Innovation Creation in Online Consumer Communities--How Computer Tuners Jointly Develop New Products

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This paper introduces joint innovation creation activities in computer case modding and overclocking communities. It explores the impact of community members’ motivations on their specific innovation behavior and innovation interests. Our research shows that members’ motives to tune computers differ from their motives to engage in innovation creation activities in online communities. Further, members’ behavior as well as innovation focus depends on their set of motives. Performance oriented community members for example often come up with more extreme solutions than application oriented community members who favor usability. This research contributes to a deeper understanding of consumer innovations in online communities.

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SYMPOSIA SUMMARY

Understanding Collaboration and Collective Production: New Insights on Consumer Co-Production
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SESSION OVERVIEW

The concept of co-production is central to marketing’s new Service-Dominant Logic (Vargo and Lusch 2004), which has been attracting considerable recent attention from both academics and practitioners. A co-production perspective is one where “the customer becomes primarily an operand resource (coproducer) rather than an operand resource (‘target’) and can be involved in the entire value and service chain” (Vargo and Lusch 2004, p. 11). A better understanding of co-production activities is important not just because of recent growing interest in the phenomenon (Lusch and Vargo 2006), but also because such investigations are likely to contribute to our already extensive knowledge about how consumers interact with one another in the marketplace (e.g. Schouten and McAlexander 1995). Achieving this better understanding is the collective aim of the researchers contributing to this symposium proposal.

Across three studies, we focus on two distinct types of co-production, which have not yet been fully discussed and distinguished in the literature. The first type, which we call “collaboration,” is the partnership of consumers with the company to co-produce a service (Meuter et al. 2005), a brand identity (Sherry 2006), or a product (von Hippel 2005). The second type, which we call “collective production,” is the interaction between consumers to produce a brand community (Muniz and O’Guinn 2001), a narrative (Schau and Russell 2004), or product alterations (Schau and Muniz 2005), independent of company input and stewardship. Our session aims to investigate theoretical and practical issues associated with each of these types of co-production (collaboration and collective production) in order to better understand marketplace relationships (both consumer-to-consumer and consumer-to-organization), and their role in the marketing process.

Understanding more about collaboration and collective production is important for three reasons. First, co-production is becoming an increasingly visible phenomenon in the marketplace. As evidenced by consumer participation in recent Super Bowl advertisements, consumers are being more openly solicited for input into the development of marketing mix elements. And, in domains like Amazon.com and Youtube.com, the traditional consumer role has become blurred as it moves from a ‘passive’ receiver of value to an ‘active’ producer of value. Second, the analytical distinction between consumers and producers is foundational for orienting existing models of market exchange including pricing, cost structure, and division of rewards from intellectual property. What adjustments in our theories of consumer behavior are therefore required when the distinction between ‘consumers’ and ‘producers’ becomes blurred? Lastly, we know from previous research that consumers form communities around products (Muniz and Schau 2005), brands (Muniz and O’Guinn 2001), and media (Kozinets 2001), but we don’t yet fully understand how this collective activity relates back to the company itself.

Three papers will explore co-production by examining collaboration and collective production. In an exploration of collective production, Andrea Hemetsberger will discuss the way in which open-source contributors negotiate and portray their roles as members of an entrepreneurial tribe. Johann Fuller and Eric Von Hippel will present another study of collective production in which they examine joint innovation activities in a community of computer users and modifiers. Lastly, Ashlee Humphreys and Kent Grayson will use data from a collectively-produced online encyclopedia, to understand how conflict is managed in consumer collaboration and collective production activities. Following the paper presentations, a discussion will be led by Al Muniz, whose published work has already made significant contributions to the literature on consumer-consumer and consumer-organization relationships (Muniz and O’Guinn 2001, Muniz and Schau 2005).

This session contributes to our understanding of consumer behavior in three ways. First, by studying relatively new consumer-behavior contexts, we learn something about a novel mode of consumer-production and are able to better understand the type of value produced by this mode of consumption. Second, we enrich our understanding of company-consumer relations by moving from a dyadic model to a multi-nodal model that includes company-consumer, consumer-consumer, and company-community relationships. Finally, we gain a better understanding of the nature and direction of consumer activity, including collaboration, dissent, and production processes.

EXTENDED ABSTRACTS

“Between Idealism and Realism: Negotiating the Entrepreneurial Role of the Free and Open-source Movement in Contemporary Economy”
Andrea Hemetsberger, University of Innsbruck

From a consumer research perspective, we can approach the networked information environment as a collective form of consumer creativity, which is transcending through interactions of networks of consumers as they communicate, share community and forge culture. Consumers are creative human actors in various consumptionscapes (Ger and Belk 1996). Yet, consumer creativity goes far beyond that. The changes in technology, economic organization, and social practices have resulted in remarkable new forms of co-production, such as the collective production of software. This is the case of free and open-source software (F/OSS). Together, consumers are creating sophisticated software—the outcome of an aggregation of collective expertise that is difficult to match elsewhere (Bagozzi and Dholakia 2002; Cova, Kozinets and Shaker, 2007). Consumers/users/co-producers passionately engage in programming, freely share their work with online friends, and build up successful businesses with free and open-source software.

This research examines the discourse of the F/OSS community, and carves out the ambivalent nature of their emerging entrepreneurial identity. It shows how co-producing tribes on the Internet negotiate, resolve, and restate contradictory motivations and tensions that arise from their common practice as successful entrepreneurs. It also contributes to our burgeoning understanding of online tribes and their role as “productive” communities. Finally, this presentation contributes to the current postmodern discussion concerning the spheres of production, consumption, and entrepreneurship.

In this symposium session I will report on an interpretive study, using public discourse data from the main newsforum of the F/OSS movement, covering the years 2000 to 2006. 10 to 15 stories are posted daily, which produce up to 5,700 replies. Posted stories with relevant topics and replies above a critical threshold of 600 to
1000 were selected. I used a grounded theory approach (Goulding, 2002) and analyzed the data for emergent themes.

I separated out four important quadrants of identity discourse. The first quadrant comprises Utopian romantic discourse which connects early altruist, gift-giving and helping behavior narratives, accompanied by discourse about highly passionate work. A second quadrant encompasses strong notions of freedom and libertarian values, resulting from a countercultural, emancipatory striving. These two quadrants reflect the political-ideological motivations for the collaborative practices among the members of the F/OSS movement. Originally thought of as a revolution, movements, instances of political-ideological discourse are geared towards radical distinction from work in capitalist enterprises. The other two quadrants are characterized by their realist undertone. One of them is ultimately pragmatic. Pragmatic discourse is oriented towards action, emphasizes the power of factuality and ‘the power of the doer’. It advocates collaboration and free sharing as the origin of collective expertise and wealth. While political-ideological discourse is directed against capitalist working practices, the goal of realists is to produce excellent software. As long as this goal is achieved, action is considered moral. Realist skeptical discourse—the fourth quadrant—challenges naïve romantic and overly pragmatic action as well. It is characterized by careful attempts to impede co-optation and hostile takeovers of free and open-source businesses by the established industry. Realist discourse enables the Collective to think and act entrepreneurial, political-ideological discourse is “the guardian of the moral conscience”.

By dissociating entrepreneurial action from the domain of “the entrepreneur” as a social institution, the findings contribute to the current discussion about the producing and entrepreneurial consumer. The findings suggest that participatory cultures like the F/OSS movement are as entrepreneurial in their thinking and acting as they are romantic and activist. Contrary to countercultural movements, entrepreneurial tribes contain a multitude of stances, are pluralistic and heterogeneous; they are no amorphous masses (Cova, Kozinets and Shankar, 2007). This produces contradictions and tensions, which seem to be vital for continued identity search and meaning construction of entrepreneurial consumer endeavors. In contrast to co-optation theoretical claims, online participatory cultures like the F/OSS community sustainably pursue their radically different production and business practices through their openness to multiple stances. Their entrepreneurial common practices provide new and empowering opportunities to define the social identity of consumers: not through consumption but through contributing to a collective, productive effort. Yet consumers’ entrepreneurial identity is still ambivalent; struggling to become the moral collective entrepreneur uniting idealism and realism.

Similar to hot-rodders who customize car bodies, PC “modders” or “tuners” individualize their computers. Case modding primarily deals with changes of the design. Overclocking tries to force computer components to run at higher clock rate and thereby increase the levels of performance. The field of computer tuning was chosen for several reasons. First, computer tuners often meet in online communities dedicated to innovation activities. Second, creative and technically skilled users can be found in online computer tuning communities. Third, computer tuners do not only generate and discuss ideas but indeed build their own computers according to their specific needs. Fourth, case modding and overclocking present important market segments of consumer goods, both in terms of volume and innovation lead markets. Almost all gaming computers cases are modded. Designs for high performance hardware and new cooling systems are often initiated by overclockers.

Multiple research methods have been applied to shed light on the innovative behavior of computer tuning communities such as www.extremeverclocking.com and www.casemodder.de. Nettography (Kozinets 2002) served as starting point to get an understanding of the research field, identify interesting community members, and analyze their behaviors. Interviews provided an even deeper understanding and portrayed who those innovators are. Videography (Belk & Kozinets 2005) helped to capture richer insights: emotions, gestures, and impressions of computer tuning; valuable for a deep understanding. Finally, an online survey was used to quantitatively test our derived hypothesis regarding the relation between motives, innovation activities, and the type of created innovations.

Our findings reveal that computer tuners come up with creative solutions and tend to be very skilled. While the desire for unique solutions, need for better computers, and the fun derived from the modding activity itself seem to be the primary motives for case modders, overclockers either aim for more performance necessary to better run extensive software applications or to compete with others and set new benchmarking records. Like case modders, overclockers really love what they do and spend loads of time and money for their hobby. Besides of the utility gained from their self-created solutions and the fun derived from the creative act of building, community aspects like sharing experiences and know-how with others, striving for pride and recognition present further important aspects of computer tuners’ motivations. For some community members, computer tuning is not just a hobby, but a philosophy which drives their everyday life.

Depending on the motives, computer tuners behaviors and kind of innovations seem to differ. Competition oriented computer tuners for example tend to innovative more extreme solutions often lacking practical applicability e.g. because of short durability and complex handling. While competition oriented computer tuners look for help and suggestions to improve their records in communities, they tend to keep their ideas private until they take part at a tournament. For computer tuners paying more attention to social aspects, developing a new computer is less important than getting involved in community related activities. Often, they fill a moderator or administrator position in the community.

Another interesting aspect encountered in our analysis is that motives and preferred innovation activities of community members seem to change over time. While personal need for a better computer may often be the initial reason to get into computer tuning, the feeling of mastering becomes more important after a while. Afterwards, some computer tuners become more interested in competitions while others engage in community activities around computer

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While existing studies demonstrate the high quality of user innovations and give insight in the characteristics and motivations of innovative users (Hemetsberger, 2001; Lakhani & von Hippel, 2003; Shah, 2006; Von Krogh & Von Hippel, 2006), little is known about differences in consumers’ innovation activities in dependence on their motivation. This paper investigates joint innovation creation activities in computer case modding and overclocking communities. It especially explores the impact of community members’ motivations on their specific innovation behavior and innovation focus.
tuning. Finally, most experienced and known members often become community champions who hold the group together and stimulate development of the domain.

First, our results challenge the predominant view of passive consumers. They show that consumers become active and produce their own products. Consumers become producers and execute tasks in their leisure time previously considered as work. Hence, the existing definition of consumers and producers becomes obsolete. Second, motives why consumers engage in collaborative innovation activities go beyond typical values encountered in economic and consumer theory. Hence, motives that affect consumers’ way of life’s may be more complex than so far reflected in theory. Third, collective collaboration seems to be a complex phenomenon allowing consumers to develop in different directions, taking on different roles, and contributing to different activities depending on their motivations. Little is known about consumers’ careers as co-creator. With our findings we hope to contribute to a better understanding of the emerging phenomenon of community collaboration.

“He Said, She Said: Managing Dissent in Co-Production”
Ashlee Humphreys, Northwestern University
Kent Grayson, Northwestern University

The notion that firms gain competitive advantage by engaging customers in co-production can invoke images of producers and consumers happily cooperating. However, community interactions also inevitably involve discord. And, while previous research has noted that disputes can occur among consumers within the same community (e.g., Kates 2002; Kozinets 2001) or between producers and consumers (e.g., Kozinets and Handelman 2004), less attention has been given to the systems that consumer communities develop for handling these disputes and the strategies that individual consumers use for winning them. That is the focus of our research. We seek to understand how disputes among consumers can be managed in a way that maximizes the benefits of consumer collaboration and collective production.

To develop this understanding, we focus on disputes that occur among the consumer/producers of Wikipedia, an open-source online encyclopedia. Wikipedia offers two important advantages for our research. First, the Wikipedia community has developed specific guidelines for handling conflict, which provides uniquely tangible evidence for our study. Second, most disputes on Wikipedia are part of the public record, which offers an extensive and comprehensive population of disputes for us to sample.

We analyzed two data sets from Wikipedia.com. The first consisted of 100 Wikipedia articles (and their accompanying discussions) randomly chosen from all Wikipedia articles. The second consisted of 100 articles (and discussions) randomly chosen from a set of 1111 “core” topics on Wikipedia. Articles, discussions, and revision histories were all read and open-coded for common themes and strategies.

In line with previous research on disputes in the social construction of knowledge (Fuchs and Ward 1994; Owen-Smith 2001; Rosenthal 2003; Tuchman 1972), we find that the very same tactics used to assert claims can be inverted and used as tactics to contest or undermine claims. Extending previous research, we identify six tactics that are used this way. When consumers (de)objectify a claim, they focus on whether a statement is appropriately supported by expert or secondary sources (Tuchman 1972). When they (de)subjectify a claim, they focus on whether the claim meets the rules of logic or follows common sense (Tuchman 1972). (De)proceduralizing a claim, involves a focus on whether formal or informal procedures were followed in making or disputing the claim (Daston 1992; Porter 1995). (De)structuring a claim involves addressing whether the formatting or presentation meets formal or informal expectations (Fuchs and Ward 1994; Tuchman 1972). When consumers (de)reputationalize a claim, they focus on whether the claimant has knowledge or biases relevant to the claim (Fuchs and Ward 1994; Tuchman 1972). When they (de)assert a claim, they address whether a claim is so undisputed that it does not need any tactics to reinforce it. And, when they (de)enforce a claim, they take a unilateral action against another claimant such as classifying certain claims as irrelevant or deleting claims altogether (Fine 1996).

We further extend previous research by providing insight regarding the power implications of each of these tactics. We group the above tactics according to whether they invoke power by referring to consensus [(de)objectifying, (de)subjectifying], to accepted rules [(de)proceduralizing, (de)structuring], or to the claimant [(de)reputationalizing, (de)asserting, (de)enforcing]. We find that gaining power by consensus and reference to accepted rules are the two most common strategies, but that references to the claimant are both more influential and more detrimental to the collaborative process. Tactics such as (de)enforcing, for example, work by defining the ‘field’ of a topic and thus influence what can and cannot be legitimately said about the topic, and limit the ability of other users to make contributions (Foucault 1977). Our research points to the importance of providing consumers engaged in collective production with approaches for handling conflict that may enhance the collaborative process. We also draw attention to the fact that consumer community discourse is not always harmonious and that power in these communities is often heterogeneous.

REFERENCES


