Influencing citizen behavior: Experiences from multichannel marketing pilot projects

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ABSTRACT

Information technology allows national and local governments to satisfy the needs of citizens in a cost effective way. Unfortunately, citizens still tend to prefer traditional, more costly channels, such as the front desk, phone and mail. Through pilot projects government agencies attempt to influence this behavior of citizens, directing them towards the online channel. With this paper we provide insight into the possibility to influence citizens' behavior in the complex landscape of multi-channel service provision. The paper systematically compares five pilot projects using a framework that is based on organizational and marketing literature. The results show that socio-psychological factors are crucial in multi-channel management, much more than the technology itself. We conclude that citizens can be directed towards the online channel. However, not all projects are successful. Economic and legal instruments tend to sort more direct effects than communication or service instruments. Moreover, organizational factors such as bureaucracy often hinder eventual success. Choosing a smart and relatively small scope and strong project manager may help to evoke success in directing citizen online behavior.

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1. Introduction

Government agencies use a wide variety of customer service channels, from the front desk to mobile text messaging (Bremer & Loïpez Prado, 2006; Griffin, Trevorrow, & Halpin, 2006), mobile services (Lee, Tan, & Trimi, 2006; Sheng & Trimi, 2008; Trimi & Sheng, 2008), and Twitter (Macintosh, 2008). These digital channels offer advantages such as the ability to store and make vast amounts of information available to citizens. Given the cost effectiveness, government agencies often prefer citizens to use the electronic channels (Andersen & Medaglia, 2008; Asgarkhani, 2005; Ebbers, Pieterson, & Noordman, 2008).

Although the use of online channels has grown in recent years (Aichholzer, 2005; Millard, 2006), citizens continue to rely on traditional service channels for many of their service needs (Pieterson & Ebbers, 2008; Reddick, 2005). In addition, people simply seem to add digital channels to their set of service channels instead of substituting traditional channels with digital channels (Dholakia, Miao, & Nikhilesh, 2005).

Several factors explain the ongoing preference for the traditional channels. First, channels have different characteristics and are used for the provision of information, communication and transaction of products and/or services. Hence, channels also vary in their suitability for specific tasks. Second, citizens may not have an actual need for the services that are provided online (Wijngaert, 2005). Third, citizens are often unaware of service offerings, unable to find services, and/or in many cases the desired services are not available online (Van Dijk, Pieterson, Van Deursen, & Ebbers, 2007). Fourth, they need to have the (digital) skills to actually use these new services (Van Deursen & Van Dijk, 2009). And fifth, citizens are often guided in their channel choice by other factors, such as ease of use, habits and emotions (Pieterson, 2009).

Despite the reasons mentioned above government agencies want to influence citizen behavior. Therefore, in 2008 and 2009, Dutch government agencies started various pilot projects on multichannel service delivery aimed at changing citizen channel behavior. In the pilot projects various instruments to guide people to online public services were developed and implemented. The goal of this paper is to obtain insight into the possibilities and limitations of these instruments. In a more practical sense, the paper reports on the lessons learned from these pilot projects.

We review existing knowledge with regard to multichannel management in Section 2. This section forms the basis for the framework that is used to assess the pilot projects and that is described in Section 3. In Section 3, we present the research method that was used and the pilot projects that were included in the

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research. In Section 4, we describe the results from our analysis and in Section 5, we draw conclusions with regard to the overall goal of the paper. In this section, we also discuss practical and scientific implications of the research and suggestions for further research.

2. Multichannel marketing

Information technology has brought new channels through which services can be delivered. For government agencies the challenge is to (a) satisfy the needs of their citizens (b) in a cost effective way in (c) a complex landscape with multiple service channels. Similar to the private sector (e.g., Lee, 2002), this requires that government agencies align the design and implementation to the needs of the citizen in a multichannel strategy. Multichannel marketing is focused on influencing customer channel choice and behavior (Teerling & Pieterson, 2009). Through multichannel marketing, governmental agencies deploy strategies to guide their citizens to the most cost-efficient channels. In this paper we approach multichannel marketing from three angles:

1. the instruments that can be used to influence behavior,
2. the process of implementing these instruments and,
3. perspectives from which this process can be viewed upon.

This section elaborates on each of these angles that form the basis for our research framework.

2.1. The instruments to influence behavior

Before we try to influence citizen multichannel behavior, we need to understand it. In the model by Pieterson and Teerling (2008a, 2008b), citizens first determine their channel choice. The channel choice is an individual's specific decision to use a medium in a particular communication incident. Second, citizens have a broad pattern of channel use over time. Third, citizens (un)consciously evaluate their channel choice and usage. The entire experience determines how citizens perceive certain channels and how and which channels they choose in the future. Teerling and Pieterson (2009) define four categories of instruments government agencies can use to influence the channel choices citizens make. These four categories are:

Communication instruments are characterized by the transfer of information from government to citizens, such as mass media communication, personal communication or public relations in order to increase knowledge about the digital channels.

Legal or restrictive instruments are aimed at changing citizen behavior through rules, regulations and restrictions. In contrast to the other categories, it has a compulsory nature.

Economic instruments are directed towards changing citizen behavior through financial incentives. This category relies on the assumption that citizens weigh the costs and benefits of various channels.

Service or product instruments include the physical evidence of the service, the reliability or the assurance. In general, the category allows for differentiating the quality of the service across various channels in order to change citizen behavior.

2.2. The process of implementing the instruments

In practice, agencies may choose any of the instruments or a combination of instruments to realize their goals of influencing citizen behavior. The way in which these instruments are implemented in the organization can be described using insights from organizational innovation. The organizational innovation process

has four stages in the development of an organizational ICT innovation (Bouwman, Van den Hooff, Van de Wijngaert, & Van Dijk, 2005):

Adoption is the phase of investigation, research, consideration and decision making in order to introduce an innovation.

Implementation concerns the decision on the part of an organization to use an innovation and is translated into a number of activities aimed at establishing the actual use of the application in the organization.

Use is the phase in which the members of an organization and customers start applying the innovation in their daily operational activities.

Effects is the phase in which the consequences of the use of an ICT application for the organization become manifest.

When we apply this process of adoption, implementation, use and effects to the area of multichannel marketing several observations can be made.

First, financial considerations may play a role, especially with respect to legal and economic instruments. Implementing these instruments in many cases is more costly than implementing a communication campaign or changing service characteristics. Besides, economic measures often have economic side effects (e.g. in terms of accessibility and digital divide or high tax rates or high fines that might harm the economy) and legal instruments might lead to the rise of administrative burdens. Second, time considerations may play a role. It may take years to implement a change in laws, whereas communication is in most situations quickly available. Considerations like these lead us to a more systematic analysis of factors that may influence the process. The next section provides an overview.

2.3. Perspectives from which this process can be viewed upon

Besides these considerations on the instrument level, four perspectives affect the process of organizing the service and the service delivery process itself (Bouwman et al., 2005):

The organizational perspective: all factors related to the nature of the organization and the environment in which it operates. An example of an organizational factor is how decisions are made in an organizational context. Factors such as the structure and nature of the organization may also hinder or impede the use of certain instruments. Organizations with a strong focus on law enforcement (e.g. tax organizations) are more inclined to use restrictive instruments, such as legal and economic instruments.

The user perspective: all factors concerning the individual user – his or her characteristics, tasks, organizational position – and factors having to do with the psychological processes surrounding the innovation from the decision-making process through to the use and effects. Citizens for example have to be able to use the service and the channel through which these are offered (the user perspective). Just putting services online does not lead to usage (Van Deursen & Van Dijk, 2009). Users need to have the right set of (digital) skills (Hargittai, 2002) or bureaucratic competences (Daemen & Thomassen, 1989). By training citizens to enhance their skills or self-efficacy organizations can influence the channel behavior of citizens.

The technological perspective: all factors related to the information and communication technology itself: hardware and software, networks, standards, and so on. Examples of such factors are accessibility and compatibility of the technology. Organizations may for example choose to change certain extrinsic channel characteristics, such as the proximity or contact speed (Kwast, Martha, & Wolken, 1998), and the level of service (Verhoef, Neslin, & Vroomen, 2007). Organizations may also change characteristics of the service itself, such as the complexity and ambiguity of the service (Ebbers et al., 2008). By varying service characteristics and channel charac-
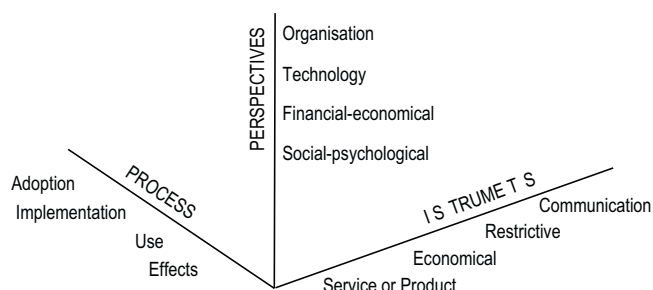
Fig. 1. Research framework.

istics, organizations may provide incentives for citizens to use a certain service via a certain channel.

The economic perspective: all factors related to financial considerations (costs and benefits) that play a role in the decision-making process surrounding the innovation – and the effects of the innovation.

Hence, developing aspects with respect to the organization, service and/or user are important means in deploying marketing instruments and realizing the goals of the organization.

3. Research approach and methods

Looking at the different instruments and stages in the process from different perspectives as described in Section 2, an integrated and broad view on multichannel marketing emerges. Fig. 1 provides a summary of the framework.

Using the research framework in Fig. 1, we further specify the main question of this paper. The overall goal is to understand how government agencies can guide people towards the online channel. Hence, the research question is:

Which technological, financial and social–psychological lessons can be learned in the phases of adoption, implementation, use and effects of the application of multichannel marketing instruments?

In this early stage of experimenting with multichannel marketing instruments, we opt for an approach in which we not only look at quantitative aspects of multichannel marketing but mostly take qualitative aspects into account. Similar to the productivity paradox (Brynjolfsson, 1993), which shows that the effects of ICT are hard to capture; the results of a pilot project cannot always be quantified. Therefore, it is important to also take qualitative aspects into account.

In order to draw lessons from the pilot projects, we must identify successes and failures (Petroski, 2006). Although this notion seems evident, in general both project managers and researchers prefer to draw attention to those things that go well. In this research we intend to not only look at the successes, but also at the setbacks.

In the next section we describe the empirical approach that is used to provide an answer to this research question and approach.

3.1. A systematic comparison of five pilot projects

The "Channels in Balance" (see in Dutch www.kanaleninbalans.nl) research program explores multichannel management for governmental organizations in the Netherlands. In particular, the program addresses channel synchronization and multichannel marketing. The pilots that are included in this paper are part of this program. In some of these pilots a new channel was added to the existing set of channels. In other pilots a new channel was already in place. In all pilots a multichannel marketing instrument is adopted and implemented. A brief summary of the project goals:

Pilot 1: This pilot was conducted within a national governmental agency with several millions of customers. The purpose of this experiment was to stimulate the use of an online application form. In contrast to the regular procedure in which citizens were provided with welcome letter and paper form, they were now the welcome letter only contained a URL and the phone number to call for a paper form. Although people could still call for a paper form, the number of online applications rose from 35% to almost 80%. This project used restriction and communication as multichannel marketing instruments.

Pilot 2: In this experiment citizens could receive an SMS notification of a money transfer from the same organization as in Pilot 1. The aim of this project was to discourage the use of telephone by citizens who were wondering whether the money was already transferred. This project relied on communication, economic and product instruments to achieve their goal.

Pilot 3: A national government agency conducted an experiment in which an online chat service could be used to support people in their online search for information. This project used increased service quality as an instrument to seduce people towards the online channel.

Pilot 4: This pilot aims to educate clients through a personal training on how to use the website of this national government organization. The goal was to install a number of computers in the hall of the service desk. Hostesses explain waiting customers how they could use the website of the agency. The aim is that the improved confidence of users should lead to an increase in the use of the digital service instead of the desk. This project strongly focused on the communication instrument.

Pilot 5: This pilot is designed to guide people in three local municipalities to the online channel through various multichannel marketing instruments. This project used economic, communication and service instruments.

3.2. Data collection and analysis

For the analysis of the pilot projects we gathered both qualitative and quantitative data. As the researchers were part of the "Channels in Balance" program, data collection was relatively easy. We used the evaluation reports from the pilot projects and semi structured single interviews (using the framework in Fig. 1 as a basis) with the pilots' project managers. The project description, summary of the interview and lessons learned were sent back to the project managers for review. In some cases the project managers made some additional comments. These comments were processed in the project descriptions. The lessons learned in each of the projects were categorized in the research framework. From this categorization a set of seven key findings was derived, which are described in more detail in Section 4.

4. Results

We describe seven principal findings that broadly fall within three groups. The first set of findings is related to the type of services that people are guided to and the instruments that are used to establish this. A second set of findings is related to how the pilots are embedded within the organization. The third and last set of findings is related to multichannel marketing for (new) services in the future.

4.1. Choice of the on online service that is promoted

All pilots in this research were aimed at realizing an increased use of the online channel. Before we turn to the instruments that were actually promoted, we first have to distinguish between two types of governmental organizations: national and local. The

national administrative bodies sometimes have millions of customers and just a few processes. In contrast, local authorities offer many services to sometimes only a few hundred customers a year. Consequently, early on in the project, different types of organizations need to make different choices as to which online services they want to promote. We conclude that, before making any decisions on the actual implementation of multichannel marketing, government organizations need to think about which services they want to promote and how this is related to their normal operations. Not all online services are suitable for all government organizations, or, in other words, there is no single solution that fits all. From a contingency perspective government organizations need to investigate how an increased usage of a specific service serves the overall goal of an effective and efficient organization. Hence, multichannel marketing should only be deployed where effects are feasible.

4.2. Scope of the project

A second important lesson concerns the scope of the pilot. Most projects chose a limited set of practical goals. In general, the pilots were neither in technical nor organizational sense very complicated. Also from a financial point of view, the projects were relatively small. Consequently, it was relatively easy to organize the necessary changes to execute the pilot. The small scope also emphasized the direct relationship with day-to-day issues. This motivated people to actually realize the project goals. The pilots often generated extra work. Nevertheless, due to immediate results in their work, employees were very willing to contribute. Hence, choosing a limited scope for the projects was beneficial in various direct and indirect ways.

We draw the conclusion that for multichannel marketing projects it is wise to start small and smart. The increased usage of the online channel is not a matter of a single pilot, but rather an ongoing process in which goals may shift over time. More ambitious projects can be developed once experience increases. From this, we conclude that multichannel marketing is more evolutionary than revolutionary in nature.

4.3. Convincing the management in an evolutionary process

Given that multichannel marketing is more evolutionary than revolutionary, management must constantly be convinced of its usefulness and necessity. The project managers fulfill an important role in this process. They need to convince management of the objectives of the pilot. From a psychological perspective, this means that the project manager should have sufficient experience to gain the trust from management. One of the ways in which the project managers were able to establish trust was through research. The pilot projects that are part of the analysis in this paper were all embedded within a research consortium. The very fact that projects were closely monitored helped to gain trust, both for current and future projects. From this we conclude that it is important to have an experienced project manager deal with the project. Secondly, we conclude that (scientific) research adds value to multichannel marketing.

4.4. The balance between effectiveness and efficiency

Many of the projects have a strong focus on the provision of high quality services. This results from the customer centered approach that is central to many Dutch e-government initiatives. Hence, in most pilots effectiveness is the key driver, not efficiency, making the eventual service delivery more expensive instead of less expensive. Even though, increased efficiency was not the primary goal in most projects, some project did increase it. In these cases, the aim was to increase efficiency, while maintaining service quality. The

implication of this finding is that multichannel marketing may benefit the organization both in terms of effectiveness and efficiency at the same time. However, this is not always the case.

4.5. Choice of multichannel marketing instruments

In order to actually realize an increase of the use of the online channel, different pilots used very different instruments. Results from most pilots show that multichannel marketing is possible. Very simple measures can sometimes yield a significant shift in the use of the online channel. However, not all pilots turned out successful. For example, the pilot that intended to implement a chat function was never exectured. Consequently, the effects of this instrument cannot be measured. Overall, it turned out easiest to show results from projects that used the restrictive or economic instruments. Projects that used other instruments (service quality or communication) could only show indirect results.

4.6. The importance of communication and involvement

In Section 4.3, we emphasized the role of the project manager during the adoption phase of the pilot. Taking on the organizational perspective, this section argues that also in the implementation phase, the role of the project manager is crucial. It is the project manager's task to involve employees in the process. We already saw that employees have an intrinsic motivation to provide better services to clients. Another issue is that plans are often made in one department while they impact work that needs to be done by another department. Because budgets were small in most projects, it is important that the relationships between departments are properly managed. Even though most projects were technically simple, it did become an issue in some projects. The problem usually concerned a lack of capacity. We conclude that although most services are relatively simple, technology does play a crucial role in these projects. On the one hand because technology is what the activities revolve around but also because technology is not obvious. Organizational issues can turn simple technological problems into complicated hurdles.

4.7. Working across organizational boundaries

In the pilots that were part of this paper, the focus was on service provision to customers. Although collaboration with other organizations was not the primary focus of the projects, there was consciousness with regard to the possibilities of collaboration. First of all, project managers envisioned collaboration between similar parties (e.g. the back offices of different municipalities working together), and collaboration with different parties (e.g. a school that can access the municipal birth register to directly obtain a birth certificate when a student enrolls). Through collaboration across organizational boundaries the role of the customer can change from being the bearer of information in the process to controlling who gets which information.

We conclude that collaboration between departments or organizations can add a lot of value to the services that are provided by making use of the online channel.

5. Conclusions and recommendations

A central goal of bureaucratic organizations, such as (most) governmental agencies is to work cost-efficient (Tat-Kei Ho, 2002). It is no surprise that governments try to be customer friendly in their service delivery, while at the same time keeping the costs as low as possible, which leads to an increasing focus on online service delivery. The use of electronic services by citizens however still lingers.

As a consequence, governments try to persuade citizens to use the electronic instead of traditional service channels.

In order to influence citizens' behaviors, government agencies deploy four different multichannel marketing instruments: communication, legal or restrictive, economic and service or product. In this study, we focused on the success of several government agencies in influencing citizens' usage of the online services. We analyzed five pilot projects to find out which technological, financial and social–psychological lessons can be learned in the phases of adoption, implementation, use and effects of multichannel marketing instruments.

Although cross case research is scarce, five pilot projects may not provide a representative sample of all possible multichannel marketing efforts future research should be directed towards the study of a larger number of projects.

As for the results, the different pilot projects differ largely in their scale and impact. However, we find some remarkable similarities between the pilot studies. The case study resulted in seven main findings. First, the results show that multichannel marketing works in practice. The study shows that it is indeed possible to influence citizens' behaviors. Second, we see differences in the effectiveness of the different instruments. The pilots focusing on changing behavior through economic and restrictive instruments proved relatively successful. Third, it appeared that the project manager played a crucial role in the success of the pilot. Project managers must be able to overcome organizational, bureaucratic and financial barriers to make the project successful. Fourth, successful projects appeared to have more an evolutionary than a revolutionary character. Fifth, and this connects to the previous result, successful pilots were not the most (technological) advanced but smaller 'tweaks' and adjustments to the service delivery process. Sixth and final result is that scientific research proved very beneficial in the process of guiding the pilot studies.

Our framework proved to be valuable to study this type of organizational innovation. We suggest that future researchers that use the framework see it as a flexible, theoretical tool. Future research efforts may also be directed towards a (quantitatively) test of the seven findings that were presented in this paper.

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Lidwien van de Wijngaert The research of the Lidwien van de Wijngaert focuses on the adoption, use and effects of ICT from a user perspective. The research is characterized by a focus on the user in a day-to-day context. The purpose of the research is always to understand the factors affecting the diffusion of new IT-related services.

Willem Pieterson works as an assistant professor within the Center for e-Government. Studies of the University of Twente. In March 2009 he obtained his Ph.D. Cum Laude (Hons) for his dissertation on Channel Choices by citizens for their interactions with governmental agencies. He works on various research and advisory projects mostly on the field of peoples' behavior regarding ICT and new media and the implications for organizational communication strategies and multichannel service delivery.

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