DIGITAL PLATFORMS FOR SOCIAL INCLUSION: THE CASE OF AN INFORMATION PLATFORM FOR REFUGEES

By: Maximilian Schreieck, Manuel Wiesche, Olga Usachova, and Helmut Krcmar⁵

The number of people fleeing their home countries has increased drastically in recent years. Host countries such as Germany are striving for the social inclusion of refugees. From a neoliberalist view, social inclusion comprises access to social resources, such as the labor market. The social justice view goes further, interpreting social inclusion as the participation of refugees as equal members of society. Digital platforms can contribute to social inclusion through their mechanisms of openness, generativity, and network effects. Drawing on the case of Integreat, an information platform for refugees in Germany, we show how these digital platform mechanisms supported the access and participation aspects of social inclusion. The case study serves as a starting point for research at the intersection of the literature streams of digital platforms and social inclusion and, more broadly, informs the use of digital platforms for social causes.

When refugees 6 arrive in a host country—often after harrowing journeys—they face the challenge of settling in a host society with an unfamiliar culture, habits, and language (Guo et al., 2020). In Europe, this challenge was spotlighted during the so-called "European refugee crisis" (Holmes & Castañeda, 2016) in 2015, when almost 500,000 refugees, many of them from Syria, applied for asylum in Germany alone (Federal Office for Migration and Refugees, 2016) and in 2022, when 8 million refugees fled from Ukraine to European countries (UNHCR, 2023).

One goal pursued by host societies and refugees is social inclusion. From a social justice view, social inclusion refers to a marginalized group's participation in and sense of belonging to a society (Warschauer, 2004). A vital component of the social inclusion of refugees is the availability of information (AbuJarour et al., 2019). However, it is often difficult for refugees to access reliable information about counseling services, language courses, healthcare, and education (Qayyum et al., 2015).

Digital technology can play an essential role in social inclusion (Andrade & Doolin, 2016) by improving access to information and enabling participation. Digital platforms are particularly promising because their fundamental mechanisms—openness, generativity, and network effects (Tiwana, 2014)—facilitate the provision of relevant and up-to-date information to refugees by enrolling third parties who contribute to and maintain information. This case reports on Integreat, an information platform for refugees, and illustrates how the mechanisms of digital platforms can contribute to social inclusion.

Social Inclusion

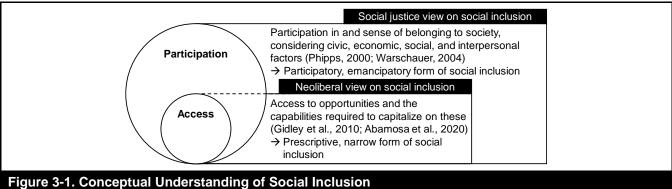
From a neoliberal view, social inclusion is interpreted as access to opportunities and the capabilities required to capitalize on them (Gidley et al., 2010; Abamosa et al., 2020). However, focusing on access can lead to a top-down form of social inclusion based on a "narrow, normative and prescriptive view of the world and economic relationships" (Garrett, 2005, p. 543) that does not allow marginalized groups to achieve the same benefits as privileged groups.

From a social justice view, social inclusion refers to equal and fair participation (Gidley et al., 2010). Social justice—a philosophical concept, theory, and ideology rather than a clearly defined state (Tyler et al., 2019; Gidley et al., 2010) refers to fairness, moderation, and equality in the distribution of rights and resources in society (United Nations, 2006). This view leads to a participatory, emancipatory form of social inclusion, defined as participation in and a sense of belonging to society, considering civic, economic, social, and interpersonal factors (Phipps, 2000; Warschauer, 2004).

has already been officially recognized or not. A more formal terminology would refer to a person as an asylum seeker as long as their status as a refugee has yet to be officially recognized (Amnesty International, 2023).

⁵ The transparency material for this article can be found at https://osf.io/7n2tu.

⁶ We use the term refugee to refer to a person who has fled their home country to seek protection, regardless of whether their status of a refugee



Combining the neoliberal and the social justice views on social inclusion yields access and participation as two hierarchically related aspects of social inclusion (Figure 3-1). Participation goes beyond access because it concerns marginalized groups' sense of belonging to society rather than their material resources. At the same time, a lack of access to employment, housing, and education opportunities can hinder participation (United Nations Department of Economic and Social Affairs, 2016). Thus, we interpret access as a prerequisite for participation as part of a holistic, social justice view on social inclusion.

Digital Platform Mechanisms I

Digital platforms are digital resources that enable valuecreating interactions between complementors and users (Constantinides et al., 2018). Complementors create products and services that enhance the platform's core and are made available to users. The information systems literature has identified several mechanisms as drivers for the success of digital platforms, from which we identified three mechanisms relevant to our study. We refer to digital platform mechanisms as processes that contingently cause the evolution of digital platforms (Henfridsson & Bygstad, 2013; Bunge, 2004).

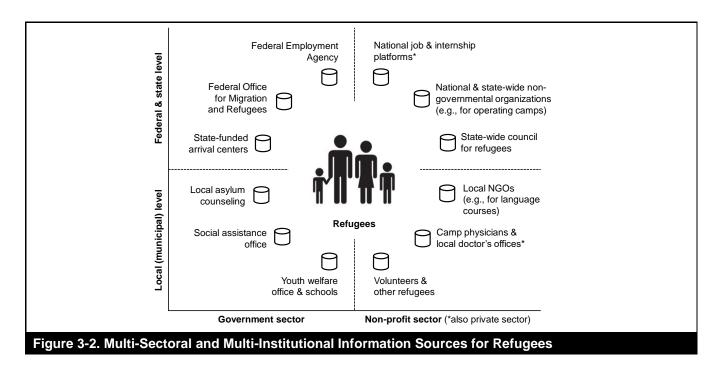
First, a platform's *openness* allows complementors and users to join the platform to contribute or use products and services (Eisenmann et al., 2009; Parker & Van Alstyne, 2018). Second, generativity enables complementors to produce heterogeneous products and services on a platform (Cennamo & Santaló, 2019; Zittrain, 2006) by providing resources for complementors (Ghazawneh & Henfridsson, 2013). Third, platforms create same- and cross-side network effects. Same-side network effects are present when increasing numbers of users attract more users and increasing numbers of complementors attract more complementors. Cross-side network effects refer to more users drawing more complementors and vice versa (Tiwana, 2014; Parker & Van Alstyne, 2018). While companies have created vast economic value with these digital platform mechanisms, organizations can leverage them to address societal inequalities and advance social justice (Jha et al., 2016).

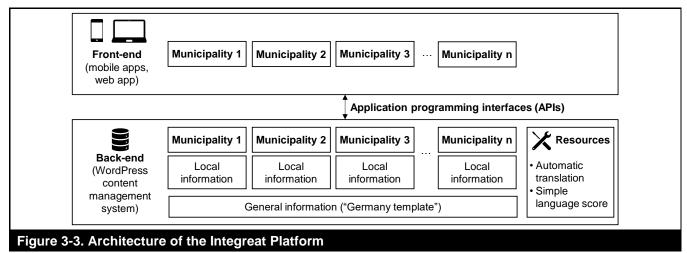
The Case of Integreat and Methodology

At the height of the influx of refugees to Germany in 2015, voluntary asylum counselors launched Integreat in the Bavarian city of Augsburg. They realized that providing reliable information to refugees was a challenge. Gathering the relevant information was difficult because it resided in a multi-sectoral and multi-institutional setting (Figure 3-2) comprised of governmental actors and nongovernmental organizations (NGOs) on different levels of the German federal state. Furthermore, information was often only available in English and German and quickly became outdated because counselors distributed printed material.

To address these issues, the volunteers piloted a digital platform to provide information for refugees. Municipalities, acting as complementors, entered information into the platform's backend, and refugees—as the platform's users retrieved that information through mobile apps. The scalable design of the platform allowed for the quick onboarding of new municipalities (Figure 3-3). 7 To address Germany's federal structure, Integreat developed a "Germany template" that included information relevant to all refugees arriving in Germany. Municipalities can draw on this template and add local information, such as contact details for local counseling services. The Integreat platform further offers multi-language support and a simple language score that can help contributors simplify their texts.

⁷ See https://integreat-app.de/en/ for more information on the Integreat app, https://integreat.app/ for access to the web app, and https://github.com/digitalfabrik for the Integreat open-source repositories.





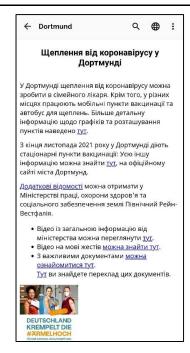
As of August 2023, 93 German municipalities were using Integreat, representing about 20 % of Germany's refugee population. The number of API hits on the Integreat platform reached 200,000 monthly in 2022 across 23 languages. Numbers rose during the COVID-19 pandemic in 2020 and the war in Ukraine in 2022 because municipalities were disseminating multi-language information on the current COVID-19 situation and moved quickly to translate relevant content into Ukrainian and Russian (Figure 3-4).

To study the case of Integreat, we implemented an action design research approach (Sein et al., 2011). Three members

of the author team have advised the Integreat team since 2015 on the architecture design, acquisition of municipalities, and alignment with actors across government levels and institutions. To evaluate the outcomes, we collected empirical data covering the evolution of the Integreat project from 2015 to 2022. The data included 59 interviews with 60 project members, municipality representatives, and refugees, as well as other data sources used for triangulation. For data analysis, we followed a qualitative case study approach (Yin, 2014). We developed a case description and then iteratively coded the interview data (Gioia et al., 2013), linking emerging themes to access and participation.



Overview page from Munich



COVID-19 vaccination information from Dortmund in Ukrainian



Points of interest for refugees in Dortmund

Figure 3-4. Screenshots of the Integreat App

Integreat's Contribution to Social Inclusion

Through the digital platform mechanisms of openness, generativity, and network effects, Integreat contributes to the access and participation aspects of social inclusion (Table 3-1). Integreat implements openness by providing multi-language content, including rare languages for which most local NGOs cannot provide translators. Integreat is open to different information providers and increases the share of simple language content. Consequently, Integreat offers refugees one-stop access to information from various providers and faces fewer barriers such as language and complexity:

We have an open language café with child care that takes place almost every day. ... We promoted the language course for children via Integreat. We also published information on the summer festival and Ukraine festival on Integreat. (December 2022, employee of the city of Dortmund)

Furthermore, the availability of information on Integreat helps refugees participate in emancipatory dialogues with asylum counselors because they can familiarize themselves beforehand

with the sometimes bulky and long-winded terminology related to the asylum application process, enabling them to ask the right questions and increasing their confidence in counseling sessions.

Integreat fosters generativity, establishing access to recent and trustworthy information, maintained for the long term. By providing municipalities with templates with nationwide information, Integreat increases the availability and quality of information. Distributing the effort to curate and maintain information among third parties makes the project more sustainable because third parties do much of the operative work, allowing the core team to focus on strategic tasks such as finding team members and ensuring funding. Furthermore, integrating third-party content, such as job listings, and the facilitation of cross-sector interaction creates opportunities for participation in the job market and local social activities:

For the first two months, I didn't have a place; I didn't have anything—no clothes, no contact. ... Through the app, they helped me to find a German language course and a local theater club. I participated in a theater project and got to know more people who spoke English and German. (September 2020, refugee from Syria)

Table 3-1. Digital Platform Mechanisms and Social Inclusion			
Digital platform mechanism	Implementation in the Integreat platform	Impact on	
		Access	Participation
Openness	 Providing multi-language content Opening up to information providers (municipalities, NGOs,) Incentivizing simple language content Promoting Integreat as a tool for counselors 	One-stop access to relevant, easy-to-understand information	Emancipatory dialogue between refugees and counselors
Generativity	 Providing information templates Distributing efforts to maintain the information among actors Integrating third-party content (e.g., job listings) Facilitating cross-sector interaction 	Access to recent and trustworthy information, maintained for the long term	Participation in the job market and local communities
Network effects	 Publicly licensing the information Providing a web app with search engine optimization Providing communication channels for more engagement 	Access to the information through multiple channels	Participation in local communities

Integreat supports *network effects* by enforcing public licenses for all information available on the platform. As a result, municipalities can reuse information and benefit from an increasing number of participating municipalities. Further, due to search engine optimization on the Integreat web app, the content is displayed prominently in Google search results. Refugees can easily access this information via Google, and this additional reach has incentivized municipalities to provide more content.

Learnings for Digital Platforms for Social Causes I

The case of Integreat illustrates how digital platforms can support the social inclusion of refugees and address inequalities of opportunities within societies. 8 We show that the digital platform mechanisms of openness, generativity, and network effects contribute to social inclusion's access and participation aspects. While the impact on access directly results from the digital platforms' affordances, an effect on participation requires that refugees use the platform in a socially embedded context (Warschauer, 2004; Orlikowski, 2000)—for example, in asylum counseling sessions or to interact with local communities.

Concerning network effects, organizations might convince more complementors to join the ecosystem because the digital platform allows them to reach more members of marginalized groups faster than through traditional operating models. For the network effects to unfold, the platform must be easy to use for complementors, even if they have little experience working with digital technologies. Furthermore, organizations can foster the exchange among complementors and link them to existing communities, such as open-source communities and local interest groups. Overall, we suggest that the mechanisms of digital platforms can be leveraged by social initiatives that take on a social justice perspective to support marginalized groups.

Arvidsson, 2021)—describes digital platform mechanisms that foster exclusion and inequality (see also Nicholson et al., 2021).

Organizations that implement digital platforms for social causes, particularly those addressing marginalized groups, can draw on the findings from our study. To leverage openness, a digital platform must reduce entry barriers for users (e.g., by providing multi-language content), complementors (e.g., by providing tools to help them contribute to the platform), and relevant multipliers (e.g., asylum counselors in the case of Integreat) who will advocate for a solution. To leverage generativity, organizations will need to establish a crosssectoral ecosystem of complementors (cf. Logue & Grimes, 2019), which will aid in the transition from a volunteer-driven model to a sustainable model that distributes efforts to maintain the platform's services.

⁸ Digital platforms can have negative impacts on social inclusion. While the case of Integreat highlights positive impacts, recent work-for example, on the digital identity platform Aadhaar in India (Masiero &