Final Insights Report: Voices Of Venezuela

Voices of Venezuela (VOV), an initiative of Art For Impact SAS and Tech Equalized LLC, has had a transformative journey within the Patrick J. McGovern Foundation(PJMF) Accelerator program. Our project, sponsored through the Global Development Incubator, has let us make substantial progress in enhancing our capabilities in data management, natural language processing (NLP), and system infrastructure. Our efforts have been directed towards delivering verified information to Venezuelan migrants and other vulnerable groups, as well as data insights to the organizations working with them.

Throughout the project, one of the most significant insights was the understanding of the importance of data governance, especially in prioritizing privacy and security. Regular engagements with the PJMF and virtual learning opportunities enabled us to develop a system that stands firmly aligned with our ethical commitments in handling sensitive information. This process involved a careful examination of data collection, storage, and dissemination practices, ensuring that user confidentiality and privacy were always at the forefront.

We recognized early on the need for a data infrastructure that was robust, yet adaptable. This infrastructure had to address challenges related to data volume, source connectivity, and budget constraints, while also being forward compatible with new advancements in Generative AI. This foresight was crucial in ensuring our systems stayed relevant and efficient within a rapidly evolving technological landscape.

A major achievement of the VOV project was the centralization of data from various sources and merging of historical and new data streams. This effort streamlined our operations, improving the accuracy and reliability of our data, and increasing its value to the humanitarian sector. This centralization is expected to enable us to scale our work more efficiently, adaptable to new locations and humanitarian contexts.

Implementing NLP played a key role in analyzing conversational data. By understanding community needs in detail, we can respond with greater precision and faster through automated responses. Our helpline, which has handled thousands of messages daily at peak times, shows why scalability through automations is so important. Utilizing technologies such as Wit.ai and OpenAI for dataset labeling and model building, we were able to train 39 intents from natural language on our helpline. This capability has been a game-changer, and will significantly enhance our service's responsiveness and accuracy.

The insights gained from this technological advancement have far-reaching implications for safeguarding human rights. Our improved data analysis capabilities enable us to better understand and address the unique challenges faced by migrant communities. The system we have built and tested, soon going live, will play a critical role in new projects. These projects aim to use data insights to improve decision-making, better identify beneficiary needs and abuses of human rights, and hopefully lead to more targeted and effective humanitarian interventions by CSOs, NGOs, and government bodies.

Looking forward, we plan to focus on building local knowledge bases, as well as databases of orgs and services so that we can leverage them within our system using Generative AI. This approach will involve comprehensive feedback systems and an 'ask the community' feature to fill in gaps in information and increase the collective knowledge available. We believe this will help ensure that our service and responses remain both relevant and specific, addressing the unique contexts and needs of our users over time.

Our experience with the VOV initiative serves as a practical model for nonprofits facing similar challenges in communication and data management. Our goal was to create a manageable yet adaptable foundational system, allowing us the flexibility needed when scaling to additional populations or projects. It was also crucial to ensure forward compatibility with future technological innovations, particularly Generative AI. We chose Wit.ai as it was free, multilingual, and we can increase our intent classification over time. Addressing data volume, privacy, and connectivity challenges, we used Google Cloud Platform (GCP) as a storage lake with Big Query to analyze data after removing Personally Identifiable Information. This then goes to Looker Studio for a dashboard, where information can be further filtered. This strategy ensured our system was scalable and future-proof, capable of efficiently handling large volumes of data.

Consolidating data from various platforms has enhanced our operation's reliability, so that our analysis is universal over all information sources. This streamlined operation also leads to a more comprehensive understanding of migrant experiences. We are currently pulling data from APIs to manage conversations on platforms like WhatsApp, Facebook Messenger, and Telegram.

Our current work with the Colombian government highlights the practical application of our insights. We have engaged in two major projects: one focusing on connecting 50 civil society organizations with government-supported initiatives across 9 mayor's offices and the other aimed at linking 100,000 migrants to banking services. In both

projects, the data we provide is crucial, not only in terms of operational logistics but also in ensuring that the services offered are in line with the actual needs of the migrants and serve as a quantitative way for projects to measure their impact. The insights and technologies we have developed will continue to inform and guide our strategies and we will continue to increase our data analysis processes and dashboard as we grow.

Our journey offers valuable lessons for other smaller nonprofits grappling with similar data challenges. The key takeaway is the importance of not over-complicating systems. A solid, manageable foundation is preferable to a complex system that may prove too challenging for a team to manage or update effectively. In the coming year, we plan to make transitions in our infrastructure, moving from self-hosting to offloading our RapidPro system to managed hosting services by companies already proficient with RapidPro. This shift is expected to further streamline our operations, ensuring more reliable and efficient service delivery by making it easier for us to focus on the value we provide instead of the management of service code.

The VOV initiative under the PJMF Accelerator has marked a significant milestone in our journey. Our enhanced capabilities in data management and analysis will make a real difference in the lives of those we serve. As we look to the future, we are excited about the potential of our system and the impact it will have on humanitarian efforts. The lessons learned and experiences gained from this project are invaluable to us, providing a roadmap for us and other nonprofits seeking to harness the power of data in their humanitarian endeavors.