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Political parties and their online platforms–Differences in philosophies

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As external forces seek to gain influence over ICTs of political parties, their security becomes an additional relevant factor in parties' finances. While many studies focus on parties' online fundraising, their spending for web-based technologies remains terra incognita. Our perspective follows the idea that a party's spending is an indicator for relevance. What aspects are on the table when new ICTs are purchased by parties? What significance do security concerns have? We analyzed the Green Parties in Germany and Austria. Both are forerunners in their use of online participation platforms with decades of experience in engaging members offline. We conducted interviews with stakeholders from both parties and an external IT-specialist. Our findings indicate differences in the approach of securing ICTs even among these most similar cases: some see security as a long-term issue and invest in in-house solutions, others see security as a necessary expense and opt for external service providers.

KEYWORDS

political parties, ICTs, security, finances, green parties

1. Introduction

According to Eurostat, in 2021, 92% of households in Europe had access to the internet and almost 80% of respondents used the internet daily (Eurostat., 2022). The potential for political parties to reach citizens through ICTs is therefore tremendous (e.g., Chadwick and Stromer-Galley, 2016). This also poses the necessity for political parties to move where the people are: into the digital sphere. Political parties' migration toward digital solutions is a research topic at the intersection of political science and computer sciences and looks back at 20 years of research. Among practitioners and scholars, the chances concerning exchange through ICTs and participation for a large number of people triggered hope for a renewed quality of (party) democracy (mobilization thesis). Influenced by the research on the digital divide (e.g., Van Deursen and Van Dijk, 2011; Scheerder et al., 2017) and experiences of the web's potential to harm individuals and society, recent research also considers possible negative effects and even perils of technological advancements for democracy (e.g., Persily, 2017; Margetts, 2018; Starks, 2019). Acknowledging both, opportunities and perils, this paper examines how political parties attempt to cope with the technological advancements by taking a rare perspective: party spending. To ensure enhanced and reliable intra-party democracy and member engagement, security of platforms is an imperative to guarantee procedural integrity (see Figure 1). Accounting for security and user-friendliness involves investing in adequate digital infrastructure. By observing two European parties, we analyse the process of implementing digital infrastructure. We decided to focus on the Green Parties in Germany and Austria, because these parties have a long tradition and emphasis on member engagement and face the challenges of hybrid campaigning (offline and online; e.g., Chadwick et al., 2018) in multi-party systems with a large number of competitors. Choosing a pair comparison enables us to identify more general tendencies and at the

same time provide an in-depth analysis building on different resources. We use official data on party financing and combine these with expert interviews from party officials and internet experts. Key aspects of our analysis concern the decision-making and implementation process of platform usage. This includes budgeting, function, usability and security. We seek to understand which tools are used and which of these aspects are a priority. Are tools developed in a targeted fashion or do they grow rather naturally?

2. Political parties' spending: detecting party strategy

Parties may benefit from a sophisticated online appearance (for an overview see Vergeer, 2013). They can attract and integrate members through ICTs (e.g., Gibson et al., 2013; Scarrow, 2014; Vaccari and Valeriani, 2016; for a critical perspective see Davis, 2010), deepen intra-party democracy by moving decision-making and candidate selection processes online (e.g., Ceron, 2017; Gerbaudo, 2019; Biancalana and Vittori, 2021) or use ICTs to create a positive image for the party organization by providing transparency (e.g., Nixon and Johansson, 1999). Yet, this comes most literally at a cost. User friendly and secure tools need to be developed in order to meet parties' demands. In addition, these tools need to be implemented and maintained to harvest the possibilities to their full extent. What parties expect from digital platforms varies. While the administration of members is a necessity, fundraising, deliberation and decision-making are optional. While for example parties like Podemos, the Five Star Movement or the Pirates employ digital technology to an extent that led to the term Digital Party (Gerbaudo, 2019), long established and large parties in many cases seem to rely on a rather slim model of digitalization, often reduced to one-way communication via websites or social media (Gibson and McAllister, 2015; Garcia Lupato and Meloni, 2023). Both strategies might be suited well for the organization and its electorate. Depending on the path a party chooses for its migration into the digital, the platforms need to be tailored in order to meet these demands. Parties have different options: either they rely on available and established platforms, they develop their own, or they have someone develop solutions for them. While emerging parties might be able to develop their own solutions as they grow, established competitors might opt for purchasing software and services. This leaves traces in a party's spending record.

Although financial investments of parties provide an obvious indicator for a party's effort to migrate into the digital, to the best of our knowledge party research exclusively focuses on digital fundraising, and not on digital spending (for an overview see Fitzpatrick, 2021). This seems surprising since financial reports are publicly available in many Western democracies, and questions on details might be cleared through interviews with parties' administration offices. This gap in research may result from the tradition of research into party income before the internet age. Questioning the effects of (partial) state funding and its effects on party democracy is a key component in Katz and Mair's (1995) cartel party thesis and the elaborate body of research building on this school of thought (e.g., Hopkin, 2004; Van Biezen and Kopecký, 2014). Even before Katz and Mair's meaningful contribution to the debate, other scholars put an emphasis on party funding, especially public party funding (e.g., Mendilow, 1992) and its effect on party systems (e.g., Müller, 1993). Although the analysis of party funding is very important to understand party (system) change, this just tells half of the story. Yet, studies that do focus on spending restrict the term to campaign expenses (e.g., Benoit and Marsh, 2010; Johnson, 2013; Brock and Jansen, 2015). How parties spend and invest their assets tells us how the organization (re-)builds itself. Budgeting is an intentional and planned procedure. This perspective also allows to detect key areas of parties' structural decisions. Organizations will spend their assets with the expectation to benefit from their investment. Drawing on organizational research, four elements are essential for an organization: tasks, structure, individuals and roles, as well as technology (Leavitt, 1965). These four elements were specified by Leavitt in his so-called diamond model, which has been part of the intersection of digital and organizational research (e.g., Wigand, 2007; Hoff and Scheele, 2014). While some authors interpret "technical" in a very modern fashion, Scott and Davis (2007), re-shape it as a "material-resource" component. This interpretation is interesting because it frames technology as a restrictor of structural processes in an organization. Investments in technology therefore shape an organizations' structure and influence the behavior of its members.

The success of any technological change however also depends on the acceptance and use by members. Usability of digital solutions in any organization must be considered. Usability in political science is often connected to e-voting (e.g., Herrnson et al., 2008), e-governance (e.g., Huang and Benyoucef, 2014) or campaign websites (e.g., Følstad et al., 2014; Mochla and Tsourvakas, 2020). The routines of political parties beyond campaign season have not been a focus in this regard. Usability can be understood as a design choice that makes it comfortable for users to find information easily in a well-structured digital environment (similarly Matera et al., 2006). For political parties, the use of ICTs by members has to reflect usability issues in order to be accepted as a channel for file-sharing, communication and coordination, and intra-party democracy. Beyond these immediate user demands, security and privacy have become an issue especially in the light of cyberattacks on government platforms like the German Bundestag in 2015 or scandalously around the interference in election campaigns (e.g., Cambridge Analytica). These circumstances raise questions on how parties react in their employment and design of digital platforms. The research questions guiding this analysis are as follows:

RQ1: What digital tools do parties employ and for what?
RQ2: Who is involved in making these decisions?
RQ3: What parameters are important for decisions regarding security and user-friendliness?
RQ4: Are usability and security equally important in these decisions? How do parties secure and design their use of ICTs?

3. Case design and country specific info

In order to answer these questions, we conduct a comparison of two similar cases: the green parties in Germany (Bündnis 90/Die Grünen) and Austria (Die Grünen). This allows for an in-depth

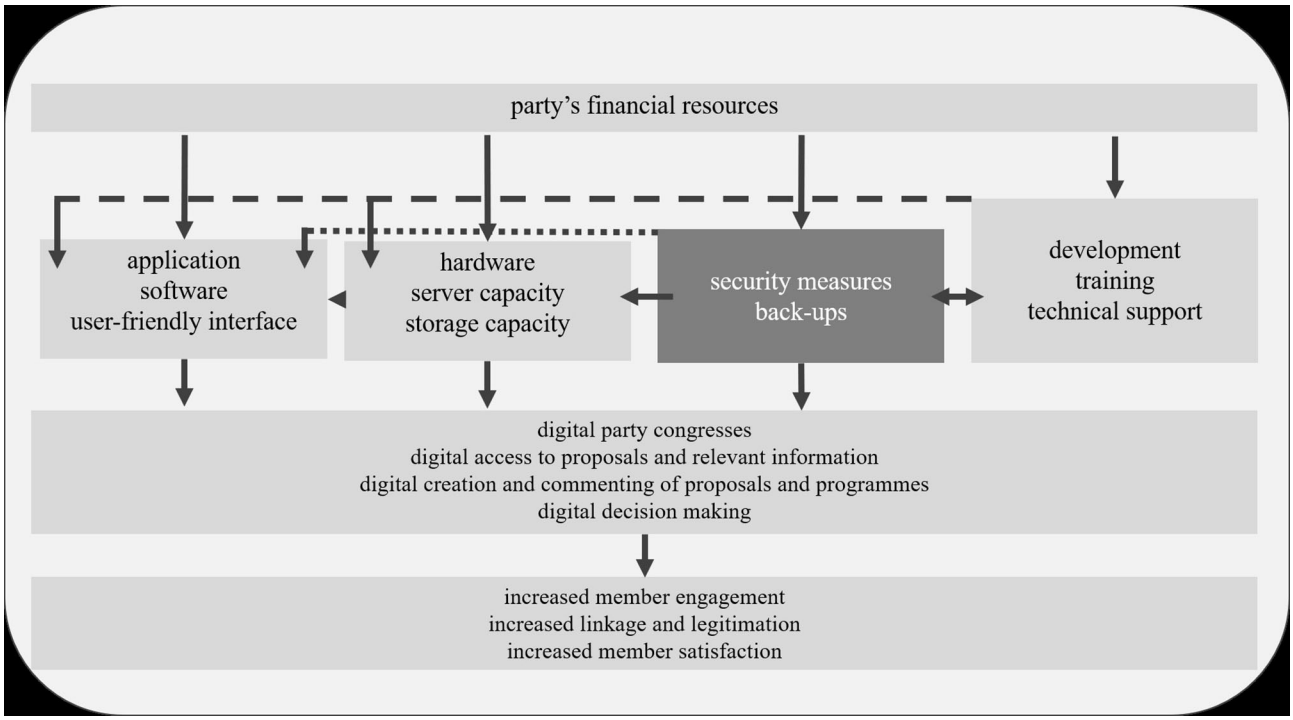

FIGURE 1
Visualization of links between party spending and the demand for security in intra-party democracy.

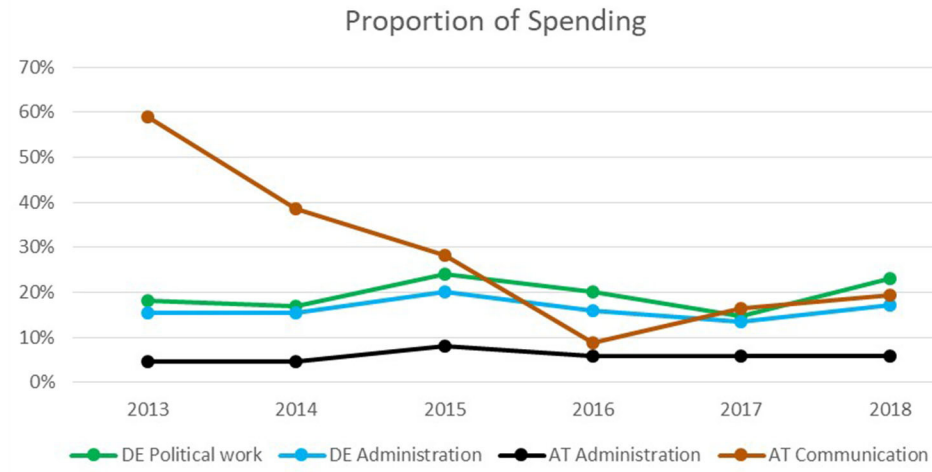

FIGURE 2
Proportional spending by party and area (financial reports by the parties; see above).

analysis respecting many aspects for each case. In addition, it opens the scope beyond a single-case study and allows for some more generalized interpretation of findings. However, this demands for a careful choice of cases (Gisselquist, 2014). We conduct a controlled comparison (George, 2019) of two very similar parties–both are opposition parties who follow similar policy goals, are located in neighboring European countries, and were founded under similar circumstances during the 1980s. Both parties have a strong emphasis on grassroots involvement and comprehensive intra-party democracy. The national contexts of the parties are similar as well: post-industrial societies with multiparty systems, need for coalition formation in parliament, wide media landscape and a high internet penetration rate amongst the population. Recent polls estimate the share of Green parties' voters at around 10% for Austria and 20% Germany of the vote share (Politico., 2022). At the same time, there is a noticeable diversification in topics covered by the green parties (see Fitzpatrick and Mayer, 2019). The recent changes by Bündnis 90/Die Grünen to expand

the manifesto in areas like security can most certainly be seen as an attempt to attract voters beyond the typical crowds. With their solid performance during election in Germany in 2021 these changes can be regarded successful, their role in the current government coalition proves the sincerity of the programmatic changes. Die Grünen in Austria was the former party of President Alexander van der Bellen, who froze his membership in order to demonstrate the non-partisan character of his administration. Yet, the success in Austria and Germany demonstrates green parties' ability to run for and gain experience in public office. Hence, these parties are interesting competitors.

All the similarities between the parties allow us to focus on the few differences between them: They are in different countries (Germany vs. Austria), have a different trajectory (increasing success in Germany vs. intermittent bankruptcy and a rebuild based on regions in Austria), and have very different membership numbers (∼100,000 vs. 7,500) and therefore differently sized budgets (48 vs. 2.5 million for 2018).

Their emphasis on transparency and inclusiveness in decision-making suggests an open attitude toward online solutions that promise to meet these criteria, and makes them a "crucial case." At the same time, the fear of external interference and infiltration poses a plausible threat to political actors: external manipulation of campaigns and votes or data theft of members' and politicians' identities including addresses or banking account data are only some examples. In the following analysis, we examine how the green parties in Austria and Germany cope with these challenges. Our goal in this analysis is to identify how the parties react to these challenges in their own ways, given the differences between them, especially concerning members and budgets, which we believe are decisive factors in how they plan their activities.

4. Methods and data

As discussed above, it is surprising that party finances have not been a focus for research, because they are, to some degree, public data. Hence, we started our analysis by retrieving this data and creating an overview of party finances for both parties. Party expenses in Germany are reported to the administration of the Bundestag, regulated by the Political Parties Act, §24, and made publically available on the Bundestag website [Deutscher Bundestag, (n.d.)]. Based on these reports, we collated data for the years 2000–2018 (the last available at the time of writing), for party income, expenditure, and the expenditure subcategories for "running business" and "general political work." The former includes regular costs for the party, such as cleaning and maintenance, which also includes the maintenance of IT systems, such as servers. The latter includes costs that are incurred for the fulfillment of the parties' societal role, and internal or external participation and decision-making. This would include any new developments for tools for these purposes (Lenski, 2011; paras 24, #5, Rn Lenski, 52-54). Since these numbers are very broad, we used them as a starting point for interviews with the party's treasurer.

Parties in Austria also have to submit annual financial reports, which are published through the Court of Auditors (Rechnungshof). Reports available at the time of writing ranged from 2013 to 2018 [Rechnungshof Österreich, (n.d.)]. The Austrian reports are slightly less detailed than those for Germany (e.g., grouping of costs and totals), but allow some basic comparisons, indicative of where the parties focus their spending.

Using this financial data as a starting point, we conducted two stakeholder interviews with senior representatives of both parties, to gain insight into the context of the numbers, and the considerations that are made for spending on digital platforms. While a larger number of interviews would have been preferred, there is only a very limited number of experts in parties who *can* respond to questions like ours. We therefore supplemented the data for the German party with interviews conducted previously (in 2018; cf. Thuermer, 2019), in a period of intense digital development. The interview questions and profiles of the interviewees can be found in the Appendix.

All interviews happened between 2018 and 2020, and were conducted and transcribed in German, then thematically coded in English. Coding was done inductively, identifying relevant themes, and similarities and differences between the responses, over multiple readings. All coding was conducted by the second author, since consent from participants did not allow sharing the data outside of the institution. The final codes resulting from this analysis are:

- **Digital tool requirements**, for discussions of what digital tools are needed, and what they need to be or do in order to be useful for the party (e.g., "we had many more people using [a tool], so it was running over capacity")
- **Digital tool use**, for discussions of how digital tools are used in practice (e.g., "I try to create contacts with real people, to build a relationship to us and our brand, and I use digital tools to organize that")
- **Administrative considerations**, for discussions of administrative processes that enable the adoption or integration of digital tools (e.g., "these processes are co-financed, so we need to ensure that this is communicated across all financial committees")
- **Spending considerations**, for discussions of aspects that were considered during discussions about the costs and financing of digital tools (e.g., "we need to trust the people who thought this through and developed the tool in many regards anyway, so we also have to trust their assessment and prioritization")
- **Security considerations**, for discussions of aspects that were considered during discussions about the security of digital tools (e.g., "How secure is the system? Can Edward Snowden submit a proposal in my name?")
- **Usability considerations**, for discussions of end user requirements of digital tools (e.g., "how many people can actually use the tools. It's a question of practicability, for users in the country, but also for our staff")

The codes' frequency of use can also be found in the Supplementary Table 1.

To add further context, the resulting profiles of parties' priorities were then discussed with an expert in IT security from the ChaosComputerClub. This was originally intended as an in-depth expert interview. However, since the parties' considerations on security were less detailed than anticipated, it was ultimately

used to simply provide context to the considerations we found, and whether or not those were considered sufficient.

5. Findings and discussion

5.1. Party finances

As mentioned before, both parties work with very differently sized budgets, which stem from membership fees and donations. The Austrian party does not only have much lower membership numbers and income, but their situation is further complicated by their loss of votes in the 2017 national election, causing a 2 year break in their representation in parliament, and a subsequently looming bankruptcy.

Despite differences in how much cash both parties have at their disposal, where they spend this money proportionally does tell some part of the story: While the Austrian party spends a large part of their funds on communication, and only a small proportion (6% on average) on administration, the German party consistently spends a third of their funds on political work and administration (see Figure 2). However, as we found during our interviews, the financial records do not tell the *whole* story.

5.2. Tool requirements and use

The Green Party Germany has heavily invested into the development and maintenance of digital tools for several years. There is a reoccurring theme in how these tools are developed: Volunteers start to put together tools based on use-cases they see themselves; then the tools are taken up by other groups within the party; and ultimately the tools and their development are taken on by the party centrally, who will also fund their hosting and development going forward. This order of proceedings is likely due to earlier attempts to develop and implement tools top-down; the internal knowledge-management tool and social network *Wurzelwerk* was developed externally, and the attempts to implement and gain users for it were unsuccessful, as members were not convinced of its use, or usability (Heinrich and Spitz, 2014; Thuermer et al., 2018).

The route from volunteer development to official adoption happened with the *Antragsgrün (proposal green)*, an internal participation tool for the management of proposals (see also Thuermer, 2021); and most recently with the *Grüne Wolke (green cloud)*, a cloud application to share data among members. The *Wolke* was developed by an association in the vicinity of the party, and quickly gained popularity and users. Ultimately, within only 6 months of active use, the tool became so successful that the association deemed it irresponsible to continue running it, as it needed a more stable support and security concept, and a volunteer association was not a suitable framework to handle either of these things. At that point, the party office stepped in to ensure the tool, which had become central to campaigns and other party activities, could be maintained professionally:

> *"so they said, we can't keep doing this on our own, because the storage space requirement has exploded, and so has the workload"* (Interviewee 3).

This, naturally, led to an immediate need for funds.

A similarly immediate need for funds arose when the company that hosted all party branches' websites discontinued their services, and the party had to find an alternative solution very quickly. Both services–the *Wolke* and the websites–have been taken over by a cooperative, owned by the party and its subsidiary branches.

> *"I would even say that now is the time for our organization where digitalisation becomes serious. Everything before was interesting, [. . .] but now it is serious, because suddenly the tools that are made available are decisive, instead of what happens offline. For collaboration and to organize an election campaign, these tools are now absolutely essential"* (Interviewee 3)

For the Green Party Austria, digital tools are much more focused on outreach and campaigning, and less on internal enablement. This is partly due to the parties' position, having dropped out of parliament in 2017, only to get re-elected and join a government coalition 3 years later. The interim period has had disastrous effects for the parties' finances, and so expensive development projects are neither possible nor desired.

Instead of large development projects, the party established a series of small projects under the umbrella *Projekt Bienenstock* (project beehive, launched 2017), where they evaluate the need for, develop and test small solutions, to ultimately contribute to election campaigns and engagement of supporters in the future. Starting from the needs within the party, the project used personas, interviews and focus groups to establish what tools would be useful, and then prioritized and assigned the limited available resources accordingly. It includes, amongst other digital tools, an activist app to engage supporters. The party also collaborates with the Green Party Germany, to share some of the tools that were developed there. This includes a canvassing app used to support door-to-door efforts in election campaigns, developed for the Green Party Germany, who made it available to their Austrian peers. The Austrian party is now paying for an adaptation to their local needs. Tools are developed and tested in small areas, rather than nationally.

In this respect, we observe a focus on tools that enable decentralized campaigning (Gibson, 2015) for the Austrian Greens, while the German Greens centralize best practices from subordinated party entities.

5.3. IT finance decisions

Many of the recent financial decisions taken in the Green Party Germany were not premeditated, but arose from urgent necessities, out of sync with the parties' plans. Part of this urgency arose from the need to transfer previously voluntary services into professional structures, simply because these services were more successful–and therefore necessary–than anticipated.

Previously, a key priority had been to establish systems that could be used across branches.

Even when investments into tools were planned, the key consideration in prior years has not been cost, but usability and reach, especially across the subsidiary branches who co-fund these investments:

> *"It was important to me that multiple layers of the party could use these tools, so, I want to do things that the state and local branches can use independently. (…) I'd rather have something rustic and simple, but usable, than something elaborate that only the top-level can use."* (Interviewee 2)

This also included the development of tools that were specific to the parties' needs: *"Better to develop solutions ourselves, than to buy custom-made solutions"* (Interviewee 2).

While security was one of the key considerations to fund tools like the *Grüne Wolke*, it was only one of multiple reasons, alongside continuous availability and centrality to the workflows in the party being equally or more important. Security was a consideration before the tools were introduced, but not a major one: *"My gut feeling was that, no idea, that's the question, isn't it, how closed off is the system against external influences?"* (Interviewee 1). Security was then one of the triggers to make an investment necessary in the first place, but in the following discussions it still only played a minor role. It was perceived as achieved by virtue of taking the tool on internally:

> *"Questions like IT security can only be solved if you have a little access to everything, and a general overview. (…) We have not developed this yet, but at least we have a basis to have realistic influence in the future. This was a starting point."* (Interviewee 3)

Other considerations, such as how exactly the maintenance of the tool would be handled administratively, were much more important going forward. This looked slightly different for *Antragsgrün*, which is very influential in internal decision-making, and so security took more of a central role; but even in this case, hosting the tool internally was seen as key to ensuring control over access to the tool. Usability was no consideration for either tool, since it has already been established, and is the reason for the tools' success, and needs to be maintained, rather than investing in its continuous development:

> *"The* Antragsgrün *grew from the party itself, it's been accepted by diverse stakeholders. We continue to adapt it to our requirements, and support the development by now. (…) But we use the things that are there rather than developing something completely new."* (Interviewee 2)

Financial decisions in the Green Party Germany are made collaboratively between the national and state executives, which is mandated by the party statutes (§19; Bündnis 90/Die Grünen., 2020). When discussing digital tools and their financing, IT experts do not have much of a stake in the conversation; the focus in these discussions appears to be on the administration much more than on their technical or practical viability. Decisions are led by the necessity to fund a process or tool that is required, not by available budgets. This is partly because the viability of the tools in question is already established (after all, the tools are already developed and in use), and partly because there are few IT experts engaged in senior decision-making levels. This leads to sometimes naïve discussions about how IT services can be purchased, as simply going for the cheapest offer may appear to be the best option financially, but would not lead to the longevity and continuity the party wants for their services:

> *"We had 60 people in this discussion, you can imagine how many really had any IT expertise. And then those with expertise contribute, but those without misinterpret what they say, to mean they don't want these things either."* (Interviewee 3)

While data protection was not a key consideration for these decisions, complying with the new European General Data Protection Regulation (GDPR) was one of the motivations for the decision to outsource tools to an external (but party-related) organization. The services were handed to the collaborative, because the party *"could not possibly use the same IT provider as the FDP"* (Interviewee 3), and a provider based in Germany and closer to the party would be more compliant with GDPR as well as German perceptions of data protection. The additional layer of organization (which was previously handled by a group of volunteers) was deemed necessary, amongst other factors, to ensure legal compliance. This may explain some of the success a party-internal cloud app had in the first place, and why so many members are using the service. Administratively, having access to and insight into the workings of the IT provider was deemed necessary to establish control over IT security as well. Security from unauthorized external access was deemed less relevant, as none of the data shared on the *Wolke* was truly sensitive; it is a practical tool, not a sensitive one, and since it is used to share things like campaign posters and best practice widely across the party, much of its content can be deemed semi-public to begin with. Therefore, there is little danger, but also a perception of very limited interest in accessing these data. On the other hand, making investments into security specifically was seen as a waste of money, as Interviewee 3 explained: *"even if I pay hundreds of thousands for a provider, I can still get hacked."* Previous data leaks in the party, such as the publication of the phone numbers of their executives, had not been due to IT security at all, and the party could not ensure that the periphery of family members or relatives adhered to any security standards.

As IT security expert Alexander Bogk from the CCC points out, IT security should consider not only hardware, but also people and processes, to ensure that data is kept confidential, available, and maintains integrity. The ideal setup for any one organization will always be based on individual requirements and perceived threats, as well as finances. Cloud applications have the benefit of scalability and lower costs, but may be less secure from (state) interference. On premise solutions (e.g., own servers) require higher initial investment and maintenance costs, but allow tighter access controls. However, both routes can be used securely, provided expert staff (or even volunteers) are available to maintain them.

An interesting side-note is that the need for these digital tools did explicitly *not* arise from the elsewhere observed increase in online services due to pandemic-related lockdowns. On the contrary, the pandemic may have made decisions more complicated than they would otherwise have been, because suddenly, digital tools and discussions gained more attention from internal stakeholders, which put an internal spotlight on decisions that would otherwise have happened without major discussions. The need for these tools had arisen *before* the pandemic, and largely to enable personal interaction, such as canvassing.

In Austria, financing for the *Bienenstock* is granted by a cross-section of party leadership, campaign- and IT experts, who collectively make decisions about which projects to fund. Funds are made available across the party, but primarily from the two largest and most financially strong subsidiaries. The party had not invested heavily in IT in the past, and now felt the need to catch up:

> *"We simply were not competitive in the digital arena. (…) That is why we told ourselves we needed to catch up."* (Interviewee 4)

Digital participation is a focus for them, however, they focus heavier on publicity and digital communication than on engagement–which also explains the continuously low-stakes investment. The long-term plan for the *Bienenstock* is to develop a number of tools beneficial to the party as a whole. Some of these tools may be shared back with their German colleagues in the future, and there is an idea to potentially establish more wide-ranging European collaborations.

Security, again, does not play a major role beyond the decision of where services are hosted. The party does not have the resources to pay for internal experts, and so decided to use external services such as Microsoft Azure, where security is taken care of. Rather than investing into security and maintaining control themselves, they are treating security as a service that they pay for:

> *"Of course that is in the US, and yes, we cannot meet the political demand to be secure from the NSA. We aren't. But it's better to be part of existing security architecture as other commercial providers, because that means a maximum of IT security."* (Interviewee 4)

The alternative would only be to do nothing at all, as the party does not have the resources to ensure IT security on their own, not only for the initial investment and staff required, but neither for continuous development to maintain the current security standards at all times:

> *"IT experts in large companies change all the time, and have much more resources and know-how. And even they cannot guarantee one hundred percent IT security."* (Interviewee 4)

6. Conclusion

This paper is located in the evolving sub-discipline of political science integrating computer sciences' knowledge to analyse political parties and their evolution. We examine the efforts of political parties to meet the needs of security and user-friendliness of ICT platforms for party purposes. While many papers observe parties' digital behavior during campaign season, we take a more general look at parties' internal ICT use. In addition to this novelty, we evaluate parties' spending on ICT development and security as an indicator of importance and awareness for security issues. We address four main research questions: What digital tools do parties employ and for what? How do parties secure and design their use of ICTs? What parameters are important for decisions regarding security and user-friendliness? And, who is involved in making these decisions? Especially, in terms of guaranteeing the procedural integrity of will-formation and decision-making these questions addressed perils and chances of web-based technologies: while a more inclusive and transparent process can increase member engagement and the legitimacy of decisions, secure systems become a condition for digital intra-party democracy. Only a system that is safe from external influences can promote democratic procedures within a party.

Green parties prove to be a very interesting case in terms of evaluating the implementation of ICTs into communication and decision-making processes. Continuing the established importance of member integration in the digital age is an imperative and challenge at the same time. Comparing these similar cases, we find different paths of ensuring security. Regarding the first and second question, both parties are collaborating in their development of digital tools, but have different priorities. The Austrian party focuses on tools that campaign and outreach activities, such as canvassing and engaging affiliates. The German party on the other hand focuses on collaborative tools, allowing members to exchange data, or engage in the parties' decision-making processes.

Where the German party prefers to be in control of IT systems and therefore keeps them as close and internal as possible, the Austrian party assumes that they cannot achieve security internally, and therefore pay for everything to be hosted securely *externally*. This difference to some degree reflects the differences in both parties' resources, with the German party having access to significantly more funds.

Essentially, we find two philosophies about security and user-friendliness and their achievability: The German Green Party takes up successful tools, initiated by an affiliated association outside of the party framework, and tested in party subsidiaries. User-friendliness is therefore a neglected parameter in the process: By the time a tool is adopted, the party already knows it works and it is worth the investment. When its popularity reaches a critical threshold, they opt for centralizing the tool and implementing it on their own servers. The affiliated association and subsidiaries can be seen as a party lab, successful tools and initiatives will be centralized and afterwards enjoy party funding. The motivation for this is security concerns which are accounted for by the process of centralization. The German Greens do not outsource platforms and services. This can be seen as an artifact of the German privacy culture: Germans historically are much more suspicious when it comes to data protection, which may partially explain the desire of the German party to keep all their data and applications close to their chest. The second philosophy represented by the Greens in

Austria is mainly inspired by the need to be cost efficient. ICTs are evaluated by e.g., focus groups before development and funding or they import established apps from abroad–in this case from Germany.

Turning to the third question, both parties shared the dilemma of discussing IT security and its financing among politicians with limited understanding of the technical implications these decisions would have, and ultimately decided on different solutions.

In context of the pandemic, it seems surprising that the increased awareness for digital solutions was said to have an inhibiting effect: circles not interested in the process before the COVID-19 pandemic suddenly wanted to have a say in decisions on the table, which complicated the digitalization process. It seems that this virus was slowing humankind down in even the most unexpected situation. Future research in a post-COVID era will have to focus on what party routines will remain online and what routines will experience a long-term migration into the digital. Depending on this development, the affordances for secure solutions will have to be re-addressed. In terms of policy development, democratic societies and their governments will have to discuss whether guaranteeing secure solutions for will-formation and decision-making should be regarded a public duty. For scholars, the scientific supervision of these adaptation processes remains a challenge-from a normative and empirical point of view.

Data availability statement

The datasets presented in this article are not readily available because interviews are subject to third party restrictions. Requests to access the datasets should be directed to GT, gefion.thuermer@kcl.ac.uk.

Ethics statement

The study involving human participants was approved by the University of Southampton under ref #20777. Written informed consent was obtained from the interviewees for participation in the research and for the publication of any potentially identifiable images or data included in this article.

Author contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

Supplementary material

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fpos.2023.1199449/full#supplementary-material

SUPPLEMENTARY TABLE 1
Thematic coding frequency.

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Appendix

Annex: interview details

Questions

Interviews 1 and 2 were conducted during PhD research of the second author, and covered the relevant topics as part of questions concerning the implementation of online participation processes:

1. What is your opinion of these participation processes?
2. Which opportunities arise through them?
3. Which problems are related to these processes?
4. Are you actively using these processes, or planning on doing so?
5. In your opinion, how do these processes align with the Green Party ideal of democracy?
6. What is your role in the implementation of these processes?
7. Which criteria are important to you when implementing the processes?
8. How does this show in what happens during the implementation?

Interviews 3 and 4 were conducted specifically for this paper, and covered the below questions:

1. How and where does the party make decisions about IT expenses?
2. How much does the party spend on IT, and how has this changed over the last five years?
3. How are costs allocated to budgets?
4. For what specifically were payments made? Were funds spent on specific platforms?
5. Are solutions developed specifically for the party, or do you buy solutions that are already available on the market?
6. Does staff receive specific training, or do they learn on the job?
7. Are costs redistributed from the national to regional branches?
8. What role does IT security play in your financial decisions?
9. Did you spend any funds on software for cybersecurity?
10. Is cybersecurity a relevant aspects for licenses you purchase (e.g., windows updates)?
11. What motivates the decisions about the use of specific IT solutions?

Interviewee profiles

Interviewee 1 is a man in his sixties. He lives in a rural area in Western Germany and is a parent. He holds a position at national level in the Green Party Germany.

Interviewee 2 is a man in his forties. He lives in Berlin and is a parent. He holds a position at national level in the Green Party Germany.

Interviewee 3 is a man in his forties. He lives in Berlin and is a parent. He holds a position at national level in the Green Party Germany.

Interviewee 4 is a man in his thirties. He lives in Linz and holds a regional position in the Green Party Austria.