

Belonging as a Relevant Success Factor for E-Government?

R. Preiß¹, D. Zetti² and C. Herzog¹

¹Institute of Electrical Engineering in Medicine, University of Lübeck, Germany

² Department of Science, Technology and Society, Technical University of Munich, Germany

DOI 10.3217/978-3-85125-976-6-12

Abstract. This contribution addresses citizen's expectations towards e-government. Based on an interview study, we argue that meeting expectations in e-government can contribute to a sense of belonging. Repeated references to types of mutual reliability articulate this belonging. Our findings are based on guided interviews with German citizens who have experienced administrative interaction in the past 12 months. The interview data indicate that the requirements for digital and analogue administrative procedures differ. In digital spaces, the aspects of transparency, efficiency, and safety are more pronounced. In contrast, analogue administrative procedures are often characterised by the interviewees as helping with weighing decisions for individual cases and the opportunity to ask unstructured questions.

The interviews further indicate that trust, obligations, and reciprocity play decisive roles in the socio-technical negotiation processes between citizens and the administration. Citizens must communicate case-specific data correctly and completely, while authorities are obliged to handle processes properly and responsibly. This exchange gives rise to mutual dependencies, which, in turn, lead to implicit expectations of the other party. The respective counterparts should reciprocate in terms of the swiftness by which data can be entered or processed digitally. For citizens, an accelerated way of submitting digital forms appears to imply accelerated administrative procedures. Our research suggests that, in addition to perceived added value, flexible online and offline administrative procedures and transparent processes, e.g., in terms of processes and contacts within the administration, as well as the specifics of data sharing, can be decisive success factors for e-government.

1 Introduction

E-government in Germany is often described as backward and clearly in need of improvement. When comparing the state of digitalisation in e-government with other nations, Germany tends to occupy the midfield (European Commission 2022; Van der Linden et al. 2022). A digitalised administration is considered progressive and the epitome of efficiency (Dodel & Aguirre 2018; Irani et al. 2007; Ndou 2004). It opens up new possibilities, e.g., in terms of process management, contact with citizens, and creates new opportunities for citizen participation, but it also poses various challenges. There is a risk that certain groups of citizens may feel excluded, for example due to a lack of skills to use the new digital platforms (Mesa 2023:9). A study from 2021 portrays 49 % of German citizens to possess at least basic digital skills, while 51 % scored lower in the corresponding test (European Commission 2022:24). In addition, only 7% of the population³¹ does not have access to the Internet or is unable to use it. However, this percentage is decreasing (Initiative D21 2023:23).

Moreover, "an ambition to digitalize as much and as quickly as possible results in a one-size-fits all approach that actually fits only a few audiences, leaving many further disconnected from government" (Bertrand & McQueen 2021:31). Therefore, based on a qualitative interview study with citizens, we address the following question: can and does public administration facilitate a sense of belonging? If so, what are the key factors, how can they be shaped, and what forms do they take in e-government? Fundamental responsibilities, competencies and social potentials are also related and discussed based on the interview data.

The Corona pandemic in recent times has clearly shown how important interpersonal relationships are and that health burdens, such as depression and anxiety, can be caused by a lack of social contact (Courtin & Knapp 2017:808; Van Tilburg et al. 2021:249,253). To compensate for and maintain interpersonal contact, tools such as video conferencing, messenger services and other digital applications were increasingly used for information exchange and community-building (Sheldon et al. 2021:8). These digital tools are changing interpersonal interaction relationships on a broad scale. Communication technologies bridge the gap between physical and emotional aspects. They do not necessarily substitute one for the other but connect them to each other (Bier & Amoo-Adare 2016:21). Therefore, the question arises to what extent a digital public administration is responsible for creating new links to citizens, to expand these links and still promote traditional contact channels in analogue ways.

³¹ Participants aged 14 and over were surveyed in this study.

Socialisation is increasingly occurring on and through digital applications, e.g., through social media, virtual reality or other communication and interaction platforms. This raises the question of how the socio-technical links between the analogue and the digital can find a place in e-government, or even be replaced altogether.

In the following, the current state of research on success factors of e-government and its effects on individuals is briefly presented and related to theoretical work on aspects of belonging. Then, the methodological approach is presented, and the results of our qualitative study are discussed in the context of the state of research and the theoretical construct. The paper concludes with a summary of the main findings, a discussion of the implications and an outlook on future research perspectives.

2 E-Government Particularities

To make tangible the possible societal impacts of advancing digitalisation in the context of e-government, we first present a definition of e-government due to Spirakis et al. (2010).

Electronic government is the use of Information and Communication Technology in the transformation of government; primarily aiming to the improvement of accessibility, effectiveness and responsibility. It is based on the diffusion of the information and the information policy development. Electronic government guides to increasing citizens' participation and active citizens' development affecting the mechanisms of democracy. (Spirakis et al. 2010:75)

Increased efficiency, transparency and security are among the most important incentives that drive claims that government services should become exclusively digital (Belanche et al. 2010:110). Transparency about administrative processes and the status of processing tasks, data flows between different authorities and departments, information about the use of personal data, the purposes of this use and who has access to this information are other factors that can increase efficiency and accountability but also promote trust in public authorities (Van der Linden et al. 2022:24). Since most government services involve a legally binding obligation, trust is necessary to ensure operability and, thus, the appropriate use of administration. If trust is fundamentally lacking, incorrect data entry and denial of use are more likely to occur (Wirtz 2022:416).

Not only negative personal experiences, but also digital experiences are easily generalised to similar systems. Hardré already noted that trust in digital systems is assigned as a "generic whole", i.e., it often does not matter who specifically, e.g., provides a website and what other technological features are at work in the background (2016:91). Rather, websites are taken as representative artefacts as such, and an overarching trust extends onto other, but related websites. Tolbert and Mossberger are

more specific, finding "[...] that users of local government websites are more likely to trust local governments" (2006:355). However, an increase in general trust in government is more likely to be caused by other factors, such as age, gender, and political orientation (Tolbert & Mossberger 2006:366).

The European Commission ranks German e-government in 21st place, while Malta, Estonia and Luxembourg hold the top positions (Van der Linden et al. 2022:16). E-government progress is actively promoted by the German state, with the main objectives being international competitiveness and economic efficiency (BMWi 2021:11). Since Germany is often described as lagging behind in e-government because of gaps in transparent processes, due to its data management and the general frequency by which e-government services are used (European Commission 2022; Van der Linden et al. 2022:92), the question arises as to which factors are crucial to understanding e-government use and non-use from the citizen's perspective.

There is still insufficient research on decisive factors for a citizen-oriented implementation of e-government applications (Pleger et al. 2020:9; Scheiber et al. 2020:31). A clear deficiency in public administration, for example, as Funke describes, is that "citizens are generally not regarded as customers but as deserving (or undeserving) applicants" (Funke 2022:163). A shift in public administration culture towards greater service orientation would significantly enhance the success of e-government initiatives (Funke 2022:147,190). Other success factors are, for example, convenience, i.e., being able to contact authorities from home around the clock, that the systems are reliable and that they are easy to use and navigate. These predominantly refer to satisfactory experiences (Funke 2022:190; Scheiber et al. 2020:26,31). However, Scheiber et al. found that personal contact with public authority staff is a significant barrier to the use of digital services, with around 50 % of citizens in Germany and Switzerland preferring personal contact (2020:33). Therefore, the question arises why personal contact is important.

3 Human Needs and Belongingness

As citizens and administrations are in a mutually dependent relationship, the administration carries the responsibility to act in the interest of the citizens. This also includes enabling the fulfilment of basic human needs, e.g., via welfare allowances. With Maslow (1970) we can speak of interdependent basic needs that need to be met before needs such as safety, peace, security, and protection become relevant (1970:25; 72). Among "Maslow's needs"—that can be seen as more than just basic but still highly relevant—are "feelings of belongingness, of being one of a group" (1970:72). In modern

welfare states, public administration has to be concerned with the whole range of needs so impressively described by Maslow and later visualised, for example, by Mcleod (2022) in the famous pyramid of needs.

According to Baumeister and Leary, the sense of belonging is an almost universal, innate need, which implies "a need to form and maintain at least a minimum quantity of interpersonal relationships" (Baumeister & Leary 1995:499). Accordingly, Baumeister and Leary also found that higher needs, such as the pursuit of "power" and "approval", are largely driven by the desire for belonging (1995:498).

Maslow identified the individual desire for more belonging within American society as early as the 1970s:

[...] by the need to overcome the widespread feelings of alienation, aloneness, strangeness, and loneliness, which have been worsened by our mobility, by the breakdown of traditional groupings, the scattering of families, the generation gap, the steady urbanization and disappearance of village face-to-faceness, and the resulting shallowness of American friendship³². (Maslow 1970:44)

Granovetter can be seen as another classic author of sociological theory that can help to understand, how public administration is more than a mere functional apparatus of the state. Citizens address institutions as a vis-à-vis, yet in another way than they approach relatives or friends. They establish so-called weak ties (Granovetter 1973). In this context, the strength of an "interpersonal tie" is a "combination of the amount of time, the emotional intensity, the intimacy (mutual confiding), and the reciprocal services" (Granovetter 1973:1361). Accordingly, weak ties are those between acquaintances and other less intensive acquaintances, and strong ties are those between good "friends" and close family members (Granovetter 1973:1368). Since e-government includes an exchange of services and information through fleeting interaction relationships, we can assume a connection that corresponds to weak ties.

Belonging narratives are often shaped by past experiences (Heyd 2016:290). Feeling that thoughts and opinions are respected can also contribute to a sense of belonging to a particular community (Lohrenz et al. 2021:135). Furthermore, a sense of belonging can arise from observing community practices and even from hearing the positive experiences of others with which one can identify oneself (Bier & Amoo-Adare 2016:7; Nitschke & Schweiger 2021:363). However, negative experiences or the feeling of one's own lack of these observed practices can also lead to feeling rather lonely and excluded, for example. Another central feature through which people make their belonging to a certain community tangible is the common language (Anchimbe 2016:514). As Bublitzky notes, communication is "crucial to maintaining a sense of belonging among family,

³² Whether the superficial friendships described here also apply in other societies cannot be said with certainty.

friends, and one's home country" and is facilitated not only in person but also on digital channels such as "mobile messaging" (2022:236). Hence, it can be concluded that belonging in the broadest sense is constituted by verbal and nonverbal communication as experienced or experiential knowledge within and outside socio-technical arrangements.

Another factor that is closely linked to the sense of belonging is the necessary trust already mentioned in the previous section. The trust placed in "leaders" and state authorities is strongly dependent on the intermediaries who stand between the individual subjects and can, if necessary, mediate trustworthiness (Granovetter 1973:1374). Not only does trust in state authorities and their intermediaries play a fundamental role in determining the extent to which one feels a sense of belonging, but also trust in oneself and one's own abilities. According to Lohrenz et al., users of digital services should have the feeling that they can control a situation on the basis of personal experience and acquired skills and that they can assess the consequences of their inputs or decisions (2021:135). These skills can thus be seen as enabling factors for a digitally supported sense of belonging. In addition, a greater sense of belonging to public authorities brings a certain added value by increasing the sense of community and reducing frustration with politics (Vetter 2011:2). Thus, the increasing sense of belonging also has a stabilizing effect on the legitimacy of political structures (Dahl 1967; Nitschke & Schweiger 2021:364).

4 Methodological Approach

The qualitative research underlying this work's approach is based on the Grounded Theory Methodology (GTM) according to Strauss and Corbin (1996), which is a modified form of the original methodology of the American sociologists Barney G. Glaser and Anselm L. Strauss. What is special about GTM, despite the systematic, rule-based approach, is that it retains space for creative association and, hence, an inherent openness in the research process allowing the discovery of a theory from empirical data (Mey & Mruck 2011:11; Berg & Milmeister 2011:326).

To discover relevant areas for research for the empirical methods, we conducted shorter participatory observations following (Breidenstein et al. 2015) with a total of five senior employees from the Federal Employment Agency, the Familienkasse Nord with the main task of processing and approving child benefit applications, Dataport as an IT service provider for public administration, the registry office and the citizens' service office. During these sessions, implementations of the respective administrative processes, as well as details regarding data flows are presented. Participant observations were

conducted under the principle of openness, meaning that the researchers identified themselves and introduced the associated project.

In order to gain concrete insights into the lifeworld of the citizens and to be able to analyze their views and experiences (Baur & Blasius 2019:15), guided interviews were conducted following Helfferich (2019). An initial open narrative prompt is intended to generate a multitude of relevant aspects for research to be deepened in a second step through appropriate queries (Helfferich 2019:676). The third step offers a scope for more structured and less open questions with predefined formulations (Helfferich 2019:677).

This three-step procedure is repeated per topic block. The thematic blocks are: experience horizon for life situation-specific administration interaction, wishes and expectations, administration-specific culture change and the handling of personal data and values in the digital space. This approach carries the advantage of exploring themes in close proximity to the narratives given by the interviewee. Hence, both structure and openness can be maintained as features of the approach.

We conducted interviews with ten citizens from Lübeck, a North German city with just under 220 000 inhabitants. Participants were chosen to differ as much as possible in their affinity for technology, social status, age and gender. The age range of the participants interviewed in the study spanned from 19 to 65 years. Out of the participants, 4 are female and 6 are male. The professional affiliations of the interview participants are as follows: 1 - geographer, 2 - social worker, 3 - teacher trainee, 4 - politician, 5 - psychology student, 6 - master carpenter, 7 - psychology student, 8 - retired person with an M. A. degree in communication science, 9 - retired laboratory manager in the field of biology, 10 - retired software developer. Interviewees should have had relevant administrative contact within one year prior to the start of the interview. The interview-specific data of this work includes two interviews on the topic of birth, six interviews on moving, and two interviews on unemployment.³³

Central to the data analysis within GTM are recurring comparisons, extensive investigations into the data and theoretical coding (Corbin & Strauss 2015:88; Strauss et al. 2011:74). Collection and evaluation are continuing scientific processes. The following relates the theses from coding to the data from the participant observations and discusses them with further literature.

³³ To the best of their abilities, the authors took care to translate direct quotes including colloquialism from the interviews as literally as possible to convey intersubjective comprehensibility.

5 Findings

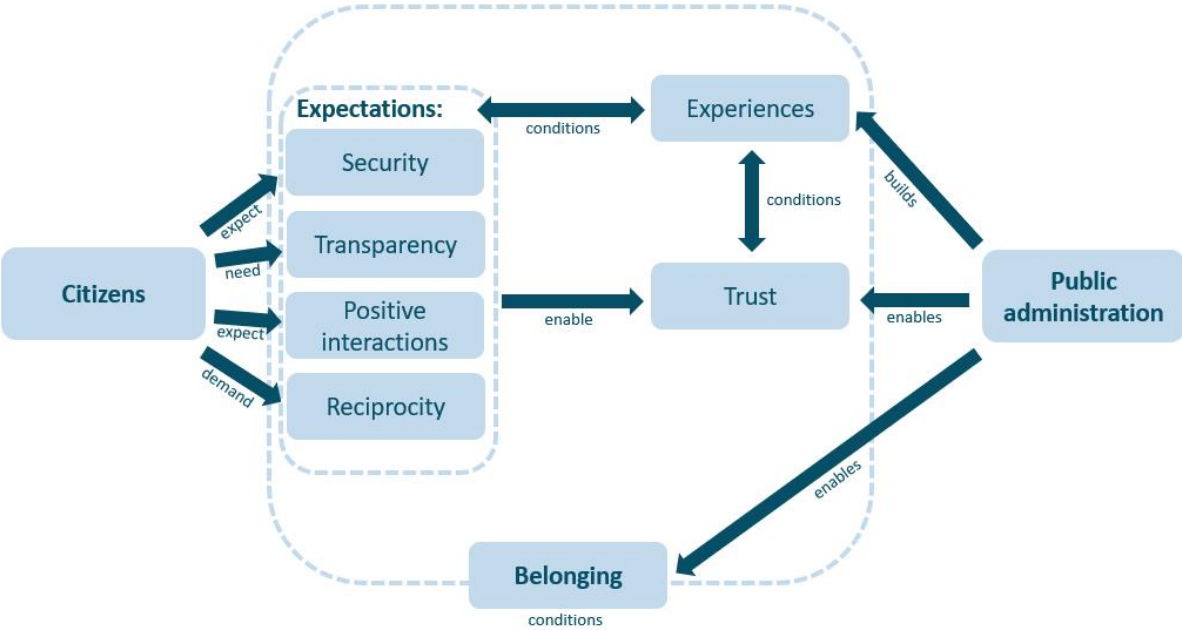


Figure 1: Category scheme (source: own illustration).

In this section we present results from the analysis of the interview data. For this purpose, we will elucidate aspects relevant to belonging, their connections and role in e-government implementations. To do this, we will analyse the experiences and expectations of the citizens from the interviews, relate them to the results of the participant observation and show similarities and differences to the current state of research from section 2 and 3. To illustrate the following argumentation and the categories found, see **Fig. 1**. In order to understand the figure, it should be noted that the terms can be understood differently depending on individual perceptions of the interviewees. For this reason, different perspectives on the terms are presented below and linked to the theoretical framework on the basis of the interview statements. On the left side of the figure, it shows that citizens have varying expectations of the public administration, which are linked to their experiences, trust in the system, and digital competencies. On the right, the public administration is seen as both a facilitator and a provider of experiences, trust, and a feeling of belonging. We will examine later how a sense of belonging affects different aspects and plays an important role in this matter. It should be noted that the themes are not exhaustive, but rather highlight the fundamental aspects that are closely related to the sense of belonging.

5.1 E-government Expectations and Success Factors

In order to make the connections from **Fig. 1** tangible, the citizens' expectations from the interview study are first presented and interpreted with reference to the theory. Administrators see the avoidance of personal contact with the public administration as an added value. This was expressed in the participant observation at the registry office and at the Familienkasse Nord. The desire to avoid personal interaction with representatives of the public administration personally was moreover indicated by several citizens in interviews (Int 3; 5; 8).

Digital communication channels, such as online forms or e-mail, make it possible to complete official tasks flexibly in terms of time and place, thus creating more freedom for private activities (Int 2; 3; 5; 8; 9). Another advantage is that external characteristics cease to have an influence on how citizens are treated, which was described as the most important advantage of e-government by one interviewee (Int 8). In the digital domain, stigmatizing looks, e.g., cannot induce biases. Hence, there is a perception of being treated more fairly and "only" on the basis of data, without inducing further judgmental attitudes. Therefore, the administration is more often expected to operate only as a task-fulfilling instance, which should receive and process the citizens' requests and otherwise, if possible, take up only a few points of interaction with the citizens (Int 3; 7). Especially for technology-savvy citizens, the digital way is the "fastest", "easiest" and "most uncomplicated" (Int 1; 2; 3; 5; 6). Contrary to the observation of Scheiber et al. 2020, the avoidance of personal contact is also partly expressed as a fundamental expectation of public administration in the context of an e-government implementation. This expectation is justified, for example, by the fact that commercial providers enable a purely digital service and that a different approach is no longer in keeping with the times (Int 3).

Data security is expected to be an important criterion for e-government, as stated in all interviews (Int 1-10). It is important to distinguish between data required for the fulfilment of official tasks, which were considered rather unproblematic to share, and more personal data such as "sexual preferences", "hobbies", "social gender" as well as "religious affiliation and body measurements" (Int 1; 4; 8). In the case of such data, which is not necessary for the official task, a clear limit is set as to what should not be shared, which is also evident in discussions on the danger of the "transparent citizen", see for example Wewer (2012). The desire for more anonymity also becomes evident from the following quote: "Because, of course, I don't want a situation like the one in China. That practically the state authorities know everything about me and that I am basically completely transparent" (Int 10). As our fifth interviewee pointedly describes, data protection in public administration should be "as open as necessary, as safe as possible" (Int 5).

Furthermore, it is expected, as already stated by Funke (2022), that the public administration exhibits more customer orientation in digital as well as analogue dealings with the citizens, and thus requires a friendly interaction, during which the needs can be addressed individually (Int 2; 4; 8). However, what is understood as customer orientation varies, but as an expectation it offers starting points for a possible sense of belonging, which is discussed in more detail in section 5.3.

The advantage of traditional visits to the authorities is, e.g., the direct exchange of relevant information and the possibility to ask unstructured questions (Int 2; 4; 9; 10). With a fully digital public administration, visits to the authorities are only necessary for specific concerns and in the event of problems (Int 9). In this context, it should be mentioned that especially non-tech-savvy groups of people face other difficulties and prefer personal contact partly due to a lack of access to technology, such as smartphones and computers, but also a lack of digital skills. Especially older people need support more often and are increasingly excluded in purely digital procedures (Int 8; 9). Therefore, for inclusive e-government, traditional exchange and contact must also be maintained.

During the participant observation at the registry office, it was stated that the citizens expect to receive birth certificates of newborns within one or two days, which was described as the "Amazon mentality"—a notion that is reflected in the fact that the registry office receives more calls when things do not go as quickly as hoped. There appears to be a lack of awareness that administrative processes that are seemingly simple from a citizens' perspective still involve complex analogue procedures in the administrative backend, some of them taking up to four weeks. In contrast to this is the view

[...] that because, since they [the clerks] exert a kind of pressure on the families, because you have to have all the documents within a week after birth. They, too, should turn this into some work zeal. So that you also get your documents quickly. [...] I would like to see that as reciprocity. (Int 2)

Here, administration is perceived as a single entity and it is also clear what the reasons for the desired processing time are. The assumption that big tech companies are responsible for the change in thinking (Morison 2019:38) and acting does not hold in this case and is rather based on a lack of citizens' insight into administrative processes. However, there are indications that an expectation of mutual reciprocity in the time allowed for input and output is amplified by the anonymity of digital interfaces. Interfaces influence expectations of digital administrative procedures. Reciprocity is shaped here by mutual dependency relationships that imply mutual obligation without direct compensation. The successful exchange of reciprocal services can promote fairness and solidarity on a broad level (Offe 2002:275). Furthermore, there are indicators that even in analogue procedures the public administration should enable reciprocity, for example, if one arrives "five minutes too late", the appointment is not cancelled immediately, but "[...] it's only fair if the person sitting behind the desk also has to wait a few minutes. It's

so very unbalanced" (Int 3). This shows not only the expectations that suggest mutual understanding, but also the balancing aspect that can make the exchange fair. Similar effects have already been described for the exchange of gifts by Marcel Mauss (1968), which describes a different form of reciprocity, but follows similar rules and thus conditions the expectation. During a mutual exchange of gifts, the time between the instant at which A presented a gift to B and the instant at which B reciprocates with another gift for A is called the "latency phase". In this "phase of uncertainty", A waits for something in return, which intensifies the relationship on both sides. B has already received the good, in this case the data from citizens (A), and is reminded of the giving person through his or her task of reciprocating the contribution (Stegbauer 2002:51). This relationship is particularly intensified by "more frequent enquiries by e-mail or telephone", which was the theme of the participant observation at the registry office. The phenomenon of the latency phase also became clear in the interviews: "you shoot your questions a bit into an orbit where you don't really know where they will arrive" (Int 1). If the service is then reciprocated, for example with the birth registration of the child, an "institutional bond" is created, which creates stability in social systems (Stegbauer 2002:42).

5.2 Transparency and Trust

In the following, we will use the interview data to show which forms transparency and trust take and how they are connected, as shown in **Fig. 1**. In this regard, as indicated in the previous section and in section 2, in order to meet citizens' expectations of e-government, there is a need to make processes, data transfer conditions and other unclear factors transparent. Only in this way can an understanding emerge as to why something happens the way it does and what one must pay attention to, as well as what one's own externally defined obligations are. In addition to transparent processes, a certain level of trust in technical solutions and in the instances behind them is essential for the sovereign use of e-government-related applications.

In order to increase "public trust" in e-government, Castelnovo (2013:3) proposes increased transparency, citizen participation formats and more decision-making opportunities for citizens. A need for more transparency is also evident in the interviews. Expectations of direct feedback on the processing status of submitted requests, an estimate of the time of completion, suitable contact persons and the respective areas of responsibility were mentioned (Int 1-10). Furthermore, the need for transparent and easy-to-understand guidelines, e.g., for birth registration came up: "That it is already clear to me on the internet what I have to submit" (Int 2).

Especially in administration, the issue of "trust" in and by citizens plays a major role, particularly due to mutual dependencies (Akkaya et al. 2011:89f.). Even though citizens have the legal obligation to enter their data correctly and completely in the respective registration process, a certain basic trust in state authorities must be given, which ensures that, e.g., deliberate misstatements in sensitive, yet comparably benign data inputs, do not occur and that the administrative processes may function smoothly. The interviews indicated that this basic trust is present:

but there are certainly other institutions that I would trust less to handle my data carefully, than authorities that actually have my personal data anyway, about when I was born somewhere or registered. (Int 1)

However, skepticism can also be inferred from the interviewees' uses of the word "hope": "well, with the city I would hope that they have clarified this well with each other. That they don't pass it [personal data] on" (Int 2). There was support for making the provision of some data mandatory: "what I had to provide was ok, name, date of birth, gender. This didn't give me any headache" (Int 2). However, this raises the question of whether the sharing of sensitive data per se is met with approval due to a certain basic trust in state authorities or whether the normative framework as a legal obligation and the lack of an option to object leads to consent. For example, it was mentioned that the interviewee sees the disclosure of the child's gender as problematic, as it can restrict later choices of social gender. In fact, the interviewee would offer to share all mandatory information, while preferring uncomplicated ways of changing it later as pragmatic (Int 1). It is thus indicated that there is no blind trust, but a basic trust already exists in the "usual" procedures. Furthermore, one interviewee's knowledge of fireproof filing cabinets in the registry office contributed to the fact that he had no security concerns about the data and thus trusted the institution. Therefore, it can be seen that citizens' expectations and especially transparency enables a certain degree of trust (**Fig. 1**).

5.3 Belonging through E-government?

Since belonging is a very rich concept, individually expressed and differently perceived, this section will show where similarities with the theoretical construct can be found and what particularities can be identified in public administrations. Moreover, this section shows why belonging conditions citizens' expectations, trust and experiences, as shown in **Fig. 1**.

Since, as Maslow (1970) describes, basic human needs build on each other, are mutually dependent and cannot be seen as distinct, the question arises as to which needs can be met by public administration. Public administration can be seen as a kind of interface or mediator that enables the provision of basic needs such as money for food, shelter and protection against existential risks. In today's world, in addition to safeguards for mental

and bodily integrity, the protection of personal data seems to be an increasingly important aspect, see e.g. Cope et al. (2018). In this context, the interview results regarding the protection of personal data, as stated in the previous section, indicate that it is fundamentally assumed that the data to be shared is secure and only passed on to the necessary authorities. Therefore, from the perspective of the interviewees, it can be assumed that this need for security is being met. The expectation of the basic human need for security by public authorities can be enriched by the following quotation:

[...] without delay, without pressure, without fear, without hindrance, in any way. Friendly contacts, feeling as if I am in the state's good hands. That is what I want, a kind of affectionate contact. (Int 4)

In this quote, a need for state provided protection and thus a need to feel safe is evident. This appears to be translated into the desire for interactions with well-meaning and friendly administrative personnel. A similar requirement is also evident in the ninth interview when the interviewee states to expect "friendly", "patient" and "supportive" staff who "listen" and act in a solution-oriented way, i.e., a certain "service orientation" (Int 9). This coincides with the need for more customer orientation described in sections 2 and 5.1, which was also partly experienced according to the interviewees and can thus condition a certain sense of belonging.

But do citizens really desire personal interaction? One interviewee stated: "I always find public servants very kind. However, I don't have to see them too often", but only for processes that require "support" (Int 7) and other problems that can neither be solved online nor alone (Int 4; 9; 10). On the one hand, e-government is expected to minimise personal contact; on the other hand, there are also contrary opinions that advocate as much personal contact as possible and some interviewees view it critically "when it replaces positive social interactions" (Int 5). For older people, too, it is often seen as a hurdle, should it no longer be possible to see the authorities in person, or to be available to them by telephone at least (Int 2; 3; 4; 9; 10). In this context, the notion also came up that personal interaction with administrative staff is used to compensate for a lack of social contact by "people who really enjoy the fact that they can sit in front of a real person and actually describe their needs in personal contact" (Int 4). However, according to this interviewee, "it is not the task of the administration to completely meet all human needs", but nevertheless to provide assistance and information about potential contact points, for example to counteract trends towards increasing loneliness (Int 4). These statements support the findings of Scheiber et al. (2020), that the lack of personal contact can represent a significant barrier to e-government use. However, as already mentioned in 5.1, the interview data shows that personal contact can also be perceived as obstructive and annoying, especially for people with an affinity for technology, so there are indications that personal contact as well as purely online processing should be made available as needed (Int 2; 3; 6). The question of whether satisfactory online processing

can, on the basis of positive experiences with e-government, lead to a greater sense of belonging at a larger level, e.g., to the state, the political system or one's own society, cannot be answered conclusively here, e.g. because the state of implementation in Germany is not yet sufficiently advanced. What is clear, however, is that for those who only choose the digital process, where no personal exchange processes might be necessary, possible personal ties with administrative personnel are lost. These ties could have represented a personal added value as well as trust-building aspects due to personal exchange. In order to promote trust in a fully digitalised e-government, other ways and mechanisms are needed, as explained in the previous section.

On the other hand, if digital opportunities are used to establish communication and, for example, to make appointments for face-to-face contact and thus act as a bridge, they can also have a positive impact on the emergence of a sense of belonging and other trust-building aspects. A sense of belonging can also be created by the flexible digital interaction possibilities on other levels, as citizens then have more time in private for socialization aspects and can go to the authorities online at any time of the day (Int 2).

As Heyd (2016) and Lohrenz et al. (2021) add, belonging is determined by the experiences made and heard, and the feeling that thoughts and opinions are respected. The feeling of not being taken seriously makes it difficult to feel belonging, as one of the interviewees described with regard to the treatment her husband received:

and quite often we experience it with authorities, not only the immigration office. My husband is the client who is charged, and they talk to me. [...] And that does something to his self-confidence and to his ego. And I also find it extremely unprofessional. (Int 2)

This shows that such conduct is not in line with the perceived customer orientation. Moreover and most importantly, it gives evidence that her husband does not feel to be taken seriously because he is not accepted as a qualified interlocutor due to his comparable lack of German language skills, which calls into question his self-perception as a citizen (Int 2). Whether he would have had different experiences if he had appeared alone cannot be said here, also because his wife was obliged to come along according to her own statements. Nevertheless, there are indications that even the possibility of a sense of belonging to emerge is made more difficult, and that there is a greater need to break down communication barriers. E-government could perhaps even enhance this through multilingual chatbots or translation tools, which civil servants alone could not do. Therefore, in personal exchange, it is not only the client's responsibility, but also the administrative staff's responsibility to act in a context-sensitive way. Negative experiences not only make it more difficult to build trust, but also hinder a sense of belonging. For example, the eighth interviewee describes that he experienced "very rough handling" and was not taken seriously because of his slightly unkempt appearance, which is why he describes having experienced "no welcoming culture" and has the

impression that "there really is a selection with citizens who are wanted here [...] and those who are not" (Int 8). Due to these experiences of discrimination, he would clearly prefer e-government without personal contact, as he then has the feeling of being treated without prejudice. With regard to the administrative staff, the lack of personal contact is also described as an advantage, as they no longer have to see "unpleasant people" (Int 8). The 'empty corridors' and significantly lower visitor numbers experienced during the Corona period were also described during the participant observation as a positive and helpful change. In addition to the reciprocity described in section 5.1, these views indicate a further reciprocal expectation, which, according to Granovetter (1973), shows the strength of the tie and thus, as a link, provides indicators for an existing or lacking sense of belonging. The absence of personal contact does not create weak ties, which can have a negative impact on the sense of belonging. Exchange of information for reciprocal processes must occur on both sides and in similar time sequences. If this is not possible, at least transparent descriptions are needed so that expectations can be adjusted to a realistic process. If expectations can be sufficiently met through transparency, satisfactory security aspects and generally positive interactions, it is possible that trust in state authorities, based on previous experience and other aspects of socialisation, will emerge as an enabling factor for a sense of belonging. Therefore, a public administration which can build context-specific experiences, can be seen as an enabler of trust and belonging. See **Fig. 1** for an illustration.

6 Summary and Outlook

As Maslow describes, a sense of belonging is a basic human need. However, the satisfaction of basic physiological and safety needs to take precedence. Public administration contributes to the basic satisfaction of these needs. Building on these basic needs, it provides a sense of belonging, not only to the state but also to the social environment. Public administration can be seen as a kind of gatekeeper for more than just the satisfaction of basic human needs. For example, to enable personal and positive contact, to perceive the state as an institution that is available in case of problems and also offers personal support, and even to enable less socially involved citizens to feel a certain sense of belonging, if only by providing suitable contact persons.

Expectations of e-government are relevant to extending the qualities of basic security needs. These include the transparent, secure, reliable and trustworthy handling of personal data. It therefore can be concluded that e-government contributes to the conditions of belonging. Whether the sense of belonging is a decisive success factor for e-government depends on various factors and varies within subjective perceptions. In

terms of a sense of personal, perhaps even intimate interaction, e-government can be designed to give citizens a sense of belonging. However, this would require opportunities for exchange that allow personal interactions when needed and that create positive experiences.

The analysis of our interviews indicated that some citizens prefer to have as little face-to-face interaction with government as possible: (a) since they prefer to spend their time on activities that are more important to them. Online services therefore free up time for other types of social interaction. Thus, e-government can also indirectly facilitate aspects of belonging by, simply put, leaving citizens alone. Some citizens prefer to have rare interactions (b) because replacing face-to-face interactions can help to avoid unpleasant experiences. Language barriers, prejudices, etc. can turn face-to-face interaction into negative experiences, such as situations in which one does feel "unseen" or perceives to be not recognised as an autonomous subject. E-government offers solutions to both of these expectations. It should be noted that this perspective is very limited, as data-based and algorithmic processes tend to reinforce prejudices rather than reduce them (Gianfrancesco et al. 2018). Therefore, it would be more desirable to focus on more customer-oriented staff training in order to be able to guarantee personal links where necessary and to enable more positive experiences. It is, of course, a serious matter that citizens feel so disempowered to protest against biased administrations that they look to e-government to solve the problem.

However, it is possible that e-government can create additional weak ties that connect the lifeworld of, for example, a non-German-speaking immigrant with the administrative and political reality and thus create a certain sense of belonging through digital means. Whether it is simply the ability to easily find the right contact person or to provide direct support through technical solutions. Eliminating these interactions through purely digital administrative action removes the opportunity for weak bonds to be formed in the context of interactions with authorities, which could have a negative impact on the sense of being part of a community. This raises the question of whether such indirect connections facilitated by e-government are a good way of overcoming the problem of potentially fallible administrative staff. A counter-argument might well be that this is an attempt to use technology to solve social problems, when other attempts should be made to get administrators to be more empathetic, less judgmental and more reasonable in meeting citizens' expectations.

References

- Akkaya, Cigdem; Obermeier, Manuela; Wolf, Petra; Krcmar, Helmut (2011): Components of Trust Influencing eGovernment Adoption in Germany. In: Marijn Janssen, Hans J. Scholl, Maria A. Wimmer, Yao-hua Tan (ed.), *Electronic Government*. Berlin, Heidelberg: Springer, pp. 88–99. DOI: 10.1007/978-3-642-22878-0_8.
- Anchimbe, Eric A. (2016): Digital Narratives of Belonging as Anglophone or Francophone in a Cameroon Online News Forum. In: *Open Linguistics* 2(1), pp. 511–527. DOI: 10.1515/opli-2016-0027.
- Baumeister, Roy; Leary, Mark (1995): The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation. In: *Psychological bulletin* 117(3), pp. 497–529. DOI: 10.1037/0033-2909.117.3.497.
- Baur, Nina; Blasius, Jörg (ed.) (2019): *Handbuch Methoden der empirischen Sozialforschung*. Wiesbaden: Springer. DOI: 10.1007/978-3-658-21308-4.
- Belanche, Daniel; Casaló, Luis V.; Flavián, Carlos (2010): The Importance of Confirming Citizens' Expectations in e-Government. In: W. Cellary, E. Estevez (ed.), *I3E 2010, IFIP AICT 341*, pp. 103–111.
- Berg, Charles; Milmeister, Marianne (2011): Im Dialog mit den Daten das eigene Erzählen der Geschichte finden: Über die Kodierverfahren der Grounded-Theory-Methodologie. In: *Grounded theory reader*. Wiesbaden: VS Verlag für Sozialwissenschaften. pp. 303–332.
- Bertrand, Arnaud; McQueen, Julie (2021): How can digital government connect citizens without leaving the disconnected behind? In: EY | Building a better working world. Electronic Document. https://www.ey.com/en_gl/government-public-sector/how-can-digital-government-connect-citizens-without-leaving-the-disconnected-behind [18.05.2023].
- Bier, Mareike; Amoo-Adare, Epifania A. (2016): Not Quite Home or Alone: A Conversation on Belonging in a Digital Age. In: *Crossroads Asia Working Paper Series* 31.
- BMWi (2021): Digitalisierung in Deutschland – Lehren aus der Corona-Krise. Electronic Document. https://www.bmwk.de/Redaktion/DE/Publikationen/Ministerium/Veroeffentlichung-Wissenschaftlicher-Beirat/gutachten-digitalisierung-in-deutschland.pdf?__blob=publicationFile [10.02.2023].

- Breidenstein, Georg; Hirschauer, Stefan; Kalthoff, Herbert; Nieswand, Boris (2015): *Ethnografie: Die Praxis der Feldforschung*. Konstanz: UTB GmbH.
- Bublitzky, Cathrine (2022): *Mobile Belonging in Digital Exile: Methodological Reflection on Doing Ethnography on (Social) Media Practices*. In: *Media and Communication* 10(3). DOI: 10.17645/mac.v10i3.5379.
- Castelnovo, Walter (2013): *A stakeholder based approach to Public Value*. In: *Proceedings of the 11th European Conference on eGovernment: ECEG Como, Italy*, pp. 94–101.
- Cope, Kevin L.; Crabtree, Charles; Lupu, Yonatan (2018): *Beyond Physical Integrity*. In: *Law and Contemporary Problems* 81(4), pp. 185–195.
- Corbin, Juliet M.; Strauss, Anselm L. (2015): *Basics of qualitative research: techniques and procedures for developing grounded theory*, Fourth edition. Los Angeles, London, New Delhi, Singapore, Washington DC, Boston: SAGE.
- Courtin, Emilie; Knapp, Martin (2017): *Social isolation, loneliness and health in old age: a scoping review*. In: *Health & Social Care in the Community* 25(3), pp. 799–812. DOI: 10.1111/hsc.12311.
- Dahl, Robert Alan (1992): *The Problem of Civic Competence*. In: *Journal of Democracy* 3(4), pp. 45–59. DOI: 10.1353/jod.1992.0048.
- Dodel, Matias; Aguirre, Florencia (2018): *Digital inequalities' impact on progressive stages of e-government development*. In: *Proceedings of the 11th International Conference on Theory and Practice of Electronic Governance, New York, NY, USA: Association for Computing Machinery (ICEGOV '18)*, pp. 459–463. DOI: 10.1145/3209415.3209475.
- European Commission (2022): *The Digital Economy and Society Index (DESI), Shaping Europe's digital future*. Electronic Document. <https://digital-strategy.ec.europa.eu/en/policies/desi> [06.06.2023].
- Funke, Corinna (2022): *DIGITIZATION, FAST AND SLOW: Comparing the creation of digital public services in Denmark, France and Germany*, Florence: European University Institute.
- Gianfrancesco, Milena A.; Tamang, Suzanne; Yazdany, Jinoos; Schmajuk, Gabriela (2018): *Potential Biases in Machine Learning Algorithms Using Electronic Health Record Data*. In: *JAMA Internal Medicine* 178(11), pp. 1544–1547. DOI: 10.1001/jamainternmed.2018.3763.
- Granovetter, Mark S. (1973): *The Strength of Weak Ties*. In: *American Journal of Sociology* 78(6), pp. 1360–1380.

- Hardré, Patricia L. (2016): When, How, and Why Do We Trust Technology Too Much? In: Sharon Y. Tettegah und Dorothy L. Espelage (ed.), *Emotions, Technology, and Behaviors*. San Diego: Academic Press, pp. 85–106. DOI: 10.1016/B978-0-12-801873-6.00005-4.
- Helfferrich, Cornelia (2019): Leitfaden und Experteninterviews. In: *Handbuch Methoden der empirischen Sozialforschung.*, 2nd ed. Wiesbaden: Springer, pp. 669–686.
- Heyd, Theresa (2016): Narratives of Belonging in the Digital Diaspora: Corpus Approaches to a Cultural Concept. In: *Open Linguistics* 2(1). DOI: 10.1515/opli-2016-0013.
- Initiative D21 (2023): D21-Digital-Index 2022/2023 – Jährliches Lagebild zur Digitalen Gesellschaft. Electronic Document. https://initiatived21.de/uploads/03_Studien-Publikationen/D21-Digital-Index/2022-23/d21digitalindex_2022-2023.pdf [11.09.2023].
- Irani, Zahir; Love, Peter E. D.; Montazemi, Ali (2007): e-Government: past, present and future. In: *European Journal of Information Systems* 16 (2), pp. 103–105. DOI: 10.1057/palgrave.ejis.3000678.
- Lohrenz, Lisa; Michalke, Simon; Robra-Bissantz, Susanne; Lattemann, Christoph (2021): Mechanismen zur Gestaltung erfolgreicher digitaler Plattformen. In: *Wirtschaftsinformatik & Management* 13(2), pp. 132–142. DOI: 10.1365/s35764-021-00323-0.
- Maslow, Abraham H. (1970): *Motivation and personality*, 2d ed. New York: Harper & Row.
- Mauss, Marcel (1968): *Die Gabe: Form und Funktion des Austauschs in archaischen Gesellschaften*. Frankfurt am Main: Suhrkamp.
- Mcleod, Saul (2022): Maslow's Hierarchy of Needs. Electronic Document. <https://www.simplypsychology.org/maslow.html> [02.05.2023].
- Mesa, Diego (2023): Digital divide, e-government and trust in public service: The key role of education. In: *Frontiers in Sociology* 8:1140416. DOI: 10.3389/fsoc.2023.1140416.
- Mey, Günter; Mruck, Katja (2011): *Grounded-Theory-Methodologie: Entwicklung, Stand, Perspektiven*. In: *Grounded theory reader*, 2d ed. Wiesbaden: VS Verlag für Sozialwissenschaften, pp. 11–48.
- Morison, Brittany (2019): Big Tech and the Right to Freedom of Thought. In: *The iJournal: Student Journal of the University of Toronto's Faculty of Information* 5(1), pp. 35–40. DOI: 10.33137/ijournal.v5i1.33472.

- Ndou, Valentina D. (2004): E - Government for Developing Countries: Opportunities and Challenges. In: *The Electronic Journal of Information Systems in Developing Countries* 18(1), pp. 1–24. DOI: 10.1002/j.1681-4835.2004.tb00117.x.
- Nitschke, Paula; Schweiger, Moritz (2021): Alltagspraktiken digitaler Teilhabe in Nachbarschaft und Stadt. In: *Medien & Kommunikationswissenschaft* 69(3), pp. 363–379. DOI: 10.5771/1615-634X-2021-3-363.
- Offe, Claus (2002): Reproduktionsbedingungen des Sozialvermögens. In: *Bürgerschaftliches Engagement und Zivilgesellschaft*. Wiesbaden: VS Verlag für Sozialwissenschaften. DOI: 10.1007/978-3-322-93263-1_19.
- Scheiber, Patricia; Müller, Lena-Sophie; Stein, Fabian; Krcmar, Helmut; Hein, Andreas; Daßler, Lukas; Paul, Linda; Exel, Stefanie; Pleger, Sarah (2020): eGovernment Monitor 2020: Staatliche Digitalangebote – Nutzung und Akzeptanz in Deutschland, Österreich und der Schweiz. Electronic Document. https://initiated21.de/app/uploads/2020/10/egovernment_monitor_2020_onlineausgabe.pdf [03.07.2021].
- Sheldon, Pavica; Antony, Mary Grace; Charoensap-Kelly, Piyawan; Morgan, Sarah; Weldon, Laina (2021): Media and interpersonal channels uses and preferences during the COVID-19 pandemic: the case of the United States, Thailand, and Croatia. In: *Heliyon* 7, pp. e07555. DOI: 10.1016/j.heliyon.2021.e07555.
- Spirakis, Grigorios; Spiraki, Christina; Nikolopoulos, Konstantinos (2010): The impact of electronic government on democracy: E-democracy through e-participation. In: *Electronic Government, An International Journal* 7(1), pp. 75–88. DOI: 10.1504/EG.2010.029892.
- Stegbauer, Christian (2002): Reziprozität. Einführung in soziale Formen der Gegenseitigkeit. Wiesbaden: Westdeutscher Verlag.
- Strauss, Anselm; Corbin, Juliet (1996): *Grounded Theory: Grundlagen qualitativer Sozialforschung*. Weinheim: Beltz.
- Strauss, Anselm L.; Legewie, Heiner; Schervier-Legewie, Barbara (2011): Forschung ist harte Arbeit, es ist immer ein Stück Leiden damit verbunden. Deshalb muss es auf der anderen Seite Spaß machen. In: Günter Mey und Katja Mruck (ed.), *Grounded Theory Reader*, 2nd ed. Wiesbaden: VS Verlag, pp. 69–78.
- Tolbert, Caroline J.; Mossberger, Karen (2006): The Effects of E-Government on Trust and Confidence in Government. In: *Public Administration Review* 66(3), pp. 354–369. DOI: 10.1111/j.1540-6210.2006.00594.x.

- Van der Linden, Niels; Sem Enzerink; Jochem Dogger; Horst, Myrte ter; Eijk, Teddy van (2022): eGovernment Benchmark 2022: synchronising digital governments : background report., LU: Publications Office. Electronic Document.
<https://data.europa.eu/doi/10.2759/204448> [27.04.2023].
- Van Tilburg, Theo G.; Steinmetz, Stephanie; Stolte, Elske; Roest, Henriëtte Van Der; De Vries, Daniel H.; Deborah Carr (ed.) (2021): Loneliness and Mental Health During the COVID-19 Pandemic: A Study Among Dutch Older Adults. In: *The Journals of Gerontology* 76(7), pp. e249–e255. DOI: 10.1093/geronb/gbaa111.
- Vetter, Angelika (2011): Lokale Politik als Rettungsanker der Demokratie? In: bpb.de, (Politik und Zeitgeschichte), Nr. 2011. Electronic Document.
<https://www.bpb.de/shop/zeitschriften/apuz/33489/lokale-politik-als-rettungsanker-der-demokratie/> [13.04.2023].
- Wewer, Göttrik (2012): Auf dem Weg zum gläsernen Staat? Privatsphäre und Geheimnis im digitalen Zeitalter. In: *dms – der moderne staat – Zeitschrift für Public Policy, Recht und Management* 5(2), pp. 247–262. DOI: 10.3224/dms.v5i2.01.
- Wirtz, Bernd W. (2022): Nachfrageorientiertes/Nutzerorientiertes E-Government. In: *E-Government*. Berlin, Heidelberg: Springer. DOI: 10.1007/978-3-662-65330-2_10.