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Evidence-Based Policy Engagement of Social Welfare Non-Governmental Organisations: A Case Study on the Democratic Relevance of Caritas Switzerland's Data Ecosystem

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Abstract

The challenges of the COVID-19 era, rising inflation, and global disruptions, combined with increasingly restrictive social welfare regimes, have created a growing demand for quick and low-threshold support provided by social welfare NGOs. These organisations are uniquely positioned to connect street-level social work insights from the poverty line with macro-level policy debates – a role with significant democratic potential to amplify the voices of people experiencing poverty. This article presents a mixed-methods single-case study of the largest SWNGO in Switzerland, combining a systematic assessment of its data ecosystem with insights from 18 semi-structured interviews and focus groups across organisational levels. It argues that investments in robust, ethically governed data systems can strengthen NGOs' democratic role and increase their impact on poverty reduction. We identify seven distinct data types that generate valuable insights into poverty dynamics. However, a key organisational tension persists between the strategic imperative of well-managed data and the limited resources available for case management documentation. The article concludes that high-quality data can significantly enhance evidence-based policy advocacy. Data ecosystems in SWNGOs should therefore be recognised as essential democratic infrastructure in efforts to combat poverty.

Keywords: NGO, democracy, digitalisation, evidence-based policy advocacy, poverty
JEL Classification: L31, H55, D31, D33, HN
Word count: 6673 with references

1. Introduction: The Promise and The Challenges Of Evidence-Based SWNGO Policy Engagement

"The ultimate goal is to end Poverty and make Caritas not needed anymore, meanwhile we celebrate over 100 years of existence". - Interview CCH3, Caritas Switzerland

While Caritas is committed to eradicating poverty and ultimately rendering its own role obsolete, it simultaneously celebrates a century of existence and continues to play a pivotal role in Switzerland's social security system. This enduring paradox reflects both the persistence of poverty and the limitations of the welfare state. In Switzerland, 16,0 percent of population live in or are at risk of poverty (BFS, 2025). This is related to the high cost of living (Hümbelin et al., 2024), but it also underscores that the system fails to provide universal coverage for all citizens (Borrelli & Kurt, 2024; Lucas et al., 2021; Piñeiro et al., 2023). Within the Swiss welfare mix, which combines conservative and social-democratic elements (Bossert et al., 2024), private non-governmental organisations play a vital role in guiding and supporting people living in, or at risk of, poverty. Their significance becomes particularly evident in times of crisis, such as during the COVID-19 pandemic, when more than 150 NGO and NPO organisations in the social work sector supported residents facing hardship (Drilling et al., 2024; Götzö et al., 2022).

While social work organisations are mandated to provide individual support, they are also often regarded as a voice for the poor (Schoneville & Thole, 2025). Professional non-governmental and non-profit organisations are uniquely positioned within civil society to engage in evidence-based policy advocacy. Their close ties to the lived realities of people affected by poverty, combined with their long-term commitment to social justice, enable them to keep pressing social problems on the political agenda (Almog-Bar & Schmid, 2014; Beer et al., 2012; Berry & Arons, 2003). In Fraser's (1990) terms, they respond to the historical exclusion of marginalized groups, challenge the rhetoric of "economic privacy" and reframe ostensibly individual problems (e.g., poverty) as systemic societal issues - as "matters of common concern" requiring democratic deliberation. The strategies, commitment and success of evidence-based advocacy are, however, shaped by organisational possibilities and influenced by both external and internal factors (Brusseel et al., 2025b, 2025a; Carrilio et al., 2004; Gal & Weiss-Gal, 2022).

These organisations increasingly rely on digital databases to document, record and organise client information (Burton & van den Broek, 2009; Cordery et al., 2023; Ley & Reichmann, 2020). The documentation of their client interactions, internal operations and external stakeholder communication is not only valuable for traditional use cases in reporting towards funders, and improving their services (Stepanek et al., 2020; Valenti et al., 2017). More than that, they open up the opportunity to aggregate client data to empirical insights and generate knowledge for evidence-based policy development (Brusseel et al., 2025b; Carré et al., 2021; ONN, 2023). With this, the organisations accumulate and translate their professional low-threshold social work insights (Albareda, 2018) from the poverty line to the meso and macro layers of social work (Rice, 2013), reaching until the macro social policy negotiations and its related social rights (Almog-Bar & Schmid, 2014; Sabag & Levin, 2023).

But to unleash such potential from their documentation data at hand, SWNGOs are confronted with substantial organisational, ethical and technical challenges. They struggle with limited information system infrastructure and software available and the lack of resources for proper data entry (Carrilio et al., 2004; Weber, 2019), the pending collective negotiation around it (Gillingham, 2016; Weber & Rink, 2023) and the required staff training (Valenti et al., 2017). Opposing the very idea of measuring / quantifying social work (Bradt et al., 2011; Carrilio et al., 2004) or more specifically the related data privacy concerns (Althammer, 2024; Gillingham, 2015), professionals may resist the secondary use of their produced data. Certainly, the fast developments around digital documentation reshape professional social work environments in a field between need for systematic data (Ottmann et al., 2024) and the risk of prescriptive, forcing typologisation and software reducing professional discretion if not carefully designed (Ley & Reichmann, 2020; Ley & Seelmeyer, 2014; Weber, 2019). Against this background, this article explores how improved data management can strengthen the advocacy role of SWNGOs with the two research questions:

> RQ1: What types of policy-relevant data are produced by social welfare NGOs, and how can they contribute to a better understanding of poverty dynamics?
>
> RQ2: How, and under which organizational and technical conditions, can such data be mobilized for effective policy engagement?

In order to investigate these questions, this study adopts a mixed-methods single case study on a key SWNGO engaged at the poverty line: Caritas Switzerland. Caritas is an independent non-governmental organisation that provides social services, mediates social rights and engages in social policy advocacy within Switzerland, next to their engagement in international development cooperation (Krummenacher, 2005). It is the largest NGO supporting poor people in Switzerland, with 16 local counselling agencies and 22 markets offering products at reduced prices.

The upcoming section will introduce the conceptual framework (*section 2*), followed by a description of the mixed methods applied (*section 3*). *Section 4* presents the results in three parts: (a) an overview of seven key datasets offering insights into poverty dynamics, (b) a demonstration of data activation in practice, and (c) a set of recommendations for data management among SWNGOs. These potential actionable recommendations and their implications for the policy processes are further discussed in *section 5* together with open research questions.

2. Framework: The Data supply chain for Evidence-based Policy Engagement of Large Social Welfare NGOs

Due to functional differentiation within large SWNGOs, the social workers interacting directly with individuals in poverty are often distinct from those analysing the resulting data for policy advocacy. At one end of the data supply chain (*Figure 1*) front line social workers document and manage client data with the primary goal of organising and delivering successful targeted support (Cordery et al., 2023). At the other end, SWNGO professionals in strategic social policy positions aim to improve the socio-political environment (Almog-Bar & Schmid, 2014). Their work often draws on the insights from field-level practice and a statistical analysis of their co-produced data (Brusseel et al., 2025b). In fact, the legislative policy stages require matching evidence: The initial stages require generalizable empirical research, while the policy formulation process is driven by professional cost-benefit expertise (Mosley & Gibson, 2017).

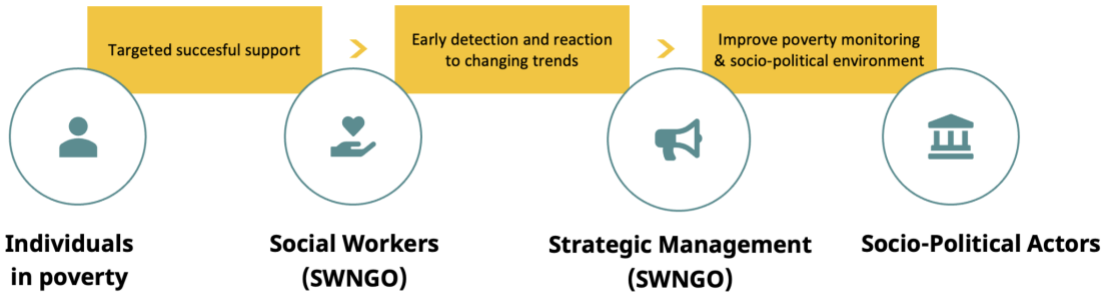

Figure 1: The data supply chain for evidence-based advocacy

Serving as a linking element from micro to macro (Rice, 2013), administrative data is to be aggregated, maintained, and analysed - with the aim of identifying and responding to changing poverty dynamics as early as possible. These insights not only allow a feedback loop to frontline service strategies but also form a critical foundation for evidence-based social policy engagement. *Figure 1* illustrates how well-managed data can influence policy engagement. This model serves as a conceptual framework to interpret and evaluate the subsequent findings, offering both an explanatory lens and a structure through which the results can be organized and understood.

3. Methodology

To answer the two research questions, this study employed a convergent mixed-methods design (Fetters, 2020) in a single case study on a key SWNGO engaged at the poverty line: Caritas in Switzerland was selected as a paradigmatic case (Mills et al., 2010) due to its extensive regional presence and size, longstanding professionalisation in poverty alleviation, and current efforts to integrate their data into policy engagement[a]. The convergence of quantitative secondary administrative data and qualitative insights allows a comprehensive understanding of how data is understood, evaluated and used across different organisational levels.

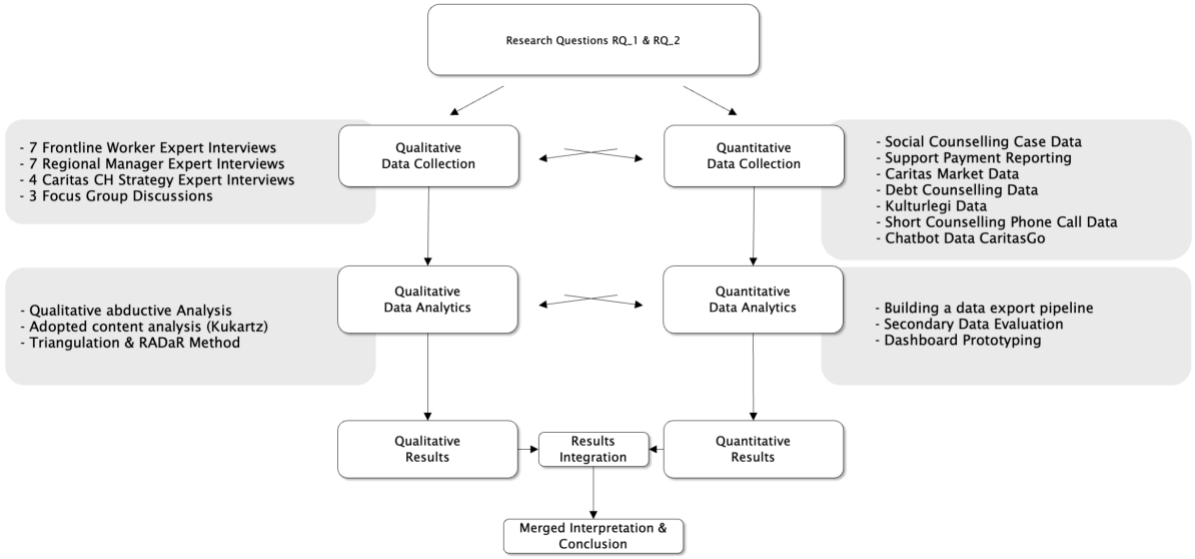

Figure 2: The Mixed Methods diagram outlines the research design, highlighting the data collection, analytics and integration points.

3.1 Data Collection

First, available organisational datasets with potential information around poverty dynamics were collected and are evaluated to identify the relevant key characteristics for policy advocacy potential. To uncover, to understand and to contextualise the data practices, semi-structured interviews were conducted across all three organisational levels of Caritas: With 7 frontline social workers, 7 regional managers and 4 Caritas Switzerland key figures in data processing for policy. The expert interview questionnaire asked for the challenges and opportunities, the professionals associate with current procedures for data collection, management and analysis. Respondents were invited to describe how socio-economic macro-trends, ideally, could be identified and processed in their data systems. To triangulate the interim results and identify the strength, weaknesses and potentials of each dataset, an additional focus group for each organisational level was conducted subsequently.

3.2 Data Analysis

To determine the data's alignment with and potential to address the research interests of policy engagement, the quantitative analysis included a secondary data evaluation adopting Watkins' (2022) 10 questions framework approach[b]; and a real-world data dashboard prototype to visualise key trends, serving as a practical proof of concept highlighting the opportunities and limitations of the current data management practices and putting them up for discussion. The dashboards development followed a five-phase sprint design (Knapp et

al., 2016) and was built with open-source tools (Superset, PostgreSQL). The prototype focused on the most structured and consistent regional dataset (Basel), due to the low level of data standardization across regions, which currently limits the feasibility of meaningful data aggregation. To build investemtent recommendations, we compared six contemporary Caritas datasets (B, D, E, F and two regional versions of A, see *section 4.1*) and their core policy-informing variables. All data were anonymized. Ethical and privacy risks were addressed throughout the process.

The qualitative analysis explored how staff engage with data in practice, using abductive coding and content analysis (Kuckartz, 2012) in MaxQDA and the RADar method (Watkins, 2017). The emerging insights were structured in sections on dataset structure (4.2), their socio-political utility (4.3), the dashboard application (4.3), and resulting recommendations (4.4). Integration followed the bidirectional mixed-methods design (Moseholm & Fetters, 2017).

4. Results

Across focus groups and interviews, the participants emphasised the potential in Caritas' data along their characteristics of (1) the unique insights into particularly marginalised, hard-to-reach populations, (2) the immediacy with which the data documents emerging social problems and (3) the broad aspects of lived poverty covered by the various datasets. However, Caritas' data landscape is fragmented, with inconsistent collection practices, varying tools lacking shared standards, and thus low data coherence. Data care has so far been deprioritized due to time pressure and limited capacity, especially in complex cases. The lacking unified strategy makes both documentation and evaluation burdensome and often misaligned with analytical needs.

To gain a more detailed understanding of the data supply chain for SWNGO advocacy, this section portrays (a) the seven highly relevant datasets offering valuable insights into poverty dynamics, (b) a practical dashboard examples, and (c) identified recommendations towards SWNGOs data management.

4.1 The Available Data Ecosystem

The following subchapters introduce the content and scope of the digital datasets generated by a SWNGO such as Caritas – presented following a progression from established to more

recently emerged datasources. This is followed by a tabular synthesis that enables a comparative assessment of their analytical, operational, and socio-political potential (4.2).

4.1.A Social Counselling Case Management Data

In most regions, Caritas offers social counselling and manages the case data in some digital form. The primary function of this dataset is to systematically record and manage client interactions. Frontline workers are responsible for collecting comprehensive demographic and socio-economic information. In some regions, records further include detailed accounts of the type, frequency and scope of client engagement. What makes this dataset particularly informative, is its combination of a structured, formal demographic part and an open text dossier that allows an unstructured documentation of the key information around the case. However, this data is highly heterogeneous, due to several interrelated factors: (1) The services provided by regional offices vary significantly and are dynamically shaped by local needs and availability of complementary services; (2) Resource availability - both for service provision in general and for digital documentation in particular - is uneven across regions; and (3) a broad array of non-standardized and often incompatible software systems is in use.

4.1.B Debt Counselling Data

Next to the general social counselling, Caritas offers specialised debt counselling. This service is understood as both a form of debt prevention and a means of providing information and guidance to those already affected by debt. Next to basic demographic household information, they document detailed data on the different types of income, debt and credits at hand, along with the identified causes of indebtedness. These causes are categorised into biographical, health-related, behavioural (mismanagement), material, and social factors. This dataset can be particularly useful to understand the dynamics around debt in Switzerland, even though not representative of all people in debt. As an example, they visualize that the "big three" causes of debt (divorce, job loss and sickness/accident) are playing into 56% of cases, half of the advice seekers only consult the service after 5 years in debt and the self-employed are the group with the highest debts (Schuldenberatung Schweiz, 2024).

4.1.C Support Payment Reporting

During Covid-19, Caritas provided financial short-term support to individuals and families that had no other support options (yet) accessible through grants of up to CHF 1'500. This novel project was accompanied by nationally harmonised reporting system across all regions

- an unprecedented achievement for Caritas Switzerland (CCH2_31, CCH3_166). This statistic allows insights into the total number of applications submitted and approved in each region, as well as the total amounts granted. It also aggregated information on the type of support (e.g. paid bills, cash, vouchers), the area of need (e.g. rent, health expenses, children) and target populations (e.g. working poors, income loss, families). Notably, 30% of all applications explicitly cited "income loss" as the reason for the request, while 22.7% were categorized under "working poor." However, it does not allow for cross-tabulation - i.e., it is not possible to determine which target groups received which types of support or specific amounts; only the overall counts are known. The primary purpose of this statistical system is to enable NGO management to account for the use of resources to funders. As this financial assistance program was developed specifically in response to the Covid-19 crisis, no pre- or post-pandemic comparative data are available.

4.1.D **Caritas Market Data**

For logistics and strategy purposes, Caritas Markets record in their accounting system how many discounted goods they sell in which product category to how many clients. The Caritas Market data from 22 locations therefore allow a detailed analysis of revenue volume and customer fluctuation. The insights can be analysed by category group or even on the level of single products. The locations provide a considerable geographical coverage throughout Switzerland across 11 cantons. The data reports the numbers with a time granularity of two weeks and is thus relatively high in timeliness.

This new export and insight possibilities came with an implemented software update in September 2021. Since then, the Caritas Market data is therefore suitable for a scientific analysis of the consumption behaviour of the poor. The markets are currently considering to introduce minimal demographics to this dataset in a privacy-friendly way for deeper socio-political insights.

4.1.E **Kulturlegi Data**

Kulturlegi is a discount card for people living on a low income in Switzerland. It is issued by Caritas and gives access to reduced prices for cultural, educational, and sports activities, as well as the Caritas markets. Kulturlegi's low-threshold access strategy limits the dataset to eligibility and basic demographics, however it covers a large population near the poverty line, including people that are not in debt or counselling yet (CCH4_147).

It is one of the most promising channels to address and communicate to people around the poverty line with intentions of prevention, service announcement or campaigning (BE_SW_205, BS_GL_89). This dataset is rather harmonised, as the 14 regional Kulturlegi operators are part of a shared project coordination body (CCH1_28) with an administrative office.

4.1.F Short Counselling Phone Call Data

Short counselling via phone serves as a first contact and early intervention tool, designed to provide concise advice on urgent social, legal, or economic issues and give the possibility to re-direct the caller to the best fitting branch or organisation (BE_GL_159). This dataset systematically captures each short counselling call, recording key "reasons for contact" in categorical indicators such as housing tension, employment problems, financial hardship and debt, health concerns, family and relationship issues, legal questions, and integration challenges, among others. In Zurich, the first contact to Caritas is in nearly all cases via phone, therefore this statistic can serve as a fast and notably early barometer of emerging social vulnerabilisations in the population (ZH_GL_289).

The dataset's strength lies in its consistent simple categorization of problem dimensions over time, allowing comparative analysis and monitoring of trends in acute client needs. However, the data's binary categorical format for the presence or absence of issues limits nuanced understanding of case complexity or longitudinal trajectories. Overall, this dataset can be activated as a complement to longer-term datasets (A, C) by highlighting immediate social pressures, disclosing frequent triaging patterns, providing crucial insight for service planning and rapid response strategies.

4.1.G Chatbot Data CaritasGo

In 2025, Caritas of Central Switzerland launched *CaritasGo* - a GPT-4o-based chatbot beta-version designed to streamline access to financial and social assistance services in Canton Lucerne. The chatbots aim is to lower the complexity and reluctance to ask for support: It is available anonymously, 24/7, and responds in the user's language (10 languages available) even when the source information is German. Similar to the short counselling phone call data, this dataset collects the initial reasons for support enquiry. In fact, as it is the only dataset that documents the users own wording and not the social workers interpretation, this dataset can provide a unique insight into the questions and ambiguities of users. Insights from this pilot

are intended to inform broader national deployment and potential thematic extensions such as debt or budgeting support.

4.2 Typology: Data consistency, coverage (temporal & spatial) and API connectivity potential

The socio-political utility of SWNGO data depend on its intended application. To support a comparative understanding, *Table 1* summarizes key structural and technical characteristics across the seven datasets. These include: (1) *Regions*: the number of contributing Regional Caritas Organizations; (2) *Data Consistency:* the level of uniform definitions, formats, and recording practices across data collector, region and time; (3) *Annual observations*: an approximation of the average number of data points per year; (4) *Main collector,* mostly the social worker, of the data; (4) temporal *Granularity:* represents the resolution in which the data is currently reported; (5) *API connectivity potential:* The potential of the dataset to be integrated into monitoring systems via an Application Programming Interface; (6) The *Explanatory Power* for poverty mechanisms is driven by the depth and nuance of information captured on the reasons for consultation and the socio-economic situations; and (7) the *thematic core,* the area in which the dataset can contribute most insights.

[Table 1 here]

Table 1 reveals central trade-offs across these dimensions. While the datasets Caritas Market (D) and Kulturlegi (E) are comprehensive in size and coverage, they provide limited insight into the structural drivers of poverty – highlighting a recurring trade-off between quantitative breadth and qualitative depth. The explanatory power is higher in datasets that document the reasons for consultation in more detail (A, B, G). These rich, contextual data points allow for analyses that go beyond demographic descriptive statistics. Yet, the datasets most promising for this type of qualitative analysis - such as Social Counselling Data (A) - are often the hardest to standardize. A's data collection methods range from manual spreadsheet reporting to semi-automated extraction from case management software. Collective investments in harmonizing case management documentation could therefore unlock significant analytical value and unlock regional comparisons. A further analysis of spatial granularity could be insightful, comparing the geographical resolution of the respective datasets[c].

Temporal granularity - another key dimension - varies considerably and reflects the digital maturity of the data systems. Finer-grained, more timely monitoring is essential in volatile

socio-economic contexts and can be a substantial advantage compared to the traditional poverty statistics with their delay of up to 3 years (BFS, 2012). In this regard, API connectivity serves as a proxy for technical maturity and future readiness for automated integration. Emerging datasets like the Chatbot Data (G), though still limited in scope, point toward a promising future for real-time, scalable, user-initiated, user-centred input.
Two overarching challenges must be noted. First, consistency across datasets is severely constrained as definitions, data formats, and recording practices vary significantly with no standardisation of key variables. Second, users cannot be reliably re-identified across different Caritas branches. Together, these constraints severely limit the potential for linked integrated data analysis in the current form (See *sections 4.3 and 4.4*).

4.3 Data Dashboard prototype

The Caritas dashboard prototype aggregates social counselling case management data (A) and Caritas Market data (D), with the aim of demonstrating how data from client interactions can be systematically analysed and applied in daily operations as well as strategic decision-making. The prototype revealed several key insights. Major external events were visibly reflected in the service data – for example, a marked surge in new registrations following the 2022 Ukraine invasion – underscoring the dashboard's capacity to capture socio-political shocks. The aggregated data also improved organizational awareness of internal trends, such as the improved documentation of reasons for client consultations, by making these patterns more transparent. Notably, the tool attracted high interest from diverse stakeholder groups, ranging from frontline social workers and regional managers to policy actors at the national level. A detailed analysis of a case study on one particular policy reform - the Swiss Foreign Nationals and Integration Act (FNIA 2019) - is the subject of a forthcoming article. In a broader socio-political perspective, such a data-driven dashboard can enhance transparency in social service provision, support evidence-based policy advocacy through concrete data on emerging social issues, and even function as an early-warning system via alerts that flag significant shifts in client needs or demographics. Finally, the project highlighted the need for robust data governance frameworks (clear roles and access rights for data), strict adherence to data privacy safeguards, and the importance of user-friendly, ethically managed digital infrastructures to ensure trust and broad adoption of such innovations.

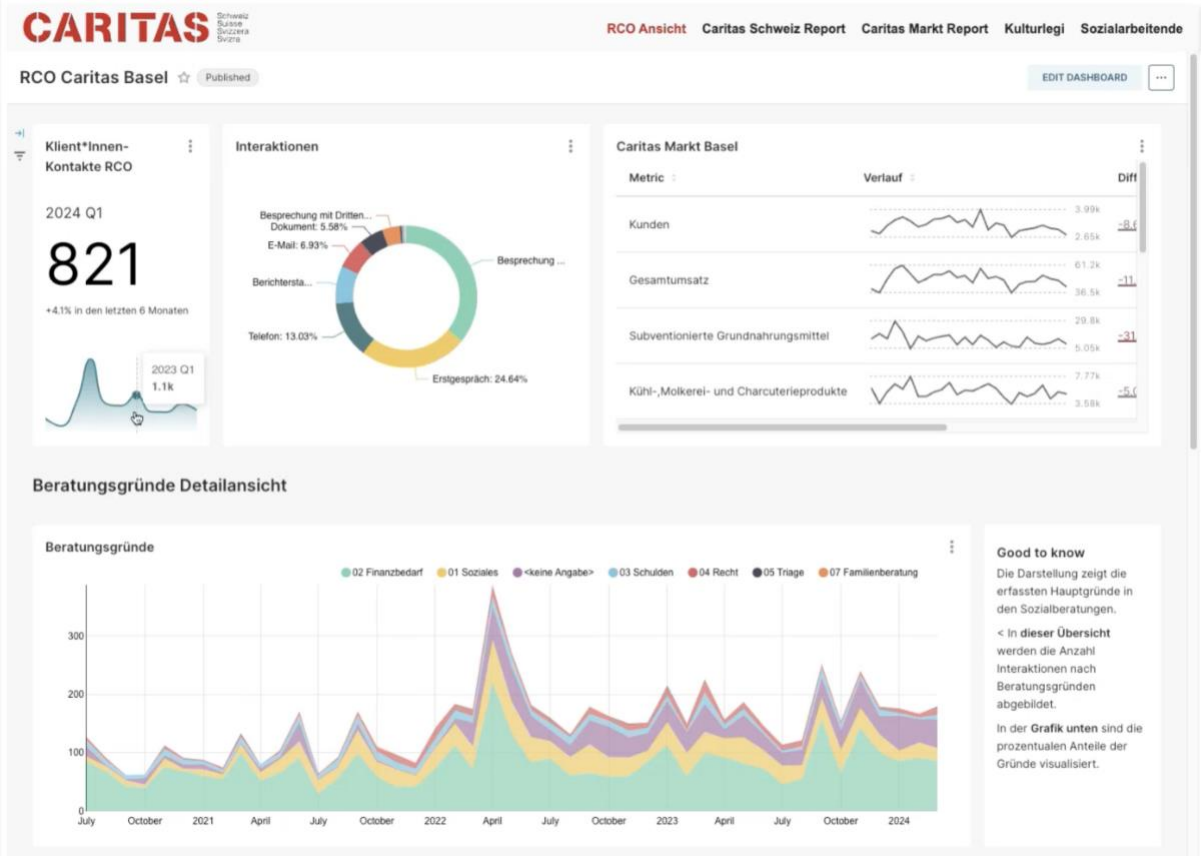

Figure 3: The Dashboard in action, illustrating the recent interactions at Caritas Basel, described along their type, frequency, reasons with an added overview of the local Caritas Market statistics

4.4 Nine Recommendations and investments for SWNGO data activation for policy engagement

Building on the practical experience with the portrayed datasets, a set of nine approaches for strengthening the SWNGO data supply chain has been developed. While grounded in the specific case study, the recommendations are intentionally formulated to address the identified challenges and remain applicable across a wide range of SWNGOs.

They are sorted to mirror the logic of the data supply chain itself (*section 2)* - Beginning with its application in policy engagement and tracing back step by step until the point of first documentation at the frontline.

4.4.A Meaningful Indicators

Given the typically limited personnel and technological resources among SWNGOs, their data end users should agree to a reduced set of informative indicators, they require for their work. Next to the documented reasons for the consultations, advocacy activities can benefit

from overviews of number of new registrations (year-over-year change), an analysis of the length of needed support, and overviews of regional coverage.

4.4.B Systematic Discussion on Data Within a Data Strategy

These recommendations represent a starting point. Ongoing reflection and a collective mid-term strategy are essential as SWNGOs navigate the evolving opportunities, risks, and requirements around data documentation.

4.4.C Roles & Access Rights Concept

A robust strategy for access rights management is essential for protecting sensitive information. Role based access control helps to categorize typical user roles, granting access permission to those roles, and allows a continuous monitoring of access rights (Marquis, 2024). Large SWNGOs need to implement such a framework not only to enhance data security and to have auditable access, but also to allow increased collaboration with branches, regions and other stakeholders. Evidence-based advocacy requires reliable data access across branches – at present, the Caritas advocacy offices lack it, substantially limiting their work.

4.4.D Data Protection, Privacy & API Connections

Because client data managed by SWNGOs are sensitive personal data, strong data protection measures are pivotal. The dashboard prototype development (4.3) helped to identify critical points in the data pipeline. Next to Access Right concepts, two key areas must be addressed: (A) Anonymisation is essential for privacy and ethical data use. Techniques like earliest possible data masking, k-anonymization, and differential privacy help ensure that individual identities cannot be inferred, while still enabling meaningful analysis and reporting. Data minimization further reduces risk by only collecting and processing variables strictly necessary for the intended purpose. (B) Technical infrastructure must support secure data storage and analysis - preferably through a protected application programming interface, API. This includes selecting suitable platforms (local, cloud, or hybrid), ensuring legal compliance (e.g., GDPR), encryption, access control, audit logs, and backups.

4.4.E Data Care

Ongoing maintenance and a sustained culture of data care are essential to improve long-term usability, trust and accountability - both internally and in public advocacy. Data care implies reflexivity: interrogating what is collected, what is omitted, and how data practices affect the

people represented. This requires fostering a shared responsibility for data quality, appropriate technological infrastructure and ensuring that staff receive ongoing training in both the ethical and technical dimensions of their data work.

4.4.F Metadata Standards & Data catalogue

During the research period, the policy department of Caritas Switzerland couldn't answer multiple requests for cross-regional analysis of client interaction data (CCH4_71), reflecting broader data fragmentation challenges within large SWNGO networks. As organisational datasets and stakeholder demands grow, a data catalogue with metadata standards aids processing, reduces ambiguities and allows interoperability. As "data about data" (Duval, 2001), metadata describe datasets as in how and with which assumptions they were collected, the definitions of the variables and possible answers, along potential useful context (University Libraries, 2024). To ensure equitable access to organizational data - and thus strengthen evidence-based decision-making in advocacy - a shared metadata standard is essential to bridge previous data silos across regions. Metadata Standards can also lay the foundation for a clear trail of data access – when augmented with metadata on permissions, lineage and data access.

4.4.G Illustration of case histories

Even regions working with established case management software lack a user-friendly way to visualize the progression in case histories (ZH_MGMT_273, ZH_SW_367) – for instance to evaluate improvement, stagnation, or worsening across time. An automated version history of relevant variables would thus inform policy engagement and benefit organizational evaluation.

4.4.H Flexible, Efficient, User-Friendly Software

Participants across all organisational levels emphasised the technological disadvantages of available software along the whole data supply-chain. Rooted in a dominance of commercial proprietary software, the lack of open-source solutions, and an apparent preference for local developers, there is limited reason to expect this to change.

4.4.I Funding Question for Essential Digital Infrastructure

To invest in such adequate software, a financing solution is still to be found. Participants highlight the problem of earmarked funding, as donors often aim for visible projects to

demonstrate their social commitment while essential (digital) infrastructure stays underfunded (BS_GL_33, CCH4_26). A joint development - across regions or even across organizations - would be compelling, as a robust case data management system is urgently needed by all SWNGOs.

5. Discussion & Conclusion

Due to their prominent role in service delivery within practical proximity to the lived realities of poverty, Caritas Switzerland and comparable large SWNGOs are uniquely positioned to bridge their resulting expertise and legitimacy from the poverty line to macro-level social policy debates - a significant democratic potential to amplify often marginalised voices. We found multiple underutilised rich datasets and identified technical recommendations that, if addressed, would allow to substantially strengthen their data ecosystems and ultimately transform such organisational data into democratic infrastructure. In Sum, they enable SWNGOs to bridge the micro and macro layers of poverty mechanisms to support policy debates with their grounded evidence.

Developing and financing such capacity is a core challenge, especially as neoliberal welfare regimes (Hasenfeld & Garrow, 2012) and earmarked donations further constrain the already limited resources for both, technological infrastructure and structural political work. In times of privatisation and contracting out of social services, governments are increasingly dependent on SWNGOs for their policy feedback and implementation expertise (Almog-Bar & Schmid, 2014).

Given the critical underfunding of essential digital infrastructure despite widespread technological shortcomings in current proprietary case management systems, this study underscores the need for a collaborative, public-interest digital solution. One promising direction would be the co-development of an open-source platform, jointly initiated by a consortium of stakeholders - including SWNGOs, social research institutions, government agencies, and civic tech initiatives. Such an infrastructure could support harmonized, privacy-conscious, and ethically governed data practices while avoiding vendor lock-in and costly duplication of efforts. The system would need to be modular, interoperable, and user-friendly, allowing adaptation to different organizational sizes, languages, and regional legal

frameworks. Above all, the challenges identified here are not unique to Caritas Switzerland, but persist across SWNGOs internationally (Förster, 2025; Piga, 2025).

Importantly, this would not merely be a technical solution, but a strategic democratic intervention: a shared platform of this kind could radically improve the capacity of SWNGOs to coordinate advocacy, generate robust evidence for policy processes. Drawing on emerging models from civic tech and open government data movements, such a platform could become a shared digital commons (Warso & Krewer, 2024).

Our study, while illustrative, is limited by reliance on a single organizational voice and constrained data access, underscoring the need for broader, comparative research. While advocating for data-driven insights, we acknowledge the limits of quantification. Social problems are not fully measurable, and over-reliance on metrics can overlook the human stories behind numbers. Qualitative and community-based methods remain essential for capturing context, meaning, and lived experiences that data alone cannot convey. Statistical evidence is complementing, not replacing, participatory knowledge.

In closing, this study highlights large SWNGOs like Caritas Switzerland as uniquely positioned democratic actors. While this case is context-specific, the insights are broadly relevant: many large SWNGOs share similar opportunities to activate their data ecosystems, as well as common constraints. Strengthening the internal data supply chain - from frontline collection to policy engagement - can enhance their legitimacy and impact in democratic decision-making. Grounded in robust, ethically managed data and enriched by qualitative insight, such an approach strengthens SWNGOs not just as service providers, but as proactive democratic agents of social change.

T. Tables

Dataset	Regions (out of 16)	Data Consistency (Systematic Collection)	Annual Observations (appr.)	Main Collector (SW = Social Worker)	Granularity (in days)	API connectivity potential	Explanatory Power	Core Thematic Contribution
A. Social Counselling Case Management Data	14	low	~15'000	SW	1 day – 365 days	medium	high	Complex case trajectories
B. Debt Counselling Data	11	medium	~5'000	SW	365 days	low	high	Debt dynamics
C. Support Payment Reporting	16	high	~6'300	SW	30 days	low	low	Covid-19
D. Caritas Market Data	10	high	~1 mio. clients in 22 locations ~250 products in 9 product groups	Software	14 days	high	low	Consumption behaviour
E. Kulturlegi Data	14	high	~180'000	(Online) Form	N.A.	medium	low	Population at risk of poverty
F. Short-Counselling Phone Call Data	2	medium	~2'500	SW	1 day	low	medium	Triaging patterns & immediate social problems
G. Chatbot Data (new)	1	TBD	TBD	(Online) User	1 day	high	high	Self-expressed questions & needs

Table 1: The main characteristics of the 7 described Data Sets: The number of Regions reporting into the dataset, the total sample size and the time granularity of data points.

***Consistency**; high: uniformly collected across regions with standardized fields and definitions. medium: mostly consistent, some variation in collection protocols. low: heterogeneous in structure, purposes, or coverage. TBD: still in pilot.*

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Notes

[a] Switzerland is an especially fertile context for studying NGO-democracy dynamics due to the federalistic emphasis on consultation in policymaking and direct-democratic instruments. However, Caritas' international network with shared objectives indicates European/global relevance.
[b] The appendix provides a detailed description of the original evaluation questions.
[c] Based on the availability of postal codes or municipal identifiers, the regional distribution of social problems could be analysed.