

The Digitalization of Local Public Services: Evidence from Germany

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Germany's position in international rankings (Digitalization of Public Administration)



digital-agenda-data.eu/charts/desi-components (2018)



E-government over time: Germany in an EU comparison



digital-agenda-data.eu/charts/desi-components (2018)



Obstacles to digitalization in Germany

- Numerous reasons for digitalization backlog
- Legalistic administrative culture → high number of written form and documentation requirements + authentification and attendance requirements (norm screening by the federal government has so far been unsuccessful)
- Historically rooted fear of the "transparent citizen" → restrictive data protection regulations; no modernization of the data protection law and privacy rules
- Technical/structural problems: lack of basic digital components, e.g. for "once only" (need of comprehensive modernization of registries; current legislative proposal → intense political debates because of privacy concerns)
- Capacity problems (personnel, IT/process know-how)
- Missing overall digital architecture in the federal system (decentralized systems and solutions do not fit/connect to central/standardized digital components)
- Governance problems in the federal multilevel system



How Digitalization Policy is organized in the German Federal System





Collaboration in the Federal System: The Online Access Act as a Multi-Level Challange

- IT systems designed for interoperability and networking across departments and levels without media discontinuity
- Digitalization as a multidimensional "collective work" that cannot be processed by one level only (multi-level problem); consequently:
- Process of digital transformation can only be implemented in administratively interwoven structures, since:
- One level cannot make decisions and advance processes without the involvement of the other level(s)
- Thus, there is an institutionalized necessity to cooperate:
 - Horizontally → cross-departmental coordination necessary (e.g. 5 ministries responsible at federal level; but mostly "negative coordination")
 - Vertically across all levels of government (e.g. "IT planning council" as an intergovernmental body of the federal and Länder governments)
- Online Access Act of 2017 obliges the federal, Länder and local governments to offer 575 services digitally until 2022 (14 thematic areas)



Implementation Status of the Online Access Universität Potsdam Act – as of October 2019

| | | | | | Planung abschließ en! | Zwischenziele festlegen! | Nur noch 3 Jahre! |
|--|-----------------------|------------------------|----------------------|-------------------------------------|-------------------------|---|------------------------------|
| THEMENFELDER (575 LEI STUNGEN) | Federführung Bund | FEDERFÜHRUNG LAND | MI TARBEI T LAND | STATUS THEMENFELD | ABSCHLUSS THEMENFELD | UMSETZUNG (GESETZE, SOFTWARE, ROLLOUT) | BUNDESWEITE VERFÜGBARKEIT |
| Familie & Kind | ₩ BMFSFJ | НВ | s. | Themenfeldplanung abgeschlossen | abgeschlossen | ELFE-Gesetz in Planung | bis 2022 |
| Querschnitt | вм | BE | 👹 68 🛄 нн 😸 тн | Durchführung Digitalisierungs Labs | OKT 2019 | nicht begonnen | bis 2022 |
| Bauen & Wohnen | вм | <mark>⊛</mark> 券 ≋⊛ | ë ™ 🐼™ | Themenfeldplanung abgeschlossen | abgeschlossen | Rollout Wohngeld bis Dez 2019 | bis 2022 |
| En- und Auswanderung | A A | вв | 👸 BY 👸 BW 🚺 IW ្ ISH | Themenfeloplanung abgeschlossen | abgeschlossen | Umsetzung begonnen | bis 2022 |
| Unternehmensführung und - entwicklung | BMWi | HH III | 🐯 вү 🁸 нв 🚺 ім | Durchführung Digit alisierungs-Labs | NOV 2019 | Umset zung begonnen | bis 2022 |
| Arbeit & Ruhestand | 🛞 BMAS | W IW | | Themenfel dplanung abgeschlossen | abgeschlossen | Umset zung begonnen | bis 2022 |
| Steuern & Zoll | 🛞 BMF | E | Ħ | Analyse / Planung | DEZ 2019 | nicht begonnen | bis 2022 |
| Bildung | BMBF | ST | RP RP | Durchführung Digit alisierungs-Labs | OKT 2019 | Umsetzung begonnen | bis 2022 |
| For schung und Förderung | BMI Lücko geschlos | ssen BY | | Vorgespräche | DEZ 2019 | nicht begonnen | bis 2022 |
| Recht & Ordnung | вмју | an 🛃 | | Themenfeldplanung abgeschlossen | abgeschlossen | Planung begonnen | bis 2022 |
| Umwelt | 🚯 BMU | SH 🙀 B6 | | Themenfeloplanung abgeschlossen | abgeschlossen | Umsetzung begonnen | bis 2022 |
| Gesundheit | 🚯 BMG | * | | Themenfeldplanung abgeschlossen | abgeschlossen | Planung begonnen | bis 2022 |
| Engagement und Hobbies | ВМ | | eb) 💓 SH | Analyse / Planung | JAN 2020 | nicht begonnen | bis 2022 |
| Mobilität & Reisen | ВММ | 👸 HE 🗱 BW | | Themenfeldplanung abgeschlossen | abgeschlossen | Planung begonnen | bis 2022 |
| | | | | | | Hier spielt die Musik! | |



Digitalization and the role of municipalities: Research Project on Local Public Services – Example of Local One Stop-Shops



Example of German Local One Stop Shops (LOCS)

- > Organizational Units of Local Governments
- Mirror the tradition of functionally strong local governments in Germany with broad task profiles
- Entities of public service delivery closest to citizens
- ➢ Institutional invention of 1980s → today in all cities with more than 15.000 inhabitants
- Bundle services in various fields of citizen-related services at "one stop" (single window access)
- Examples: passports, certificates of marriage/birth etc., registry affairs, driving licenses, car registration, parking permits, citizenship affairs, traffic fines etc.
- Quite advanced in terms of e-government



Methods

Case studies on digitalization: Freiburg, Mannheim, Karlsruhe Case studies on Local One-Stop-Shops: Bochum, Mannheim, Karlsruhe In total 27 expert interviews

Quantitative surveys:

| | Target group | Overall population | Response rate |
|---|--|--|--|
| Administration survey | Mayors | N = 721 | n = 221, 30,7% |
| (every city >15.000 inh.) | Staff councils | N = 746 | n = 263, 35,3% |
| Staff survey (Bochum, | One-Stop-Shop staff, Bochum | N = 75 | n = 40, 53,3% |
| Karlsruhe) | One-Stop-Shop staff, Karlsruhe | N = 135 | n = 70, 51,9% |
| Citizens survey (Bochum, Karlsruhe, Mannheim) | Citizens Karlsruhe Citizens Bochum Citizens Mannheim | Random sample 6000 Random sample 2000 | n= 1171, 19,5% n = 418, 21% n= 201 |



Current Hurdles of Digitalization in German LOCS

- Low political pressure towards strategic digital projects
- E-government initiatives sporadic/ incremental;
- Lack of clear objectives regarding digital service delivery
- Lack of digitalization budgets, effective governance structures
- Confusion of (few) well-functioning services and (many) poorly working ones on local websites
 - Problem: "good" services/forms ones hardly to be found, because (many) "bad" ones hinder finding the (few) "good" ones
- Lack of digital marketing concepts in order to promote/advertise well functioning services (those without media-break)



What is "Digitalization"? The Staff's Perspective

| | Fully relevant | Quite relevant | Not very relevant | Not at all relevant | n |
|--|-------------------|-------------------|----------------------|------------------------|----|
| Documents scans and electronic storage systems | 66,7% | 21,7% | 11,6% | 0,0% | 69 |
| Converting to electronic records (eRecords) | 47,8% | 37,7% | 13,0% | 1,4% | 69 |
| Online appointment scheduling | 63,8% | 29,0% | 5,8% | 1,4% | 69 |
| Electronic response to citizens' concerns | 53,6% | 40,6% | 2,9% | 2,9% | 69 |
| Complete electronic processing of One-Stop-Shops' services | 44,1% | 30,9% | 20,6% | 4,4% | 68 |

Source: Staff Survey Karlsruhe



Comparison expectations/experiences: The Citizens' Perspective



1 = not at all relevant; 2 = not very relevant; 3 = quite relevant; 4 = fully relevant Demand n = 1083 to 1138; Experience n = 1029 to 1129 Citizen Survey Karlsruhe



Digital Maturity

| Service | Information available online | Partially processed online (forms, emails) | Fully pro- cessed online | N |
|--|---------------------------------|---|-----------------------------|-----|
| Passports | 87% | 21% | 2% | 210 |
| Certificates (birth / marriage) | 67% | 44% | 10% | 101 |
| Criminal record | 75% | 26% | 23% | 205 |
| Registration of residency | 80% | 39% | 3% | 205 |
| Authentication of certificates | 96% | 8% | 1% | 178 |
| Dog tax registration | 80% | 33% | 6% | 118 |
| Residents parking perming | 81% | 27% | 8% | 84 |
| Parking permit for people with disabilities | 91% | 18% | 0% | 87 |
| Housing benefits | 85% | 30% | 0% | 54 |
| Vehicle registration (only county-free cities) | 83% | 33% | 10% | 48 |

Source: city survey (mayors). Question: "Which services of your local one-stop shop are online available and to what extent?



Dysfunctionalities of Digitalization: The Staff's Perspective

| | Fully & quite relevant | Not very & not at all relevant | n |
|--|---------------------------|-----------------------------------|----|
| Rather positive effects | | | |
| Increase of the transparency of processing status | 67,2% | 32,8% | 64 |
| Reduction of attachement to usual opening hours and working days | 65,7% | 34,4% | 67 |
| Reduction of processing time | 62,3% | 37,7% | 69 |
| Improvement of administrative processes | 61,2% | 38,8% | 67 |
| Reduction of workload | 38,8% | 61,2% | 67 |
| Rather negative effects | | | |
| Constant availability | 86,9% | 13% | 69 |
| Technical problems | 84% | 15,9% | 69 |
| Difficulties with software, particularly due to poor quality of service providers such as computer centers, <i>bund</i> or <i>land</i> | 77,6% | 22,4% | 67 |
| Additional processing time per case | 76,4% | 23,5% | 68 |
| Feeling of being controlled due to digitalization | 72,3% | 27,7% | 65 |
| Shifting working time from front to back office | 67,7% | 32,4% | 68 |
| | | | |

Source: staff survey Karlsruhe.



Dysfunctionalities of Digitalization: The Staff's Perspective

Changes in duration of proceedings in Local One-Stop Shops (last 5 years)

| | Strongly & fairly increased | Unchanged | Strongly & fairly decreased | N |
|---|--------------------------------|-----------|--------------------------------|----|
| Duration of proceedings in general | 51,7% | 45% | 3,4% | 60 |
| Duration of proceedings due to digitalization | 69,5% | 25,4% | 5,1% | 59 |

Source: staff survey Karlsruhe



Dysfunctionalities of Digitalization: The Staff's Perspective

Changes in tasks, work intensity, availability and email traffic

| | Strongly & quite increased | No difference | Quite & strongly decreased | n |
|---|----------------------------------|------------------|----------------------------------|----|
| Amount of tasks to complete | 73.7% | 16.4% | 9.8% | 61 |
| Work intensity for the staff | 89.7% | 5.2% | 5.2% | 58 |
| Constantly available online for the managers | 58.6% | 32.8% | 8.6% | 58 |
| Work load via email traffic (back office) | 82.3% | 16.1% | 1.6% | 62 |

Source: staff survey Karlsruhe



Citizens' Motives for Expanding Online Services in: Generational Divide



Source: citizens survey Karlsruhe. Data for the category "very important"; n = 1102 to 1115



Citizens Views on Digitalization: Generational Divide





Summary of the results

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Expectations on digitalization vs. reality

- Citizens/employees predominantly in favor of more online services
- Time saving highest expectation (for 90% of citizens very/rather important)
- For 80% of citizens user-friendly online services central requirement to citizen-friendly citizens' office
- But: only 54% of the citizens see this requirement to be completely/partly implemented
- → 26% difference between demand and reality = significant discrepancy between expectations and reality
- Most requested/favored services for digitalization by citizens ≠ de facto offer



Expectations on digitalization vs. reality

- Information provision function (for less requested services) is prevalent; communication function is low; transaction function is rudimentary
- Not a single service can be fully processed online in more than 23% of the cities (for criminal records).
- Not a single service can be carried out online uniformly in each Local One-Stop-Shop in the whole of Germany.
- Staff and citizens do not equally see transaction function as requirement for a citizens-friendly Local One-Stop-Shop (60% vs. 90%)



Citizens' perspective

- Only 10% of the citizens recurs to electronic access to Local One-Stop-Shops → Reasons?
- Half (49%) would not do without personal advice
- 39% generally prefer personal contact
- 89% of the citizens would fully/partially make use of digital services, if they were as easy to process online as in platforms like Amazon, Otto, Zalando, etc.
- Usability-problems of current online services: e.g. poor accessibility of infos on city portals; overloaded websites; badly working search functions; technical and legalist language; multiple media discontinuities



Citizens' perspective

Distinctive generational effects:

- Time saving: (much) more important reason to make use of online services for the younger generation (81% of age group 18 - 29) than for the older one (53% of the over 50)
- Personal contact to city administration: less important for the young (8%) than it is for the older respondents (34%)
- "online services are too complex to use": less agreement among the young respondents (2%) than the older ones (18%)



Staff's perspective

Positive effects of digitalization:

- Higher transparency of processing status (67%);
- Loosening bound to usual opening time and work days (66%);
- Improvement in administrative processes (61%);
- Online appointment scheduling: a consistent "success model" (available in 33% of Local One-Stop-Shops; in 90% of the cities > 100.000 inh.)
- But: only 39% thinks workload was curbed
- Managers evaluate the effects of digitalization more positively than the staff



Staff's perspective

Negative effects of digitalization

- > are considered more relevant (61-87%) than the positive (61-67%)
- Due to digitalization the processing time increased (70%), decreased (5%)
- Constant availability: 87%; technical issues 84%; Additional processing time per case (76%); controllability (72%)
- Digitalization is considered to be a burden rather than a work relief
- Increasing workload because of back office emails processing (82%)
- Higher work pace; overloading; stress
- Shifting working time from front to back office without improving the amount of accomplished cases



Decentralization vs. Standardization: Typical Arguments

Standardization/Centralization





- State/federal level actors too remote; they don't grasp how things work in practice on the local level
- Suggestions on digital solutions must come from the local level, otherwise no improvements → bottom-up strategy
- Street-level knowledge indispensable for well functioning digital solutions
- Centralization to the disadvantage of effectiveness of local service delivery



Decentralization vs. Standardization

- Online Access Act aims at a standardization regime → the federal government has been granted competences for this based on a constitutional amendment
- Debates about a standardization agenda to the ensure adoption of jointly developed digital solutions based on a joint digital architecture
- Yet, main actors in the digital laboratories of the Online Access Act are federal/state governments; municipalities underrepresented
- Key questions:
 - How to make existing digital solutions of (advanced) local governments compatible with new solutions (centrally) developed in digital laboratories of the Online Access Act?
 - How to roll centrally developed solutions out nationally and from one jurisdiction to another?
 - Problem: principle of voluntariness
 - How to achieve the right balance between standardization on the one hand and decentralization/diversity on the other?