagements by ruling out assumptions, identifying white spots (missing resources) and demanding collaborative commitment to a common goal.

Professional empathy can only be created through understanding of one another's professional profile. Stakeholders need to feel understood and they need to understand one another when it comes to what they can offer (resources) and what they need (needs) to/from the collaboration. This can only be identified if all stakeholders have a similar picture of each other's skills and knowledge.

Without the tool provided, professional empathy can still be created in discussion; however, the intervention of the tool provides a similar common ground for facilitated discussion, leaving little room for wrong interpretation. It can be stated that the tool is not a method for training professional empathy, but more a facilitator that accelerates awareness for this skill in context.

We have seen that the tool levels out the discussion to an extent that makes give and take relationships comprehensible for any outsider because it gives a unique real-time graphic overview and feedback to users. Furthermore, our claim is that professional empathy is the missing key in multi-stakeholder collaboration, as this competence facilitates understanding, alignment and commitment amongst stakeholders unlike any other defined term.

11TH EUROPEAN ACADEMY OF
DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY
INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT
FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

7 REFERENCES

- [1] Richard E.S. Boulton, [Barry D. Libert](#), [Steve M. Samek](#), (2000) "A BUSINESS MODEL FOR THE NEW ECONOMY", *Journal of Business Strategy*, Vol. 21 Iss: 4, pp.29 – 35
- [2] Gray, B. "Conditions Facilitating Interorganizational Collaboration." *Human Relations* 38.10 (1985): 911-36.
- [3] crispplatform.nl/why-crisp
- [4] Feldstein, Martin S. "The Effects of the Ageing European Population on Economic Growth and Budgets: Implications for Immigration and Other Policies." (2006), NBER Working Paper No. 12736
- [5] Jones, Randall S. "The Economic Implications of Japan's Aging Population." *Asian Survey* 28.9 (1988): 958-69. Web.
- [6] Gultekin Atasoy, P., Bekker, M.M., L. Yuan, Brombacher, A. and Eggen, B. Facilitating Design and Innovation Workshops Using the Value Design Canvas. In *Proceedings of the Participatory Innovation Conference, 2013*, 111–118.
- [7] Belbin, M. (1981). *Management Teams*. London; Heinemann. Print.
- [8] de Bono, Edward (1985). *Six Thinking Hats: An Essential Approach to Business Management*. Little, Brown, & Company.
- [9] Katzenbach, Jon R., and Douglas K. Smith. *The Wisdom of Teams*. New York, NY: HarperCollins, 2003.
- [10] Miller, Brian Cole. *Quick Meeting Openers for Busy Managers: More than 50 Icebreakers, Energizers, and Other Creative Activities That Get Results*. New York: AMACOM, 2008. Print.
- [11] Isaacs, Kim. "How to Write a Career Summary". 2008 Monster.ca June 17th 2008
- [12] Smeltz, Wayne, and Barrington Cross. "Toward a Profile of the Creative R&D Professional." *IEEE Transactions on Engineering Management* EM-31.1 (1984): 22-25. Web.
- [13] Ray, Karen Louise. *The Nimble Collaboration: Fine-tuning Your Collaboration for Lasting Success*. Saint Paul, MN: Amherst H. Wilder Foundation, 2002. Print.
- [14] Winer, Michael Barry, and Karen Louise Ray. *Collaboration Handbook: Creating, Sustaining, and Enjoying the Journey*. Saint Paul, MN: Amherst H. Wilder Foundation, 1994. Print.
- [15] Pelin GULTEKIN-ATASOY, Hanneke HOOFT VAN HUYSDUYNEN, Yuan LU, Tilde BEKKER, Aarnout BROMBACHER and Berry EGGEN (2014) Conflicts as Opportunities for New Insights. *Proceedings of The 19th DMI: Academic Design Management Conference: Design Management in an Era of Disruption*. London, 2–4 September 2014 Pp. 1324 – 1343.
- [16] Tudor, K. "Understanding Empathy." *Transactional Analysis Journal* 41.1 (2011): 39-57. Web.

11TH EUROPEAN ACADEMY OF
DESIGN CONFERENCE

APRIL 22-24 2015

PARIS DESCARTES UNIVERSITY
INSTITUTE OF PSYCHOLOGY

BOULOGNE BILLANCOURT
FRANCE

CONFERENCE ORGANIZERS:

PARIS DESCARTES UNIVERSITY
PARIS SORBONNE UNIVERSITY
PARIS COLLEGE OF ART
ISTEC PARIS

- [17] McDonald, Nicole M., and Daniel S. Messinger. "The Development of Empathy: How, When, and Why." 2011
- [18] Young SK, Fox NA, Zahn-Waxler C. The relations between temperament and empathy in 2-year-olds. *Dev Psychol.* 1999 Sep; 35(5):1189-97.
- [19] Kluger, J. Bunnies, Stinkbugs and maggots: The secrets of empathy. 2013 (science.time.com)
- [20] Calabrese, Leonard, Joseph Bianco, Douglas Mann, David Massello, and Mohammadreza Hojat. "Correlates and Changes in Empathy and Attitudes Toward Interprofessional Collaboration in Osteopathic Medical Students." *The Journal of the American Osteopathic Association* 113.12 (2013): 898-907
- [21] Presser, Jennifer. "Empathy and Clinical Competence." *The Clinical Teacher* 10.5 (2013): 342-43. Web.
- [22] Larson, Eric B., and Xin Yao. "Clinical empathy as emotional labor in the patient-physician relationship." *Jama* 293.9 (2005): 1100-1106.
- [23] William A. Gentry, Todd J. Weber and Golnaz Sadri, "Empathy in the workplace: A tool for Effective Leadership". 2007
- [24] Gentry, W. A., and C. Chappelow. "Managerial derailment: Weaknesses that can be fixed." *The perils of accentuating the positive* (2009): 97-114.
- [25] Ball-Rokeach, S. J., and Nancy Eisenberg. "The Development of Prosocial Behavior." *Contemporary Sociology* 13.1 (1984): 106. Web.
- [26] Mark H. Davis, "A Multidimensional Approach to Individual Differences in Empathy". 1980
- [27] Rygh, Kyrienne. *Value Pursuit - Dialogue through design.* 2013, CRISP MAGAZINE.
- [28] Ertel, Chris, and Lisa Kay. Solomon. *Moments of Impact: How to Design Strategic Conversations That Accelerate Change.* N.p.: n.p., n.d. Print.
- [29] xplane.com – Empathy Map
- [30] Gibb, J.R. (2007). Defensive communication. In C. D. Mortensen (Ed.), *Communication theory* (2nd ed.), (p. 201- 212). New Brunswick, NJ: Transaction Publishers.
- [31] Mattessich, Paul W., Marta Murray-Close, and Barbara R. Monsey. *Collaboration--what Makes It Work.* Saint Paul, MN: Amherst H. Wilder Foundation, 2001. Print.
- [32] Ajzen, Icek. "The Theory of Planned Behavior." *Organizational Behavior and Human Decision Processes* 50.2 (1991): 179-211. Web.
- [33] Koskinen, Ilpo Kalevi. *Design Research through Practice: From the Lab, Field, and Showroom.* Waltham, MA: Morgan Kaufmann/Elsevier, 2011. Print.
- [34] Creswell, J.W. *Research design. Qualitative, quantitative and mixed methods approaches.* Sage, Los Angeles, 2014.
- [35] Lucero, A. and Arrasvuori, J. 2010. PLEX Cards: a source of inspiration when designing for playfulness. In *Proc. of Fun and Games '10.* ACM, 28-37.