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Facts and feelings: The role of rational and irrational factors in citizens' channel choices

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ABSTRACT

In the past decades, the topic of how and why citizens choose certain service channels to interact with governments has received widespread attention as it is an important component of government service channel strategies. Most of the existing work, however, suffers from two problems. The first is an ongoing focus on a limited set of possible determinants, making it hard to assess which of these factors are most important. The second is the underlying assumption that citizens rationally assess their situation and based on the task at hand choose the best fitting service channel. In this article we challenge both assumptions. We review the work on channel choice and rationality in decision making. Based on this review we propose and empirically test a model combining different determinants and decision making processes. Our findings show that citizens sometimes choose channels rationally and sometimes irrationally. The task at hand, personal characteristics, and situation trigger which factors are most important. As a consequence, models focused on channel strategies should focus less on rational 'matching' and more on situational factors.

1. Introduction

When government agencies started deploying electronic service channels in the 1990s, providing services to citizens and businesses, the expectation was not only that governments would save money by delivering services through the cheaper online channels, but also that citizens would adopt these channels quickly and start utilizing them (Pieterson & Van Dijk, 2007). However, several studies from various countries, such as Australia (Australian Government, 2005), Canada (Erin Research, 2003), The Netherlands (Bongers, Holland, Vermaas, & Vandeberg, 2004), and Switzerland (Berner Fachhochschule & Unisys, 2005), showed that a decade later governmental agencies still faced high numbers of contacts via more traditional service channels, such as phone and front desk. Even now, another decade later, we often see that clients in citizen-to-government or business-to-government interactions still prefer telephone or front desk over website (e.g. Reddick & Turner, 2012; Van den Boer, 2014, Reddick & Anthopoulos, 2014, Kræmmergaard & Østergaard Madsen, 2015).

The obvious question is why this is still the case. If electronic channels are superior to traditional channels, as many governments seem to believe, then why are citizens still using the traditional channels? Research focusing on citizens' channel choices, as well as models focusing on the incorporation of these behaviors in multi-channel management service delivery models often center on the argument that channels have characteristics that render them suited for different types of tasks (see e.g. Ebbers, Pieterson, & Noordman, 2008). Hence, different types of channels should be deployed for different types of services. Given the complexity or ambiguity of certain tasks, this could indeed explain why citizens still keep using traditional channels for many services (see Daft & Lengel, 1986 for a discussion of the media richness concept that connects tasks to media).

However, this thought assumes that citizens are able to assess the characteristics of the task at hand and subsequently match the characteristic of this task with properties of the available service channels. This is a very rational view on decision making that expects citizens to have full information and objectively weigh pros and cons of tasks and channels.

There are two problems with this assumption. The first is that research has already shown that channel choice is not merely a function of task characteristics. Studies have found that factors as demographics and personal characteristics, situational constraints, experiences, the nature of the interaction, values that citizens place on public service, the overall satisfaction that citizens place on the service that they

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receive from their government, trust, and emotions (Haddock & Huskinson, 2004; Pieterson & Van Dijk, 2007; Reddick, 2005; Reddick & Turner, 2012) can also influence channel choices.

The second problem is that the idea that decision making processes are inherently rational has been challenged as well. Several studies have argued that people do not actively weigh task characteristics, but rather make their choices based on habits (Pieterson & Van Dijk, 2007). Max Weber (1922) has argued that these are not two competing approaches. Rather, they are simply different ways of making decisions. Based on the situation, people use one or the other strategy. The labels Weber uses for those different strategies are rational and irrational social action.

If we, finally, want to improve the efficiency of governmental service delivery, we need to start by increasing our understanding of the channel choice process and to that end, we need to move beyond matching tasks to channels but also incorporate other factors that may lead to more, or less, rational processes of decision making.

Goal of this contribution is twofold. The first is to summarize the state of the art in eGovernment research focusing on channel choice. The second is to propose and empirically test a model of channel choice that goes beyond studying intentional use, but expands towards actual use. This model is based on the summary of the existing literature and theories reflecting both rational and irrational channel choice determinants.

2. Channel choice

In recent years, various studies have been conducted on how and why citizens choose and use the different service channels. One of the most comprehensive one is the study of Pieterson (2009) (who also provides a comprehensive overview of the channel choice literature prior to 2009). This study on information needs of taxpayers suggests that, at least for tax related issues, citizens primarily follow their habits in channel selection. Pieterson (2009) also suggests that, secondarily, certain factors (situational, emotional, etc.) can trigger a more rational channel choice process.

In case of that second instance decision process "*situational, and emotional factors as well as habits do not play a role anymore*" (Pieterson, 2009, p. 235). Once the second process takes place, Pieterson's (2009) findings suggest that citizens choose channels that suit their task and its given characteristics best, a so-called task-channel elaboration. The elaboration process depends on of the nature the task on the one hand and the characteristics of the channel on the other hand.

More recently, Reddick and Anthopoulos (2014) studied channel choice behavior in Canada. Their results show that, even though the use of traditional channels is declining (traditional office visits declined from 64% in 2005 to 47% in 2012), the use of the website increased to 47% in 2008, and then declined to 38% in 2012 as well. The authors (2014) attribute this decline to the website's limited capabilities in terms of problem solving. Furthermore, their data illustrate the differences in usage between the different channels. The results showed that office visits were most often used for applications/registrations (62%); voice phone-calls were preferred for problem solving (68%); and government websites were most often used for information or advice retrieval (53%). Reddick and Anthopoulos (2014) found four factors to be key predictors of channel usage: the digital divide; user satisfaction with the channel; nature of the transaction; and finally security and privacy.

Kræmmergaard and Østergaard Madsen (2015) studied how citizens in Denmark use channels and can be guided towards online services. They found that the Internet is the primary channel to conduct transactions, while the phone is the main channel to solve problems arising with these transactions. This seems to suggest that people develop certain preferences to solve certain types of problems. This is in line with Pieterson (2009), who argued that experiences shape how people use channels and this in turn might lead to these preferences for channels.

This overview of studies suggests that a wealth of different factors may influence channel choice. Sadly virtually no studies exist that incorporate all these variables mentioned. In our empirical work (see below), we have tried to fill this gap by testing a model of channel choice that includes task related factors, channel related factors, habit, and personal characteristics. However, before we present this model we first discuss the decision making process in more detail.

3. Theoretical framework

Throughout this article, we have touched on a key theoretical issue pertaining to channel choice behavior and that is the question to which extent channel choice is a rational process or an irrational process steered by habits. As discussed above, there are two streams of thought on decision making. The first is that of the rational actor and rational choice defined by Hahn and Hollis (1979) as:

> "*Given the set of available actions, the agent chooses rationally if there is no other action available to him the consequence of which he prefers to that of the chosen action* (Hahn & Hollis, 1979, p. 4)".

This implies that the actor will carefully weigh all choices available and subsequently choose the best possible alternative. This is an assumption that falls perfectly in line with multi-channel service delivery models, such as the one proposed by Ebbers et al. (2008).

The second choice process, as suggested by Pieterson (2009), is that of the non-rational habitual decision maker. Habits are "learned sequences of acts that become automatic response to specific situations, which may be functional in obtaining certain goals or end states" (Verplanken, Aarts, & van Knippenberg, 1997, p. 540). Various studies have indeed shown that many decisions are made via habits instead of via reasoned actions (Aarts, Verplanken, & Knippenberg, 1998; Sutton, 1994; Verplanken et al., 1997).

So how are decisions made? Are people rational beings that carefully assess situations and elaborate, or does no such process take place and do people choose channels based on their habits, driven by experiences?

According to various theorists, both can exist at the same time. The adaptive decision maker hypothesis is one attempt to integrate different views on rationality, it assumes that "the use of various decision strategies is an adaptive response of a limited-capacity information processor to the demands of complex task environments" (Payne, Bettman, & Johnson, 1993). In other words, depending on the situation, for example a lack of time or urgency, people will change the level of rationality in their process. According to Payne et al. (1993), this depends on the desired accuracy of the decision making process and the desire to minimize the (cognitive) effort required to make to make this decision.

A similar, often criticized but even so very often defended and applied (Cohen, Hazelrigg, & Pope, 1975) view is proposed by Max Weber (1922) who argues that different types of rationality exist, each one driven by different factors. Rational social action is broken down in purposive rationality (Zweckrationale) on the one hand and value rationality (Wertrationale) on the other hand. Weber (1922) sees purposive rational actions as actions to attain some end by the conscious and calculated use of certain means. Value-rational oriented actions he sees as actions driven by a conscious belief in the value for its own sake of some ethical, aesthetic, or other form of behavior, no matter of its prospects of success. In this, we translate Weber's Zweckrationale into a rational approach of channel choice depending on how a channel fits the task at hand best given its characteristics, in order to complete the task as efficient and effective as possible. Examples of determinants that relate to this approach are for example channel characteristics, task characteristics, and the nature of the interaction (Reddick, 2005; Ebbers et al., 2008; Reddick & Turner, 2012). Moreover, we translate Weber's