

Unlocking the Potential of Grassroot Initiatives Using Data

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Abstract

Grassroots organizations in India are at the forefront of creating positive impact by prioritizing locally rooted issues and community involvement. This article explores the transformative potential of digitizing operations at the grassroots, focusing on data management-driven frameworks and capacity-building initiatives to strengthen their operational efficiency.

Introduction

As drivers of community engagement within the development sector, the work of Indian grassroots organizations is underpinned by a deep understanding of the social, geological, and economic issues of their communities. Much like watering the roots of a plant for it to flourish, these organizations are dedicated to providing hands-on support, nurturing their beneficiaries from the ground up. Recognizing their pivotal role at the forefront of creating impactful change at the last mile, it is important to address any resource gaps, particularly in scaling operations and ensuring smooth functionality. The next few passages will explain why anchoring on technology for this purpose could be beneficial. A prerequisite to go about this is to first answer the question - amidst discussions on leveraging technology for social change organizations, how is the grassroots landscape uniquely positioned?

Grassroots organizations operate on a distinct framework that prioritizes community-centric approaches over structures and directives commonly found in traditional non-profit organizations (NPOs). Unlike their hierarchical counterparts, grassroots cannot employ a one-size-fits-all approach due to the granularity of data and the nuanced approaches of their work. Every community presents unique demands, community sentiments, and local governance, necessitating adaptable and localized solutions. For instance, an organization dedicated to enhancing livelihoods in local communities must identify opportunities, implement strategies for improvement, and evaluate the effectiveness of adapting its approach for each community. Similarly, an NPO focused on education must assess literacy level, create educational plans to foster interest, identify faculty skills, pinpoint factors leading to school dropout, and maintain attendance records for every unit of the community they work with. This is time-intensive, to say the least.

Data Management Driven Governance

Establishing formal processes, which involve streamlining internal operations and organized record-keeping proves to be rewarding in such settings. The roadmap to achieving this is less daunting than it appears when utilizing technology. Coupling basic data management with digitized data collection can bring significant reduction to manual tasks. The goal here is not just automation; it is to derive valuable insights and better serve the communities that grassroots strive to empower.

Many grassroots people are unaware of the benefits of integrating technology into their administrative and management procedures, as well as publicly available data organization systems that save time and guarantee efficient processes. Based on an extensive tech assessment survey conducted by us at [Tech4Good Community \(T4GC\)](#), out of the 1000+ NPOs that T4GC has worked with over the past five years, 90% report struggling with siloed data due to a lack of centralized data management systems, data collection, and visualization tools.

The solution? A robust data management system that enables grassroots organizations to systematically collect and report data on their activities, finances, and outcomes. This transparency fosters trust with stakeholders, including donors, beneficiaries, and partners. Moreover, this accurate data is essential to demonstrate impact, secure funding, and advocate for change. Organizations can then redirect their focus from sifting through disparate data stored in various formats toward more important work.

Grassroots as Reliable Data Hubs

Conducting research is inherent to grassroots organizations, as evidenced by their strong community engagements. Their unique access to granular information underscores the importance of ensuring the integrity of data collected and disseminated by grassroots organizations. Data integrity here refers to its accuracy, consistency, and reliability, which is paramount for making informed decisions, gaining credibility, and influencing policy. This requires volunteers, community-based organizations, and field staff to track and store information methodically. To achieve this, standard data management systems should be put in place to capture projects, donors, finances, and other operations. This reduces the risk of data loss and enables real-time collaboration, ensuring that information remains accurate and up-to-date. Through this, grassroots will be able to nurture their position as invaluable sources of credible ground truth information.

Case Study: Data Transparency through Streamlined Operations

[IMAGO](#) Global Grassroots, founded in 2014, focuses on scaling innovations on gender equity and sustainable economic opportunities for local communities through a participatory and adaptive approach. The Unnat Agri Enterprise Program empowers rural women (Unnat didis) by connecting them with agro-processing enterprises to enhance their income opportunities. In this mission, IMAGO India has encountered several challenges with manual data management,

which led to inefficiencies and inaccuracies in tracking business operations. These units needed a robust system to capture data related to purchases, production, sales, stock, inventory, and accounts. Additionally, managing member-level data for the extensive network of Unnat didis, who are crucial to the sales process, was cumbersome and prone to errors.

To address these issues, T4GC has developed a customized Enterprise Resource Planning (ERP) system that has thus far provided IMAGO with the following capabilities:

- Capture detailed operational data, including purchase records, production volumes, sales data, and stock inventory.
- Manage member-level information by tracking the demographic profiles and sales performance of Unnat didis.
- Financial data tracking is done by incorporating all accounts-related data such as expenses, cash flow, and balance sheets.
- Data visualization featuring dashboards and report generation capabilities for a comprehensive view of operations.

Witnessing the benefits, IMAGO decided to deploy the ERP system across all 50 centers in Jharkhand, Uttar Pradesh, and Madhya Pradesh. This tech expansion began with an initial rollout in 3 centers. Now, IMAGO has access to a holistic view of all the active centers where the program is implemented, collaboration between field staff, and a centralized dashboard that enables the admin team to monitor each enterprise effectively, ensuring real-time visibility into operations and performance metrics. This has led to improved operational efficiency, better inventory management, and enhanced tracking of financial health. This technological intervention enabled IMAGO to scale its impact more effectively, aligning with its mission to help rural women entrepreneurs achieve sustainable incomes.

Case Study: Empowering Organisations through Capacity Building

Jagrutha Mahila Sanghatane (JMS), a women-led Community-based Organization in Raichur, Karnataka, initially collected data using pen and paper. During T4GC's interaction with JMS in 2019, their data was scattered, disorganized, and largely uncollected. This encompasses donor data, member data, beneficiary data, and information on events and campaigns. These problems were compounded when some of their collected data forms were lost in natural calamities - JMS lost close to 2000+ members' data collected manually on paper to floods.

Recognizing the need for a better method, JMS partnered with T4GC and Google EarthOutreach to embrace technology. They began collecting data from all their resource persons and initiated a digitization process. What started with making a shift towards transferring data onto Excel soon transformed into a full-blown digital data collection exercise. Expert tech volunteers from Google trained JMS staff in using Open Data Kit. Previously, JMS could collect 30-40 forms in three hours manually; with digital data collection, they could gather 80-100 forms in two hours. Additionally, JMS saved approximately Rs. 50,000 annually by using trained youth volunteers for data collection instead of outsourcing the digitization of paper forms.

Ensuring Last Mile Tech Adoption

While technology has become cheaper, organizations encounter significant challenges in realizing tangible benefits and returns on investment when adopting these tools. Reasons include a lack of familiarity with technology, among others. The organization's staff usually aren't adept in technology, nor are they expected to be, considering that their primary focus is to drive the mission of the organization. Capacity-building initiatives stand out as the game changer here, supplementing grassroots communities with resources to upskill their technical expertise while demystifying technology. By employing methods like hands-on demonstrations and sharing success stories, organizations can effectively guide end users toward recognizing the immediate benefits of technology, such as improved documentation and streamlined planning processes. This approach ensures buy-in from all stakeholders, aligning technology adoption with the larger mission of the organization.

Getting Started with Technology

Procuring and maintaining software is more affordable in today's world. There are multiple options available:

- Discounted pricing that organizations can avail with a valid nonprofit registration,
- Open-source technology that comes at very low costs and customization capabilities,
- Capacity-building initiatives and training resources to upskill teams technically.

Tools like ERPNext, Odoo, Google for Nonprofits, Metabase, Kobo Toolbox are already being used by several NPOs in India. These data management systems facilitate data collection, research, analysis, and inference needed to drive outcomes.

Establishing a transparent and collaborative data-sharing infrastructure within the organization is tantamount to a smoother and more sustainable functioning of grassroots initiatives. However, grassroots communities and organizations, particularly because of their self-reliant approach, are often skeptical of digitizing their data and processes due to the absence of tech support for system setup and training. Guiding them through the process of adopting technology via comprehensive awareness and training is imperative to realize the advantages of digitization.

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