# Leveraging Social Media within Integrated Service Delivery of Personalized Public Services towards Proactive E-government

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#### Abstract:

Governments all over the world have had to continually come up with new strategies to advance and build e-government as a result of the incorporation of the newly developed digital technologies. As the front office is directly tied to communication, there is an ongoing push for new ways to communicate during the process of public services delivery. Social media platforms, as the most common phenomenon that technology has to offer to humanity, have shown to be effective tools for communication exchange. Social media are recognized as "window of opportunity" and crucial component of integrated service delivery for e-government development. This article focuses on personalized public services as the highest level of sophistication that some public services can acquire in the context of e-government projects aimed at becoming smart government. The paper's research technique is a case study of a current situation in the Republic of North Macedonia. The motivation for the proposed solution comes from the most recent published research on nations with comparable levels of e-government development. The purpose of this study is to point researchers and IT professionals in the direction of incorporating social media into the service delivery process for public services that can achieve a level of personalisation.

### **Keywords:**

social media, integrated service delivery (ISD), proactive public services,

## 1. Introduction

From past to the present, e-government has been associated with monitoring and applying the latest technologies, with the aim of leveraging their benefits in enhancing the level of operation of institutions, on the one hand, and improving and facilitating the delivery of public services to users, on the other hand. Although the back office and the functioning of the institutions, along with their connection and external functioning, is the core of e-government [6], the segment of the front office is the part of the public sector that receives the most attention from those who invest (i.e. the state), and those for whom those investments are intended (i.e. citizens).

The incorporation of digital technologies has revolutionized the way governments provide services to their citizens. The complexity of digital public services varies, and such services can be delivered in a variety of manners [18]. Hence, the improvement of the citizen-government relationship is the most

important task placed on the way to achieving the government's challenges for the citizens and within their objectives. Although at the beginning the goal of online services was to make the delivery of services more user-friendly, today this is no longer enough: the focus is placed on the delivery being adapted to the habits of citizens regarding the use of technologies. Even more, the focus is slowly shifting towards reducing the administrative burden of citizens, by achieving proactivity on the part of the state in the realization of a certain number of services that allow it. Scholta and Lindgren [26] suggest that public organizations need to be proactive in digital public services in the approach to their clients / for what concerns the approach to their clients / so as to approach their clients. This means that the state has to sustain a process of continuous improvement of the interactions between users and government. In this context, IT specialists, fostered by the intense development of numerous digital technologies and their widespread application, were pressured to provide various creative ideas for integrating those technologies. The purpose of such integrations is to meet the citizens' requirements, as much as feasible. So, IT experts use already existing information on citizens' technology use and application habits, and create service delivery customized to the users' habits. This has led governments to consider integrating existing and widely used technologies and accomplishing integrated service delivery (ISD).

ISD, can be defined as the act of bringing together and merging digital technologies for the delivery of public services, in order for citizens to have seamless access to these services, depending on their preferences and needs [14]. Such system opens the possibility for further development: namely, it gives the government an opportunity to change its approach from reactive to proactive. Although a number of solutions, frequently technical, have been elaborated to support ISD, the authors agree that there is still opportunity for future research in terms of the digital technologies that may be included in ISD.

As social media become "window opportunity" because of their widespread use, attempts are carried out to identify the ways to leverage these platforms in e-government initiatives, in order to facilitate communication, encourage citizen engagement, and optimize public service delivery [5]. UN [28] as an international survey, indicate that four out of five countries now have a national information portal containing links to government social media accounts, on platforms such as Facebook and Twitter. This situation results in a high uptake of online services, which is especially important on the path towards a fully digital government. Unfortunately, only a limited number of countries can brag of such accomplishments, which also serve as an excellent example of a benchmark. According to the EU's e-Government Benchmark for 2020, North Macedonia is ranked at the bottom of the list comprised of 44 countries covered by the study, in respect to the possibility for complete online service [7].

The paper shed light on the specific challenges faced by Macedonian citizens in the process of renewing personal documents, showing the shortcomings and the wrong, extremely outdated and dysfunctional concept behind the system created in e-government direction. As a result, the Macedonian scenario presents an intriguing framework for exploring the potential benefits and problems of integrating social media into e-government services, as part of an ISD which can lead to the creation of a stable base for a proactive approach of the state towards the citizens, especially for what concerns the delivery of certain public services.

This paper is structured in five sections, as follows: section 2 discusses the state of the art of social media and e-government research. In the third section we briefly elaborate on social media and integrated service delivery. Next, in section 4 we present a specific case study that can be used as contribution to theory and to streams of administrative burden and proactive digital public service produce – this represents the scenario where social media are used as part of the ISD. Finally, section 5 of this paper draws several conclusions and recommendations for further research.

# 2. Social media and e-government: the state-of-the-art

Almost a quarter of a century ago, an increase was noticed in the need to get more value out of public administration information technology investments, and the discussion over how to do so is becoming progressively more heated. As a result of this, many e-government programs and research efforts are

centered on improving online service delivery [15]. Modernization of services through processes of reconstruction, and the adoption of new information technologies and systems, are often fundamental components of such improvement efforts [12].

In the second phase, following the rapid increase of ICT (Web 2.0), the possibility of social media becoming an important aspect of e-government development appears obvious, and the hope is that such development will have a substantial impact on how services are delivered in the public sector [19]. Creating new service delivery channels to serve citizens, and especially including social media as a channel, in conjunction with other technologies and applications, is recognized and recommended as a way of providing citizens with accessible tailored e-government services [3].

During the past decade, a body of research articles on the potential importance of social media in e-government emerged. Some papers are related to literature reviews [10, 12], while others are focused on describing and analyzing specific case studies where social media are involved in e-government functionality [9, 13]; Tursunbayeva and her colleagues [27] "identify, classify, critically appraise and synthesize the corpus of published research evidence relevant to the adoption, use and impacts of social media for e-government in the public health sector" with focus to social media as a channel for organization-citizen interaction (dissemination and feedback). Bharosa and his colleagues [4] analyze integrated service delivery from a government institutions aspect, having for focus a set of principles needed for ISD functioning, including social media as one of the channels. However, there is still very little empirical research on governments' use of social media platforms [16]. Some of the studies explore how to leverage social media to achieve e-government goals such as e-participation [2]. Going even further in this direction, some of the authors investigate Facebook posts as something that requires human attention, and therefore makes it a challenge for government organizations to engage through this medium to communicate with their citizens [8]. Only a small portion of this pool of research publications explores how social media could potentially be integrated into the service delivery process [19].

Recently, the researchers gathered citizens' opinions and attitudes on the use of social media in communication with public institutions. The goal of this research [12] is to discover what factors can persuade citizens to use social media for public service delivery; the outcomes of this study are intended to aid government organizations and policymakers in making decisions to provide a more citizen-centered service delivery.

Adae et al. [1] give examples of cases for integrating e-government portals with social media accounts in the African public sector. They determined that the usage of government portals to provide e-government services can be supplemented by social media accounts that provide information about the services and "serve as an avenue to engage the public about e-government services".

Some researchers point out the proactivity of public organizations to be desirable in the digital public services delivery. Proactivity advocates advise public institutions to change their approach to the citizens; citizens to receive public service even if they do not do anything or merely only confirm that they want that public service. Scholta and Lindgren [26] contribute to this theory by defining the conceptual changes that proactivity necessitates in digital public services. The importance of their work comes from their call for collaborative research by scientists from public administration, information systems, and service management, to connect the flows (administrative procedures) related to the administrative burden of citizens in order to achieve state proactivity in terms of delivery, through the integrated delivery of services employing various technologies.

# 3. Social Media and Integrated Public Service Delivery

### 3.1. Integrated service delivery (ISD)

The main problem in public service delivery is the fragmentation of each department and the scarce attention paid to information system development and user needs. The fragmentation and "silo" government structure complicates easy communication, and this results in customer dissatisfaction.

Public agencies continuously supplement their service delivery channels with online services, in order to improve service delivery and to make it more user-friendly. The policies and rules for improving service delivery are mostly based on customer oriented management paradigms, and they do not take into consideration complex customer interaction processes [4]. As a remedy for "the fragmented landscape of public administration" [22] Integrated Service Delivery (ISD) is developed.

ISD is the process of bringing and fitting together government services, so that citizens can access these services in a seamless fashion, based on their wants and needs [14]. All actors included in the process of creation of ISD (architects, designers, system developers, programmers, administrative staff) need customer expectations as input, as well as information concerning citizens' use of public services through technological means.

ISD covers a wide range of initiatives: in the past it concerned traditional channels (such as the telephone and service desk) which remained from the online channel that include services over the Internet or via unstaffed kiosks. As a result, citizens and businesses now use a variety of channels to contact a public agency; the separate development of different channels of communication available for a single service (multi-channel delivery)has resulted in inconsistencies of interfaces. To overcome the drawbacks of multiple-channel service delivery, the different channels should be integrated and coordinated. Creating ISD has advantages for both the government and its clients.

#### 3.2. Social media

Social media is regarded as a component of the Web 2.0 movement, which is distinguished by user-generated content, online identity building, and relational networking. Social media programs such as Facebook<sup>TM</sup> and Google+<sup>TM</sup>, microblogging services such as Twitter<sup>TM</sup>, blogs, wikis, and media sharing sites such as YouTube<sup>TM</sup> and Flickr<sup>TM</sup> are all examples of social media [23]. According to Landsbergen [16] the social media is a set of tools that serve several social communication needs; a communication tool rather than an IT application; a tool that supports communication within social networks.

Social media is rapidly growing, because it supports some important social needs. Governments will need to use social media in the process of service delivery because of the following two reasons:

- firstly, social media as a tool: 1) allows individuals to use human and other networks more easily; 2) expects interactive rather than broadcast communications; 3) is powerful because it uses "multimedia" content (video and audio), not only text; and 4) relies on measures and objectives to facilitate communication. Its effectiveness comes from allowing two-way, interactive communication. People desire quick access to the information they require and to the relationships they wish to build.
- Secondly, metrics are a critical point, since they are an integral component of this culture. Messages, postings, and communications, are all counted by people in various groups. These network-influence indicators emphasize the importance of the message and the communicator. The open-source nature of the technology allows for the collection of this data.

## 3.3. Proactive public services

Public services are defined as services provided to the public to address social or economic ills or issues, as well as any instance in which citizens, businesses, or others, interact with the administration and some form of information or financial exchange occurs [21].

Proactive public services are services that a public organization "pushes" toward citizens or businesses based on their needs, circumstance, personal preferences, life events and location [17]. A public sector

organization operates proactively when it approaches the recipient before the recipient contacts the public sector organization [25], thus acting ahead of time.

As proactive public services can be considered a next step in digital government development [17], they are usually based on digital public services, services that are delivered or mediated via digital technology.

## 4. Macedonian Case Study

Macedonia's adoption of e-government, and thus of the means of realizing service delivery, is quite disintegrated and unclear, as in many other countries that are in the middle of the process of e-government development. In such countries there are a variety of avenues for information sharing, through both traditional and online channels, although the traditional one remains dominating. Through different phases of e-government development there are attempts for online public service delivery: each institution has its own website with online services; there is a One-Stop-Shop - www.uslugi.gov.mk; but also e-government kiosks have been constructed in the larger towns. Some of the online services just provide information, such as contact information (e.g. information for phone calls, as a method of communicating with government institutions, and e-mail address), but others provide different online applications or tools. It is very rare to have a complete online service delivery. Within the context of e-health, Macedonians receive individualized service: for instance, when they have an appointment with a specialist they receive a SMS reminder. In general, the majority of service delivery still happens through traditional means (e.g. institutional front desk and paper documents). The TV and the radio are the most commonly utilized channels by the government, to deliver information to the citizens (one-to-many), and sometimes social media are employed, too. The One-Stop-Shop option is weak, and mostly information-based. Moreover, if some examples of complete online service delivery exist, they are not user friendly. Some websites should allow citizens to simply apply for scheduled terms to approach institutions, but this functionality is frequently out of order and poorly organized (e.g. the citizen must manually check which term is free - the system does not automatically present free terms, which leads to an unnecessarily time-consuming research for free terms).

This study presents an uncommon circumstance that occurred in the Republic of North Macedonia. As a result of the country's renaming, it is required by the law that all citizens' personal documents, regardless of their expiration date, be replaced with new ones, from May 2023 to February 2024. As a result, the Ministry of Internal Affairs (MIA) is required to issue personal paperwork such as ID cards, passports, and driving licenses to all Macedonians. This places a significant strain on the institution's capabilities, especially since many Macedonian residents living abroad visit Macedonia over the summer and, as a result, must apply for, and receive, these public services. It is critical to remember that these services are sequential: first, ID cards, then passports. Each document issuing procedure takes an average of 10 days.

All service delivery begins with informing, especially when it is not the typical issuing of documents, as in this case. The procedure of issuing documentation necessitates applying for a term, filling out an application in person in MIA premises, being present at the institution for taking photos, waiting for documents to be issued, and physically being present at the institution to collect the personal document. The overall process of issuing these services was as follows: citizens were informed by the government mainly utilizing TV and radio as traditional tools, and online information was also employed, via the ministry of Internal Affairs' website. Social media platforms such as Facebook and Twitter were used, too. At the beginning, to take an appointment to visit MIA it was necessary to use a tool on the Ministry of Interior Affairs' (MIA) website, that was, however, not sophisticated. This function has stopped working in the past 3-4 months, shortly after the law went into effect, and now, at its place, the MIA's website provides information regarding phone calls as a channel for service dating. The number found on the website refers to a call center that provides assistance to MIA, but getting a hold of service is often problematic. A large number of citizens confronted with this circumstance visit MIA offices in search of information, or to schedule appointments. Furthermore, another absurd situation takes place - a citizen who

needs to change all three personal document, in an ideal time table of 1 month, needs to visit the MIA facilities minimum three times.

#### 5. Conclusion and Contributions

A number of public services, such as personal documents (ID, passport, driving license), have limited duration. This characteristic allows such public services an opportunity to potentially achieve the highest level of sophistication of online services in e-government. To reach the so-called personalization phase of e-government development, the government must "take care" of the day of expiry of documents and notify individuals about it on time. Attaining this level of sophistication in public sector delivery relates to a higher level of e-government development known as smart government. Smart governments shift their function from reactive to proactive, which means they initiate and execute services without prior engagement or application by residents. This kind of situation requires the governments to find a cheap, but also very close communication channel to the citizens, closest to their habits.

Social media has become a platform that is easily accessible to anyone with Internet connection, and the favorite communication channel for a large number of people. So, it has opened the door for governments to think of utilizing such channel in a strategic way and to benefit from social media in the process of service delivery as part of the ISD. This is especially related to public services delivery that can lead the government to become a smart government by interacting with its citizens in an effective and efficient way, according to citizens' habits of using technology. According to Dadashzadeh [8] a distinct approach is required, which means that governments' use of social media should be organized; governments should focus on simplification and collaboration and,by using the most widespread tools, such as social media, it should provide efficient client-focused services, though electronic delivery. In the strategy of creation of ISD Scholta and Lindgren [26] suggest that public organizations need to be proactive in digital public services delivery, where the organizations have to approach their clients, rather than the other way around.

The present Macedonian case study is a good example for the identification of obstacles as possible opportunities for improvement. The lack of communication, need of two-way communication, user friendly application form, and approach to service delivery through technological tools that citizens habitually use, suggest that Macedonian e-government initiatives need to provide significant insights linked to the integration of social media in the integrated delivery of public services within e-government.

The purpose of this study is to support and guide government officials, policymakers, and researchers in making decisions on the strategic incorporation of social media in e-government service delivery. The SMS reminder example in Macedonian e-health demonstrates that Macedonian e-government has the potential to be proactive if it uses the most generally widespread communication technologies, which are already a part of the population's daily life, and are essentially inexpensive to use. The goal is to encourage IT experts to explore ways to include social media into integrated public service delivery, for instance, to create a tool to reach citizens with reminders; through such innovations the country would finally become smart. This case study can be used as an excellent example that contributes to existing theory, since it points out the problems that exist in digital public services and currently keep them from achieving a high level of sophistication, and call for joint research by scholars of public administration, information systems, and service management, to relate the research streams of administrative burden and proactive digital public service.

This paper will contribute to the body of overall literature and knowledge on the incorporation of social media platforms into the ISD process. The findings will shed light on the potential benefits of increased involvement, improved communication, and streamlined service delivery as a result of social media integration into the service delivery system. Future research is expected to show how integration can streamline application processes, promote inclusion, and improve overall service delivery by demonstrating the capabilities of social media toward achieving the 'human-centered digital transition' that Ursula von der Leyen, President of the European Commission, believes in [7]. In that direction, the challenge for the next

paper can be answering to the question "How can social media enable governments to enact a better proactive service delivery in a way that they have never done before?"

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