THEORY AND PRACTICE OF BRAND CO-CREATION

DISSEETATION

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Abstract

The focus of this thesis is set on the application of the co-creation construct in the area of brand management and branding. The paradigm of brand co-creation follows a stakeholder-oriented perspective on brand building. A brand is seen as dynamic social process constructed through multiple networked interactions and relations between the company, the brand and various stakeholders. Instead of accepting the brand owner’s view of what its brand is, stakeholders act as co-creators of brand meaning. In fact, the concept of co-creation has become increasingly popular to contemporary branding literature and is regarded as a dominating paradigm shift in brand research. However, the topic is still in a fledgling state and further insights on the development and management of brands in the era of co-creation are needed. Therefore, this doctoral thesis contributes to brand research and brand practice alike by presenting four stand-alone papers on the theme of brand co-creation.

The first paper in Chapter 2 creates the foundation for examining product- and brand-related effects of co-creation. The aim of this chapter is therefore to define and delimit the concept and process by describing the dominant research streams relevant to the phenomenon, presenting an up-to-date literature review, and discussing avenues for future research. The paper concludes by identifying gaps in research that establish the relevance of the subsequent empirical chapters.

The second paper in Chapter 3 investigates the effect of co-creation on non-integrated consumers. That is the majority of the total who, in the real world, remain passive and only observe the outcome of the co-creation process. The construct of observer-based brand equity is introduced and a 2 x 2 between-subjects experimental research design tests a postulated conceptual framework. Thereby, the general effect of co-creation on observer-based brand equity is analyzed and the effect of two independent variables is captured. These variables are the intensity of integration and the level of expert knowledge.

The third paper in Chapter 4 explores the dark side of brand co-creation. The tendency in existing studies has been to take an optimistic perspective and overlook the fact that co-creators might misuse their increased empowerment to push the brand in unwanted directions. To counter that limited view of the phenomenon, the notion of ‘non-collaborative co-creation’ is described and defined. A 2 x 2 between-subjects experiment measures the observer-based brand equity before and after exposure to purpose-designed co-created treatments that take the form of either ‘brand play’ or ‘brand attack’ and is executed either by established artists or mainstream consumers.
The fourth paper in Chapter 5 reflects upon the relevance of co-creation in business-to-business branding. A qualitative case-study is presented and analysed, concerned with a transformation process of a German prosthetic-technology company, from internally governed branding to an externally co-created brand. This paper takes a dynamic approach to research brand co-creation through a longitudinal design that allows to analyze data ranging from 1988 – 2018.

This thesis concludes by offering an overview of the findings of each chapter before answering the main research question by means of a synopsis of the theoretical and managerial implications identified. General limitations are discussed and directions for future research suggested.
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“A ship is always safe at shore but that is not what it’s built for”

(Albert Einstein)

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1 Theory and practice of brand co-creation

1.1 Research background

The famous company Nike offers an early insight into the process later recognised as ‘co-creation’ of a brand. The founders of what was first called Blue Ribbon Sports, Bill Bowerman, a track-and-field coach at the University of Oregon, and his former student Phil Knight, established their business model in 1964 by turning customers into co-creators of the brand and involving them in various brand-related processes which had initially been reserved to the organisation. In particular, Nike treated users of their products as partners rather than targets. Runners were actively integrated into product development, their experience and feedback being considered essential to the process of conceiving, realising and optimising the design of their running shoes. Co-creation by the company and its customers thus generated products that were ‘relevant’ (Ind et al., 2012). Today, Nike maintains the process only at the level of professional sport. In general, however, co-creation continues to present a vital element for brands and branding, which is most evident in the existence of ‘brand-related communities’ (Konrum et al., 2017).

The example of Nike demonstrates not only a greater openness than before to the outside world, with the aim of establishing and sustaining relationships and partnerships with stakeholders, but also a shift in thinking from an organisation-centric logic to one that is highly participative (Ind and Coates, 2013). Consumer involvement in co-creation is a dominant force in business today (Gyrd-Jones and Konrum, 2013), as seen in various practical cases demonstrating the relevant role of stakeholders in the creation of value for companies (for example: Hatch and Schultz, 2010; Ind et al., 2013). A main constituent of the discussion of co-creation since its recognition in the cases of Nike and others has been the argument that value is unfolded through interrelations between customer and provider, where the customer is converted from a passive observer to an active co-creator (Prahalad and Ramaswamy, 2000; Vargo and Lusch, 2004).
The phenomenon of co-creation is not in itself an entirely new notion. Studies conducted in the 1960s had already provided evidence that users can innovate (Enos, 1962) and patterns of co-creation can be identified before the turn of the twentieth century (Wikström, 1996). While industrialisation and the advent of mass production may have suppressed the co-creational approach to output generation, increasingly complex market environments subsequently limited the ability of conventional mass marketers to meet the heterogeneous needs of contemporary consumers (Christodoulides, 2008; Iglesias et al., 2018). Consequently, since the millennium, the paradigm of co-creation and the notion of companies co-opting consumers to become co-developers of value and meaning have re-emerged (Prahalad and Ramswamy, 2000, 2004). They have developed into one of the most discussed and debated topics across a broad range of research fields, including information systems, economics, management, and marketing (Ind and Coates, 2013; Rindfleisch and O’Hern, 2010). That prominence is confirmed by a search in Google Scholar in February 2019 on the general term ‘co-creation’, which produced more than 4.2 million results. The general notion of co-creation is increasingly being adopted as an overarching concept in many subfields of marketing, such as for instance experiential marketing, marketing communication, business-to-business marketing, relationship marketing, and brand management and branding.

The focus of this thesis is on the application of the co-creation construct in the last of those sub-disciplines: brand management and branding. Historically, brands were used by craftsmen to differentiate their products and by cattle owners to claim ownership of their animals (De Chernatony and McDonald, 2003; Kapferer, 2004). Accordingly, for many years the dominant perspective of brand research was to see brands as a means of product differentiation and as markers of identification (Aaker, 1991; Joachimsthaler and Aaker, 1999; Keller, 2008). In recent times, the branding literature has focused on internal and static approaches to brand building, such as identity-based brand models (Burch et al., 2009) or brand orientation (Urde et al., 2013). These paradigms acknowledge that the brand exists in the minds of consumers,
but continue to treat consumers as passive receivers of an intended brand identity (Beverland, 2018). Academic discussion of co-creation, by contrast, challenges all perspectives that stick to a company-oriented brand building and talks of the new logic for thinking about brands and branding (Merz et al., 2009). Indeed, brand co-creation is often equated with the era of ‘stakeholder-oriented branding’ (Christodoulides, 2008; Hatch and Schultz, 2009, 2010; Iglesias et al., 2018) in which brand construction has been regarded as an ongoing social process of negotiation between stakeholders and the brand owner (Iglesias et al., 2013; Ind, 2014; Ind et al., 2017). These interrelationships between co-creators and their more direct interaction with brands are increasingly reinforced by the technologies available in digital environments (Christodoulides, 2009; Ind et al., 2013; Ramaswamy and Ozcan, 2016; von Wallpach and Vallster, 2013).

The conceptualisation of brand co-creation extends the ‘typical’ duality of customers and company, to focus on a multitude of stakeholders who are potential brand co-creators (Konrum et al., 2017; von Wallpach et al., 2017). One key challenge resulting is concerned with the integration of all participants into a new model of brand management and brand creation (Gyrd-Jones and Konrum, 2013), which can enable interplay among all internal and external brand co-creators (da Silveira et al., 2013). A possible solution to this challenge is offered by Iglesias et al. (2013), who take an organic view of the brand and propose a brand co-creation framework that refines and extends earlier brand models. In particular, it takes into account how different business settings and multiple stakeholders can ‘conversationally’ co-create the brand, a process partially beyond the control of the so-called brand owner. Nevertheless, there is to date no universal framework capturing the brand co-creation paradigm and respecting the network-like structure, the heterogeneity of the participants in brand creation and the low controllability of the process. There is furthermore little empirical evidence so far as to how practitioners can make use of co-creation to interrelate with customers and other brand co-creators to establish true partnerships with them (Ind et al., 2017). In general, it can be said that existing research on
the paradigm of brand co-creation is fragile and fragmented (Hatch and Schultz, 2010; Ind et al., 2012; Payne et al., 2009). Given that brand co-creation has developed into one of the dominant topics in brand research (Kaufmann et al., 2016; Veloutsou and Guzman, 2017) and that embracing co-creation can be beneficial for both organisations (Kazadi et al., 2016) and customers (Ind et al., 2013), further insights are needed into the development and management of brands in the era of co-creation.

1.2 Research purpose

Against the backdrop of increasing attention to and interest in the co-creation construct within the field of brand management and branding, the key purpose of this thesis is to make a contribution to current discussion and debate by offering original and useful insights into brand research and the practice of branding. It comprises four papers focused on brand co-creation, each concentrating on a different facet of the construct or the context. Together, those carefully develop findings and implications, and clarify how those can be used to manage co-created brands effectively.

The general research purpose can be split into four coherent sub-purposes:

(1) This work aims to support scholars studying branding in general and brand co-creation specifically, to unfold further pieces in the jigsaw puzzle containing the whole picture of how to build and sustain brands in increasingly complex and uncontrollable market environments which challenge the conventional role-allocation of company and customer (Prahalad and Ramaswamy, 2000). In order to do that, it follows a systematic approach to researching brand co-creation. A first step is to form a general perspective on the topic by conceptualising its roots, followed by exploration of the phenomena by means of empirical studies that employ both qualitative and quantitative designs.

(2) A concurrent aim is to function as a catalyst for continued research efforts to explore the brand perspective in the twenty-first century. As the topic of brand co-creation is still in a
fledgling state, various research questions remain open or call for more attention. It is hoped that this thesis will inspire further exploration of the dynamics of brand creation and thereby challenge contributions to the literature that have enshrined a static idea of brands (Aaker, 1996a, 1996b; Balmer, 2012), within business-to-consumer and business-to-business settings and with respect to both different product brands and corporate brands.

(3) This thesis also aims to anchor and embed the topic of brand co-creation increasingly into brand textbooks and study programmes because, so far, the established brand literature has paid scant attention to the paradigm of brand co-creation (Baumgarth and Kristal, 2015). For example, no German textbook on branding deals with the topic of brand co-creation explicitly or extensively.

(4) Lastly, it is noted that recent studies have called for a new, more open and participatory brand management style (for example, Iglesias et al., 2013); that the shift from internally-governed, management-centred brand building to a co-creative process requires practitioners to re-think how they operate brands; that, on the one hand, brand owners are increasingly losing control over intended brand meanings (Kristal et al., 2018; Saleem and Iglesias, 2016) while, on the other, brand management can generate product-related and brand-related benefits by interrelating with internal and external stakeholders (Ind et al., 2017). Accordingly, this thesis aims to offer useful guidance to managers in business-to-consumer and business-to-business settings on the question of how to initiate, institutionalise and maintain brand co-creator networks.

1.3 Research questions

The central research question arising from the research purposes just stated can be formulated as “What are possible effects and consequences of the co-creation paradigm for brand research and brand practice?”
Given the comparatively fragile and fragmented state of the fledgling topic of brand co-creation, it is necessary to understand where the idea itself comes from. An overview of existing research is also essential to uncover knowledge gaps and set pathways for future research that could help to answer the postulated research question. Four sub-questions can be addressed individually.

(1) **What are the main antecedents of brand co-creation and what are the typical perspectives under which brand co-creation is investigated in existing studies?** (Chapter 2)

In the process of answering this first sub-question, three characteristics of the existing research literature were identified, all of which can be critically questioned. The first is a focus on integrated and active consumers. Related brand co-creation research adopts the premise that customers are always integrated co-creators (Prahalad and Ramaswamy, 2004). It has been suggested, however, that the proportion of non-integrated customers involved in co-creation is far greater than the number of integrated customers (Fuchs et al., 2013) and that, on average, one integrated consumer faces a hundred passive ones (Carroll and Rosson, 2008). The second questionable pattern is the assumption that co-creation alone has positive effects for products and brands. Yet it is well-known that the involvement of consumers in the creative and innovative processes around branding carries the risk of negative forms of engagement (Fournier and Alvarez, 2013; Hollebeek and Chen, 2014), as a result of which a brand may be pushed in unwanted directions (Ind, 2014).

The third and final characteristic to be called into question is a focus on product brands in business-to-consumer settings, yet the concept of customer integration and collaboration in the co-creation of products or services is more relevant to business-to-business than business-to-consumer settings (Kohtamäki and Rajala, 2016). The notion of co-creation of value in business markets is furthermore well established in the literature, for instance in the frequently cited paper by Vargo and Lusch (2011). A consequence of the business-to-consumer focus is that most research studies have been concerned with product brands. This is not necessarily to
be expected because one main assumption regarding brand co-creation is that many different stakeholders are involved in the process (Iglesias et al. 2013). That notion of multiple stakeholders is held to be especially relevant to corporate branding, for instance by Balmer (1995), and is often in fact most important in business-to-business marketing (e.g. Leek and Christodoulides, 2011).

These three characteristics of the existing literature not only call for consideration of future research directions, but also suggest three further sub-questions:

(2) *How does co-created branding affect observers’ product-related and brand-related constructs?*

The background to this question is the subject of Chapter 3.

(3) *Is there a dark side to co-creation and what are the possible risks for a co-created brand?*

This issue is discussed in Chapter 4.

(4) *Is co-creation relevant to corporate brandings in industrial settings? If so, is brand co-creation in business-to-business marketing any different from co-creation in business-to-consumer marketing?*

The background to this question is to be found in Chapter 5.

1.4 Research outline

This thesis comprises six chapters.

Following the general introduction to the research topic and the thesis itself in this Chapter, the next four present a set of papers on brand co-creation, which can help to answer the general research question by respectively covering all of the four the sub-questions just described. The three papers in Chapters 2, 3 and 4 have been published in peer-reviewed journals; the fourth, in Chapter 5, is currently under review by another.
More specifically, Chapter 2 sets up a foundation for the examination of the product-related and brand-related effects of co-creation. The main aim of the paper it presents was to discuss the dominant antecedents of brand co-creation, as identified in published research studies, and consolidate those into a new ‘three-pillar’ model of the process. A thorough literature review resulted in a condensed yet systematic overview of existing research, achieved by allocating individual studies to a particular pillar. The paper concludes by listing gaps left in the knowledge and offering propositions for future research to close them.

Chapter 3 relates to one of those propositions in investigating the effect of co-creation on the perceptions of brand equity held by consumers who are ‘observers’ rather than participants in the process. The paper introduces the construct of ‘observer-based brand equity’ and presents a 2 x 2 between-subjects experimental research design that tested a postulated conceptual framework. Analysis of the results with respect to the general effect of co-creation on observer-based brand equity captured the effect of two variables: the intensity of integration and the level of expert knowledge.

Chapter 4 moves on to the consideration of a research proposition established in Chapter 2. The paper it presents investigated negative effects attributable to brand co-creation, recognising the phenomenon of ‘non-collaborative co-creation’. Another 2 x 2 between-subjects experiment measured observer-based brand equity before and after exposure to purpose-designed co-created treatments, which were defined as being examples of either ‘brand play’ or ‘brand attack’ and had been executed either by established artists or by mainstream consumers.

Chapter 5 addresses a third knowledge gap. The paper it presents is an exploration of the relevance of co-creation to business-to-business branding, via a qualitative case study of a brand transformation process in a German prosthetic-technology company. The dynamic, longitudinal design of the study permitted analysis of data ranging from 1988 to 2018.
Chapter 6 concludes by offering an overview of the findings of each chapter before answering the main research question by means of a synopsis of the theoretical and managerial implications identified. General limitations are discussed and directions for future research suggested.

1.5 Research contribution

By answering the four sub-questions in the respective papers, this thesis contributes to existing knowledge with respect to brand co-creation. While the empirical chapters discuss theoretical and managerial implications in detail, what follows is a brief overview of the main contributions of each one to the research field of brand co-creation.

Chapter 2: Many scholars in different disciplines have applied what might be called ‘the co-creation label’ to their work. Consequently, co-creation in general is becoming increasingly complex notion (Galvagno and Dalli, 2014). There is no consistent theoretical perspective on the process, which results in an equivocal understanding of it (Ranjan and Read, 2014). The main contribution of Chapter 2 is therefore to reduce the level of complexity by summarising the main antecedents of brand co-creation and synthesising them into the new three-pillar model. The paper presented in the chapter contributes to a better understanding of ‘brand co-creation’ by offering a finite definition and introducing clear directions for future research, divided according to the general paradigm, specific ideas and methodological aspects.

Chapter 3: Because most of existing studies of brand co-creation have examined ‘integrated’ consumers (e.g. Ind et al., 2013), it is not fully clear how the result of brand-related co-creation affects consumers in the mass market. Chapter 3 helps to clarify by arguing that, in terms of co-creation, the construct of consumer-based brand equity has to be considered as the sum of its parts: there is the brand equity vested in participants, on which majority of research focuses, and the brand equity of observers that is as yet largely unexplored. The paper presented in that chapter joins a small number of studies analysing the effects of co-creation on observers. It also
investigates the role of expertise in the co-creation process and its influence on the brand. The observable evidence is that this is the first paper to have conceptualised and quantitatively measured the relationship between co-creation and observer-based brand equity. It furthermore supplements the traditional approach to the discussion of co-creation as a tool in the innovation process by exploring its possible utility as a means of strategic brand management in the mass market.

Chapter 4: Researchers have agreed that co-creation bears positive effects for products and brands, while many companies see consumer engagement with brands as a key objective in their marketing strategy (Dessart et al., 2015). What tends to be overlooked is that co-creators could misuse their empowerment by behaving in a non-collaborative way, instead of acting as valuable contributors, and thereby become an uncontrollable element in the development of brand meaning (Black and Veloutsou, 2017). Therefore, the contribution of Chapter 4 is to identify, describe and define the phenomenon of non-collaborative co-creation, so as to clarify the process by which brand meanings can be subverted during co-creation. In contrast to the typical perspective of co-creation research, the presented paper does not restrict itself to a pure business setting but rather interconnects the fields of culture and brand management by testing whether co-creators who are established artists can mitigate the negative brand-related effects of non-collaborative co-creation.

Chapter 5: The business-to-business environment is much richer in interactions and collaborations between company, stakeholders and brand than the business-to-consumer area (Kohtamäki and Rajala, 2016). A main focus of current research in industrial marketing is the inherent tendency in that market setting to ‘organise’ co-creators into networks (Aarikka-Stenroos and Ritala, 2017). Nevertheless, knowledge of the industrial brand co-creation process is sparse, so Chapter 5 contributes to the field first by extending the few existing insights into industrial brand co-creation. Secondly, it offers more than just a snapshot
of the phenomenon, as in the existing literature, but rather emphasises the dynamic nature of the construct by exploring the process of transformation from an internally created brand to one opened up to co-creation over a period of 30 years. What is more, that chapter advances theoretical and empirical discussion in the field of business-to-business brand management and branding. In terms of scope and depth, research within this field has failed to explain a wide range of current branding issues (Beverland et al., 2007b; Wang and Hao, 2018), such as co-creation. Lastly, due to some specific peculiarities of industrial brands (Beverland et al., 2007a; Leek and Christodoulides, 2011), the paper identifies unique characteristics of industrial brand co-creation to serve as valuable reference points for future work.

1.6 Guidance to readers

"Either write something worth reading or do something worth the writing"

(Benjamin Franklin)

This thesis aims to fulfil both Franklin’s adjuncts, presenting the results of research conducted on a topic that it is worthwhile to write about and offers the reader interesting content that it will be worthwhile to read. It comprises four single research projects on the theme of brand co-creation. Over the past four years, individual parts of these projects were presented at scientific conferences in the UK, Sweden, Finland, Austria and Germany, included in peer-reviewed conference proceedings, and published in peer-reviewed academic journals. This whole process delivered a great opportunity to receive highly valuable feedback from experienced scholars and thoughtful reviewers, strongly supporting the development of each individual idea so as to make it suitable for publication. That is how research can be shared with fellow academics and practitioners, and thereby make a contribution to the progress of the body of research-based knowledge concerning branding, in turn motivating both interested parties to expand the discussion and application of brand co-creation.
Given that Chapters 2-5 were originally stand-alone research papers on the same broad topic, a certain degree of overlap and repetition is inevitable, especially with regard to specific sections dealing with introductory remarks and theoretical backgrounds. Each chapter nevertheless deals with its own relevant and innovative research question and closes a knowledge gap within the field of brand co-creation.

Before you begin to read on, I must thank you in advance for your interest and your time. The journey undertaken in researching and writing up my thesis has been demanding, enjoyable and exciting. I sincerely hope you will share my enthusiasm as you read the outcome.
2 Brand Co-Creation - Antecedents and research agenda

An essential first step towards exploring the co-creation construct in the sphere of brand management and branding is to establish an overview of the most important characteristics and the dominant antecedents of brand co-creation in general. The aim of this chapter is therefore to define and delimit the concept and process by (a) describing the dominant research streams relevant to the phenomenon, (b) presenting an up-to-date literature review, and (c) discussing avenues for future research. In particular, this conceptual element of the thesis will identify gaps in research that establish the relevance of the subsequent empirical chapters.

Publication history:
The ultimate origin of this Chapter is an extensive literature review on brand co-creation, written in English:

Kristal, S. (2015), “All roads lead to Rome and many roads to lead to brand co-creation. The pillars of brand co-creation (PBCC) - Antecedents, state of the art and impulses for future research”, pp.1-72. (unpublished manuscript).

This literature review was condensed and translated into German for submission to a Special Issue of the German journal *transfer - Werbeforschung und Praxis* on co-creation in marketing. That journal, published since 1955 in a print run of about 5,500 copies per issue, focuses on communication, branding and advertising. It is to be found in most of libraries in German and Austrian universities and business schools, and is read widely among German-speaking practitioners. The paper was accepted for publication following formal review and revision, and was awarded Best Paper of the Year:
Abstract
The key question is: can branding still be treated as a unilateral, company-driven activity or should it rather be understood as social process between the legal brand owner and further participants in the process, with whom the value and meaning of the brand is jointly defined? This Chapter deals with the paradigm change in brand management caused by the increasing importance of the ‘co-creation’ concept in research and practice. That term is defined and a condensed overview of the current state-of-the-art in research is given. The dominant antecedents of brand co-creation research are discussed and built into a three-pillar comprising: innovation management, service marketing (or the ‘service-dominant logic’) and consumer behaviour. The Chapter concludes with suggestions for future research.

Keywords: Brand co-creation, service-dominant logic, brand communities, user generated content, consumer culture theory
2.1 Introduction

The membership group of owners of Harley Davidson motorcycles, with more than one million members (Harley Owners Group, 2015), is the prototype for a ‘brand community’. MyBurger is a concept by McDonald's first tested in Germany in 2009, which invites suggestions from consumers for future recipes via a project-based specific Facebook platform. Proposals for co-created offerings can be voted for online and those which prove to be the most popular recipes are put on sale at stores (Sesselmann, 2016). Although the Tesla electric automotive manufacturer has not so far engaged in much conventional advertising or communication, enthusiastic users have created professional-looking advertising and communication clips online: for instance, the ‘modern spaceship’ commercial for the brand (YouTube, 2014). Absolut Vodka has co-created its brand image for over 30 years by collaborating with professional artists in its product design (Baumgarth, 2014). Premium Cola, a German soft-drink brand founded in 2001, is democratically managed by an online based user-collective consisting of approximately 760 stakeholders, such as suppliers, customers, consumers or delivery fleets (Lübbermann and Boltz, 2011). The brand profile of the sharing platform Airbnb depends on the co-creative relationship between guest and host.

What these examples of brand building have in common is to show that the brand is neither built nor designed exclusively by the company that legally owns the brand. Instead of an inside-out perspective on brand building, a multilateral approach to brand management and branding is adopted. Brand meaning is co-created through interrelationships between various stakeholders, many elements of which are beyond the control of the organisation. Consumers and other stakeholder groups become active contributors, co-designers, and hence co-creators of the brand. The traditional view of brand strategy management as an internal task, as expounded for instance by Aaker (1996) is replaced or at least supplemented by the notion of co-creation.
The remainder of this Chapter aims to give a thorough account of the most important papers published to date in this rapidly developing and complex field of research. To do so, it begins by describing and defining the concept of brand co-creation. Since that has wide and diverse roots within different fields of study (such as social psychology, education, management science, software development and organizational management), the most dominant antecedents of research into the co-creation of brands are identified and discussed, before an overarching review of the dominant literature dealing with the concept and process. The Chapter concludes with a discussion of opportunities for future research projects, structured according to inputs relating to (a) the paradigm in general, (b) specific ideas and (c) methodological aspects.

2.2 Brand co-creation

The term “brand co-creation” describes a new paradigm in brand management and branding strategy that takes a stakeholder-oriented perspective on the process of brand building (Christodoulides, 2008; Gregory, 2007; Iglesias et al., 2013). Although the topic is still in a fledgling stage (Hatch and Schultz, 2010; Payne et al., 2009), some authors do speak of the evolving new logic of branding (Merz et al., 2009). That logic is founded upon the proposition that brands are no longer a unilateral company-driven task, but rather a social process that can be characterized as consisting of multiple networked interactions between the company and its various stakeholders (da Silveira and Lages, 2013; Gyrd-Jones and Konrum, 2013; Iglesias et al., 2013). Brands are thus seen as more than markers of identification and means for product differentiation, as implied by Aaker (1996) and Kapferer (2012). Instead, they can be understood as continuously evolving visions that unite various stakeholders in the pursuit of a common cause (Hatch and Schultz, 2009; 2010), who can in turn be seen as partners rather than targets (Gregory, 2007).
The idea of brand co-creation challenges dominant paradigms of brand management and branding, such as the identity-based approach (Burmann et al., 2009) or brand orientation (Urde et al., 2013) because the distinction between internal and external perspectives is no longer as clear as it was (da Silveira et al., 2013). Although identity-based branding or brand orientation aim to capture a holistic perspective of the brand, they still resort to a traditional organization-centric view of consumer behaviour (Ind, 2014). A possible result is dissonance between how managers perceive consumers’ relationships with a brand and the reality of how consumers live, build and use brands (Ind et al., 2012). The notion of brand co-creation suggests that, instead of following a company’s idea of the constitution of a brand, consumers and further stakeholders become active co-creators of brand identity and conduits of brand meaning (Hatch and Schultz, 2010; Iglesias et al., 2013; Ind et al., 2013; Ind, 2014; Payne et al., 2009; Vallaster and von Wallpach, 2013). The construction of the brand evolves into a multilateral activity and becomes a joint, collaborative ‘project’. Due to the fluid and flexible ‘organic’ nature of a brand (Iglesias et al., 2013), its identity can be influenced or even deflected in unintended directions by external stakeholders.

Ind et al. (2013) define co-creation as an “active, creative, and social process based on collaboration between organizations and participants that generates benefits for all and creates value for stakeholders” (p. 9). Hatch and Schultz (2010) describe it as “an emergent phenomenon based in networks of different and constantly changing stakeholder configurations” (p. 592). Drawing on those expressions of the concept, brand co-creation is defined for the purposes of this thesis as a dynamic process based on collaborations and negotiations within different networks of organization, stakeholders and brand, to jointly constitute, lead and develop the brand and thereby to co-create brand meaning(s). It becomes clear that meaning is often built outside the corporate walls as stakeholders interact and negotiate with each other on their own terms (Gregory, 2007; Ind et al., 2013; Round and Roper,
2012) and that many parts of these co-creative processes are beyond the control of the brand-owning organization itself (Iglesias et al., 2013).

Interrelations between stakeholders, the company and brand take place in networks or ‘conversational spaces’ where those stakeholders interact through brand interfaces and frontline employees (Iglesias et al., 2013; Vallaster and Lindgreen, 2011; Vallaster and von Wallpach, 2013). From the brand owner’s perspective, two types of networks can be distinguished: direct and indirect. Direct networks comprise all relationships between the legal brand owner, consumers and other stakeholders. The organization is thus directly involved in co-creation. In indirect networks, the conversations and relationships lie beyond the brand owner’s reach, and co-creation takes place without the company’s involvement. For instance, within a ‘brand community’ (Muniz and O’Guinn, 2001) or a ‘socio-cultural environment’ (Arnould and Thomson, 2005), consumers autonomously co-create meaning for the brand. Figure 2.1 illustrates the emergence of brand meaning within the brand co-creation paradigm.
Ind (2014) argues that brand managers “no longer have control over their brands in the way that they used to when brand image was determined largely by one-way marketing communications” (p. 736). The consequence is that a heightened participation externally fosters a need for participation internally. Although companies may be increasingly losing control over their brands, they can still have a strong influence on branding if they choose to become active participants in the process and are willing to create the conditions under which stakeholders can help in developing the brand (Ind, 2014). Brand co-creation means that brand managers are still responsible for setting a clear direction. Instead of pre-defining a rigid brand identity, however, they need to define a proposition that offers a sense of direction but at the same time allows for reinterpretations (Iglesias et al., 2013). Brand managers need to develop a new style of
leadership that is more humble, participatory and open if they are to enable an ‘agile’ style of management (Iglesias et al., 2013).

Summing up this section of the Chapter, the brand co-creation paradigm motivates academics and practitioners alike to re-think the classical concepts of brand management and branding. A fluid and agile aspect of the brand is emphasized that has so far attracted little attention in the mainstream branding literature. For example, none of the German textbooks concerned with brand management deals explicitly or intensively with the topic of brand co-creation.

2.3 The three pillars of brand co-creation

It has already been remarked that the notion of co-creation has wide and diverse roots within various research fields, and it can be added that many subfields of marketing are increasingly anchoring their research and practice in the overarching general concept of co-creation. Beyond branding itself, those include experiential marketing, marketing communication, business-to-business marketing, and relationship marketing. The result is an increased volume of publication on co-creation and increasingly complex (Galvagno and Dalli, 2014). It therefore seems fruitful, in pursuit of a theoretical basis for understanding the emergence and antecedents of brand co-creation, to take a systematic approach within the general research field of co-creation. A thorough review of the literature has found only four recent publications that discuss the crucial foci for useful research into co-creation (Galvagno and Dalli, 2014; Ind and Coates, 2013; Ind et al., 2013; Payne et al., 2009). Drawing upon the work of these authors, three thematic clusters are identified, and integrated into the ‘three-pillar’ model of brand co-creation shown in Figure 2.2. Those pillars are innovation management, service marketing and the service-dominant logic (SDL), and consumer behaviour, the latter comprising the subtopics of consumer culture theory, brand communities and user-generated content.
The following three sections of this Chapter introduce each pillar in turn and reflect upon how co-creation is understood and carried out in those terms.

2.3.1 Innovation management

The traditional view of innovation, that consumers are passive entities, largely dependent upon the innovation potential of the company (Rindfleisch and O'Hern, 2010), has increasingly been challenged by academics and practitioners as the importance of collaborating with stakeholders in the development of innovative products and services has been recognized (Greer and Lei, 2012). Two streams within the field of innovation management in particular are regarded as forerunners of the co-creation paradigm (Hatch and Schultz, 2010). One of these is user-driven innovations in new product development (von Hippel, 1988). Although studies in the 1960s had already provided evidence that users are able to innovate (Enos, 1962), it was the
path-breaking work of von Hippel that explicitly focused attention on the central role of users as innovators (Bogers et al., 2010). The subsequent advent of the internet has increasingly facilitated collaboration between the brand owner and its users by means of so-called ‘toolkits’, which may be seen as mediators of co-creation, allowing companies to build online platforms through which they can integrate and empower consumers (Füller, 2010). Users are able to create and co-create ideas that show a high commercial attractiveness and might even fulfil the needs of a broader mass of consumers who have not yet been met by the market offering (Fuchs and Schreier, 2011). The second stream deals with open innovation processes. Chesbrough (2003, 2006), for example, discusses the role of users in such processes in terms of the degree to which a firm’s boundaries are permeable to knowledge inflows.

Both user-driven innovations and open innovation processes are a departure from the traditional unilateral understanding of innovation management, arguing that competitive advantage can be generated through co-creation.

2.3.2 Service marketing and Service-Dominant Logic (SDL)

Another major precursor of current brand co-creation thinking can be found in the increasing importance of services and the paradigm-shift from a goods-dominant logic to the service-dominant alternative (Iglesias et al., 2013; Ind and Coates, 2013; Payne et al., 2009). The growing interest over recent years in co-creation as an aspect of marketing and management research can be largely attributed to a highly influential paper in the Journal of Marketing by Vargo and Lusch (2004) calling for evolution towards a ‘new dominant logic for marketing’.

Central to that service-dominant logic is a fundamental proposition relating to the process of co-creation, which emphasizes the active involvement and interaction of customers and other stakeholders in the brand. Interrelationships and collaborations between the brand owner and those external parties lie at the very heart of SDL and its ten ‘premises’ (Vargo and Lusch, 2008). The argument is that companies can offer only ‘value propositions’, not direct value.
The role of the customer is translated to active co-creation of value because value is created in use (Vargo and Lusch, 2004). The classical idea of value being embedded in the product is thus contradicted, since a brand can have no value without the integration and collaboration of customers (Payne et al., 2008; Grönroos, 2011).

Many published papers taking the SDL perspective treat co-creation as an intrinsic element and common denominator of exchange (Galvagno and Dalli, 2014; Ranjan and Read, 2014).

2.3.3 Consumer behaviour

This rather general pillar of brand co-creation in fact embraces three independent streams of research and theoretical perspectives on brand co-creation, which are dealt with in turn below. They are consolidated under one pillar because all three relate predominantly to consumer behaviour.

Consumer culture theory

Like SDL, consumer culture theory is not a closed concept (Vargo, 2011). Rather, it refers to a family of theoretical perspectives on the dynamic relationships between consumer actions, the marketplace and cultural meanings (Arnould and Thompson, 2005). Its fundamental argument is that meanings attached to products and services are negotiated and co-created between consumers, the company and their cultural environment, at various levels of market interaction (Vargo, 2011). These co-created meanings will usually be the very reason for the attractiveness of market offerings (Arnould and Thompson, 2005). Thus, because consumers take an active role as creators and co-creators of meaning, consumer culture theory is a relevant field in which to further develop knowledge of brand co-creation.

Brand communities

User communities in general and brand communities in particular represent a decisive area of study for the development of the notion of brand co-creation. Indeed, researchers into brand
communities in the early 2000s, such as Muniz and O’Guinn (2001) were among the first to argue that a brand is co-created through interactive and dynamic relations of that type. Various later studies on brand communities (Veloutsou, 2009; Bruhn et al., 2014; Dessart et al., 2015) have shown how their members establish relationships with each other and with the brand to co-create and negotiate the brand’s meaning. Specifically, symbolic interpretations of brand-related information plus personal narratives based on both personal and impersonal experiences with a brand make a key contribution to co-created branding (Muniz and O’Guinn, 2001; Merz et al., 2009).

User-generated content

This has been a focal aspect of the discussion of co-creation in recent times. Without content created by users, the direct and indirect networks would be ‘empty’ and a brand would not be able to potentially profit from co-created meaning. The emergence and rise of the internet and digital technologies has upset the symmetry of information, which for many years worked in favour of marketing managers (Christodoulides, 2009). Consumers have not only become increasingly empowered to interrelate with other consumers and with brands, but also to generate and share their own content, which has in turn led to a more participative approach to branding (Christodoulides, 2009). When such content explicitly relates to a brand, the process is referred as ‘user-generated branding’ (Arnhold, 2010), which is explicitly contrasted with ‘command and control branding’ and emphasizes the rationale for a multilateral approach to brand management (Christodoulides et al., 2006).

2.4 Brand co-creation – a synopsis of the literature

The three pillars of brand co-creation offer a valuable foundation for an overview of the status-quo with respect to brand co-creation research. The evolving discussion of the co-creation concept has been led since 2000 by Prahalad and Ramaswamy (2000, 2004). More recently, McColl-Kennedy et al. (2012) have enumerated 27 definitions of co-creation,
of which 22 have been advanced since 2000. The full literature review following therefore focuses on literature meeting the following four criteria: papers included must deal explicitly with co-creation; the main focus must be on brand management and branding; and the paper must have been published between 2000 and 2015. After a thorough keyword search around “brand co-creation” and variations thereof, using Business Source Complete (EBSCO) and Google Scholar, 34 publications were identified that meet the criteria. Each of those was assigned to one of the three pillars of brand co-creation. If one of them could not be clearly assigned to a single pillar because it addressed themes within several research streams, a ‘primary focus’ was used to allocate it to one of the three.

Ind and Coates (2013) remark that innovation studies dominate the field of co-creation research in general but, with respect to brand co-creation specifically, the picture is different. Among the 34 papers reviewed, ten could be allocated to the innovation management pillar, twelve to service marketing and SDL and a further twelve to the consumer behaviour pillar. The share of the total is thus quite balanced across the three categories, and there is no detectably dominant perspective.

This overview of the literature does not claim to be complete; rather it offers a picture of the state of the art with respect to the current development of research into brand co-creation and thereby to identify typical patterns and knowledge gaps, in order to identify fruitful avenues for future empirical studies.

Tables 2.1 to 2.3 summarize the reviewed papers, organized by reference to the three-pillar conceptualization of brand co-creation.
<table>
<thead>
<tr>
<th>Source</th>
<th>Contribution</th>
<th>Empirical approach</th>
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<tbody>
<tr>
<td></td>
<td><strong>Innovation management</strong></td>
<td></td>
</tr>
<tr>
<td>Sawhney et al. 2005</td>
<td>Presentation of two online platforms of brands used to co-create innovations</td>
<td>Case study</td>
</tr>
<tr>
<td>Hoyer et al. 2010</td>
<td>Development and discussion of a brand co-creation-framework for new product development</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Fuchs et al. 2010</td>
<td>Measurement of product- and brand-related effects of customers after integration into new product development</td>
<td>Experimental</td>
</tr>
<tr>
<td>Bilgram et al. 2011</td>
<td>New product development at Nivea</td>
<td>Case study</td>
</tr>
<tr>
<td>Fuchs and Schreier 2011</td>
<td>Investigation of how user design effects brand-related constructs of non-integrated consumers</td>
<td>Experimental</td>
</tr>
<tr>
<td>Schreier et al. 2012</td>
<td>Investigation of how customer integration effects brand, product and image-related constructs of non-integrated consumers</td>
<td>Experimental</td>
</tr>
<tr>
<td>Nishikawa et al. 2013</td>
<td>Comparison of key performance indicators and parameters of consumer-developed versus company-developed brands at Muji</td>
<td>Case study (quantitative)</td>
</tr>
<tr>
<td>Fuchs et al. 2013</td>
<td>Exploration of how user design of luxury brands effect brand-related constructs of non-integrated consumers</td>
<td>Experimental</td>
</tr>
<tr>
<td>van Dijk et al. 2014</td>
<td>Investigation of how customer integration affects perceptions of brand personality and behavioural intentions of non-integrated consumers</td>
<td>Experimental</td>
</tr>
<tr>
<td>Kristal et al. 2015</td>
<td>Exploration of how user design effects the brand equity of non-integrated consumers</td>
<td>Experimental</td>
</tr>
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</table>
### Table 2-2: Published papers on brand co-creation relating to the Service Marketing and SDL pillar

<table>
<thead>
<tr>
<th>Source</th>
<th>Contribution</th>
<th>Empirical approach</th>
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<tbody>
<tr>
<td><strong>Service marketing and SDL</strong></td>
<td></td>
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</tr>
<tr>
<td>Jones 2005</td>
<td>Development of a brand co-creation framework taking a multi-stakeholder perspective</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Brodie et al. 2006</td>
<td>Integration of branding into SDL</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Ballantyne and Aitken 2007</td>
<td>Exploration of how SDL impacts on B2B brand management and branding</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Ind and Bjerke 2007</td>
<td>Development of a participative model that integrates stakeholders into brand management and branding</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Payne et al. 2008</td>
<td>Development of a framework for brand managers to understand and manage value co-creation</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Payne et al. 2009</td>
<td>Outline of a conceptual model for designing and managing the customer experience in the light of SDL</td>
<td>Case study</td>
</tr>
<tr>
<td>Merz et al. 2009</td>
<td>Discussion of a new logic for brands in the light of SDL</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Fyrberg and Jüriado 2009</td>
<td>Extension of the framework of Brodie et al. (2006) based on expert interviews</td>
<td>Qualitative Interviews</td>
</tr>
<tr>
<td>Tynan et al. 2010</td>
<td>Development of a co-creation framework of luxury brands in the light of SDL</td>
<td>Case study</td>
</tr>
<tr>
<td>Drengner et al. 2013</td>
<td>Development of a holistic perspective on brand management and branding based on SDL</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Iglesias et al. 2013</td>
<td>Establishment of a brand (value) co-creation framework that develops earlier brand models</td>
<td>Qualitative Interviews</td>
</tr>
<tr>
<td>Nysveen and Pedersen 2014</td>
<td>Study the influence of customer co-creation participation on customers’ brand experience, brand satisfaction and brand loyalty based on SDL</td>
<td>Quant. Interviews</td>
</tr>
</tbody>
</table>
**Table 2-3: Published papers on brand co-creation relating to the Consumer Behaviour pillar**

<table>
<thead>
<tr>
<th>Source</th>
<th>Contribution</th>
<th>Empirical approach</th>
</tr>
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<tbody>
<tr>
<td>Brown et al. 2003</td>
<td>Investigation of how retro-brands are created or co-created within consumer communities</td>
<td>Netnography</td>
</tr>
<tr>
<td>Gregory 2007</td>
<td>Discussion of how stakeholders can be actively engaged in developing a corporate brand</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Füller and von Hippel 2008</td>
<td>Exploration of how brands are co-created within brand communities</td>
<td>Quant. Interviews</td>
</tr>
<tr>
<td>Diamond et al. 2009</td>
<td>Investigation of the impact of the socio-cultural environment of consumers on the American Girl brand</td>
<td>Ethnography</td>
</tr>
<tr>
<td>Hatch and Schultz 2010</td>
<td>Integration of the DART model (Prahalad and Ramaswamy 2004) into brand management and branding at the example of a brand community</td>
<td>Case study</td>
</tr>
<tr>
<td>Pongsakornrungsilp and Schroeder 2011</td>
<td>Determination of how consumers co-create brand meaning and value within brand communities</td>
<td>Netnography</td>
</tr>
<tr>
<td>Ind et al. 2013</td>
<td>Investigation of co-creation processes within a brand community</td>
<td>Creation of a brand community</td>
</tr>
<tr>
<td>Vallaster and von Wallpach 2013</td>
<td>Determination of how stakeholders co-create brand meaning in a brand crisis</td>
<td>Case study</td>
</tr>
<tr>
<td>Gyrd-Jones and Kornum 2013</td>
<td>Analyzing the relations of LEGO with four stakeholder ecosystems</td>
<td>Case study</td>
</tr>
<tr>
<td>Ind 2014</td>
<td>Reflection upon brand co-creational practices by using the examples of LEGO, Mozilla and Adidas</td>
<td>Conceptual</td>
</tr>
<tr>
<td>Bruhn et al. 2014</td>
<td>Investigation of the quality of customer-to-customer interactions in B2B brand communities</td>
<td>Quant. survey</td>
</tr>
<tr>
<td>Ramaswamy and Ozcan 2015</td>
<td>Development and discussion of a brand co-creation framework by using the cases of Starbucks, Apple and Nike</td>
<td>Case study</td>
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</tbody>
</table>
To sum up this section of the Chapter, the focus has been on integrated and participative consumers who take part in brand co-creation. Few published papers, however, have so far recognized the further need to study non-integrated ‘observers’ of co-creation in action and the ways in which individuals who are only spectators, as it were, perceive user-designed brands (Fuchs and Schreier, 2011). Furthermore, despite some researchers observing that there are also stakeholders other than customers who might be relevant to brand co-creation (Iglesias et al., 2013; Jones, 2005), the role and motivation of end-consumers in brand co-creation has so far primarily been the primary focus and the perspective tends to have been consumer-oriented.

It is also noteworthy that brand co-creation studies mainly discuss consumer brands, even though the literature does recognize the relevance of brand co-creation in the more complex product categories found in industrial settings (Bruhn et al., 2014; Iglesias et al., 2013). Moreover, it is very obvious that the theme of brand co-creation normally focuses optimistically on positive effects. Possible brand-related risks, such as those identified by Fournier and Alvarez (2013) are typically overlooked.

Concerning the methodologies of brand co-creation research, the emphasis is on experimental studies, case studies and conceptual discussions. The Innovation Management pillar in particular seems to have attracted experiments that test the influence of co-creation on product-related and brand-related outcomes. The conceptual papers are mostly found in the realm of the Service Marketing and SDL pillar, which is perhaps unsurprising in the light of the assertion by Vargo (2011) that the premises of SDL are “not strictly empirically testable” (p.4). Conceptual papers mostly propose frameworks for brand co-creation. Qualitative case studies are the main methodology with regard to the Consumer Behaviour, authors aiming to understand the dynamics and motivations of engagement in brand co-creation and its possible outcomes. So far, relatively few qualitative interviews have been conducted with brand owners, an exception being the study by Iglesias et al. (2013), who included in their sample a variety of
marketing managers for international brands in various sectors, and directors of brand consultancies.

2.5 Impulses for future research on brand co-creation

It has been argued that branding is changing away from an organization centric approach, to a highly participative process between the organization, consumers and further stakeholders. The relevance for practitioners and the paradigmatic potential of the brand co-creation theme for the field of brand management and branding cannot be denied (Iglesias et al., 2013; Ind, 2014). However, research on brand co-creation is still at a fledgling stage (Hatch and Schultz, 2010) and therefore, the following ideas aim to set impulses to reinforce future investigations on brand co-creation. The postulated research agenda can be divided into three fields: (1) a general paradigm of brand co-creation, (2) specific ideas about brand co-creation and (3) methodological approaches to the exploration of brand co-creation.

2.5.1 A general paradigm of brand co-creation

Existing, innovative paradigms in the field of brand management and branding are the idea of identity-based brand management (Burmann et al., 2009) and the counteracting of market orientation through the brand orientation (Urde et al., 2013). Both approaches take an inside-out perspective to brand building and put the emphasis on internal resources and competencies. A managerial implication is the focus on different instrumental measures of behavioural branding whereas brand co-creation requires a new and participative approach to the brand that respects the interactive character of the brand building process (Ind, 2014). It follows that the network-like structure of the phenomenon, the heterogeneity of the participants, and the low controllability of the process must all be considered. One of the very few existing frameworks seeking to do that is the organic view of the brand (Iglesias et al., 2013), which can be regarded only as a first attempt to understand the overall complexity of the topic. Research should continue to develop a model that integrates the theoretical foundations of brand co-creation,
an important pre-requisite for the initiation of bigger research projects and the ability to integrate a multitude of generated results and insights. Such a conceptual model, if viable and successful, would help to anchor the brand co-creation paradigm increasingly into the conventional textbooks of marketing and branding and into related curricula within universities and business schools.

2.5.2 Specific ideas about brand co-creation

While the paradigmatic perspective offers a broad but rough framework for brand co-creation research, specific ideas deal with more concrete aspects that fill out the framework with content. The following seven avenues for future research derive from observation of knowledge gaps in the literature overview.

Active brand co-creators versus observers of brand co-creation

It seems to be a given of the co-creation concept to see all consumers as active co-creators of the brand, but real-world examples show that there can also be rather passive consumers who are primarily observers of the results of co-creation initiatives. It has indeed been suggested that, on average, one integrated consumer has the company of a hundred passive ones (Carrol and Rosson, 2008). This phenomenon has been summed up as the ‘90-9-1-principle’ (Nielson, 2006), describing the typical situation in which 90% of consumers remain passive, 9% are somewhat active in sharing or liking a co-created campaign (for example via Facebook) but are not actively engaged in the co-creation process, and only 1% are actively integrated into it. It would therefore be useful to seek further understanding of the impact of active brand co-creators and user design on observers within the audience. So far, only a few studies have investigated the brand-related constructs of observers: for instance, that by Kristal et al. (2015).
Destructive brand co-creation

Brand co-creation research implicitly assumes that the behaviour of brand co-creators is overall supportive, and that the effects on the product and the brand are positive. However, the negative influence of consumers in co-creation generally (Gebauer et al., 2013) and in brand co-creation specifically (Fournier and Alvarez, 2013) runs the risk of negative forms of engagement. Consumers can misuse their increased empowerment and turn into ‘co-destructors’ (Echeverri and Skalen, 2011) of the brand. Real-world examples include the phenomenon of ‘brand hacking’ (Düllo and Liebl, 2004), which ranges from offering ironic or assertive commentaries on various social media to ‘guerrilla’ actions on branding in the real world.

The optimistic view of brand co-creation therefore needs to be extended to a more critical perspective embracing the co-destructive potential of co-creation.

Full stakeholder perspective

Existing studies of brand co-creation mainly deal with the consumer of the end-product as a brand co-creator, yet several others, such as those by Gyrd-Jones and Konrum (2013) and Jones (2005), have found that other stakeholder groups are relevant to brand-co-creation. Those might include those who might be called ‘multiplicators’: for example, bloggers, non-governmental organizations or professional artists. Future research should aim to extend the spectrum of brand co-creators investigated, exploring their interactions with each other, with other stakeholder groups and with the brand.

Leadership style and organisation

The conventional practice of brand management is strongly characterized by a control and command approach. One visible symbol for this is the strict corporate-design guidelines implemented by many organizations. Brand co-creation demands a new leadership style that departs from a management control orientation towards a more open, flexible and participative
way of building and maintaining the brand (Iglesias et al., 2013). This need is confirmed by the results of a current study on trends in brand management (Boltz and Baumgarth, 2015), in which 46 brand experts from the academic and practitioner communities rated *change of the brand organisation* as the most relevant topic in a list of 38 possibilities. Future studies could explore how brand managers involved with co-created brands should adapt the way in which they execute branding, in order to align their leadership more strongly to an open and flexible philosophy.

**Brand control**

The brand co-creation paradigm will have a strong effect on brand control procedures. In the future, the measurement of Key Performance Indicators will assume less importance, as the brand owner’s focus shifts to continuous observation of interactions with brand co-creators. Brand owners today should be moving away from treating consumers and other stakeholders as passive observers’ through viewing them as active participants in the branding process, to assessing their role as proactive co-creators of brands. Recognising such increased external participation demands a parallel increase in internal involvement (Ind, 2014). If and how this can be translated into concrete control protocols remains an unexplored question.

**Brand equity**

The concept of brand equity is a well-established topic within brand research, as typified by the work of Christodoulides and De Chernatony, 2010), which will also be touched by the debate on brand co-creation. While the current aim has mainly been to determine the current strength of the brand and extrapolate this value into the future, it is the resilience of brands in interacting networks that will in future determine its value to the brand owner. One study has conceptualized this notion in the form of a brand equity model assessing the resilience of an organization with respect to external disruptions and changes (Välikangas, 2010). A distinction is to be made here between proactive robustness comparable to the classical ‘brand strength’
and reactive agility. Future research could usefully extend the existing conceptualization of brand equity accordingly.

**B2C versus B2B**

Research on brand co-creation has clearly concentrated on B2C marketing, only a few studies featuring industrial settings: for instance, Bruhn et al. (2014) and Iglesias et al. (2013). However, the notion of interactions and relationships between a brand owner and its stakeholders is in fact more applicable to the B2B setting than to B2C (Vallaster and Lindgreen, 2011). Future research should therefore investigate such relationships and interactions in the case of industrial brands and determine the extent to which such brands can benefit from an open and participatory approach to brand building.

**2.5.3 Methodological approaches**

Though current brand co-creation research frequently adopts experimental designs, the empirical analysis of brand co-creation cannot be fully realised through classical quantitative methods alone. This is because capturing the direct effects of measures in terms of causal relationships is only one aim of viable research, the other being to understand dynamic processes and interactions between all brand co-creators. Such qualitative and longitudinal approaches as ethnography or netnography (Kozinets, 2015), case studies, and action-based research are alternatives that can be expected to become steadily more relevant. Several research questions will probably be best addressed by mixed-method designs. This methodology is exemplified in a study by Gebauer et al. (2013), which investigated the positive and negative behaviour of co-creators within a company-created online community dedicated to the identification of innovation opportunities for the brand. A preliminary qualitative phase explored triggers and forms of dysfunctional behaviour encountered in that community; a subsequent quantitative phase tested how those influenced the behaviour of its members.
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This chapter investigates the effect of co-creation on non-integrated consumers. That is the majority of the total who, in the real world, remain passive and only observe the outcome of the co-creation process: they are defined as ‘observers’ of that process. It is argued that, in terms of co-creation, the construct of consumer-based brand equity has to be regarded as the sum of its parts. It comprises the brand equity of integrated, active participants on which majority of research focuses, plus that of the passive observers, which remains unexplored. A between-subject experiment is reported, which tested the general effect of co-creation on observers’ brand equity and two independent variables. The chapter also discusses the potential of co-creation as a strategy for brand owners to exert a positive effect on the brand equity of the observers in the market.

Publication history:
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The full paper was published in the Journal of Product and Brand Management:

Abstract

This paper aims to analyse the general effect of co-created products on the brand equity of observers (OBBE). Thereby, this study is one of the few analyzing the effects of co-creation on observers in terms of brand equity. A between-subject experiment with a 2 (intensity of integration: democratically voted vs commonly created) x 2 (expert knowledge: no expert knowledge vs expert knowledge) design plus one control group (zero co-creation) is conducted for two brands to test the postulated hypotheses. Findings show that co-creation can have a weak positive effect on the OBBE. Integration intensity and expertise of integrated consumer also affect the OBBE only marginally. Thus, in contrast to the typically positive tenor of brand co-creation studies, we have come to a somewhat disillusioning conclusion with regard to its actual effect, at least with regard to non-integrated consumers. As participant-based brand equity seems to be the element of overall brand equity that profits from co-creation, results bear the implication that brand managers should aim to convert observers into participants, instead of setting the focus on the presentation of the user-designed product to the mass market. Further research might investigate whether the initial brand equity has a moderating effect. Also, brand image and underlying product category could influence the relation between co-creation and the OBBE and would be valuable for future studies.

Keywords: Co-creation, Expertise, Intensity of integration, Non-integrated consumers, Observer-based brand equity
3.1 Introduction

In 2011, McDonald’s conducted a co-creation campaign in Germany with the theme “Mein Burger”. About 116,000 ‘concepts’ for future burger recipes were proposed by consumers via a project-specific Facebook platform – that is, an online form of co-creation. Some 1.5 million who had not necessarily taken part in that first stage of the promotion subsequently registered their ‘votes’ for the competing concepts. Such participating customers, who either proposed concepts or voted for them, are described in the literature as being ‘integrated’; the majority who did neither can be classified as ‘non-integrated’. Though the number of the former is impressive in its own right, it is nevertheless small in comparison with the roughly 2.5 million customers per day who visited a McDonald’s restaurant in that year, noticing and consuming the results of the Mein Burger initiative (Herrmann, 2012). The literature shows that it is very typical of a co-creation campaign that the proportion of non-integrated customers in that daily footfall heavily outnumber the minority of integrated customers (Burnett, 2000; Fuchs et al., 2013; Madupu and Cooley, 2010; Takahashi et al., 2007). On average, one integrated consumer is facing a hundred passive ones (Carrol and Rosson, 2008). This phenomenon has been summed up as the ‘90-9-1-principle’ (Nielson, 2006), noting that in customer integration, 90% of consumers remain passive, 9% are somewhat active in sharing or liking the co-creation aim, for example via Facebook, but are not actively engaged with the co-creation campaign, and only 1% are active.

In the McDonald’s case-in-point, 4% of consumers ‘created’ their own burger (the sum total of created concepts over time) while the remainder (daily customers) refrained from engaging in the process. Besides McDonald’s, many other companies and brands have integrated consumers into the process of designing and creating new product offerings. Table 3.1 presents a selection.
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Table 3-1: Examples of co-creation of a new product or service

<table>
<thead>
<tr>
<th>Brand</th>
<th>Offering</th>
<th>Description</th>
<th>When</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threadless</td>
<td>T-shirts</td>
<td>Designing own t-shirt</td>
<td>Since 2000</td>
</tr>
<tr>
<td>Starbucks</td>
<td>Tea and coffee</td>
<td>Generating ideas for beverages and food</td>
<td>Since 2008</td>
</tr>
<tr>
<td>LEGO</td>
<td>Toys</td>
<td>Generating ideas for combinations of bricks</td>
<td>Since 2008</td>
</tr>
<tr>
<td>Coach</td>
<td>Tote bags</td>
<td>Designing a new tote bag</td>
<td>2008</td>
</tr>
<tr>
<td>Coca-Cola</td>
<td>Soft drinks</td>
<td>Designing a new can</td>
<td>2011</td>
</tr>
<tr>
<td>Volvo</td>
<td>Water</td>
<td>Designing a new on-the-go bottle</td>
<td>2011</td>
</tr>
<tr>
<td>Oral-B</td>
<td>Electric toothbrush</td>
<td>Creation of an interactive toothbrush</td>
<td>2012</td>
</tr>
<tr>
<td>Hugo Boss</td>
<td>Fragrances</td>
<td>Designing new product packaging</td>
<td>2012</td>
</tr>
<tr>
<td>Citroën</td>
<td>Cars</td>
<td>Generating ideas for the Citroën DS3 design</td>
<td>2012</td>
</tr>
<tr>
<td>Nescafé</td>
<td>Instant coffee</td>
<td>Creation of a new coffee product</td>
<td>2013</td>
</tr>
<tr>
<td>Kellogg’s</td>
<td>Cereals</td>
<td>Creation of a new cereal product</td>
<td>2015</td>
</tr>
<tr>
<td>Florette</td>
<td>Salad meal</td>
<td>Creation of a new salad meal</td>
<td>2015</td>
</tr>
<tr>
<td>MMA</td>
<td>Insurance Service</td>
<td>Creation of new services to be offered</td>
<td>2015</td>
</tr>
<tr>
<td>Kit Kat</td>
<td>Chocolate bar</td>
<td>Designing new product packaging</td>
<td>2015</td>
</tr>
</tbody>
</table>

The traditional innovation paradigm views consumers as passive entities who are largely dependent upon firms to help satisfy their needs (Rindfleisch and O'Hern, 2010). This perspective is increasingly under challenge by academics and practitioners (see for example: Chesbrough, 2003; Ind et al., 2012; Pitt et al., 2006; Von Hippel and Katz, 2002) while the importance of collaborating with customers in the development of innovative products and services has been recognised for many years (Greer and Lei, 2012). Although studies in the 1960s had already provided evidence that users are able to innovate (Enos, 1962), it was the ground-breaking work of Von Hippel (1976, 1978) that explicitly drew attention to the central role of users as innovators. While the idea of integrating external groups into the creation and design phase of brand development has been new to many companies, the design world has been following a very similar approach. Established in Scandinavia in the 1970s and labelled ‘participatory design’, it involves end users in the initial phases of designing new products and services as a means to reduce the different risks combined in the design process (Pals et al., 2008; Sanders, 2002).

The idea of democratising the innovation process by empowering users to take an active stake in new product development (Von Hippel, 2005, 2009) can be seen as one antecedent of the
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concept of co-creation (Galvagno and Dalli, 2014; Ind et al., 2012; Ind and Coates, 2013; Ind et al., 2013; Payne et al., 2009). The innovation management perspective has gained in popularity in the literature and now dominates research in the field (Ind and Coates, 2013). Our paper accordingly deals with co-creation in the new product development process (NPD), specifically what is often referred to as ‘user design’. Most of the existing research in that area of study focuses on integrated consumers (Bilgram et al., 2011; Frow et al., 2015; Füller, 2010; Ind and Coates, 2013; Ind et al., 2013; Rindfleisch and O’Hern, 2010). Conclusions drawn always relate to the small portion of active consumers, the participants, and tend to show an increase in such brand-related constructs as attitude (Hoyer et al., 2010), loyalty (Sawhney et al., 2005) or brand perception (Ind et al., 2013). In contrast, the majority of real-world consumers remain passive and only observe the outcome of the co-creation process, the user-designed product. In this paper, we therefore call such non-integrated consumers ‘observers’.

Especially with regard to co-creation in NPD, it is interesting to analyze effects on brand equity because it is a key asset for firms (Christodoulides et al., 2015). In research brand equity presents a focal construct (Farquhar, 1989; Yoo and Donthu, 2001) and practitioners are interested in brand equity because they expend a significant amount of resources for its maintenance and growth (Bambauer-Sachse and Mangold, 2011; Keller and Lehmann, 2006). Brand equity became an integral part of marketing performance measurement (Christodoulides et al., 2006) and crucial to evaluate and understand the holistic impact of marketing (Christodoulides and De Chernatony, 2010).

Brand equity has been defined by Aaker (1991, p.15) as “a set of assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or that firm’s customers” while Christodoulides et al. (2015, p.309) assert that brand equity “encompasses the added value endowed by the brand to the product”. Two different approaches to the measurement of brand equity have been developed: financial
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and a consumer-based (Aaker, 1991, 1996a; Christodoulides et al., 2015; Keller, 1993). The first of those focuses on the financial value brand equity brings to the business and can be seen as the outcome of aggregate consumer response to a brand name. The consumer-based approach, on the other hand, is based on market perceptions, treating brand equity as the main driving force of increased market share and profitability (Christodoulides and De Chernatony, 2010). In this paper, we focus on the consumer-based view. We furthermore argue that, when it comes to co-creation, the overall equity of a brand is made up of the brand equity of the active consumers, the ‘participants’, plus the brand equity of the non-integrated consumers, the ‘observers’. These are henceforward distinguished as PBBE and OBBE, for participant-based and observer-based brand equity respectively. Little is to be found in the research literature to date on the effects of co-creation on OBBE, most studies having analysed the effect on PBBE. The purpose of our own contribution is therefore to close this knowledge gap by presenting and testing a conceptual framework to capture the effect of co-creation on OBBE. We first analyse the general effect of co-creation on OBBE empirically and secondly report the results of a laboratory experiment designed to test the influence on it of different implementations of the co-creation approach.

The variables tested are the strength of consumer integration – that is, how far individuals are integrated into the process of co-creation – and the perceived level of expertise of actively integrated consumers. In our empirical experiment, measurement of the strength of integration followed the methodological lead of Fuchs and Schreier (2011) and Fuchs et al. (2010, 2013): whether subjects voted for existing concepts (weak integration) or took part in creation of new concepts (strong integration). Different levels of strength were presented through the medium of the content of advertisements and press releases, and the effect on OBBE was tested. A control group consisted of individuals who had not participated in co-creation at all.
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Fuchs et al. (2013), commenting on the observable negative reaction of observers to co-creation of luxury brands, introduce a strategy to ‘legitimise’ the consumers who had been jointly involved in the NPD process, for instance by ‘socially distancing’ them from other consumers by characterising them as celebrities or star designers, but the notion of expert co-creators has never been tested empirically. Our paper will show how the perceived expertise of integrated consumers affects OBBE, differentiating between ‘novices’ and ‘experts’. It also discusses the extent to which co-creation can exert a positive effect on OBBE in the mass market and offers for managers strategies for the enhancing of overall consumer-based brand equity.

3.2 Conceptual background and development of hypotheses

3.2.1 The CBBE is the sum of its parts

Figure 3.1 shows that, in terms of co-creation, PPBE and OBBE (as defined above) combine to generate consumer-based brand equity, henceforth referred to as CBBE. The relative contributions of the two constituents are based on the McDonalds case example, in which only 4% of customers were ‘participants’. The respective sizes of the slices in the pie-chart are not meant to represent any hard-and-fast proportions, but simply to emphasise that OBBE is always much the larger component of CBBE. The positive effect of co-creation on PBBE is well known and widely discussed but we would argue that it is by no means enough to determine overall brand equity. Yet there is still a question mark in theory and in practice over the effect of the other driver, OBBE. Moreover, PBBE is the component of brand equity that is formed by only a small fraction of all individuals, those who agree to engage in co-creation being a clear minority in comparison to the large proportion of passive observers (Burnett, 2000; Fuchs et al., 2013; Madupu and Cooley, 2010; Takahashi et al., 2007).
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![Diagram showing CBBE = PBBE + OBBE]

**Figure 3.1: CBBE = PBBE + OBBE**

3.2.2 The measurement of OBBE

The conceptualisation and measurement of brand equity is a challenging task (Christodoulides et al., 2015) and the literature consequently exhibits a variety of conceptual frameworks (Christodoulides and De Chernatony, 2010). There is furthermore no general agreement about the dimensionality of brand equity (Christodoulides et al., 2015) and it is not only researchers who draw on a wide variety of views (Christodoulides and De Chernatony, 2010); so do practitioners (Veloutsou et al., 2013). Despite the consequent disagreement about approaches to the measurement of CBBE, the model proposed by Aaker (1991) is the most commonly used in empirical research (Atilgan et al., 2005; Christodoulides et al., 2015). The dimensions of brand equity in that model are brand awareness, brand associations, perceived quality and brand loyalty. Although Aaker himself has never operationalised a related measuring scale (Christodoulides and De Chernatony, 2010; Christodoulides et al., 2015), many other researchers have (Atilgan et al., 2005; Bravo et al., 2007; Kim and Hyun, 2011; Pappu et al., 2005; Yoo et al., 2000; Yoo and Donthu, 2001).

The scales to be applied to measurement of the OBBE, shown in Appendix A, combine Aaker’s dimensions of brand awareness, brand associations and perceived quality with three others –
innovation, differentiation and relevance – derived from the work of Lehmann et al. (2008). The total set of measures further incorporates a series of established and validated rating scales (Atilgan et al., 2005; Bravo et al., 2007; Lehmann et al., 2008; Yoo and Donthu, 2001). While measurement of OBBE is thus based on well-established measures of CBBE, the target group to which the construct is applied is different, namely observers of co-creation outcomes. Nevertheless, given that the eventual scale was constructed from items in existing scales, its validity and reliability were ensured.

3.2.3 The positive effect of co-creation on PPBE

Ind and Coates (2013) describe co-creation as a “shift in thinking”. The manufacturer is no longer the sole creator of value; instead the creation of value becomes a collaborative process with the consumer. Ramaswamy and Gouillart (2010) define co-creation as an emerging relationship between consumers and the organisation in the process of which value is created. The idea is to bring consumers and companies closer together in order that they can jointly participate in brand development and the creation of new products and services (Ind et al., 2013). The effects of co-creation on actively involved consumers have been widely explored in academic research studies, the general tenor of their findings being that the integration of consumers into the NPD process generates positive outcomes for the brand and the company. For instance, integrated ‘participants’ develop an increased sense of commitment and trust towards the company. The company’s brand profits from such an increase in loyalty (Sawhney et al., 2005) and such consumers develop a level of ‘brand intimacy’ (Ind et al., 2013). Active participants furthermore experience an increase in the perceived psychological value of the self-designed product (Franke et al., 2010) and a subjective feeling of ownership of the brand is enhanced (Franke et al., 2010; Fuchs et al., 2010). Researchers have also observed an increase in satisfaction among participants in co-creation, a stronger feeling that they are appreciated by the company as necessary and important contributors to the product...
development process, and a higher level of self-esteem (Ramaswamy and Gouillart, 2010). Integrated consumers exhibit a higher demand for the self-designed product than for company-designed products, their intention to purchase the co-created brand is stronger, and they are willing to pay significantly more for it (Fuchs et al., 2010; Franke et al., 2010; Hoyer et al., 2010; See-To and Ho, 2014). Co-creation also fosters positive word-of-mouth (Bilgram et al., 2011; Hoyer et al., 2010). Consumers who collaborate actively in NPD report more favourable brand perceptions and attitudes. They also experience an intrinsic sense of reward in the feeling that the company has listened to them and given them the chance to influence the future direction of the brand (Ind et al., 2013).

In short, co-creation has a positive effect on the product- and brand-related constructs of ‘participants’. But the question remains whether or not co-creation affects the ‘observers’ who do not participate in the co-creation process.

3.2.4 The unknown effect of co-creation on OBBE

To our knowledge, only four empirical research studies have so far explored the influence of co-creation on the mass market – that is, those consumers we refer to here as ‘observers’.

The first of those investigated how such observers perceived companies which empowered customers as contributors to corporate NPD. Fuchs and Schreier (2011) argued that companies can involve customers in the NPD process either by giving them a choice among varied designs and specifications or by inviting them to develop their own proposals for new products. These two dimensions of customer empowerment and the interaction between them were tested in an experimental setting for three different product categories (t-shirts, folding bicycles and furniture), in which it was considered that customer empowerment might generally make sense from the NPD perspective. Participants in the Fuchs and Schreier experiment were shown images of co-created products and text referring to them and informed that the products concerned had been selected or created, or both, by consumers actively involved in the
co-creation process. It was found that such customer empowerment led to an increased level of
customer orientation, more favourable attitudes to the company and stronger behavioural
intentions among non-integrated consumers. The finding applied to all three product categories
despite the deliberate differences in terms of perceived financial, functional and physical risk,
and the level of engineering and technology input to the design.

Schreier et al. (2012) studied non-integrated observers’ perceptions of companies that sell
products co-created by customers. Their study focused on consumer products, since that is the
category within which manufacturers increasingly draw on ‘user design’ and promote it in their
communications; they considered that it would be both unrealistic and uninteresting to study
perceptions of firms in more industrial product categories. The research design compared
company design with user design for four product categories: t-shirts, breakfast cereals,
household products, and sports products. Participants in the study were given background
information about the respective manufacturers and their approaches to innovation before being
exposed to relevant visuals and text. The finding was that the evidence of co-creation by users
enhanced perceptions among non-integrated consumers of a firm’s innovation ability with
respect to product outcomes. The study thus confirmed the expected positive effect of
user-design in the product categories investigated. In particular, it was found to mediate positive
outcomes with respect to the purchase intentions of participants in the study, their willingness
to pay and their readiness to recommend the firm to others.

Fuchs et al. (2013) investigated the extent to which benefits attributed to identifying products
as being co-created with consumers can be generalised to a range of product contexts. Their
study focused on customer involvement in NPD in the luxury fashion sector, on the working
assumption that co-creation might exert a positive innovation effect for the makers of
mainstream fashion brands but would backfire in the case of luxury brands. While the two other
studies reported above had involved unknown or fictional brands, these research designs
involved such familiar mainstream fashion brands as Sisley and Diesel and such luxury brands Louis Vuitton and Prada. User-design was tested against professional company design by presenting study participants with visual images and background information relating to the different fashion collections, explicitly identified as user-designed or company-designed. The findings confirmed the expected positive outcome of identifying the product as having been co-created, in the case of mainstream fashion brands. With regard to luxury brands, however, an important boundary condition was found to apply to that positive effect. The results also identified a mitigating effect on consumers’ brand perceptions. Since luxury brands are built upon an image of exclusivity and high status, the idea of collaborating with active consumers and being close to end-users is more likely to harm a luxury fashion brand than to benefit it. Specifically, specifying user-design of a luxury brand could result in reduced demand, lowered quality perceptions and failure to signal high status.

In the fourth and most recent of the four studies identified in the literature, Van Dijk et al. (2014) investigated the effect of co-creation on observers’ behavioural intentions and their perceptions of a brand’s personality, by testing company-design against user-design in the case of a well-known Dutch ready-made food brand and a fictional alternative. The researchers raised the question whether familiar brands can benefit as much from co-created product innovations as unfamiliar brands can because brand associations already exist. The particular consumer product chosen for the experiment had not yet been introduced to the market. An experimental study in which individuals were exposed to visual images and background information about the genesis of the design found that co-creation positively influenced the behavioural intentions (willingness to try out the new product, purchase it, talk positively about it, and recommend it to others) and perceptions of brand personality. The results also showed that the knowledge that a brand collaborates with customers in its NPD process enhanced in particular observers’ perceptions of the sincerity of the company. No evidence was found that
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the effect of co-creation on perceptions and intentions differed between the established and fictional brands.

These studies can be seen as a first approach to the understanding of how co-creation affects the OBBE in the mass market, but the answer to that research question remains incomplete for three main reasons. First, the majority of the existing relevant research studies investigated active participants in co-creation. Second, the studies that have focused on non-active observers have yielded contrasting findings. The positive effect of user involvement in co-creation was found in most cases but, in the case of luxury brands, it was negative. Third, all previous studies have measured individual and different components of the brand-related outcomes. That said, the findings of three of the four studies examining the effect on observers are positive. Since our study also focuses on consumer brands and most research studies of active participants in co-creation show that it has a positive influence on brand evaluation, we follow the tenor of the available literature on participants and observers by expecting co-creation to have a positive effect on OBBE.

Our first research hypothesis is thus that:

**H1: Co-creation has a positive effect on observer-based brand equity.**

3.2.5 Implementation of co-creation and the unknown effect on OBBE

Fuchs and Schreier (2011) suggest that customer integration into NPD can be conceptualised in terms of two basic dimensions: the extent of customer empowerment to (1) select product designs and (2) create them. They distinguish four different strengths of empowerment on each of those dimensions. The first, ‘zero empowerment’, describes a condition of no co-creation and corresponds to the traditional corporate approach to NPD. The company is responsible for and in charge of the whole of the innovation process and consumers are not involved at all. A starting point for their incorporation into the NPD process is the empowerment of participants to make a selection from given product designs to be produced by the company at a later stage.
This form of integration, ‘democratic voting’, is actively put into practice by firms across a range of product categories. For instance, Fuchs et al. (2013) report that the American designer lifestyle brand Giando Massi allows its ‘fans’ to vote for their favourite design via Facebook, and will develop the highest-rated designs.

Beyond simply selecting designs, consumers may be empowered to create their own design for new products in collaboration with the manufacturer. This ‘commonly created’ level of integration into NPD is not only a stronger form of consumer integration, but also demands a higher level of involvement on the part of those integrated participants. Fuchs et al. (2013) give the example of the ‘Design a Coach Tote’ initiative by the eponymous brand, in which users were invited to create their own designs for a new handbag, the best of which were commercialised by Coach. The strongest form of integrating participants allows them to both create designs and vote for outcomes. It can thus be defined as ‘full empowerment’. It is practised, for instance, by the Chicago-based online co-operative and e-commerce website operator, Threadless, with specific reference to their user-designed t-shirts. A large number of alternative graphic motifs are put to an online public vote every week. The top-scorers are reviewed weekly and about ten designs chosen on the basis of average scores and ‘community feedback’ to be printed on the t-shirts and other clothing, which are then sold online worldwide. Threadless call their community of online participants ‘artists’. With more than 860,000 followers on Facebook and more than two million on Twitter in 2015, according to their own website, they receive an average of 500 new user-made designs per week. Another example, cited by Hatch and Schultz (2009, 2010), is LEGO and its LUGNET (LEGO Users Group Network) online community, within which fans of the brand exchange ideas about new designs and features. The combinations and compilations of bricks that receive a certain number of votes are regularly adopted by LEGO itself and later sold as being ‘Designed by LEGO Fans’.
Fuchs and Schreier (2011) assert that non-integrated observers who are aware that active participants have been empowered to select or create new products perceive the empowering company to be more customers oriented, have more favourable attitudes towards it, and exhibit stronger purchase intentions. We thus argue that the expected positive effect of co-creation on OBBE might be reinforced by varying the implementation of the co-creation approach. We expect that the strength of consumer’s involvement in co-creation affects OBBE. More precisely, the more strongly active selecting and creating consumers are integrated into the co-creation of a brand, the higher is the expected positive effect on OBBE.

Our second research hypothesis is thus that:

**H2:** *The strength of the integration of active participants into the new product development process moderates the effect of co-creation on observer-based brand equity.*

Our study tested the effect on OBBE of two of the different strengths of integration proposed by Fuchs and Schreier (2011): ‘democratically voted’, which represents the empowerment to select a product and ‘commonly created’, which represents the empowerment to create a product. ‘Zero empowerment’ (no co-creation) served as a control group.

Fuchs et al. (2013) introduce a strategy to legitimise consumers who were part of the NPD process to counter the possible mitigating effect of co-creation on the image of luxury brands. They found that non-integrated observers reacted more positively to user-designed luxury fashion brands if integrated participants were socially distanced from them by being legitimised by the brand’s head designer’s acknowledgment of the design capabilities of the winning user-designers, by being described as ‘artists’ or by being celebrities. Hence, it can be argued that an individual who has been presented as a legitimate influencer can have a positive effect on observers’ brand evaluation. In order to see whether the expected positive effect on OBBE
of customer empowerment in NPD could be reinforced, we chose to test a specific type of participant who was at a social distance from other active participants as well as from mere observers: for example those with an extended level of knowledge in a specific domain.

Consumer knowledge consists of two different elements: product familiarity or experience and expertise (Alba and Hutchinson, 1987; Jacoby et al., 1986). The former implies some degree of experience with or information about a specific product. Product-related experience can emerge through, for instance, interaction with salespeople, exposure to advertising, comparison with competing offers, or purchase and usage (Alba and Hutchinson, 1987). The higher the level of familiarity with a product, the greater a consumer’s expertise also is, defined as the ability to perform product-related tasks successfully and skill in a specific area (Alba and Hutchinson, 1987; Ericsson and Smith, 1991; Jacoby et al., 1986). ‘Experts’ possess accumulated knowledge about a product which can be easily recalled and combined with new information (Alba and Hutchinson, 1987). In that process, information can be judged important or unimportant, the former being processed more selectively and intensively. Ericsson and Smith (1991) define experts as individuals who are perceived to be comparatively outstanding in a particular domain. Fiske et al. (1983) had earlier argued that they are able to manage their knowledge more efficiently than non-experts because they are more familiar with specific attributes of a product than novices and, as he puts it, possess a larger available cognitive capacity.

Expertise has also been defined as the extent to which a communicator is perceived to be a source of valid assertions (Hovland et al., 1953). Marketers may thus be able to convey their message to the market more effectively by working with experts as spokespeople for a product or brand. In this sense, the notion of expertise implies that its possessor has certain positive characteristics which will affect the persuasiveness of the message, the level of trust consumers have of a source and hence their acceptance of the proposition put. If the source of the message
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is trustworthy, consumers accept it as more credible and honest and feel more confident during
the purchase and consumption process; if on the other hand they do not trust a source they are
much less likely to purchase the product or develop positive attitudes towards it (Atkinson and
Rosenthal, 2014). The perceived expertise of a source thus has a positive impact on attitude
change and willingness to follow advice (Ohanian, 1990). One study found specifically that
salespeople judged to be expert achieved a higher sales volume than non-experts (Woodside
and Davenport, 1974).

The concept of the expert knowledge of integrated consumers being combined with co-creation
has never, to the best of our knowledge, been tested empirically. With the aim of bringing
co-creation and expertise together, our study set out to investigate the extent to which the higher
level of knowledge among consumers incorporated into the process can increase the positive
effect of co-creation on OBBE. The literature suggests that the harnessing of expertise can have
a positive effect on the evaluation of a brand by consumers in the mass market. We therefore
assume a difference in OBBE according to whether it is ‘fans’ or consumers with advanced
knowledge in the product category who co-create the brand. We argue that integrated
consumers’ expert knowledge deployed in the co-creation will have a positive effect on OBBE.

Stating that proposition as a formal research hypothesis:

H3: The perceived expertise of active participants moderates the effect of co-creation on
observer-based brand equity.

In our experiment, described in detail in the next section, the expertise of actively-integrated
consumers was explained to the individuals taking part in terms of the extended knowledge and
high familiarity with the product categories to be tested conferred by their association with the
German Sport University Cologne, the only national academic institution to be dedicated
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exclusively to sports management, exercise science, sports medicine and nutrition. The conceptual framework in Figure 3.2 summarises the relationships postulated in the three research hypotheses.

![Conceptual framework](image)

**Figure 3-2: Conceptual framework**

3.3 Empirical study

3.3.1 Pre-tests and procedure

A 2 x 2 between-subjects experimental research design was chosen to test the conceptual framework. Two brands from contrasted product types within one general category, Nike sports footwear and Kölln energy cereals, were selected as the experimental stimuli on the basis of existing studies of the most common brands in Germany (Aberratio 2014; Gujmedia 2014) and on a pre-test among 34 university students to test brand awareness. The dependent variable was observer-based brand equity (OBBE); the independent variables were (1) the strength of consumer integration in NPD and (2) the perceived level of expertise of actively integrated consumers. Chosen to be the perceived source of expert knowledge was the German Sport
University Cologne, renowned within the country for its relevant specialisations in sports management, medicine and nutrition, and therefore possessing a high degree of credibility and trustworthiness in the context of the study. The integrated consumers were represented by students and professors attending and delivering classes in sports and health management, who could be assumed to be in a position to offer expert knowledge with regard to both of the test products when co-creating the brand.

To check whether the manipulations of the two independent variables had been effective, a second pre-test was conducted with 59 students. Different sub-groups were exposed to a print advertisement and a press release for a Nike brand running shoe and to an advertisement and a press release relating to a new muesli launched by the Kölln brand. All four had been created in different treatments which varied only in terms of the strength of integration and the perceived level of expertise of the co-creating integrated consumers. In the case of both Nike and Kölln, the variations were ‘selected’ versus ‘created’ and ‘novice’ versus ‘expert’. Appendix B includes exemplary press releases for the treatments. Appendix B shows the expertise/ weak integration and no-expertise/ weak integration variants of the Nike and Kölln press releases (translated into English). There were thus four manipulated inputs per brand.

Participants in the experiment were also exposed to one advertisement and one press release for each brand in which there was no implication of consumer involvement in the process of product development, as a control condition.

Participants in the pre-test read the press release for the first brand then saw the corresponding advertisement before responding to the statements “Consumers are strongly involved in the product development” and “Consumers involved in the product development have a high level of expert knowledge” on a Likert scale anchored at 1 = completely agree and 5 = totally disagree. Participants then repeated the procedure for the second brand. A t-test showed that the manipulation of the strength of integration was effective and significant for both Nike
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(3.38 > 2.59; p=0.039) and Kölln (3.31 > 2.27; p=0.007), as was the manipulation of the expert status: Nike (3.88 > 2.61; p=0.001); Kölln (3.96 > 2.20; p=0.000).

3.3.2 Study
The between-subjects design study consisted of two independent variables relating to consumer involvement in the product-development process (strength of integration: vote versus create) and two relating to the perceived expertise of the co-creator (novice versus expert) plus one control-group treatment in which there was no evidence of consumer input into the process. The 239 participants in the full study were students at a German university, of whom exactly half were aged between 18 and 22, 60% were female and 68% studied Business Administration. The design of the main study was similar to that of the second pre-test, with the addition of a control group, exposed to advertisements and press releases for both brands in which there was no evidence or suggestion of co-creation, to measure the general impact of co-creation on OBBE. An advertisement and press release relating to a third brand and a questionnaire were also included in the design, to distract the participants from the exact aim of the study.

The dependent variable OBBE was measured by eleven different items derived from well-established scales previously used to measure consumer-based brand equity (Atilgan et al., 2005; Bravo et al., 2007; Lehmann et al., 2008; Yoo and Donthu, 2001). The reliability of the scale chosen for both brands was confirmed by a Cronbach’s α coefficient of 0.887 for Nike and 0.942 for Kölln. Confirmatory factor analysis validated the OBBE scale in both cases, the measures of fit yielding results that Hu and Bentler (1999) define as highly satisfactory: for Nike (CFI = 0.96; TLI = 0.95; RMSEA = 0.07; SRMR = 0.04) and for Kölln (CFI = 0.97; TLI = 0.95; RMSEA = 0.07; SRMR = 0.06).

The pre-test of the initial manipulation was checked again in the main study by applying the same two statements and Likert scale for both treatments. With respect to the strength of integration, the control group, the voting experimental group and the creating experimental
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group were tested against one another. ANOVA found that the manipulation was effective and significant for both Nike (3.64 > 3.00 > 2.09; p = 0.00) and Kölln (4.19 > 2.44 > 1.92; p = 0.00). T-tests also showed that variation between non-expert and expert co-creators was significant for both brands: Nike (3.67 > 2.12; p = 0.00); Kölln (3.78 > 2.05; p = 0.00).

3.3.3 Findings
H1 was tested by means of a t-test between the control group and both the experimental groups for both brands, assessing the extent to which co-creation affected OBBE positively in comparison with the no-co-creation condition, with the results shown in Figure 3.3. The hypothesis was rejected for the case of Nike (2.10 < 2.18; p = 0.499; F = 0.186). Non-integrated consumers’ knowledge that the brand had been co-created in association with integrated consumers did not result in an increase in the OBBE score. In the case of Kölln, however, H1 was accepted (3.49 > 3.03; p = 0.008; F = 0.458). The non-integrated ‘observers’ who had been exposed to the co-creation version of the press release exhibited higher brand equity than the control group, exposed to a no-co-creation treatment.

Figure 3-3: Mean values of OBBE in control group and experimental groups
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An ANOVA with respect to the OBBE scores was conducted in order to measure whether or not the strength of integration of the integrated consumers had an impact on the brand equity exhibited by non-integrated observers – to be precise, if an increase in the empowerment of integrated consumers in the NPD process leads to an increase in OBBE – with the results shown in Figure 3.4. The outcome was that H2 was rejected in the case of Nike (2.11 < 2.16 < 2.20; p = 0.764; F = 0.269), the strength of integration had no effect on the mean OBBE score. With regard to Kölln, however, the hypothesis was accepted (3.49 > 3.14 > 2.93; p = 0.01; F = 4.666) since the strength of integration had a positive effect on the OBBE, and an increase in that value furthermore led to an increase in the value of the dependent variable, OBBE. However, the difference in means between the weakly-integrated ‘voting’ co-creators and their strongly integrated ‘creating’ co-creators counterparts was only marginal. The significant effect was mainly attributable to the control-group, though a positive tendency can be acknowledged.

Figure 3-4: Mean values of OBBE by strength of integration
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A t-test was conducted to compare integrated consumers with no expert knowledge and integrated consumers with expertise to assess the extent to which the notion of expertise had a positive effect on OBBE. The results shown in Figure 3.5 require H3 to be rejected for both brands. Neither the OBBE for Nike (2.23 > 2.14; p = 0.428; F = 0.516) nor that for Kölln (2.98 < 3.08; p = 0.482; F = 0.883) was positively influenced by the stated expert knowledge of integrated consumers.

![Figure 3-5: Mean values of OBBE by expertise](image)

3.4 General discussion

3.4.1 Theoretical and managerial implications

The academic literature reports a large corpus of research on the role of ‘integrated’ consumers and the importance of co-creation in the NPD process. It fails, however, to offer sufficient evidence of how integrated co-creators can be effectively incorporated into brand management strategy and brand communication. Schreier et al. (2012) call for more research studies involving non-integrated consumers and those who are not already familiar with the product,
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while Fuchs et al. (2013) call for more research into the notion of ‘democratic decision making’ in NPD. Hoyer et al. (2010) are concerned about the effect that co-creation can have on product positioning, brand image and corporate image. Ind et al. (2013), summing up the current state of knowledge, assert that neither the impact of co-creation on consumers in general nor the strategic managerial implications is clear, due to a lack of applicable research.

In short, authors in a range of academic journals have recently been identifying the need for more and better research on what we have called ‘observers’ and ‘observer-based brand equity’ (OBBE). In response, our study is one of the few published so far to analyse the effects of co-creation on non-integrated consumers and the very first, to the best of our knowledge, to explore how it affects OBBE. We furthermore supplement the traditional approach to the discussion of co-creation as a tool in the innovation process by exploring its possible utility as a means of strategic brand management in the mass market.

Our study found that co-creation can have a positive effect on OBBE, though the improvement attributable to user-designed products was both weak and only marginal. No negative effects were observed. Thus, in contrast to the typically positive tenor of studies of co-creation in NPD usually have, we have come to a somewhat disillusioning conclusion with regard to its actual effect, at least with regard to non-integrated consumers. We challenge the temptation to blindly transfer findings of the positive influence of co-creation on participants’ brand equity to the brand equity of observers. It seems that the antecedent of an amelioration of the latter is not in fact the embedding of customer integration into innovation management, in so far as OBBE has been found to be rather unaffected by the former.

Fuchs and Schreier (2011) argue that a company is perceived by non-integrated observer-consumers as more market oriented when it increases the empowerment of integrated participant-consumers in the NPD process: that is, its corporate image seems to profit from user-design. We found a different effect. Our study did not actually measure a decrease in brand...
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equity and an increase in the measure of OBBE can occur, but the positive impact of co-creation was limited at best and generally not a significant factor.

Our study further extended those reported in the literature by empirically testing the influence of co-creation in combination with that exerted by the expertise of integrated consumers, as perceived by observers. Again, no effect on OBBE was detected. Even the message that bona fide experts had worked with the company in the NPD process (as, for example, in the case of the German Sport University) did not increase the measure of OBBE.

To sum up, co-creation does not harm OBBE, but equally does not confer any noticeable benefit on it. If overall consumer-based brand equity is seen as the sum of its constituent parts, PBBE and OBBE, the implication in our view is that co-creation is not the proper way to set about improving OBBE. As various studies have shown, PBBE can be enhanced by collaborating with participant-consumers in the design and development of new products. Thus, such co-creation mainly affects only a small proportion of the consumer-based brand equity. OBBE, by far the largest component of CBBE, seems to be resistant to co-creation.

Transferring our findings into the practical field, the study bears important implications for managers. In implementing a strategy of incorporating co-creation into brand management and brand communication, managers need to be aware of the comparatively low influence exerted by the brand equity of non-participating consumers, who clearly make up the majority of the market. The fact that participant-based brand equity seems to be the decisive element of overall brand equity raises the question of how strategically effective it in fact is to incorporate co-creation into brand management, especially with the aim of positively affecting OBBE. With an eye to budget allocation, we suggest that it would be better to think in terms of converting passive observers into active participants. More of the latter should result in an increase in PBBE and ultimately in a benefit for overall CBBE. Thus, instead of focusing on the communication and presentation of the user-designed product that is the result of co-creation,
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Managers should plan to increase the number of participants in co-creation, so as to improve the level of CBBE. Figure 3.6 visualises this process in operation.

**Figure 3-6: How to improve CBBE by means of co-creation**

Companies should schedule their communication activities before the planned NPD begins or at a very early stage during it, with the aim of motivating more consumers to become part of the action. Managers aiming to exploit the benefits of co-creation have to understand what motivates consumers to become engaged in the process. There is a substantial literature relating to the drivers of co-creative consumer behaviour (Bagozzi and Dholakia, 2002; Coulter et al., 2003; Deci and Ryan, 2002; Emerson, 1981; Fournier, 1998; Franke and Schreier, 2007;
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Franke and Shah, 2003; Franke et al., 2010; Franke, 2014; Füller, 2006; Hennig-Thurauf, 2004; Ind et al., 2013; Schreier, 2003; Von Hippel, 2009).

The actual process of interaction furthermore needs to be user-friendly. Well-developed engagement platforms, referred to in the literature referred as ‘toolkits’ (Thomke and Von Hippel, 2002; Von Hippel, 2001; Von Hippel and Katz, 2002; Von Hippel et al., 2011), designed to facilitate participation in co-creation, could be a readily available means to increase the number of integrated consumers.

We are not suggesting that co-creation should be concealed from the market in brand communication. The strategic aim is more to find the right balance between communicating the fact of user-design to observers in a positive way after the initial co-creation (via broadcast media, online or in-store) and aiming to motivate them to become participants. So far, companies have focused on the former. In terms of increasing CBBE with the help of co-creation, we are arguing that the focus needs to be clarified and shifted in the direction of the engagement of consumers.

3.4.2 Limitations and further research

This study gives a more complete insight into the how co-creation affects OBBE than can be gleaned from the literature so far, but certain limitations that have to be taken into account which in turn suggest directions for further research.

The results of the analyses of the empirical data study should be treated with appropriate caution, given that the participants in the study were a convenience sample of university students of business administration. While it would certainly be risky to generalise the findings to the consumers in general, students do represent an important target market for both brands chosen as the experimental stimuli. Though their responses concerning co-creation and user-design could be of importance to Nike, Kölln and other companies targeting similar
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markets, it would be advisable to replicate the study with a focus on a more heterogeneous sample.

Although the scale used to measure OBBE was validated, a further limitation may relate to the conceptualisation of the OBBE. First, there is no general agreement about what brand equity actually is or the dimensions which constitute it (Christodoulides and De Chernatony, 2010; Christodoulides et al., 2015; Veloutsou et al., 2013). Second, the scale in question was applied to both brands without any adaptation despite their representing two distinct product categories and the respondents being in a single country. Christodoulides et al. (2015) remark that the conditions in which brands are competing will vary according to the product category and to geography.

Only one source of expertise (the nationally renowned specialist university) and one type of expert (students and professors) were included in the research design. While no significant effect on OBBE was found in our study, the expertise of different types or sources of active consumers might have produced a positive result. A future study could usefully test the influence of artists as a special type of expert, testing whether or not OBBE was enhanced by the ‘art infusion effect’ (Hagtvedt and Patrick, 2008a). As for the product category, those which are more technical or of higher complexity in general might derive greater benefit from the involvement of integrated consumers with appropriate technical expertise in the innovation process. One particular class of expert, online bloggers, are often seen as opinion leaders by their followers. They are thereby able to provide advanced information to consumers, the value of which is enhanced by their perceived credibility, innovativeness and expertise (Droge et al., 2010; Hsu and Tsou, 2011; Lyons and Henderson, 2005; Schmallegger and Carson, 2008; Uzunoğlu and Kip, 2014). Involving such credible experts in co-creation could yield positive effects comparable to those that can be achieved by using celebrities as spokespeople for a brand (Patzer, 1983; Thomsen, 2006; Tripp et al., 1994). It would thus be interesting and
potentially useful to investigate whether brands co-created by bloggers enjoy a heightened OBEE.

Bloggers could furthermore be conceived of as a special type of participating consumer and communication channel. In our experiment, observers learnt about the co-creation of the product via press releases and advertisement issued by the company; a future study might assess the extent to which the effect on OBEE is different if that information is conveyed by the user-designers themselves. It has been suggested that integrated participant-consumers are likely to deliver positive word-of-mouth recommendations and referrals (Hoyer et al., 2010; Maru File, 1992; See-To and Ho, 2014). Such dissemination of the co-creation activity by participants into their own networks could be expected to have a positive impact on the OBEE within that network and to motivate the hitherto non-integrated consumers who are also within it.

Although our study design involved the companies themselves plus novice and expert outsiders as categories of co-creator, we made no distinction in the material that was shown to the participants assigned as non-participants observers. Previous published studies have found that consumers can generate ideas with high commercial potential and that the outcomes of user-driven NPD compete with, or in some cases even outperform, innovations of professional and corporate origin (Fuchs and Schreier, 2011; Hoyer et al., 2010). Further research could explore the effect of co-creation on the OBEE not only when the type of co-creator differs but also when the product is user-designed versus company-designed.

The brand images of the two tested brands were not measured. Conclusions drawn from the study can be transferred to other brands only with caution in so far as brand image could be a relevant determinant of whether or not a specific brand is perceived to be ‘authentic’ in the context of empowerment of consumers to participate in NPD. Some brand images might have a better fit to co-creation and user-design than others. Fuchs et al. (2013) have shown that, in
the case of luxury brands, co-creation can have a negative impact on the perception of luxury brands as they are built upon the notions of distance and high status. Fuchs and Diamantopoulos (2012) and Fuchs et al. (2013) argue that the involvement of consumers in NPD might have a better fit in some product categories than in others, and could thereby affect its relevance from the non-integrated consumer-observer’s point of view. Further research might therefore usefully investigate the impact of user-design on brand image in various product categories.

Our study did not measure the brand equity of the two brands investigated. Intuitively, we believe that Nike has much higher brand equity and brand awareness than Kölln. In the case of a strong brand, co-creation may have only a marginal effect on OBBE at best and possibly no effect at all; it might, however, help to improve OBBE for a weak or young brand. Though Van Dijk et al. (2014) contend that co-creation does not affect observers’ brand perceptions differently if the brand is established rather than unknown, the impact on OBBE of brand equity before co-creation is not clear. Future research is needed to establish whether or not that variable moderates the relationship between co-creation and OBBE.

We also made no effort to measure the weight of communication over time. The effect on OBBE could depend on whether the information that the brand had been co-created was communicated only in the short term or over a longer period of time during which consumers were confronted with it repeatedly and frequently. Future studies might look for evidence that the pattern of communication has a moderating effect on the relationship between co-creation and OBBE.

Lastly, the possible negative effects of co-creation were taken into account only tangentially. User-designers might later exhibit negative or even anti-social attributes that are revealed to the mass market by social media or other communication channels. In such circumstances, co-creation could harm the brand by triggering negative publicity and word-of-mouth. Problems within the process of co-creation itself, such as unfair voting, facetious responses and
unfulfilled promises made by a company to participating consumers, could also exert a negative
effect on brand equity. More research into this aspect of co-creation is definitely needed, given
that most studies to date have taken a very positive perspective, despite the possibility of
customer integration resulting in co-destruction.
This chapter explores the dark side of brand co-creation. The tendency in existing studies has been to take an optimistic perspective and overlook the fact that co-creators might misuse their increased empowerment to push the brand in unwanted directions. To counter that limited view of the phenomenon, the notion of ‘non-collaborative co-creation’ is described and defined. A between-subjects experiment is reported, which measured ‘observer-based brand equity’ (Chapter 3) before and after exposure to purpose-designed distortions of actual Nike and Levi’s advertising, taking the form of either ‘brand play’ or ‘brand attack’, executed by established artists or mainstream consumers. The chapter interconnects the fields of culture and brand management by testing the extent to which the involvement of artists can mitigate negative brand-related effects in non-collaborative co-creation.

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Abstract

This paper investigates the ways in which ‘non-collaborative co-creation’ can affect brand equity as perceived by independent observers. It reports a study of the different effects on that perception attributable to non-collaborative co-creation that takes the form of either ‘brand play’ or ‘brand attack’ and is executed either by established artists or mainstream consumers. Particularly, a 2 x 2 between-subjects experiment (brand play versus brand attack; consumer versus artist) measures observers’ perception of brand equity before and after exposure to purpose-designed co-created treatments. Findings show that non-collaborative co-creation causes a negative difference in before-after values (dilution) of observers’ perceptions of brand equity. Furthermore, the study demonstrates that the effect on observers’ brand equity is moderated by the form of non-collaborative co-creation and the type of co-creator. Thereby, brand attack causes a stronger dilution of brand equity than brand play. Artists can mitigate the dilution or have a positive effect on those perceptions. These results bear the implication that brand managers must recognise that co-creation carries considerable risks for brand equity. They should closely monitor and track the first signs of non-collaborative co-creation in progress. It could be beneficial to recruit artists as co-creators of controlled brand play. Future research could usefully investigate the relative susceptibility of brands to non-collaborative co-creation, the effects on brands of higher complexity than those in our experiment, exposed in higher-involvement media, and the effects of more diverse forms of co-creation.

Keywords: Non-collaborative co-creation, artist co-creators, brand play, brand attack, brand equity
4.1 Introduction

One view of branding is as a dynamic social process constructed through multiple relations between companies and stakeholders. For instance, see: Merz et al. (2009); Veloutsou (2009); Vallaster and Von Wallpach (2013); Kaufmann et al. (2016); Von Wallpach et al. (2017). The outcome of active dialogue and interaction between the integrated parties is ‘co-creation’ of the brand’s value and meaning (Black and Veloutsou, 2017; Iglesias et al., 2013). Most published studies in the field of brand co-creation tend to take an optimistic perspective of consumers engaging with each other and with the brand, a process which has become a key objective in the marketing strategies of many companies (Dessart et al., 2015). However, the involvement of consumers in the creative and innovative co-creation processes around branding entails the risk of negative forms of engagement (Hollebeek and Chen, 2014). Brand co-creation can mean that companies lose control over the brand’s meaning (Cova and Paranque, 2016; Saleem and Iglesias, 2016), which may be pushed in unwanted directions (Ind, 2014). Co-creators could misuse their increased empowerment by behaving non-collaboratively instead of as valuable contributors and thereby representing an uncontrollable source of information (Black and Veloutsou, 2017). Both the existing literature and real-life cases suggest that non-collaborative co-creators may either playfully parody initial brand meanings or express negative emotions they feel towards the brand and its meanings (Fournier and Avery, 2011; Hegner et al., 2017; Zarantonello et al., 2016).

In real-world cases, the entries in an online label-design competition in 2011 backfired for the German dishwasher detergent brand Pril. Among non-serious and facetious designs and slogans, one included the headline “Tastes of chicken” and another featured a distorted cartoon face (how-todotcom, 2011). A similar competition for the Nutella brand in France attracted submissions containing a number of words to which the brand owner seriously objected, such as “palm oil” or “orangutan”. Provoked by what was seen as censorship, contestants turned to negative and harmful word-of-mouth (Theeboom, 2015). Both brands were thus facing the
consequences of non-collaborative co-creative behaviour, which certainly did not work to their own advantage. The literature normally focuses on consumers as the co-creators of brand meaning subversions, but also acknowledges that professional artists are often the originators of brand-related parodies and anti-brand content (Borghini et al., 2010; Klein, 1999; Sandlin and Milam, 2008). Specific cases include a German artist known for his gentle mocking of brand names and logos, Petrus Wandrey, who transformed Nivea Crème into ‘Naïve Crime’ and Rolex into ‘Relax’ (Petrus-wandrey.com, 2015) and the American artist Ron English, who explicitly attacks brands rather than playfully distorting logos or designs. Blazenhoff (2012) reports his re-naming a Kellogg’s cereal as ‘Sugar Frosted Fat from Killkids’ and picturing the brand’s mascot Tony the Tiger as an overweight ‘Fat Tony’.

Although such brand parodies and negativity toward brands are a current and developing phenomenon (Fournier and Alvarez, 2013; Rauschnabel et al., 2016; Veloutsou and Guzman, 2017), research has so far paid very little attention to the brand-related effects of non-collaborative co-creation. Non-collaborative behaviour has been identified, however, as a significant feature of interactions between a brand owner and its stakeholders (Echeverri and Skalen, 2011; Gebauer et al., 2013; Greer, 2015) with the attendant danger that altered brand meanings can start to compete with those initially created by brand managers and thereby decrease the value of hitherto successful and competitive brands (Cova and D'Antone, 2016; Giesler, 2012; Thompson et al., 2006). In such a situation, co-creation is not a process of mutual brand-value development, but becomes one of brand-meaning destruction (Gyrd-Jones and Kornum, 2013). If so, non-collaborative co-creation is a serious threat to a brand and its carefully nurtured equity. There is therefore an urgent need to explore the ways in which the results of non-collaborative co-creation are perceived in the marketplace. Our paper accordingly presents what is to the best of our knowledge the first empirical attempt to investigate the effect of that one form of co-creation on brand equity as perceived by the observers of the co-created content. We define that perception as ‘observer-based brand equity’
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or OBBE. Our study also tests the extent to which the effect on OBBE is moderated by the particular form of non-collaborative co-creation, on the grounds that such distinct forms might have a totally different effect on the brand and that their potential damage to its equity could therefore differ significantly, as well as the consequent need for the brand owner to react appropriately. In one such form, the brand may serve as a fodder for parody and pranks (Fournier and Avery, 2011; Harold, 2004; Thompson et al., 2006); we call this ‘brand play’. In another form of non-collaborative co-creation, the brand is hijacked for a destructively negative re-imagining of its meanings (Cova and Pace, 2006; Romani et al., 2015; Zarantonello et al., 2016); we call that ‘brand attack’.

A second moderator explored in the study is the type of co-creator, specifically general consumer or independent artist. Artists do regularly engage in non-collaborative co-creation (Borghini et al., 2010; Klein, 1999), and we may suppose that the effect they have on OBBE will differ from that exerted by mainstream consumers. Research studies having furthermore shown that art has a positive effect on brands (Fuchs et al., 2013; Hagtvedt and Patrick, 2008a; Lee et al., 2015), we explore the extent to which that also holds true in the case of non-collaborative co-creation.

Our findings are that: (a) non-collaborative co-creation can lead to a dilution of brand equity even for high-equity brands, demonstrated by a before-and-after negative change in OBBE, (b) its effect is moderated by the form of non-collaborative co-creation and type of co-creator; (c) artists can influence brand equity positively even if the artwork is the result of non-collaborative co-creation behaviour. These findings can help academics and practitioners alike to better understand the dangers and risks inherent in brand co-creation. Specifically, they offer guidance on when to take action against destructive non-collaborative co-creation and how to engage artists in the branding process constructively.
4.2 Conceptual background and development of hypotheses

4.2.1 Co-creation of brand meaning

Consumer co-creation challenges traditional company-centric approaches to management. A company is no longer the sole creator of value but shares that task collaboratively with its stakeholders (Prahalad and Ramaswamy, 2004). The co-creation idea is strongly rooted in innovation and new product development (Ind and Coates, 2013). More precisely, the traditional innovation paradigm views consumers as passive entities who are largely dependent upon firms to help satisfy their needs. This perspective has been challenged by, for instance, Von Hippel (2009), while the growing empowerment of consumers to co-produce products and services with other consumers and with the brand owners has been recognised by Chang and Taylor (2016). Co-creation in NPD focuses on collaborative interactions between integrated parties. Enthusiastic consumers who are well disposed towards a brand become involved with it and support the brand owner in developing and evaluating innovations (Cui and Wu, 2016).

The generally positive tenor of findings in innovation management research has strongly influenced the application of the co-creation perspective to other fields such as branding and to the optimistic level of discussion of co-creation in the brand management context.

The notion of brand co-creation is founded upon the proposition that a brand can no longer be defined simply as a representation of a product or service but must rather be understood as the perceptions and interests that unite a disparate group of stakeholders in the pursuit of common cause (Hatch and Schultz, 2010). The literature of branding has simultaneously progressed from the perspective of brands as markers of identification and means of product differentiation to a dialogue discussing brands in terms of a complex social process allowing for the co-creation of value and meaning by multiple stakeholders (Gyrd-Jones and Kornum, 2013; Ind et al., 2013; Kaufmann et al., 2016; von Wallpach et al., 2017). The notion of co-creation posits that, instead of accepting the brand owner’s view of what its brand is, consumers and other stakeholders act
as joint creators and active conduits of brand meaning (Vallaster and von Wallpach, 2013), which incorporates both its identity and its reputation of the brand (Black and Veloutsou, 2017). Stakeholders thus have the power to divert a brand’s internal positioning as well as its external identity and image in totally new directions.

Academic studies of co-creation, including those focusing specifically on brands, have so far tended to neglect the intuitively reasonable proposition that possible negative outcomes must exist. Their perspective is clearly optimistic, emphasis being placed on the product-related and brand-related benefits of co-creation and potential risks combined with customer integration stay overlooked. In fact, non-collaborative behaviour has been identified as a significant feature of interactions between brand owners and stakeholders, capable of inhibiting a positive co-creation strategy (Echeverri and Skalen, 2011; Gebauer et al., 2013; Greer, 2015). Co-creation thus becomes a process of mutual destruction of brand meaning rather than one of mutual brand development (Gyrd-Jones and Kornum, 2013).

4.2.2 Co-destruction of brand meaning

The process of brand co-creation has been most thoroughly explained in academic studies of brand communities in which individuals establish relations with each other and with the brand, to co-create the brand’s meaning: for example, Muniz and O’Guinn (2001), Cova and Pace (2006), Veloutsou (2009), and Dessart et al. (2015). A separate research stream in the literature has shown that brand meanings can be co-destroyed in geographically independent ‘anti-brand communities’ made up of individuals who are opposed to brands (Cova and White, 2010; Dessart et al., 2016; Hollenbeck and Zinkhan, 2006, 2010; Popp et al., 2016), the existence of which is said to be an example of the growing negativity toward brands (Veloutsou and Guzman, 2017). The literature has recently acknowledged that consumers can indeed dislike brands (Demirbag-Kaplan et al., 2015) and sometimes even feel ‘hate’ for them (Hegner et al., 2017; Zarantonello et al., 2016). It has in fact been argued that such negative relationships with
brands are even more common than the positive alternative, and that co-creation as a tactic for brand building is strongly driven by risk (Fournier and Alvarez, 2013). Negative forms of engagement with a brand, as reported for example by Hollebeek and Chen (2014) call into question the optimistic paradigm of peaceful collaborative creation, emphasising instead that co-creation can seriously endanger brand equity.

Another distinct mechanism for transforming initial brand meanings in unwanted directions is ‘culture jamming’, an increasingly popular activity that can be understood as social protest against a consumption-oriented culture and the influence of commercial mass-media (Klein, 1999; Kozinets and Handelman, 2004; Sandlin and Milam, 2008). Its proponents distort and re-define the cultural symbols that are most often represented by successful and iconic brands (Romani et al., 2015). Culture jamming takes many distinct forms, such as the subversion of advertisements and parodying of websites. Exponents may even shoplift an item, change its labelling or packaging and return it to the shelves (Sandlin and Milam, 2008). The most prevalent manifestation of culture jamming is so-called ‘adbusting’, often carried out by independent artists, the aim of which is to create ‘adversarial’ brand meaning by publishing and distributing ‘anti-advertising’ (Rumbo, 2002). Whereas anti-brand communities are clearly related to anti-branding and negativity towards brands, culture jamming also contains the notion of brand-related parodies and pranks that are playful rather than confrontational (Fournier and Avery, 2011; Harold, 2004). Their aim is to ‘improve’ meanings in order to force a change, rather than to destroy them (Klein, 1999).

Anti-brand communities and culture jamming are clear cases-in-point of the general phenomenon of non-collaborative co-creation in action, in our context with respect to brand imagery, brand meaning and brand equity. Though such co-creation is not necessarily negative just because it is ‘non-collaborative’ our study is concerned with the scenario in which a brand owner’s stakeholders misuse their increased empowerment in the process and do not integrate
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their resources in the way the company expects. Drawing upon the notion of ‘devaluation of value’ (Plé and Chumpitaz Cáceres, 2010), we can characterise non-collaborative brand co-creation as the collaborative co-destruction of brand value. The very fact that external actors may become involved in the branding process means that, while a company can plan and manage a strategy for brand identity, it cannot be in full control of public perceptions of the brand’s meanings (Cova and Paranque, 2016; Saleem and Iglesias, 2016). That fact brings with it challenges and risks, given that the commercial interests of the organisation can come into conflict with the intrinsic motivations of consumers and other stakeholders, who may want to steer the brand in directions unwanted by the brand owner (Ind, 2014). This process fosters brand-related parodies and what Thompson et al. (2006) and Giesler (2012) have described as ‘doppelganger images’ capable of diluting brand meanings and endangering a brand’s equity. As most of such co-creation takes place in online networks (Vallaster and von Wallpach, 2013), altered brand meanings diffuse rapidly and thereby increase the possible danger of non-collaborative behaviour.

To the best of our knowledge, there is no available empirical research into non-collaborative co-creation while the majority of studies in closely related fields, such as anti-brand communities and culture jamming, have majored on qualitative research (Romani et al., 2015). Bearing in mind the potential risks of such co-creation for a brand (Fournier and Alvarez, 2013), our study aims to close a gap in current knowledge with regard to the effect of non-collaborative co-creation on brand equity by studying the process experimentally. Given that brand equity is now considered to be a key asset for almost any firm in the mass market and has become a key concept for marketing academics (for example Chatzipanagiotou et al., 2016; Christodoulides et al., 2015), OBBE emerges as the most appropriate measure of the effect. Our study is particularly concerned with investigating how observers in the marketplace perceive the results of non-collaborative co-creation. In the process of co-creation, the overall brand equity is made up of the equity of a small fraction of active participants who agree to engage in the process.
and a large proportion of passive observers who heavily outnumber the former (Fuchs et al., 2013; Kristal et al., 2016).

4.2.3 Dilution of brand equity by non-collaborative brand co-creation

A key proposition underpinning our study is that non-collaborative co-creation has a negative effect on OBBE. We believe that this effect is caused by a dilution of brand equity as demonstrated by a negative difference in before-and-after OBBE values, a measure previously applied by Pullig et al. (2006) and Bambauer-Sachse and Mangold (2011) to the same phenomenon. In our study, dilution is operationalised as a response to negative cues communicated by specific cases of non-collaborative co-creation: specifically, distorted brand logos and advertising images that trigger constructive processing of information in a way that may revise initial beliefs about the brand and bring about a weakening of important brand-value perceptions (Fournier and Alvarez, 2013). An inconsistency could thus emerge between those initial beliefs and the distorted and deformed brand imagery (Keller, 2003). Specifically, altered meanings challenge initial meanings, there is a good chance that observers will revise their initial brand evaluation towards the non-collaborative co-creation, and a dilution of OBBE will potentially result.

Our first research hypothesis is thus that:

**H1**: Non-collaborative behaviour of co-creators has a negative effect on OBBE.

This proposition may at first sight seem intuitively obvious, but we contend that there is an urgent need to examine it empirically, first because this type of co-creation has not yet been formally investigated and its effect on brand equity is therefore unclear, and second because one form that it commonly takes in practice is culture jamming, the playful parodying of brand meanings. Fournier and Avery (2011) have argued that such parodies can in fact be an
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indication of much-coveted cultural resonance for original brand meanings. It could thus be the fact that they would increase brand awareness, a benign or even positive outcome for the brand, and ultimately mitigate the expected negative effect on OBBE.

4.2.4 Different forms of non-collaborative brand co-creation

The literature suggests that there are two forms of non-collaborative brand co-creation, which can be detected in real-life scenarios: the phenomena we have called brand play and brand attack. It was essential to test both in our study because their effect on OBBE is unclear and the need is to capture the overall effect of non-collaborative co-creation.

Brand play can be recognised when the brand is used as fodder for parody. It has its roots in culture jamming and the playful creation of parodies. The concept of playfulness has been studied extensively in marketing-related research as a possible response to advertising (Alden et al., 2000). It has been noted that it is strongly associated with the application of humour to advertising (Rössner et al., 2017) and that a positive connotation is attached to it (Aaker et al., 1988). Playful subversion of a brand might create a positive and risk-free context for observers (Fournier and Avery, 2011), but could on the other hand generate a disconnection between actual brand beliefs and perceived brand attributes, and thereby lead to a revision of initial brand meanings. We compare this situation with an unsuccessful brand extension in which the extension attributes are inconsistent with beliefs regarding the family brand (Roedder John et al., 1998). Our assumption is that this inconsistency will lead to a dilution of OBBE. The second form of non-collaborative brand co-creation is, by contrast, a clearly derisive and aggressive way of subverting a brand, for example by criticising the brand owner’s corporate practices, such as the exploitation of child labour and sweatshops; we call that brand attack. Hegner et al. (2017) argue that this form is strongly related to negative emotions with regard to brands and to anti-branding. Tanner et al. (1991) and Alden et al. (2000) suggest that attacking a brand’s meaning can actually engender fearfulness, especially if the brand is depicted in a threatening
context. Brand attack and the reaction to it is seen as a brand-related adverse event by Dutta and Pullig (2011), who link it to a brand crisis. This can not only have devastating general consequences for the brand (Dawar and Pillutla, 2000) but also dilute its equity (Fournier and Alvarez, 2013). We therefore believe that both brand play and brand attack have a negative effect on OBBE and cause its dilution, the effect of the latter being expected to be stronger than that of the former.

Our second research hypothesis is thus that:

\textbf{H2: The form of non-collaborative brand co-creation moderates the effect on OBBE.}

4.2.5 Artists as non-collaborative brand co-creators

The literature also concerns itself with artists, rather than mainstream consumers, as a significant category of non-collaborative co-creators (Borghini et al., 2010; Klein, 1999). Various cases in point show how they may distort brand logos and graphic images by either brand play or brand attack, as exemplified respectively by the non-collaborative co-creations of Petrus Wandrey and Ron English described in the Introduction.

Increasingly, brand owners actively seek to join forces with the arts, while an increasing number of artists are cooperating with commercial organisations beyond the art world (Iezzi and Wheaton, 2007). There is general agreement that consumers perceive art differently from how they perceive other objects (Joy and Sherry, 2003). In recent years, some studies have begun to investigate the use of art as a marketing tool. The ‘art infusion hypothesis’ (Hagtvedt and Patrick, 2008a) asserts that the integration of art has a positive effect on the image of a product or a brand, whether the artwork is evaluated positively or negatively by consumers; it is the fact of integrating art and commerce that exerts the influence. It can also have a positive effect on a brand’s perceived extendibility (Hagtvedt and Patrick, 2008b) and may furthermore enhance perceptions of its prestige, quality, value and uniqueness. This positive effect can occur whether or not consumers are familiar with the artist (Lee et al., 2015). It was found by Lacey et al.
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The subversion of brand meaning in non-collaborative co-creation by professional artists and consumer activists (2012) that imagery associated with ‘art’ was preferred to that associate with similar images that were visual but not classified as art. They argue that, whatever their content and form, such visual stimuli operate upon the area of the brain connected with rewarding experiences, evoking positive feelings and emotions. Research has also found that art can have a beneficial effect on corporate reputation and image, especially if the company sponsors cultural activities and institutions and announces the fact to the public (McNicholas, 2004; Schwaiger et al., 2010; Quester and Thompson, 2001), and that purchase intention and customer loyalty increase when companies are committed to sponsoring the arts (Carrillat et al., 2008; Mermiri, 2010).

In the literature, artist co-creators are described as being socially distanced from mere participants in co-creation campaigns. To counter the mitigating effect of co-creation on the image of luxury brands, Fuchs et al. (2013) proposed a strategy to ‘legitimise’ those consumers who were part of the co-creation activity. They found that observers rated user-designed luxury brands more positively if the co-creators were socially distanced to some extent from average consumers by being described as ‘artists’. So, in general, it seems likely that any individual who has been presented as a legitimate influencer can have a positive effect on observers’ evaluation of the brand. Artists can exert that influence in particular because of their social distance from other consumer co-creators and mere observers and the fact that, thanks to their superior experience and expertise in design processes, can be declared ‘experts’, who will be credited with the ability to perform product-related tasks in a specific area more successful and skilful than novices (Alba and Hutchinson, 1987; Jacoby et al., 1986). Marketers may be able to convey messages more effectively by working with experts as spokespeople for a product or a brand because the persuasiveness of the message and trustworthiness of the source are increased and consumers feel more confident during the purchase and consumption process (Atkinson and Rosenthal, 2014).
Based on the positive effect of art on a brand and harnessing the idea that mere consumers could rate artists as experts, we assume that non-collaborative brand co-creation by consumer co-creators results in a stronger dilution of OBBE than co-creation by artist co-creators.

Stating that proposition as a formal research hypothesis:

H3: The type of co-creator moderates the effect on OBBE.

The conceptual framework in Figure 4.1 summarises the relationships postulated in the three research hypotheses.

![Figure 4.1: Conceptual framework](image)

4.3 Empirical study

4.3.1 Sampling

Brand co-creation mostly takes place online (Fournier and Avery, 2011; Kennedy, 2017) and the millennial generation accounts for as much as 90% of social media users (Duggan et al., 2015), the majority of those being students. Thus, it is students who mainly engage in brand co-creation and who are typically exposed to the results of co-creation activities. Also, people
born between 1982 and 2000 now represent more than a quarter of the population in the USA (Kennedy, 2017), constituting crucial target groups globally for the brands chosen for the pilot study, pre-tests and main study. If any research findings are to be applicable to consumers of a specific product category or specific brands, then the research should sample those people (Calder and Tybout, 1999). Therefore, a student sample was a proper choice as such a sample is representative of a population of interest in the context of our study. From a statistical point of view, students enhance research validity on account of their apparent homogeneity (Peterson and Merunka, 2014). The resulting high level of internal validity plus the reduced extraneous variability in data allows for strong hypotheses tests to be conducted (Calder et al., 1983; Peterson, 2001). This was considered to be a particularly important consideration for the design of our study because the effect of non-collaborative brand co-creation on OBBE has never been tested before: the effect could prove to be small and a beta error could therefore discourage further research into the phenomenon in future. Our study was in fact concerned more with the testing of theory than with the generalisation of results to other population groups. To ensure that testing was both rigorous and powerful, the sample needed to be as homogenous as possible. The homogeneity within student samples is essentially higher than within other homogenous or non-homogenous samples (Calder et al., 1983; Calder and Tybout, 1999; Peterson, 2001; Reynolds et al., 2002).

4.3.2 Pilot study

A pilot study was conducted in order to inform the selection and design of the two implementations of non-collaborative brand co-creation to be tested: ‘brand play’ and ‘brand attack’. Nineteen students of business administration and economics at a German university were exposed to a dossier of 29 representations of well-known brands, from varying product categories and different levels of complexity, all of which had been distorted in some way by individuals exposed to them in the marketplace. They were asked to say if the
motivation of the consumer co-creators seemed to them to be to play with the brand or attack it. The first of those alternatives would correspond to such descriptions as ‘playful’, ‘humorous’, ‘silly’, ‘ironic’ or ‘youthful’ and the second to ‘attacking’, ‘destroying’, ‘aggressive’, ‘threatening’ or ‘irritating’ (Aaker et al., 1988; Alden et al., 2000). After identifying those logos which looked unfamiliar and could not be associated with any brand, participants allocated each of the remainder to one of three groups by writing ‘P’ (brand play), an ‘A’ (brand attack) or a ‘?’ (not sure) on the image itself. Seven of the 29 brands were classified as either P or A.

4.3.3 Pre-tests

While the approach of the pilot study was exploratory, the objective of first of two pre-tests was to develop scales for the measurement of one independent variable, the form taken by non-collaborative brand co-creation: play versus attack. We used Adobe Photoshop to design a ‘counterpart’ for each of seven logos and graphic treatments which had survived the pilot study. The counterpart of one designated A for brand attack was manipulated to depict brand play, and vice versa. Since the notion of play is closely associated with the concept of humour, the play alternatives were treated humorously. The brand attack classification being related to brand-adverse events, our distorted creative treatments were associated with child labour. Examples of the distorted alternatives for two of the seven brands are shown in Appendix C.

The scales for the measurement of play and attack were based on the work of Aaker et al. (1988) and Alden et al. (2000). Specifically, in the case of play, they were seven scale items (funny, playful, humorous, childish, silly, zany, and youthful); for the attack variant, the scale comprised six items (fearful, attacking, destroying, threatening, aggressive, and irritating). We allocated 38 undergraduate students of business administration, 21 of whom were female, between two sub-samples which would be exposed to either the play or attack manipulation. A recording schedule presented them with one or other of the two treatments, the corresponding
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seven or six scale items, and rating scales anchored at 1 = totally disagree and 5 = completely agree. Exploratory factor analysis found that, in the case of brand play measurement, two items loaded on a second factor: ‘childish’ and ‘silly’. Those were duly eliminated. Brand attack loaded on a single factor. The reliability of the scales was confirmed by Cronbach’s α coefficients of 0.876 for brand play and 0.915 for brand attack. A t-test for each of the manipulations of the two modes (play versus attack) and their respective rating scales showed that those for Adidas, Nike, Levi’s and Burger King were effective and significant: see Table 4.1. The manipulations for Starbucks, Puma and Hewlett Packard were not successful and these brands were removed from the next stage.

Table 4-1: Results of first pre-test

<table>
<thead>
<tr>
<th>Brand play</th>
<th>Brand attack</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adidas play</td>
<td>3.41</td>
<td>2.39</td>
</tr>
<tr>
<td>Adidas attack</td>
<td>1.62</td>
<td>3.21</td>
</tr>
<tr>
<td>Levi's play</td>
<td>4.16</td>
<td>1.36</td>
</tr>
<tr>
<td>Levi's attack</td>
<td>1.41</td>
<td>3.74</td>
</tr>
<tr>
<td>Nike play</td>
<td>3.93</td>
<td>1.50</td>
</tr>
<tr>
<td>Nike attack</td>
<td>1.64</td>
<td>3.00</td>
</tr>
<tr>
<td>Burger King play</td>
<td>3.18</td>
<td>2.41</td>
</tr>
<tr>
<td>Burger King attack</td>
<td>1.46</td>
<td>2.93</td>
</tr>
</tbody>
</table>

The second pre-test adopted tried-and-tested scales for measurement of the effectiveness of a second independent variable, whether the co-creator was a consumer or an artist. Based on the mean values found in the first pre-test, we chose the Nike and Levi’s brands to be the stimuli. We furthermore created purpose-written newspaper stories about the co-creation of the logos and graphic treatments presented to the participants. One reported that co-creators, either consumers or artists, had spontaneously distorted the Nike logo and visual in the two different ways shown in Appendix C and disseminated the result online. The other explained that Levi’s
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had instigated the co-creation process by running a competition and that those ‘integrated’ consumer or artist co-creators had chosen to attack the brand by distorting those elements in one of the two ways shown in Appendix C, rather than simply playing with them. The articles confirmed the ‘artist’ status of the co-creator by reporting that he had exhibited in the previous year at the Museum of Modern Art in New York and was famous for distorting the graphic representation of iconic brands. Participants in this pre-test were 45 undergraduate students of business administration, 26 of whom were female. They read the article on the first brand before seeing the distorted visual image and then responding on a Likert scale anchored at 1 = totally disagree and 5 = completely agree to the statements “This graphic treatment of the brand is art” and “The co-creator is an artist”, adopted from a study by Hagtvedt and Patrick (2008a). They then repeated the procedure for the second brand. The results showed that the manipulation of co-creator type had been effective. In the case of the brand-play treatment for Nike (artist co-creator against consumer co-creator) the distorted logo and transformed strapline seen in Appendix C were evaluated as art (4.18 > 1.81; p= 0.00) and the creator as an artist (4.27 > 2.09; p= 0.00). For the brand-attack alternative (artist co-creator against consumer co-creator), in which the ‘swoosh’ logo was unaltered but the strapline was clearly polemical, the treatment was again evaluated as art (3.63 > 1.66; p= 0.01) and the creator as an artist (3.72 > 1.83; p= 0.00). With regard to Levi’s, the brand-play treatment (artist co-creator against consumer co-creator), involving an anagram of the brand name and an image of Elvis Presley, as also shown in Appendix C, the treatment was assessed as art (3.83 > 1.54; p= 0.00) and the creator as an artist (4.25 > 1.72; p= 0.00). In the brand-attack variation in which the brand logo was intact but the visual unarguably hostile, the treatment was once more seen as art (3.72 > 1.63; p= 0.00) and the creator as an artist (4.18 > 1.54; p= 0.00).
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4.3.4 Study

In the mixed design of our study, the within-subjects factor was elapsed time and the 2 x 2 between-subjects factors were form (brand play versus brand attack) and type (consumer as co-creator versus artist as co-creator). The F-tests were Greenhouse-Geisser adjusted. The 255 participants in the main study were students at a German university, three quarters of whom (76%) were studying Business Administration and Economics; their average age was 23 and 60% were female. Though it would be risky to generalise such a specific sample, a significant proportion of users of Levi’s and Nike products are indeed of student age. With that proviso, the findings presented in the next sub-section are an original empirical attempt to capture the effect of non-collaborative co-creation on brand equity.

The experimental procedure comprised before-and-after measurement of OBBE with a period of unrelated activity sandwiched between the two measurements. In the before phase, participants were given a dossier containing non-manipulated treatments of advertisements for Nike and Levi’s and also for the German chocolate brand Milka, an extra stimulus placed in the middle of the dossier to distract them from the exact purpose of the study. OBBE was measured for all three brands, in order to capture the baseline brand equity of each. Completion of the ‘before’ measurement scales was followed by 45 minutes of ‘filler’ activity unrelated to the experimental scenarios, the purpose of which was again to deflect attention from the exact purpose of the experiment.

For after-measurement of OBBE, participants were given a second dossier containing the pre-tested manipulated versions of the visual treatments and newspaper articles relating to Levi’s and Nike, attributed to the intervention of an artist or a consumer, plus non-manipulated Milka stimuli and an entirely neutral newspaper article. They completed the same rating scales as before, measuring their perceptions of the brand equity of Nike, Levi’s and Milka in the various experimental conditions described.
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The particular focus of the main study was the dilution in OBBE, which would be demonstrated by a negative difference in before-and-after values for OBBE, as in studies by Pullig et al. (2006) and Bambauer-Sachse and Mangold, (2011).

Table 4.2 shows the eleven different items chosen to measure the dependent variable OBBE, which have been used in a recent study by Kristal et al. (2016). Those are derived from scales for the measurement of CBBE in several earlier studies (Yoo and Donthu, 2001; Atilgan et al., 2005; Bravo et al., 2007; Lehmann et al., 2008). The reliability of the current scale was confirmed for both brands in the before and after measurement by the Cronbach’s $\alpha$ coefficient ($\text{Levi’s}_{\text{before}} = 0.908; \text{Levi’s}_{\text{after}} = 0.939; \text{Nike}_{\text{before}} = 0.858; \text{Nike}_{\text{after}} = 0.954$).

Table 4-2: Scales for the measurement of OBBE

<table>
<thead>
<tr>
<th>Theme</th>
<th>Question</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand awareness</td>
<td>I can recognize Brand X among other competing brands.</td>
<td>Yoo and Donthu (2001)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Atilgan et al. (2005)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bravo et al. (2007)</td>
</tr>
<tr>
<td>Brand associations</td>
<td>Some characteristics of Brand X come to my mind quickly.</td>
<td>Yoo and Donthu (2001)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Atilgan et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>I can quickly recall the symbol or logo of Brand X.</td>
<td>Bravo et al. (2007)</td>
</tr>
<tr>
<td>Perceived quality</td>
<td>Brand X is good quality.</td>
<td>Atilgan et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>Brand X performs well.</td>
<td>Lehmann et al. (2008)</td>
</tr>
<tr>
<td>Innovation</td>
<td>Brand X is innovative.</td>
<td>Lehmann et al. (2008)</td>
</tr>
<tr>
<td></td>
<td>Brand X constantly improves its products.</td>
<td></td>
</tr>
<tr>
<td>Differentiation</td>
<td>Brand X stands out from its competitors.</td>
<td>Lehmann et al. (2008)</td>
</tr>
<tr>
<td></td>
<td>Brand X is in a class by itself.</td>
<td></td>
</tr>
<tr>
<td>Relevance</td>
<td>Brand X is relevant to me.</td>
<td>Lehmann et al. (2008)</td>
</tr>
<tr>
<td></td>
<td>Brand X fits my lifestyle.</td>
<td></td>
</tr>
</tbody>
</table>
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The effectiveness of both manipulations was checked again for the main study by the same measures as in the pre-tests. T-tests showed the effectiveness and significance of the form of non-collaborative brand co-creation: Nike<sub>bp</sub> (4.45 play > 1.53 attack; p= 0.00); Nike<sub>ba</sub> (4.15 attack > 1.40 play; p= 0.00); Levi’s<sub>bp</sub> (4.35 play > 1.38 attack; p= 0.00); Levi’s<sub>ba</sub> (4.27 attack > 1.26 play; p= 0.00); they also confirmed that variation between artist and consumer co-creation as well as the manipulation of the art work were significant for both brands: Nike<sub>artist vs consumer</sub> (4.06 > 2.17; p = 0.00) - Nike<sub>art work vs. no art</sub> (3.67 > 2.11; p = 0.00) ; Levi’s<sub>artist vs consumer</sub> (3.84 > 1.95; p = 0.00) - Levi’s<sub>art work vs. no art</sub> (3.51 > 2.07; p = 0.00).

4.3.5 Findings

A repeated-measures ANOVA tested the postulated framework, finding that there was a significant pre-post difference in OBBE values for Levi’s and Nike. H1 can be accepted for both brands since non-collaborative co-creation affected OBBE negatively, as shown in Figure 4.2. In the case of Nike (F (1,242) = 101.139, p = 0.000), the extent of dilution was 0.61 (OBBE<sub>before</sub> 4.19 > OBBE<sub>after</sub> 3.58); for Levi’s (F (1, 246) = 138.877, p = 0.000), it was 0.63 (OBBE<sub>before</sub> 3.84 > OBBE<sub>after</sub> 3.21). There was no interaction effect between the form of treatment or type of non-collaborative co-creator for either Nike (F (1, 242) = 0.266, p = 0.606) or Levi’s (F (1,246) = 0.778, p = 0.379). We can therefore proceed to the testing of the remaining hypotheses.
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Figure 4-2: OBEE before and after experimental treatments

H2 was supported for both tested brands, so it can be stated that the form of non-collaborative co-creation does moderate the effect on OBEE. In the case of Nike (F (1, 242) = 110.827, p = 0.000; $\eta^2_p = 0.314$) in particular, brand play affected OBEE marginally. The dilution of -0.03 (OBEE\textsubscript{before} 4.16 < OBEE\textsubscript{after} 4.19) points to a slight positive effect of brand-play on OBEE. The brand-attack format caused a definite dilution of 1.23 (OBEE\textsubscript{before} 4.23 > OBEE\textsubscript{after} 3.00).

For Levi’s (F (1, 246) = 70.378, p = 0.000; $\eta^2_p = 0.222$) the dilution resulting from the brand-play treatment was 0.16 (OBEE\textsubscript{before} 3.82 > OBEE\textsubscript{after} 3.66) while that attributable to brand attack was 1.13 (OBEE\textsubscript{before} 3.86 > OBEE\textsubscript{after} 2.73). H3 was supported for both brands and it can therefore be stated that the type of co-creator type does moderate the effect on OBEE. The results for Nike (F (1, 242) = 23.589, p = 0.000; $\eta^2_p = 0.089$) were that believing the co-creator to be a consumer brought about a dilution of 0.94 (OBEE\textsubscript{before} 4.24 > OBEE\textsubscript{after} 3.30) and believing him to be an artist a figure of 0.25 (OBEE\textsubscript{before} 4.14 > OBEE\textsubscript{after} 3.89). For Levi’s (F (1, 246) = 18.298, p = 0.000; $\eta^2_p = 0.069$) belief in a consumer co-creator resulted in a
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dilution of 0.92 (OBBE_{before} 3.82 > OBBE_{after} 2.90) while the value if the co-creator was presented as an artist was 0.36 (OBBE_{before} 3.85 > OBBE_{after} 3.49).

The dilution measured in the four sub-groups is shown in Table 4.3. In the case of the brand-play treatment of Nike, representing it as the work of a consumer co-creator led to a dilution of 0.22 (OBBE_{before} 4.25 > OBBE_{after} 4.03) while the belief that it was the work of an artist resulted in a value of minus 0.28 (OBBE_{before} 4.07 < OBBE_{after} 4.35). These results respectively indicate a before-and-after diminution and improvement in OBBE. The combination of brand attack and non-collaborative co-creation by a consumer resulted in a dilution of 1.49 (OBBE_{before} 4.23 > OBBE_{after} 2.74); the value for the artist co-creator was 0.87 (OBBE_{before} 4.22 > OBBE_{after} 3.35).

With respect to Levi’s, dilution brought about by the brand-play treatment being attributed to a consumer co-creator was 0.38 (OBBE_{before} 3.80 > OBBE_{after} 3.42). There was no measurable dilution if the co-creator was said to be an artist (OBBE_{before} 3.83 = OBBE_{after} 3.83). The brand-attack treatment attributed to a consumer co-creator resulted in a dilution of 1.39 (OBBE_{before} 3.85 > OBBE_{after} 2.46); when the co-creator was believed to be an artist, the dilution was 0.83 (OBBE_{before} 3.87 > OBBE_{after} 3.04).

Table 4-3: Dilution of OBBE after experimental treatments

<table>
<thead>
<tr>
<th></th>
<th>Nike</th>
<th>Levi's</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consumer/</td>
<td>Consumer/</td>
</tr>
<tr>
<td></td>
<td>Play</td>
<td>Attack</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OBBE_{before}</td>
<td>4.25</td>
<td>4.23</td>
</tr>
<tr>
<td>OBBE_{after}</td>
<td>4.03</td>
<td>2.74</td>
</tr>
<tr>
<td>Dilution (before -after)</td>
<td>0.22</td>
<td>1.49</td>
</tr>
<tr>
<td>OBBE_{before}</td>
<td>3.8</td>
<td>3.85</td>
</tr>
<tr>
<td>OBBE_{after}</td>
<td>3.42</td>
<td>2.46</td>
</tr>
<tr>
<td>Dilution (before -after)</td>
<td>0.38</td>
<td>1.39</td>
</tr>
</tbody>
</table>
4.4 General discussion

4.4.1 Theoretical implications

The academic literature contains a large corpus of research on the beneficial effects of co-creation on the product or the brand. It does not, however, offer sufficient evidence of consequences and brand related effects if co-creation ‘goes wrong’. The findings of our study confirm the theoretical proposition that the phenomenon of co-creation of a brand entails loss of control to some extent over public perceptions of the brand’s meanings, which can be steered in directions unintended by an original branding strategy.

Our study identified, described and defined the phenomenon of non-collaborative co-creation, to clarify the process by which brand meanings can be subverted during co-creation. In particular, we conceptualised two forms of co-creation: brand play as the playful parodying of brand meanings, as suggested by Fournier and Avery (2011), and brand attack as the expression of negative emotions or even hate for the brand, as identified by Demirbag-Kaplan et al. (2015) and Hegner et al. (2017). Our study joins a small number of others to explicitly analyse the effect of negative co-creation, for example those by Echeverri, and Skalen (2011), Gebauer et al. (2013) or Greer (2015). It is the very first, to the best of our knowledge, to explore how that affects observers’ perceptions of brand equity. Our findings can be extremely valuable, given that the creation of brand-related parodies and the expression of negativity toward brands together represent a current and developing trend in co-creation (Cova and D'Antone, 2016; Fournier and Alvarez, 2013; Veloutsou and Guzman, 2017). Our study shows that co-creation which goes wrong is strongly driven by risk affecting brands in general and high-equity brands in particular. Brand meanings created by non-collaborative co-creators are starting to compete with the brand meanings that brand managers have set out initially created through their branding strategies. Thus, in contrast to the characteristically positive tenor of brand co-creation studies, we have come to a contrasting conclusion with regard to its effect. We found a
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‘brand attack’ co-creation mode caused a stronger dilution of OBBE than ‘brand play’ and that co-creation by consumers caused a stronger dilution than that executed by artists. To be precise, brand play by a consumer resulted in lesser before-after dilution of OBBE than brand attack by the same co-creator. The result of brand play by an artist was either a positive improvement in OBBE or no measurable effect at all. Our findings are therefore in line with those of previous studies on effects of art on brands, such as Hagtvedt and Patrick (2008a).

Our study furthermore answers two specific needs identified by previous researchers: first, for more and better research on the inherent risks and dangers of co-creation (Echeverri and Skalen, 2011; Gebauer et al., 2013; Greer, 2015; Plé and Chumpitaz Cáceres, 2010); second, for more studies of independent observers of co-creation in order to extend the limited body of knowledge about their responses (Fuchs et al., 2013; Ind et al., 2013).

4.4.2 Managerial implications
Co-creation marks a shift from management-oriented brand building to a collaborative process in which stakeholders become increasingly empowered. In its non-collaborative form, it can disrupt brand managers’ efforts to strengthen the brand and load it with powerful meaning. Subverted versions of those meanings can begin to compete with the original concepts communicated via marketing campaigns and generate what has been described in the literature as a ‘doppelganger’ brand meaning (Giesler, 2012), which can potentially be caused by either brand play or brand attack and can lead to a significant dilution of observers’ evaluation of the brand’s equity. There is thus a strategic need for non-collaborative co-creation to be monitored and managed, especially when it takes the brand attack form and initial brand meanings begin to be damaged by virally dispersed unflattering brand meanings. Brand strategists must become familiar with viral environments, such as the blogosphere or brand communities, and monitor those regularly for evidence of anti-brand sentiments. IBM’s Social Sentiment Index, for instance, aggregates and gauges content from a range of social media platforms, distinguishing
sarcastic and negative opinion from sincere and positive commentary, and identifying such specific trends as critical and disruptive material (www.ibm.com, 2016).

However, echoing the conclusion of Popp et al. (2016) with respect to anti-brand communities, we propose that non-collaborative brand co-creation also sounds a wake-up call for brand managers to make the necessary improvements. Early warning of the subversion of brand meanings can provide strategists with insights that could be usefully applied to branding activities capable of strengthening the brand and thereby rendering non-collaborative behaviour beneficial for the brand and its meaning.

Brand-related parodies could be a sign of much-coveted cultural resonance for the original brand meaning (Fournier and Alvarez, 2013), particularly when they have been executed by artists. Our study has found that ‘brand play’ initiatives executed by artists can have a positive effect on OBBE. We therefore advise practitioners to think about intentional cooperation with artists to the extent of suggesting that they playfully engage in brand co-creation. Many well-known companies do in fact invite artists to engage in various co-creation processes. For example: as long ago as 1975, BMW began to invite famous artists to propose their own model designs, which are exhibited in a company museum and at art exhibitions around the world; in 1985, the Swedish vodka brand Absolut invited Andy Warhol to play with the design of their bottle; in 2014, the luxury fashion brand Louis Vuitton opened its own art museum after a decade of involving artist and architects in the creation of limited editions, the design of their shops and other communications in general.

4.4.3 Limitations and further research

Although our study offers a more complete insight into how non-collaborative co-creation affects OBBE than can be gleaned from the literature to date, certain limitations need to be taken into account, which in turn suggest directions for further research.
The results of the analyses of the empirical data should be treated with appropriate caution, given that the participants in the study were university students, mostly studying business administration and economics. The risk of generalising from that sample is mitigated by the fact that students do represent a significant proportion of the target markets for the brands chosen to be the experimental stimuli. Also, our study was not concerned with the generalisability of our results to other populations but rather was focused on theory testing with respect to an unknown effect; a highly homogenous sample was accordingly appropriate. Though the results could therefore be of interest and use to Nike and Levi’s, and to other companies targeting similar markets, it would nevertheless be advisable to replicate our study with a more heterogeneous sample.

Our paper has not commented on the dimensionality of value co-creation behaviour and its conceptual richness. Further research could usefully explore how value co-creation dimensions, particularly customer participation behaviour and citizenship behaviour, relate to an unsuccessful outcome of the co-creation process. It would be very valuable to focus on the role of customer behaviour in value co-creation in order to detect weaknesses in the process. Future research could investigate exactly what customer participation and customer citizenship behaviour need to look like, so that the value co-creation process itself is successful (Yi et al., 2011; Yi and Gong, 2013). Such insights would also help strategists to understand which forms of co-creator behaviour lead to undesired outcomes.

Another issue for future research is the intensity of non-collaborative co-creation. In our study, participants read descriptions and discussion of the co-created material in (purpose-written) newspaper articles, which are generally consider to be a fairly low-engagement medium. The effect on OBBE might possibly be greater if the experience and intensity of non-collaborative co-creation are stronger. Consider the ‘Dismaland’ project organised by the celebrated graffiti artist Banksy, a pop-up parody of an amusement park on a run-down site in a faded seaside
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resort in the south-west of England, featuring grumpy guards, funereal theme park games and negatively provocative artworks by about sixty international artists. Visitors walking through the creation were part of the experience. This high level of experience and the high-involvement nature of the non-collaboratively co-created images might be expected to intensify the effect, presumably negative, that they had on the visitor-observers.

With regard to artists as co-creators, it would be interesting to investigate whether payment for their participation yielded a different result in terms of OBBE from non-paid co-creation. In the scenario of our study, the artist co-creator was not engaged by the organization but had subverted the stimulus materials without the company’s knowledge and consent. In practice, many companies today do purposely integrate artists into their creative and communicative operations with the express intention of benefiting the brand. A future study could test how independent observers perceive such paid-for integration of artists into promotion of a brand. Some might feel that payment removes the freedom and creativity normally characterising art and hence diminishes the positive effect of artist co-creators.

In our study, participants learnt about non-collaborative brand co-creation via newspaper articles. A future investigation could test whether the form of non-collaborative co-creation and the type of co-creator have a different potential to make the co-created material go viral and, if so, whether there would be a corresponding influence on the established effect on OBBE. For instance, brand attack might be more likely to be noticed by observers than brand play. Similarly, co-creation by artists might bring about a weaker dilution in OBBE than co-creation by consumers. However, if the work of the former reaches more observers online and offline than the initiatives of the latter, the more widespread perception of the subversion should also generate a stronger dilution.

Finally, our scenario invoked direct distortion of two brand logos and associated visual treatments. The possibility exists, however, that a brand might be used as metaphorical element
on the basis of which to make a critical socio-political statement; the brand itself is not the primary goal of the attack, but only the means to an end. For instance, a painting by a Dutch artist depicted an obviously starving African boy holding a Louis Vuitton handbag and a chihuaha. The intention was that the juxtaposition of the handbag, symbolising Western affluence with African starvation would draw attention to the socio-political situation in Dafur. Similarly, the aim of a painting of a squashed Coca-Cola can by a Russian-German artist was not to attack the brand but to highlight pollution and the throwaway mentality of consumers. The question is whether or not such indirect brand attacks have any effect on OBBE and, if so, if the effect is any different from the results of our experiment.
5 Corporate brand co-creation in industrial markets:
The case of German prosthetics manufacturer Ottobock

This chapter reflects upon the relevance of co-creation in business-to-business branding. A qualitative case-study is presented and analysed, concerned with a transformation process in a world-leading German technology company, from internally governed branding to an externally co-created brand. Differences between business-to-consumer and business-to-business brand co-creation are identified in that context and the importance of co-creation in industrial branding is discussed.

Publication history:
A conceptual paper dealing with the notion of investigating brand co-creation in industrial settings was presented at a joint BMM-EMAC conference on ‘business market management’:

Kristal, S., Baumgarth, C. and Henseler, J. (2017), ‘Brand meaning and equity in b-to-b markets: A brand co-creation view’. In Proceedings of the 8th BMM Biennial International Conference on Business Market Management (in Association with EMAC), Karl-Franzens-University of Graz, Austria, 6th-8th July.

A revised version of that paper in German was accepted for publication as a chapter in a German textbook of business-to-business brand management:


Based on those conceptual inputs, a preliminary version of the paper on which this Chapter is based was developed and presented at the 13th Global Brand Conference:

A shorter version of the content of this chapter was presented at the equivalent conference in 2019:


The following full paper is currently under review by the *Journal of Business Research*.

Abstract

The assumption that brand identity is a static and internal creation is increasingly challenged by recent published research, which discusses branding as a social process of co-creation. The majority of the resulting insights relate to business-to-consumer brands, however, and the relevance of co-creation to business-to-business branding remains largely undiscovered, despite the fact that the notions of collaboration and interrelation between company and stakeholders are more relevant to industrial settings than to consumer markets. The case study reported in this paper therefore explores the process of co-creation in B2B branding, specifically in the individual case of a world-leading German prosthetic-technology company. Analysing the branding process over the period 1988 to 2018, we identified four stages in the transformation of its corporate brand from internally governed to externally co-created. In particular, our findings show that before the company had opened up the brand to external and internal
stakeholders, it had constructed a solid basis for the brand through professionalising its management and integrating the notion of the brand into the daily life and mindset of all employees. This case study shows that a B2B brand identity does not emanate only from within the company but is co-created together with stakeholders. Our findings not only consolidate and advance the fragmented body of research on B2B branding but also offer practitioners a blueprint for the development and management of a brand in the era of co-creation.

Keywords: Brand co-creation, Brand identity, Business-to-business branding, Industrial marketing

5.1 Introduction

Recent thinking around the branding process challenges the assumption of brand identity as a static and enduring creation, initiated, executed and controlled by brand management (Aaker, 1996b). Specifically, a brand is seen as a dynamic social process constructed through multiple networked interactions and relationships between the company, the brand and various stakeholders (Black and Veloutsou, 2017; da Silveira et al., 2013; Iglesias et al., 2013; Ind et al., 2017). Instead of accepting the brand owner’s view of what its brand is, stakeholders become active conduits and co-creators of brand meaning (Prahalad and Ramaswamy, 2004; Kornum et al., 2017; Veloutsou and Guzmán, 2017; von Wallpach et al., 2017).

The existing base of research on brand co-creation is dominated by a strong focus on business-to-consumer (B2C) settings. The business-to-business (B2B) field is comparatively underexplored although recent papers in Industrial Marketing Management reinforce the dominance of topics that lie at the very heart of co-creation research (e.g. Aarika-Stenroos and Ritala, 2017). Real-world examples confirm that B2B brands increasingly interconnect with
surrounding stakeholders and engage them in brand-related processes through, for instance, ‘brand worlds’ (Österle et al., 2018), user-centred brand communication (Michaelidou et al., 2011; Thakur and AlSaleh, 2018) or brand communities (Bruhn et al., 2014). Such co-creative activities might help B2B brand managers to overcome various changes in the business environment (Baumgarth, 2010) by strengthening the bond with stakeholders, building enduring innovation-oriented relationships and increasing brand value (Ind et al., 2017).

However, the supremacy of B2C has some consequences for existing insights into brand co-creation: First, despite theoretical suggestions that brand meaning is socially constructed in the B2B setting (Ballantyne and Aitken, 2007), it is not fully clear from an empirical point-of-view if and how B2B brand identity is co-created. Second, as corporate branding is normally discussed in the B2B context (Leek and Christodoulides, 2011; Mudambi, 2002), present knowledge on brand co-creation mainly refers to branded products rather than to corporate brands and the field of corporate branding continues to be dominated by static approaches to brand building (Balmer, 2012). It is noticeable that, when researchers’ attention does switch to corporate branding, their main focus continues to be on B2C brand owners (e.g. Essamri et al., 2018). Third, most research is concerned with end-consumers and their motivations to engage with the product (e.g. Ind et al., 2013) or investigates product- and brand-related effects (e.g. Kristal et al., 2018), which leads to inadequate understanding of a management-oriented perspective on brand co-creation.

The purpose of our study is to address these gaps in the knowledge and to research how co-creation impacts corporate brand identity in a B2B setting, from a managerial perspective.

On the one hand, it advances theoretical and empirical examinations in the field of B2B brand management and branding. Although there is a growing interest on branding theories and their applications to industrial settings (e.g. Lindgreen et al., 2010), B2B branding research is much less developed than in the consumer branding literature. In terms of scope and depth, B2B brand
research has not so far explained a wide range of current branding issues (Wang and Hao, 2018), such as co-creation. On the other hand, our study contributes to the brand co-creation-field in general first by extending the few existing insights into brand co-creation in B2B (Mäläskä et al., 2011; Törmälä and Gyrd-Jones, 2017; Törmälä and Saraniemi, 2018; Vallaster and Lindgreen 2011; Vallaster and von Wallpach, 2013) and second in that, in contrast to existing research, it is not a snapshot of a brand co-creation scenario. The typical approach has been to investigate a case of co-creation at a given point in time, typically an innovative-design competition (e.g. Fuchs et al., 2013), with the result that the dynamic nature of brand co-creation is disregarded. We explore the brand transformation process of the world-leading German prosthetic-technology company Ottobock over a period of 30 years. The company supplies its products in more than 50 countries worldwide and generates sales of over €1 billion, or about $1.2 billion. Our case draws on data ranging from 1988 to 2018 and outlines the change from a product-focused to a co-created brand.

5.2 Theoretical Background

5.2.1 A static approach to brand identity in B2C and B2B

Conventionally, the branding literature has conceptualised brand identity as a unilateral and enduring creation, initiated and maintained by brand management (Aaker, 1996b). Brand managers are supposed to develop a consistent identity for the brand and transmit it to stakeholders in such a way that they internalise that information (Burmann et al., 2009). A strong brand achieves alignment between intended and enacted brand identity by manipulating the consumer’s brand knowledge to yield a positive image and thus, favourable responses (Kapferer, 2012). It provides a point of reference for consumers confronted by too many product choices (Joachimsthaler and Aaker, 1997; Keller et al., 2011).

The literature of corporate branding follows this perspective of identity as a static and stable entity (Joachimsthaler and Aaker, 1997; Urde et al., 2013), unilaterally defined and
communicated to stakeholders (Balmer, 2001). Corporate brand identity is often regarded as a ‘promise’ made to stakeholders (Balmer and Gray, 2003; Melewar et al., 2012) with the aim of creating a positive brand image (Harris and De Chernatony, 2001). While a product brand mainly targets end-consumers and represents a single product or service, a corporate brand represents an entire organisation and aims to establish relationships with a large number of stakeholders (Balmer, 1995, 2012; Roper and Davies, 2007). Corporate brands are concerned with the company’s history, values, vision and core competences (Balmer, 2001), and therefore require a different management approach from that for product brands (Harris and De Chernatony, 2001).

Several frameworks have been proposed for identity-based product and corporate branding, differing in the amount and content of their dimensions. Examples are the three-dimension enterprise brand (Hatch and Schultz, 2008), the six-fold AC3ID test (Balmer et al., 2009), the six-dimension brand identity prism (Kapferer, 2012), the nine-element brand identity matrix by Urde (2013), and the CSR brand model (Baumgarth and Binckebanck, 2015), which builds upon the four-dimension model of Hatch and Schultz (2008). There is thus no consistency about the dimensionality of brand identity. What is more, most of those frameworks, and brand identity research in general, whether on product brand level or on corporate brand level, have been developed predominantly with B2C brands in mind.

Other authors have proposed frameworks specifically relating to B2B brand identity. Coleman et al. (2011) offer a six-item measurement scale for B2B service brands, the brand identity network, defining the identity of such brands as “the strategist's vision of how a B2B service brand should be perceived by its stakeholders”. Beverland et al. (2007a) offer an Industrial Global Brand Leadership framework, in a study which found brand identity to be built around five brand-supportive capabilities, all initiated and executed internally by managers.
Contemporaneously, Beverland et al. (2007b) proposed a framework containing five key attributes which business marketers could use to build a strong brand identity.

These three studies make it clear that an inside-out perspective of brand construction is also followed in the B2B setting.

5.2.2 A dynamic approach to brand identity and its focus on B2C

Recent brand research has shifted the traditional view of brands to a dialogue that understands them as the basis of the perceptions and involvement that unite a disparate group of stakeholders in the pursuit of a common cause (Hatch and Schultz, 2010). This new logic for branding and brand management leads to a radical shift in thinking and introduces a new era of brand building (Merz et al., 2009). It challenges the ‘old’ logic on the grounds that it does not consider today’s increasingly dynamic and complex market environments, in which brand identity is no longer stable (da Silveira et al., 2013) and stakeholders are proactively involved in value-creation processes that were previously the province of the company (Prahalad and Ramaswamy, 2004; Ramaswamy and Ozcan, 2018). Instead of accepting the brand owner’s view of what its brand is, stakeholders are seen as active conduits and co-creators of brand meaning (e.g. Ind et al., 2013; Kristal et al., 2018; Vallaster and von Wallpach, 2013) and a brand is thus seen as a dynamic social process (e.g. Ind et al., 2017).

The traditional definition of brand identity is reconceptualised as a dynamic and unstable construct, originating in the interplay of very many actors and subject to permanent negotiation (Black and Veloutsou, 2017; da Silveira et al., 2013). Many aspects of co-creation lie outside the boundaries of the firm, in ‘conversational spaces’, and often develop beyond the strategic aims set by brand managers (Iglesias et al., 2013). The distinction between an internal and external locus of identity construction thus becomes redundant. There is even the notion of multiple co-existing brand identities (von Wallpach et al., 2017), resulting in “a nested system of identities” (Konrum et al., 2017: 432).
This dynamic approach to brand identity represents the application of the co-creation construct to the field of brand management. However, most of the literature and empirical evidence is focused on consumer brands and B2C settings while the B2B field remains relatively unexplored. On the one hand, the dominance of B2C in discussion of brand co-creation is not really surprising given that the existing body of research on brand management is mainly based on consumer markets, reflecting an assumption that industrial buyers are unaffected by the emotional values residing in brands (Kotler and Pfoertsch, 2007). On the other hand, the lack of attention to brand co-creation in B2B seems surprising when taking into account three considerations in particular. First, that the topic of customer integration and collaboration in co-creating products or services is more prevalent in B2B than in B2C (Hingley et al., 2015; Kohtamäki and Rajala, 2016) and also that the notion of co-creation of (service) value in business markets is well established in the literature (Marcos-Cuevas et al., 2016; Vargo and Lush, 2011). Second, one essential factor in brand co-creation is the ‘organisation’ of co-creators into networks (Vallaster and von Wallpach, 2013) or ecosystems in which the ongoing negotiations take place (Gyrd-Jones and Kornum, 2013), discussion of which is dominant in B2B, lies in the nature of industrial markets, and is a current pillar of research in industrial marketing (Aarikka-Stenroos and Ritala, 2017; Forkmann et al., 2018; Möller and Halinen, 2017; Pagani and Pardo, 2017). Third, a consequence of the focus on B2C is that the bulk of research studies of co-creation is concerned with product brands, although the notion of many different stakeholders seems especially relevant to corporate branding (Balmer, 1995, 2012; Roper and Davies, 2007) and despite the fact that corporate branding is often most important in B2B marketing (Leek and Christodoulides, 2011; Mudambi, 2002) on account of product variations, shorter product life cycles or the production of customised products (Baumgarth, 2010).

These considerations emphasise the need for better understanding of the relevance of brand co-creation in B2B. There have furthermore also been recent calls for research to this end (Ind
et al., 2017) and for the application of branding concepts to industrial settings (Wang and Hao, 2018).

5.2.3 Co-creation of brand identity in B2B

Despite the predominance of the consumer focus, and the progressive widening of the brand literature by new work on B2B brands over the past decade (e.g. Baumgarth and Schmidt, 2010; Beverland et al., 2007a; Kotler and Pfoertsch, 2007; Lindgreen et al., 2010), the nature of (corporate) brand co-creation in industrial settings remains largely unexplored. There are suggestions that brand building in B2B is a social process among a large number of stakeholders, but those do suffer major limitations. First, much of the discussion is conducted at a purely theoretical level and any empirical evidence is missing. This holds especially true for conceptualisations that aim to transfer the service-dominant logic to B2B branding (Ballantyne and Aitken, 2007; Merz et al., 2009). Second, though empirical studies have investigated brand building by taking a multi-stakeholder perspective, for instance those by Gyrd-Jones and Konrum (2013) and Hatch and Schultz (2010), their settings derive from the marketing of such consumer brands as Nike or Lego, so their findings cannot be transferred directly to B2B brands. Third, while a dynamic perspective has been applied to B2B brand identity (Iglesias et al., 2013), the fieldwork in the study incorporates both B2B and FMCG brands, so there remains a lack of specific relevance to industrial marketing or dedicated insights into B2B branding.

In the B2C context, co-creation of brand identity has been most thoroughly examined in studies of brand communities (Muniz and O'Guinn, 2001). Discussions is scarce of B2B technologies that could enable the establishment of such communities (e.g. Agnihotri et al., 2016; Christodoulides et al., 2018) and knowledge relating to industrial-brand communities is limited to their effects on relationship building (Andersen, 2005) and brand loyalty (Bruhn et al., 2014).
To the best of our knowledge, only five published papers have researched corporate brand co-creation in industrial markets: Mäläskä et al. (2011) studied the participation of network actors in SME branding; Vallaster and Lindgreen (2011) discuss the role of stakeholders in the formulation of corporate brand strategy; Vallaster and von Wallpach (2013) investigated brand co-creation in an online environment; Törmälä and Gyrd-Jones (2017) explored the development of corporate brand identity in a new B2B venture; and Törmälä and Saraniemi (2018) examined the roles of business partners in the co-creation of corporate brand image. The findings of these studies provide preliminary indications that a B2B brand is co-created by simultaneous interactions between interdependent stakeholders, meaning that brand identity is not stable and does not emanate from within the company.

The objective of our study is to develop and expand the limited amount of existing research-based knowledge about the co-creation of industrial-brand identity by examining the process in B2B settings, from a managerial perspective. In contrast to the majority of research into brand co-creation, we take a dynamic and longitudinal approach. Our study draws on data from 1988 to 2018 to explore the transformation in the branding of Ottobock from a technology-focused internally created brand to one opened up to internal-external co-creation. Owing to the specific peculiarities of both B2B multi-stakeholder networks (Bruhn et al., 2014) and industrial brands (Leek and Christodoulides, 2011; Mudambi, 2002), however, it would not be useful to apply insights from studies in the B2C context to B2B marketing with no modification. So, it is important to be aware of the main differences between co-creation in the B2C and B2B settings. To the best of our knowledge, such overview is not yet available.

5.2.4 Brand co-creation characteristics: B2C versus B2B

Among the general dimensions of co-creation (Ind et al., 2012; Roser et al., 2013), six characteristics unique to B2B brand co-creation can be distinguished, based on insights from the few studies discussed above: co-creator type; purpose of co-creation; behaviour of
co-creators; duration of co-creation; expertise of co-creators; importance of employees. With regard to the first of those, brand co-creation in consumer markets mainly takes place between end-consumers and the company (France et al., 2018) while, in industrial markets, many more stakeholder groups than just consumers are involved in the process (Törmälä and Saraniemi, 2018). Turning to the second unique characteristic, consumer engagement in the co-creation of B2C brands is based on motivations guided by personal purposes (Ind et al., 2013) while interactions in the B2B setting are driven by the occupational purposes of paid professionals (Mäläskä et al., 2011). Concerning the behaviour of co-creators, research studies of the process with respect to B2C brands have recently focused attention on the non-collaborative behaviour of the co-creators (Kristal et al., 2018) as compared with the professionally motivation of co-creators in industrial markets to avoid opportunistic behaviour (Bruhn et al., 2014). The duration of brand co-creation in the B2C context often presents only a snapshot of the process, since the majority of studies in that field relate to a specific co-creation competition (e.g. Fuchs et al., 2013) while B2B co-creation is determined by mutual interest in longer-term brand relationships (Törmälä and Gyrd-Jones, 2017). With regard to the expertise of co-creators, those acting on B2B brands tend to have a higher level of brand knowledge than their B2C counterparts, in that they are professionals who work for the brand (Vallaster and von Wallpach, 2013). Lastly, the brand owner’s employees represent an important group of brand co-creators in both consumer and industrial settings (Iglesias et al., 2013). Their particular significance in the industrial branding process lies in a sort of feedback loop in which they interconnect with stakeholder networks, observe and process product-related consumer behaviour, and internalise that intelligence into the brand identity (Törmälä and Gyrd-Jones, 2017; Vallaster and Lindgreen, 2011).

Table 5.1 summarises the differences in brand co-creation characteristics between the B2C and B2B contexts.
Corporate brand co-creation in industrial markets:
The case of German prosthetics manufacturer Ottobock

Table 5-1: Brand co-creation characteristics

<table>
<thead>
<tr>
<th>Setting Characteristics</th>
<th>B2C</th>
<th>B2B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Co-creator type</td>
<td>Company-Consumer</td>
<td>Multiple stakeholders</td>
</tr>
<tr>
<td>Purpose of co-creation</td>
<td>Personal</td>
<td>Professional</td>
</tr>
<tr>
<td>Behaviour of co-creators</td>
<td>Non-collaboration present</td>
<td>Collaboration dominant</td>
</tr>
<tr>
<td>Duration of co-creation</td>
<td>Short-term</td>
<td>Long-term</td>
</tr>
<tr>
<td>Expertise of co-creators</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Importance of employees</td>
<td>Important</td>
<td>More important</td>
</tr>
</tbody>
</table>

5.3 Methodology

5.3.1 Design of the study

The empirical work reported in this paper is based on a qualitative, single case study. The value of case studies to business research is well recognised (Beverland and Lindgreen, 2010; Piekkari et al., 2010) in that they enable the building of the conceptual base of a phenomenon that otherwise lacks a strong existing theory (Yin, 2009). To study a complex phenomenon such as co-creation, which involves human interactions and a multi-stakeholder perspective (at least in the B2B setting), demands an in-depth approach that can be effectively achieved in a single case study (Feagin et al., 1991). As our study furthermore set out to capture the dynamics of brand co-creation over time, a process-based case design was adopted. The objective was to develop conceptualisations pertaining to the subject of the study instead of holding on to predefined theoretical frameworks (Andersen et al., 2018). In contrast to a multiple-case design, such a process-based single case study does not set as its priorities comparisons in relation to existing issues, the sampling of case exemplars, or achieving theoretical saturation (Perry,
1998). Priority is given to establishing temporal connections between events and unfolding patterns of specific events, which may migrate between levels and units of analysis (Andersen et al., 2018).

5.3.2 Criteria for selection of the case

The empirical case study in this paper is of Ottobock SE & Co. KGaA, henceforward referred to by its corporate brand name ‘Ottobock’ or simply as ‘the company’. Founded in 1919 by the eponymous orthopaedic technician, it manufactured and distributed artificial limbs, support appliances and wheelchairs for disabled survivors of the First World War. Recognising that demand could not be met by the traditional methods of craftsmanship, Otto Bock conceived the idea of mass-producing such orthopaedic aids and appliances, and supplying them direct to orthopaedic practitioners in hospitals and clinics. He thereby laid the foundation stone for the whole orthopaedic industry. Ottobock has since been a leading innovator, for instance as the first company in the industry to use polyurethane plastics rather than wood in the manufacture of prosthetic legs after World War II. Other innovations have been the development of an electrically operated prosthetic arm controlled by muscle signals in the 1960s, and the world's first completely microprocessor-controlled leg prosthesis system in the 1990s. By the harnessing of such complex technologies, Ottobock developed from a manufacturer of individual components into a supplier of complete prosthetic systems. In 2019, it is a third-generation family-owned business with over 8,000 employees across more than 50 countries, generating annual sales greater than €1 billion (approximately $1.2 billion).

Ottobock was chosen as the host company for this case study for two reasons. First, because of the opportunity to access critical data and unpublished information in a real-life industrial setting; second, the data source would satisfy the methodological criteria of being unique (Yin, 2009), information-rich and is clearly relevant in the area of interest (Patton, 2002) in that it represents a best-practice scenario within its industry, that brand management is given a high
priority, and that external stakeholders are incorporated into internal marketing and branding activities.

5.3.3 Data collection

Analysing a case as specific as this and ensuring construct validity in so doing require highly heterogeneous data and an in-depth data collection process (Beverland and Lindgreen, 2010). Our study relied on different sources of evidence, as recommended by Yin (2009): Those are detailed in Appendix D, and consist of eight component categories. Six semi-structured in-depth interviews, designed to incorporate ideas from the literature and offer respondents enough flexibility and freedom for theory to be built inductively (Eisenhardt and Graebner, 2007) were supplemented by: two ‘brand workshops’; the content of eleven press releases; information from two corporate websites; six product brochures; two ‘brand-books’; eight secondary-interviews; and the content of three company-generated social-media channels.

To increase construct validity, all data were triangulated (Denzin and Lincoln, 2011) and consolidated into a chronologically-structured case study, which was sent to the Chief Marketing Officer (‘CMO’), whose remit was worldwide, as a check on its communicative validity (Beverland and Lindgreen, 2010). After acting upon minor alterations requested, the case-study was resubmitted to the same executive and approved without further modification.

5.3.4 Data analysis

A systematic analysis was assured by adopting a multi-step approach, encompassing data reduction, display and verification (Miles and Huberman, 1994), which is considered to be appropriate in case study research (Halinen and Törnroos, 2005; Yin, 2009). In this case, analysis comprised four steps.

As a first step, the analysis process was organised in different time phases, in order to understand the company’s dynamic development and to reduce overall complexity. Analysis
was highly iterative at this stage, leading to recognition of four time-phases, each of a distinct
duration but all exhibiting similar patterns of content. To ensure validity across the four, the
outcome was again scrutinised by the CMO. No modifications having been requested, we
proceeded to the second step, in which qualitative content analysis was conducted, based on a
brand-identity framework adapted from Baumgarth and Binckebanck (2015) and Hatch and
Schultz (2008), which is shown in Figure 5.1. That organising principle was chosen because it
focuses attention on corporate brands and their conceptualization, and explicitly recognises the
various stakeholders involved in brand construction: a structure that is well suited to our
research. It comprises four dimensions:

- Brand management: management-oriented decisions around the brand, such as
  positioning or corporate design

- Corporate culture: values shared by employees, covering implicit and explicit norms
  and rules

- Behaviour: inward and outward measures determined by the organisation

- Communication: all personal and non-personal contacts with stakeholders
At the second step of the data analysis process, these four dimensions became the coding elements in content analysis, which proceeded reciprocally from material to coding element and back until all data items had been allocated to one coding element. This process was carried out separately for each constructed time-phase, as shown in Appendix E.

The third step was to employ axial coding (Strauss and Corbin, 1990) was used to cluster the data items in each coding element into a single superordinate category constructed in an inductive manner, relying on well-established concepts from management, marketing and branding. This process was again carried out phase by phase, yielding 16 themes. In a fourth and final step, we made further use of axial coding to merge all elements and superordinate categories in each phase into four brand-stages capable of describing the progress of brand-identity development from 1988 to 2018.

Figure 5.2 provides a diagrammatic summary of the whole data analysis process.
5.4 Findings

Our longitudinal analysis of the development of Ottobock’s corporate brand found a transformation from one that was internally-generated product-centred and technology-focused to a ‘participatory’ brand, characterised by a degree of internal-external co-creation. The results clearly show that corporate brand identity is not endogenous to the organization, but co-created in collaboration with different stakeholders. Table 5.2 presents the outcome of merging the subordinate categories with the respective brand identity elements, which was to distinguish four sequential stages in the development of the Ottobock brand identity: marketing for high-tech products; professionalisation of brand management and user-focus; living the brand; and co-created brand. While no explicit branding or marketing department had existed in the first
of those phases, before 2008, professionalisation of the branding and brand management functions had begun. That proved to be the first step towards the creation of a strong foundation for the brand, which was further strengthened and stabilised in the third phase, starting some five years later, when the brand came to be seen as a strategic hub and the company transformed simple brand orientation into the notion of ‘living the brand’. Finally, by 2018, Ottobock had increasingly opened itself up to stakeholders in its operating environment and internalised external inputs that could affect the brand’s identity. In the remainder of Section 4, the four brand-stages are presented in detail by grounding the respective brand identity dimensions with data artefacts (Yin, 2009).

Table 5-2: Subordinate categories and brand-stages for each time phase

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand Management</strong></td>
<td>No professional brand management</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>Technology-driven</td>
</tr>
<tr>
<td><strong>Behaviour</strong></td>
<td>Quality and innovation</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td>Sender-oriented approach</td>
</tr>
<tr>
<td><strong>Stages of brand development</strong></td>
<td>Marketing for high-tech products</td>
</tr>
</tbody>
</table>
5.4.1 Marketing for high-tech-products (1988 – 2008)

**Brand management**

This stage is characterised by a classical approach to B2B marketing and technology brands. The company had neither a marketing-department nor a brand management function. Instead, there was an Information Department with responsibility for the printing and creating of advertisements and brochures. Sales and marketing activities were managed by the Product Management Department. Branding focused on B2B clients: orthopaedic technicians, physicians, and health insurance companies. The users of the products were not considered.

*CMO:* “… there was an info-department. They created catalogues for clients, such as orthopaedic technicians, and they sometimes also created an advert, but that was always product-focused and always in specialist media. A marketing department in that sense did not exist. Of course, some advertising was done. But this was not what we understand today as target-group-oriented advertising or multi-media campaigns. All this was non-existent then, and that was not so long ago.”

**Culture**

The culture could be best described by the metaphor ‘dark blue’ which is said to be the typical colour for an engineering brand. There were no brand guidelines for employees; instead the mindset was focused on technology and quality.

*CMO:* “We were dark blue, typically engineering: thus, an engineering brand. We were very traditional, we were very B2B. Our focus was on our tradition, and also on our logo.”
Corporate brand co-creation in industrial markets:
The case of German prosthetics manufacturer Ottobock

Behaviour

Brand-related activities were more or less the result of luck. The need was not seen to establish a positioning or identity for the brand. The belief was that the company’s name would be enough. Since Ottobock had always been known for high quality and innovation, the focus was on internal product development and production as the most important tasks.

*Brand consultant:* “Well, a brand positioning was non-existent. Here was a company that was world famous in its industry for the quality and functionality of its products. Ottobock was a quality seal.”

Communication

The company’s communications were characterised by sender orientation, as distinct from receiver orientation. Users were not involved in the generation of communications and there was no ambition to generate or integrate user-generated content. The focus of communication strategies was on product information and technology, and the main target audience was professionals in the field of prosthetics. There was no integration of communications initiatives. Figure 5.3 shows two examples of advertisements within a product brochure during this period.

*Figure 5-3: Examples of early advertisements and brochures*
5.4.2 Professionalisation of brand management and user-focus (2009-2012)

**Brand management**

From 2009, Ottobock began to engage external consultants and agencies with the aim of strengthening the brand image. Based on these external inputs in tandem with internal deliberations, the company’s CEO decided to conduct a customer survey in 2010-11 that would find out more about perceptions of the Ottobock brand. The conclusion was that the company was well-known for high quality products but that, at the same time, the brand was seen as being overbearing and totally product-centred.

*Brand consultant*: “[The customers] said: You have great products, you are a world market leader, but you have an infatuation with technology, you are a bit arrogant and narcissistic. That shocked the management … But it was also thought-provoking and led to the decision that ‘we need to change our organisation’.”

These findings led to two important initiatives. The first was a re-organisation of how the brand was managed through the establishing of the position of Chief Marketing Officer, assigned responsibility for global brand management; the second was an intensification and professionalisation of brand management. The aim was step away from being positioned as an engineering brand focused solely on technical product features. In 2011, the brand logo was changed to that shown in Figure 5.4.

*Figure 5-4: Brand logo before 2011 (left) and new logo (right)*
While the supplanted logo mimicked the signature of the founder, it was intended that its replacement would be easier to read anywhere in the world, and that the simplified typeface with the lower-case initial letter plus the dot at the end evoking an online presence would convey the company’s new marketing orientation. At the same time, a management team articulated fifteen brand values, which were codified in a first global ‘brand book’. The overall mission was to create a brand in a brand-free environment. In 2012, internal workshops with such stakeholder groups as managers, employees and customers were run with the aim of narrowing down the initial brand values to the main core values that made up the brand. The outcome was three: human, reliable, inventive.

Culture

The changed approach to branding also affected the corporate culture, in that the decision was made to shift the firm’s focus from product to user, from pure B2B to B2B plus B2C. There is clear evidence of this new orientation in the extract from the ‘brand book’ shown in Figure 5.5.

![Figure 5-5: Graphic from Brand Book I](image-url)
Internal communication was also affected. In 2012, the concept of an open-plan office was put into practice. Not only were walls removed, but the glass boxes that had previously encased products on display in the headquarters showroom were dispensed with in order to make those products more accessible to visitors.

**Behaviour**

The notion of ‘design thinking’ was introduced. Users of the firm’s prosthetic devices were invited to participate in product development workshops together with product managers, engineers and designers. Simultaneously, Ottobock began to form working relationships with brand ambassadors representing the company and its products, most of them professional Paralympics athletes. The first of those made an external contribution to new product development by acting as a co-creator of a knee joint for athletes, which has subsequently become world market leader in this specific product category.

*Brand ambassador:* “… I integrate my experience from sports into the company. … Ottobock equipped me with a technician and the know-how, and a product was developed that is nowadays used across the whole world.”

**Communication**

In this phase, there was a change in communications strategy towards opening-up to an increased number of target groups. A Science Centre was opened in Berlin in 2009, with the aim of involving more visitors and the general public in the topics of mobility and prosthetics. Its exhibits majored on interactivity, to acquaint visitors with the complexity of the human body, the history of the company, and the functionality of its products. In parallel with this shift to
B2B plus B2C, the level of user-centredness increased in the company’s communications, as exemplified by the advertisement in Figure 5.6.

Figure 5-6: User-centred communication

Another communication initiative was running clinics. Set up as a collaborative project by the brand ambassador quoted at 4.2.3, they are now conducted all around the world. Besides the idea of supporting amputees in their wish to live an active life, the clinics help the brand to promote its corporate social responsibility, distance itself from its formerly overbearing image, and reach target groups that would otherwise be inaccessible to Ottobock.

*CMO:* “… it is a world market leader trap. We were a preferred brand; we were not a loved brand. And here the running clinics help us.”

5.4.3 Living the brand (2013-2015)

**Brand management**

In this phase, a ‘brand compass’, as shown in Figure 5.7, was introduced with the aim of reminding employees at all levels of the three core brand values that were established in the
previous phase. It simultaneously offered an opportunity for employees to check whether or not their operational behaviour aligned with those brand values. The brand compass was depicted in a second global brand book, published in 2015. Under the title ‘Living the Brand, the book explained the increasing importance of being a brand-oriented organisation. The generic brand compass was adapted to be relevant for images, interior design, relations with partners, digital media, internal and external communication, brand language, brand culture, service quality, and trade shows.

![Brand Compass](image)

Figure 5-7: Brand compass

**Culture**

The brand compass also helped to embed the brand and its values further into the culture and language of employees, and to make clear that the brand was much more than just a matter of design. That held particularly true after the re-branding in the previous phase.
CMO: “We have the brand compass, where the core brand values are embedded. Everyone can simply check: ‘Is my behaviour in line with the values?’.”

In addition, an internal campaign was initiated in 2014 under the banner ‘I am Ottobock because…’. An example of its outputs is shown in Figure 5.8. Employees could express why they ‘stood for’ Ottobock, and hence why they were part of the brand and a potential brand ambassador. The notion of a ‘brand’ had become more important and more embedded in the minds of employees.

![Figure 5-8: Internal ‘I’m Ottobock’ campaign](image)

**Behaviour**

The ‘design thinking’ workshops initiated towards the end of the previous phase were at first unsuccessful due to a belief among product managers that external sources of co-creation inputs would lack expertise and that the design of the product was not as important as its features. In response to this resistance, the Brand Consultant decided to invite the chief designer of a German multinational automation technology manufacturer to make a presentation about the importance of user-oriented design in product development. After such a credible source had emphasised the need for the integration of design thinking and external sources, such as users,
into the product development process, the product managers duly started to adopt the idea. One example of a project in which users co-created in tandem with product managers and designers is the new design for the mechatronic knee joint.

*Brand consultant:* “For the first time we initiated a co-creational project for a mechatronic knee joint where from the very beginning, designers and users worked together in development.”

**Communication**

In the process of opening up the brand, Ottobock’s presence at trade fairs was redesigned with the aim of creating a ‘brand-world’: see, for example, Figure 5.9. Employees were offered training intended to focus their attention on the brand’s core values and ensure that their behaviour would be on-message when they communicated with visitors and other external groups. The main focus of communication was moved to user testimonials rather than the usual brochures and other paper-based information materials. This was another step towards the brand becoming more open, approachable and tangible for external groups.

*Figure 5-9: New trade-fair stand*
The use of social media channels for communication and listening was also intensified. The dialogue is no longer led by Ottobock; rather, it is the role of the brand to interact with followers and gather relevant inputs for internal processing, particularly when it comes to feedback that might help to optimise existing products or develop new ones. Various Ottobock users have already started to act as influencers and give insight into their daily life with a prosthetic limb to a large number of followers.

5.4.4 Co-created brand (2016-2018)

Brand management

The brand management function has been further stabilized, with the aim of increasing the degree of user-orientation and of being more differentiated with regard to the positioning strategies for different product groups (prosthetic devices of several kinds and wheelchairs). In this final phase it becomes clear that the core direction of the brand has been stable since the foundation of the company. However, external inputs have modified the brand’s positioning in so far as it has become more open and approachable.

*CMO:* “Ottobock is Ottobock. We cannot change this; that would be [too] difficult … But the brand is more open, more approachable … and that is clearly the influence of external stakeholders … We know that here or there we need to manage our brand in a more differentiated way.”

Culture

The ‘design thinking’ philosophy has become very dominant in Ottobock’s innovation culture. The increased integration of external sources described at 4.4.3 below has led to an open-minded culture within the company’s ‘inner sanctum’, the R&D department. There has also
been an impact on the profile of potential employees, who are expected to be more open, participatory and co-creative than before.

*Head of R&D:* “We will have to look for other profiles. More open, communicative. … not everyone will have Ottobock-specific ideas, but completely different ideas that we take as inspiration to transfer them to products. I think that is the crunch point, where we have to improve in the future.”

**Behaviour**

In 2016, Ottobock inaugurated a workspace dedicated to blue skies thinking about innovation in Berlin, designated the ‘FabLab’, which was intended to open up the product development and innovation processes more strongly to external groups extending beyond brand ambassadors or lead users. For instance, start-ups, universities or other people and organisations operating in sectors different from Ottobock’s were expected to be attracted by such new technologies as 3D printing or rapid prototyping. The plan was to integrate those groups increasingly into the development and co-creation of new medico-technical products and corresponding services, such as digital apps, and thereby set up a win-win situation: Ottobock generates the idea and/or prototype and on that basis takes over responsibility for production and introduction to a market with very high barriers to entry. In order to capitalise on FabLab and intensify the idea of blue-skies thinking, ‘CreativeLab’ was opened at the corporate headquarters in Duderstadt in 2017.

*Head of FabLab:* “… there is a start-up here; they work on intelligent insoles that include sensors connected to an app. When you walk with it, dynamic movement data is captured. That is highly relevant for us … for the mobility, what we want to enable as Ottobock … because of this data we will be able to offer a better therapy.”
Driven by the new innovation culture, co-created projects have been initiated with companies that have no relation to Ottobock’s core-business: for instance, with a German insurance company, where the idea was to develop new ways of thinking about sports equipment, or with a Japanese car maker about mobility solutions in the future.

**Communication**

The focus on users in communication strategies was further intensified in 2016, specifically a more differentiated and user-oriented approach by product group (prosthetic devices of several kinds and mobility aids) has been adopted. To achieve a more differentiated approach to communication strategy than is normal in this field, Ottobock developed a strategy focused on the application of its products to sport (Figure 5.10).

*Figure 5-10: Differentiated communication*
Simultaneously, a real social-media push started and the number of related activities increased, to strengthen encounters and interactions with users. An essential part of Ottobock’s communication strategy during phase four was the establishment of brand communities in order to increase the amount of co-created brand content. For instance, one community is centred on the running clinics and the Brand Ambassador is part of it. Here stakeholders from all over the world interact with each other and with the brand that otherwise would be unreachable for the company.

*Head of Digital Marketing:* He (Brand Ambassador) reaches a community that works well for us … The community members … are emotionally connected with him. We would have never reached these people as a company, no matter how hard we might have tried.”

5.5 Conclusions and implications

5.5.1 General conclusions

Our findings depict an emergent sequence of stages that seem to be a prerequisite to the adoption of co-creation by a brand owner, specifically with respect to a B2B brand. Those range from an absence of any brand management and marketing activities, through the professionalisation of brand management and branding, to a brand orientation and eventually to co-creation. Thus, before external inputs are internalised, the company constructs a solid basis for the brand by professionalising its management and integrating the notion of brands and branding into the daily life and mindsets of all employees. Such inputs do not stop at the image but reach through to the brand’s identity. External stakeholders have an especially significant effect on the identity-related dimensions of behaviour (through co-creation in product development) and communication (through co-creation of brand content).
5.5.2 Theoretical implications

The academic literature contains an increasing corpus of research into the effects of co-creation. It does not, however, offer sufficient evidence of the consequences and brand-related effects of co-creation in industrial settings. The findings of our study confirm the theoretical propositions of Ballantyne and Aitken (2007) that brand building in B2B is a social process involving a large variety of stakeholders, and that brand identity is subject to negotiation. On the basis of this empirical finding alone, the theoretical implications of our study are many and significant.

Most of the existing knowledge in the field of brand co-creation stems from studies and discussions of consumer markets, yet the topics of customer integration, interconnection and collaboration hold equally true for B2B. Our paper therefore contributes to the literature of brand co-creation by transferring the topic to the field of industrial branding and thereby answering recent calls for research into the process in the B2B context (Ind et al., 2017). Our study joins a small number of others to explicitly analyse the co-creation of industrial brands and extends their findings by outlining a pattern of brand development stages that seem to have to be passed through before a B2B brand owner is “prepared” to open up to external stakeholders. This implies that stabilisation of brand management and corporate brand orientation are both essential prerequisites of readiness to transfer external inputs into internal branding activities. These findings can be very valuable to researchers and practitioners, given that the construction of a brand is no longer solely an internal management task and that companies increasingly lose control over their intended brand meanings (Black and Veloutsou, 2017).

Furthermore, existing research on brand co-creation has mainly taken a consumer-oriented perspective while that of our study is management-oriented, shedding some light on how co-creation can be triggered, managed and controlled. In contrast to the focus of most studies on product brands, ours has concentrated on a corporate brand. We argue that the latter are
better suited than the former to research into co-creation due to the ‘natural’ inclusion of multiple stakeholders in branding (Balmer, 1995).

What is more, our study advances the fragmented body of research on B2B brand management and branding, which has lagged behind B2C branding thinking for many years (Beverland et al., 2007b). The establishment of unique characteristics of brand co-creation in the B2B setting can serve as valuable reference point for future work on the co-creation of industrial brands. To the best of our knowledge, no other paper has yet presented such a comparison of factors.

Lastly, with regard to theoretical implications, existing research on brand co-creation, regardless of context (B2C versus B2B) or brand category (product versus corporate) tends to present a snapshot of a co-creation scenario in which the dynamic nature of co-creation is neglected. Our study is one of the first of its kind to take a process-oriented perspective on the co-creation of brand identity by investigating a real-world brand transformation over a period of thirty years.

5.5.3 Practical implications

Co-creation marks a shift from internally-generated, management-centred brand building to a collaborative process. Such a different approach also demands a change of management style. The need to interconnect and exchange resources with stakeholders is higher in B2B than in B2C (e.g. Aarikka-Stenroos and Ritala, 2017). It is thus practically important that practitioners know how to initiate, institutionalise and maintain brand co-creator networks, in order to integrate external brand inputs and strengthen the brand’s identity. The stages of brand development that our findings describe can serve as a blueprint for B2B brands in general.

Another implication for practice arises from our focus on a corporate brand. One essential threat to corporate brands is the gap between stakeholders’ perceptions and the ‘promise’ made by the corporation (Roper and Davies, 2007). The consequence of such a gap might be that stakeholders reject the brand’s offer (Balmer, 2012). Our case provides corporate brand
managers with a practical example of how to prevent such an occurrence. Since its re-branding in 2011, Ottobock has started to integrate external stakeholders increasingly into corporate activities. This has helped managers to recognise external needs they presumably would not otherwise have detected and strengthen the bond between stakeholders and the brand. The resulting brand promise is not only better aligned with stakeholders’ expectations, but it is they who to some extent support the company in formulating its brand proposition.

Furthermore, our findings show that the leadership style of Ottobock managers has clearly changed over the years. We show that within each brand development stage, they have adapted the way in which they managed the brand. For instance, in the stage of professionalisation of brand management and user focus, the main task was to establish a brand management and marketing department and integrate the resulting processes into the company’s organisation. In the stage of living the brand, managers were already one step further forward and the concern was how to internalise the brand into the minds of all employees. In the stage of co-created brand, it can be best recognised that the initial leadership style of deciding and commanding has transformed into listening and participating. However, we also show that setting an initial sense of brand direction is still the manager’s key task, which is less about proposing rigid brand standards than about having a well-defined purpose with the flexibility of reinterpretation.

5.5.4 Limitations and further research

The results of our analyses of the empirical data collected should be treated with appropriate caution, given that the focus of our case study was on a single host company. The method enabled us to study the phenomenon and an empirical example of it in-depth by carefully developing conceptualisations pertaining to the subject of the study (Andersen et al., 2018) but it is not clear if the brand-stages would also apply to other companies in the same industry and to firms in other industries. A larger sample of companies from various industries would be needed
to establish whether or not industrial companies in general need to create a strong foundation for the brand before successfully co-creating brand meaning.

Another methodological limitation is the explorative nature. It is suitable to advance the understanding of brand-related topics in the field of industrial marketing and build theory (Beverland and Lindgreen, 2010; Piekkari et al., 2010). Though, we are not able to identify the most “valuable” stage for the brand. Hence, the relation between the brand-stages that we found and brand success (e.g. brand equity) remains unclear. Further research could follow a quantitative design to measure and compare brand-related effects within each brand development stage. An experimental study could test the identified stages against each other in relation to brand-related constructs.

With Ottobock we investigated a well-established company in the orthopaedic industry. However, with newly founded small ventures, completely different stages of brand development than the ones we found might evolve as pre-stages of co-creation or they might even become redundant at all. Further research could explore B2B start-ups that co-create brand meaning to learn if and which brand-stages they went through.

The four time-phases that we constructed as a first step in our empirical analysis present another limitation. Although the time-phases were validated by the CMO, the distinction between them is not as clear as postulated in the paper because data-extracts in one phase overlap with prior or post phases.

Lastly, the brand identity dimensions that served for the coding are well-fitting in the context of co-creation. However, there is no agreed consensus about the dimensionality of brand identity and therefore, future work might retrieve on other dimensions when researching brand co-creation.
Conclusions

Each of Chapters 2 to 5 follows a specific research mission within the general topic of brand co-creation. Together, they thus generate a distinct set of findings and implications, as well as identifying limitations pointing towards avenues for future research.

Chapter 2 presents a review of the relevant literature, exploring the main antecedents of brand co-creation and the typical perspectives under which that process is investigated in existing studies. Chapter 3 focuses on product-related and brand-related conceptualisations of ‘observers’ of the outcomes of co-creation. Insights into the dark side of brand co-creation are offered in Chapter 4, which examines the relationship between ‘non-collaborative’ co-creative behaviour and the brand equity derived from the perceptions of observers. Chapter 5 deals with the relevance of brand co-creation in the important setting of industrial marketing, and the way in which it is managed in that form of business-to-business marketing.

The themes of these individual papers have been arranged and developed in such a way that, when the findings and implications are brought together, it becomes possible to provide an answer to the central research question, regarding the possible effects and consequences of the co-creation paradigm for brand research and brand practice.

The next section of this Chapter begins with a summary of the findings of the four main chapters. It then consolidates the implications for theory and practice identified in the papers in each of those chapters into an approach to the answering of the central research question. Finally, general limitations and directions for future research are reviewed.

6.1 Overview of findings

Chapter 2 builds on the premise that the paradigm of co-creation has rich and diverse roots in a large variety of different contexts (Ind and Coates, 2013). It is therefore essential, before being able to fruitfully explore its application to the branding field, to reduce complexity and have a clear understanding of the main drivers of brand co-creation. To achieve that aim, Chapter 2
follows a multi-step approach. First, four recent publications are identified that identify
dominant antecedents of co-creation. Three thematic clusters are generated from them, and
integrated into a ‘three-pillar model’. Those pillars represent the key foci of research into
co-creation: innovation management; service marketing; consumer behaviour.

Innovation management, especially the integration of customers into new product development
(von Hippel, 1988) and ‘open innovation’ (Chesbrough, 2003), is a veritable hotbed of brand
co-creation. Both activities are based on the view that collaboration with users and their
integration into the process are necessary to secure competitive advantage. Turning to service
marketing, the rising importance of the service sector and the concept of ‘service dominant
logic’ (Vargo and Lusch, 2004) were decisive forerunners of brand co-creation in that they
challenged traditional company-centred perspectives on value creation and proposed the notion
of co-creation instead. As for consumer behaviour, that rather general pillar actually comprises
three theoretical concepts, in all of which co-creation is an intrinsic element: consumer culture
theory, communities and user-generated content.

These important antecedents having been postulated, a review of the literature relevant to
co-creation yielded 34 publications between 2000 and 2015, each of which was assigned to one
of the three pillars of brand co-creation. The result was that ten were allocated to innovation
management and twelve each to the service marketing and consumer behaviour pillars. Though
this literature base does not claim to be exhaustive, it offers a viable overview of the current
development status of research in the field of brand co-creation and allows for the identification
of knowledge gaps and typical patterns of implementation, as the departure point for future
empirical studies. Chapter 2 concludes by identifying such possible future research projects,
and elaborating upon them. Proposals are structured according to: the general paradigm of brand
co-creation; more specific ideas about brand co-creation that have served as an inspiration for
the papers presented in these Chapters; and methodologies.
Chapter 3 is dedicated to capturing the empirical effects of co-creation on the brand equity derived from ‘observers’ of the outcomes of co-creation initiatives. So far, research has usually concerned itself with active and integrated brand co-creators and largely ignored non-integrated observers of co-created brands. The paper presented in that Chapter, by contrast, emphasises that non-integrated consumers clearly outweigh integrated co-creators and argues that, therefore, an understanding of how that majority of passive consumers perceives co-created brands is urgently needed. It reports a between-subjects experimental design to test two independent variables relating to consumer involvement in the product-development process: strength of integration and perceived expertise of the co-creator. A control group was made up of individuals who had not participated in co-creation at all. The input stimuli were promotional materials for two brands from contrasted product types within one general category, selected on the basis of existing studies of the most common brands in Germany and a pre-test: Nike and the German cereal brand Kölln. The dependent variable was conceptualised and validated as observer-based brand equity (OBBE) as distinct from participant-based brand equity (PBBE). Results indicated that, in the case of Nike, the notion of co-creation did not result in an increase in the OBBE score. For Kölln, however, non-integrated observers who had been exposed to a co-created brand exhibited higher brand equity than the control group who had been exposed to a treatment involving no co-creation. The strength of integration had no effect on the mean OBBE score of the Nike brand and only a marginal positive effect on the OBBE score of the Kölln brand. The second independent variable, perceived expertise of the co-creator, had no effect on the OBEE in the case of either of the tested brands.

Chapter 4 builds on another knowledge gap identified in the review of the literature. The paper presented there questions the prevalent optimistic perspective adopted in the brand co-creation field, investigating the product-related and brand-related effects of non-collaborative behaviour on the part of brand co-creators. To test those empirically, mixed-design before-and-after measurement set the within-subjects factor as elapsed time and the 2 x 2 between-subjects
factors as the form of non-collaborative co-creation and the type of co-creator. OBBE, as conceptualized and validated in Chapter 3, was again chosen as output variable. Non-collaborative co-creation was characterised, following the leads of the literature and real-life examples, as either ‘brand play’ (parody and pranks directed at the brand) or ‘brand attack’ (destructive re-imagining and hijacking of the brand). The type of co-creator was either artist or general consumer. The pre-tested final input stimuli were manipulated treatments of advertisements for the Nike and Levi’s brands. Results showed that non-collaborative co-creation lead to a dilution of before-after values of OBBE. This negative effect was found for both tested brands, which emphasises that even high-equity brands are not immune to suffering from non-collaborative co-creation. Furthermore, the study demonstrated that the effect on OBBE is moderated by the form of non-collaborative co-creation and type of co-creator. In particular, the ‘brand attack’ form causes a stronger dilution of brand equity than ‘brand play’ for both brands. It was also found that a consumer co-creator yields a stronger dilution in OBBE than an artist co-creator, which is the case for both brands. Artists may either mitigate the dilution or have a positive effect on those perceptions.

Chapter 5 explores yet another idea for further research presented in Chapter 2. The paper it presents critically questioned the supremacy of the business-to-consumer focus in brand co-creation research, on the grounds that many characteristics of co-creation (such as interactions, networks, ecosystems, collaborations, multiple stakeholders) seem more natural in business-to-business settings. The study reported therefore examined brand co-creation in the case of an industrial brand, by means of a qualitative case study of a German prosthetic-technology company over the period 1988 to 2018, in contrast to the quantitative experiments described in Chapters 3 and 4. Collection and analysis of data was preceded by the conceptual generation of six characteristics that outline the differences in brand co-creation between the business-to-consumer and business-to-business contexts. The subsequent case-study methodology adopted a process-based design, chosen specifically because the aim was to
capture the dynamics of brand co-creation over time and to establish temporal connections between events. It drew upon a variety of sources of evidence, as recommended by Yin (2009). Longitudinal analysis of the data found a transformation from internally-generated, product-centred and technology-focused branding to a ‘participatory’ process, characterised by a degree of internal-external co-creation. Four sequential stages were identified in that transformation journey: ‘marketing for high-tech products’; ‘professionalisation of brand management and user-focus’; ‘living the brand’; and ‘co-created brand’. While no explicit branding or marketing department had existed in the first of those phases, before 2008, professionalisation of the branding and brand management functions had begun. That proved to be the first step towards the creation of a strong foundation for the brand, which was further strengthened and stabilised in the third phase, starting some five years later, when the brand came to be seen as a strategic hub and the company transformed simple brand orientation into the notion of ‘living the brand’. Finally, by 2018, Ottobock had increasingly opened itself up to stakeholders in its operating environment and internalised external inputs that could affect the brand’s identity.

6.2 The brand co-creation paradigm: implications and consequences for researchers

In considering the theoretical implications of the four main papers presented in this thesis, with a view to identifying their consequences for future research and practice in the co-creation of brands, it will be helpful to recognise the evolution of this concept into a ‘hot topic’ in current marketing research, and a dominant paradigm shift in the area of branding-related research (Kaufmann et al., 2016; Veloutsou and Guzman, 2017). The majority of reported research studies have found positive product-related and brand-related effects resulting from embracing the notion of co-creation: for example, those by Hatch and Schultz (2010) and Ind et al. (2013, 2017). However, what studies have not reported is that most of such results relate only to the comparatively small number of ‘integrated’ participants in the process of co-creation, while the significantly larger number of non-integrated ‘observers’ remains passive and yet is exposed to
the outcomes of co-creation initiatives: for instance, Fuchs and Schreier (2011). The question of how observers perceive co-created brands thus remains unanswered. The empirical study that is the focus of Chapter 3 found that co-creation can have a positive effect on OBBE, though the improvement attributable to co-created products was weak and only marginal. Thus, in contrast to the typically positive tenor in studies of brand co-creation, the findings reported and discussed in that chapter come to a somewhat disillusioning conclusion with regard to the actual effect of co-creation, at least with regard to the product-related and brand-related constructs of non-integrated consumers. The temptation to blindly transfer the positive influence of co-creation on participants’ brand equity (PBBE) to that of observers (OBBE) has to be challenged. It seems that the antecedent of an amelioration of the latter is not in fact the embedding of co-creation into brand innovation, in so far as observers’ brand equity has been found to be largely unaffected by the former. Even the message to consumers that bona fide experts had worked with the company in the process of co-creation did not increase the measure of OBBE. To sum up, brand co-creation does not harm OBBE, but equally does not confer any noticeable benefit on it. This does not mean that the growing importance of brand co-creation in branding research ought to be mitigated; on the contrary, scholars and researchers should be increasingly sensitised to ways of integrating co-creation and its implementation into branding strategy. If, as is argued in Chapter 3, overall ‘consumer-based brand equity’ is to be seen as the sum of its constituent parts (PBBE + OBBE), the implication is that co-creation is not the proper way to set about improving OBBE.

Combining this insight with the theoretical implications to be derived from the findings reported in Chapter 4, there is clearly scope for extending answers to the central research question regarding the effects of brand co-creation on research and practice in the field of branding. We have already seen that the academic literature contains a large corpus of research on the beneficial effects of brand co-creation. Yet those reported research results confirm the theoretical proposition that the phenomenon of brand co-creation entails a loss of control over
the brand’s meaning, which can be steered in unintended directions by an original branding strategy. The practical risk accompanying brand co-creation is the dilution of initial and intended brand meanings, and the emergence of ‘doppelganger images’ (Thompson et al., 2006). These subverted versions of brand meanings can begin to compete with the branding originally created and communicated by the brand owner. The implications of the study in Chapter 4 thus confirm the assertion of Fournier and Alvarez (2013) that negativity towards brands is a current and developing trend in the practice of co-creation. They also support the assertions made in Chapter 3 that challenge the allure of ‘copying-and-pasting’ insights from previous studies into the formulating and designing future research projects on brand co-creation. Chapters 3 and 4 together demonstrate the complexity and multifacetedness of brand co-creation and provide the motivation for brand researchers to increase their efforts to discover more about inherent risks and dangers of the process, and to expand insights into how the brand-constructs of independent observers of co-created products might be enhanced.

Findings reported in Chapter 5 similarly have a potential impact on brand-related research, confirming that brand building in industrial settings is a social process involving a large variety of stakeholders, and that brand identity is subject to negotiation. Recognising that co-creation is an increasingly important theme for industrial brands, that corporate brands predominate in business-to-business marketing (Leek and Christodoulides, 2011; Mudambi, 2002), and that multiple stakeholders are a natural characteristic of corporate branding (Balmer, 1995), the direct consequence for brand research is clear: knowledge of brand management and branding in the business-to-business field in general, and specifically of the co-creation process, needs to be expanded. This implication gains urgency from the fact that existing insights into industrial brand management and the application of branding paradigms is limited, lagging behind consumer branding (Beverland et al., 2007b; Wang and Hao, 2018).
Moreover, Chapter 5 implies that brand managers need to re-think their management style. There is therefore a further need for research to foster understanding of how managers can connect with customers and all other stakeholders, to build sustainable brand relationships by increasingly adopting a management-oriented perspective on brand research instead of the clearly favoured consumer-oriented view (France et al., 2018).

6.3 The brand co-creation paradigm: implications and consequences for practitioners

Turning to the implications that emerging from this thesis with a potential impact on the practice of brand management, a first issue for consideration is that there are different perspectives on co-creation of brands (Ind et al., 2017). One of those sees co-creation as an operational tool in branding to, for instance, enhance new product development. In that case, brand managers need to be aware of the relatively low influence of brand co-creation on non-participating observers in their market when planning a relevant initiative, such as for example a user-design competition. The consequence of adopting such a perspective is that, in terms of budget allocation, it would be wise to place the emphasis on converting passive observers into active participants. Chapter 3 comes to the conclusion, on the basis of the findings of the study it reports plus those of various others, that more of the latter should result in an increase in the former, ultimately to the benefit of overall consumer-based brand equity. Thus, instead of focusing on communication and presentation of the co-created product that is the result of co-creation, managers should plan to increase the number of participants in the process. Their schedule of brand communication activities should be scheduled mainly before the planned integration of users as co-creators, with the aim of encouraging more consumers to become part of the action. User-friendly ‘engagement platforms’ could be another readily available means of increasing the number of integrated consumers.

A further practical consequence is that, despite engaging consumers with each other and with the brand having become a key marketing objective in many companies (Dessart et al., 2015),
brand managers need to be clearly aware that ‘destructive non-collaborative co-creation’ is a real possibility, and that such negativity might be even be fostered by digital branding environments (Popp et al., 2016; Rauschnabel et al., 2016). It follows that brand strategists need to become familiar with such viral environments as the blogosphere or brand communities, and monitor them regularly for evidence of anti-brand sentiments.

The findings reported in this thesis also highlight the potential benefits of brand managers taking a wider perspective on their branding strategies and acquainting themselves with fields of activity that might seem only peripheral at a first glance. The study which forms the focus of Chapter 4 found that ‘brand play’ initiatives executed by professional artists can have a positive effect on OBBE. Intentional collaboration with artists, to the extent of suggesting that they might playfully engage in brand co-creation, could thus have a positive impact on perceived brand identity.

Treating brand co-creation from a strategy-oriented perspective (Ind et al., 2017), brand managers need to be aware that the adoption of co-creation marks a shift from management-oriented brand building to a collaborative process in which stakeholders become increasingly empowered. This is at least as valid for practitioners in business-to-business marketing as for those operating in consumer marketing settings. In an era of brand co-creation, managers would be well advised to adapt their management and leadership styles. One based on deciding and commanding would oppose the philosophy underpinning co-creation, which requires managers to become humbler, to listen and participate (Iglesias et al., 2013). It will still be a manager’s key task to initiate a sense of ‘brand direction’ but the flexibility is needed for that to be reinterpreted and negotiated. That demands a strong brand foundation, as suggested in Chapter 5, but also the willingness and openness to steadily ‘open up’ the brand to co-creators and accept a consequent loss of control.
6.4 Limitations and future research

Although this thesis offers a more complete insight into the paradigm of brand co-creation than can be gleaned from the literature to date, certain limitations in its content need to be taken into account. Those will in turn suggest directions for future research. While specifically relevant limitations are identified within each chapter, the following are generalised reflections relating to the thesis as a whole.

First, the largest part of it is concerned with the study of specific aspects of brand co-creation. Though insights and implications generated offer valuable guidance to researchers and practitioners, the topic of brand co-creation lacks a consistent general framework. While the ‘organic view of the brand’ by Iglesias et al. (2013) does try to capture the network-like structure of the process, the heterogeneity of the participants in it and the low controllability of brand co-creation, it can for the moment be regarded only as an early step in that direction.

Given the importance of the co-creation construct in the field of branding, a future research effort is called for towards the development of a framework that will be applicable by scholars, researchers and especially practitioners. It will need to provide clear management-oriented guidelines and a set of steps aimed at showing how to initiate, institutionalise and maintain co-creator networks in such a way as to integrate external brand inputs and thereby strengthen the brand.

In the process of exploring the process of brand co-creation, this thesis has identified certain of its consequences, such as the potentially negative effects of non-collaborative co-creation. The question thus arises: how can brand owners control brand co-creation and measure its effectiveness? Despite the inevitability of some loss of control over brand meaning when co-creation takes place, managers are not consequently absolved from the need to apply key performance indicators. Future research could usefully make a contribution to that end by developing a control tool plus concrete performance indicators exclusively relating to brand
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c-co-creation. Once a viable general framework is developed, it will be especially important to
integrate that tool into the process, in order to further establish co-creation as the new
predominant branding paradigm in research and practice.

The case study in Chapter 5 shows that, before the host company was prepared to open its brand
to co-creation, two stages of brand development had been necessary to achieve the
professionalisation of brand management and a brand orientation. Though that is a highly
relevant key finding in that particular case, it remains unclear whether those two preliminary
stages are a general ‘must-have’ or even a formula for success, when brands aim to interconnect
with stakeholders. Future research might usefully follow up on that lack of clarity by
investigating more brands in a wider range of settings and contexts. If such studies were to find
that the brand was strengthened by, first, a solid basis achieved by professionalising brand
management and, second, the integration of brands and branding into the daily mindsets of all
employees (that is, ‘brand orientation’) and third, the elasticity necessary for co-creation, the
following implication would arise. Though the brand co-creation paradigm challenges other
dominant concepts in brand management, such as identity-based approaches or brand
orientation, those are not necessarily contradictory to it. Hence, the question would not be
‘either/or’ but rather how to connect the paradigms with one another in order to have a clear
internal approach to brand building, while at the same time allowing for external inputs to be
integrated and co-created.

Lastly, methodologically, one conceptual approach, two quantitative experiments and one
qualitative single-case study were conducted in this thesis. Although that demonstrates an
appropriate variation in the methods applied, such a complex phenomenon as co-creation,
which implies human interactions and a variety of stakeholders, may well call for mixed-
method and action-based methodologies as a route to a better understanding of the dynamics
underlying the phenomenon of co-creation. Also, most empirical studies have adopted a
consumer-oriented perspective, as do two of the studies within this thesis. Despite recent research studies aiming for a management-oriented perspective – for example, Chapter 5 or the work of Ind et al. (2017) – future research could not only adopt a more strongly management-oriented perspective on the topic but also combine both perspectives within one study, in order to capture all stakeholder perspectives fully.

6.5 Final thoughts

This thesis has investigated the application of the co-creation construct to brand management and branding conceptually, qualitatively and quantitatively. Theoretical and practical implications and consequences drawn from the findings show that the ways in which brands are operated have changed in recent years, being transformed from the definition and maintenance of brands in a unilateral manner by the brand owner to the embracing of complex social processes. The meaning of the brand is no longer defined by a brand strategist in a rigid way but by a variety of brand co-creators who conceptualise and even re-conceptualise negotiated brand meanings. A more fluid and open approach to brand building carries the risk that the brand is pushed in unintended directions (Kristal et al., 2018) and that brand owners are no longer able to protect and control their brands (Christodoulides, 2008; Ind, 2014). Stakeholders will often co-create a brand on their own terms, beyond ‘corporate walls’ (Beverland, 2018; Iglesias et al., 2013). Rapidly changing and unstable market environments, paired with ever developing technological possibilities, foster co-creation and introduce a new age of branding to brand research and brand practice.
References


Iezzi, T. and Wheaton, K. (2007), “Advertising has been seen as art, now art used as marketing tool”, *Advertising Age*, Vol. 78 No. 15, p. 16.


Schreier, M. (2003), ‘Value creation by toolkits for user innovation and design’. In *Proceedings of the 2nd Interdisciplinary World Congress on Mass Customization and Personalization*, Technical University of Munich, Germany, 6th - 8th October.


## Appendix A: Scales for the measurement of OBBE

<table>
<thead>
<tr>
<th>Theme</th>
<th>n</th>
<th>Question</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand awareness</td>
<td>1</td>
<td>I can recognize Brand X among other competing brands.</td>
<td>Yoo and Donthu (2001)</td>
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<td></td>
<td></td>
<td></td>
<td>Atilgan et al. (2005)</td>
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<td></td>
<td></td>
<td></td>
<td>Bravo et al. (2007)</td>
</tr>
<tr>
<td>Brand associations</td>
<td>2</td>
<td>Some characteristics of Brand X come to my mind quickly.</td>
<td>Yoo and Donthu (2001)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Atilgan et al. (2005)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bravo et al. (2007)</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I can quickly recall the symbol or logo of Brand X.</td>
<td></td>
</tr>
<tr>
<td>Perceived quality</td>
<td>4</td>
<td>Brand X is good quality.</td>
<td>Atilgan et al. (2005)</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Brand X performs well.</td>
<td>Lehmann et al. (2008)</td>
</tr>
<tr>
<td>Innovation</td>
<td>6</td>
<td>Brand X is innovative.</td>
<td>Lehmann et al. (2008)</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Brand X constantly improves its products.</td>
<td></td>
</tr>
<tr>
<td>Differentiation</td>
<td>8</td>
<td>Brand X stands out from its competitors.</td>
<td>Lehmann et al. (2008)</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Brand X is in a class by itself.</td>
<td></td>
</tr>
<tr>
<td>Relevance</td>
<td>10</td>
<td>Brand X is relevant to me.</td>
<td>Lehmann et al. (2008)</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Brand X fits my lifestyle.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B: Examples of test press releases

*Kölln:* weak integration + no expertise

Press Release 10/14

*Kölln introduces a new energy cereal*

*Consumers selected a new cereal for Kölln!*

On a specially launched online platform three different versions of the new Kölln energy cereal were presented to 120 consumers. The consumers selected the new cereal based on their experience and knowledge.

With its mix of pineapple, apples, bananas, raspberries and raisins the new and healthy whole-grain cereal convinces health conscious consumers and connoisseurs. The new cereal of Kölln is all natural with no sugar, salt or preservatives added and is low in fat.

375 g muesli will be available from autumn on at a price of € 2.99.

*Kölln:* weak integration + expertise

Press Release 10/14

*Kölln introduces a new energy cereal*

*Experts selected a new cereal for Kölln!*

On a specially launched online platform three different versions of the new Kölln energy cereal were presented to 120 professors and students of the renowned German Sport University Cologne. The professors and students who were all part of the class “healthy sports nutrition” selected the new cereal based on their experience and knowledge.

With its mix of pineapple, apples, bananas, raspberries and raisins the new and healthy whole-grain cereal convinces health conscious consumers and connoisseurs. The new cereal of Kölln is all natural with no sugar, salt or preservatives added and is low in fat.

375 g muesli will be available from autumn on at a price of € 2.99.
Nike: weak integration + no expertise

Press Release 10/14

Nike introduces a new running shoe

Consumers selected a new running shoe for Nike!

On a specially launched online platform three different versions of the new Nike running shoe were presented to 120 consumers. The consumers selected the new running shoe based on their experience and knowledge.

The new Nike running shoe powers your fastest miles with lightweight, highly responsive cushioning, a supportive fit and excellent traction.

The running shoe will be available from autumn on at a price of € 119,95.

Nike: weak integration + expertise

Press Release 10/14

Nike introduces a new running shoe

Experts selected a new running shoe for Nike!

On a specially launched online platform three different versions of the new Nike running shoe were presented to 120 professors and students of the renowned German Sport University Cologne. The professors and students who were all part of the running class selected the running shoe based on their experience and knowledge.

The new Nike running shoe powers your fastest miles with lightweight, highly responsive cushioning, a supportive fit and excellent traction.

The running shoe will be available from autumn on at a price of € 119,95.
Appendix C: Distorted logos and visuals used in the experimental study

<table>
<thead>
<tr>
<th></th>
<th>Brand play</th>
<th>Brand attack</th>
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<tbody>
<tr>
<td>Nike</td>
<td><img src="image" alt="Moustache: Just Shave it" /></td>
<td><img src="image" alt="Child Labour: Just Stop it" /></td>
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<td>Levis</td>
<td><img src="image" alt="Elvi's" /></td>
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### Appendix D: Sources of evidence

<table>
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<tr>
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<th>Specific sources</th>
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<tbody>
<tr>
<td>Interviews</td>
<td>Interview A: Chief Marketing Officer (Aged 37, joined Ottobock in 2005; by telephone April 2018)</td>
</tr>
<tr>
<td></td>
<td>Interview B: Head of Digital Marketing (Aged 39, joined Ottobock in 2002; face-to-face March 2018)</td>
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<tr>
<td></td>
<td>Interview C: Head of R&amp;D (Aged 44, joined Ottobock in 1991; face-to-face March 2018)</td>
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<tr>
<td></td>
<td>Interview D: Head of ‘FabLab’ (Aged 36, joined Ottobock in 2015; face-to-face April 2018)</td>
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<tr>
<td></td>
<td>Interview E: Brand Ambassador (Aged 35, ambassador for Ottobock since 2007; by telephone April 2018)</td>
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<tr>
<td></td>
<td>Interview F: External brand consultant (Aged 50, consultant for Ottobock since 2010, face-to-face March 2018)</td>
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<td>Brand workshops</td>
<td>Workshop A: After the interview with Chief Marketing Officer in April 2018</td>
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<tr>
<td></td>
<td>Workshop B: After the interview with external brand consultant in March 2018</td>
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<td>Brand Books</td>
<td>Brand Book I (2011)</td>
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<td>Brand Book II (2015)</td>
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<td>Homepages</td>
<td>Ottobock Homepage and corresponding subpages</td>
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<tr>
<td></td>
<td>‘Fab Lab’ Homepage and corresponding subpages</td>
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<td>Social media</td>
<td>Ottobock Facebook posts</td>
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<td>Ottobock Twitter feed</td>
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<tr>
<td></td>
<td>Ottobock YouTube posts</td>
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<tr>
<td></td>
<td>Press Release B: 30 years of Paralympics (2017)</td>
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<tr>
<td></td>
<td>Press Release C: Let’s Dance (2017)</td>
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<td></td>
<td>Press Release D: Econ Award (2013)</td>
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<td></td>
<td>Press Release F: Brand ambassador leaves Let’s Dance (2017)</td>
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<td></td>
<td>Press Release I: Ottobock engages agency for new corporate design (2012)</td>
</tr>
<tr>
<td>Origin</td>
<td>Specific sources</td>
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<td>------------------------</td>
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<tr>
<td>Secondary Interviews</td>
<td>Interview A: Chief Marketing Officer (Proceedings of the international branding conference DERMARKENTAG 2016)</td>
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<tr>
<td></td>
<td>Interview B: Chief Marketing Officer (German Newspaper 04/2016)</td>
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<td>Interview C: Chief Marketing Officer (German Newspaper 02/2017)</td>
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<td>Interview D: Chief Marketing Officer (German Newspaper 08/2012)</td>
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<td>Interview E: Head of Corporate Communication and Head of Open Innovation (Human Resources Magazine 07/2017)</td>
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<td>Interview F: Chief Marketing Officer (Markenartikel Journal 06/2017)</td>
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<td></td>
<td>Interview G: Brand Ambassador (German Newspaper 06/2017)</td>
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<td>Interview H: Head of business unit (Healthcare Marketing Journal 05/2011)</td>
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<td>Product brochures</td>
<td>Brochure A: Arm prosthetics (before re-branding)</td>
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<tr>
<td></td>
<td>Brochure B: Arm prosthetics (before re-branding)</td>
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<tr>
<td></td>
<td>Brochure C: Arm prosthetics (after re-branding)</td>
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<tr>
<td></td>
<td>Brochure D: Foot prosthetics (before re-branding)</td>
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<td></td>
<td>Brochure E: Hand prosthetics (before re-branding)</td>
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<td>Brochure F: Spinal prosthetics (before re-branding)</td>
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## Appendix E: Results of coding for each time phase

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<tr>
<td></td>
<td>• First corporate-identity guidelines</td>
<td>• External consultant and agency for creation of corporate-design</td>
<td>• Brand compass to guide language and behaviour</td>
<td>• Further establishment and stabilisation</td>
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<td></td>
<td>• Info-department responsible for marketing</td>
<td>• New brand logo</td>
<td>• Brand Book I</td>
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<td></td>
<td></td>
<td>• Internal brand ambassadors</td>
<td>• Brand Book II with focus on three main brand values</td>
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<td>• Brand platform</td>
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<td></td>
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<td>• Creation of brand values</td>
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<td>• Establishment of Chief Marketing Officer post</td>
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<td><strong>Culture</strong></td>
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<td></td>
<td>• “Dark-blue”-metaphor (technology-focused B2B-brand)</td>
<td>• Shift from B2B to B2B and B2C</td>
<td>• Internal brand management measures</td>
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<td></td>
<td>• B2B-culture</td>
<td>• Open-space offices</td>
<td>• Internal brand campaign</td>
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<td>• Open showroom at Headquarter</td>
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<td></td>
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<td>• Participative workshops</td>
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<td>• Design-thinking perspective</td>
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<tr>
<td>Dimensions</td>
<td>Phase</td>
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</tbody>
</table>
| Behaviour  | • High-quality products  
• Technology first  
• First innovation, where idea is based on external source  
• First engagement in Paralympics | • Focus on high-quality products and features  
• Product co-created by a Brand Ambassador | • Focus on high-quality products and features | • Co-creative FabLab Berlin  
• Co-creative CreativeLab at Headquarters  
• Collaboration with start-ups, universities, further companies |
| Communication | • One-way-communication  
• No integrated approach  
• Fact- and info-based  
• External Brand Ambassadors  
• Open-house at Headquarters | • Science Center  
• Customer survey  
• Running Clinics  
• New exhibition style of the showroom  
• New type of trade-fair communication: shift from paper to user | • Social-media activities establish and increase  
• Campaign: Passion for Paralympics | • Social media for listening and interaction  
• Brand communities  
• Lead of communication by users |