

# e-Government Readiness, Strategy and Two Different User Groups - in Austria

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**Abstract.** This paper offers a description of the e-Government Strategy in Austria and its e-Government readiness, and looks at how two different user groups are experiencing e-Government in Austria. Studies conducted show that adolescent citizens are more optimistic and enthusiastic about the possibilities offered whilst the municipalities are more skeptical. The Austrian e-Government strategy, the decisionmakers and IT solution providers must understand the needs of all stakeholders and provide viable solutions accordingly.

**Keywords:** e-Government, e-Participation, municipalities, adolescents, e-Government readiness, e-Government Strategy, Austria.

## Introduction

### 1 The Austrian e-Government Strategy

The Austrian e-Government Strategy<sup>1</sup> states that: “All policy making of public administration has to be carried out by electronic means and to be simple and quick, without requiring in-depth technological knowledge. Thus, public administration has to utilize modern electronic media for communication”. While this clearly marks a strategic viewpoint, one question inevitably arouses: Where does “All policy making [...]” start and where does it end? Should each and every “conventional” process of public administration be made available electronically or should a more careful approach be taken?

Only the most basic and fundamental principles of what comprises the Austrian e-Government strategy are anchored by law. The federal structure of Austria, with its layers state, province, town and municipality and their respective sovereign rights, do not really allow for a centralised e-Government strategy. Defining technical terms and standards in law is impractical, as terms and standards are subject to frequent changes. Thus the states, provinces, towns and municipalities have agreed to set up a “vertical

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<sup>1</sup> <http://www.digitales.oesterreich.gv.at/site/5237/Default.aspx>

layer” to ensure a common understanding, mutually accepted conventions and methods as to how the e-Government strategy should be implemented. The conventions on the Austrian reference server<sup>2</sup> are the authoritative resource for data formats, interface descriptions, procedure models and good practices of e-Government in Austria. By defining and agreeing to the decision making process, it is possible to achieve normative conventions, although these do not have legal status.

## 2 e-Government Readiness

In 2001, the Austrian province Salzburg applied an all-or-nothing strategy with the goal that by the end of 2004 all public administrative processes should be electronic. In 2006, the provincial accounting office (Landesrechnungshof) reported a defeating result: 83 pages described how the project was 30% over the set budget, behind schedule, missing implementations, and that during the period 2001 - 2005 only a total of 577 electronic applications had been received [1]. Further major concerns were the missing measurement of frequency (how often a procedure is actually used) and that stakeholders had not been involved, leading to poor and unpractical solutions.

Project management is a key factor for the successful implementation of e-Government services. It is important to identify the relevant processes for electronic implementation and to take into consideration factors such as frequency, cost and benefit, risk and utility and impact. Answers to some of these factors can easily be obtained by asking the stakeholders, for example, by using a survey. Then, on the basis of the data received, a decision should be taken.

The report on e-Government implementation in Salzburg focused on the failures in project management. However, another important aspect was quietly ignored: the ex-ante readiness for e-Government. Readiness must be present in the following areas [2]:

- Leadership and governance readiness assessment: the leaders must agree upon and recognize e-Government as an important part of the governmental strategy which supplements public services and enables faster, more flexible and friction-free service delivery for business and citizens.
- Legal readiness: does the state have a legal framework which allows electronic application and communication with the governmental agencies?
- Organizational readiness: digital communication flows are very different to the traditional information flow in governmental institutions. Traditionally, these are organized in a strict top-down, bureaucratic manner. An “e”-ready state has to design a process model showing how to deal with digital information flows, and then legally anchor them.
- Competency readiness: both government and administrative personnel must have the knowledge to deal with electronic communication facilities, not merely on a technological basis but on the conceptual side too. An indicator

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<sup>2</sup> <http://reference.e-government.gv.at>

for competency readiness is whether internal trainee programs focusing on ICT knowledge mediation are available.

- Technology readiness: this encompasses all the ICT facilities necessary for electronic information brokerage, communication and service delivery such as hardware, software and network infrastructure. In underdeveloped countries, even a stable source of electricity may be an issue that needs to be taken into consideration.
- Customer readiness: despite the availability of the technical infrastructure, it is impossible to expect an even distribution of e-Service acceptance. "E-" acceptance is influenced by literacy rate, rural / urban residence, cultural factors and accessibility. For example, some people strongly prefer face-to-face communication over electronic communication.

### 3 Two Different e-Government User Groups in Austria

#### 3.1 User Group 1: The Municipalities

In 2008, the Danube University Krems invited all 2357 Austrian municipalities to participate in an online survey hosted by the Austrian Federal Bureau of Statistics. The project was to look at the Austrian municipalities' availability of e-Services, participatory facilities and e-Government readiness. The survey could be accessed on the web platform 10th July – 22nd August 2008.

2357 Austrian municipalities were invited to participate, 1249 completed the questionnaire, which represents an excellent return rate of almost 53%. Some of the interesting results obtained were:

- 93% of the municipalities have a website;
- 49.14% of the municipality websites have the domain name "gv.at" (governmental domain);
- 79.76% of the municipalities believe that the website adds value to the way the municipality is perceived;
- 1.6% of the municipality employees are assigned to ICT-related work;
- 87.9% of the municipalities have a network structure;
- 94.9% of the municipalities have antivirus;
- 87.7% of the municipalities have a firewall;
- 54.8% of the municipalities back up their data;
- 68.3% of the municipalities believe that the adoption of IT processes will lead to increased efficiency and simplify daily work.

The IT infrastructure available per employee (PC, laptop, internet connection) and the type of network connection are further important indicators for e-Government progress. The correlation between the number of employees and the number of available PC's or laptops is 0.57, or a mean of 1.33 employees per computer. This number makes sense as it takes into consideration operative personnel too, which may not be equipped with computers at all.

Awareness of IT security is generally very good: employees know about the risks of viruses and malware, and computer systems are secured – but they often lack

backup strategies. Since an ever increasing dependency on working computer appliances is to be expected, a working day (or even longer) lost due to defective hardware can be catastrophic. Training programs for public administration need to address this issue.

### 3.2 User Group 2: Adolescent Citizens

The other side of the coin is highlighted by the projects “Mitmachen.at – Move Your Future” and “Jugend2help” led by the Danube University Krems. These projects investigated the attitudes and expectations of those citizens assumed to be most technically adept and “savvy”: adolescents. Adolescents, also known as the „online generation“, digital participation is a key success factor for involvement and integration into the evolving e-State. They must be recognised as a significant target group of e-Government and e-Participation users; their interests include further education, obtaining a driving license, starting a family, housing and re-location. These are services which can be facilitated by online information, communication and transaction.

In Austria, 95% of the 14–18-year-olds use the internet [3] so online-based participation projects are possible (as long as they are made accessible to everyone). A common prejudice is that young citizens are not interested in politics at all, yet a survey [4] reveals that 86.7% of all adolescents do want to be involved in political decisions, and 92.5% believe that political engagement is beneficial to their personal development, although only 50.9% are actually willing to contribute towards such activities. Whilst 25.4% of the adolescents asked know about any youth programmes, only 15% participate. This shows that there is a big discrepancy between the value given to participation and the actual level of engagement, particularly in traditional or party politics. These young users are important for the further development of e-Skills and online integration as they act as disseminators and teachers of digital skills and knowledge in their families and communities, a role which is particularly important in marginalised groups. Digital inclusion is based on technical resources; for that reason in Austria accessibility is legally anchored in the E-Government Act<sup>3</sup>.

In 2007, “mitmachen.at” was the first Austrian youth e-Participation project to look at adolescent users and their interaction with e-Government and views on e-Participation. The Jugend2help web portal project followed in 2008, and the adolescent citizens were invited to participate in the creation of the content and take decisions concerning their own space (“youth”) on the Austrian e-Government webportal [www.help.gv.at](http://www.help.gv.at).

The name of the project “Mitmachen.at – move your future” reveals the objective: in German, the verb ‘mitmachen’ means ‘to participate’, and the project provided young citizens aged 15–25 living in Austria the opportunity to use the internet to present and voice their concerns about the future. It was one of the biggest e-Participation projects, and involved a number of organisations, including youth institutions, software companies, various Think Tanks and the relevant public authorities so as to develop a democratic participation process.

The focus of the study was online participation, participant involvement, the relationships that developed between participants and, at a meta-level, how participants

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<sup>3</sup> <http://www.digitales.oesterreich.gv.at/DocView.axd?CobId=31191>

felt about online participation. The project results were analysed as a case study, with the aim to analyse the project and its results as a whole, to show the opportunities and limitations of online deliberation as a means of increasing citizen engagement and reducing the problem of citizen apathy, (see [5] [6]). The project investigated and tested the general electronic participation processes, and the technical implementation and the (technical) framework which make such participation processes possible. Portals are important for simplifying the vertical and horizontal integration of e-Government [7] and the virtual portals used for this project included both the necessary instruments for participation as well as two different user levels (administrative and end-user).

The discussion process was governed by the pre-set eight topics, but the participants had the opportunity to voice their opinions about anything else they considered to be important. The highest number of comments were made in the category 'political system', and revealed the participants' frustration with politics and politicians. A few wanted to know more about the Austrian political system and politics but, in general, the comments were derisive and very superficial. A small number of participants displayed interest in the project itself, the results to be obtained from the project and how opinions and results would be used. A participant declared: "The politicians should read this ..."<sup>4</sup>.

The results show that a web portal can be a method of participation and communication which is accepted and will be used by young people. The ideas generated provide a "mini-governmental program determined by young Austrians" (as described by a member of the expert panel involved in the project).

In 2008, the follow-up project "Jugend2help" ([www.jugend2help.gv.at](http://www.jugend2help.gv.at)) was conducted. It was largely influenced by valuable information gained from the project "mitmachen.at" ([8][9]). Therefore, the central aim was to collect new e-Participation and collaboration experiences and data, to examine the way a public Web 2.0 project works and to find out to what extent young citizens can be engaged in public decision-making processes. The cooperation between civic society, public administration and various partners (from schools to unemployment agencies) was to lead to a better, user-friendly provision of public services.

Besides obtaining correlations between the users and their e-Government needs, the researchers also investigated the adolescents' understanding of e-Participation, e-Government and public administration. Asked what they knew about e-Government, the adolescents' answers included "something to do with the government"<sup>5</sup>, and "an opportunity to look into the state's finances and expenditure"<sup>6</sup>. Although they know little about e-Government and the digitalisation processes occurring at state level they responded positively to it and adolescents seem to want the opportunity to participate (physically and digitally) in the participation process, as they strongly believe in the value of communicating and sharing. They were also particularly enthusiastic about participating in this e-Government portal project - they recognised the project as an opportunity to participate in government and public administration, and to have their say on issues which are relevant and important to them. The adolescents liked the idea of

<sup>4</sup> Comment made on [www.mitmachen.at](http://www.mitmachen.at)

<sup>5</sup> Comment made by a participant.

<sup>6</sup> Ibid.

finding all the information they need electronically; they belong to the generation that is growing up expecting to find everything on the internet [10] and to integrate their e-Participation and e-Government needs seamlessly into their work and personal lives.

## 4 Lessons Learned

The results obtained from the “mitmachen.at” and “Jugend2help” projects were positive, and show that citizens do have an interest in online deliberation and interaction, and that the internet certainly offers a new possibility of involving citizens in political discussions and e-Government.

An important issue that needs to be considered is age: the age bracket of the intended users is a determining issue for such projects. A strategy for youth e-Participation and e-Government therefore requires a specific definition of the category “young people” or “adolescents” that may vary in different countries – the Austrian Census Office, for example, defines a youth as a person up to 19 years of age. The means and channels of participation must be adapted to the target group characteristics, age will determine the appropriate topics and the choice of language to be used. The (marketing) strategy will also be determined by the age of the citizens, so that it can reach and encourage those citizens to participate. It should carefully consider the choice of communication channels (i.e. the ones users really like and use) and what institutions (e.g. schools) can help to reach out to those citizens.

Citizens and political/public actors now do have a wide range of media and ICT tools to assist them with complex processes such as participation and public administration, but they must be able to “enhance representative democracy, whilst creating a vibrant, inclusive, transparent and responsive Knowledge-based Democratic Society and not just be a new form of political communication.” [11]. Digital networks can support all forms and stages of public involvement and empowerment, ranging from simply providing information to actual decision-making [12]. New electronic media provides a way to enhance deliberation (rather than replace existing democratic mechanisms) by providing transparency, encouraging broad discussions and supporting opinion-building. The collaboration between public administration and all sectors of civic society includes integration in policy-making and the co-development of public services, and in the long run, participation can contribute to the process of democratisation in both state and society by breaking down social barriers and structural inequalities.

The results obtained from the e-Government survey show that by 2010 97% of the municipalities in Austria aim to have websites and 92% plan to provide online forms. Many municipalities already offer such services, but a closer cooperation with the Austrian Help.gv (which also offers the national e-Government webportal [www.help.g.v.at](http://www.help.g.v.at)) would be beneficial for all stakeholders. Such a co-operation could start to meet citizen needs and requirements, and so increase citizen satisfaction.

At the beginning of 2007, the Austrian parliament reformed the voting laws: beside the new possibility of postal voting and e-voting, the voting age was reduced to 16 years. This means that political education is more important than ever before, and adolescents must be well informed in order to be able to take good decisions. It is well known that political education needs to include a practical approach; so, beside the right

to vote, youth participation programmes should encourage young people to engage in politics. Public administration too needs a policy and guidelines for online citizen participation – such a policy should have standardised e-Participation methods, including the four-phase model tested in “mitmachen.at” and “Jugend2help”, as it can then be used for a wide range of future e-Participation and e-Government projects ranging from local, neighbourhood projects to nation-wide involvement. The aim of developing a policy is not to regulate participation, but to provide an overview and a documentation of tested methods, as well as allowing further innovation.

Some cornerstones of the Austrian eGovernment strategy require better marketing and information policies or a change in general conditions: 49.6% of municipal employees did not know about e-Delivery and 52.6% cannot e-Sign any documents. Better cooperation of software providers, public management consultants, and a strategic brochure such as “5 Steps towards e-Delivery” would improve the situation.

More Austrian projects will be launched in the coming years, and will show the extent to which citizens want to become politically involved and make use of the new technologies for this purpose. All in all, we will soon know if technology can actually change democracy. In general, the results from “mitmachen.at” and “Jugend2help” show that most young Austrians have a positive attitude towards online deliberation, new methods and opportunities to participate. Municipality officers tend to have a somewhat negative attitude as to whether eGovernment and eParticipation can increase work efficiency and simplify processes. E-Government is viewed as a tool geared more towards the citizens than to the officers, and usability seems to address citizen issues rather than the employees.

An important indicator for e-Government readiness is a project plan for IT-projects and the results show that 87% of the Austrian municipalities do not plan their IT projects! The tendency of smaller communities to provide fewer online services and their negative attitude towards IT applications and projects is partially an infrastructure problem. Today’s public administration still operates in structures set after World War II: a federal reorganisation is long overdue, at least at the operative layer. Inter-community collaboration with service orientation and an option for higher specification may be a solution. Virtual communities, e-Villages in terms of their proper meaning, will make rural areas more attractive for citizens and business. Both IT solution providers and decision makers try to address both the citizens’ and municipalities’ needs, by understanding what their issues are and then by finding viable solutions.

## References

1. Landesrechnungshof Salzburg, Bericht des Landesrechnungshofes über die Projekte E-Government und ELISA, Land Salzburg (2006)
2. Al-Omari, A., Al-Omari, H.: E-Government Readiness Assessment Model. *Journal of Computer Science* 2, 841–845 (2006)
3. GfK AUSTRIA, Online Monitor 3. Quartal, GfK Austria (2007)
4. Serloth, A., Maerki, O.M.: Partizipation und Information – Ergebnisse einer Jugendbefragung, Study conducted for the Austrian Ministry of Social Security Generations and Consumer Protection, das Fernlicht, Vienna (2004)
5. Blumler, J.G., Coleman, S.: *Realizing Democracy Online: A Civic Commons in Cyberspace*, IPPR, London (2001)

6. Klein, H.: Tocqueville in cyberspace: using the internet for citizen associations. *Information Society* 15(4), 213–220 (1999)
7. Moon, M.J.: The evolution of e-government among municipalities: rhetoric or reality? *Public Administration Review* 62(4), 424–433 (2002)
8. Edelman, N., Krimmer, R., Parycek, P.: Engaging youth through deliberative e-participation: a case study. *Int. J. Electronic Governance* 1(4), 385–399 (2008)
9. Krimmer, R., Makolm, J., Parycek, P., Steininger, I., Kripp, M.: Politik zum Mitmachen, Jugenddeliberation im Internet, Arbeitspapiere zu elektronischen Wahlen und Partizipation, pp. 69–78 (2007)
10. Codrington, G., Grant-Marshall, S.: *Mind the gap!* Penguin South Africa (2005)
11. van Lerberghe, D.: Are we moving towards a more participatory representative democracy? In: *Proceedings of the Eastern European eGov Days 2007: Best Practice and Innovation*, OCG Band 222, Vienna, pp. 197–204 (2007)
12. Parycek, P., et al.: *EDEM. Positionspapier zu E-Democracy und E-Participation in Österreich* (2008)