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Consumer Power: Evolution in the Digital Age

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Abstract

The predictions of growing consumer power in the digital age that predated the turn of the century were fueled by the rise of the Internet, then reignited by social media. This article explores the intersection of consumer behavior and digital media by clearly defining consumer power and empowerment in Internet and social media contexts and by presenting a theoretical framework of four distinct consumer power sources: demand-, information-, network-, and crowd-based power. Furthermore, we highlight technology's evolutionary role in the development of these power sources and discuss the nature of shifts in power from marketers to consumers in terms of each source. The framework organizes prior marketing literature on Internet-enabled consumer empowerment and highlights gaps in current research. Specific research questions are elaborated for each source of power outlining the agenda for future research areas.

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Introduction

At the dawn of the Internet, scholars began predicting a shift in power from the marketer to the consumer, suggesting a new form of consumer–firm relationship (Bakos 1991; Deighton and Kornfeld 2009; Kozinets 1999; Levine et al. 2000; Shipman 2001). With the introduction of the World Wide Web, ordinary consumers gained access to vast amounts of information and developed opportunities to influence their own lives, in the marketplace and beyond. The social media landscape of ubiquitous connectivity, enabled through mobile devices, in turn has not only enhanced access to information but also allowed consumers to create content and amplify their voices, across the globe, to anyone willing to listen.

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Some predictions of the effects of these changes have come to fruition; others have rotted on the vine. This article examines the intersection of digital media and consumer behavior to gain insights into consumer empowerment and set the agenda for further research. Specifically, we explore whether the predicted power shift actually has occurred, examine its origins and nature, and discuss its potential trajectory. This research contributes to existing marketing literature by offering a framework that integrates various expressions of consumer behavior in digital media and links them to forms of consumer power. The framework provides the structure for this article, which seeks to contribute in three ways. First, we organize a fragmented body of literature by linking consumer digital media participation with evolving sources of power. Second, we highlight gaps in existing literature related to defining and explaining the mechanisms that underlie consumer empowerment. Third, our framework establishes a basis for identifying routes of investigation related to questions of consumer power, empowerment, and potential disempowerment.

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Consumer Power and Empowerment

For centuries, power has fascinated scientists from various disciplines, with particularly intensive research in sociology and psychology (for an overview, see Magee and Galinsky 2008). Researchers agree that power is a key human concern (Schwartz et al. 2012) that constantly influences behavior and constitutes a "fundamental component of social systems and hierarchies" (Rucker, Galinsky, and Dubois 2011, p 353; cf. Russel 1938). The execution of and exposure to power are endemic to human nature (Nietzsche 1883), so the omnipresent effects of power shape human behavior in nearly every situation (Giddens 1982).

Yet this concept is relatively rarely discussed in consumer behavior contexts (Rucker, Galinsky, and Dubois 2011). Power shapes consumers' everyday activities in manifold ways, especially online; search algorithms control what information consumers can access, for example, and bloggers and other opinion leaders continuously influence consumption decisions through recommendations and product tests distributed through social media. Consumers also adjust browsing behaviors if they fear that providing personal information would give companies too much power over them. Therefore, differences in the distribution of power among stakeholders (e.g., consumers, marketers, online infrastructure) should directly affect how information gets distributed, how consumers behave online, and how consumers choose among different consumption options in digital worlds.

In the context of this research, we define power as the asymmetric ability to control people or valued resources in online social relations (cf. Handgraaf et al. 2008; Keltner, Gruenfeld, and Anderson 2003; Rucker, Dubois, and Galinsky 2011). In this regard, asymmetric and online social relations refer to the relative degree of mutual dependences between at least two parties. This relational component is a central property of our definition: In online worlds, if no counterpart existed, power could not arise. A powerful entity requires a comparison with a powerless one to derive its position, through perceptions of control over comparatively more people or resources. In exchange, the powerless entity tacitly accepts the differences in the online hierarchy, because it controls comparatively fewer people or resources, and approves the claim on power by the powerful entity.

Previous definitions of power, mostly in offline situations, use ability to indicate that explicit action by a powerful entity might not be required, as long as the claim of power is not questioned by the powerless (Magee and Galinsky 2008). In social relations, this tacit agreement is usually safeguarded through status, or "the extent to which an individual or group is respected for or admired by others" (Magee and Galinsky 2008, p 14). In offline contexts, status can be stable, over a long period of time because it results from "subjective interpretations" by a society of "objective accomplishments" achieved by the person in power (Magee and Galinsky 2008, p 14), and these subjective interpretations transform directly into expectations about potential future behavior (Berger et al. 1977). In online environments though, this condition may be rather less stable, such that status requires more and continuous action. Social media environments are equipped with different, explicit signifiers of status (e.g., number of followers, badges, activity rankings, etc.) that may make subjective interpretations of status

obsolete. They continuously measure individual activity and the influence of these activities on others. Therefore, status is more transparent on the Internet and in social media; a clear function of the consumer's online behavior.

Accordingly, in social media environments, control over people relates to influence. Influence is a function of reach, the degree of the person's embeddedness in the social network, and persuasiveness, linked to the relevance of the content the person creates online. To be influential, a social media participant needs relevant content and sufficient reach. Control over valuable resources instead refers to the right to dispose of tangible or nontangible assets online. In virtual communities, status constitutes a scarce resource, derived from longevity, expertise, or the network governance roles assumed by particularly engaged contributors and signified by hierarchically organized icons. Community contributors might gain power through their expertise, as a function of automated ranking systems that confer merit-based status and provide public recognition for cumulative contributions. Contributor status also serves as a quality indicator for users of the community-generated content. Another person might be powerful because she or he can aggregate and combine information (e.g., programming a crawler to analyze electronic word-of-mouth in social networks) or governs the network to grant or restrict access to others.

Finally, the term *empowerment* is very common with respect to developments in the Internet and social media. It refers to the dynamic process of gaining power through action by changing the status quo in current power balances (Cattaneo and Chapman 2010; Clegg 1989; Sadan 1997).¹

Four Sources of Consumer Power

In order to investigate the consumer empowerment phenomenon, we conducted a thorough literature review spanning publications in high-quality academic and managerial journals. In so doing, we identify an evolution across four sources of consumer power, starting with two individual-based power sources (demandand information-based power) and progressing to two network-based power sources (network- and crowd-based power), (see Fig. 1). We find that early research (Bickart and Schindler 2001) focused on the Internet's ability to empower consumers through increased information access, choice, and options to impose market sanctions through voice and exit. Newer social technologies also allow consumers to move beyond these individually based power sources to dynamic, complex, other-oriented power sources. Although we describe these four sources in parallel with historical technology developments, the sources do not

¹ Some researchers refer to empowerment as "both a process and an outcome" (Sadan 1997, p 73; cf. Staples 1990); while others take a psychological perspective (Diener and Biswas-Diener 2005; cf. Rappaport 1987). Unless explicitly noted, these perspectives have not been taken in this paper.

² We began our search with the following journals and followed article references to relevant articles in additional journals: *Journal of Consumer Research, Journal of Interactive Marketing, Journal of Marketing, Journal of Marketing Research, and Marketing Science.*



Demand

- •Demand-based power resides in the aggregated impact of consumption and purchase behaviors arising out of Internet and social media technologies.
- Technical/Historical
 Expanded assortments through efficient distribution and warehousing. Search engines and graphical browsers allowed increased consumer access and choice, yet the knowledge, financial, and infrastructure barriers at this time limited an individual's ability to create personal websites and share information.

Information

- •Information-based power is comprised of two facets, grounded in the abilities to consume and produce content: Information-based power through content consumption relates to the ease of access to product or service information, which reduces information asymmetry, expedites market diffusion of information and shortens product lifecycles. Information-based power through content production is the ability to produce user-generated-content. It enables empowerment by providing an outlet for self-expression, extending individual reach, and elevating the potential for individual opinion to influence markets.
- · Technical/Historical

Increased Internet access allows consumers access to both marketer and consumer content and creates a stage for self-expression. Web 2.0 applications broaden both information access and the ability to produce content through simple code-free interfaces. The eradication technical barriers of the Web 1.0 era, coupled with the free or low cost hosting for individual profiles and accounts across digital media platforms enabled average consumers to easily consume content and create multiple presences across the Internet.

Network

- Network-based power centers on the metamorphosis of content through network actions designed to build personal reputation and influence markets through the distribution, remixing, and enhancement of digital content.
- •This power speaks to the actions by which others can add value, beyond that of the original content. This value derives from activities such as content dissemination (e.g., sharing and organizing content through networks), content completion (e.g., comments on a blogpost that contribute to previous content, tagging), or content modifications (e.g., repurposing content, such as a video or image meme) in social networks.
- Technical/Historical:

The rise of the importance of social networks allow increased distribution of content, along with a greater ability for repurposing content and reputation building.

Crowd

- Crowd-based power resides in the ability to pool, mobilize, and structure resources in ways that benefit both individuals and the groups.
- •Examples of crowd-based power include crowd-creation (e.g., Wikipedia, SoundCloud), crowd-funding (e.g., Kickstarter, Indiegogo; Seogand Hyun 2009), crowd-sourcing (e.g., Amazon Mechanical Turk), crowd-selling (e.g., Etsy), or crowd-support in peer-to-peer problem solving (P3) communities.
- Technical/Historical: Advances in mobile technology and data infrastructure allow for ubiquitous and nearly instant access to information and resources across digital platforms. Crowd-based power allows for the rise of group/community buying power, crowdsourcing, and crowdfunding, the sharing economy, and the creation of new marketplaces.

Individual-based Sources

Network-based Sources

Time

Fig. 1. Evolution of consumer power sources.

represent finite moments in time. Instead, new sources emerge successively to complement prior sources; all four sources coexist today. Furthermore, consumers can draw power from multiple sources, and each source's boundaries are fluid and permeable.

The diffusion of Internet technologies and their associated characteristics influence the emergence and evolution of consumer empowerment (Kozinets et al. 2010). The source of that influence can be traced back to two types of infrastructure characteristics: (1) hard infrastructure characteristics determined through the developers' source code in terms of (a) openness of the infrastructure architecture (Lerner and Tirole 2002) and (b) infrastructure interaction designs (Daft and Lengel 1986; Mayhew 1991), along with (2) soft infrastructure characteristics, which reflect the social processes built into the platform. Infrastructure characteristics condition both network participation and the empowerment process by providing different interaction formats (i.e., news-streams, chronologies, tagging, fora, hangouts, albums), by impacting the overall attractiveness of the network and its capabilities, by providing public acknowledgment of merit

through signifiers of popularity (i.e., Likes or Re-Tweets) or achievement (i.e., public badging, ranking or gamification techniques), or by signaling or masking social class (Henry 2005). Network owners control how these characteristics are laid out and therefore hold power over technology design and by extension, impact user interaction (Mayhew 1991).

Hard infrastructure characteristics include all infrastructure characteristics determined through the developers' source code. Through catalyzing and structuring all relationships, all information, and all means of participation and value extraction, the source code represents a central element influencing consumer behavior. In this respect, (a) openness of the infrastructure architecture relates to the modularity, distributed access, and the value of the collective effort created as individuals collaborate across online networks (von Hippel and von Krogh 2003). Many networks restrict information access to limited groups of people (subscribed network participants, paying advertisers, etc.) and, hence, centralize control and power. Moreover, firms can restrict the ability for search engines to index and serve content. For

instance, at the time of this writing Google's search engine currently cannot index Twitter or Facebook posts (at the request of the platform owners) but does index and include content from its own social network, Google+, in search engine results pages. (b) Infrastructure interaction design (Daft and Lengel 1986; Mayhew 1991), or the availability and restrictions on data types, amount, and directionality of interactions condition both network participation and the empowerment process by providing different interaction formats and different types of relationships (i.e. unidirectional following, mutual friendships, and hybrids). Evidence from research on Facebook's mysterious "EdgeRank," a newsfeed algorithm, suggests that different types of content have varying potential for interaction and engagement. In developing its "EdgeRank" algorithm, Facebook suggests that visual content, such as videos and photos, offers higher levels of user engagement over non-visual content, such as text-only postings.

Soft infrastructure characteristics leverage social processes that evolve from the bottom up in the form of communal norms or are imposed from the top down as regulatory mechanisms built into social media infrastructure to recognize the merits of individual contributors. Governance formed through social processes (Wiertz et al. 2009), prompt normative expectations that tacitly define appropriate behavior and implicit obligations associated with online interaction. This contrasts with governance systems embedded in the technology infrastructure which typically employ icons (i.e., stars, rating points, contributor rank) to publicly recognize merit by rewarding specific types, quantity, and quality of contributions over time. Working together, normative and meritocratic governance systems exert an influence on participatory behavior and empowerment outcomes.

In the following sections we describe each of the four power sources in detail. Throughout each discussion we illustrate how consumers have gained power, highlight the influence of technology characteristics and note directions and questions for further research.

Demand-based Power

Demand-based power resides in the aggregated impact of consumption and purchase behaviors arising out of Internet and social media technologies. Demand-based power existed before the Internet; yet it continues today, sometimes in new forms. During the rise of the mainstream Internet, circa 1995, consumer power was limited to demand-based power, exerted through purchase or boycott (Zureik and Mowshowitz 2005). The option to exit represents a salient, classic statement of demand-based power, signaling dissatisfaction but providing little or no actionable feedback to guide marketer responses (Hirschman 1970). While technological advancements and inventions such as search engines and graphical browsers allowed increased consumer access and choice, the knowledge, financial, and infrastructure barriers at this time limited an individual's ability to create personal websites and share information. This left demand-based power as the predominant outlet for the exercise of consumer power.

The rise of Internet commerce removed geographic and time constraints, empowering consumers through expanded assortments, increased retail options, and new service features (Day 2011). Likewise, e-tailers benefited from the rise of the Internet in terms of low entry costs and market expansion. Logistic and communication efficiencies allowed retailers such as Amazon to push out into the long tail of preference distributions (Anderson 2004), adding as much as \$1 billion to consumer welfare, in increased variety alone, as early as 2000 (Brynjolfsson, Hu, and Smith 2003). Access to broad assortments through countless distribution outlets also gave rise to significant downward price pressures, elevating the importance of value-based pricing that was contingent on the customer's perceived utility rather than the company's cost of production (Porter 2000; Prahalad and Ramaswamy 2004). Firms have struggled to maintain influence over increasing levels of demand-based power, by resorting to "empowerment to select" strategies (Fuchs, Prandelli, and Schreier 2010). Such strategies invite lead users to participate in the product development process which generally strengthens demand for the final product.

Further Research: Demand-based Power

If we imagine demand-based power as democratic voting power, online consumers continue to vote collectively with their actions, and aggregated votes often have considerable impact. Such actions include not only purchase decisions but also website visits, application downloads, YouTube video views, Google searches, and Facebook likes. The value of some aggregated demand-based actions is clear when for example, measured in terms of the value of 100,000 purchases; while the value of 100,000 Facebook likes is less obvious (Walker Naylor, Lamberton, and West 2012). Google search trends, which illustrate a form of demand-based power in information search contexts, relate to sales in various settings: retail (Ayoubkhani and Swannell 2012), video game, music, movies (Goel et al. 2010), motor vehicle (Choi and Varian 2012), housing (Wu and Brynjolfsson 2010), and private consumption (Kholodilin, Podstawki, and Siliverstovs 2011; Schmidt and Vosen 2012). Consumers' search activity thus can serve as a proxy of objective measures of consumer economic activity (Hoffman and Fodor 2010). More research is needed to determine how the range of online actions that produce demand-based power (i.e., purchase volume, Facebook Likes, or Tweets) can be categorized and linked to marketing and economic metrics in order to assess the value of aggregated consumer actions online.

The explosion of long tail, niche, and customized markets also prompts questions about the benefit of access to nearly infinite options. How much is too much? Some evidence suggests that too much choice can reduce satisfaction and create poorer decision quality (Botti and Iyengar 2006) due to information overload. Do long-tail markets which provide access to infinite options, benefit or overwhelm the consumer?

Furthermore, the explosion of products and services available online had initially moved production markets from oligopolistic forms back to more atomistic market structures. However, during the last years a wave of consolidation on the retailer's side has concentrated markets at the distribution level. This raises

interesting questions, not only about the distribution of power between producers and consumers, but also about the differences in power between producers and intermediaries. How does the consolidation of retail outlets influence the distribution of power among consumers, producers, and retailers?

Information-based Power

Information-based power is comprised of two facets, grounded in the abilities to consume and produce content: Information-based power through content consumption relates to the ease of access to product or service information, which reduces information asymmetry, expedites market diffusion of information and shortens product lifecycles. Information-based power through content production is the ability to produce user-generated-content. It enables empowerment by providing an outlet for self-expression, extending individual reach, and elevating the potential for individual opinion to influence markets. Historically speaking, Web 2.0 applications have broadened both information access and the ability to produce content through simple code-free interfaces. The eradication of these technical barriers of the Web 1.0 era, coupled with the free or low cost hosting for individual profiles and accounts across digital media platforms enabled average consumers to easily consume content and create multiple presences across the Internet.

Information-based Power Through Content Consumption

In terms of consumption, the rise of the Internet granted consumers access to information, both firm-created and consumer-created, that was previously unavailable or difficult to obtain. This consumption-related information might include product or service information from producer or retailer websites and their corresponding advertisements, professional product/service reviews from independent journalists or rating agencies (often in combination with aggregated recommendations from shopping bots), and private product reviews (electronic word-of-mouth [eWOM]; Hennig-Thurau et al. 2004). Easy access to product reviews, comparative product specifications, performance data, and prices enables consumers to better match their preferences to products and reduces information asymmetry between marketers and consumers.

In addition to improved choice options for specific purchases (cf. demand-based power), this multiplicity of information leads to better educated and more sophisticated consumers, who are more demanding and difficult to influence and who have systematically different shopping patterns compared with offline shoppers (Brynjolfsson, Hu, and Simester 2011). The increase in available information thus makes it more challenging for marketers to spark consumers' awareness. With diffused awareness across an expanding number of options, any one marketer's total share of consumer awareness has decreased, leading to a relative increase in consumer power.

Consumers' overall media consumption has continued to increase over the past few years (Nielsen 2011). With more information available, consumers generally consume and process more information in shorter time periods, which helps

induce shorter adoption cycles and faster diffusions of market trends. According to the diffusion theory (Bass 1969), shorter adoption cycles produce shorter product lifecycles, which increase pressure on marketers, providing another example of the shift in power to the consumer.

The shift in information-based power toward the consumer is largely influenced by technical affordances related to interactivity which have given rise to an enhanced psychological sense of control. For example, shifts in personal beliefs regarding the efficacy or enhanced learning that results from socially embedded support, facilitates information assimilation and usage (Ariely 2000; Jayanti and Singh 2010). Consumers whose use of digital media is disproportionately reflected in information retrieval are more strongly motivated than others to reap the benefits of enhanced information access, but continue to retrieve rather than contribute to content, operating in a one-way capacity; while other users exhibit higher interest in adding to the consumer knowledge base that supplements commercial messaging.

Information-based Power Through Content Production

Burgeoning infrastructure increased Internet access so that everyday consumers could use the Web as a stage for selfexpression, yet some barriers to content creation remain, limiting complex content production activities to actors with adequate technological (e.g., knowledge of HTML coding and website hosting) and financial (e.g., hosting, production costs) resources. Historically speaking, most consumers during the Web 1.0 era were restricted to content consumption roles, with limited content creation and distribution abilities, yet the increase in consumer power was substantial. Information-based power through production was further bolstered by Web 2.0 capabilities that lifted many of these restrictions. Consumers gained the ability to vocalize both praise and complaints through eWOM (Grégoire, Laufer, and Tripp 2010; Hennig-Thurau et al. 2004; Ward and Ostrom 2006) and explore facets of the self, and advocate for brands and social causes (Schau and Gilly 2003). The impact of the production of user-generated content extends beyond the virtual context, outperforming traditional marketing efforts at times. For example, eWOM can elicit greater responses and persist long beyond the impact of traditional marketing communication, suggesting that it is a promotional "gift that keeps on giving" (Trusov, Bucklin, and Pauwels 2009). In the form of product or service reviews, eWOM has been linked to firm-level effects such as stock returns (Chen, Liu, and Zhang 2012) and box office revenues (Liu 2006).

Unlike the exit option afforded through demand-based power, the production element of information-based power gives consumers a means to catalyze change by providing a feedback mechanism to publicize undesirable practices, policies, or outputs by firms (Hirschman 1970). For product reviewers, the information-based power derived from content creation reflects the accelerating shift in control from the marketer to the consumer.

Information-based power through the production of content speaks to the desire for self-expression, achieved through acts such as the creation of a personal website, writing a blog, creating online videos or music or podcasts, or voicing praise and complaints on review, anti-branding, or boycott sites. Research into people's motives for creating personal websites indicates that some consumers are not at all interested in content dissemination. They describe content creation as a tool for self-exploration (Schau and Gilly 2003) or declare that their intention is to share content with a small, prescribed group of contacts, expressing deep concern about content access and sharing outside of this intended audience.

Further Research: Information-based Power

Today, more consumers create information that increases the information-based power of firms instead of consumers. Whereas consumers once gained power from access to user-generated content, firms now gain power from access to the increasingly large amounts of information that consumers produce. This shift raises a series of research questions to address how information-based power creates a paradox of technology (Mick and Fournier 1998) in which consumer empowerment is balanced by some level of disempowerment. Will consumers continue to view themselves as empowered by information, knowing that their search patterns, product preferences, or network connections simultaneously empower marketers?

The ability to profile individual consumers on the basis of their information search history, purchase, and consumption cycles may erode some advantages that consumers have won over the past decade in terms of enhanced information access and control. As online experiences become increasingly personalized, a growing concern notes consumers' lack of knowledge and understanding of the process. These "Filter Bubbles" or uber-personalized experiences threaten to control or limit the information that consumers access and share (Pariser 2011). In the age of Big Data, how do consumers view and assess the promise of personalization systems that may threaten to control or limit the information that they can access or share?

Although consumers exhibit surprising tolerance for this form of privacy invasion (Milne and Boza 1999), the "always on" and constantly trackable characteristics of mobile environments may push consumers to take active steps to lessen transparency and preserve their power (Boyles, Smith, and Madden 2012). As personal computing becomes even more personal, with the advent of wearable devices that capture location or health and fitness information, consumers who are empowered by access to their own personal data feeds may choose whether to share this information, in the same way they share their Facebook status updates. A recent survey (Paulus 2013) of consumers involved in the "quantified self" movement (Kronsberg 2013) indicated that less than one-third were "very open" to sharing their personal tracking data with others. In which conditions will consumers be more likely to share information with marketers, and what are the perceived benefits and risks of sharing this information?

Online tools for enabling information-based power grant ordinary consumers the means to become experts in areas that previously were the sole domain of paid professionals. Gladwell's (2008) "10,000 hour rule" asserts that mastery of any field requires at least 10,000 hours of practice (e.g.,

musicians, computer programmers, athletes). Considering the huge volume of posts made by top contributors to online product forums and the time taken to write each post, we note that some contributors easily meet Gladwell's criterion. They effectively have been empowered by the process of contributing user-generated content to become product experts, and they can serve as effective, unofficial representatives of a brand or product. What are the conditions that produce volunteer experts, willing to contribute to online product forums or generate product reviews and what are the implications of their empowerment?

The difference between consumer-generated and professional reviews is another important question, investigating whether consumer reviews exert comparable, or perhaps even greater, influence on firm value than professional reviews. Do consumer-generated reviews exert comparable or perhaps even greater influence on firm value than professional reviews? Will the relationship between consumers who generate reviews and the consumers who rely on them parallel traditional consumer–marketer relationships, or will new relational forms emerge?

Platforms limit the range of expression through restrictions on the types and amounts of content that can be produced, which can hinder interpersonal communication (e.g., Lanier 2010). Media richness theory suggests that the richer a message is communicated, the better it is processed by the recipient. The first empirical results support this theory with respect to different media types for eWOM in social media. For example, Lin, Lu, and Wu (2012) found that consumers prefer product reviews including visual elements over reviews without visual stimuli. Do restrictions on media richness of different Internet platforms also affect consumer empowerment? Does the degree to which technology affords or restricts communication (through media richness or restrictions on the range of expression) impact perceptions of self-efficacy, competence, communal knowledge generation, and consumer's perception of empowerment?

Evidence supports the idea that individual traits, such as need for uniqueness, may affect consumers' propensity to post online reviews (Cheema and Kaikati 2010) and the persuasiveness of other consumers' reviews (Khare, Labrecque, and Asare 2011), while transitory states such as loneliness influence susceptibility to mass influence (Wang, Zhu, and Shiv 2012). Future researchers may consider investigating whether purchase and online consumption processes vary as a function of enduring personality traits or psychological characteristics. For example, among consumers who feel relatively isolated, do large numbers of rave reviews sometimes backfire and reduce their willingness to buy, whereas minority opinions would enhance their purchase intentions? How do different personality traits or transitory psychological states moderate the consumer's reaction to different types of product reviews?

Another consideration involves the use of consumer-generated content in mass media. Mainstream news often integrates consumer-generated content as an information source and integral part of their reporting. In these cases, does the perception of this repurposed content change, such that consumers view it as more trustworthy and authentic than information from a marketer?

Likewise, how do consumers view user-generated versus firm-generated ads (Ertimur and Gilly 2012; Thompson and Malaviya 2013)? Recent research suggests that disclosing advertising cocreation may be a double-edged sword for marketers, in terms of skepticism and identification with the ad creator (Thompson and Malaviya 2013). Which marketing effect do cocreated consumer advertisements have?

Network-based Power

Network-based power centers on the metamorphosis of content through network actions designed to build personal reputation and influence markets through the distribution, remixing, and enhancement of digital content. In effect, network-based power speaks to the actions by which others can add value, beyond that of the original content. This value derives from activities such as content dissemination (e.g., sharing and organizing content through networks), content completion (e.g., comments on a blog post that contribute to previous content, tagging), or content modifications (e.g., repurposing content, such as a video or image meme) in social networks.

Certainly prior to social media, content sharing was not impossible — just more difficult for the average consumer and therefore less widespread. Prior to the emergence of the Web, closed communities of like-minded members could interact on online platforms, such as CompuServe, Prodigy, AOL, and The Well. In the mid- to late-1990s, web platforms such as Yahoo!, GeoCities, and Tripod broadened opportunities for content creation and dissemination and opened up closed communities. Napster demonstrated the disruptive power of open content dissemination in the music industry (Giesler 2008). By the early 2000s, additional social platforms such as Plaxo, StumbleUpon, and Friendster emerged, followed quickly by explosive creation and access to social content caused by the widespread adoption and use of social networking sites such as MySpace and Facebook. Network-based power therefore complements both information- and voice-based power, arising from the mass distribution and consumption of user-generated content. As such, everyday consumers increasingly use social activities to achieve "stardom" through the massive reach of social platforms (Liu-Thompkins and Rogerson 2012) in the style of Bo Burnham, Justin Bieber, Rebecca Black or Macklemore. Examples that effectively illustrate the social exchange of information include user-generated links that facilitate content exploration (Goldenberg, Oestreicher-Singer, and Reichman 2012) and the stream-of-consciousness blogs maintained by consumers (James, Handelman, and Taylor 2011), which invite responses from the social network.

The strength and number of social connections in ones' network, substantially increases the ability to share and influence others, empowering consumers who distribute content, regardless of whether it is self-created, created by others, or cocreated. Whereas content production from information-based power entails a one-way broadcast with a focus on the self, network-based power implies a multi-way dialog with a focus on others. Web 2.0 technologies and the rise of social media have enabled widespread network-based power and individual consumers' ability to influence others' decision-making and cocreate content more

easily through liking, commenting, tagging, or other forms of media enrichment. Through the size of their personal network they help spreading information, leading to a pinball-like distribution of information (Hennig-Thurau et al. 2010; Hennig-Thurau, vor dem Esche, and Bloching 2012). The unique characteristics of eWOM content, authorship, and distribution in social networks make it distinct from traditional eWOM, with its origin in object-specific, anonymous, non-sharable product reviews. We believe that social networks have created a new type of eWOM – social WOM – and hope for more research dedicated to this phenomenon soon.

This many-to-many communication model sets the stage for a broad spectrum of expressive outlets. For example, in a study of how information spreads through social online activities, Kozinets et al. (2010) identify four distinct communication strategies evaluation, embracing, explanation, and endorsement – used by influential consumers' to spread product information through and consequently become influential in a network. Network analysis has emerged as a technique to study the characteristics of social network structure and interactions that lead to the development of network-based power. For example, Goldenberg, Oestreicher-Singer, and Reichman (2012) find that social hubs, with many ties to other people, are more likely to adopt early, speed up the overall adoption process, increase the size of a market, and predict product success. Also referred to as lead users (Kratzer and Lettl 2009), this type of consumer has a broad market impact as compared to the localized influence of opinion leaders exerted by way of the strong ties within their personal social network.

Since network-based power centers on consumer connections, the openness of the infrastructure plays a substantial role in terms of determining the accessibility and redistribution of content. Likewise, the infrastructure interaction design determines formal constraints on freedom of expression, particularly when it directly imposes content and character length restrictions as found on the Twitter platform.

Soft infrastructure characteristics designed to reward specific types of contributions may indirectly influence the nature of content transformation or redistribution and directly impact personal reputation through the display of public rank within online forums or communities. The influence of normative governance which tends to emerge organically from social interaction online defines network or communal expectations and appropriate behavior (Mathwick, Wiertz, and deRuyter 2008). While the relative impact of imposed versus emergent governance systems is not fully understood, it is safe to say that perceived restrictions on self-expression, regardless of their source are likely to get interpreted as impediments to the reputation- and relationship-building efforts that constitute the heart of this segment's engagement.

Lastly, although network-based power is generally viewed as a positive influence for consumers, some costs are becoming more evident. People experience social obligations in the context of virtual environments, which create risks for their personal autonomy and privacy (Markos, Labrecque, and Milne 2012). For example, a dehumanizing process of "reductionism" (Lanier 2010) might result from the nature of online social interactions. By completing data entry fields to provide status

updates to friends or notify others of changes in relationships, people get reduced to fragments of information and the range of self-expression is considerably narrowed. This trend in itself is not surprising; social media represent another cycle of the paradox of technology (Mick and Fournier 1998), in which consumer empowerment is balanced by some degree of disempowerment. Therefore, all of the effects of network-based power may not be positive overall.

Further Research: Network-based Power

As digital media integrate increasingly into consumers' lives, their indispensability may create a sense of entrapment and disempowerment (Hoffman, Novak, and Venkatesh 2004). For example, the pressure to maintain an active profile and nurture relationships through online platforms may produce feelings of discontentment (Labrecque, Markos, and Milne 2011) and addiction, as illustrated in a recent study of Swedish adults (Denti et al. 2012). Research into Facebook specifically highlights this empowerment/disempowerment paradox, such that Facebook has gained the power to enforce and validate what is considered "real" (Berthon, Pitt, and DesAutels 2011). What are the psychological and consumption-related consequences that result from perceived pressures to exert and maintain networkbased power, particularly when it leads to feelings of entrapment, addiction, or begins to blur the distinction between reality and virtual reality?

Although the early migration of social interaction to the Web freed the consumer from the physical and socio-economic constraints of his or her life (Henry 2005; Turkle 1995), modern pressures for authentication may reestablish the links between virtual profiles on the one hand and physical and psychic realities on the other. The tension created by the need for authenticity may further erode the barrier between private life and a digital persona, causing consumers to lose control of the increasingly tenuous separation between that which is private and that which is public (Markos, Labrecque, and Milne 2012). This begs the question, does the need for authenticity in social media pressure consumers to relax privacy for their digital persona beyond their personal comfort zone? As the consumer's digital footprint and social connections grow, private acts can be disseminated across vast networks and transformed into public events, thrusting private individuals into the limelight to be honored or subject to devastating forms of cyber bullying (Kim 2009). Valkenburg, Peter, and Schouten (2006) similarly report the possible harmful effects of relationships in social networks on adolescents' self-esteem; Facebook use even may be linked to psychotic symptoms (Nitzan et al. 2011). More research is needed to understand the development of harmful social interactions and explore the mechanisms that consumers use to combat such undesirable outcomes.

Marketers also regain power through their ability to identify, reach, and influence more socially connected consumers. Recognizing the benefits of soliciting the compliance of influential consumers, buzz marketing firms, such as Buzzagent, "seed" marketing messages and provide product samples to opinion leaders in return for their willingness to share product experiences and evaluations with their networks. In a sense, marketers bribe

opinion leaders for their own gain, which involves many ethical considerations. This practice allows marketers to regain some, though not complete, control, because the discussion still is cocreated by the consumer opinion leaders (Kozinets et al. 2010). Furthermore, because social power distribution is not uniform, a few consumers in the right-hand tail have disproportionate influence over others. Does this uneven power distribution disempower those not in the right-hand tail? What is the marketing impact of having good relations to influential bloggers for a firm?

Outcomes of network-based power that may negatively affect firms also appear in various contexts, ranging from service defection, which spreads contagiously throughout customer networks (Nitzan and Labai 2011), to the negative influence of consumer complaints on future stock returns (Liu 2006). These events entail a negative form of network-based power, at least from the point of view of the firm. Such social media-induced corporate communication crises seem to occur with increasing frequency worldwide, yet they remain relatively unexplored in prior literature (Hennig-Thurau, vor dem Esche, Bloching 2012). What is the effect of social media crises on markets and brands?

Crowd-based Power

Crowd-based power resides in the ability to pool, mobilize, and structure resources in ways that benefit both the individuals and the groups. Advances in mobile technology and data infrastructure create crowd-based power through ubiquitous and nearly instant access to information and resources across digital platforms. As the ultimate illustration of consumer power, crowd-based power reflects a deliberate aggregation of all preceding power bases (demand-, information-, and network-based power) to align power in the best interests of both individuals and larger groups, such as virtual communities. Crowd-based power amplifies demandbased power through communal buying or collective expression of needs. It amplifies information-based power through standardization, centralization and provision of easy access for content consumption (hard infrastructure characteristics). It amplifies information-based power in terms of content production through installation of reward- and acknowledgment-systems (soft infrastructure characteristics). Crowd-based power employs and amplifies network-based power through bolstering individual connections in networks to increase reach and pool resources across groups, creating new levels of buying power and new marketplaces. Examples of crowd-based power include crowedcreation like that which occurs using Wikipedia or Sound: Cloud; crowd-funding (Seog and Hyun 2009) such as we see in Kickstarter or Indiegogo; crowd-sourcing as is used in Amazon Mechanical Turk; crowd-selling as can be seen wth Etsy; or crowd-support in peer-to-peer problem solving (P3) communities (Mathwick, Wiertz, and de Ruyter 2008).

Crowd-based power can be reflected in both structured (e.g., community) and unstructured (e.g. individual) efforts. In structured environments, such as brand or consumption communities, actions offer the ability to affirm or question personal contributions, build a cohesive identity, and mobilize

community members to pool individual and network resources – knowledge, economic, or social – in service of community initiatives. Crowd-based power may also be obtained and utilized by individuals who are not part of a structured community. For example, individuals may contribute to a kickstarter program for the direct individual benefit (e.g., funding a band's new album in order to gain access to the finished product, mp3 downloads for personal use). In this example, many individual consumers' financial resources are pooled to allow the creation of a new product, from which the individual can benefit; however, a pooling of resources is necessary for the outcome to be achieved.

The distribution of power among marketers and consumers here is dependent on the network owner's origin and ideology. which usually influences the setup of crucial infrastructure characteristics. Such communities and crowd initiatives allow for the creation of sometimes fully consumer-controlled markets. In these cases the firm is either completely absent or may play a supporting role through providing community infrastructure. However, in the creation of that infrastructure, firms have opportunities to influence community priorities through public recognition systems that reward contributors for high-quality, ongoing participation (Wiertz et al. 2009). As contributors begin to accumulate recognition points, the point system becomes the basis for most communities' hierarchical structure. Members build personal reputations according to the level of their recognized contributions, exemplified by iconbased badge systems that introduce gamification techniques to reward efforts. These multifaceted systems facilitate content creation and curative functions that transform the "wisdom of the crowd" into useable resources (Kozinets, Hemetsberger, and Schau 2008).

In terms of social commerce, crowd-based power has an important economic value-creating role (Stephen and Toubia 2010). The links between sellers create social networks that act as virtual shopping centers, helping customers browse among shops and improving the accessibility of shops within the network. Without such crowd-based power, many individual sellers lack the resources to succeed; therefore, success is contingent on structural ties and community support. In entrepreneurial contexts, social networks might crowd-fund artistic and commercial ventures (Seog and Hyun 2009), creating positive side effects in the form of market buzz.

Firms also increasingly work with consumers to provide shared resources that enable crowd-based power. Lamberton and Rose (2011, p 109) study commercial sharing programs that "provide customers with the opportunity to enjoy product benefits without ownership," including digital content (e.g., music, movies, or CAD plans for 3D printers) or physical products (e.g., Zipcar or bicycle-sharing systems). The Airbnb site, for example, offers an alternative to traditional hotel room booking by connecting consumers who want to share spaces while traveling; it claims that it can already fill more rooms than the entire Hilton Hotel chain (Empson 2012). Such programs constitute a hybrid approach to crowd-based power; firm interaction is required to set up and maintain the system and to mitigate perceptions of the risk of product scarcity. At the same time, the product – shared cars, bicycles, or lodging – represents

pooled resources. These community-driven business models have the potential to disrupt many traditional companies as consumers continue to change their mindsets about resource sharing (i.e., the rise of the "sharing economy").

Research also highlights the existence of intrinsic value in the community experience itself. The sense of belonging and shared social relationships in particular makes collective affiliation meaningful to participants (Thomas, Price, and Schau 2013). In interacting, members cocreate value "through the development of communal consciousness of kind, rituals, traditions, and norms of moral responsibility" (Muniz and O'Guinn 2001, p 412), and in the process, the virtual community begins to emerge as a separable entity. Muniz and Schau (2005, p 737) offer insight into the nature of one community's power, which bordered on a spiritual experience, demonstrating a capacity for "magic, religion, or the supernatural," which attracted people to form communities around a shared cause. These examples illustrate how communal effort can translate into status, reputation, moral outrage, or spirituality.

Further Research: Crowd-based Power

Research on crowd-based business models is still in its infancy. We currently know very little about how and where companies should try to utilize crowds in their own value chain. We know even less about whether and how crowds question existing business models. However, developments in certain industries have shown dramatic changes already. For example, in 2012, Encyclopædia Britannica, after 244 years of tradition, announced that it was retiring its printed version due to changes in consumer preferences for knowledge consumption and years of considerable financial problems. At the same time, Wikipedia has grown to the seventh most frequented global website, accounting for approximately 365 million readers worldwide (Alexa 2013). Hence, knowing how advances in digitalization and developments of consumer crowds affect future businesses might be nothing less than the search for the Holy Grail for the next ten years to come. How do consumer crowds affect business

More specifically, many questions regarding value creation and power distribution in consumer crowds remain unanswered: Where does the greatest value creation occur in consumer crowds? Is it possible for firms to lock customers into an optimal value coproduction relationship? And, how should such tactics be modified, given the level – consumer, firm, or network – at which content and value get created?

The exercise of crowd-based power is ultimately an act of voluntarism on the part of the coproducing consumer. A firm's role in this relationship often is simply to facilitate community interaction by providing enabling technology infrastructure characteristics. The perceived fairness of the governance mechanisms built into these platforms influences the effectiveness and longevity of the community. However, factors that contribute to the perception of fairness, as it relates to the procedures and outcomes of governance mechanisms are unexplored in the social media context. What are the procedural characteristics, incentive systems, and ranking outcomes that sustain or undermine continued engagement in the co-

production of community resources and the exercise of crowd-based power?

Communities gravitate toward stratified social systems, sometimes organically but more typically through mechanisms built into the governance infrastructure. Political tensions that arise between in- and out-groups in these virtual contexts can undermine community cohesion and power. Automated ranking systems support reputation building and confer personal status and power within these communities, often at the expense of those individuals relegated to the lower strata. Researchers should consider investigating the political struggle that arises within the ranks when core members attempt to align the behavior of others through formal or informal governance mechanisms. What are the social and political interest groups that emerge in online communities and what are the empowering and disempowering consequences that result from differences in a community's social strata?

Is there a potential for focal companies to learn from consumers trying to destroy a brand or company online? How do different reaction strategies impact communal developments in anti-branding pages?

Conclusion

This article has aimed to examine the intersection between digital media and consumer behavior, specific to consumer empowerment. We have defined consumer power in Internet and digital media environments and have presented a framework that describes the four distinct sources of consumer power: demand-, information-, network-, and crowd-based power. We also discussed how the infrastructure characteristics of Internet and social media platforms shape the appeal, effectiveness, and ability to empower. For each power source, we presented themes and questions that we believe will continue to be important areas for further research. These research questions are summarized in Table 1.

We find that the discussion of consumer power through digital media is in its infancy; many aspects are not well understood. We hope the review and suggestions stimulate further research in this area and provide guidance for ways to investigate these key issues in the future.

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Table 1 Further research questions.

Demand-based power

- · How can the range of online actions that produce demand-based power (i.e., purchase volume, Facebook Likes, or Tweets) be categorized and linked to marketing and economic metrics to assess the value of aggregated consumer actions online?
- · Do long-tail markets which provide access to infinite options, benefit or overwhelm the consumer?
- · How does the consolidation of retail outlets influence the distribution of power among consumers, producers, and retailers?

Information-based power

- · Will consumers continue to view themselves as empowered by information, knowing that the information related to their search patterns, product preferences, or network connections simultaneously empower marketers?
- · In the age of Big Data, how do consumers view and assess the promise of personalization systems that may threaten to control or limit the information that they can access or share?
- · In which conditions will consumers be more likely to share information with marketers, and what are the perceived benefits and risks of sharing this information?
- · What are the conditions that produce volunteer experts, willing to contribute to online product forums or generate product reviews and what are the implications of their empowerment?
- · Do consumer-generated reviews exert comparable or perhaps even greater influence on firm value than professional reviews? Will the relationship between consumers who generate reviews and the consumers who rely on them parallel traditional consumer-marketer relationships, or will new relational forms emerge?
- · Does the degree to which technology affords or restricts communication (through media richness or restrictions on the range of expression) impact perceptions of self-efficacy, competence, communal knowledge generation, and consumer's perception of empowerment?
- · How do different personality traits or transitory psychological states moderate the consumer's reaction to different types of product reviews?
- · Which marketing effect do cocreated consumer advertisements have?

Network-based power

- · What are the psychological and consumption-related consequences that result from perceived pressures to exert and maintain social-based power, particularly when it leads to feelings of entrapment, addiction, or begins to blur the distinction between reality and virtual reality?
- · Does the need for authenticity in social media pressure consumers to relax privacy for their digital persona beyond their personal comfort zone?
- · What is the marketing impact of having good relations to influential bloggers for a firm?
- · What is the effect of social media crises on markets and brands?

Crowd-based power

- · How do consumer crowds affect business models?
- · Where does the greatest value creation occur in consumer crowds? Is it possible for firms to lock customers into an optimal value coproduction relationship? And, how should such tactics be modified, given the level consumer, firm, or network at which content and value get created?
- · What are the procedural characteristics, incentive systems, and ranking outcomes that sustain or undermine continued engagement in the co-production of community resources and the exercise of crowd-based power?
- · What are the social and political interest groups that emerge in online communities and what are the empowering and disempowering consequences that result from differences in a community's social strata?
- · Is there a potential for focal companies to learn from consumers trying to destroy a brand or company online? How do different reaction strategies impact communal developments in anti-branding pages?

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