

# Making Up Mobile Advertising Audience

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## Abstract

## Introduction

This paper presents a case study on how emerging advertising media makes up its audience. Based on a fieldwork in a startup company attempting to turn mobile phone into an advertising channel, I will theorize the arrangement that constitutes the sellable asset of a new media. I have neither nothing to say about how to understand specific audiences nor I am trying to critically deconstruct commercial media. Instead, I will explore how people are summoned up as an audience for advertising from the digital traces left behind by their behaviour in the interconnected information space. The paper aims to establish a conceptual scaffolding for unpacking the data-driven co-evolution of the organization, its product and consumers.

The idea of looking at commercial media as the manufacturing of people into advertising audiences is not new. It dates back, at least, to late 1970s when political economists debated audience as a commodity produced by commercial mass media (Bermejo 2009). Along with commercial media companies, advertising agencies and advertisers, a key role in the industrial setting has been played by the ratings companies that have, to a significant degree, measured audiences to existence by employing a range of observational technologies and standardizing of ratings (Ettema & Whitney 1994). Indeed, systematic observations on people's behaviour have been the raw material out of which audience is produced since the invention of market feedback technologies and large-scale regulation of mass consumption in the beginning of 20<sup>th</sup> century (Beniger 1986). Against this background the introduction of digital information and communication technologies may seem to provide merely an upgraded machinery for observing the consumers.

Contrary to television, radio and print, however, online media embeds the surveillance function into itself. The networks generate automatically a wealth of traces about people's behaviour shifting the

traditional problem of obtaining observations about the audience to selecting, aggregating, analyzing and packaging the constant influx of data (Miller et al. 1994). There is less need for separate second-order observational technologies provided by the ratings industry that has also been slow to establish its standardizing function in the face of variety of novel and shifting ways people engage with internet-based media (Bermejo 2009). Put into a broader context, the technologically-induced shift in the core institutional problem could be seen as just another example of increasingly important role digital data is assuming in constructing the operational environments of organizations (Kallinikos 2009b). The ratings industry emerged largely around the problem of how to craft data out audience and its media consumption. The current case represents a reversal of this problem, that is, how to craft a commercial medium and its audience out of data.

The empirical research took place early 2009 in a mobile virtual network operator (MVNO) company offering a free mobile phone service for consumers in exchange for sending advertisements to their phones. The template for business model was adopted from the commercial media: foster technological capabilities to serve advertisers with ever-more mobile and fragmented consumers. In order to do this the company had to turn mobile network subscribers into contacts advertisers would recognize and value as a target audience (Ettema & Whitney 1994). The three-months fieldwork provided a microcosm into a setting that revolved in many respects around the elusive yet crucial process of manufacturing the audience. This paper builds on Ian Hacking's (2002; 2006) ideas to come up with a lens through which data-driven audiencemaking can be studied. Hacking suggests a constitutive 'looping effect' between institutionally maintained groupings of people and the reactions of those being put into categories. The paper builds towards a better understanding of the involvement of digital records in this process (Kallinikos 2009).

The problem of studying just one setting is, of course, that it is neither possible to contrast the findings across cases nor are the factual observations generalizable to a population. Instead, my aim is to build a theoretically motivated study opening up how increasingly informed environment shapes the possibilities for making up people as well as to build new organisation around this opportunity. Organizing is understood here as an endogenous process recursively reproducing itself and its own environment (Hernes & Weik 2007) – a view which contrast with organizational theorizing assuming clear-cut separation of organization its environment.

The paper is structured as follows. I will first explicate the idea of making up people and contrast it briefly with related theories on how people are formatted as individuals. I will then describe my

fieldwork site and how the data corpus was put together. Third, and the most important part of the paper constructs a theoretical narrative on how people are packed as an advertising audience. Finally, I will discuss the contributions as well as highlight some limitations related to the current status of the work.

### **How to build an advertising audience?**

The organization was founded on the simple idea of building a new kind of advertising channel out of telecommunications and thus, to have a sellable product, it had to turn mobile network subscribers into an audience advertisers would recognize. The ability to relay messages to a group of people does not, however, constitute an advertising audience with an economic value (Ettema & Whitney 1994). People and their behaviour at the other end of the medium make a difference to the advertisers only to an extent that is measured and packed into an institutionally effective entity. Indeed, the evolution of commercial mass media has been intimately connected to the changes in the industrial measurement apparatus making it possible to rationalize the money spent on different types of advertising (Barnes & Thomson 1994). The early emphasis on the sheer size of the audience gave away during the latter half of 20<sup>th</sup> century to a market segmentation enabled by more sophisticated observation methods and computerized data analysis, which, in turn, facilitated a move from broadcasting media treating its audience according the logic of lowest common denominator towards media that provided individualizing treatment for smaller and smaller segments (Castells 2000, pp. 358–365; Barnes & Thomson 1994; Turow 2005). Internet-based media would seem to be a perfect opportunity for such aspirations, yet it has at the same turned out to be rather difficult to build coherent online audiences.

#### *Audiencemaking as a recursive classification of individuals*

Segmenting consumer population into target audiences is, generally speaking, an exercise in classifying people. Modern organizations' dealings with people are more often than not mediated by classifications that constitute a powerful infrastructure shaping the social reality (Bowker & Star 1999). Even if the development of classifications is often motivated by a practical need to describe a part of reality, this does not suppress their function in prescribing social realities. Categorizations tend to feed back on the subjects in various ways, if not other than by people acting out the labels attached to them in virtue of being aware of them. This is the point of departure for Ian Hacking's (2002) thesis how individuals are made up in the matrix of institutional forces that open up and

close down the range of possible identities individual may adopt under certain historical circumstances. Hacking (2002, p.113) points out in a passing, but given the context of this study, interesting remark that advertising industry is “largely engaged in trying to make up people”. Hacking does neither offer a general theory of making up people nor discuss the topic of advertising in any details, but he outlines a lens that can be tailored for studying the evolution of a particular institutional matrix in which people are recursively formatted as individuals.

The power of modern institutions to process people into a (limited) number of behavioural moulds runs from the fact that people are what Hacking call interactive kinds. Institutions not only subject individuals to different treatments according to their classifications, but people are more or less aware of their slot in the matrix. A categorisation imposed on an individual may, but does not have to, describe his essence more or less accurately. Resulting from the knowledge of being categorized, and indeed if it is felt inappropriate, a person may come relate differently to himself and others effectively substantiating the categorization quite possibly motivating further categorizations. This is what Hacking calls the looping effect. Maintained by specific institutions it makes up specific kinds of people during a specific period in history.

#### *Audience manufacture as a contemporary industrial process*

The mobile phone is a socially complex artefact. It enters into an immense variety of everyday settings often forcing people to renegotiate the orderliness of their everyday rituals (Ling 2008). Turning it into an advertising channel suggests a new kind of role for a mobile phone user accustomed to interpersonal communication. Hacking draws most of his examples, not unlike Michel Foucault and Erving Goffman, from cases usually seen as a deviance from the norm<sup>1</sup>. The looping effects are not, however, limited to special cases as the very institution of everyday interaction is founded on participants taking willingly or unwillingly socially defined roles (Goffman 1983; Hacking 2004). People are certainly not tied to any fixed role or set of roles as they adapt and position each other dynamically under local circumstances (van Langenhove & Harré 1999), but as Hacking shows the recursive processes shaping the templates for being and acting transcends those settings. Furthermore, as the case shows, audiencemaking is an industrial process deriving its characteristics to a significant degree from the technological basis of production.

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<sup>1</sup>Using examples such as transient mental illnesses, abused children and woman refugees Hacking shows how it has been possible to be categorized into such groupings only at the certain historical period.

The shift from purpose built, second-order observational mechanisms to the computational rendition of audience could be seen as shift from a simple automation to complex informatization not unlike what has happened in industrial manufacturing (Zuboff 1988; Kallinikos 2009a). Only this time the product is a certain type of person willing to engage with the advertising messages or, to be more precise, the specific behavioural reactions of that person constructed out of the digital dust left behind by his actions in the interconnected information space. For unless the network subscribers substantiate the claims about the advertising audience by their behaviour the company would not have anything to sell for the advertisers.

### **Research site and data collection**

The empirical research took place early 2009 in a recently founded telecommunications company offering a free mobile phone service for consumers in exchange for sending text and multimedia message-based advertisements to their phones. A key part of the deal, both for the consumers and the advertisers, was that the advertisements would be interactive and carefully targeted encouraging recipients to respond to them. The venture brought therefore together a rising trend in commercial media to entice consumers to explicitly opt in for highly targeted advertising in exchange for receiving tangible benefits with the search for new business models in the increasingly competitive telecommunications market (Eaton et al. 2010; Turow 2005).

In order to understand the setting qua organization, as a specific system of production sustaining itself under certain historical and institutional circumstances it is necessary to grasp its underlying rationale, a common object of activity that provides the unitary nature of the organization (Pugh 2007, p. xii; Ackoff 1971; Engeström & Miettinen 1999). The company was set up as a mobile virtual network operator (MVNO) leasing network infrastructure from a traditional operator company while focusing itself on the promising but yet to be proven way of doing business. The template for business model was adopted from commercial media: muster technological, legal and marketing expertise to serve advertisers with a novel way to reach ever-more mobile and fragmented consumers. The organization relied on the extensive sourcing of services and expertise from partners across Europe. The consumer operations had been launched in 2007 in one country with plans to expand to several others.

In contrast to many advertising-funded internet companies (including Google) where the media model was an afterthought, the organization was built from the ground up around the idea of new

kind of advertising medium. The participatory observation period at the headquarters revealed, unsurprisingly, that keeping the evolving operations aligned was not easy. Maintaining round-the-clock consumer service, developing rigid telecommunications infrastructure, envisioning a business model that could turn the business profitable and managing the cash flow of startup company all entailed different timescales and priorities that had to be brought together by people working at multiple physical locations.

During the three-months fieldwork I observed as well as participated in a variety of activities contributing to how the audience was manufactured. I gathered together 62 days of observations notes, 31 recorded interviews and naturally occurring documents as the data corpus for the study. The work at the office was characteristically heavily interdependent across the organization putting a premium on constant coordination as well as coordination of coordination both in face-to-face settings at the office and mediated by an array of communication tools (Thompson 1967). The elusive yet omnipresent members of the audience figured in informal discussions, were present in a form or another in documents, and targeted with real as well as hypothetical operations. This brought up the question how did the organization actually observe its subscribers, the prospective members of the advertising audience? Prior to launching its service the company had conducted a number of detailed studies on the individual experience of receiving and interacting with advertisements sent to personal mobile phone. Observing people using their mobile phones was not, however, relevant for making up the audience.

At the core of audience-building were Advertising Detail Records (ADRs), minuscule digital traces the systems generated for subscribers' advertising-related actions in the network. This technological affordance contrasts with the traditional commercial media that had to develop the observation mechanism separately in the form of circulation studies for print, audio and people meters for radio and television (Beniger 1986; Barnes & Thomson 1994; Bermejo 2009). Any syndicated audience-measurement was a compromise between the level of detail, coverage, sampling and costs tailored to answer specific questions about media consumption (Miller et al. 1994). The company approach does not entail such compromise, but the records are neither an advertising audience in themselves. In fact, any individual record is all but meaningless as the records are generated at such a high level of granularity that is hardly informative for any generic purpose, and yet the records were habitually referred en masse in discussions. In contrast to traditional media, the problems was not capturing information about fleeting moments of media usage as data, but pulling the audience members out of the data.

## **Patterns of audiencemaking**

En masse digital traces left behind by mobile network subscribers do not make up any kind of audience. The data was merely the raw material that afforded the possibility of summoning mobile phone users as an advertising audience. I will, nevertheless, take Advertising Detail Records as the point of departure for the narrative unpacking the audience manufacture. The practices around them represent a significant rearrangement, if not a break, in the problem space for audiencemaking. At the research site, the records were constantly invoked in various occasions and their pivotal role was never really questioned. They bind various operations and tasks on the metaphorical production line together resulting in a cyclical process shaping both the consumers and the organization.

The narrative is divided into five phases each highlighting specific aspects of the cycle. The phases are, of course, not clear-cut and there are occasional shortcuts between them. It may seem awkward that the analysis does not obey received domains of empirical analysis but keeps jumping from a level to another. This is to acknowledge that organizations are made of many kinds of things and stuff (Orlikowski & Scott 2008), but instead of wandering after the actors themselves (cf. Latour 2005) the idea of looping provides a theoretically informed framing to analyse how different things come together making up the audience. Each phase discusses its particular matter and mechanisms as well as how the phase is fed by the previous one in terms coming up with the audience.

### Advertising Detail Records

A telecommunications network keeps a log of traffic it routes from and to mobile phones, which afforded the company to deploy a highly granular mechanism for measuring the audience. In terms of advertising, this offers not only interactive, but also what Spurgeon (2008) calls registration type feedback from the audience. Any advertising-related event such as an outgoing advertisement or a reply to an advertisement was recorded as a line of structured data tokens into a database. A single Advertising Detail Record represents therefore a minute, textual observation of consumer activity in the system. Obviously, an individual ADR did neither account for much by itself nor in a mass of thousands of such event stored everyday. A telecommunications engineer might be able to retrieve some information out of the database lines but for most purposes individual ADRs were all but meaningless. We might say that as an organizational entity a record is almost completely decoupled from any particular practice or purpose. Their digital constitution mainly affords aligning,

combining and juxtaposing records against each other, which opens up, however, a space of possibilities not granted to commercial media founded on analog technologies.

Instead of having to employ third parties and craft secondary technologies reminiscent of Nielsen audimeter and its contemporary incarnations used to painstakingly sample broadcast media usage, the digital telecommunications infrastructure embedded a generic observation mechanism into itself (Bermejo 2009; Beniger 1986). More importantly, the economics of second-order rating systems necessitates that the data is collected strictly for a certain analysis while ADRs keep the space of observable patterns open. The company had tapped into the generative character of digital networks and coined a novel approach for measuring the advertising audience (Kallinikos et al. forthcoming; Zittrain 2008). Whenever there was a need to know something about the audience a common suggestion was “to look it from the data.” The records were habitually invoked both directly or indirectly across operations and practices involved in making up the core product for the company.

### Reporting infrastructure

Individual ADRs represent the discrete observations on people's behaviour, but as such they do not inform any organizational purpose. To comply with company set privacy requirements the access to the raw records was strictly limited and they were directly accessed by named technicians from the database usually only if there was a problem with an individual subscription or a need for tailor-made analytical operation. The mass of records formed, nevertheless, the foundation for several layers of automatic aggregation procedures and reporting practices. The variety of reports covered general subscriber activity levels, the delivery of advertising, and incidents in the network infrastructure, which, combined with advertising sales reports, website traffic measurement, customer service reports, financial reporting and media monitoring service, provided much of the visibility into the environment in which the company operated. Setting up the reporting apparatus had taken a considerable amount of time and effort, but once it was in place it could quickly juxtapose incoming data with other records revealing patterns against which operations could be planned and assessed.

Many of the reports were made available through a wiki-based intranet that served as the nexus of distributed work practices. Weekly, monthly as well as custom reports appeared on the stream of recent updates on the front page of wiki making them available across the organization. Teams representing different organizational functions often cited reports from their domain in the Monday

morning meetings encompassing the whole staff. Reporting seemed, however, to play a minor role in coordinating the activities. The high-velocity setting with rapidly changing priorities and shifting temporal horizon made long-term planning often difficult and diminished the applicability of standardized reporting as a means of aligning activities (Eisenhardt 1989). To put it short, the reporting provided a mirror from which routine operations, planned actions and exogenous events reflected back to the organization. For instance, the implications of any change to the service provided to the consumers were carefully followed on daily basis to enable quick corrective manoeuvres if needed. The automatic aggregation of ADRs was certainly not the only source of reports that often combined data from several sources. Nevertheless, a significant proportion of regular reporting relied on them.

### Business development practices

The company was headquartered in a Northern European capital, but the bulk of daily operations took place elsewhere. The multi-million operation was conceived from the outset as a distributed endeavour with organizational processes cutting across geographical and organizational boundaries. An office in Central Europe served advertising customers and was responsible for building the relationship with the consumers. Without numerous and regular reports there would have been little visibility into the distributed system that was managed from the headquarters. A lack of visibility running from a technical problem or a failure to provide expected reporting rendered by some part of the organization was quickly noted at the headquarters as it made the objects of work tasks inaccessible and inactionable.

**Researcher:** Does it [reporting system] have any role in the new partnering based model that is being developed?

**Informant:** If you ask my opinion is that this business cannot be operated in any setup without the visibility and reporting [into the data].

An excerpt from an interview of a business developer, 14 May 2009

The pressure to understand the market and tailor the mode of operation to it was acute, since the company was living on venture funding until the revenues from advertising could sustain the organization. Both the efficiency of day-to-day operations and the business development practice envisioning ways to assemble the new medium profitably necessitated constant access to the

environment that did not exist without the constant reporting. The fieldwork coincided with a period when the organization was actively considering its approach and business model. The organization decided to move from building own MVNO operations into partnering with traditional telecommunications operators. The basic idea of turning mobile phone users into an advertising audience remained the same, but the new approach entailed some changes on the roles and relationships of different parts of the organization. All in all, the audience management and analysis figured even more prominently in the new organization.

### PR and marketing communications

Visibility to the consumer environment was crucial in terms of planning operations and reacting to emerging issues. It was, however, not enough to understand internally how the subscribers behaved with respect to outgoing advertising. The knowledge had to become shared across the advertising media market or, so to say, it had to become an organizing vision that other organizations could relate with (Swanson & Ramiller 1997). Without the recognition of advertisers there would be few advertisements to send and the advertising revenues would not take off. There was also to some extent a need to legitimize the new channel that some people perceived too personal to be used for large-scale advertising. These outreach activities involved publishing press releases and case studies on the company website, giving interviews and presentations in trade fairs, meeting analysts and journalists, as well as using media monitoring service to keeping on eye what was said about the company and reacting if needed.

[Company] is indeed pushing the boundaries by creating a new and engaging way for brands and agencies across the UK to connect with the youth audience. As a media channel, our response rates have been averaged 29% and we continue to lead the market innovation.

Press release, 10 March 2008

The media industry had a keen interest on the company and its attempt to create a new advertising channel that promised to combine the interactivity of online advertising with an exceptionally accurate targeting of marketing messages. A proof offered for the existence and legitimacy of audience was often the rate at which subscribers responded to interactive advertisements sent to their mobiles. The response rate was distilled from the millions of ADRs representing the variety of advertisement messages sent to the subscribers and their replies. The average number stood for the quality of the medium even inside marketing parlance lacking other details. When industrial analysts reflected upon the learnings from the company history they circulated the number through

their text making it look more of a fact about the medium than the company.

Brands [advertisers] have been impressed with average campaign response rate of 25 percent. The richness of the interaction between [Company's] members and advertisers has also frequently been impressive. [...] This type of engagement has convinced advertisers that mobile is a viable engagement medium for their target audiences.

Analyst report, August 2009

In this context the records did not so much provide visibility into emerging environment than enabled to prove that it was possible to conceive mobile phone subscribers as an advertising audience. Whether this is possible by cutting out the ratings companies out of the picture remains an open question. The highly successful search engine advertising that has by-and-large bypassed the rating companies offers in this respect in an interesting precedent (Bermejo 2009). Finally, the company was experimenting with tools to shortcut this pattern by opening some its reporting systems to the internet so that clients could observe how their advertising campaigns were doing.

### Consumer behaviour

Unlike the traditional telecommunications operators the company did not spend huge amounts of money for advertising to lure new subscribers to its service. Most of the subscribers had been invited by their friends using the tools found on the company website. The nature of medium was made clear upfront to the newcomers who were screened to fit specific demographic criteria and instructed to make sure they could receive advertisements or risk being expelled from the service. To put it short, any consumer subscribing to the service was made aware of being involved with an advertising medium. This was communicated as a deal between the company and the consumer.

The advertising audience the company was building was not supposed to be just aware of the advertising but interact with it. The promise to the advertisers was that they would not only get exposure but an engaged audience. The audience members were constructed as active consumers of advertising – not just passive recipients of it. The data made it possible to measure these interactions and combined with the interactive and computational nature of the medium it was possible to program advertisements to build customized dialogues based on individual consumer's responses. On top of delivering the messages, the measured reactions the advertising generated was at the core of the audience product. The members were also invited to reflect upon and pose questions on the open discussion forum on the company website occasionally revealing surprising

features about the service.

## **Discussion**

The narrative depicts how measurement data circulate through different procedures at various domains of organizational reality eventually feeding back into the behaviour of subscribers, and, thus, to themselves. Yet, as it was made clear, an individual record does nothing by itself. Their computational constitution merely enabled to bring together practices into a configuration that would have not otherwise made sense as an audiencemaking setting. For sure, there were many other important processes and practices maintaining the organization, but its sole product was based on the generative character of ADRs that made it possible to conceive people as active consumers of advertising. The records were the foundation for reporting that provided the crucial visibility into the high-velocity environment, involved in rationalizing many business development and operational practices, as well as offered a proof for the quality of the audience. In terms of participant observation, the records provided an empirically salient feature which informed many kinds activities.

Going back to the question motivating this study, what kind of product was being manufactured? Toward the beginning of this paper it was made clear that the capability to send advertising messages to people's mobile phones did not constitute a product advertisers would be interested in buying. The audience could never be seen (literally) as a group of real people. An institutionally effective audience is, first and foremost, measured into existence (Ettema & Whitney 1994) and in this sense it derived from a looping effect between consumer behaviour and the acts upon patterns constructed out of data. If the consumers would stop responding to the advertisements, the advertisers would stop advertising or the company would run out of money the audience would disappear. We might even say that because of the carefully measured behavioural feedback loop the the essence of audience was not the likely exposure to advertising as in most traditional ratings systems, but the active consumption of advertising (Bermejo 2009).

The way organization harnessed data represents an attempt to introduce a technological discontinuity (Tushman & Anderson 1986) to traditional approaches to measuring audiences. Instead of relying on second-order technologies from the ratings companies the medium itself afforded the information fuelling the audiencemaking. For sure, cutting out the ratings industry from the picture is not a simple matter of replacing the observational technology. The authority of

standardized, de facto official, ratings covering several competing media is not easily achieved by a media organization measuring its own offering. Having said this, the ratings industry has had difficulties in adapting its practices to the online world (Bermejo 2009). It has not been able to establish an authoritative method for measuring the online audiences leaving the door open to, for instance, search engines to come up with their own approaches. Turning a search engine into an advertising medium was, however, an afterthought – although extremely successful – by Google whose founders have been said to originally resent the idea of accompanying search results with advertisements. The organization reported in this paper took the technological opportunity in a sense even further by organizing around as an audience manufacturing system from the outset.

Placed in a broader context of organization theory the case gives an interesting twist to a debate about the role of technology in organizing. These theories commonly assume a more or less clear cut separation between the organization and its environment. For instance, ecological approaches assume organizational populations that adapt to the environment through death organizations while contingency theories focus on the environmental adaptation taking place in the organizations (Hannan & Freeman 1977; Miles & Snow 1984). The latter has been particularly influential in the field of information systems inspiring numerous studies on how information technology affects the organizational 'fit' with its environment<sup>2</sup>. The current study points to a somewhat different dynamics in the context of innovative new enterprise. Technology was, obviously, everywhere in the organization, but it was in some key respects involved in setting up the organizational environment, not just supporting adaptation to external forces.

## **Conclusions**

This paper presented an attempt to make a theoretical cut into a data corpus drawn from a intensive fieldwork at an organization trying to build a new advertising medium. The empirical evidence was used to illustrate how the audience as well as the organization co-evolved in a loop that was held together by operations on and about the digital data about the consumers consumption of advertising. Reminiscent of Zuboff's (1988, p. 316) study on informed manufacturing "it was not necessary to know in advance what data might be important or why; the data could be retrieved and analyzed at a later date, giving rise to ever new interpretive possibilities." Telecommunications systems may not be usually understood as generative technology in the sense Jonathan Zittrain (2008) coined the term, but the digital records emanating from it were shown in this paper to furnish

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<sup>2</sup> This idea is from an unpublished article manuscript by Chrisanthi Avgerou.

a particular domain of industrial activity with similar effects (Kallinikos et al. forthcoming). A systematic and in-depth analysis of the empirical evidence will likely reveal a more nuanced view how computational operations characteristic to the interconnected information space format the organization and the audience members as well as enable theorizing the data-driven organizing in the future.

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