Design meets Ethnography

Reflections on design, innovation, value creation and ethnography

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ABSTRACT

There is an increasing attention towards users in today's business. Focusing on creating value for users can be a source to innovation and a way for firms to achieve competitive advantage. Ethnographic methods can lead to a deep understanding of users, and has been in the spotlight of design as a discipline for some while. Ethnography appeal to designers as it provides a deep understanding of the meaning their design have for others, and as it can help them to create more compelling solutions that are of value for the users. The paper is based on a literature review, and provides an insight into the relevance of ethnography for innovation, design and value creation, and seeks to answer whether combining ethnography to design can lead to value-added innovation for the users. Research indicates that ethnographic observation methods can be used for gaining valuable insight, which in turn can lead to designers creating innovations that are of value for the users. Methods for integrating ethnography to the design process are addressed, and findings suggest a way in which designers and ethnographers collaborating as desirable.

KEYWORDS: Design, ethnography, innovation, value creation

1. INTRODUCTION

Today, customers live in a rapidly changing technical environment [1], and the firms access to information and new markets has dramatically increased due to the globalization. This has led to bigger international competition [2] and to greater opportunities [3], and firms are searching for new ways to achieve competitive advantage [4]. Innovation has become an important factor for this [1, 5], and good design is shown to be one of the major determinants for success in the competitive marketplace [6]. The velocity of research on innovation in the area of design is thus increasing [7].

Von Hippel identified the users as a source to innovation already in the late 70's, and argued

that three out of four successful innovation projects were a result of initiating projects based on users needs rather than on technological opportunities [8]. Today, many businesses feel that it is necessary to understand consumers in context in order to be competitive and have shifted their focus towards users. Businesses need to have knowledge about what drives people, human behaviour and what is meaningful to people. Companies are increasingly open to approaches that develops products and services based on the users need [9], and many businesses have thus extended their innovation process to include human-centered, observationbased research methods often referred to as ethnographic methods [10].

Given the fact that both design and ethnography seems to play an important role for innovation with the user in focus, this paper seeks to answer the research question: Can combining ethnography and design lead to value-added innovation for the user? And in which way is ethnography relevant for design, innovation and value creation?

The article is based on a literature review on innovation, design, value creation and ethnography, and is structured as follows: The first sections provide an insight into ethnography, innovation, design and value creation, and how ethnography is relevant for each of the terms. The article then refers to a method for how to combine ethnography to design, followed by a discussion and a conclusion.

1.2 Ethnography

Ethnography is a research method in the field of anthropology [11], which is based on observing people in their natural environments to see the world through the users eye. This provides a unique way of discovering the underlying meanings behind behaviour, to get a holistic understanding of how people comprehend their world, and to see patterns of behaviour in a real world context [1, 12-15]. As LiAnne Yu, a cultural anthropologist, states; "If you want understand what motivates a guy to pick up skateboarding, you could bring him into a sterile laboratory and interrogate him, or you could spend a week in a skate park observing him interacting with his friends, practicing new skills and having fun" [12, p. 5]. Also, what people say they do is often not what they actually do. Reasons for this can be that people are not aware of what they actually do, or they do not have the vocabulary to talk about it. By doing observations, one can reveal what people actually do [15].

The most fundamental approach in ethnography for gaining insight in consumer behaviour is participants observations [16]. This can be done by placing the observer in the role of the

customer, or by living together with the people studied and becoming involved in their activities and daily life [1, 15]. Ethnographers also conduct non-participant observations, which can be done by for example "shadowing a person throughout his or her daily activities or by setting up video cameras to track multiple persons behaviours" [1, p. 35]. Interviews are also common approaches in ethnography, and the observations can provide ethnographers a way to learn how and which questions to ask. Field notes and videotaping are common tools for capturing and documenting the research [1, 15].

2. INNOVATION

The practice of innovation goes far back and is as old as human activity itself [7]. It historically occurred as a direct response to a user need [1, p. 36]. In 1976, Downs and Mohr stated that "innovation has emerged over the last decade as possibly the most fashionable of social science areas" [17, p. 700].

The Oslo manual, an international standard for the measure and analysis of innovation, defines innovation as "the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations" [2, p. 46].

There are many types of innovation and the classification may vary according to the intention behind the innovation [18]. This article will briefly look into four types of innovation that are relevant for the discussion part, and for the knowledge of innovation focusing on the user aspect.

2.1 Incremental and Radical Innovation

Two categories of innovation for products and services are incremental and radical innovation, explained by Norman and Verganti [18, p. 82] as;

- Incremental innovation: Improvements within a given frame of solutions ("doing better what we already do")
- 2. Radical innovation: A change of frame ("doing what we did not do before").

While incremental innovation happens frequently and is the dominant type of innovation, radical innovation happens rarely. They are, however, both important. As Norman and Verganti states: "Without radical innovation, incremental innovation reaches a limit. Without incremental innovation, the potential enabled by radical change is not captured" [18, p. 83].

2.2 User-driven innovation

As mentioned in the introduction, businesses are increasingly focusing on understanding their costumers and on uncovering their needs as a competitive advantage. Companies towards delivering products or services that provides a special value or experience to the costumer. This has led to an increased use of the term user-driven innovation [5]. A user-driven innovation process focuses on the customer needs [5] and refers to the process of gaining information about the user [19]. The involvement of the end-user in the innovation research can be done through different ways like: design for users, design with users and design by users. "When a product is designed for users, data and theories regarding the user are used as a knowledge base for design. A design with users denotes an approach where user studies are included, together with feedback from the user. When users are actively involved in the design of the product or service, the term design by users can be applied" [20, p. 14].

2.3 Meaning based innovation

The term 'innovation of meaning' relates to the *purpose* of a product or service as perceived by the user. The purpose can be explained as the "why", rather than the "what" [21]. According to Öberg and Verganti, the level of meaning is a level of innovation that has been overlooked

People are constantly searching for meaning, and therefor also for new solutions to serve their existing purposes better. "Innovation of meaning is a change in in the purpose of a product or service from a users interpretation in a given context of use" [21, p. 83].

Meaning as a driver to innovation can be seen in light of the development in the watch industry during the 1970's. Before 1970's watches were considered as jewelleries that were past along for generations. But with the emerging electronic technology, a small number of Japanese companies transformed the watch from a jewellery item to a tool for telling time with a numerous of subsidiary functions such as timers, games and calculators. This meaning change made the Japan, at that time, to become the world leading of watch production [18].

The importance of meaning based innovation can be seen in Verganti's diagram on the dimensions of innovation consisting of three modes of innovation [22, p. 452], as shown in figure 1. Design driven innovation is in this diagram presented as a result of the generation of new meanings.

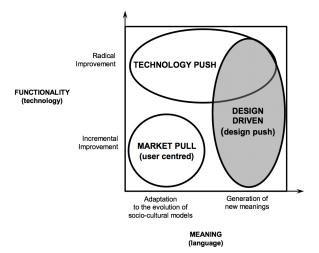


Figure 1: Verganti's dimensions of innovation

2.4 The relevance of Ethnography in Innovation

In order to "sustain innovative thinking and provide long-term breakthrough ideas that resonates deeply with consumers, we need to look for deeper, less obvious patterns to inspire and inform out thinking" [10, p. 247]. A deep understanding of customer and user needs can be gained through observations and ethnographic research that seeks to understand the meaning-based needs and not only the fundamental use and usability needs of the customer or user [23].

Beckman and Barry have developed an innovation process to be used to generate new products, services, business models, and other design. It consists of four steps: observation, framework, imperatives and solutions. Sara L. Beckman and Michael Barry argue that the core of the innovation process is observation, requiring the innovating team to understand their target groups needs in the level of meaning [1].

In IDEO's 'The ten faces of innovation' by Tom Kelley, the anthropologist is one of them. They argue that people who adopt the learning roles will be open to new insights every day. The anthropologist is according to IDEO the one who "brings new learning and insights into the organization by observing human behaviour and developing a in-depth understanding of how people interact physically and emotionally with products and services" [24, p. 5].

3. DESIGN

Design is formulated by Heskett as the deliberate and reasoned shaping and making of our environment in ways that satisfy our needs and give meaning to our lives [25]. Some claims that design comes from the Italian word 'disengnare', which means drawing or preliminary study and planning [26]. Others see design as the discipline which emerged as a result of the industrial revolution and modern methods of mass production, where the work of designing objects began to develop as a separate role in the manufacturing process [16].

Today, the advances in technology has led to an expansion of opportunities in design that impact

people's behaviour and experience beyond the specific designing of the object itself [27]. Design as a profession has expanded, and the term design can among others be used about interaction, experience, products and services [28]. According to Simon, design is about "changing existing situations into preferred ones" [29, p. 111].

Design has shifted focus towards more acceptance and incorporation of user studies and towards enabling user experiences and designing with consideration of people's current and desired experiences with products and services [14, 27, 30]. It has been claimed that a good designer is "able to see things in different ways, to determine the users meanings, to organize them in a structured whole, and to reorganize them depending on the result" [31, p. 534]. The change can partly be seen by the development of computing and communication systems that demanded 'user experiences', and not standingalone items [30]. As the scope of the designer's field is being enlarged, and the knowledge of user studies grows, the boundaries connections to other fields expand [30].

One important mission of the designer is to identify and meet the users needs and wants. This can be hard as consumers often have complex, multiple needs which they are not always able to express. But designers may develop products or services that meets certain needs in which consumers did not know they had. An example is the popular Post-it notes [16], and the well-known example with Henry Ford who said that if he had asked his customer what they wanted they would have answered a faster horse. One can not expect customers to always know what they want and to envision the future [24].

3.1 Design in the field of innovation

Organizations seek competitive advantage through innovation, and design is as mentioned one of the major determinants for success. An innovation solution can be presented "in which the designer serves as articulator of cultural values and emotions to renovate existing products and communications strategies, to design new products with cultural content and meaning based on cultural values" [32, p. 498]. Consuming a product implies to experience it, not only buying, owning and using it [32]. The Oslo Manual states that "design is an integral part of the development and implementation of product innovations (good or services)" [2, p. 48]. Design has a strategic relevance, and can bring a sustainable competitive advantage when used systematically [33]. "The role of design has changed from developing new products to developing mechanism for organizations and societies to deliver better and innovative products and services for customers and citizen"[34].

3.2 User-centered design

As designers can be seen as ambassador for users [14], terms like user-centered design and human-centered design are in focus. The terms are often used interchangeably, and human-centered design is the ISO term for user-centered Design, ISO 9241-210 [14]. Sanders has presented user-centered design as a zone of activity within the landscape of human-centered design (research) [9].

User-centered design is today often used about the approach where the users needs, wants and behaviour linked with both products and services are given much attention during the design process [14]. AIGA, the professional association for design, states that great design always connects with people. And to be able to truly connect, designers need to understand the meaning their products have for others [12]. The methods are often based on an iterative cycle of investigations, where each iteration commonly consists of observations, ideation phases, and rapid prototyping and testing. Each iteration builds upon the lesson learned from the previous iteration [18].

3.3 The relevance of Ethnography in Design

Ethnography migrated into the field of design through human-computer interface design (HCI), studies on how humans interact with computer software in the workplace, called 'computersupported cooperative work' or CSCW [1, 11, 14, 16]. Before this, software designers used to develop programs based on their own intuition and thoughts on how users would interact with these programs [16]. The Participatory Design (PD) community with roots in the design of workplace environments Scandinavian in countries [30] also contributed to the adoption of ethnographic techniques in the field of design by aiming at involving users in the design process to reflect their needs and interest in products [14]. By integrating ethnographic methods, designers received help to better understand the needs of the users [13, 15].

Ethnography appeals to designers because it can provide a window into the ways users interact with products in their everyday lives [16]. Ethnography can be a tool for better design by helping designers to reveal a deep understanding of people, how they perceive their world, and the meaning their design has for others, and by that create more compelling solutions [12]. Dharrel Rhea, a design research consultancy, says that "A designer should care about ethnography because It can help produce more compelling, innovative design that really connects with users – in a way that creates delight" [12, p. 3].

Factors that influence people's experiences can be factors designers can influence and control like sound, smell, texture, sequence, logic and so on. These factors are interpreted in different ways due to personal, social and cultural meaning. It is therefor critical for designers to understand as much as possible about how these factors are interpreted in order to develop design that support people's experiences in desirable ways [27]. Suri argues that one key area for the practice of designing for experiences is to understand what matters. What qualities matter to the users and how can design enhance their

experiences. This includes learning about a broad range of activities, thoughts and feelings. And a helpful tool for achieving this are ethnographic methods from anthropology [27].

An example on the importance of understanding the underlying needs of the users when designing for innovation is the U.S. Governments try to improve the production of acorn grinding in the early 1990s. This production was mostly done by Native American tribes by providing them with iron grinders. The attempt failed due to not understanding that the Native American tribes also used the place to pass along traditions and tell stories. As the U.S. Government tried to improve the production by only consider it as a food production place, and not understanding the tribes meaning of the place, the iron grinder solution failed [1].

4. VALUE CREATION

The term value is used in a number of disciplines like design, anthropology, psychology, economics and marketing [3]. Consumer value has been defined by Hilliard as an interactive relativistic preference experience [35], which typically refers to the evaluation of an object (both products and services) by a subject (consumer or costumer) [36]. The anthropological approach sees value as determined through social and cultural constructs and that an object can not contain value [3].

4.1 User-value

There is, as mentioned before, a growing recognition that design focusing on providing value for users is important for business success [37]. User value is according to Boztepe something that is "created as a result of the harmonious combination of product properties and what users and their local context bring to the interaction with the product" [38, p. 62].

Prahalad and Ramaswamy argue that the meaning of value and the process of value creation are rapidly shifting from a product- and firm-centric view to personalized consumer experiences [39]. Gutman has made a means-end chain model based on consumer categorization processes. The model suggests that "consumers produce choose actions that desired minimize consequences and undesired consequences" [40, p. 61], and attempts to explain how value is formed in the interface between products attributes (made by designer's intentions) and users needs. It suggests that product attributes can lead to psychological or social advantages like the feeling of happiness or comfort, and to the social and personal values. In order for designers to understand how products and services will be perceived by users, an understanding of higher user goals and how they will be related to consequences is required [3]. For example, "knowing that consumers want to look well dressed doesn't tell us much unless we know why they want to look that way (sexual attractiveness, accomplishment, neatness etc., which are value-level considerations) and what attributes in clothing they associate with being well dressed" [40, p. 60].

Boztepe also highlights the definition of 'value as experience', as important for the discussion on value in design. She argues that the terms consumer value and costumer value, and the focus of value as the evaluation of some object/product by some subject/user is relevant for the field of design as it examines the term value within the relationship of user and product [38]. She expresses that "users interact with products within the context of their goals, needs, cultural expectations, physical context, and emotions. And products, with their tangible and intangible qualities, can influence the way users interact with them. What we call user value is thus created as a result of the interaction between what the product provides and what the users bring in terms of their goals, needs, limitations, etc" [38, p. 58].

4.2 The relevance of Ethnography in Value Creation

People in different cultures can have different behaviours and experiences with products but still share common values [3], and value can change from one context to another [38]. It is thus essential to understand the user's goal and that the same goals can be achieved in different ways. By observing the activities around the use of products one can learn which products lead to desired consequences [3]. Tools from ethnographic research focusing on value assignment are needed to handle the concept of value and to build a better understanding of user value assignment [38]. To examine how user value is developed in relation to the users experiences and interaction with products, an ethnographic research using observations, interviews is valuable [30].

People often invest in objects that give them meaning which are not aligned with the producers intended meaning or the objects functions, but for what the object signify. In this view, the value is not in the object itself, but in the context and message it conveys. It is thus important to consider how goods are made sense of and what they provide to users including status, prestige and identity [37].

5. ETHNOGRAPHY IN THE DESIGN PROCESS

There are many ways of how ethnography could come into the design process. The ethnographer could do observations alone, and then give the insight from the study to the designer, the designer could actively be a part of the participatory observations, or a project could consist of a team based on both ethnographers and designer [15].

Ethnography within design has often been done by ethno-methodologically informed design and participatory design [15]. Ethno-methodologically informed design involves a fieldworker who provides the designers with detailed observation. The fieldworker does not engage in the actual design work and the providing of information may be the only point of connection between the fieldworkers and designers. Participatory design

aims to benefit from the users own knowledge about their own behaviour, and are using this directly in the design process to develop appropriate solutions for the user [41].

Hughes et al have identified four different usage of ethnography in system design [13, p. 432]:

- Concurrent ethnography: where design is influence by an on-going ethnographic study taking place at the same time as systems development
- Quick and dirty ethnography: where brief ethnographic studies are undertaken to provide a general but informed sense of the setting for designers
- Evaluative ethnography: where an ethnographic study is undertaken to verify or validate a set of already formulated design decisions
- 4. Re-examination of previous studies: where previous studies are re-examined to inform initial design thinking.

The most common usage associated with design is according to Hughes et al 'concurrent ethnography'. This usage includes an iterative process where ethnography is followed by a debriefing session involving both the ethnographer and the designer. The process is as follows fieldwork > debriefing > prototyping > fieldwork, and goes on until the team are satisfied [13].

AIGA, The Professional Association for Design, has suggested a way including six steps for the collaboration of ethnographers and designers in the design process [12]:

- 1. Define the problem
- 2. Find the people
- 3. Plan an approach
- 4. Collect data
- 5. Analyse data and interpret opportunities
- 6. Share insight

Each step includes the role of both the ethnographer and the designer. Based on this information, a chart has been created.

Step	Ethnographer	Designer
1	Helps all stakeholders understand the questions	Articulates a clear brief and helps define
	and the role research can	the information and
	play	deliverables needed to
		communicate research
		findings effectively to the
		client
	Defines and finds the best	Confirms that the people
2	types of people to study	meet the criteria of the
		brief
	Designs the specific	Prepares the stimuli
3	method for collecting data	that the ethnographer
	and develops the tools for	will use during research
	conducting fieldwork	and sets frameworks for
		understanding data
	Uses a trained eye to	Participates and makes
4	probe, ask questions and	observations of what's
	observe small detailes and	taking place
	nuances	
_	Leads the analysis by	Collaborates with
5	grounding fieldwork in	the ethnographers to
	research training and	transform observations
	outside experience	and data into a coherent
		and compelling story
	Tells the story in a way	Creates a visual narrative
6	that helps people embrace	_
	recommendations and	transfer and buy-in within
	create a shared vision	an organization

Chart 1: AIGA's six-step collaboration between ethnographers and designers

6. DISCUSSION

The previous sections have shed light upon the relevance of ethnography for innovation, design and value creation, and showed ways of integrating ethnography into the design process.

This section investigates the research question, 'if combining ethnography and design can lead to value-added innovation for the user', further by discussing how all the terms are related to each other, and the role of ethnography in the design process.

6.1 Innovation, Design and Value Creation, and how Ethnography comes into the picture

Creating value for customers has as mentioned been pointed out as the source of sustainable competitive advantage. It is claimed that successful innovation is the one who creates customer value [42]. Kim and Mauborgne argue that firms need to focus on promoting value innovation in order to achieve sustained profitable growth. And in order to value innovate, companies must have insight in if they offer value for their costumers [43]. This is supported by Trueman and Jobber's research where they argue that one of the most important thing in order to succeed in the complex business environment is to raise the users perceived value [44].

In Gutman's means-end chain model, value is explained as formed in the interface between the designer's intention and the users needs. Gutman emphasizes the importance of designers to understand user goals and their relation to consequences in order to understand how products and services will be perceived by users [3]. This is also discussed by Walsh et al who states that design can be a tool for firms to innovate and compete on user value by delivering products and services that increases the customer's perceived value of new products and services [45]. It is however claimed that the designers research methods, that typically include surveys, focus groups, interviews and usability tests, never can lead into large-scale improvements as it often are limited by the participants' current expectations [46]. This can be seen in light of Boztepe who argues that there is a need for tools and research frames to help designers plan and conduct research that will lead to highly relevant information [37]. Kumar and Whitney highlights the importance of ethnographic observation methods which they argue can be used to gain valuable insight, which in turn can lead designers to create innovations that are of value for the users [46]. Blomberg et emphasizes the importance ethnography to design, and argues by presenting six specific reason in which ethnography can be relevant for design [15]. Ethnographic methods can in light of this thus be argued of being much valuable to design.

On the other hand, gaining an understanding on how users experience their world and how they value products requires time and resources, as argued by Melican [30]. Hughes et al, however, claims that ignoring the value ethnography can bring could be much more costly in terms of insufficient systems and dissatisfied customers [13]. Elliot and Elliot claim that ethnography reaches parts other research approaches cannot. Ethnography can according to them among other access what people really do rather than what they say they do. Many parents may for example claim that they do not allow their children to watch violence on television. But observations done on this area has shown that children often see violence on television, and that it is the parents who wants to believe that they do not let their children watch things on television that might give them nightmare [1]. Based on this, it can be indicated that ethnography might play a positive role for design by observations leading to highly relevant information, and that the value gained from adding ethnography to design can compensate for the required time and resources that might follow.

The importance of observation for innovation is also discussed by Beckman and Barry, who highlight observation as the core in their innovation process, and claims that observations are needed in order to understand the users needs in the level of meaning [1]. This is supported by Elliot and Elliot, who argues that ethnographic observations seeking to understand the meaning-based needs can lead to a deep understanding of users [23]. Verganti and Normann supports the importance of meaning based innovation and states that breakthrough design-driven innovations reflect innovations of meanings [22]. They, however, claim that meaning-driven innovation have potential to be design-driven if the observations are rooted in an understanding of how society and culture are changing, and fundamental meaning questions of new and their interpretations are addressed. According to Verganti and Normann, the more time researchers use on studying existing human behaviour, activities and products, the more they get trapped into existing paradigms leading to incremental innovations. An understanding of the changing human behaviour can thus seem to lead to radical innovations.

Meaning as a driver to innovation can also be seen in the cited example of the development of watch industry in section 2.3. This example shows that the new innovation on watches is due to the changing human behaviour. Verganti's model of the innovation dimensions, presented in section 2.1, shows that a user-centered (market pull) approach can lead to incremental innovation, while an design-driven approach where the generation of new meanings are in focus can lead to both incremental and radical innovation. As ethnography can be seen as not only the understanding of current human behaviour, but also about how and why it is changing [47], it can be a helpful tool for understanding the patterns of changes in human behaviour. Adding ethnography to design can in light of this be seen as a source to both radical and incremental innovation. However, it can be indicated that ethnography in the field of design has its biggest potential in leading into incremental innovations, but might lead into radical innovation if the level of new meaning is addressed. But regardless of radical incremental innovation, the research question considers value-added innovation for users. The last section thus indicates that ethnographic observation methods can be used for gaining valuable insight, which in turn can lead to designers creating innovations that are of value for the users.

6.2 The role of Ethnography in the Design process

Hughes et al argue that if it is to be accepted that ethnography is an important mean for design in order to gain knowledge about social matters, then "serious attention needs to be given to the variety of ways in which ethnographic studies can be used by designers" [13, p. 431]. Their study of 'concurrent ethnography', show that the contribution of fieldwork to design has a declining rate of utility during the iterations. They

argue that the 'quick and dirty ethnography' can be capable of providing much valuable knowledge in a short matter of time, and that the 'payoff' from 'quick and dirty' ethnography is greater in terms of time spent in relation to the utility of the observations. This might indicate approach where ethnographers an undertake brief ethnographic studies which in turn informs designers is a desired approach. It is, however, not enough data to support this statement, as the four usages of ethnography their article presented in all include ethnographers and designers working independently. A problem with this type of approach is also raised by Hughes et al which see a problem with the communication of the findings from the ethnographers to the designers [13]. This is supported by Melican who argues that the application of ethnography to design can lead to disagreements due to lack of alignment between the designers and ethnographers conducting the user research. Disagreements can according to him typically be concerning the "role and value of the research, and how the designers are to make use of the research data" [30, p. 181].

To reduce the disagreements between ethnographers and designers, an approach where designers conduct ethnographic methods could be considered. Designers are also interested in human behaviour and are used to conducting observations and interviews. Blomberg et al has explained the difference between the interests of ethnographers in relation to designers in that the designer is more interested in understanding human behaviour in order to design artefacts that meet the needs of the users, whilst the ethnographer is interested in understanding human behaviour as it is reflected in the life of people. The designer therefore spend much time on testing and evaluating a certain design in relation to the users need whilst the ethnographer focuses on understanding and observing human behaviour per se [15]. HEAD claims that ethnography conducted by designers differ from its roots in anthropology [14]. Their study show that designers spend shorter time in the field compared to ethnographers, and that the designers focus is narrower. According to them, ethnography done by designers is often "too instrumental and limited to deriving 'implications for design': lists of needs, problems and requirements" [14, p. 37]. An approach where designers conduct ethnographic research can hence not be seen as desirable.

According to Blomberg et al, ethnography within design has often been done by ethnomethodologically informed design participatory design, explained in chapter 5 [15]. Kjærsgaard and Otto argue that the role of ethnography within design cannot be like in the ethno-methodologically informed design and participatory design. They suggest a design anthropological approach where context and practices of use, and design are intersected in order to develop a holistic understanding both in the field and in the design studio. It should be a collaborative process between ethnography and design [41]. An approach where ethnographers and designers collaborate during the process can thus seem to be preferred. This might in turn indicate that the 'six step-collaboration' between ethnographers and designers, presented in section 5, can be a possible way for the combining of ethnography and design.

7. CONCLUSION

The discussion indicates the importance of ethnography in design for ensuring innovations that are of value for the users. As mentioned in the introduction, firms are searching for new ways to achieve competitive advantage. Ethnography can be a tool for this by providing companies with a better understanding and alignment with their consumer's values. Adding ethnographic observations to design can lead to a deeper understanding of human needs and be used for gaining valuable insights, which in turn can lead to designers creating innovations that are of value for the users. By the collaboration of designers and ethnographers, understanding of users can be developed in order to ensure that the products and services

designed are of value for the users [37]. And the value products provide for users is one of the key attributes that distinguishes breakthrough products and services from their closest followers [48].

The discussion indicates that the desired way of integrating ethnography into the process of design is by designers and ethnographers collaborating rather then by the designer conducting ethnographic research, ethnographers doing observations alone and then gives the insight from the study to the designer. A way of doing this has been presented by AIGA. However, as this article only considers one way of performing this collaboration, it is not sufficient data to validate the process presented by AIGA. More research is needed on the collaboration ethnographers between designers, and how to integrate ethnography into the design process.

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