



**The European Commission Mutual Learning Programme
for Public Employment Services**

DG Employment, Social Affairs and Inclusion

**MULTI-CHANNEL MANAGEMENT:
RECENT DEVELOPMENTS IN PES AND E-
GOVERNMENT**

Analytical paper

July, 2011

This publication is supported under the European Community Programme for Employment and Social Solidarity (2007-2013). This programme is managed by the Directorate-General for Employment, social affairs and equal opportunities of the European Commission. It was established to financially support the implementation of the objectives of the European Union in the employment and social affairs area, as set out in the Social Agenda, and thereby contribute to the achievement of the Lisbon Strategy goals in these fields.

The seven-year Programme targets all stakeholders who can help shape the development of appropriate and effective employment and social legislation and policies, across the EU-27, EFTA-EEA and EU candidate and pre-candidate countries.

PROGRESS mission is to strengthen the EU contribution in support of Member States' commitments and efforts to create more and better jobs and to build a more cohesive society. To that effect, PROGRESS will be instrumental in:

- providing analysis and policy advice on PROGRESS policy areas;*
- monitoring and reporting on the implementation of EU legislation and policies in PROGRESS policy areas;*
- promoting policy transfer, learning and support among Member States on EU objectives and priorities; and*
- relaying the views of the stakeholders and society at large*

For more information see:

<http://ec.europa.eu/social/main.jsp?langId=en&catId=327>

European Commission:

DG Employment, Social Affairs and Inclusion, Unit C.3 Skills, Mobility and Employment Services.

Authors: Dr. Willem Pieterse & Zachary Johnson, Syndio Social

In collaboration with GHK and the Budapest Institute

The information contained in this publication does not necessarily reflect the position or opinion of the European Commission

CONTENTS

EXECUTIVE SUMMARY	i
1. INTRODUCTION	1
1.1 Concepts and definitions	1
2. PRE-REQUISITES FOR A SUCCESSFUL E-GOVERNMENT STRATEGY: ACCESSIBILITY AND CUSTOMER SATISFACTION.....	3
2.1 E-service strategies should take into account level of Internet connectivity in different countries and among different users.....	3
2.2 E-Inclusion requires a digital skills as well as a digital access strategy	5
2.3 Usage of online channels can be increased by understanding what clients want and improving service quality through design and benchmarking	7
3. THE MULTI-CHANNEL STRATEGY ISSUE: HOW TO DESIGN AND MANAGE ALL SERVICE CHANNELS?	9
3.1 Multi-Channel Strategies: channel choice for different services depends on the strengths and weaknesses of different media.....	10
3.1.1 Basic concepts and approaches.....	10
3.1.2 Channel and Service characteristics: some channels are better suited to supply certain services	12
3.1.3 A combined framework for Integrated Multi-Channel Management.....	16
3.2 Implementing the Integrated MCM strategy	16
3.3 Channel marketing/steering; how to influence channel behaviour?	19
4. THE INNOVATION ISSUE: WHAT ARE THE CURRENT DEVELOPMENTS AND CHALLENGES?	21
4.1 Social media	21
4.2 The role of social networks and intermediaries.....	23
4.3 Skip the Front-Office: tools that directly connect to the back-office	24
4.4 Back-Office optimization and data management	25
5. CONCLUSIONS	27
5.1 Recommendations.....	28
6. REFERENCES	30

EXECUTIVE SUMMARY

In this report we analyse the broader state of the art in e-Government and apply that to the PES context. The focus thereby is on three main topics.

- The implementation of new channels and services. This issue mainly focuses on the question of what services to bring online and what pre-requisites for a successful e-government strategy exist.
- Management and integration of channels and services (the multi-channel issue). This issue deals with the management of all channels and the integration of the electronic channels with existing ones.
- The consideration and evaluation of trends and developments (the innovation issue). This topic focuses on the question which of the latest developments should be adopted to improve and expand service provision and reach.

The most important pre-requisites for successful e-government are accessibility of services and the improvement of customer satisfaction. The supply of e-services itself is nearing saturation; however the low accessibility (e.g. for low skilled people) and usability of services lead to lower than anticipated customer satisfaction. To keep customers in the electronic channels, the quality of the electronic services needs to improve.

An integrated channel strategy offers many advantages compared to other channel strategies when it comes to improving the effectiveness and efficiency of public service delivery. The proper services should be supplied via the proper channels to the right audience. A channel marketing strategy should aid the steering of clients to the proper channels.

Key trends and developments are a) the rise of social media (that have certain potential benefits, but still have to prove themselves for PES organisations), b) the role of social networks that could be powerful means to convey messages to PES target groups, c) direct integration of tools in the back-office and d) the improvement of processes in the back-office itself.

A general conclusion is that the proper execution of Multi-Channel Management is a complex and often underestimated process. It is a change management issue that comprises the entire organisation.

This leads to ten recommendations.

- 1 Set clear and measurable goals in the MCM strategy.
- 2 Measure, evaluate and adjust to benchmark their own and other PES' progress.
- 3 Focus on Integrated MCM.
- 4 Create a service-channel matrix.
- 5 Implement in clear steps.
- 6 Devise a channel marketing mix.
- 7 Carefully consider social media for specific purposes and not as 'hype'.

- 8 Use intermediaries to increase the effectiveness and efficiency of the process.
- 9 Skip the front-office and allow direct access to back-office systems.
- 10 Optimise back-office processes to reduce front-office contacts.

1. INTRODUCTION

Improving public service delivery is high on the agenda of most governmental organisations. Technological developments (e.g. the rise of the Internet offering online tools and channels of communication, as well as the advent of social media), the need for cost efficiencies and calls from the public for improved service provision have fuelled an expansion of e-Government applications that is (mainly) pre-occupied with three issues:

- The implementation of new channels and services. This issue mainly focuses on the question of what services to bring online and what pre-requisites for a successful e-government strategy exist.
- Management and integration of new channels and services with existing infrastructures and channels (the multi-channel issue). This issue deals with the management of all channels and the integration of the electronic channels with existing ones.
- The consideration and evaluation of the latest trends and developments (the innovation issue). This topic, finally, focuses on the question which of the latest developments should be adopted to improve and expand service provision and reach.

Like most governmental agencies, PES organisations have to deal with the issues mentioned above. The purpose of this paper is to provide lessons on e-government and multi-channel management (MCM) from the experience of PES organisations, wider e-government applications and the academic debate.

This paper summarises the State-of-the-Art on the three issues mentioned above (e-Government (Chapter 2), Multi-Channel Management (MCM) (Chapter 3) and innovation (Chapter 4)) based on the literature available from the three domains. We conclude this paper with a number of practical implications for PES organisations. Firstly, however the most important concepts are defined.

1.1 Concepts and definitions

Multi-channel management

We use the following definition of Multi-channel management (MCM):

“Multi-channel Management is the effective and efficient deployment of channels for the communication, interaction, transaction with and/or distribution of products/services to the client” (Teerling, 2007).

Throughout this paper MCM is interpreted as an issue with a broad scope. This means that MCM should not just focus on the design and implementation of channels in the front-office (the customer facing side of service provision), but also include the relevant changes and implications in the back-office (e.g. in the administrative function) and the organisation as a whole. This therefore concerns not only data integration, but also the organisational implications of such innovations, including the need for change management strategies.

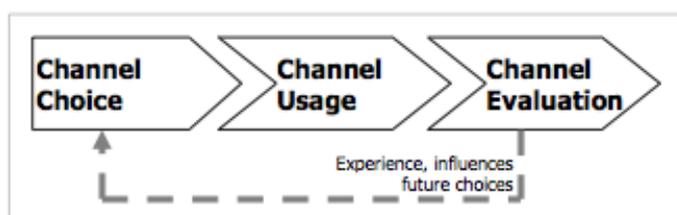
e-Government

E-Government is defined as “*the continuous optimisation of service delivery, constituency participation, and governance by transforming internal and external relationships through technology, the Internet and new media*”. The most important aspect of this definition is that it stresses that e-Government is a *broad* issue (like MCM). The success of e-Government does not depend on bringing as many services online as possible, but on the proper organisational alignment. Research shows that a majority of such approaches (up to 65%) fail (Heeks, 2006) where *soft* factors (e.g. communication, lack of understanding of citizen behaviour, cultural change) form a larger obstacle than technological (IT) factors.

Channel Behaviour

Channel choice and channel behaviour must be seen to be significantly influenced by an individual’s (first) experience of using a channel. We define choice as follows “*Choice is an individual’s specific decision to use a medium in a particular communication incident.*” This choice afterwards leads to the use of certain channels (hence, channel use can be seen as the aggregate of all choices). After using a channel, the client evaluates their user-friendliness and outcomes and this evaluation influences future channel choices (see Figure 1).

Figure 1: The basic model of channel behaviour



Understanding this process is important for two reasons. Experiences and the resulting habits form the most important determinants of channel choices (Pieterse, 2009). Improving the *entire* service delivery process therefore is a key factor in not only guiding clients to certain channels but also in *keeping* them there. Despite all efforts in bringing services online and guiding clients to the electronic channels, many clients fail in using electronic services (e.g. due to bad design (Pieterse, 2010) or a lack of skills (Van Deursen, 2010)) resulting in them using other channels. Pieterse (2011) calculates that 30% of all contacts with governments fail at the first instance (resulting in a second attempt to use a service or obtain the required information) the largest proportion thereof (40%) fails in using the electronic channels. These clients turn to other – more traditional - channels (telephone and face to face (F2F)).

Understanding this behavioural process is relevant when it comes to channel marketing and influencing client behaviour. Because each stage in the channel process is based on different behavioural determinants, every single stage poses different requirements and constraints on the channel marketing process.

2. PRE-REQUISITES FOR A SUCCESSFUL E-GOVERNMENT STRATEGY: ACCESSIBILITY AND CUSTOMER SATISFACTION

The first years of e-Government were focused on technological development and bringing 'as many services online' as possible. The crash of the Internet-bubble led to a rethinking of the position of the Internet in the channel-mix (Ebbers et al. 2008). This was due to observations such as that the Internet as a whole was not going to replace the other channels, as many utopian views predicted (see Pieterse, 2009 for an overview).

The period afterwards roughly until now can be characterised by a focus on four aspects; increasing Internet connectivity and then mainly broadband access (see 2.1), emphasis on e-Inclusion and digital skills (2.2), improving service quality and satisfaction (2.3) and finally the integration of the Internet in the multi-channel mix (chapter 3). The last few years saw the arrival of the second wave in e-Government; the transformation of the web1.0 into web2.0, a development that is slowly being followed by governments and PES organisations (chapter 4).

A successful e-government strategy requires a full appreciation of the factors which underpin the use (or otherwise) of e-services. These include the spread of Internet connectivity in households (also called Internet penetration) and the actual use of online channels for different purposes. As important as access issues, is the level of digital literacy in different parts of the population.

2.1 E-service strategies should take into account level of Internet connectivity in different countries and among different users

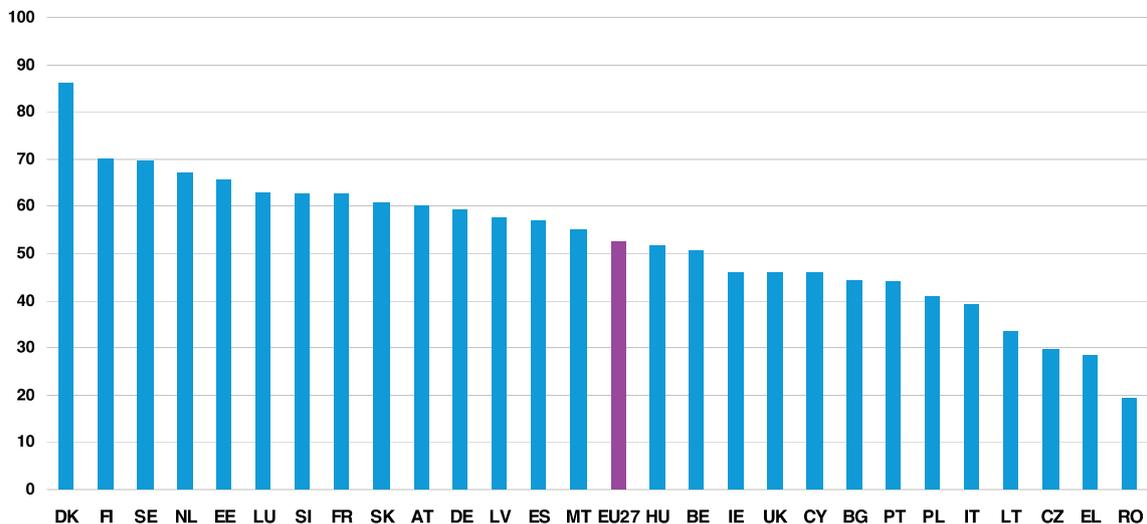
In January 2010, broadband penetration grew to 24.8% in the entire EU27 (European Digital Competitiveness Report 2010¹). The penetration among households and individuals grew to 61% (Seybert & Löff, 2010). This implies that the possibilities to increase the richness of the online channel (e.g. by adding video or advanced feedback mechanisms) are growing. The Netherlands and Denmark are the two countries with the highest levels of broadband penetration (around 40%), whereas Bulgaria and Romania (around 14%) are among those with the lowest levels. The situation is a lot better for households. In the Netherlands and Sweden some 80% of households use a broadband connection, whereas the percentage for Bulgaria and Romania is around 25%. The EU27 average for households is 56% (and for the combination of households and individuals is 61%, as mentioned above). This clearly inhibits the possibilities of some countries with respect to adding data hungry features to the electronic channels and the possibilities of social media (e.g. photos on Facebook, video chatting and YouTube). Naturally the status quo and more importantly the future broadband penetration (which will improve rapidly) need to be taken into account when designing and implementing multi-channel strategies. It would mean that PES organisations in the countries that reach broadband connectivity saturation levels (Scandinavia, NL, DE, LU, UK) can

¹ <http://bookshop.europa.eu/en/european-competitiveness-report-2010-pbNBAK10001/>

implement these features more easily. Countries who are in the middle of the adoption curve (ES, HU, PL, IE, SI, FR, AT, EE, BE, MT) should can start to design and test more data hungry features and the countries with lower rates (RO, BG, EL, IT, SK, PT, CY, CZ, LV, LT) could nonetheless start making strategic decisions about offering these rich online services to their entire audience (or be selective in their MCM strategy and offer these features to the early adopters), as Internet penetration is growing rapidly.

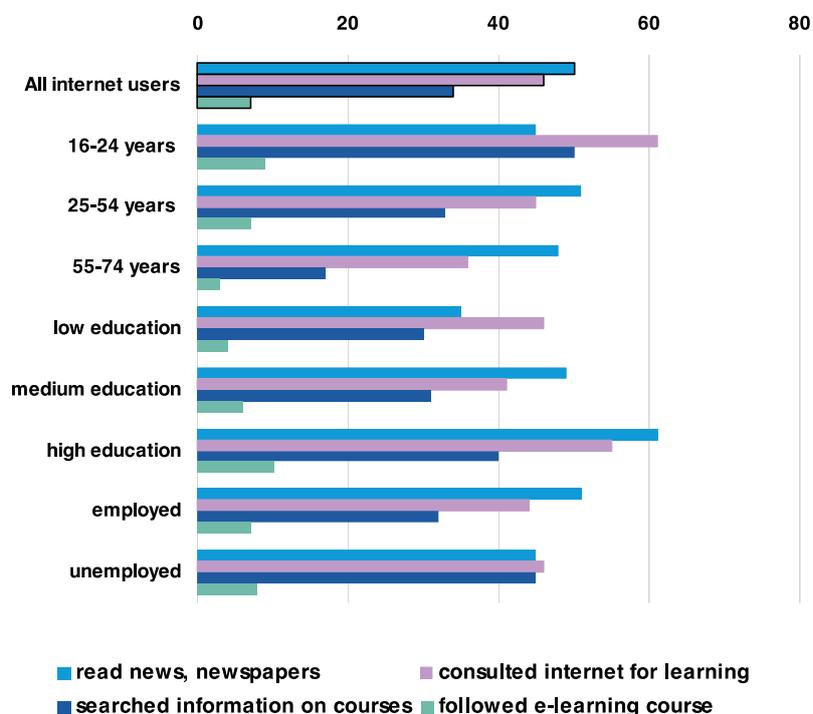
Across the EU, just over 50% of individuals used the Internet to find information from public authorities in 2010, with some significant variation between countries (85% in Denmark and under 20% in Romania, Eurostat, 2010) (see Figure 2). The same report from Eurostat finds that four in ten unemployed individuals consulted the Internet for learning (see Figure 3). Given their status, it is no surprise that unemployed people are intensive users of the Internet for job search and application for a job (69 % of unemployed Internet users compared to 23 % average for all users). On the whole, Internet users are more likely to be young (90% of 16-24 year olds used the Internet at least once a week in 2010, compared to 73% of 25-54 years olds and 37% of 55-74 year olds) and highly educated (90% of regular users). Only 44% of individuals with low levels of education were likely to use the Internet regularly in 2010.

Figure 2: Internet users who used the Internet for finding information from public authorities' websites in the last 12 months, 2010 (% of internet users)



Source: Seybert & Lööf, 2010.

Figure 3: Use of Internet for reading news and learning purposes, by age group, level of education and employment situation, EU, 27 (% of Internet users).



Source: Seybert & Lööf, 2010.

This seems an indication that job-seekers are often to be found in those groups that are digital laggards or people with lower digital skills (see also next section). For PES online strategies this implies two challenges:

- Service design for average users should take levels of digital skills into account;
- Strategies to improve digital literacy are particularly significant for PES services.

For their MCM strategy this implies two more points:

- The weight of the traditional service channels in the channel mix will remain relatively important for PES organisations in the short to medium term.
- When designing channels and the channel-service match, PES organisations should gradually shift from supplying all services via the traditional channels to the integrated strategy where more and more advanced services are being offered more prominently via the electronic channels.

2.2 E-Inclusion requires a digital skills as well as a digital access strategy

The digital divide, or the issue of e-inclusion, is an important point of discussion regarding the development of e-Government and MCM. A majority of citizens in the EU have access to the Internet. However, a far smaller group is capable of using this medium to interact with governments in general and PES organisations in particular.

The European Competitiveness Report (2010) concluded that around 64% of all Europeans have some level of digital literacy. This implies that around a third of all citizens lack the principal skills to use the Internet. Combined with the 30% of all citizens without Internet connection, this limits the pool of citizens being able to use the (advanced) services of PES organisations to less than half of the entire population, although this varies greatly from Member State to Member State. However, the digital divide issue is more complex than it appears from these figures. Two concepts are of particular importance (Van Dijk, 2005). Firstly, to understand and address the digital divide, we need to understand the factors that determine Internet use (and hence explain the digital divide). Secondly, we need to further break down the most important factor: digital skills.

According to Van Dijk (2005), the digital divide in most cases is seen as the difference between those people with or without a pc and/or Internet connection. However, this does not explain the wide gap between supply and actual use of e-services that could be expected based on Internet connectivity alone (Van Deursen, Ebbers & Van Dijk, 2006). Studies suggest that the actual use of electronic channels is (consecutively) determined by, 1) possession of pc and Internet connectivity, 2) motivation to use the Internet, and 3) digital skills.

Between each of the steps there is a gap. For example, many people with an Internet connection are not motivated to use the Internet, because they do not need to or simply do not want to (e.g. 50% of user lists 'no need' as a reason to not buy online). Even people who do have the required digital skills often do not use the electronic channels. Studies on the choice of service channels (Pieterse, 2009) show force of habit is an important factor limiting successful take-up of e-services. It is therefore important to develop successful strategies to overcome such habits, as well as enhancing digital skills.

According to Van Deursen (2010), four different types of digital skills exist:

- Operational skills (being able to use a computer)
- Tactical skills (understanding online structures, such as menus)
- Informational skills (being able to find relevant information)
- Strategic skills (being able to use information and service to gain benefits)

Without successful approaches to enhance all the above skill sets, fewer job seekers than often anticipated will be able to use the PES' complex services and will keep on relying on the traditional service channels. In this context it is important to note that the multi-national European eFacilitator is an initiative to create and to recognise a training curriculum for digital skill trainers or *eFacilitators* for social inclusion². This recognises the need for education of the digital illiterates and might be a good starting point for the creating of PES specific programmes. These situational factors put constraints on the channel choice process. Besides clients' characteristics,

² See <http://www.efacilitator.eu/wordpress/>

organisational and external factors should be taken into consideration. These include:

- Legal constraints (e.g. laws that prevent using certain steering instruments)
- Technological developments (e.g. new technologies, such as social media)
- Governmental (political) demands (e.g. new regulations)
- Budget constraints (e.g. budget cuts that force the PES to lower service levels)
- Organisational structure and culture (e.g. resistance to change and the necessity to work across organisational boundaries). Experiments in the PES setting from the UK Jobcentre plus and the Swiss PES found that using staff rewards as an incentive for change and the achievement of objectives work well in this respect (see Mosley, Schütz & Breyer, 2001))

Like the *situational* factors, these *external* factors put constraints on the organisational context in which the IMCM process takes place (see also Figure 5). However, these aspects are crucial for the success of MCM and are often neglected in practice (Pieterse, 2010).

In conclusion, in order to create a successful platform of competent users for PES on-line services, it is important to go beyond strategies to increase Internet penetration and work on successful strategies to enhance more complex digital skills and steer users in a way which increases motivation to utilise these channels. Service quality and satisfaction are critical factors in this equation. External factors which may limit channel choice also have to be borne in mind.

2.3 Usage of online channels can be increased by understanding what clients want and improving service quality through design and benchmarking

Due to the mismatch in supply and demand (Van Deursen et al., 2006) in e-Government, the failure of many e-Government projects (Heeks, 2006) and the progress that the private sector is making in the evolution of e-Services, there is a growing attention on improving the quality of processes and service and, by creating a better customer experience, increasing customer satisfaction (and therefore usage). Improvement of service quality is being done in various ways:

- Better matching supply and demand of e-services (bringing those services online that clients want). This does create the problem that one needs to understand the needs and usage patterns of clients. Recent research (Pieterse, 2011) shows shortcomings in this area.
- Improve accessibility and usability of e-services. A notable example is *Drempelvrij* (barrierfree) the Dutch certificate for accessible websites³.
- Personalisation of services to increase customer satisfaction. Personalisation (Pieterse et al., 2007) is a good way to reduce ambiguity and complexities in the process (see also the next chapter)

³ See: <http://www.drempelvrij.nl/>

- Benchmarking of service quality. Benchmarking in this context applies to a) measuring the progress of the PES organisation itself, and b) comparing service quality of the PES organisation to other (European) PES.

Some frameworks are becoming available to measure and benchmark the quality of the service-delivery process, such as the i2010 framework⁴ and the United Nations' e-Government survey⁵. Both measure the availability of services via certain channels, the use of services and user satisfaction, but do not specifically focus on the PES context and don't take into account the large variety in characteristics and needs of the population. Given the fact that (comparative) measurements in the PES domain are lacking, it might be considered to build a European instrument that PES organisations can use to monitor and benchmark their service delivery process. This instrument should focus on the supply and demand of services via all channels to the wide variety of target groups.

4 http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/benchmarking_digital_europe_2011-2015.pdf

5 <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan035535.pdf>

3. THE MULTI-CHANNEL STRATEGY ISSUE: HOW TO DESIGN AND MANAGE ALL SERVICE CHANNELS?

A MCM strategy should consist of at least three elements; a) an overview of goals, b) steps that need to be taken in order to reach these goals and c) factors that influence this process. Ideally, agencies should incorporate each of these three aspects in their Multi-Channel strategy.

According to various authors (Treacy & Wiersema, 1997; Ebbers et al., 2008), the main reasons for the increasing popularity of MCM are its potential to adjust the available service channels to the needs and behaviours of the citizens, and to achieve both a cost reduction and an increased customer satisfaction.

In order to improve customer satisfaction, it is important to increase awareness of customer requirements. Fountain (2001) argues that governmental agencies often simply assume what the needs of the citizen are. One reason for this is that it is rather difficult to assess the preferences of citizens. Intrapersonal tradeoffs among preferences make it difficult to understand what citizens want, because there are so many ways in which people make those tradeoffs. For example, channels choices can be based on such factors as situational constraints (time and distance), emotions, characteristics of the task and channel and personal characteristics. The interaction between these factors leads to an almost unlimited set of possible tradeoffs, preferences and behaviours. This might explain why the level of knowledge within governmental agencies about the behaviour of citizens is rather low (Pieterse, 2008).

While the goal of achieving greater cost efficiencies is becoming more and more critical, research (e.g. Moon, 2002) has shown that in seeking to achieve such outcomes, several factors must be borne in mind:

- Many e-service applications have high initial development and set-up costs;
- E-service applications often require a back-up function (as a minimum technical support, for example through a call centre);
- Cost efficiencies are most likely to be achieved through successful channel integration, which is a gradual process, require in many cases at least a period of parallel supply;
- Certain service aspects (to certain clients) will always need to be provided through various channels in order to avoid exclusion and to ensure the quality of outcomes for more complex functions.

Balancing cost-efficiency and service quality is a difficult task. A too strong focus on service quality may lead to high levels of satisfaction, but also to (too high) costs in the service delivery process. On the other hand, a too strong focus on cost efficiency may undermine the service effectiveness as a whole. Scheepers and Kommers (2001) argue that the McDonald's effect may occur when cost-efficiency is chosen above a proper alignment to the roles of citizens and governments; smooth and efficiently satisfying superficial short term needs may lead to a neglect of the

complex, fundamental and long-term needs (p. 327). Hence carefully balancing the two goals is the first fundamental challenge for PES organisations.

3.1 Multi-Channel Strategies: channel choice for different services depends on the strengths and weaknesses of different media

This section explores the basic concepts and approaches of channel strategy, sets out which channels could be considered most suitable to supply which types of services and sets out a concept for integrated multi-channel management (IMCM) before the next section (3.2) elaborates on the challenges of implementing IMCM successfully.

3.1.1 Basic concepts and approaches

i. Parallel Positioning – largely a thing of the past

The traditional way of dealing with service channels is that of parallel positioning. Before the advent of the Internet, this was the basic strategy that most governmental agencies followed. The strategy rests on the idea that all different channels are used alongside each other; each question could be answered via each channel. Although this is no longer the strategy used by all organisations, it is still in use by organisations advocating equal access to all channels.

ii. Replacement Positioning – not always feasible

The second strategy arrived after the advent of the Internet. The Internet provided the opportunity to provide certain (often rather simple information or functional services) in a cost efficient manner that allowed the consideration to replace traditional with online channels. The replacement of the written tax form for entrepreneurs by the obligatory electronic form in the Netherlands is a striking example of this strategy. However, complete replacement may not be an option for some of the reasons mentioned above.

iii. Supplemental Positioning – a step towards integration

There are also other reasons why replacement positioning might not be the ideal channel management strategy. From a communication point of view; channels have different characteristics that make them suited for different types of (communication) tasks. One of the most prominent (media) communication theories; Media Richness Theory (Daft & Lengel, 1986), for example, argues that media differ in richness and that rich media are needed to solve ambiguous problems. Van Dijk (2006) reviewed numerous media theories and argues that the electronic channels are fast, have a high geographical reach, have a high storage capacity, and are accurate and selective. The electronic channels, however, also score low on their social reach, degree of interactivity, their stimulus richness, complexity and privacy protection.

This knowledge would call for simple and fast services to be dealt with via the electronic channels and the complex and ambiguous services via the traditional channels. Hence, channels supplement each other and services should be offered via the best channel for that particular task.

This strategy has gained importance in the private sector where, for example, transferring money is done electronically with banks, but mortgages are mostly sold in person. Such policies attempt to implement a multi-channel approach that has originated in the business sector and in marketing (examples from the private sector are Kumar & Venkatesan, 2005; Neslin, et al., 2006) This strategy potentially has two benefits (Pieterse & van Dijk, 2006): efficiency savings resulting from the fact that not all services have to be delivered via all channels and improving client satisfaction by delivering more tailored and flexible services.

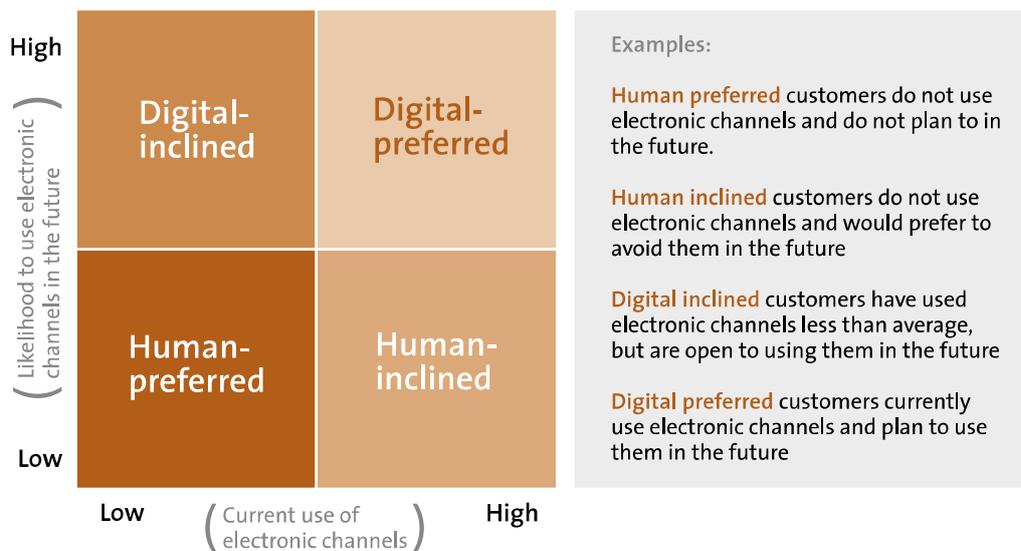
However, this strategy also has a number of drawbacks. Firstly, there are some differences between the public and private sector that make the applicability of this strategy difficult (Ebbers, Pieterse, & Noordman, 2008) as governments have the duty to deliver services to their citizens. A governmental agency, for example, cannot exclude citizens who do not possess a computer from services that are delivered solely via the Internet. A second reason why this strategy is hard to realize is that it assumes that citizens are rationally able to match a certain channel with a certain service. As the channel choice section made clear, citizens often do not behave rationally, but choose their channels habitually.

iv. Integrated Positioning

A better strategy might be the integrated strategy (Pieterse & van Dijk, 2006). This strategy combines elements of the supplemental strategy and the parallel strategy (Ebbers, et al., 2008), The basic idea behind this strategy is that, principally, all services are offered via all channels, albeit not to the same extent and that in the design of the channels its strengths and weaknesses are taken into account. In addition, this approach also emphasises the integration of various functions (including those supplied in the front and back office) in order to be able to provide a seamless service to the customer and exploit efficiency savings (Payne and Frow 2005). Factors influencing the choice of the right channel for the right task are discussed in more detail in the following section (3.1.2).

Various authors argue that integration should be the ultimate goal of channel management (Ebbers, Pieterse, & Noordman, 2008). In this strategy channels are no longer managed separately, but are connected in order to be seen as one single channel. On a national level a few examples of integrated multi-channelling can be found. Canada, for example, aims at improving its e-government services via integrated multi-channel service delivery. Another example is Australia's guide for 'the strategic assessment and development of service delivery channels' (Australian Government, 2006). The Australian Government analysed service/channel fit (see table 1) and based their channel strategy on that analysis. Furthermore, this organisation segmented their client group into four segments based on their current e-channel use (low or high) and future likelihood (low or high) of using electronic channels (see Figure 4). Although this programme cites that citizens differ in what channel types they prefer when interacting with government, it does not tell us why they prefer it and what channel type attributes they perceive as useful in which situation.

Figure 4: Customer Segmentation



Source: Australian Government, 2006

IMCM depends on the fit of channel and service characteristics in conjunction with the personal (situational) and (PES) organisational characteristics (see Pieterse, 2008). In the next two sections, we explore these in more detail.

3.1.2 Channel and Service characteristics: some channels are better suited to supply certain services

The key challenge in IMCM is to (most prominently) match the right service to the right task. Various authors describe certain characteristics of channels and services that are useful in this respect. The most prominent are ambiguity and complexity.

Ambiguity has to do with *meaning* (Daft & Lengel, 1986), it is about not feeling sure of how to interpret information. To give an example from the PES context, in completing online registration forms which would enable automatic vacancy matching, job seekers are often required to classify their previous occupation, sector or skills level to match with definitions suitable for an administrative database. This can leave job seekers struggling to determine, for example, which “SOC codes” are relevant for them or whether, if they were previously a carpenter who sold furniture directly, they worked in “manufacturing” or “retailing”. To reduce ambiguity PES organisations need to confirm whether or not a citizen’s interpretation is correct. Resolving ambiguity calls for a) a lot of interactivity to check for interpretations and b) a certain amount of ‘richness’ in the channel to check for and convey certainty and meaning. Depending on the level of sophistication of the online tool being offered, this may require either the use of F2F and telephone channels for this task, or a strong back-up function for the online channel to ensure data accuracy (and thus avoid – in this example – vacancy mismatches).

Problem complexity is about the number of interrelated actions a client has to take in order to solve a problem or use a service (Ebbers et al., 2008). The more interrelated actions are the more complex a problem becomes. For example, in order to fill in a

benefit form, a citizen has to make many decisions that are often intertwined (if situation *a* changes then does situation *y* change as well). This makes information complex. The higher problem complexity becomes, the more information an individual has to process in order understand a problem. The more complex the service becomes, the greater the likelihood that ambiguity arises. The Australian government (2006) created an overview of how ambiguity and complexity relate to various service channels (see Table 1).

Table 1: Service characteristics (Australian Government, 2006)

Level of complexity	Low ambiguity	High ambiguity
Low complexity	Prefer Internet (usage already high)	Prefer phone
Moderate complexity	Use Internet if confident (increasing usage over time)	Prefer face-to-face or phone
High complexity	Lower usage of Internet (there is willingness if shown how; levels are expected to increase)	Prefer face-to-face

The more generic a service is, the more general the information is and the easier the service can be brought online. However, the more personal a service is, the higher the personal relevance for the client becomes (e.g. a mortgage is a highly personalised and highly relevant service, whereas booking an eight day vacation is a low personal and less personally relevant service). Very often, personal services are more complex (more information is required to target the service to one's personal needs) and this might also increase the ambiguity (albeit that it is a different form of ambiguity). Next, certain characteristics of service channels can be defined. The table below lists the most important (not all) channel characteristics⁶.

⁶ See Teerling (2007) and Pieterse (2009) for a more detailed overview of channel characteristics.

Table 2: Overview of channel characteristics

Characteristic	Traditional			Mobile			Mass media		New Media		Social media	
	F2F	Phone	Post	Mobile Phone	Smart Phone	SMS	TV	Radio	e-Mail	Web	Micro blogs	Social network
Contact speed	--	+	--	+	+	++	+	+	++	++	++	++
Feedback speed	++	+/-	--	+/-	+/-	+/-	n.a.	n.a.	-	+/-	+	+
Personalisation	++	+	-	+	++	+	-	-	+	+/-	+/-	+
Language variety	++	+	--	+	+	+	-	-	+/-	-	+/-	+
Reach (geographical)	-	+	+	+	+	+	+	+	++	++	++	++
Reach (social)	-	+		+/-	--	+/-	+	+	+/-	+/-	--	--
Pull/Push/Interaction							Push	Push		Pull		
Network nature*	1to1	1to1	1to1&1tom	1to1	1to1	1to1&1tom	1tom	1tom	1to1	1tom	1tom&mtom	mtom
Data carrying capacity	+	-	+	-	-	--	--	--	+	++	--	+
Costs per contact	--	-	-	-	-	+/-	+/-	+	-	+	+	+
Complexity reduction	+	-	--	-	+/-	--	--	--	-	+	-	+
Resolve ambiguity	++	++	--	++	++	--	-	-	+	-	+	+

*1to1 = one-to-one, 1tom = one-to-many, mto1 = many-to-one, mtom = many-to-many

The table shows the strengths and weakness of each channel and can be used to assess what channels are suitable for what type of service. However, one should note this table is a snapshot; many of the characteristics are not static and subject to change over time. For example; the 'richness' of websites has increased tremendously in the last 15 years. Where websites 15 years ago consisted mostly of (unformatted) text, current websites consist of more cues (audio, video), possibilities to interact and higher levels of personalisation. This increases the amount of complexity and ambiguity that can be handled via a website.

Pieterse (2009) gives suggestions for what purposes the channels are best suited.

In the following table some suggestions are given for the connection between certain services (tasks) and service channels.

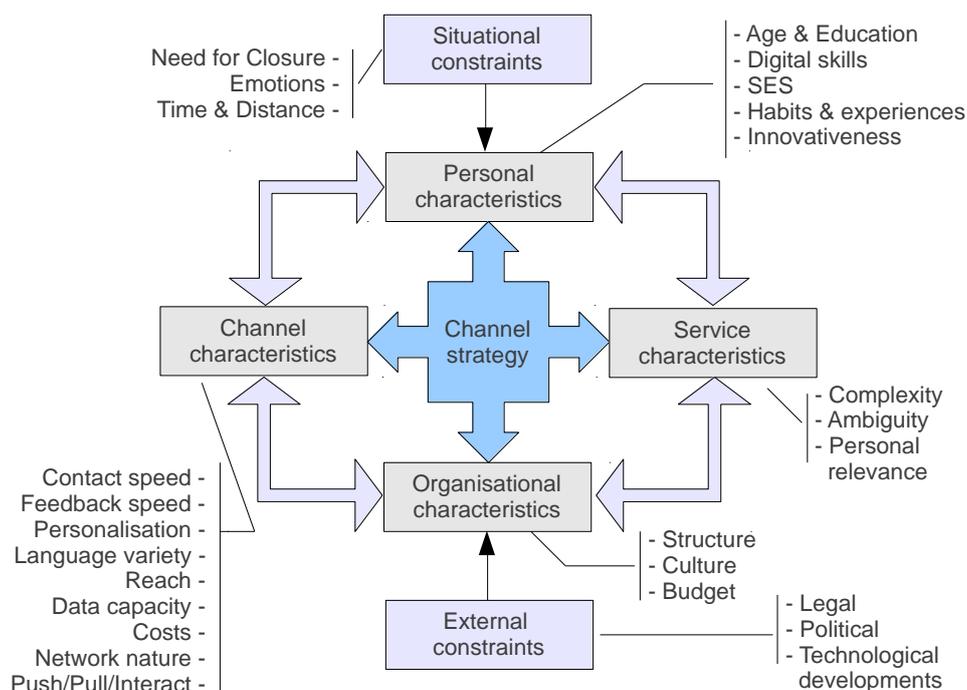
Table 3: Task-channel fit.

Channel	Chosen why?	Suited for what tasks?	Suited for what situations?	Refers to other channels
Website	<ul style="list-style-type: none"> - Easy to use - High contact speed 	<ul style="list-style-type: none"> - Simple & standard tasks - Much information (background) 	<ul style="list-style-type: none"> - To reduce low levels of uncertainty - When emotions play a minor role 	<ul style="list-style-type: none"> - Telephone when ambiguity is high - Front desk when complexity and ambiguity are high - Telephone when closure is needed
Telephone	<ul style="list-style-type: none"> - High contact speed - High immediacy of feedback - Gives closure 	<ul style="list-style-type: none"> - Ambiguous tasks 	<ul style="list-style-type: none"> - To reduce high uncertainty levels - When emotions play a major role - When people are in a rush 	<ul style="list-style-type: none"> - Website when ambiguity is reduced - Front desk when complexity and ambiguity still high
Front desk	<ul style="list-style-type: none"> - Out of habit - Gives closure - Is personal - Offers high levels of service 	<ul style="list-style-type: none"> - Ambiguous tasks and (highly) complex tasks 	<ul style="list-style-type: none"> - To reduce high uncertainty levels - When matters are of high importance - When emotions play a major role 	<ul style="list-style-type: none"> - The website when ambiguity is reduced
E-mail	<ul style="list-style-type: none"> - Easy to use - Gives closure 	<ul style="list-style-type: none"> - Simple & standard tasks - Much information (backgrounds) 	<ul style="list-style-type: none"> - To reduce medium levels of uncertainty 	<ul style="list-style-type: none"> - Telephone when ambiguity is high - Website when (simple) info is needed. - Front desk when complexity and ambiguity are high

3.1.3 A combined framework for Integrated Multi-Channel Management

Based on the analysis of the relevant service, channel, personal and organisational characteristics, as well as the situational and external constraints, we can create an overview of the most important factors that should be taken into account when creating an IMCM strategy.

Figure 5: An IMCM framework



After analysing the most important factors and having defined the goals of the MCM strategy, the next step would be to implement the IMCM strategy.

3.2 Implementing the Integrated MCM strategy

The Multi-Channel E-government report (Ecotec Research Limited, 2009) lists 4 key steps that need to be undertaken in designing and implementing an MCM strategy:

- Identify personal need
- Shape organisations and policies
- Deliver services effectively
- Assess and Measure outcomes

A more detailed set of steps is given by the Dutch 'Channels in Balance' project:

i. Determine the strategy

First determine the strategic goals of the organisation and translate that into service goals and the general MCM goals (e.g. in concrete targets regarding costs and service quality).

ii. Channel configuration

Assessment of a) what services should be offered most prominently via what channels, b) what channels are target to which target groups and c) what parts of the organisations are responsible for the implementation (see section 3.1.1).

iii. Measurement and evaluation plan

The success of MCM depends largely on a good understanding of what influences channel choices and the take-up and reaction to the introduction of new channels. It is wise to think about the measurement/evaluation strategy early in the implementation process. This implies that a) indicators need to be formulated (e.g. certain degrees of customer satisfaction to be achieved; share of online usage aimed for different channels) and b) a method needs to be devised to measure this (e.g. using data from the Management Information System or customer research).

An example of a successful system in the PES context that illustrates the relevance of continuous monitoring is the Italian Labour Market Observatory⁷. This system collects data from the government, employers and job-seekers to create a real-time picture of the job-market in Basilicata region in Italy via a Dashboard. This allows governments to steer the job market in order to improve the procedures to match job supply and demand and change training and education programmes.

iv. Matching channel strategies with organisational developments and change management strategy

Design the (IT) architecture, including the appropriate linking of front-line and back office functions and the required changes in the organisation (e.g. restructuring and staff training). It is very likely that the requirements of staff in terms of their capabilities will change. When the Portuguese PES (IEFP) implemented their NETemprego online portal and saw an increase in the use of the online channels, they also observed a change in the requirements of their staff. Due to the increase in on-line users and clients, they saw a need for a strong and qualified team for handling new procedures (in front-office and back-office). This also implied the need for staff training⁸. The Irish PES developed a two year training course for staff to provide them with the skills to do their jobs more effectively (Sultana & Watts, 2005).

v. Channel Marketing/Steering

Design a marketing strategy to guide clients to the right channel (see also 3.3)

vi. Finally the actual implementation takes place.

Van Veenstra and Janssen (2010) identified 8 key questions that organisations need to answer when implementing a multi-channel strategy:

1. Starting by changing the front office or the back office?
2. Starting by changing the technology infrastructure or the organisation?
3. Changing the channels one by one or all at the same time?

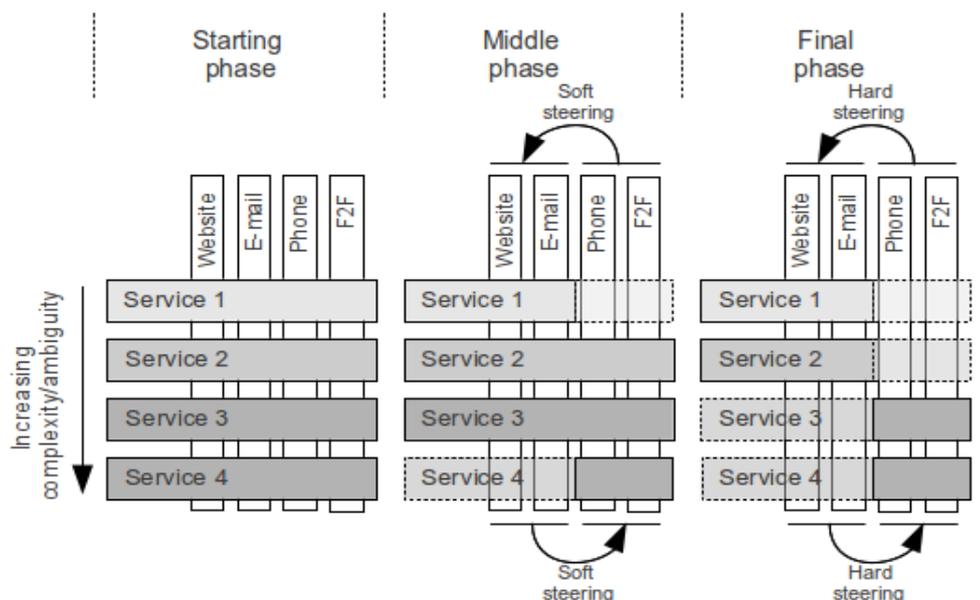
⁷ See: <http://epractice.eu/en/cases/oml>

⁸ See: <http://epractice.eu/en/cases/netemprego>

4. First implementing quick-wins or radically redesigning the whole organisation?
5. Big-bang migration or step-by-step change?
6. Managing migration as a 'project' or as a 'process'?
7. Implementing change top-down or bottom-up?
8. Making middle management or project team responsible for the migration?

It strongly depends on the nature (e.g. structure) of the PES organisation and the context of the MCM process, how these questions need to be answered. It is advised to answer each question using the framework and examples given by Van Veenstra and Janssen⁹. The framework, although aimed at the implementation of MCM, does underscore that the implementation depends on the decisions made in the early stages of the process. Furthermore, it is wise to adopt a gradual implementation process (see Figure 6).

Figure 6: Implementing the channel strategy



In the starting phase, most organisations will probably offer most services via most channels. Based on the analysis of channel-service fit and the alignment of this fit to the various target groups the organisation could start implementing the channel strategy in various stages. A gradual implementation allows 1) general users to slowly get used to the changes, 2) laggards to be taught how to use online services and acquire the necessarily digital skills and c) the organisational culture to change and resistances to change to be overcome slowly. Finally, it allows a subtle steering strategy that could start gently with communication and grows more firm with 'harder' ways of steering (e.g. restriction) (see Teerling & Pieterse, 2010).

⁹ See www.ejeg.com/issue/download.html?idArticle=210

3.3 Channel marketing/steering; how to influence channel behaviour?

Teerling and Pieterse distinguish four main instruments government agencies can use to influence the channel choices their clients make (Teerling & Pieterse, 2010):

- communication instruments
- service or product-related instruments
- legal or restrictive instruments
- economic instruments

The first two instruments are the more 'soft' instruments, whereas the latter two can be seen as 'hard' instruments; they push clients more forcefully towards a certain channel. In practice, governments often use various combinations of instruments simultaneously (Teerling & Pieterse, 2010).

Communication instruments are characterised by the transfer of information from government to citizens. Examples of these are mass media communication, personal communication and/or public relations. The category is focused on improving citizens' awareness, knowledge and perceptions of government services. In communication, a further distinction can be made between strategies intended to better inform citizens and strategies intended to mislead. Education is another important example of the use of the communication instrument.

The 'service' or 'product' instrument, deals with the characteristics of the service or product. Aspects of this instrument include for example the physical appearance of the service environment. In general, the category allows for differentiating the quality of the service across various channels in order to change clients' behaviour. This would, for example, imply that job seekers registering online would get more and quicker updates regarding jobs and vacancies. Such a change in the characteristics of the service might induce citizens to change their channel behaviour. Because the 'product or service' instrument is mostly targeted at providing extra (or lesser) value to a service, the instrument corresponds to what Bitner, Brown and Meuter (2000) define as 'value added services'. Although this instrument discriminates between certain aspects of the service, it leaves the 'core service' untouched, hence it is a pretty soft instrument in that it does not exclude certain groups from a certain service.

Legal or restrictive instruments are aimed at changing citizen behaviour through regulations and restrictions. For example, since 2005, businesses in the Netherlands have been obliged to submit their taxes through the digital channel. This instrument proves to be very effective in inducing behavioural change, but should be used carefully when 'vulnerable' client groups (e.g. digital illiterates) are concerned. An example of restriction is limiting the availability (e.g. opening hours) of certain channels and hence push clients at that moment to another channel.

Economic instruments, finally, impact on clients' channel behaviour through financial incentives. By either increasing or reducing the cost of using particular channels, citizens can be persuaded to change their behaviour. Based on transaction cost theory, it is to be expected that citizens will choose the channel that offers the most benefit for the least cost (Teerling & Pieterse, 2010). While this instrument can be very effective (e.g. the Dutch national railway services used this strategy to push clients from the F2F channel to self-service kiosks), it also leads to inequality for those who cannot use the electronic channels.

4. THE INNOVATION ISSUE: WHAT ARE THE CURRENT DEVELOPMENTS AND CHALLENGES?

In this section we pay special attention to new developments in the field that are especially important to PES organisations. The most prominent of these is the growing importance of a new set of service channels: social media.

4.1 Social media

Social media, the most recent channel development available to PES providers, has the potential to change the way that PES are able to reach clients. It is a rapidly developing medium that should be considered as a new tool to employ in the PES media-mix.

More than 940 million people world-wide use social media services like Twitter, Facebook and LinkedIn¹⁰ (Casado 2011). The growth of this user base has been explosive; 80% of Internet users belong to a social network site, and 60% of these users sign in daily (Casado 2011). The significant growth that has occurred over the past year, with usage across all social media growing 30% worldwide, shows that this is not a youth-centric phenomenon (Casado 2011). Indeed, social media are becoming a powerful means to reach many customer segments.

Unlike traditional media such as television or print advertising, social media provides continuous contact with customers. Users who subscribe to your Facebook page or Twitter account will have your information pushed to their feed of information, making your message something they choose to constantly receive. Moreover, features such as commenting and 'liking' allow users to interact publicly with the messages posted by an organisation or business. These comments and likes provide immediate feedback on the message, making it possible to constantly tailor how a brand or organisation communicates.

The main risk of introducing social media to the PES marketing mix is that constant public communication allows customers to provide both good and bad feedback. The social media platform becomes the face of the brand; it is a place where the brand is expected to provide news and explanations on the good, the bad, and the ugly of its operations. The brand must directly address customer concerns, help them understand offerings, and build a personality that makes them come back.

Different social media serve different purposes. The big three, Facebook, Twitter and LinkedIn, have the most users and provide the easiest to use services for businesses. Each site, however, lends itself well to different types of use:

Facebook: Facebook has the most users of any social media site, with more than 600 million users¹¹ (Atagna 2011). Through Facebook 'Pages,' it is easy for any brand to quickly set up a social media presence that can rapidly reach fans. Facebook makes it particularly easy to attach video, articles, images, and links to

¹⁰ See for an example and illustration: <http://epractice.eu/en/cases/mityca>

¹¹ See <http://memeburn.com/2011/04/social-networking-winners-and-losers-infographic/>

posts, which makes it the easiest for sharing rich media with customers. The downside of Facebook is that it does not have trending topics, like twitter, which means that communities tend to stay insular¹².

Twitter: Twitter is unique in that it only allows users to share 140 character messages with those who choose to follow an account. This means that messages need to be concise and pithy. For this reason, however, it is important to shorten links for posting, and limit posts to important communications (it is very easy to 'over-post' on Twitter). The most valuable aspect of Twitter is that communities tend to become global quickly; the nature of users following users makes it so that information shares quickly across users. If a post breaks prominent information, it is possible to gain tens of thousands of users in hours. The Dutch PES uses Twitter for announcements and to respond to questions from customers regarding their service processes¹³.

LinkedIn: The last of the big three is different from the others in that it is created specifically for professional use. For this reason, LinkedIn is a particularly valuable resource for PES business owners. Through LinkedIn groups, it is possible for customers to subscribe to new information, share resumes, and interact with PES in a strictly professional environment. It also is a great space for PES to interact with business owners, who often have their own company pages on LinkedIn.

For PES organisations just beginning to build their social media presence, there are a few basics steps that can make the process fit well with other channels:

- First, it is important for PES organisations to determine exactly what they seek to gain from adding social media to the mix. Is the goal to reach more customers? Is it to reach current customers better? Is it to share new types of information that doesn't translate well to other medium? Depending on the particular goal, it is possible to use the social media platform differently to best achieve the desired result.
- Next, it is highly advisable to give the responsibility of social media management to one full-time manager. Where it was once normal to give social media use to interns, it is now becoming standard practice to have full time managers that are trained in the brand language and tone, managing negative feedback, and understand the strategic goals of social media use. Having one manager ensures consistency and accountability.
- Lastly, Social media platforms are constantly developing; companies like Facebook are always adding, changing, and removing features that can help and hinder strategies. Remaining flexible is critical to being effective. Furthermore, it is inadvisable to invest large amounts of money on developing technology to integrate unless it is absolutely necessary.

¹² Besides Facebook, many social networks exist that have similar characteristics and are in this context seen as 'equals' (e.g. Google+, Orkut, Hyves).

¹³ http://twitter.com/#!/UWV_Webcare

4.2 The role of social networks and intermediaries

Social Networks are becoming increasingly important in the relationship between governments and their clients. This is due to two reasons; the first is a change in the structure of society. Due to developments such as globalisation and individualisation it gets more difficult to reach audiences. Second is technological development that results in more channels and media available (resulting in a more fragmented media use). Furthermore *social* media facilitate the formation of networks, allowing clients to use multiple information sources at the same time. These developments make it more difficult for governments and thus PES organisations to reach all clients and effectively communicate with them. A solution might be to use certain relevant *opinion leaders* within peoples' networks as intermediaries in the service-delivery process (Young & Pieterse, 2011).

The recent Multi-Channel report from the EC (Ecotec Research Limited, 2009) argues that “*almost invariably socially excluded groups require an intermediary person or organisation to enable them to benefit from a combination of information and transactions, put together to meet their highly specific and complex needs*“, thus highlighting the need to use either a social or formal intermediary in the service delivery process.

An example of the use of intermediaries by PES organisations is the German Surfing to the Job¹⁴ initiative. This initiative aims at training social workers in the use of the online 'Virtual Job Market'. Once trained, these social workers can help young people without apprenticeships and who are unemployed by teaching them to use the Internet to search for jobs, gain digital skills and increase their chances of obtaining a job or apprenticeship. Potential benefits of this strategy are twofold:

1. Less contacts of job seekers via the channels of the PES organisation and therefore an increase in the efficiency of service delivery
2. Better quality of service, due to the (perceived) opinion leadership of the social workers and their strong linkage to the job seekers (i.e. they are better equipped to assess the job seekers' needs than an agent in a call centre).

A potential pitfall is the increase in distance between the PES and the job seekers, resulting in less control over the relationship and the resulting error-proneness of the decrease in direct communication (more noise in the multi-step communication process). The experiences of the German project show that time-constraints and quality of training are important factors to take into consideration when pursuing this strategy. Nevertheless it appears wise to use intermediaries and (social) networks to interact with PES audiences, hence the following is advised:

- Use intermediaries as an additional source of information and make these intermediaries a part of the integrated MCM strategy. Especially to reach socially excluded target groups

¹⁴ See: <http://epractice.eu/en/cases/surfingtothejob>

4.3 Skip the Front-Office: tools that directly connect to the back-office

The main focus of MCM is on optimising the channels the organisation has to interact with clients. However, the entire service-delivery process may greatly benefit from skipping the interaction in the front-office altogether. This can be done in three ways:

- Eliminating processes and contacts altogether
- Letting clients interact with the back-office directly instead of using the front-office
- Pro-active service delivery that prevents the client from using the front-office

Eliminating or simplifying processes is perhaps the most complex but most effective way to reduce the number of contacts in the front office. Although eliminating processes altogether is difficult due to the legal and administrative requirements, simplification of processes may be an alternative. The Portuguese NETemprego¹⁵ initiative for example focused on administrative simplification. This PES automatically converts uploaded CVs to electronic job-seekers' records, thereby eliminating contacts.

Direct interactions between clients' back-offices and PES back-offices is a second opportunity to reduce the contacts in the front-office. Regarding PES organisation, in Sweden, some employers have direct access to the database via xml-files. (the result is that 85-90 % of the vacancies are registered by employers themselves). This strategy bypasses the front-office entirely and is therefore a possibility to realise efficiency gains, reduce errors and improve the speed of administrative handling.

An example of pro-active services that skip the front-office completely is the Belgian Crossroads Bank for Social Security (BE). This organisation pro-actively identifies the social benefits that citizens need, and delivers them through multiple channels. For example, grants such as child support can be automatically detected and granted as soon as the system has received birth information¹⁶. The Dutch Social Security Agency (Sociale Verzekeringsbank) is experimenting with sending text messages to their clients to inform them about the pay dates of their allowances, this greatly reduces the number of phone-calls by clients asking when their allowance will be paid. This does, however, imply that the back-office should be organised in such a way that pro-active service-delivery is possible.

Automatic-vacancy matching is an example of a development that both simplifies processes (less contacts) with pro-active services (lower costs in the front-office) in the PES context.

¹⁵ See <http://epractice.eu/en/cases/netemprego>

¹⁶ See <http://unpan1.un.org/intradoc/groups/public/documents/un/unpan023391.pdf>

4.4 Back-Office optimization and data management

Whilst MCM mostly focuses on the front-office, optimisation of the back-office is a key factor for success. There appears to be a strong correlation between an efficient government back-office system and the satisfaction of users (United Nations, 2008). Back-Office optimisation should focus on a number of issues:

- Streamlining data management (ensuring all data are available via all channels) of the PES organisation
- Optimizing service processes in the back-office (ensuring that transactions are handled quickly and flawlessly)
- Connecting to other organisations to share and obtain relevant information (ensuring the quality of client information and preventing duplication of client information collection)

The United Nations (2008) suggest a number of indicators that can be used to measure the optimisation of the back-office. Some examples are:

- Citizen access to their own data, confirmation of data, and creation of personal accounts and/or profiles;
- e-ID and security systems;
- On-line tracking systems of service progress (timing, response, acknowledgement, etc.);
- Presence of strategy or implementation plan for e-Government back-office re-organization, interoperability, etc.
- Single Sign On (SSO) service availability across departments/agencies;
- Existence of user type segmentation service groupings, which tend to require back-office reorganisation and/or cooperation with other agencies or private and civil entities, and are therefore more citizen-centric than government-centric;
- Website links to other government agencies, at both national and subnational levels; and Website links to relevant private and/or civil sector entities, at both national and sub-national levels

The Digital-Client Dossier¹⁷ is an example from the Dutch PES context on integration of data-files from various governmental agencies in the back-office. This should allow the drawing up of a complete picture of the employment status of Dutch citizens. While this example does not divert fundamentally from other connectors in the back office (e.g. the Belgian Crossroads Bank for Social Security), it generates three fundamental lessons:

¹⁷ See <http://epractice.eu/en/cases/dkdfase2>

- **Lesson 1 - To keep listening.**

In today's world, individuals expect the same level of service from the government as they expect from their bank or insurance company for example.

- **Lesson 2 - Do not force change.**

A project such as this encompasses many different agencies, departments and divisions and will only succeed if organisations adopt it willingly.

- **Lesson 3 - To persevere.**

It requires perseverance to make a technically-challenging, pioneering project like this a success. You must be prepared to take that challenge and see it through to completion. (<http://epractice.eu/en/cases/dkdfase2>)

The main obstacle for these networked forms of government are not the technological difficulties, but organisational considerations (see Van Dijk & Winters-Van Beek, 2008).

5. CONCLUSIONS

In this report we analysed the current state of affairs in e-Government and multi-channel management to identify some key lessons for the Integrated Multi-Channel Strategies (IMCM) of PES organisations. Further, we identified some relevant trends and issues that need to be taken into account when further developing channel management strategies.

The analysis shows that e-Government as a whole is making good progress, many basic, standard services are being supplied and used online. However, we saw large differences between the different countries. The analysis of e-Government further showed that many of the PES clients are lagging behind in their use of advanced services. This is probably due to their lower than average socio economic status and digital skills.

This provides challenges for PES with respect to planning to MCM strategies in a way that ensures inclusion, for example through enhanced training and making relevant hardware and software available in their offices. Finally, to improve e-service quality and client satisfaction it is advisable to collect usage and customer satisfaction data (as a minimum) in order to monitor progress and adjust strategic approaches.

In the third chapter we focused on MCM. A MCM strategy ideally focuses on three issues: a) a formulation of goals, b) an analysis of relevant factors and c) the steps to implement the strategy. The two main goals of MCM are cost-efficiency and service quality (customer satisfaction). While both goals are important, it must be noted that it can be difficult to achieve both at the same time and that clear planning is necessary to understand when certain service and financial goals and targets can be realised. Four different MCM strategies can be defined, although none of these tend to exist in a 'pure' form. IMCM provides the most holistic view towards understanding the strengths and weaknesses of different channels and the factors which are required to achieve successful implementation while realising the effectiveness and cost efficiency goals.

In the final chapter we discussed the most relevant current trends and issues. The use of social media is the most prominent of these. While these offer possibilities to a) reach current target groups, b) engage in fruitful discussions and c) be used for pro-active service delivery, PES organisations should carefully weigh the pros and cons before using them.

The general conclusion is that IMCM is not just the implementation of a new channel or new service. In fact it is a *change management* issue that can only succeed when embedded deeply in the organisation with the support of the top-management in order to make the required changes in organisational culture and structure. IMCM should be organised according to a *plan* that is based on the organisational and service-delivery missions and consists of a careful analysis of the relevant factors (as presented in this report) and a plan in clear measurable steps.

5.1 Recommendations

1. **Set clear and measurable goals in the MCM strategy.** Clearly define the desired levels of cost reductions (or investments), the levels of efficiency, service quality and customer satisfaction.
2. **Measure, evaluate and adjust.** The only way to ensure the goals are being met is to identify clear indicators and measure the progress of implementation and the MCM success. This goes beyond measuring numbers of contacts and services used, but also comprises channel behaviour across channels, customer satisfaction and customer needs. Furthermore, these measurements need to be used to benchmark the PES' own progress as well as other PES'.
3. **Focus on Integrated MCM.** The Integrated strategy is the only strategy that tries to meet both the MCM goals (efficiency and satisfaction) whilst not excluding groups that are lagging behind or other groups that cannot be excluded through a supplemental strategy.
4. **Create a service-channel matrix.** That takes into account the main segments in the client population, the organisational characteristics as well as the external and situational constraints. This matrix forms the blue-print for the implementation of the channel strategy.
5. **Implement in clear steps.** Six steps have been defined that can be used to create a plan to implement IMCM. Lessons from other organisations suggest that staff training, measurement and evaluation are key steps that are often neglected.
6. **Devise a channel marketing mix.** Use a mix of instruments to steer clients to the right channels. At first softer steering should be used to increase skills' levels and experiences. Later, harder measures might need to be considered to steer those acting out of habits to the more efficient and effective channels.
7. **Carefully consider the use of social media.** Social media have their own distinctive value in the channel mix (see Table 2). This renders them suitable for specific types of services. However, they require investments and it is unclear whether they will lead to cost efficient service-delivery. They should be implemented for specific purposes and not to be 'part of the hype'.
8. **Use intermediaries.** Social and formal intermediaries are not service channels but are sources of information that can be used by PES organisations to increase the effectiveness and efficiency of the service-delivery process. Certain opinion leaders are better in conveying PES messages than the PES itself.
9. **Skip the front-office.** An important measure to reduce costs in the front-office is to let clients interact with the back-office directly. First evidence¹⁸ in this area suggests that cost-savings can be obtained through the deployment of such tools as automatic-vacancy matching and e-books.

18 See the comparative paper on Integrated Multi-channelling

10. **Optimise the back-office.** IMCM heavily relies on a proper functioning of the back-office. For a seamless integration of all channels, all data needs to be synchronized across the different channels and all processes need to be handled flawlessly. This is often not the case and this leads to extra contacts in the front-office. In terms of cost-savings this is an area where a lot can be gained.

6. REFERENCES

- Atagna, M. (2011, April 15). The Current State of Social Networking: Winners and Losers.
- Australian Government. (2006). *Delivering Australian Government Services: Managing Multiple Channels*. Canberra: Commonwealth of Australia.
- Bitner, M.J., Brown, S.W. & Meuter, M.L. (2000). Technology Infusion in Service Encounters. *Journal of the Academy of Marketing Science*, 28(1), 138-149.
- Casado, P. B. (2011). Mityca: Ministry of Industry Portal for Social Networks in Spain. Retrieved from <https://oficinavirtual.mityc.es/mityca/>
- Daft, R.L. & Lengel, R.H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*, 32(5), 554-571.
- van Deursen, A.J.A.M. (2010). *Internet skills. Vital assets in an information society*. Enschede: University of Twente.
- van Deursen, A., van Dijk, J. & Ebbers, W. (2006). Why e-Government Usage Lags Behind: Explaining the Gap between Potential and Actual Usage of Electronic Public Services in the Netherlands. *Lecture Notes in Computer Science (4084)*, pp. 269-280.
- van Dijk, J.A.G.M. (2005). *The Deepening Divide, Inequality in the Information Society*. London: Thousand Oaks.
- van Dijk, J.A.G.M. (2006). *The Network Society, Second edition*. London: Thousand Oaks.
- van Dijk, J. & Winters-van Beek, A. (2008). The Perspective of Network Government. In A.Meijer et al. (Eds.) 2008 *ICTs, Citizens & Governance: After the Hype!*, IOS Press Series 'Innovation and the Public Sector'
- Ebbers, W., Pieterse, W. & Noordman, H. (2008). Electronic Government: Rethinking Channel Management Strategies. *Government Information Quarterly*, 25(2) 281-291.
- Ecotec Research Limited (2009). *MC-eGov: Study on Multi-channel Delivery Strategies and Sustainable Business Models for Public Services addressing Socially disadvantaged Groups*. Brussels: European Commission, DG Information Society and Media, ICT for Government and Public Services Unit.
- Fountain, J.E. (2001). Paradoxes of Public Customer Service. *Governance: An International Journal of Policy and Administration*, 14(1), 55-73.
- Heeks, R. (2006). *Implementing and Managing eGovernment: an International Text*. London: Sage Publications.
- Kumar, V., & Venkatesan, R. (2005). Who are the multichannel shoppers and how do they perform? Correlates of multichannel shopping behaviour. *Journal of Interactive Marketing*, 19 (spring), 44-61.

- Moon, M.J. (2002). The Evolution of e-Government among Municipalities: Rhetoric or Reality? *Public Administration Review*, 62(4), 424-433.
- Mosley, H. Schütz, H. & Breyer, N. (2001). *Management by Objectives in European Public Employment Services*. Berlin: Wissenschaftszentrum Berlin für Sozialforschung.
- Nesling, S.A., Grewal, D., Leghorn, R., Shankar, V., Teerling, M., & Thomas, J.S. (2006). Challenges and Opportunities in Multi Channel customer management. *Journal of Service Research*, 9(2). 1-18.
- Payne, A. & Frow, P. (2005). A Strategic Framework for Customer Relationship Management. *Journal of Marketing*, 69(October), 167-176.
- Pieterse, W., Ebbers, W. & van Dijk, J. (2007). Personalization in the Public Sector. An Inventory of Organizational and User Obstacles towards Personalization of Electronic Services in the Public Sector. *Government Information Quarterly*, 24(2), 148-164.
- Pieterse, W., & van Dijk, J. (2006). Governmental Service Channel Positioning. In A. Gronlund, H.J. Scholl, K.V. Andersen & M.A. Wimmer (Eds.), *Communication Proceedings of the Fifth International EGOV Conference 2006*. Krakow, Poland: Trauner Druk.
- Pieterse, W. (2008). *Kanaalstrategie [Channel Strategy]*. Enschede: Institute of Telematics/Novay.
- Pieterse, W. (2009). *Channel Choice; Citizens' Channel Behaviour and Public Sector Service Strategy*.
- Pieterse, W. (2010). Citizens and Service Channels: Channel Choice and Channel Management Implications. *International Journal of Electronic Government Research*, 6(2), pp. 37-53.
- Pieterse, W. (2010). *Van het Kastje naar de Muur; onderzoek naar kanaalsturing en kanaaloptimalisatie. [From Pillar to Post; Study on Channel Steering and Channel optimization]*. Whitepaper. Amsterdam: Sdu information Solutions
- Scheepers A. & Kommers, C. (1994). De overheid als dienstverlenende instelling. In A. Zuurmond, P.H.A. Frissen, J. Huigen, I.T.M. Snellen & P.W. Tops (Eds.), *Informatisering in het Openbaar Bestuur*. Den Haag: Vuga.
- Seybert, H. & Lööf, A. (2010). Internet usage in 2010 –Households and Individuals. *Eurostat, data in Focus 50-2010*. Eurostat.
- Sultana, R.G. & Watts, A.G. (2005). *Career Guidance in Europe's Public Employment Services: Trends and Challenges*. European Commission, Directorate-General for Employment, Social Affairs and Equal Opportunities.
- Teerling, M. (ed.) (2007). *Multi-channel management; de stand van zaken*. [Multi-Channel Management; State of the Art]. Enschede: Telematica Instituut.
- Teerling, M. & Pieterse, W. (2010). Multichannel marketing: An experiment on guiding citizens to the electronic channels. *Government Information Quarterly*,

27(1), pp. 98-107.

Treacy, M. & Wiersema, F. (1997). *The Discipline of Market Leaders: Choose Your Customers, Narrow Your Focus, Dominate Your Market*. Cambridge, Ma: Perseus Books.

United Nations (2008). *United Nations e-Government Survey 2008*. New York: United Nations.

van Veenstra, A and Janssen, M. (2010). Migration Strategies for Multi-Channel Service Provisioning in Public Agencies. *Electronic Journal of e-Government*, 8(2), 215-226.

Young, L., & Pieterse, W. (2011). *Government to citizen communication in a networked world: Integrating network and communication theories to inform strategic communication*. Paper presented at the International Communication Association, Boston, MA.