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To cite this article: Franck Cochoy, Christian Licoppe, Magdalena Petersson McIntyre & Niklas Sörum (2020) Digitalizing consumer society: equipment and devices of digital consumption, Journal of Cultural Economy, 13:1, 1-11, DOI: [10.1080/17530350.2019.1702576](https://doi.org/10.1080/17530350.2019.1702576)

To link to this article: <https://doi.org/10.1080/17530350.2019.1702576>



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Published online: 09 Jan 2020.



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Digitalizing consumer society: equipment and devices of digital consumption

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ABSTRACT

This special issue of the *Journal of Cultural Economy* focuses on the digitalization of consumption and its social, cultural, ethical, political, and gendered implications. It thus answers the call for more research on how digital devices spread from the purely personal domain to multiple sociocultural domains. Through their use, new cultural practices have emerged between consumers and these devices, and devices and markets, that lead to change, in terms of consumer demand, consumption norms, and issues of ethics, culture, and power. Closely examining the role that devices play in consumption behavior enables us to address the supposed manipulative power of hi-tech companies, infrastructures, and systems at the global level, and the view ordinary market actors hold of digital appliances as empowering tools at the local level. The papers in this volume bridge ‘actor network theory’ and ‘consumer culture theory’ from the perspective of market ‘agencements.’ Ruckenstein-Granroth and Beauvisage-Mellet, and Arriagada-Concha focus on the device-mediated relationship between large digital market infrastructures and consumer behavior; Petersson McIntyre and Licoppe unveil the societal and cultural underpinnings of digitalized markets. Last but not least, Sörum and Soujtis address the political dimensions and implications of our new digital consumer equipment and society.

ARTICLE HISTORY

Received 30 September 2019
Accepted 5 December 2019

KEYWORDS

Digitalization; consumption; devices; digital devices; mobile devices

This special issue of the *Journal of Cultural Economy* focuses on the digitalization of consumption and its social, cultural, ethical, political, and gendered implications. It thus answers the call for more research on how digital devices spread from the purely personal domain to multiple sociocultural domains (Lupton 2016, Bucher 2017). Consumer activities such as the purchase, comparison, and examination of goods currently take place through the Internet or mobile devices (Licoppe 2001); consumers organize and disseminate service- and product information on social media sites, blogs, and forums (Hansson 2017; Jenkins and Denegri-Knott 2017) and increasingly engage in ‘digital virtual consumption’ (Molesworth and Denegri-Knott 2012). Previous research has shown that digital market devices (including software, smartphones and applications, social network platforms, and websites) affect consumer activity on a number of levels (Hagberg 2008, Cochoy *et al.* 2017). These observations point towards important changes in terms of power, ownership, and

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the organization of information and technology, and the role of technical- and market expertise in shaping consumption.

We present in-depth knowledge of how different devices, in various sociocultural domains, and different modes of digitally-based consumption are experienced in concrete settings. This is done from the perspective of specific and widely-consumed devices. Through their use, new cultural practices have emerged between consumers and these devices, and between devices and markets, that lead to change, in terms of consumer demand, consumption norms, and emergent issues of ethics, intimacy, culture, and power (Mellet *et al.* 2014, Petersson McIntyre 2017, Sörum and Fuentes 2017, Fuentes and Sörum 2019). Several previous studies have, in part, focused on mundane consumer activities, but they either tend to focus on ‘fringe-group’ phenomena (cf., ‘quantified-self movement’) or use narrow purchase-decision framings towards the digitalized aspects of consumer culture (Pantzar and Ruckenstein 2015, Williamson 2015, Lupton 2016, Mallard 2017). However, recently the research literature has shown a growing interest in widely-used digitally-mediated social networks and platforms (Belk and Llamas 2013, Mellet *et al.* 2014). Several current studies on ‘digital/web technologies of the self’ have paid attention to the ability of digital media to induce a self-reflective attitude in users. Such research has shown how digital devices enable users to experiment with ‘self-writing’ or ‘self-publishing,’ giving way to practices of self-discovery, self-mastery, and self-care (Abbas and Dervin 2009, Sauter 2013). A smaller number of studies have focused on the variety of roles that digital tools take on in ordinary consumption practices. These include the use of texting devices to cope with everyday realities (Carrington 2012), the reading of QR codes to access online information in mobile contexts (Cochoy and Smolinski 2017), the mobilization of various smartphone apps in ordinary shopping environments (Fuentes *et al.* 2017, Hansson 2017), the introduction of ‘wearables’ and other self-metering devices (Kristensen and Ruckenstein 2018, Schüll 2018), the reliance on dating platforms to build social or sexual relationships (Kessous 2017, Ranzini and Lutz 2017), and so on. We believe that addressing such less frequently researched topics is a fruitful approach to understand ‘the digital economy and society.’ We propose to do just this by bringing together a collection of research papers that examine and investigate the equipment and devices of digital consumption.

The digital ‘devicification’ of consumer culture, the situation where more and more forms of action are digitally mediated by devices, puts emphasis on the dynamic- and material-, but yet non-determinist influence of digital technologies on consumption and consumer behavior. Closely examining the role that devices play in mundane consumption behavior enables us to address a puzzling opposition between (A) the supposed manipulative power of large hi-tech companies, infrastructures, and systems at the global level, and (B) the view ordinary market actors (be they marketers, consumers, or other intermediaries) hold with respect to digital appliances as empowering tools at the local level. On the one hand, cultural studies (in as much as they are part of academic marketing- and other social sciences) tend to produce a broad criticism of the digital world and a number of putative threats related to this world. This approach often denounces the tendency that certain electronic technologies have with respect to the infringement of privacy through data collection (Sholtz 2001) and the technologies’ power to discriminate between users based on opaque algorithms (Beer 2009, O’Neil 2016). The manipulation of customers based on big data analytics and targeted advertising (Alemany and Vayre 2015), as well as the exploitation of consumers through digital labor (Scholz 2013) is another point of critique, along with vigilance of digital the technologies’ ability to develop a surveillance program of a Foucauldian nature over our lives (Lyon 2014, Coll and Lyon 2015, Zwick and Bradshaw 2016, Zuboff 2019). A final critique is of the relationship between digital technologies and the neoliberal economy and big capitalism that traps us inside a new ‘silicon cage,’ as Max Weber would certainly say, if he could witness the digitalized market in which we now live (cf. Gilroy-Ware’s [2017] argument is ‘the captivating logic of digital media’).

On the other hand, we find other scholars of marketing, both experts and practitioners, who present the same digital world in more positive terms. They describe it as part of a larger ‘new economy’ that is based on services where consumers co-create value with companies (Vargo and Lusch 2004).

Such scholars emphasize the ability of search engines to develop market transparency, and price- and quality information at previously unseen levels. They stress the incredible capacity of digital tools to alleviate information asymmetry (Rezabakhshet *al.* 2006) and how such tools reverse the power imbalance between companies and consumers, in terms of the influence that online reviews, forums, chats, communities, and so on can exert on companies (Mellet *et al.* 2014). Given the above dichotomy of views, Jean-Samuel Beuscart has recently invited scholars to reconcile these two perspectives (Beuscart 2019). This is the call for research that this special issue responds to.

Indeed, it is precisely this aim of the digital world – to connect the two dimensions referred to above – that critics and practitioners tend to oppose. Google and Facebook are key examples which deserve examination if we are to understand this connection and the underlying processes that inform it. Both of these companies and the tools that they use rely on what Jean-Charles Rochet and Jean Tirole (2003) labeled ‘double-sided markets,’ i.e. markets where the same product is sold to two types of consumer at different prices. For example, consider the traditional news press which is sold to a readership but also to advertisers. Successful news presses exploit the knowledge they gain from the former to nurture and guide the market strategy of the latter. As designers of double-sided markets, Google and Facebook embed the opposition between (A) digital emancipation and (B) digital manipulation as the driving force of the technology itself. On the one hand, the service is sold for ‘free’ to its users, whilst this service is also considered to be an empowering service. In the case of Google, users can obtain information about all sorts of topics and products at a cost and a scale that was previously out of reach for individuals. Note that such information can be used to correct asymmetries between large companies and isolated consumers. With Facebook, users can connect with their friends, interact with them, and even find new friends. Users can express themselves, exchange information, share ideas and opinions, and even organize collective events and social movements; see, for instance, the ‘Arab Springs’ or the recent protests in Hong Kong (2019).

On the other hand, the same services are sold to advertisers. As a result of this, consumers have to pay an *indirect price* for benefitting from such fantastic services. Consumers do not pay with money, but, instead, they pay by providing the personal data that they share (often unknowingly) with the system. This data is generated by the digital traces that consumers leave on the systems while chatting, browsing websites, and shopping, and is used to create marketing knowledge and direct action. Digital double-sided markets are thus inherently duplicitous; they show a friendly ‘social face’ outwards to the consumer, and a ‘controlling face’ to the companies that use their data services. Both faces are closely inter-dependent, and it should be noted that human actors who interact with them are well aware of this inter-dependence, (although not equally so in all cases; see Ruckenstein and Granroth, this issue). Accounting for such duplicity and interdependency requires multiple, flexible interpretive frameworks. It is thus no surprise that the papers we bring together in this issue bridge ‘actor network theory’ and ‘consumer culture theory’ by addressing how consumption is shaped, from the perspective of market ‘agencements’ (Callon 2016, Cochoy *et al.* 2016). Market agencements constitute networks of various human actors and technical devices which are aimed at framing – or rather ‘agencing’ – market transactions. Accordingly, conceptions of ‘consumer culture’ as exclusively being the effect of human agency via meaning making, identity construction, representation, and discourse; as in for example ‘Consumer Culture Theory’ (Arnould and Thompson 2005) are replaced with the theorization of consumer culture and practices *as an effect, a product, or a relational performance*, rather than a specific human source of action. We argue that digital devices generate *relationships* between spheres of ‘the cultural,’ ‘the technical,’ ‘the ethical or moral,’ ‘the political’ and the economy or other markets (Harrison *et al.* 2014).

This special issue includes a collection of essays that have been written by leading scholars of how digital technologies interact with consumer society and specific consumer practices in a broad range of processes that can be termed the *digitalization of consumption*. In this respect, we start from the perspective that consumption cannot be understood through studying consumers and their values, meanings, representations, cognitions, actions, relations, and cultures only. Marketing knowledge, devices, and practices shape consumer behavior and thus need to be included in such research for

a more comprehensive view (Araujo *et al.* 2010, Cayla and Zwick 2011, Shove *et al.* 2012, Cochoy and Mallard 2018). Marketers, market tools, and consumption devices like smartphones, metering devices or recommender systems equip, assist, enhance consumer cognition, consumer identity, and consumer action. However, they also channel, orient, and otherwise influence these consumer-oriented phenomena by ‘making consumers consume’ to greater degrees and in a variety of ways (Beuscart *et al.* 2016, Vayre *et al.* 2017, Humphery and Jordan 2018). The contribution that digital agency makes to consumption practices deserves our attention since digital devices (including smartphones, smart watches, and other quantified-self appliances) are used and perceived as miniature, friendly, ‘wearable,’ and ‘private’ extensions of the self (Belk 2013). But note that such services form part of larger infrastructures that are aimed at framing and monitoring consumption (Kornberger *et al.* 2019). They are taken as empowering devices, but at the same time they can be seen as controlling devices. This is claimed because both of these aspects should be considered as working hand in hand (see above). Moreover, it should be noted that the hybridization of digital infrastructures and consumer practices favors the development of several agencies that are aimed at bringing these two aspects even closer together. Thus far, such agencies have been primarily business-oriented, including recommender systems, big data analytics, and other digital marketing services (Cochoy *et al.* 2016). Notwithstanding this, we have also witnessed the emergence of other intermediaries who empower consumer participation with respect to market framing; for example, consider the existence of tailor-made personal data protection systems (Milyaeva and Neyland 2016), the apps and websites that are aimed at rating consumer goods and services (Mellet *et al.* 2014, Beuscart *et al.* 2016), and shopping apps that promote alternative packaging information (Soutjis, this issue).

The papers collected in this volume cover these varied but interrelated issues. Ruckenstein-Granroth and Beauvisage-Mellet, and Arriagada-Concha focus on the device-mediated relationship between large digital market infrastructures and consumer behavior; Petersson McIntyre and Licoppe develop this topic by unveiling the societal and cultural underpinnings of digitalized markets. Last but not least, Sörum and Soujtis address the political dimensions and implications of our new digital consumer equipment and society. The following paragraphs give an outline of the different articles and their contributions.

Digital market infrastructures and consumer behavior

Minna Ruckenstein and Julia Granroth focus on a side effect that emerges from the ordinary use of technology; namely, ‘the intimacy of surveillance,’ a concept initially devised by Berson (2015). One of the distinctive outcomes of the digital world in which we live is its ability to not only monitor our behavior, but, perhaps more importantly, to record and keep track of our behavior. For a long time in human history, recording and storing traces of everyday human activity was the exception (in the form of records, letters, or archives written for special occasions). Nowadays, we witness a complete change in this activity. On the one hand, the digital world raises serious concerns about the long-term future of written archives, since, some may argue, the longevity of documents are endangered by changing digital standards, encryption methods, and the fragility of hard disks. On the other hand, our mundane practices, such as the trips we make in our motorcars, daily purchases, chat conversations, and web searches all leave digital traces that are stored, analyzed, and used for various purposes. This presents a tremendous challenge to society, but also, for the social sciences.

Consider the contribution made by Dominique Boullier (2017) who suggests that the digital world is currently giving birth to a third generation of social sciences. He argues that the first stage in the evolution of the social sciences was based on the study of society through official records. The second stage involved the study of society and public opinion through polls and surveys. At the present point in time, the social sciences have entered ‘the age of digital traces,’ based on digital methods (Rogers 2013, Marres 2017). In this context, Minna Ruckenstein and Julia Granroth examine the issue of digital surveillance that is based on consumption traces. They do so, not from the broad view of cultural studies, but at the ground level of the ordinary consumer experience. Through

a collection of consumer testimonies, the authors fully confirm and document the constitutive ambiguity of the digital world that is rooted in double-sided markets. Surveillance appears to be less of a remote program than an 'intimate' experience, where consumers express their concerns and discontent about digital marketing. However, these same consumers evidence a puzzling familiarity and sympathy for such marketing. Consumers report on the risk of being watched, the way digital tools divide the population across caricature-like profiles, and then complain about unsolicited or inappropriate advertising. Nonetheless, they also acknowledge their satisfaction with the system when targeted marketing, which is based on a proper analysis of their personal data, meets and even anticipates their desires. Consumers even ask to be watched! We discover that, in the digital universe, marketing is no longer the driving force behind consumption but, instead, it has become an object of consumption itself. Surveillance is all the more intimate when we, as consumers, take an active part in its development. Double-sided consumers thus mirror double-sided markets (Beuscart 2019).

Thomas Beauvisage and Kevin Mellet analyze the connection that mobile phones establish between digital and physical worlds by using 'physical retail' as their focus of analysis. Consumers can, for instance, use their own phones to compare prices while they are in a physical store. However, smartphones also instantiate a means for marketers to interact with consumers in novel ways. Sales and marketing professionals invest heavily in devices so as to facilitate such interactions. Individually targeted advertising, the tracking of consumers, and local notifications are only some of those new functions that digitalization has given rise to. Beauvisage and Mellet examine the implementation of a new mobile-based market infrastructure that builds on three different conceptualizations of what constitutes 'a consumer.' These include 'the consumer as an audience,' 'the consumer as a shopping cart,' and 'the consumer as a (loyalty) card.' The concept of 'the consumer as an audience' is construed primarily for the advertising industry and is characterized by 'physical distance to the store' and 'anonymity.' This class of consumer is generally considered to be a unit of a collective entity named the 'audience.' 'Geography' and 'profile' are combined and segmented in groups, but imperfectly so. The second concept, 'the consumer as a shopping cart' is specific to its presence at physical stores, supermarkets, and self-service businesses. This conceptualization relies on scientific management techniques and focuses on 'domesticating' the consumer so that the consumer will follow certain physical pathways as envisaged by store managers. Such an approach is intended to work in such a way so as to optimize the physical space that is available to the consumer inside the store, but note that this approach remains blind to customer profiles. The third conceptualization, 'the consumer as card' is based on the use of loyalty cards which are used at the store's check-outs. This approach is data-based, and is characterized by the presence of the customers' personal information and purchase history. Unlike the two previous conceptualizations, 'the consumer as card' is represented by an actual consumer, whose purchase history is perfectly known, but whose customer journey is unknown. Consequently, this approach excludes *prospective* customers. These three different approaches all lay the foundation for distinct marketing scenes. The development of the 'cookie'¹ has given online merchants the ability to engage all three of these conceptualizations of the consumer, thereby making tracking, targeting, and matching into routine operations in the digitalized marketing process, and thus creating new, autonomous cookie-based marketing scenarios. The conceptualization of the 'mobile consumer' connects to and aligns with the existing conceptualizations because of the effects of the new cookie-based marketing scenario described above. Beauvisage and Mellet argue that all of these new conceptualizations of the consumer share a common goal; namely to reconfigure the world of retail marketing by connecting digital and physical environments. Marketing professionals see the advent of the smartphone as an opportunity to extend the 'cookified' conceptualization of the consumer into the context of the existing brick-and-mortar retailscape.

Arturo Arriagada and Paz Concha examine the role of 'cultural intermediaries' in the form of music bloggers and an advertising agency. Furthermore, they investigate the role that 'digital cultural capital' plays in creating and communicating a branded music event. They focus on the new

professional roles that are enabled by digital technologies and how the meaning of ‘cultural capital’ is transformed when it is related to ‘digital capital.’ They argue that ‘digitalization’ changes networks, expertise, and professional roles. To illustrate this point they show how bloggers belong to the sphere of new cultural intermediaries and how the work of ‘taste-makers’ has changed in response to digitalization and the new connections, relations, and networks that are formed as a result of digitalization. Branded music events are private marketing activities that are oriented to specific consumers; where well-known indie musicians perform. These events are used to promote brands and are usually organized by advertising agencies. Music bloggers are evaluated in terms of their role as ‘cultural intermediaries’ who generate meaning around goods or products and circulate these meanings across different networks. Arriagada and Concha argue that, with digitalization, the role of these cultural intermediaries has changed, because it is no longer a sufficient criterion to be merely an influential ‘taste-maker.’ Instead it is those individuals who possess knowledge of technological networks who become successful, with respect to the creation of online and offline consumption experiences. Brands enroll music bloggers to support such events and their influence regarding the success of the event is dependent upon digital technologies and the bloggers’ digital competence. Arriagada and Concha discuss this in terms of ‘digital cultural capital.’ This approach is different from traditional definitions of ‘cultural capital’ (as in Bourdieu 1986), since it invokes the additional dimension of the ‘digital.’ Cultural capital thereby takes new on forms; for example, ‘digital capital’ describes access to and knowledge of technology, mainly for economic gain. Arriagada and Concha show how certain intermediaries can use a whole suite of digital technologies, including social media, guest lists, blogs, and websites, to create and orchestrate an ‘authentic’ and exclusive experience between brands and consumers. ‘Capital’ is instantiated in the form of technical expertise, but also in terms of specific knowledge of the brands and consumers involved. Social media is used in the promotion of brands, but it is also used to evaluate the impact of that promotion, and to subsequently reach out to a larger audience. Digital technologies are seen as relational objects that articulate social and economic relationships between intermediaries and brands for the exchange of digital cultural capital, they argue.

Following up on these observations, the papers that are found in the next section show that technologies do not only frame consumer behavior, they are also involved in the reshaping of social- and cultural expressions.

The societal and cultural underpinnings of digitalized markets

Magdalena Petersson McIntyre analyzes the agency of digital technologies in the context of a remediation of the ideals of femininity on digital platforms. Based on extended interviews of self-styled bloggers and ‘influencers’ and long-term observations of their websites, she describes the online emergence of an entrepreneurial, home-based woman who appears to pass her time in a pleasurable way consuming, while dealing with her everyday family life. Influencers generate income through sharing these personal narratives online. Such online activities breach many traditional boundaries, however. Emotions are closely connected with economic behavior; for example, the sharing of ‘intimacy’ is transformed into an economic practice through the endorsements and sponsorships these female bloggers receive. Such online ‘sharing’ provides a service to audiences, advertisers, and sponsors alike. Affordances in the form of clicks, shares and sponsorship turn blogging into an economic activity where the self and the product become one, thereby making the enactment of ‘femininity’ something that is visibly constructed. Relying on Karen Barad’s concept of ‘intra-action,’ the author shows how the boundaries between ‘human’ and ‘non-human’ are flouted by means of objectifying images. During this process, notions such as ‘the body,’ ‘the self,’ ‘intimacy,’ and even ‘feminism’ itself are re-specified. The empirical findings reported on in this paper describe the reshaping/remediation process that the role the housewife undergoes/is subject to through digital platforms. These platforms are in the form of lifestyle blogs, in association with corporate sponsorship. The author of this paper discusses several important points related to this transformation; including

transformations of the physical body and displays of physical imperfection online which are ‘managed,’ but are part of appearing ‘authentic’ and as a response to their audiences’ demands for authenticity. In response to these demands that are placed upon them, female bloggers and influencers are compelled to engage in a distinctive ‘staging work’ which entails negotiating between (A) the need to appear genuine and (B) maintaining key elements of privacy offline. Bodily imperfections, which may appear as a ‘problem’ offline, can be used as an empowering resource when displayed online, even if an alignment with traditional body standards and cultural norms is maintained at a general level.

Christian Licoppe brings together societal and technological issues in his paper through a fascinating exploration of how candidates who are looking for romantic and/or sexual relationships use dating apps. He compares how gay people use Grindr with how heterosexual people rely on Tinder. The fact that each group uses a different application seems to imply that technology is particularly germane to the issue; one may think that specific devices (the apps in question) contribute to shaping human relationships in different ways. But Licoppe’s account is much more subtle than a mere comparison between the groups of users might suggest. Of course, the choice of device matters! As the author shows, these apps provide *ad hoc* tools that frame and facilitate the market for sexual encounters with the use of formatted profiles, location-related information, features for displaying and sorting photographs and information, chat services, and so on. But these functionalities are roughly the same for both apps. However, despite this, there exists a clear differentiation in the way the apps are appropriated and used. Grindr is mobilized by gay people to quickly arrange immediate, sex-oriented hookups, with a clear agreement on which sexual practices are sought. In this context, very little concern for other considerations or ongoing relationships is made. In contrast, Tinder is used to facilitate meetings between women and men, following a process where learning to know each other through the sharing of ideas and preferences about varied topics is prerequisite for subsequent encounters. Anonymity and checklists about sexual expectancies prevail on the one side (Grindr), while romantic norms, varied topics and personal relationship-building frame a gradual meeting process on the other side (Tinder). Note also the connotations associated with the names of the two apps. Licoppe’s study, while still paying attention to the hype of technology, actually transcends it. Of course, these meeting platforms shape and transform the nature of the encounters that might take place, merely by facilitating them and allowing them to take place at a pace that is *faster* than it otherwise might have been, i.e. the encounters are more ‘liquid,’ as the author says. But Licoppe shows that the heart of these technologies is to be found in the ‘conversation’ feature that each app has, i.e. one of the oldest ways by which human encounters are managed. We come to understand that the manner in which conversations are organized and take place is not dependant on computer chips and algorithmic software, but on what people *are*, what they *expect*, and what they *do* with the tools that are available to them. In this sense, Licoppe’s confirms the veracity of Liz McFall’s argument with respect to the interdependency of devices and desires, techniques, and emotions (McFall 2009, 2014). Significantly, the author concludes his study with a call for more research into the ordinary conversations that develop around technologies. Despite the present ubiquity of digital technology, our world will never be purely digital; it will always combine conventional and novel resources that subtly reshape our material and cultural environment.

Digital market devices work as political tools and are thus involved in the re-definition of power relationships. These issues are further explored in the following section.

The political dimensions and implications of digital consumer equipment

Niklas Sörum provides an analysis of a new type of consumption-oriented application which he calls ‘Ethical Consumption Applications’ (ECA). Such apps reconfigure markets and consumers by introducing a moral dimension with respect to their use. Sörum introduces the concept of ‘quasi-market devices’ to account for the way in which these apps operate. This paper focuses on several sense-

making practices and the kinds of value consumers might construct during their use of such ethical consumption-oriented applications. The theoretical approach that is employed in this paper combines Science and Technology Studies (STS) and Consumer Culture Theory (CCT) as it explains how users make sense of these quasi-market devices and how market failure may be understood. The study reveals the existence of skepticism and ambivalence regarding these devices. It is of some importance that such issues be examined, and thus the author advocates an original and ‘quasi-experimentalist’ empirical approach, in which he studies the introduction of these quasi-market devices at the innovation stage, before their use becomes ‘naturalised.’ The innovation stage (according to Sörum) is the moment when constitutive tensions in the use of ethical consumption applications and the way they cue behavior are still apparent. He studies and compares three successful ECAs in Sweden, and identifies different trajectories of engagement and resistance associated with them. He also shows that certain categories of actors, bloggers, for example, may act as spokespeople for the apps and thereby contribute to shaping apps’ uses. As a whole, this innovative study supplies consumerism research with a new category of market devices, and a framework within which trajectories of adoption or non-adoption of such devices can be analyzed.

In a case study of Yuka (a mobile application (app) that enables consumers to obtain alternative health labeling on foodstuffs), Bastien Soutjis describes the context in which the introduction of the Yuka app took place. This app was intended to alleviate concerns consumers may have with respect to health issues that are related to foodstuff markets, nutrition, and food innovations, including concerns associated with additives, GMOs, and pesticides. New market devices are related to market innovations in the sense that they can alter market behavior and market relations. In this context, the argument that it is possible to influence market actors’ preferences by means of various incentives is a central argument. In this respect, the study of the Yuka-app, a highly popular system in France is based on:

The generation of a score based on different criteria that classifies products according to their health performance and compares them to one another. When the consumer scans the product barcode with the app, the score appears on the mobile screen with a short description. To do this, the app relies on a free and open database, called Open Food Facts (OFF) [...]

Soutjis’ case is an eye-opening example of how digital innovations impact on market relations, with potential consequences related to health issues and political dissent. The current state of digitalization of product information affords opportunities for third parties to intervene in market debates. Novel forms of consumer participation are made possible by advances in digital mobile technologies. In his analysis of the Yuka-app, Soutjis argues that we should understand the device as (i) part of the product qualification process (and thus as a tool that can change consumer choices towards healthier behavior), and as (ii) a political actor that puts pressure on manufacturing and retailing companies through ‘individual collective action’ – a term taken from work done by Micheletti on political consumers (Micheletti 2003). By highlighting how the Yuka app orients manufacturers and retailers toward practices that are deemed collectively beneficial in health terms and by making those practices valuable for the consumer, Soutjis argues that the device implements a kind of ‘liberal governance logic.’ He argues this because of the intention that the system has with respect to market intervention *by the market* (i.e. it does not promote political action outside the market in collective terms). The main thrust of the device, and a central piece of the argument in this paper, is based on the observation that digital market innovations such as the Yuka app are closely tied to promises of collecting and managing product data, and thus escape the current limitations of conventionally available, well-guarded market information. Yuka is then able to establish novel arenas for debate about product qualities.

With this special issue we address the many different relations, connections and flows enabled by digitalization, and its complex relationship with human and nonhuman forms of agency. When practices of shopping, dating, and communication are mediated by digital devices, the meanings given to these practices change in fundamental ways. The following articles examine these transformations in-depth.

Note

1. A cookie is a trace consisting of a small piece of data that is sent from a website and stored on the web browser.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This work was supported by Vetenskapsrådet: [Grant Number 2012-05736].

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