

# Design Empathy in Service Design Methodology

An analysis of the AT-ONE method

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## ABSTRACT

There is a rapidly growing importance of services in the world and hence the designing of services has emerged as a new innovative field. This article sets out to uncover how empathy is presented in service design methodology taking the well-acknowledged AT-ONE method created by Simon Clatworthy as the main example. A literature review presents empathy as a skill or interpersonal ability. Considering empathy in design the literature presents empathy as an imaginative projection to the users situation, a way or inner tool the designers use to step into the users shoes. In order to detect how this skill is used and presented in service design methodology the AT-ONE method was analyzed. The analysis shed light to the fact that empathy is not addressed in depth in the method itself. The phrase «stepping into the users shoes» is stated several times, while the word empathy is only used twice in the entire method description and guidelines. A qualitative interview with the author, Simon Clatworthy, revealed that this was due to the fact that he assumes and expects designers to master the skill of empathy before using the method. To explore if this was a trend within service design methodology a second method was looked into, the IDEO Design Kit. In the same way as Clatworthy, IDEO presents empathy as one of their main mindsets, but there is no tool or method teaching designers how to be empathic or how to directly use the skill in the design process. The article concludes with an assumption that there is a trend in service- and human-centered design methodology expecting designers to be empathic people. It seems the ability of empathy should already be mastered by the designer in advance of using service design tools and methods. There are many interesting fields detected in this research that would be interesting to investigate further. Looking into more methods would be interesting to try to verify the trend. Another possible way forward could be to investigate whether or not empathy is possible to teach at all.

**KEYWORDS:** Empathy, empathic design, design methodology, service design, human-centered design, AT-ONE

## 1. INTRODUCTION

70-80 % of the economies of mature countries are comprised by services [1]. The way services are offered and perceived is changing fast as a consequence of this economy and hence the consumers expectations also rise. The digital revolution has driven a radical change in the service

sector. Companies throughout the world have started seeking competitive advantages by leading through innovation as a response to these economical, social and technological trends [1]. Product providers have also started to add services to their products and there is an increased availability of channels for service delivery [2]. Due to the rapid growth and

competition in service businesses in the western world [3] many companies have started to investigate new business opportunities in services rather than products [4].

When developing new services there are several actors to consider. Not all of the actors are visible to the consumer, but they are all part of a common network providing the service. Many businesses approach actors from an economic perspective with the goal of maximizing economic value. However, a service design approach believes that there is innovation potential in looking at actors from a customer perspective instead, and thereby maximizing customer value [5]. The designer's role as an actor is often to be the connection between the user and the business, a facilitator when creating a service that provides the most possible value for the user and at the same time benefits the company. Today there are many different methods available for designers to use as guidelines on how to design services that meet both the user's needs and create value for a company.

The purpose of this paper is to explore how empathy is presented in service- and human-centered design methodology using the AT-ONE-method, *How to design better services?*, developed by Simon Clatworthy as the main example. The analysis will be seen in conjunction with existing literature on the subject followed by a qualitative interview with Clatworthy. The research ends with a discussion of the collected information from both literature review and interview.

## 1.1 Empathy

Empathy is often defined as a skill or an interpersonal ability to understand and sense other people's feelings and thoughts without having had the same experience [6]. In service design empathic understanding means to relate to the user by gaining an emotional connection and understanding the importance of certain experiences [7]. IDEO defines empathy as the following, «Empathy is the capacity to step into other people's

shoes, to understand their lives, and start to solve problems from their perspectives» [7].

Empathy can be divided into two components [7]: affective and cognitive empathy. The affective component is an immediate, and to some extent an unconsidered, emotional response from the empathizer. It is an automatic response and sometimes even a simulation of the other's emotional state. The cognitive component on the other hand is more reflected and can be described as the understanding the observer gains of the other person's feelings. The empathizer will get information about the situation and then relate and take the other's perspective.

When working with user-centered design, awareness of both components is essential [7]. The designer needs to balance the affective resonance and the cognitive reasoning to understand the user's perspective through empathy. This means combining the cognitive and affective components by understanding the user through feeling the user's emotional state. It is important to take both components into consideration because combining them lays the ground for analyzing the user's experience, and hence the designer can use the insight to create a well-fitted service for the user's needs.

## 1.2 Empathy in design

A fundamental starting point when designing services is gaining empathy with the user and their experiences [1]. The importance of «stepping into the user's shoes» has been emphasized by many as it brings the designer new perspectives on how and what the user needs. In order to get this insight the designer needs to find a way to people's minds and hearts in order to create innovative solutions.

Empathy in design is often seen as a basic emotional aspect and a key quality of a designer. A human-centered approach to design puts the user of the service in the centre of the design process and brings the designer a deep understanding of the user's circumstances and experiences. Reaching

these insights inform and inspire the designer and is one of the most important parts of design [5]. The designer needs to relate to the user, meaning going beyond just knowing about the user [7]. This is where empathy becomes important. By using an empathic approach the designers attempt to get closer to the users, their lives and experiences. The approach will increase the likelihood of designing a product or service that meets the users needs [7].

Design empathy draws upon the users real experiences to address new challenges. By allowing a deep understanding of the users needs (by stepping into the users shoes), the design process will be enabled to not only focus upon rational and practical aspects, but dig into personal experiences and private contexts [7]. This will unlock a creative capacity for innovation.

Nargis Gouseynova considers empathy as an imaginative projection into the users situation in her paper *Emotions in design process: How to find an emotional touchpoint with the user* [9]. This implies that being empathic is activities where designers imagine what it would be like for themselves to be in the position of the user. Today designers need to address challenges and projects for a wide range of users across different cultures and environments. When facing these projects empathy becomes important, making the insights more tangible. In this context the term empathic horizon is relevant as it describes the limit of the individual designers ability to empathize [9]. The limiting factors vary and can be due to cultural background, age, gender, level of education and so on. A challenging factor that occurs when empathizing with users is to set aside own behaviors that might interfere with the empathic approach [6]. Trying to expand the horizon requires both engagement and willingness.

For most people empathy and compassion is intuitive, it comes natural at least to a certain degree. However, the challenge of letting go of own role, expertise, values and opinions might be difficult. Yet it might be

necessary to empathize with a user far away from the designers own perspective. The potential conflict created between the designer and the users perception can result in failing to empathize with people of different views, experiences and who have conflicting ideas. It is maybe one of the most challenging limitations when considering the designers empathic horizon, and the designer might not even realize the empathic failure as a result of being blinded by own values and believes.

Methods such as AT-ONE provide tools on how to gain and map insights from users, but there are no tools provided just for the designer and his/her own ability to empathize. AT-ONE is a method used in the first phases of a design process [10]. Clatworthy uses the double diamond to visualize that AT-ONE is applicable and most relevant in the first two phases of the design process, «Discover» and «Define». These phases aim at gaining a profound understanding of the user and empathy is a key element in this process.

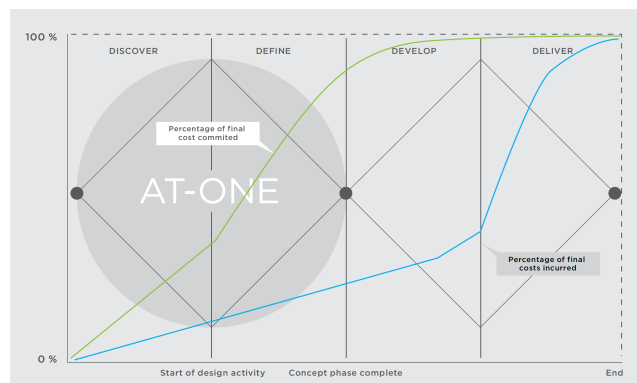


Figure 1: Illustration of double diamond design process model [10]

### 1.3 Service Design

Service Design can be explained as «Designing for experiences that occur over time and across touch-points» [10]. In the Touchpoint book in AT-ONE touchpoints are defined as «the points of contact between a service provider and customers» [11]. Service Design puts the customer in the center of the service to enable an organization to deal with strategic initiatives and operational challenges among other things [1]. Over the past two decades design as an approach has shown that skills and methods such as customer insight, cultural understanding, empathic approaches, creativity and esthetics are valuable and applicable to services.

Clatworthy proposes that service design begins from the moment a customer comes in contact with an organization and ends when the customer concludes it [12]. In order to understand this process it is important to see the business and service experience through the customers eyes. Understanding the customer expectations, experiences and behavior makes the process and journey more tangible for the designers. An important aspect of service design is to gain this insight by putting the user in the center and empathize with their needs and desires.

### 1.4 Human-centered design

Human-centered design is an approach to problem solving and creating innovative solutions for both products and services. It is much used when working with innovating services. IDEO defines Human-centered design as the following:

«It is all about building a deep empathy with the people you are designing for, generating tons of ideas; building a bunch of prototypes; sharing what you've made with the people you're designing for; and eventually putting your innovative new solution out in the world» [13].

There are many service- and human-centered design processes and tools available for designers. Two well-known and recognized methods are the AT-ONE method

developed by Simon Clatworthy and the Design Kit developed by IDEO. Both of these methods and tools are available for designers as guidelines for service innovation. The methods aim at helping designers identify users needs and wishes through human-centered design processes and tools in an inspirational way.

## 2. METHOD

This article is based on two main research methods. Firstly a literature review was done to gain insight to the topic and possible challenges and trends. The literature was used to further analyze the AT-ONE method. Secondly, the literature review was used as a basis for an interview with the main author of the AT-ONE method, Simon Clatworthy. The nature of the data collection was restricted by factors such as time and money, consequently this article is a small-scale research. Literature review and interview as methods was believed to be the best and most efficient use of available resources.

### 2.1 Literature review

A literature review is the identification, reading, summarization, and evaluation of previously done research [14]. The sources used in this article are published articles, books, reports, internet entries and video recordings to mention some within the topic «design empathy». The literature collected and used in this article was selected from available research articles, books and recommendations given to the researcher by professors from The Norwegian University of Science and Technology and the Oslo School of Architecture and Design. The literature investigated in this article was mostly academic literature which includes articles and books primarily written by university professors, scholars and highly experienced professionals within the field. This became a natural arena to search for information as the AT-ONE method itself is developed by a university professor. Most of the articles

read and used as a basis for the literature review are considered professional literature. Professional literature offers practitioners the opportunity to learn from experienced colleagues about key concepts, theories and practices [14].

## 2.2 Interview

An interview with the main creator of the AT-ONE method was conducted with the literature review as a basis. The justification for interview as a method is based on the value of contacts with key players in the field who can provide privileged information [15]. As the main creator of the AT-ONE method Simon Clatworthy is certainly a key player and can offer in-depth insight to the topic. It is reasonable to rely on the gathered information from the interview because the informant is the creator and therefore an expert in the field. The aim of the interview was to understand his intentions with the method, especially considering empathy, and to understand his view on empathy and see how this is reflected in the method he developed.

The interview was semi-structured and aimed towards a natural conversation flow. In an semi-structured interview the researcher has a clear list of questions and issues to be addressed, nonetheless the interviewees elaboration of points of interest is emphasized [15]. The researcher is flexible in terms of order of topics and prepared to let the interviewee develop ideas and speak freely on issues raised by the researcher. The reason for creating a casual atmosphere for the interview was justified by the wanted outcome of the interview. The aim was to get an insight to Clatworthy's personal opinion regarding empathy and his view and reasons for including or excluding empathy in the AT-ONE method. By keeping the interview informal the aim was to let Clatworthy be relaxed and open up in order to dig deeper into his thoughts and ideas.

The interview was a one-on-one interview, which is the most common form of semi-structured interviews. Advantages with one on one interviews are among other things

easy arrangement, opinions and views stem just from the interviewee and the interview is easy to control for the researcher. The audio of the interview was recorded and some notes were taken by the researcher.

## 2.3 Analysis

After both the literature review and the interview was conducted the results and findings were organized and analyzed.

# 3. RESULT

The findings from the literature review and the interview was first looked into separately before compared and seen against each other in a discussion.

## 3.1 Literature review

AT-ONE is a service design method that aims to help businesses innovate in service and develop strong concepts based upon this. The method was developed at the Oslo School of Architecture and Design by Simon Clatworthy in co-operation with different commercial resources.

AT-ONE stands for Actors, Touchpoints, Offerings, Needs and Experience. The method is presented in a book entitled «How to Design Better Services» and provides guidelines and tools for each letter.

### 3.1.1 AT-ONE and empathy in design

The Needs book presents several tools and methods where direct contact with the users is highly emphasized through co-creation and co-designing workshops engaging several different actors [16]. The goal of these methods is to gain a deeper insight to the users experiences by stepping into their shoes. The Needs book might be the book that is most relevant concerning empathy in the AT-ONE method due to the fact that its focus is on the users and their needs alone. Clatworthy divides the needs methods into three main categories: Be the costumer, hear the costumer and see the costumer.

Be the costumer encourages the workshop attendants to step into the users shoes by actually exploring and experiencing the current service themselves. A toolkit is provided to help them be analytic and document their thoughts and feelings throughout the experience.

Hear the costumer is a set of methods, workshops and tools on how to extract the most information and useful insight from interviews. By listening to the user, asking the right questions the designer will gain a deep understanding of their needs. There are many ways to ask questions that will enhance empathy. One way of doing this is by encouraging the user to tell stories. Explaining the experience as a story will facilitate an empathic listener. Many users are not familiar with the idea of answering questions with stories and that is why it is important to ask the question in a way so that the story will be created without the user even noticing. One method is by asking questions that will take the user back to the situation and hopefully bring a concrete scene in their mind. For example: «Where were you when you first decided you wanted to quit your job?». The question focuses on the circumstances and the context and from there the user will further explain the why and the how.

See the customer is the final category and as many other methods Clatworthy encourages designers to conduct observation studies, observe the user in the actual context. By observing the users behavior the designers can gain an understanding going beyond what the users say and focus on what they actually do.

The three categories are presented as a means to deeply understand the user's needs. The word empathy is only mentioned twice in the Needs book when explaining the objective of creating personas. After the analysis of AT-ONE a question arose asking to what degree empathy was considered when designing the method. How does AT-ONE facilitate, use or present empathy? To answer these question an interview with Clatworthy was arranged.

### 3.2 Interview with AT-ONE author

The interview with Simon Clatworthy highlighted some interesting aspects of service design, especially when it comes to what is expected of a designer.

When AT-ONE was created service design was still quite a new field within the design community in Oslo [17]. At the same time many companies were struggling with the first phases in new projects, especially when it came to service and user experience. Getting the right insight was a challenge for many companies at the time. Clatworthy wanted to make a framework people and designers in particular would remember. He gathered all his knowledge about service design and focused on the phases where the final product or service still is not decided. He focused on tools and methods to help diverge thoughts and see a wider perspective instead of focusing on a final product straight away.

When asked about empathy Clatworthy agrees with much that is said in the literature review, that empathy is a key element of service- and human-centered design. Clatworthy emphasizes the importance of empathy in all the letters, also Actors, Touchpoints and Offerings where the user might feel more distant compared to Needs and Experience. However, he also says that the Needs book is the most user-centered in the way that it involves the user in a higher level than some of the other letters. Regardless of this, he empathizes that the user is always present and can never be separated from the designer. AT-ONE is a method that expects the designer to have an empathic mind when using it.

When asked why the word empathy itself is rarely used in the AT-ONE books Clatworthy said it was not a deliberate choice he made, but probably a result of him expecting designers to be empathic naturally. He emphasizes the importance of an empathic evaluation when using all the tools and methods presented in AT-ONE. This is justified by the idea that empathy is the benchmark for a service or experience. To evaluate a service or experience before it is

created requires a good empathic insight from the designer. The essence of this is to be able to experience like the user will experience it.

When asked about why empathy is not a separate part of the method and his thoughts on why empathy has become a skill that is expected of designers, Clatworthy says that for him it was such an obvious expectation because he sees designers as sensitive people. Research and theory suggest that sensory processing sensitivity (SPS) is found in roughly 20 % of humans [18]. SPS is suggested to be a trait associated with greater sensitivity, empathy, creativity, enhanced awareness and behavioral readiness to environmental and social stimuli. The research on highly sensitive brains shows that a «sensitive person» may mediate greater attunement to others and responsiveness to others' needs [18]. Many of the associated features of sensitive people are skills that are commonly known to be key abilities of designers, such as creativity, empathy and awareness to surroundings. If Clatworthy is right, and many designers fall within the 20 % of sensitive people this may suggest that skills like empathy and creativity can be expected rather than skills needed to be taught. Whether or not the skill is possible to learn for someone who is lacking the ability of empathy is a topic that will not be discussed in further detail in this article.

## 5. DISCUSSION

AT-ONE explains tools and methods on how to get insight to the users needs and how to map and document the insight. However, it does not expressively state how the designer should act, do or think in order to feel what the user is feeling throughout the service journey. Why the word empathy is not used more than twice in a method that clearly emphasizes the importance of «stepping into the users shoes» brings many interesting questions to the surface concerning empathy in design.

The interview with Simon Clatworthy revealed an expectation to designers and

their skills in empathizing with users. Empathy is something that is expected of them, a skill that should not need to be taught, but a skill the designer should master. The new insight that came to light from the research and the interview changed the course of this article. Maybe the question was never how empathy was introduced or facilitated in the method, but why it was not more present? Are designers expected to master the ability of empathy? Are methods designed based on an idea that designers are sensitive people?

Clatworthy says that he sees designers as sensitive people and that empathy is such a big part of a design process that he takes it for granted and assumes it is a skill the designer already possesses before using the AT-ONE method. However, the expectations the method requires of the designer is not explicitly stated in AT-ONE. Empathy is considered a core skill to be able to use the method and yet it is barely mentioned. Clatworthy agrees with the statement and said that he probably should have included a separate section in the introduction book about what he, as the creator of the method, expects the designer to know before using it.

As mentioned, a certain degree of empathy and compassion comes naturally to most people. But this natural response can be challenged by many factors such as different background and cultural aspects. If the AT-ONE method is used to understand the experience of an asylum seeker living in Norway illegally for 13 years, can you still expect a Norwegian-born designer to truly understand and feel the users pains? Empathy often comes from drawing knowledge and remembering feelings and thoughts from own experience. When the designer and the user has completely different culture and background, is it even possible to design a method that will facilitate a truly deep empathic understanding? The AT-ONE method, as it is presented today, seems to leave the task of expanding the empathic horizon for the designer to solve independently. For an aspect so highlighted in design, why is empathy so intangible in tools and methods?

## 5.1 AT-ONE and IDEO Design Kit

In an attempt to verify if Clatworthy's idea of empathy in design methods is a trend or just an aspect of the AT-ONE method, a second method was looked into with the same lenses. IDEO is a global design company which has developed several learning platforms and tools for designers working with human-centered Design [19]. When looking into their perception of empathy it became clear that IDEO, just as Clatworthy, see it as a core ability when working in design. They have developed a Design Kit [20] that is intended to be a place to learn about the power of human-centered design and learn tools and methods on how to innovate and solve problems.

In the Design Kit IDEO presents different mindsets they find important for human-centered design. The mindsets are meant to let designers explore and uncover the philosophy behind IDEO's approach to human-centered design and creative problem solving. One of seven of the mindsets presented in the Design Kit is empathy, and the reason why is explained as followed: «Human centered design is premised on empathy, on the idea that the people you're designing for are your roadmap to innovate solutions» [8].

They also state that empathizing with the users is the best route to truly grasp the context and complexities of their lives and thereby put them in the center of the work. It is clear that IDEO, in the same way as Clatworthy, recognizes empathy as a core ability that is crucial for the designer in order to innovate creative solutions. However, in the 47 tools and methods presented in the inspiration and ideation phases of the Design Kit, empathy is barely mentioned. In both the inspiration and ideation phase empathy plays an important role, but the word itself is only mentioned in one tool concerning body language in one of the 22 tools and methods presented in the inspiration category [20].

Without being able to further research whether or not IDEO shares Clatworthy's expectations about designers, it is difficult

to draw a conclusion. Still, the methods and tools IDEO present indicate the same trend. Empathy is presented as a necessity of human-centered design, but in both AT-ONE and IDEO Design Kit no method, tool or guideline on how to gain and use the skill of empathy is included. This seems to be due to the same expectations as discussed above, the expectation that empathy is not something that needs to be taught, but a natural skill needed in order to fully understand and use the methods.

## 5.2 Empathy definition and AT-ONE

Looking back to the definition of empathy it seems like AT-ONE as a service design method helps and encourages the designer to gain cognitive empathy, even though it never states this expressively. The method presents tools to lay information on the table in a way that should evoke an empathic reaction from the designer, help the designer «step into the users shoes» as it is explained in the books. However, the immediate and more unconsidered empathy that is crucial in design as explained above, the affective, is not addressed at all in the method. The affective empathy the designer gains is immediate and feels natural and real. By exploring these emotions the designer can dig into and start to thoroughly understand why the user's emotions occur, what is triggering them, how they can be changed and so on. The affective part of empathy can be seen as an emotion in a specific moment and so it is questionable to what extent the affective empathy can be facilitated or taught to a person. This is a discussion that will not be explored further in this article.

The AT-ONE method has met some criticism concerning similar aspects. Sune Klok Gudiksen states in his article *The service Ouroboros: Designing persona service cycles* that AT-ONE as a research method clearly has the user in mind in the first steps in the creation of customer journeys and blueprints, but no visible and concrete exploration of the understandings of the customer [4]. Exploring the understanding can be interpreted as why does the user feel the way he/she feels. What is causing this



experience? The user might not be able to answer the question because they might not be aware of it. This is where empathy is crucial for a designer. Understanding why the user is feeling a certain way and what can be done to enhance or remove the emotion. If the user is not aware of the reason, an empathic approach from the designer could uncover the answers.

Similar criticism is found in discussions concerning the touchpoint-cards used in workshops in the letter T book. The cards provide valuable information in mapping existing situations, they can be used to identify touchpoints, create awareness concerning responsibility in the different touchpoints, bring attention to routines in services and so on [11]. The cards provide a wide range of methods and tools to get a variety of different insights from the user. Gudiksen still criticizes it for being mostly inspirational and not directly tied to a deep customer understanding. If we assume that deep customer understanding means empathizing (stepping into the users shoes, and feeling what the user is feeling), we can question if the AT-ONE method is missing a fifth letter or a workshop in one of the books on how to gain deep understanding and how to use it to create better services.

## 6. CONCLUSIONS

This article derived from looking into how empathy is presented and facilitated in service design methodology using Clatworthy's AT-ONE method as the main example. The course of the article changed throughout the research and landed on questioning why empathy was not more present in the method. The literature review detected that empathy is described

as a basic and cherished skill in design, but yet the research conducted uncovered how intangible the skill is in tools and methods. Whether or not empathy is a learnable skill or not, is something that can not be stated and there will always be conflicting arguments. The same goes for whether or not designers are sensitive people.

AT-ONE is a method that expects the designer to be empathic and to know how to use the skill when collecting and analyzing information. AT-ONE will facilitate and help the designer get cognitive components of empathy, but the affective is left to the designers own intuition and skill. By looking into another well-recognized service design methods, IDEO Design Kit, we see the same trend.

### 6.1 Further research

Further research can be done in the subject «empathy in design» building on the discussion revealed in this article. Concerning expectations of designers, more methods could be investigated. A more psychological approach could also present an interesting topic for further research investigating if it is in fact so that designers are sensitive people. Furthermore empathy could be investigated by looking into what it actually means in the field of design. There are many definitions, and it can be seen differently from a skill to a human feeling. Independently of definition, it would be interesting to research whether or not empathy can be taught. If yes, how can service design methodology facilitate and encourage designers to use an empathic lens?

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