Third-Generation Local E-Government

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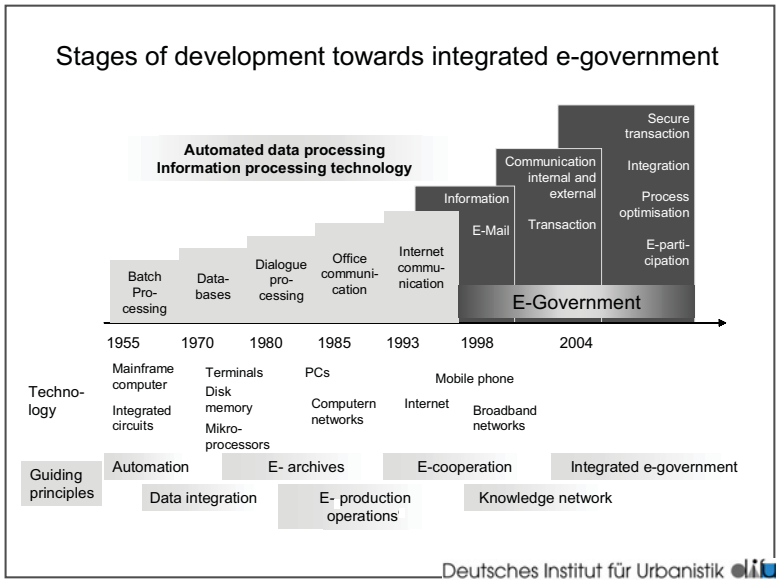
INTRODUCTION

Local e-government reflects an ongoing process of modernization. Like all processes of innovation and modernization, the development of e-government is also characterized by various phases and cycles. These phases of development are fundamentally similar, whether they are implemented in a country that is a pioneer of e-government or a country that is among the stragglers in the electronic modernization of the administration. As to the specific mechanisms, the obstacles and the driving forces of modernization vary from one country to another. At the same time, there are differences in the introduction and development of e-government between the different levels of government. National e-government strategies and possibilities are subject to different conditions than a local e-government. The national differences and the differences between various levels of government depend on factors such as the state constitution, the institutional circumstances, work cultures, modernization strategies, IT equipment, Internet access, or financial resources (Drüke, 2005b, p. 286-291; Eifert, 2004; Socitm & I&DeA, 2002, p. 8). This is important as a preliminary remark for the limitation in the scope of this study, which is focused on Germany and specifically the local government level. However, these perspectives are naturally reflected in the international discussion about good e-government.

BACKGROUND[1]

Before the idea of third-generation local e-government is presented in detail, the historical background and the preceding discussion of e-government in Germany must be considered. The term "e-government" originated in the English-speaking countries and has been used in German-speaking countries only since the second half of the 1990s. Since then, Administrative Science and Administrative Computer Science have tried to provide an authoritative interpretation of this artificial term. At least among German-speaking specialists, agreement has largely been

Figure 1. E-government development stage model



reached on a comprehensive understanding. According to this view, e-government includes *all* aspects of government and administration (public policy formation, decision-making, creation and provision of services, public participation)[2] insofar as they can be supported and enhanced by the use of information and communication technology.

So this definition follows on from the considerations and descriptions of potential from the boom era of computing in the administration, some of which were very far-sighted even then: "In future, information technology is likely to cause far more fundamental questions to be asked about the citizen-related tasks of the administration" (Reinermann, 1987). The phrases "automated data processing" and "information processing technology" were coined in the early days of computing, and they are still used alongside the term "e-government" which is so popular and therefore so eroded by constant use.

The creation of the term e-government not only marked the rise of a fashionable "Americanism" in the discussion in German-speaking countries. Instead, it represents a step across the threshold toward a new quality in the use of ICT technology in the administration, marked by the use of the Internet—today mainly in the Internet applications www and e-mail. New technical opportunities have arisen which are quantum leaps in comparison with earlier computer systems both within the administration and in contacts with the citizens. Here are just three factors:

- The internal computer networks of the administration have interfaces to the computers used by the "customers" of the administration; direct data exchange is therefore possible.
- E-mail communication allows asynchronous exchange between partners in the administration, politicians, citizens, and business people.
- Different computer systems are made compatible by "middleware" and established standards and protocols for data exchange; electronic communication and transactions can take place "across platforms."

At the end of the 1990s, the use of the Internet by local communities was mainly limited to offering information on their Web sites—it was no accident that many municipal Web sites were referred to as "municipal *information* systems." This first generation of local e-government was gradually replaced by the second generation in which the provision of information itself was supplemented by communication and transaction services: by the provision of forms on the Internet, by participation facilities on local community portals—a term which has increasingly replaced the "*information* systems"—or by the possibility of electronic interaction and transaction services. The speed with which e-government of the second generation has spread is very varied; pioneering municipalities and regions, such as those involved in the MEDIA@Komm model projects in Germany[3], which were documented in other countries, for example, in Drüke (2005a) and Socitm & I&DeA (2002)—have made considerable progress, whereas most other local communities still only provide information services.

TOWARD THE THIRD-GENERATION E-GOVERNMENT

If supplementing information and communication services by transaction services is described as e-government of the second generation, what is the third generation? What are the fundamentally new characteristics of the next generation of e-government? What are the decisive questions and features in the transition from one generation to the next?

In the phase of transition from the second to the third-generation e-government, innovations and individual solutions are beginning to grow together as integrated and consolidated implementation concepts. So the third-generation is not only characterized by a "higher level" of the use of electronic media, it also involved consolidation processes and integration at different levels.

Each "phase transition" is a time for important and decisive steps: knowledge gained from experience gives rise to new questions (cf. next section), and new positions and insights in academic theory and practical municipal solutions are discussed in preparation for the next phase.

Before the distinctive features of the third-generation of e-government—"integration" and "consolidation"—are subjected to closer scrutiny, we must describe the way e-government is embedded in the cycle of innovation which is characterized by the introduction and application of ICT technology in a networked society; for more detail, see Lenk and Traunmüller (1999, p. 21-51), Castells (2000, p. 38-60), and other sources quoted there (cf. Figure 1).

The first visible attempts to develop the third-generation of local e-government in Germany are so far only apparent in selected pioneer regions and cities such as Hamburg and Bremen. Good examples of such pioneers in Europe, the USA, and Canada can be found in Drüke (2005a), Hagen and Kubicek (2000) and Traunmüller (2003).

When we speak of "integration" as a characteristic feature of the third-generation e-government, this means:

- Grouping of e-government services by life situations or concerns.
- Integration of electronic information, communication and transaction services.
- Integration of different options to contact the administration (citizens' office, phone/call centre,