# DEVELOPING METHODS FOR SINGA LYON TO DETERMINE SOCIAL IMPACT



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# Developing Methods for SINGA Lyon to Determine Social Impact

An Interactive Qualifying Project submitted to the faculty of WORCESTER POLYTECHNIC INSTITUTE in partial fulfilment of the requirements for the degree of Bachelor of Science

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# i. Abstract

SINGA Lyon is a non-governmental organization with a basis of creating social links between refugees and local citizens to foster a more inclusive society where diversity is appreciated as a source of richness. To grow as an organization, as well as to secure vital grants and resources, SINGA Lyon requires accurate and descriptive ways to assess their social impact. The goal of this project was to identify methods to quantify SINGA's social impact within seven weeks that would be user-friendly and cost-effective. Using a comprehensive approach through numerous interviews, focus groups, and surveys, our team was able to determine key performance indicators that demonstrate social impact measurement specific to SINGA Lyon. By researching different methods, our team suggested three different strategies to help the organization in quantitatively determining their social impact including using pre and post surveys, launching Salesforce within the organization, and an option for the creation of a platform specific to SINGA Lyon through a major qualifying project by students at Worcester Polytechnic Institute.

# ii. Executive Summary

As of 2021, there are roughly 7 million documented immigrants living in France, comprising 10% of the population; despite the fact, immigrants still have trouble finding acceptance from French communities (INSEE, 2022). In France, the term *nouveaux arrivants* refers to those who have just arrived to a new community and applies to anyone who has come from another country, city, or even neighborhood. *Nouveaux arrivants* can be very well-qualified or even over-qualified for the jobs which they seek but are often faced with rejection based on religious, racial, or cultural grounds as well as linguistic barriers (Duguet et al., 2009). This can lead to problems with acquiring a job and building social connections and meaningful relationships with others.

SINGA Lyon was founded in 2016 with the purpose of creating social connections between local citizens and new arrivals. As an organization focused on valorizing diversity and removing stigma barriers against refugees, they organize several events that allow people to come together regardless of background. As many immigrate to France seeking asylum, they often arrive alone and remain in solitude. By being secluded from society, many do not develop necessary skills to transfer their previous life to their new setting. SINGA wants participants to gain the self-confidence to be able to get a job and to find a community they can place themselves in.

In the past few years, SINGA Lyon has expanded from a couple of people to thousands within their network. With this expansion follows the question of how impactful their organization is and how their social impact can be quantified; our team was tasked with providing SINGA Lyon methods to understand their social impact. As a non-governmental organization, they heavily rely on grants from private holdings with the *Fondation de France* and the *Institut de France* being the two most widely recognized in the country. With quantitative data to show their social impact, this can be added to grant proposals or shown to potential donors that showcases how their organization is benefiting society. By using a mixed methods approach, we identified some relevant key performance indicators that correlated to their overall social impact.

#### Methodology

Our first objective focused on understanding the core values and primary motivations of SINGA through document analysis and interviews with SINGA leaders. Using document analysis, we identified common recurring themes within important documents provided to us through SINGA.

We conducted three semi-structured interviews with SINGA leaders both local and global. Within these interviews we asked questions about SINGA's goals and important beliefs to obtain a stronger understanding of SINGA's values narrowing our scope of key performance indicators.

The second objective was framed to grasp participant experiences through participant observation, a focus group, interviews, and surveying. Our group attended 18 events in total and took note of values presented through activities, perceived retention rates, and the relationships between SINGA volunteers and participants. We organized one focus group encouraging discussion about their specific experiences with SINGA and ways that they have felt impacted. Besides carrying out some fruitful conversations amongst members and volunteers, we administered a survey to distribute to SINGA participants to gather additional quantitative data using the key performance indicators hypothesis that we identified previously. This multi-method approach allowed us to get a thorough grasp on the experiences of SINGA participants.

Our final objective was to identify SINGA's resources and assess their capacity for tools that measure social impact through interviews and media analysis. With the previously mentioned interviews with SINGA leaders, we were also able to ask questions about struggles/challenges they currently face, what information they would like to see gathered, and current resources they have that we could utilize to create these metrics. Using media analysis, we were able to gather an understanding of their current demographic and reach through social media. The information received from these methods was crucial to creating recommendations catered towards SINGA's needs, but also staying realistic to their resources.

#### Results and Analysis

To understand SINGA's core values and motivations more deeply, we used participant observation, interviews with SINGA leaders, and document analysis. By doing so we identified that SINGA's main objective is to support the construction of a more inclusive society that enables success no matter what background whilst building social links between *nouveaux arrivants* and local citizens. They work heavily with asylum seekers and refugees aiming to reduce stigmas, allowing everyone to exist in an equitable space where they can succeed within an unfamiliar environment. Indicators identified within this objective were self-confidence and connections.

Our second objective consisted of grasping participant experiences and perspectives. We attended 18 events with the largest areas of impact identified being: fostering social connections, improving language skills, and a general sense of self-confidence to complete daily tasks. Within the focus group discussion further emphasis was placed on the significance of social connections facilitated by SINGA Lyon. Similarly, the survey conducted among active SINGA Lyon members provided quantitative data on participants' experiences and feelings toward SINGA Lyon. Although the response rate was limited, the feedback received indicated positive responses overall, validating our initial findings about SINGA's impact on participants' self-confidence, language proficiency, and social connections. Furthermore, we performed Natural Language Processing analysis of the interviews transcripts that allowed us to identify frequency of themes and relevant categories that aligned with our previous hypotheses.

To accomplish our final objective and identify SINGA's resources and assess their capacity to measure social impact, we performed media analysis and some strategic interviews with SINGA leaders and volunteers. We analyzed SINGA Lyon's online presence and social media metrics to assess their reach and engagement with the intended audience. The analysis revealed insights into follower demographics, post reach and user engagement, showing a potential correlation between online presence and event attendance. In parallel, the interviews with leaders revealed the struggles to quantify the newcomer's presence in the community to serve their needs more effectively. Indicators that measure quality and feelings of people in different aspects when they join SINGA were missing. More data related to job creation, retention rates, budget allocation and effectiveness of different events was lacking. Conversations with volunteers shed light on the challenges to implement efficient forms to gather personal data, mainly due to tracking issues and language barriers.

#### Recommendations

The most cost effective and efficient way for SINGA to gather data from their participants would be using pre and post surveys to be administered monthly and tailored to specific events. The three key performance indicators measured using these surveys would be the level of social connections, the proficiency of the French language, and the level of confidence in finding work. Surveys would be given before and after a series of workshops, to show what participants gained from their experiences. Participants would be asked how long they had been attending SINGA,

to show the increase in their friendships, knowledge of French, and confidence, based on time. These surveys should be able to provide specific scores in these three focus areas that can be compared across time.

Another key performance indicator that would be helpful for SINGA to measure is their retention rate. Salesforce is a platform that can be integrated with other features to monitor attendance and keep track of other data found from surveys. This software would require more time and money to start using but would be able to meet more needs of SINGA. Salesforce can be used to connect with donors and volunteers, as well as keep track of participant data. This platform would be more difficult for SINGA to start using, as someone with prior experience with similar platforms would be needed to organize and manage the website; however, there are other SINGA locations utilizing Salesforce, so employees from Lyon may be able to connect with them.

The most customizable and effective way for SINGA to measure their impact would be through the help of a major qualifying project with WPI. A team of computer science, data science, and cyber security students could develop a platform for SINGA, to meet all the needs of the employees and their donors. The research collected on the needs of SINGA would be given to the new team of students to understand which key performance indicators were most important to SINGA. This website would have the same functionality as Salesforce but would be easier for SINGA to customize and use. Although this option seems to best fit the needs of SINGA, it would be the hardest to implement, as getting the project approved with WPI would take time. This is our long-term goal and recommendation for SINGA, while advising the above simpler options in the meantime.

#### Conclusion

SINGA Lyon has succeeded in promoting social diversity, reducing stigmas towards refugees, and creating social connections. Their organization has grown significantly throughout the last few years, creating the need to quantify their social impact. This project's aim was to give SINGA Lyon a set of potential methods that could be used to measure their social impact to be used when applying for grants and other funding. To do this, key performance indications were identified through interaction with the leaders and participants of SINGA Lyon. As our

recommendations differ in implementation timing, leaders of SINGA Lyon have the option to utilize methods as they see fit to capture their social impact.

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Appendix B	ALL	ALL
Appendix C	ALL	ALL
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Appendix F	Thomas	ALL
Appendix G	N/A	N/A
Appendix H	Stephanie	ALL
Appendix I	Stephanie	ALL
Appendix J	ALL	ALL

# 1. Introduction

Immigration is a complex issue that affects people worldwide. There are many reasons why a person chooses to immigrate; political conflict, war, racial or religious discrimination, financial struggles, or reuniting with family. Immigration can be a controversial topic with positive and negative impacts on each respective country. Some authors argue that immigration can provide cultural diversity, new skills, or perspectives to a country. Boosting economic growth or increasing the workforce are other benefits to embracing immigration. Conversely, some countries do not have the resources or facilities to welcome the increasing rate of immigrants into the country which can often lead to poverty and housing struggles for other citizens.

These varying consequences create conflicting opinions on immigrants among native populations. Whereas some countries embrace their immigrants and have programs and resources established to help them with such a drastic transition, others do not. In many countries, immigrants are met with hostility and negativity. They can face discrimination, social exclusion, struggle with access to job opportunities, and an inability to obtain basic resources.

As France's immigration rate increases, the topic of diversity has been highlighted in terms of both policy and within the workplace. A nonprofit organization, SINGA, is geared to help new arrivals in their adjustment to their new lives in a foreign country. SINGA's goal is to build a society rich in diversity, where everyone, regardless of their origin, can fully realize their potential. SINGA has tasked our team with identifying performance indicators to measure their social impact to understand internally areas of how workshops may be improved as well as demonstrating impact to organizations providing funding. Our work will allow SINGA to assess their strengths and weaknesses to adapt current strategies accordingly.

By exploring different views on immigration, policies, diversity, and language accommodation, the goal of this section is to understand the complexities with immigration and migrants. Within these topics, supporting data will be presented to introduce the need for evaluation and resources to aid the transition of newcomers into French society. Furthermore, to understand SINGA's core values and motivations, identify available resources, and grasp participant experiences, several methods will be used including document analysis, interviews, and focus groups.

# 2. Background

Over the past 10 years, immigration into Europe has increased exponentially due to several factors such as economic opportunities, family reunification, and humanitarian reasons (Krzyzanowski et al., 2018). The 2015-2016 refugee crisis, globally known as the Syrian Refugee Crisis, involved 1.3 million seeking asylum within the protected borders of Europe (Ostrand, 2015). Since then, the ongoing conflict between Russia and Ukraine has caused another refugee crisis with approximately 3.1 million Ukrainian residents seeking asylum in neighboring European countries (Rahimi, 2022). With the large influx of non-native residents, this has caused a dramatic shift within demographics and a massive economic strain on Europe (Krzyzanowski et al., 2018). In 2022, about 1 million individuals seeking asylum exceeded the number in 2021 by over half (Eurostat, 2023).

# 2.1 Immigration to France

In 2022, the French National Institute of Statistics known colloquially as INSEE, recorded 1 in 10 of the French population to be foreign born out of the 67.75 million total. With the demographics of the nation shifting, there is a growing need for increased resources available to immigrants (Nardon, 2017). The timeline and profile of immigrants have changed immensely in the past few years as well as the political climate of the world (Pascual, 2023).

As France becomes increasingly diverse, on a national scale, there have been initiatives to highlight ethnic diversity such as the Intercultural Cities Program, which promotes intercultural policies to increase inclusiveness; however, the discourse of diversity within France is multifaceted making effectiveness variable. Due to social vulnerabilities and stigmatization, immigrants often struggle to find employment (Zholudeva and Vasyutin, 2022). Moreover, fringe far right and even centrist political parties have started to hold their stances on immigration as many view immigration as a threat to national identity and French secularism (Boubtane, 2022).

One of these leaders is Marine Le Pen who proposed an immigration referendum in 2021 to limit access to French citizenship as well as access to asylum if elected president to which she moved forward to the second stage of the presidential election. Le Pen, daughter of former president

Jean-Marie Le Pen, is a current member of the French National Assembly and has run for presidency in 2012, 2017, and 2022. Although losing to popular vote, the current political climate is favoring Le Pen for future election. As France decreases in financial security for its citizens as shown by the pension reform from President Macron in January of this year, Le Pen's proposals become increasingly popular.

# 2.2 Immigration Laws in France

At the turn of the 19th century, France was beginning to industrialize, but lacked the labor population to do so following the French Revolution (Chemin, 2023). To support industrialization, immigration was encouraged welcoming immigrants from other European nations such as Belgium, Spain, and Italy. From this period to the mid-1970s, French immigration law favored migrants; however, policies began shifting due to the severe influx of migration from North African countries and the economic crisis of the 1970s (Weil, 1994). Between 1974 and 1988, France pushed five laws addressing illegal immigration and the permittance of new immigrants, false promises of equality to migrants regardless of background and attempts to differentiate among immigrants based on their assimilability (Weil, 1994). Since the 1980s, 29 immigration bills have passed. Immigration laws are not only difficult to understand for migrants but French natives as well. If an immigrant does not understand the laws which benefit them when they enter a new country, they can be taken advantage of (Le Défenseur des Droits, 2016).

The constant shifting immigration laws in France make the process of immigration far more difficult, especially for those who do not speak French (Le Défenseur des Droits, 2016). While there are a multitude of organizations available to aid migrants, it can be difficult to find, for example, if a person does not have access to the internet or access to a social worker who speaks their language. Furthermore, a lack of translators during the immigration process can be frustrating and exhausting for both migrants and social workers, as neither can communicate with one another thus, the process is further lengthened. Furthermore, court proceedings may require a translator, which can be mistranslated; whether being syntax, cultural differences, or a character language in which one character has multiple meanings. With a lack of properly trained

translators, serious court appearances can be riddled with miscommunication which affects the fate of a migrant (Stuber, 2020).

# 2.3 Asylum in France

As France has locational proximity to areas of conflict, it is a destination that many seek and has been considered one of the main countries of destination for refugees in Europe (UNHCR, 2023). The process of seeking asylum in France can be daunting for newcomers as there are many steps done with different organizations. To commence the process, the first step is to meet with SPADA. SPADA stands for "Structure de Premier Accueil des Demandeurs d'Asile", which means "Initial Reception Establishment for Asylum Seekers". Their job as the first contact is to register a person's information for the asylum-seeking process and connect the person with the secondary office GUDA (OFPRA, 2023).

GUDA stands for "Guichet Unique de Demande d'Asile" which means "Dedicated Asylum Application Service Center". GUDA contains both prefecture and OFII agents, prefecture agents are people dedicated to that specific prefecture (district) of France, whereas OFII agents work with the state and help migrants and asylum seekers integrate within their new environment. The first step is meeting with a prefecture agent to register an asylum application, validate information transmitted by SPADA, give fingerprints, and an individual interview (OFPRA, 2023). The OFII agent will then identify any vulnerabilities, look for housing, and assess your rights as an asylum seeker.

Once successfully registered, an application can be sent to OFPRA (Office Francais de Protection des Refuges et Apatrides) for review. OFPRA aims to review the applications they receive as soon as they can, but unfortunately this process sometimes takes over 6 months (OFPRA, 2023). During this time, the applicant may experience anxiety and uncertainty about their future. However, it is important to note that there are resources and support available to help individuals through the process. After the review process, OFPRA will either grant or deny the application. If the application is granted, the applicant will receive a valid resident card for either 10 years (for refugee status) or a maximum of 4 years (for subsidiary protection and statelessness), which is renewable. If the application is denied, the applicant may appeal to the CNDA (Cour Nationale du Droit d'Asile) within a certain period.

Overall, the asylum application process in France can be a challenging experience. However, with the assistance of the various organizations involved and the support of resources available, applicants can navigate the process and seek the help and sanctuary they need.

# 2.4 Job Finding and Language

The French labor market faces challenges and disparities in job search, particularly for immigrants. In 2019, the internet usage for job search varied based on formal education, with 12% of users with low formal education, 18% with medium formal education, and 21% with high formal education utilizing the internet for job search (Eurostat, 2023). However, it is important to note that specific data on the usage of online job search platforms by immigrants is limited and warrants further exploration.

Furthermore, a 2022 survey highlighted a significant gap in online job search behavior between lower-income and higher-income respondents, with half of lower-income individuals using the internet for job search compared to 20% of higher-income individuals. The unemployment rate remains higher among immigrants in France compared to non-immigrants. Survey data spanning from 2006 to 2020 reveals that the job search rate was 7.4% for non-immigrants and 12.9% for immigrants (Statista, 2022).

Additionally, many empirical approaches confirm the existence of labor market discrimination based on age, origin, gender, sexual orientation, religion and disability in France. A quarter of all French people say that they have experienced discriminatory behavior in the last five years (Batut & Rachiq, 2021). Efforts to address these challenges include integration programs provided by the French government, such as language courses and vocational training, aimed at supporting immigrants in acquiring necessary skills and adapting to the local job market (French Ministry of the Interior, 2021). Online platforms like Pôle emploi (www.pole-emploi.fr) and LinkedIn (www.linkedin.com) offer job seekers opportunities to access job listings and connect with potential employers, serving as valuable resources for immigrants.

# 2.5 NGOs in France

There are three main ways in which non-profit organizations in France can apply for sponsorship and funding. The leaders of the non-profit can ask a company to sponsor a specific event, start a

partnership with a sponsorship company, or open an account with a larger organization. The two most widely known companies in France are the *Fondation de France* and the *Institut de France*, both recognized by the French government (Sauvanet, 1999).

Frequently, non-profits and their sponsors prefer to develop a partnership and work together for many years. In this arrangement, a sponsor requires more information from a non-profit, including legal and fiscal specifics. In return, a sponsor can be more involved and provide more support to an organization (Deckert, 2010). Additionally, the owners of non-profits often try to heavily involve and support their employees. These employees are able to help decide company policies and select projects on which the company will focus its efforts (Sauvanet, 1999). This large partnership between the leaders of a non-profit, their sponsors, and their employees helps start-up organizations to run smoothly. However, in order for this arrangement to work, the company must have concrete policies and metrics that can be shared among everyone in charge.

# 2.6 Goals of SINGA Lyon

The focus of SINGA Lyon is to create an inclusive society by giving new arrivals access to the same opportunities as local citizens. The right to move or go to another country is a global ideal that many countries possess, including France and the United States. However, many of the immigrants who frequent SINGA have come from North African or Middle Eastern countries, where they were not allowed to move around freely. Thus, the first goal at SINGA is to give these new arrivals access to a place to stay and to start the asylum-seeking process. For people who have already completed their papers and been given the right to stay in France, the next obstacle they face is finding work. SINGA takes into consideration the unique experiences and talents that immigrants possess. They help people express themselves through entrepreneurship or by finding a job that is equal to their previous qualifications. As the asylum and inclusion process looks different for each immigrant, SINGA has yet to develop a system to quantify their success. In order to offer more resources to new arrivals, SINGA must apply for funding from companies, such as the Fondation de France. These sponsorship companies seek more specific data regarding SINGA's impact before supplying funds. This project aims to provide SINGA with tools to measure the impact they have had on both new arrivals and the local community.

# 3. Methods

The goal of this project is to identify relevant metrics and methods to assist SINGA Lyon in the assessment of their social impact. To achieve this, the following objectives were identified:

- 1. To understand the core values and primary motivations of SINGA.
- 2. To grasp participant experiences attending SINGA events.
- 3. To identify SINGA's resources and assess their capacity for tools that measure impact.

## 3.1 Understanding Core Values

A mixed-methods approach will be used to identify and understand SINGA's core values and motivations for a more robust and accurate understanding of the research subject (Schensul and LeCompte, 2013). These methods include document analysis, as well as interviews with leaders of SINGA.

#### 3.1.1 Document Analysis

To identify other key performance indicators, natural language processing (NLP) techniques can be employed to analyze SINGA's literature and reports in an efficient way. NLP is a field of artificial intelligence that enables computers to analyze and understand human language. Furthermore, by utilizing NLP techniques such as topic modeling, sentiment analysis, and entity recognition, we could identify patterns and themes in SINGA's reports and literature. This analysis can provide valuable insights into the organization's core values, motivations, and social impacts. The use of NLP on SINGA's reports can also provide a graphical representation of the organization's narrative, quantifying the language used in SINGA's reports and literature.

#### 3.1.2 Interviews with Leaders

This goal's target population would be internal leaders of SINGA involved with planning and addressing financial matters. By using semi-structured interviews, the respondents can speak unconstrainted about extraneous matters while answering questions needed to determine their capability for a new method (Beebe, 2018). Semi-structured interviews can be done in a brief period, containing direct questions about personal motivations and that of SINGA (See Appendix A). Follow-up questions will also be asked to allow the respondents to provide us with information that may not have been asked. These interviews would last around an hour and

would be recorded since the respondents may be speaking French, and some words could be missed if not contained within a recording.

# 3.2 Grasp Participant Experiences

Understanding the experiences of participants involved with SINGA is essential for determining the impact of SINGA's programs currently. This allows the team to determine current indicators of impact and helps narrow a sphere for specific key indicators at SINGA to measure its social impact effectively.

# 3.2.1 Participant Observation

Participant observation will be utilized to gain insight into SINGA's values and motivations. By attending SINGA programs, our team will partake in activities, providing a holistic view of the organization. Spreading out throughout the group of participants enables us to engage with different participants and comprehend the community's sentiments as well as viewing how participants in the events interact with each other and the atmosphere of the events themselves.

Following each event, by compiling our experiences and comparing different perspectives, this provides a more comprehensive understanding of the community. The main goal of this exercise would be to obtain a firsthand sense of how SINGA operates, more so than what could be read on a website or learned from an interview. The observations made at the events can be documented immediately after and called upon when learning about the experiences of other participants at SINGA (De Munck, 1998). These observations will then be coded into reoccurring ideas that can be established as potential performance indicators for impact assessment.

## 3.2.2 Focus Groups

Focus groups will be employed to gather data on what participants of SINGA deem the most important (Beebe, 2018). In conjunction with SINGA, focus groups will be facilitated directly before or after scheduled workshops. Members would be asked about how SINGA has impacted them personally and thus, the key aspects of the organization itself that have aided them beneficially. From these focus groups, indicators specific to the organization and its participants

that were mentioned can be developed (Ryan & Weisner, 1998). The values members report can then be compared to employees and volunteers to assess alignment with SINGA's core values.

Values and experiences reported can then be sorted based on age, gender, or nationality to determine whether certain demographics are gaining more from SINGA's workshops than other participants (Ryan & Weisner, 1998). Focus groups encourage "group interaction among respondents to produce data and insights that would be less accessible without the interaction found in a group" therefore would openly share their sentiments to create a comprehensive approach to measuring social impact (Beebe, 2018).

# 3.2.3 Surveying

In conjunction with focus groups, our team will also be dispatching surveys to grasp additional information that may not have been covered during interviews or focus groups. As the previous methods are reliant on attendance at scheduled activities, these surveys will be sent via email or group chats for participants to fill in at their convenience. Survey research is found to be most effective to supplement field research, to find what percentage of people agree with statements made by individuals (Beebe, 2018). By using a scale ranging from one to five, participants can choose their level of accord with each statement that can then be quantified numerically. These responses can then be used to guide and inform SINGA of their current social impact. As there will additionally be a space where participants can write in any comments, there is the ability to identify indicators that were not previously mentioned. With anticipating a large influx of survey responses, this method will be the most comprehensive. Results can then be coded, and graphs of quantified data can be created for a visual representation of the current impact state (LeCompt & Schensul, 2021).

# 3.3 Identifying Resources

As SINGA Lyon stands as a non-profit that relies heavily on government funding, identifying available resources is crucial for providing a sustainable method for obtaining metrics specific to social impact, in terms of both time and cost.

#### 3.3.1 Interviews

Within the interviews with SINGA leaders, there will be another part that asks about resources and potential capabilities for infrastructure designed to quantify social impact. With information collected through interviews, a network map could be developed to represent the resources and tools available to SINGA (Schensul, 2012). This map may include data about SINGA's budget and number of staff members to inform how much time and money could be dedicated to methods of assessing impact.

#### 3.3.2 Media Analysis

By analyzing metrics from social media platforms, the online presence of SINGA can be assessed. This technique can also assess the inclusivity of SINGA's online platforms to determine the demographic they are currently targeting (Van Den Berg, 2023). Site interactions can be compared to site traffic to determine the efficacy of SINGA's current methods in terms of social media. Using the ability to quantify the number of views each post receives and the demographics of their followers, this data can then be used to advise SINGA on expanding their online presence and determining social impact within the sphere of cyberspace to be used as a resource.

# 4. Results and Analysis

The following section includes results from data collection methods and how information obtained was codified to generate key performance indicators specific to SINGA Lyon. The processes highlighted in this section are used to finalize recommendations and deliverables to measure demonstrated social impact.

# 4.1 Participant Observation

Over the course of seven weeks, we attended two main types of events with SINGA. The first was workshops, in which new arrivals and citizens alike were invited to come together for a certain activity and interact. The second was celebrations, in which the people of SINGA were able to show off their accomplishments.

# 4.1.1 Workshops

There are no distinctions for people attending SINGA events; between participants and volunteers, based on where people are from, or based on the skill level of participants. The different workshops range a wide variety of subjects and are open to everyone. At any given event, there are people who have been going to SINGA for so long that they have become volunteers, as well as people who are just attending for the first time. As so many different people attend these events, it would be helpful for SINGA to keep track of how much people learn over time. From attending these workshops, we noticed that participants build their confidence, practice French, and form connections with each other.

#### 4.1.1.1 BLABLA - SINGA Core Event

BLABLA is one of the core events at SINGA, hosted every Wednesday evening without fail. This event starts with introductions from everyone, including their names and where they are from. This creates a sense of community, as everyone gathers in a large circle, so that there are no unfamiliar faces present. The reason this workshop is so fundamental to SINGA is that it facilitates connections with new people, while practicing French. There is always a wide variety of people present, so no one feels out of place.

#### 4.1.1.2 Specialized Workshops

Some other specialized workshops SINGA offers include geocaching, singing, rock climbing, cooking, and nail decorating. Through these events, we were given the opportunity to talk with different people, using the activity we were partaking in as a way to start a conversation.

Between ten and thirty people attended each of these events. Like everyone else, our skills in each of these areas varied, but anyone was welcome to participate. In each of these situations, we were able to connect with new people, by sharing something like a map or a sheet of music. We all paired up with different people to climb, cook, or do nails, meeting as many people as possible throughout the events.



**Figure 1a**: Be My Guest Workshop **Figure 1b**: Rock Climbing Workshop Pictures sourced from SINGA Lyon Facebook page.

#### 4.1.1.3 Educational Workshops

In order for employees and volunteers to be able to help newcomers, SINGA offers some workshops to educate them about the process of moving to France. We were able to attend two of these events, one about the asylum process, and the other about the process of migrating to a new country. Working together with other participants and leaders of SINGA, we mapped out the story of a few different immigrants and their journeys to France. These workshops showed us how SINGA teaches topics in an interactive way, making it easier for newcomers to understand.

#### 4.1.2 Celebrations

In the last few months, SINGA was able to move to a new location with a larger space, called the Faitout. They hosted two events during the month of June to celebrate the opening of their new

restaurant and the inauguration of the Faitout. Throughout the short time that we were in Lyon, we were able to see the Faitout improve drastically, with many employees and volunteers working together to decorate and furnish the building. The other celebrations that we attended included the SINGA Marketplace, the Lyon Street Food Festival, and the Aperitif. These events allowed us to see the accomplishments of the participants at SINGA, as well as those in charge.

## 4.1.2.1 SINGA Marketplace – Sharing of Confidence

A group of entrepreneurs worked with SINGA over the course of a year to create a website together, showcasing their entrepreneurial pursuits. It is difficult for anyone to start a business, especially after arriving in a new country. Having the support of SINGA and fellow entrepreneurs allowed new arrivals to gain confidence and create a product they were proud of.

# 4.1.2.2 Lyon Street Food Festival – Sharing of Culture

Two chefs worked with SINGA to participate in the Lyon Street Food Festival, sharing foods from their respective cultures. With the help of SINGA, these people were given the opportunity to put their talents to use in a new country, at a widescale event. As participants at the food festival ourselves, we were able to see the new arrivals in a professional environment, fitting in with other chefs who were native to Lyon.

#### 4.1.2.3 Aperitif – Sharing of Food, Music, and Stories

The Aperitif was a gathering in which everyone brought a dish to share, while talking, playing games, and enjoying live music. This event was widely attended, showing how many people are involved with SINGA and eager for any chance to gather and enjoy the company of others. Having been at SINGA for just about a month at this point, we saw many familiar faces and were able to converse with many different people.



**Figure 2a**: Aperitif Celebration **Figure 2b**: Faitout Inauguration Pictures sourced from SINGA Lyon Facebook page.

# 4.2 Interview Results through NLP

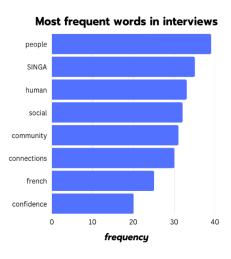
Artificial Intelligence (AI) refers to the development of computer systems that can perform tasks that typically require human intelligence. Similarly, Natural Language Processing (NLP) is a branch of AI that focuses on helping computers to understand, interpret, and generate human language. In this section, we present the results obtained from the interviews conducted with volunteers, participants, and leadership of SINGA Lyon and demonstrate how NLP can be used to gain insights from the interview transcripts and other documents. By employing NLP techniques, we aim to derive the most suitable metrics for assessing social impact and support the development of recommendations and deliverables.

#### 4.2.1 Frequency Analysis

Frequency analysis is an essential technique in NLP that is employed to find the most frequently occurring words or phrases within a text. In our study, we applied frequency analysis to all our interview transcripts to gain insights into the recurring themes, topics, and concepts that manifested themselves during the interviews.

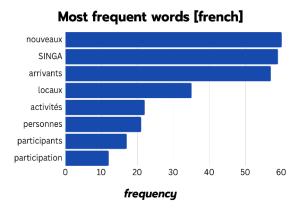
To conduct the frequency analysis, we utilized Python libraries such as NLTK (Natural Language Toolkit), PyPDF2, and matplotlib. Firstly, we preprocessed a document with all the interview transcripts (pdfs) by eliminating stop words, punctuation, and performing tokenization, which involves breaking the text into individual words. This analysis helped us to demonstrate the significance of specific subjects within the interview data and confirm the most relevant areas. Figure 3 exhibits how the words "people", "singa", and "human", came out to be the most

frequently used, which reflects SINGA's strong focus on the individual. "human", "social", and "community" account for the same principle. Moreover, "connections", "french", and "confidence" demonstrate areas of life where SINGA appears to have the strongest positive impact on the new arrivals and could be considered as possible key performance indicators.



**Figure 3**: Most frequently used words in all interviews and conversations. Sourced from interviews and conversations amongst SINGA leaders, volunteers, and participants.

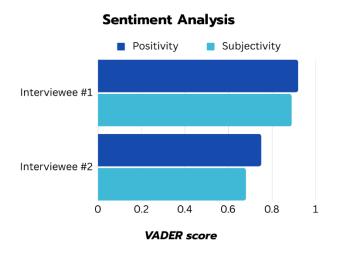
Additionally, we analyzed the "Étude d'Impact" document, which is a study conducted in 2022 by an external agency called "Meaningful Impact" where they present various methodologies to measure SINGA Brussels social impact on the "nouveaux arrivants", the community, and the locals. Identifying what type of vocabulary is the most frequent in this type of report helps us in envisioning our own suggestions and possible adaptations to SINGA Lyon. The results can be seen in Figure 4. There is a correlation with the frequency of words extracted from the interview and the study as we can evidence nouveaux arrivants (people) to be the most frequent terms. Furthermore, it is possible to evidence that the SINGA Brussels study was mainly centered on the community and the locals and that the participation in community-based it's critical for both organizations.



**Figure 4**: Most frequently used words in SINGA Brussels social impact study. Sourced from "Étude d'Impact" by Meaningful Impact.

# 4.2.2 Sentiment Analysis

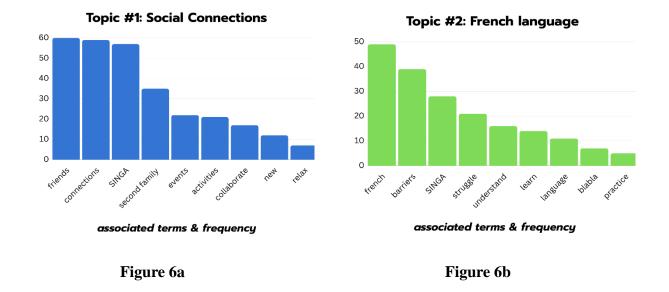
Sentiment analysis helps determine the emotional tone expressed in a text (Hutto & Gilbert, 2014). Using sentiment analysis on interview transcripts, we can understand the overall sentiment associated with specific topics discussed by participants. The VADER model (Hutto & Gilbert, 2014) represents sentiments on a scale from -1 to 1, with values closer to -1 indicating negative sentiment and values closer to +1 representing positive sentiment. For our analysis, Python libraries like NLTK or TextBlob we adapted a pretrained model using this scoring method. Figure 5 summarizes the results from interviews with two refugees attending SINGA events which show considerably positive sentiment scores (0.92 and 0.89) towards the discussed topics. These scores might be reflective of these topics' importance and practical relevance to the interviewees. Additionally, a moderate degree of subjectivity (0.75 and 0.68) accounts for the personal experiences and opinions that were shared.



**Figure 5**: Sentiment Analysis sourced from two interviews with *nouveaux arrivants*.

### 4.2.3 Topic Modeling

Topic modeling is a useful technique that we applied to the preprocessed interview transcripts using the Python library Gensim. By implementing it, we were able to discover some connections between themes or topics that emerged during the interviews, even if they were not explicitly mentioned. The algorithm identified clusters of words that frequently occurred together within the transcripts and assigned them to different topics, each representing a combination of words related to the same subject. Analyzing these visuals provided valuable insights into the key areas of interest and dominant themes discussed by the participants.



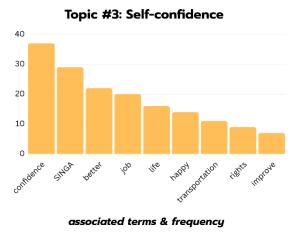


Figure 6c

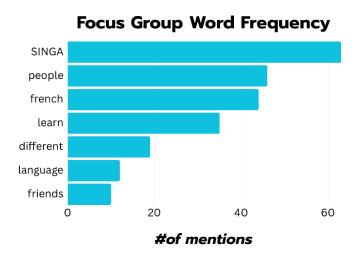
**Figures 6a, 6b, 6c**: Themes identified by Topic Modeling. Sourced from interviews and conversations amongst SINGA leaders, volunteers, and participants.

After having performed the two previous analyses and this topic modeling using the combination of all the interview transcripts, a pattern of some relevant common themes starts to emerge. Social connections (Figure 6a), French language (Figure 6b), and self-confidence (Figure 6c) stand out as unique and important aspects that deserve to be analyzed when measuring social impact. From this, we believe that it would make sense to consider key performance indicators (KPIs) that are in tune with the assessment of the new arrival's perspectives and sentiment in these three areas, ideally pre and post SINGA.

# 4.3 Focus Group Results

In order to ask complex questions in a setting which promotes free-formed responses and encourages participants to share their experiences, we organized a small set of survey questions to be employed in a focus group. We developed five mandatory questions, with a sixth question that was formulated to allow participants to share their experiences with SINGA as a whole but did not require an answer. An invitation to attend the focus was sent out through a WhatsApp group which was used exclusively by members of SINGA, and an address and time were included in the invitation. By employing a focus group rather than an individual interview, we hoped that participants would be encouraged to answer our questions more openly and freely after hearing the shared experiences of other participants in the focus group.

The focus group gave us insight of our key performance indicators that we would focus on for our methods of measuring social impact, specifically the value that members place on the social connections that SINGA helps them build. All of the members of the focus group emphasized how much SINGA has helped them form strong connections with others, and expressed their appreciation towards the organization and how much it has helped them. Furthermore, when participants were asked to say something, they wished that SINGA could change, each participant had to think deeply about the question before providing an answer, and only one of the participants mentioned changing anything about the organization.



**Figure 7**: Most frequently used words in focus group discussion. Sourced from SINGA focus group discussion.

As seen in Figure 7, the words which were appearing most frequently in conversation were directly related to the determined key performance indicators. Words such as "people", "friends", and "language" confirmed ideas which we had held regarding SINGA, which is that social connection is key for participants of SINGA. Furthermore, the focus group participants connected the SINGA events, specifically those where they interacted with other volunteers and members, to their ability to learn French. For example, the words "learn" and "language" appear in high frequency during the focus group, indicating that participants connect their ability to learn French with the fact that they can speak to others during SINGA events such as BlaBla, learning the language in a more exciting, conversational manner rather than taking a course. In

fact, participants claimed that they would have learned French much slower if they had not attended SINGA and had instead only taken French courses. Overall, the results from this focus group further confirmed that our key performance indicators were accurate and demonstrated that SINGA had in fact had lasting impact on those who had volunteered to share their stories in the focus group.

## 4.4 Survey Results

To gather more comprehensive feedback on the experiences of SINGA participants, we designed a survey that was distributed through a WhatsApp group exclusively for active members of SINGA. This method of distribution was chosen because it is primarily used to communicate upcoming events and activities to members of SINGA. We believed that by targeting active members, we would have a higher chance of receiving feedback from individuals who had been to at least one event with SINGA, and therefore have a good understanding of the organization's operation.

## 4.4.1 Designing the Survey

The survey consisted of five mandatory questions and one optional question. For the first three questions, participants were given the option to elaborate on their responses, but it was not required. We designed the survey to be brief and straightforward, so as not to overwhelm the participants with too many questions.

The survey aimed to gather quantitative data on participants' feelings about SINGA and their own feelings of self-confidence and language proficiency, as these were some of the key performance indicators that we identified through our field observation and interviews. We also had questions asking how long the participant has been in France, been involved with SINGA, and how frequently they attend SINGA events. The feedback received from the survey will help us to identify if there is a correlation between new arrivals confidence and growth in France and the levels of participation with SINGA.

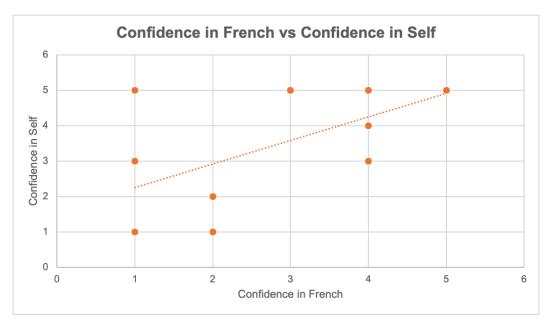
#### 4.4.2 Limitations

On the first day of distributing the survey, we received 20 complete responses. This equates to less than 5% of the population, as the WhatsApp group chat consists of 419 members. To obtain

a saturated sample size, we aimed to receive at least 80 responses. With a population of around 500, 80 responses would result in approximately a 10% margin of error.

After examining the received responses, we determined that the survey's length was not the issue since all respondents who completed the survey did so in full. Thus, we concluded that it was possible that individuals simply were not interested in clicking on the survey link. To encourage more participation, we decided to offer a monetary incentive. Specifically, we added that individuals who took the survey would be entered into a raffle for a 15 Euro gift card. Unfortunately, this proved to be unsuccessful. To stay on schedule, we only had time to employ one more strategy to gain more responses. We attended one of SINGA's most popular events (the Bla Bla) and gave a small introduction of our team/project and proceeded to hand out paper QR codes that linked to our survey to every person at the event. This was ineffective as well, only giving us two more complete responses.

#### 4.4.3 Analysis

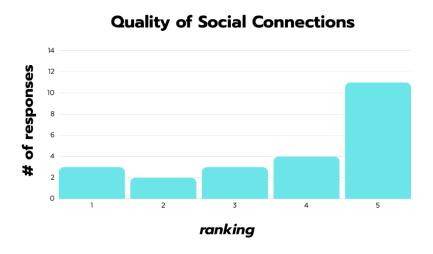


**Figure 8**: Graph depicting confidence in French vs confidence in self. Data sourced from survey.

Although our total number of responses was limited, we still found ways to effectively utilize what data we were able to gather. While we could not draw concrete conclusions, we still attempted to identify correlations between certain variables. For example, we had hypothesized

that there would be some correlation between confidence in speaking French, and self-confidence with independently completing tasks. By visualizing the data, the graph shows that the correlation was not as strong as we had assumed it would be, with an extremely low degree of correlation. This occurred in all of the different correlations we tested with our data, which we believe is in part due to the lack of saturation in our data pool. Although we were unable to successfully identify correlations between variables, we were still able to use the data in other way. We could still use the open-ended responses that some people were willing to accompany their numeric answers with.

One participant stated "Of course, because all Singa employees are nice to me. And they don't hesitate to help me in difficult times. Thank you very much for Singa!" in response to the question about self confidence growth since coming to SINGA. Responses such as these can still help us identify ways SINGA has been successful and help us measure that. We were also able to take note of what the distribution demonstrated with every question receiving relatively positive responses overall. For example, 50% of the participants ranked the social connections they had made at SINGA as a 5. With only 4 responses being a 2 or below. We cannot draw concrete conclusions from these answers, but they can help lead us in the right direction.



**Figure 9**: Graph depicting Quality of Social Connections. Data sourced from survey.

#### 4.5 Social Media and Analytics

Determining SINGA Lyon's online presence can indicate social reach based on interactions between user and interface. As SINGA Lyon keeps members engaged through usage of platforms such as Facebook, Instagram, and WhatsApp, identifying their ability to reach the intended audience in an effective manner can be quantified through metrics given through each platform.

As many participants are in the process of seeking asylum, SINGA has created a sense of anonymity at their events where people are invited to socialize without ties to their identity. As there is no system in place to track their participants, social media can serve as a link to some insights of their member population. As online presence within today's society is a strong indicator of an organization's connection to participants, these metrics can correlate to their overall reach.

With sample data taken from June 5th through July 4th, their Instagram following stands at 2192 followers; however, their page reaches less than a quarter of their total per day. With 66.7 percent of their audience being women and 33.2 percent being men, a discrepancy presents itself as events often lack in female attendees which has been identified by leaders in SINGA who have started events strictly for women to promote their participation. As the majority of participants live between the ages of 25-34 years old, this can be compared to other platforms that have similar metrics. Geographically, only 38.8 percent of their audience resides in Lyon creating a vacuum of users from surrounding cities in France. Their posts also reach a wide audience; however, interactions are limited. Facebook is their largest following with 5.9 thousand users, but, like Instagram, has minimal interactions. The Facebook cohort differs as 43.60 percent of their audience is male while 57.40 percent of their audience is female with most residing in Lyon (Appendix H & I). By increasing social media engagement, organizations can connect to more users and have a larger social impact (Tajudeen et al., 2018).

As a profile has a greater interaction rate, it can be an indicator of how impactful an organization is to its community and by comparing social media metrics to event attendance metrics we could further analyze their audience. From this key performance indicators that arise would be

retention rate to events as well as to social media where the numbers can also be compared to view correlation.

#### 5. Recommendations

This section provides three comprehensive recommendations for SINGA Lyon to measure their social impact using key performance indicators identified in the previous section. These recommendations are to be utilized within time frames of short term, medial term, and long-term solutions which the organization can use.

#### 5.1 Pre and Post Surveys

To start gathering data immediately, at zero cost, we recommend that SINGA administers pre and post surveys to their participants, to determine the impact of their workshops. These surveys would ask participants to rate their level of social connections, their proficiency of the French language, and their level of confidence in finding work, on a scale of one to five. An example survey is shown in Appendix \_. These surveys can be administered monthly at a well-attended event, such as SINGA BLABLA. To categorize these results, participants would be asked to provide how long they had been attending events at SINGA. The results could be divided into three groups for people who had been at SINGA for less than six months, six months to one year, or over one year. This would allow SINGA to measure the increase in friendships, knowledge of French, and confidence, based on how long participants had been attending SINGA events.

#### 5.1.1 Structure of Surveys

Over the course of our project, we have piloted a survey similar to the one we are suggesting. This survey was posted on two WhatsApp groups chats for SINGA and promoted at the weekly SINGA Blabla workshop. However, only 22 participants filled out the survey. One potential reason for this could be that our survey, shown in Appendix C, included eleven questions, half of which were written answers. Even though most of these questions were optional, the length of the survey may have been overwhelming for people who do not know a lot of French. The idea of the pre and post surveys we are proposing to SINGA is to make it possible for almost anyone to fill out in less than a minute. We will do this by limiting the length of the survey to four clear multiple-choice questions, asked in five languages. Although it is also useful to gain qualitative

feedback from participants, SINGA is specifically looking for a quantitative way to measure their impact. With these surveys, SINGA will have concrete data, showing their social impact over time.

#### 5.1.2 Specialized Surveys

To measure the impact of a specific event, rather than the impact of SINGA as a whole, we recommend a variation of the pre and post surveys. For example, SINGA hosts a cooking workshop called Be My Guest every other week, that participants sign up for in advance and attend for a certain amount of time. We suggest that SINGA administers a short survey at the first and last event of the session, to measure the impact of that program specifically. These surveys would include the same questions as the general survey, with one more question about the specific event. For the Be My Guest event, the additional question would ask how comfortable participants felt with cooking, before and after the workshops.

#### 5.2 Launching Salesforce

Salesforce is a popular cloud-based software providing customer relationship management tools for organizations mostly focused on sales; however, there is an option for non-profits such as SINGA that contains many of the same tools as well as additional ones that aid in connecting with donors, volunteers, and other individuals that are involved. As a medial solution, Salesforce offers many tools to identify impact with its reporting tools that gather pertinent data, representing a collective that can be displayed at once. As highly customizable software, SINGA can change their dashboard to meet their needs by adding applications relevant to their work. They would also be able to connect to their other platforms such as social media to garner metrics of their audience and how many people they are reaching.

#### 5.2.1 Reasons for Use

Interviews with SINGA leaders and volunteers showed a need for a method of tracking participants to keep communication between the two entities. As individuals who outgrow the need for SINGA and eventually cease attending events, SINGA currently does not have a system to identify who those individuals are. As retention rate was one of the key performance indicators identified, knowing who attends their events is essential for tracking and measuring their overall social impact. By pairing Salesforce with a sign-in system, SINGA Lyon would be

able to identify their participants, their engagement to activities and track communication. Currently, SINGA Global has established a connection with Salesforce; however, it has not yet been implemented in Lyon. SINGA Brussels currently has access to the platform and is the largest SINGA branch to date.

#### 5.2.2 Additional Benefits

Salesforce has the option to compile reports for organizations using Einstein AI to gain further insights by automating analytic dashboards. By using conversational intelligence, the platform has the ability to process data to create visual dashboards of collective trends. With AI driven analytics it can provide unified perspectives to data as it can be connected to external services. By compiling data, Salesforce gives users the option to access their data from one place. It also offers the ability to monitor project pipelines, financial planning, and generating automated reports.

#### 5.2.3 Drawbacks

While non-profits have the option to utilize NPSP, non-profit success pack, from Salesforce, the first 10 licenses are free of charge; however, for any number of users over 10 would be multiplied by €150 per month to keep the enterprise version. By only offering 10 licenses, with the growth of the office, some may not be able to access the platform without previously budgeting for an increase in pricing. Another drawback would be the need of an administrator with prior experience in information technology to set up as well as troubleshoot if needed, although due to its intuitive interface and plethora of information available, it is possible to implement without.

#### 5.3 Platform Design Major Qualifying Project

For the most specifically tailored approach, we have discussed the possibility of SINGA being a part of an MQP (Major Qualifying Project). An MQP is a team-based, professional-level design or research experience (WPI, 2023). It is intended for students at WPI going into their final year to apply the skills they've learned over their college career to a professional level project. Collaborating with WPI on an MQP would allow SINGA to receive a professional grade platform catered exactly to their needs.

#### 5.3.1 Organizing a Major Qualifying Project

This would be the most long-term approach for SINGA to take, as organizing and MQP and getting it approved can be a lengthy process. The first step would be to submit a proposal to the projects and registrar's office, along with a member of the WPI faculty who would be willing to be an advisor for the project. Once the proposal is approved as a proper MQP, it can be posted on E-Projects, which is WPI's platform for students to find and create projects. Once a team has been organized, and there is a concrete timeline, the project will be set into motion and completed within 7 weeks, not including the prep time required for projects this intense and involved.

#### 5.3.2 Potential Strategies for Design

With a team of computer science, data science, and cyber security students working directly with them, SINGA would have the opportunity communicate exactly what they want in their program. Using the research that we have conducted, SINGA would already have a strong idea of what they need in a program.

We identified that one of SINGA's main struggles is keeping track of retention rate and who's coming to the events and activities that they host. An MQP team could create a platform SINGA could use at events to help check in and keep track of what events a specific person is attending, how frequently they attend, and overall, how long they have been involved with SINGA. This information is crucial to measuring the impact they're having on the community.

Another key feature we recommend is a dashboard for the check-in software that makes it easier to analyze who is frequently coming to events, or who hasn't been seen in a while. This would make it easy to administer quick surveys potentially reaching out to someone to ask them why they continue to consistently come to events, or why they haven't come to an event in a few months. This would help with gathering qualitative and quantitative data for impact assessment and simply ways to improve the structure of SINGA as a whole.

#### 6. Conclusion

SINGA Lyon has done extraordinarily well expanding its organization towards the goal of promoting social diversity, reducing stigmas towards refugees, and creating meaningful social connections. With the growing size of their organization, they have demonstrated the need for a system to quantify their social impact in order to enhance the programs they currently have. The aim of this project was to provide SINGA Lyon with comprehensive methods to determine their social impact based on key performance indicators identified through leaders of SINGA Lyon as well as participants.

There were several limitations of this project that arose throughout the process which included an accelerated timeline of tasks needed to be completed within the 7 weeks present in France; minimal attendance and responses to surveys and focus groups; and language barriers as language levels varied between our team as well as participants of SINGA. By limiting our data pool, conclusions were drawn from unsaturated data and may not be as accurate as if we had more responses; however, using the responses we garnered were able to conclude key performance indicators that led to recommendations of how to quantify their social impact. Additionally, further aid from the SINGA team allowed for a guided focus of which key performance indicators would be most pertinent to them. As our recommendations are based on longevity, there is flexibility of how and when to implement these tools, however comprehensively, could capture SINGA's social impact to be added to grant proposals as well as potential sponsorships.

#### References

- Applying for Asylum / Ofpra. (2023). Retrieved July 10, 2023, from <a href="https://www.ofpra.gouv.fr/en/applying-asylum">https://www.ofpra.gouv.fr/en/applying-asylum</a>
- Batut, C., & Rachiq, C. (2021, November 16). *Labour market discrimination: How is it measured and what is its economic cost?* Retrieved from <a href="https://www.tresor.economie.gouv.fr/Articles/2021/11/16/labour-market-discrimination-how-is-it-measured-and-what-is-its-economic-cost">https://www.tresor.economie.gouv.fr/Articles/2021/11/16/labour-market-discrimination-how-is-it-measured-and-what-is-its-economic-cost</a>
- Beebe, J. (2018). Rapid Qualitative Inquiry: A Field Guide to Team-Based Assessment. Rowman & Littlefield.
- Boubtane, E. (2022, May 4). France Reckons with Immigration Amid Reality of Rising Far Right. Migrationpolicy.Org. <a href="https://www.migrationpolicy.org/article/france-immigration-rising-far-right">https://www.migrationpolicy.org/article/france-immigration-rising-far-right</a>
- Chemin, Anne. (2023, February 21). France, a land of immigration since the 19th century.

  <a href="https://www.lemonde.fr/en/france/article/2023/02/20/france-a-land-of-immigration-since-the-19th-century\_6016615\_7.html">https://www.lemonde.fr/en/france/article/2023/02/20/france-a-land-of-immigration-since-the-19th-century\_6016615\_7.html</a>
- Deckert, K. (2010). Nonprofit organizations in France. In K. J. Hopt & T. Von Hippel (Eds.), *Comparative Corporate Governance of Non-Profit Organizations* (pp. 265–324). Cambridge University Press. <a href="https://doi.org/10.1017/CBO9780511712128.011">https://doi.org/10.1017/CBO9780511712128.011</a>
- De Munck, V. C. (1998). *Using methods in the field: A practical introduction and casebook*. In De Munck, V. C., & Sobo, E. J. (Eds.), Using methods in the field: A practical introduction and casebook (pp. 39-54). AltaMira Press.
- Duguet, E., Leandri, N., L'Horty, Y., & Petit, P. (2009). Are young French jobseekers of ethnic immigrant origin discriminated against? A controlled experiment in the Paris area. https://shs.hal.science/halshs-00809665
- Eurostat. (2023). *Annual asylum statistics*. Retrieved June 14, 2023, from <a href="https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Annual\_asylum\_statistics">https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Annual\_asylum\_statistics</a>
- Eurostat. (2023). ICT usage in enterprises (isoc\_e): National Reference Metadata in SIMS structure for INFOSOC Enterprises. Retrieved from
- https://ec.europa.eu/eurostat/cache/metadata/EN/isoc\_e\_simsie\_fr.htm

- Hutto, C., & Gilbert, E. (2014). VADER: A Parsimonious Rule-Based Model for Sentiment Analysis of Social Media Text. Proceedings of the International AAAI Conference on Web and Social Media, 8(1), 216–225. <a href="https://doi.org/10.1609/icwsm.v8i1.14550">https://doi.org/10.1609/icwsm.v8i1.14550</a>
- Internet job hunting in France by income (2022). *Statista*. Retrieved July 1, 2023, from
- https://www.statista.com/statistics/411599/online-job-seekers-france-socioeconomic-background/
- Kemerovo State University, Zholudeva, N. R., & Vasyutin, S. A. (2022). Employment Problems of Muslim Migrants in France (Exemplified by Paris). Part 2. *Vestnik of Northern (Arctic) Federal University. Series Humanitarian and Social Sciences*, 1, 27–35. <a href="https://doi.org/10.37482/2687-1505-V152">https://doi.org/10.37482/2687-1505-V152</a>
- Krzyżanowski, M., Triandafyllidou, A., & Wodak, R. (2018). The Mediatization and the Politicization of the "Refugee Crisis" in Europe. *Journal of Immigrant & Refugee Studies*, 16(1–2), 1–14. <a href="https://doi.org/10.1080/15562948.2017.1353189">https://doi.org/10.1080/15562948.2017.1353189</a>
- Le Défenseur des Droits. (2016). *The Fundamental Rights of Foreigners in France*. <a href="https://www.defenseurdesdroits.fr/sites/default/files/atoms/files/dp-">https://www.defenseurdesdroits.fr/sites/default/files/atoms/files/dp-</a>
- droits des etrangers 03052016 en verifie apr.pdf
- Ministère de l'Intérieur. (2021). *L'intégration par l'engagement* [Integration through commitment]. Retrieved from <a href="https://www.interieur.gouv.fr/actualites/grands-dossiers/semaine-de-lintegration-du-17-au-21-octobre/lintegration-par-lengagement">https://www.interieur.gouv.fr/actualites/grands-dossiers/semaine-de-lintegration-du-17-au-21-octobre/lintegration-par-lengagement</a>
- Nardon, L. (2017). Working in a Multicultural World: A Guide to Developing Intercultural Competence. University of Toronto Press.
- Ostrand, N. (2015). The Syrian Refugee Crisis: A Comparison of Responses by Germany, Sweden, the United Kingdom, and the United States. *Journal on Migration and Human Security*, *3*(3), 255–279. <a href="https://doi.org/10.1177/233150241500300301">https://doi.org/10.1177/233150241500300301</a>
- Pascual, J. (2023, March 31). Immigrants in France are becoming more diverse but still face greater economic challenges. *Le Monde.Fr*https://www.lemonde.fr/en/france/article/2023/03/31/immigrants-in-france-are-
- becoming-more-diverse-but-still-face-greater-economic-challenges 6021311 7.html

- Rahimi, F., & Talebi Bezmin Abadi, A. (2022). The Ukrainian refugee crisis and the COVID-19 pandemic in Europe. *International Journal of Surgery (London, England)*, 102, 106671. <a href="https://doi.org/10.1016/j.ijsu.2022.106671">https://doi.org/10.1016/j.ijsu.2022.106671</a>
- Ryan, G., & Weisner, T. (1998). *Content Analysis of Words in Brief Descriptions: How Fathers and Mothers Describe Their Children*. In De Munck, V. C., & Sobo, E. J. (Eds.), Using methods in the field: A practical introduction and casebook (pp. 57-68). AltaMira Press.
- Sauvanet, N. (1999). Sponsorship in France. International Journal of Arts Management, 2(1), 59–63. <a href="https://www.jstor.org/stable/41064676">https://www.jstor.org/stable/41064676</a>
- Schensul, J. J., & LeCompte, M. D. (2012). Essential Ethnographic Methods: A Mixed Methods Approach. Rowman Altamira.
- Sophie Stuber. (2020, October 27). "Translation Machines": Interpretation Gaps Plague French Asylum Process. *The New Humanitarian*. <a href="https://www.thenewhumanitarian.org/news-feature/2020/10/27/france-migration-asylum-translation">https://www.thenewhumanitarian.org/news-feature/2020/10/27/france-migration-asylum-translation</a>
- Tajudeen, F. P., Jaafar, N. I., & Ainin, S. (2018). Understanding the impact of social media usage among organizations. *Information & Management*, *55*(3), 308–321. https://doi.org/10.1016/j.im.2017.08.004
- The Essentials On Immigrants and Foreigners. (2022, August 10). Institut National de La Statistique et Des Études Économiques. <a href="https://www.insee.fr/fr/statistiques/3633212">https://www.insee.fr/fr/statistiques/3633212</a>
- UNHCR, the UN Refugee Agency. (2023). UNHCR. Retrieved July 10, 2023, from <a href="https://www.unhcr.org/">https://www.unhcr.org/</a>
- Van Den Berg, A. C., Giest, S., & Kraaij, W. (2023). Assessing inclusivity in online platforms through usability evaluation with Google Analytics. Policy & Internet, 15(1), 55–77. <a href="https://doi.org/10.1002/poi3.328">https://doi.org/10.1002/poi3.328</a>
- Weil, P. (1994). [French immigration policy]. *Politique Etrangere*, 59(3), 719–729.

### **Appendices**

#### Appendix A: Interview Questions

#### Focus Group

Introduction: Hi, we are Team SINGA, and we would like to ask you a few questions regarding your involvement with SINGA. If you have any further questions, you can contact us at our email address, which is <a href="mailto:gr-SINGA-e23@wpi.edu">gr-SINGA-e23@wpi.edu</a>.

Consent: The purpose of this activity is to help us identify the benefits that SINGA brings to its participants. The results of this activity will remain anonymous, and you may stop the activity at any time. Thank you for agreeing to help us learn more about SINGA today.

Purpose: to gather data about SINGA's participants.

- 1. How did you find out about SINGA and what inspired you to come in the first place?
- 2. If you are a returning member, what has inspired you to stay involved with SINGA?
- 3. What are specific areas in which SINGA has helped you to feel good in France?
- 4. Are there any areas where you believe that SINGA can improve?
- 5. Have you recommended SINGA to anyone else new to France, and why?
- 6. Is there something you want to tell us that you really like about SINGA? (share stories)
- 1. Comment avez-vous découvert SINGA et qu'est-ce qui vous a inspiré à venir ici pour la première fois?
- 2. Si vous êtes revenus, qu'est-ce qui vous a incité à continuer à vous impliquer avec SINGA?
- 3. Dans quels domaines spécifiques SINGA vous a-t-il aidé à vous sentir bien en France?
- 4. Y a-t-il des domaines où vous pensez que SINGA peut s'améliorer?
- 5. Avez-vous recommandé SINGA à d'autres personnes nouvellement arrivées en France, et pourquoi?
- 6. Y a-t-il quelque chose que vous aimeriez nous dire sur ce que vous aimez vraiment à propos de SINGA ?

#### Semi-Structured Interviews

Introduction: Hi, we are Team SINGA, and we would like to ask you a few questions regarding your goals and core values as an organization. If you have any further questions, you can contact us at our email, which is gr-SINGA-e23@wpi.edu.

Consent: The purpose of this interview is to help us assess the resources and current capacity to measure impact at SINGA Lyon. You may ask us to stop the interview at any time or to skip any questions you do not wish to answer. Thank you for agreeing to talk with us about SINGA today. Please answer the following questions:

- 1. Do we have permission to record this interview?
- 2. Do we have permission to use direct quotations from you?
- 3. Do we have permission to paraphrase ideas from your interview?

Purpose: to assess resources and current capacity to measure impact.

- 1. How did you get involved with SINGA in the first place?
- 2. What would you say SINGA's main goals and ideals are?
- 3. What do you think is the most important thing SINGA does?
- 4. In regard to SINGA, what does success look like to you?
- 5. What does the idea of assessing social impact mean to you?
- 6. Are there certain areas you want us to measure? (Like economic or social)
- 7. Are there some workshops that you want us to focus on? (Like BLABLA)
- 8. What indicators do you need when you answer to the "appel à projet"?
- 9. Is there anything else you are expecting from our work this summer?
- 1. Comment avez-vous été impliqué(e) avec SINGA au départ ?
- 2. Quels seraient, selon vous, les principaux objectifs et idéaux de SINGA?
- 3. Selon vous, quelle est la chose la plus importante que SINGA réalise ?
- 4. En ce qui concerne SINGA, à quoi ressemble le succès pour vous ?
- 5. Que signifie pour vous l'idée d'évaluer l'impact social?
- 6. Y a-t-il des domaines spécifiques que vous souhaitez que nous mesurions ? (Comme l'économie ou le social)

- 7. Y a-t-il des ateliers sur lesquels vous souhaitez que nous nous concentrions ? (Comme BLABLA)
- 8. De quels indicateurs avez-vous besoin lorsque vous répondez à l'appel à projet ?
- 9. Y a-t-il autre chose que vous attendez de notre travail cet été?

#### Appendix B: Interview Transcripts

#### Birgit and Mathieu

#### Comment avez-vous été impliqué(e) avec SINGA au départ ?

Birgit: arrived in SINGA 2016 finishing studies and one of the courses to start the project and start with one friend to come up with something real with migrant entrepreneurship identifies SINGA Paris, did not start yet in Lyon September 2016 launched incubation January 2017, Operational in the beginning and now financial

Mathieu: previously working with microcredit, have been here for a year for people who do not have access to loans in a traditional bank, French office of immigration with Adam and after successful interviews and social activities

Adie is one of the major corporations that SINGA is working with, historical partnerships, a lot of entrepreneurs are funded by Adie

#### Quels seraient, selon vous, les principaux objectifs et idéaux de SINGA?

Main vision is to create an inclusive society globally, giving new opportunities and rights to immigrants, French and American passports are strong but most countries people are coming from do not have those rights, fighting for those rights, host immigrants giving everyone the opportunity to stay and seek asylum, big problem once the person gets their papers how can his competences be valorized through entrepreneurship, finding a job with the same competences of their previous place, with and without qualifications many people must identify their talents. When people arrive, they do not have the right to do anything but just sit and wait, how can they use their time effectively to express those talents

#### Is there one part that's focused more on of the process?

Be very specific to the persons needs and it is very individual, they don't ask right away and they allow individuals to build their self confidence, how do we speak and welcome every person into

our community and make them feel important as an individual to allow them to express themselves, a tool not an organization. Each program corresponds to a level of a

#### En ce qui concerne SINGA, à quoi ressemble le succès pour vous ?

Hard to explain but depends on what program since it depends on Entrepreneur versus creation de capitale sociale le premier reponse sont identifie qui quitter son paie. Creates a barrier between opportunities that are blocked due to the different orientations and familial situations of each individual that comes to SINGA

Secondly with a person that arrives with a proposition of things that need too many demands to succeed without this confidence with themselves if they come back, they have the self confidence to be proactive with the organization creating the social links to show the success in that aspect

Takes a lot of time to be self confidence and to be competent in the French language to understand their new environment which differs greatly and high level of judgements which changes over time but needs time to adjust between the rights, environments and codes. Mathieu; giving tools to some people to be autonomous to themselves to be a step to their own self sufficiency, mark working on employment and his goal isn't to find a job for people but instead building the self confidence to be able to find a job themselves no matter their location Understand the social differences and self confidence within themselves to allow them to repeat it continuously

#### Que signifie pour vous l'idée d'évaluer l'impact social ?

Mathieu, previous company estimated that one euro as a loan after but its more than that to create activities in the cities as an estimate to have a positive impact in the area they are working in Birgit, finance side is equal to how many people we have supported how many people are in the territory measurement of impact, social impact is more about the quality of outcomes that can be observed short and long term of the people they have supported, linked to the creation of social link of how those activities and how people meet create opportunities in the language, network, opportunity to have those papers and a qualified job from their previous job, need 10 and 20

years to find a job that equals their previous job which is even more accentuated when they have a higher qualification, how does social link creation accelerate how can they keep autonomy in ateliers let's start this to create innovation to keep that and create a process to measure efficiently what is going on in the communities

# Y a-t-il des ateliers sur lesquels vous souhaitez que nous nous concentrions ? (Comme BLABLA)

Social and economic goes together and if people feel better socially gives economic impact to have that in mind to understand which is the most important indicator

The first would be social impact to improve their language skills to have an effect on the economic pot to have their papers and get a job that is equal to their qualifications for all the people the problem is the government and their integration skills

Questioning their ability to integrate people who have great qualifications but are forced instead to do a job that is not within their qualifications so the difficulty is to find jobs within their class and their language, in the US there is a box that you have to be aunome to be particular to be created in the informal economy and if you cant find the informal economy you cannot pay tax you cannot valorize this economy so this is indispensable to be economically successful

#### De quels indicateurs avez-vous besoin lorsque vous répondez à l'appel à projet ?

Rate of men and woman (ratio)m, age, le cartier district in districts with higher rates of unemployment and poverty, qualify the number of people coming from these specific neighborhoods to get funding, if you don't give the information

Today to measure more or less 2500, 50 percent newcomers, how can they measure effectively who is coming into our community, need to construct with the community leaders, very autonomous people, when boarders they must accept our processes, but some people have to understand,

Need to find impact indicators that measures when entering SINGA, what did you come here for, then it can be measured at a later date to measure quality and the feeling of people, working after 6 years how can they find specific tools to measure that and the opportunities to do so to measure entrepreneurship program are dealing with the territory for a longer period and understand online

tools more but most newcomers do not know their passwords as they keep creating accounts they forget which is different from how we work from day to day and to understand the differences in time period to see what they are looking for, how many months how many jobs how many are hired by newcomers which can be remeasured very easily on the community there is a sample to measure effects on

Don't understand why people don't come back because they do not have to tools to understand who attends, who volunteers, from 2016 the workshops we have a sheet for information that is off-putting, the first time you need a balance of indicators and information they want to manage the change which isn't easy but doable. How do they support people to get a job and they have open time slots that are supported in their job seeking but only have 20 minutes with each person, what do they want professionally, in these 20 minutes they fill an excel sheet with a lot of data like age name as a person this is not impact driven as it gives them nothing, they don't want this at SINGA because its not personal but to reach this vision they have to staff more, not their mission and farming information

People are using different emails are they mandatory so they are created but are their other ways to get information and help them is there a way to ask what are you looking for at SINGA to reach and have a positive impact for those people, asking for people to be part of the solution, talking about self confidence how can you make people actors of their life, have tested emails if they don't answer they don't want to answer, not professional enough with the makers to set up this process for this organization but the aim is not to know who is working for SINGA and who is getting a salary to be collective enough to build this project that is acceptable to use, understand their needs but have been developed with the people themselves, if you want impact development, you need the voices of the people when needs are matched it is the perfect program

Budget, can be adjusted if we can be discussed, how will the project be developed and tested to be used, if you want to invest you need two or three of these tablets, can they tie data gathering with future events what are you interested in? Gather information while providing a service, working a lot with papers because of the intuitiveness to fill out a piece of paper, judging the right to be here, if you enter you get coffee of something translated into Arabic English Persian

Russian, create two people in the sheet with redundancies using WhatsApp phone numbers are used as a registration process of the numbers of an association check the cards the flash, formalize the process with other people

Imagine that people who come back you must estimate the relationships between people, don't know how many times they come back to find the frequency of people coming back, must construct with the volunteers leading the meetings get the financers what they want to know to see the translation and how this is organized, some financers are asking a lot of questions but they are not in their rights to do so; Give name, surname, date of arrival, signature, country of origin, regulation of what information you give to people online, cannot do this, do not have ethnic statistics no official sources of ethnic population or religion as well, the6y have the information but they cannot share this information with anyone else and do not give signatures, if they don't have the information there is a problem as they cannot take funds again, some associations give this information

#### Y a-t-il autre chose que vous attendez de notre travail cet été ?

Main important thing is to understand the newcomers side of their needs in this community and the outcomes how can you measure positive outcomes and identifiable indicators and ideas of tools, do you want to test if you have time to test, prefer to do less but specific and quality work to be done, focus on blabla and be my guest moninga for women and the needs for each one is different, can choose some not all

Tools are easy, useful, long-lasting and simple, not perfect is ok but can valorize what they do it is ok.

#### Focus Group

#### How did you find out about SINGA and what inspired you to come in the first place?

I discovered SINGA in 2017 via a friend who lives in northern France. When I arrived, I was there for about a year, and that's where I met this person with his wife. When I left, from there I went to Lyon, and we kept in touch. So, we call each other regularly and he asks me all the time, have you been able to meet people, French students. That is, it's a bit complicated when you get into a country where you don't speak the language and you don't know anyone. So, it's hard to

make links from connection, when there is a disconnection with people. Well, I told him no, not yet I just arrived and that I don't know anyone, and he told me, I'll see if there are any associations, and I can try to call them and then I can put you together so that you can communicate. And when he searched the internet, he found several associations, but SINGA was the most active in the field of connections, and had a volunteer named Jean-Paul. And he had his phone number, so he called him. I told him no, there is no problem here. At SINGA, everyone is well respected, without exception, they are welcome, and this is the goal of SINGA. It is to give facilities to people who have just arrived in France to be able to integrate into French society. And then he's going to give me the number and I called him. There were a lot of people and there were some who discussed and there were some who played board games and cards. It was the first day I arrived in SINGA, and we made acquaintances. There are always new people arriving, French foreigners from different countries on different continents. And among them there are French who come to offer activities like to go for a walk for example in the countryside or there are some who offer sports activities, go jogging or go play football, climbing. There are some who offer a tour of the city, visit the city, the city of Lyon for example. There are places where museums, libraries, front lots, historic sites are prepared. But here it is, it was very interesting.

A few of my friends were already going to SINGA and they were learning the French language and so they inspired me to come along. About two months ago I joined SINGA and from then on, I've been coming to SINGA here and at the other location. It's been nice coming to SINGA and not only learning the French language but meeting different people and communicating with them.

#### If you are a returning member, what has inspired you to stay involved with SINGA?

For me, this is my second family. Via SINGA, I was able to meet a lot of people, good people. We are always happy that we have a good relationship. When you are a child, like a teenager, when you arrive in France, you have a right to go to school, right? But when you are an adult, you don't have that right. For me, as an adult, it was the only solution to go to an association like SINGA to be able to integrate.

There are also plenty other places you can learn French but besides learning the French language, at SINGA you get to meet a lot of people, learn about different cultures, and come again and

again and meet different people and communicate with them, and along the way you can learn French.

#### What are specific areas in which SINGA has helped you to feel good in France?

I used to be an introvert, so at SINGA now by meeting different people I've gotten a little more confident and a little bit better at communicating with people and getting to know each other. When I arrived, I didn't speak French, so there was always a language barrier. That means I always felt isolated. For example, we are here, we are many people, I am with you, but I always feel isolated and alone there because I don't speak the language. Being with SINGA gave me a chance to learn. But also, there are associations that give French lessons for free. I went there to learn, read and write, and I came here to practice at SINGA and talk with people, and that's what's helped me a lot. It gave me confidence to talk with the French without being afraid or hesitant.

#### Are there any areas where you believe that SINGA can improve?

SINGA is really doing well in the field of teaching us the French language for us to be able to communicate with different people and get to know each other so I think SINGA is doing very well. There is always room to grow and get better. Many people seek asylum that need to learn from the French and search for a course of the French for asylum here.

There are several people who have invested and who have participated a lot in the events in SINGA for a long time now. If SINGA recognized us, that would have been nice. It's a lot for me personally and it's a lot of people like me. I think that this is a possibility, for example, that the people could get artifacts or diplomas.

#### Have you recommended SINGA to anyone else new to France, and why?

I advise all people who have just arrived in Lyon or in the agglomeration of Lyon to come to SINGA, to participate in the events, sports, activities and all that. Because for me, the first two years, especially the first year, were very difficult. There is no activity for the person, there is no work, just to stay locked in the apartment or in the room. It creates problems, already we must go out. At SINGA, to be able to release energy and talk helps to feel comfortable and free. For asylum seekers, they have experienced complicated things back home which have happened, and

they live with what they have experienced there. If they remain locked up, it's going to cause them a lot of problems, that's why we must get out. Come to SINGA to meet, to feel comfortable, and to learn French. For example, who has dance talents and who is good at football and who is a painter. It's a shame to stay locked up like that, that's advice I can give.

Yes of course. A friend of mine, I recommend SINGA to him and he comes along but sometimes he misses but he comes along. I recommended SINGA and I would do so in future because as I mentioned besides learning French you get to meet different people and communicating makes it easy to learn French and get better. SINGA is doing something new. There are many places where you can learn French, but SINGA doesn't only focus on just learn French and just have a lecture and like they are not strictly focusing on just learning French but also getting to engage in communication in different activities as well. Just before coming to this discussion, I was with our professor Luc. There was one other day when we got to play sports, different kinds of sports, and so it was really cool. While learning French we get to do many other activities as well.

#### Is there something you want to tell us that you really like about SINGA?

First of all, for refugees when you leave your country and go to some new place, new country, new people, where you don't know anyone so SINGA in that way is really unique and is really doing well getting to know refugees and communicating with them, trying to understand them and help them learn French of course, and give them a place where they can go and feel like I can make my life here, I can start my life here, so it's really awesome, it's great.

Foreigners, for example, including asylum seekers, practically, politically, this is frowned upon. Many people who are French citizens see this media and political barrier. Compared to seeing asylum seekers talk to them because they are human and not just watching on TV. I really appreciated this initiative and to give respect to a human being.

#### Laurence

# Your perspective and a little more about yourself and what you have done at SINGA, either in French or English?

I will try in English but if I prefer to explain perfectly, I will speak in French. I was engaged in SINGA in 2016, complicated beginning of SINGA, je t'es parler en Français tu pourras

comprends? Comprends mais pas parler donc, c'etait le tout debut de SINGA et donc ma premier action en fait quand j'ai participe en SINGA est fait un cours de chiconga with refugies which was nice because everyone who did not know chiconga got together in a parc and it was beautiful to see a sudanese, afgan, brazillian who all participated together, after I was engaged in the BLABLAs

Ive come to a few since then I've been at all the blablas where I've met many people and I see them often, after blabla you can see everyone coming together which constitutes of refugees who are often by themselves but they find people at these events which is amicable to remove them from solitude as many people who obtain asylum come alone and work in low jobs making sandwiches because they don't have the skills to communicate but after creating these links at SINGA they are able to leave and find families of their own. I am very close to one Syrian who I invite to my house to events meet my family my friends someone who was very moved by war and has a lot of interests and there are a lot of people like this for example there is a woman who works very closely with people seeking asylum and helps maintain these links we discuss with many people with contacts and finding others who may be interested there are two psychological profiles that do very well, people who want to learn and who want information about French and there are people who you see almost every week they find housing, job, significant others its not SINGA that makes these connections but it facilitates them. I see many young men who want to work and create a better life and I hear things about the status of refugees who want their life in France and don't want to be put in a box and obtain a French nationality It seems to me that SINGA helps with social connections, most important part and to be self confident within themselves to talk to people making friends if they come back its good but if

# Mentioned the French nationality, activities in SINGA with people understanding their rights, is this an important part of SINGA?

they don't that means they are ok, what are the three top goals.

Making social connections and find a place they are happy

Normally SINGA is mainly a question of links through blabla or activities cooking voila voila mais quand I have been at SINGA it means links in an African language SINGA is a community between individuals and locals to create links for example it is a question of jurisdiction of what

can I do, seeking asylum is not our job to help with and we are not specialists who have the training to help but normally its more of practical guidance to ask thinks of how can you do things but I cannot guide people or give people indications of how to assist them in that retrospect but there are people at SINGA who do have experience with these things You can still tell them where to go because some people come here without any direction of what to do and giving them steps and friends as well, sad that there is nothing like SINGA in the US

#### Mr. trump

There are associations like SINGA all throughout Europe but in France there is a large amount of citizens who want to help refugees.

Have you had experience with other SINGAs

No

#### If you would change anything about SINGA what would you do differently? Comments?

In fact, I love SINGA and it's a super organization every person is able to do things they like and its me who became in charge because I love it, I posted information on who wants to help with a match of cricket, it is me who said ok and decided that it was very agreeable, informal and you can follow the situation of refugees who have stopped coming if they are busy doing other things but there are still parties where they might be discouraged to come but these informal spontaneous events allow more people to come as they like. Like Chikonga, from the beginning there is a group that has not moved who is always here and those who come from month to month but now there are three of us who don't live in Lyon but haven't stopped its constructed in the duration of their life at SINGA, they may be in Lyon for their professional life but again there is a man who organizes meetings but does not come to activities anymore there's nothing I would change but there are fluctuating problems

### We have also been thinking about measuring impact, who is coming to the event would it be helpful to track who is showing up and to know who comes often?

I'm not so good at technology, I remember that we tried many times with machines and papers and it works but after it doesn't work because its not in our habits I'm sure it will be good but is up to the volunteers to come up with a manner and what SINGA is doing currently is working

but for example at the blablas there's many people coming but we want to keep it discreet and informal and following people to where they go is something we have never done. It would be up to them but I remember going to one of the blablas and you wrote down the names of the new people but there was no way to tell how often they are coming. It is difficult but we have a WhatsApp group that is good and I publish reminders, there are people who come from time to time and one explained his life in Albania he was very nice and they post these things from time to time and I post this there is a possibility to aid with a match of cricket and there are people who have already responded

React to a message if you came to an event today

To prepare documents to be distributed there are questions to try to identify people Survey to determine what SINGA can do better at to see what they think

The problem is many are not great at French there are some who speak in English but they cant write well in French

There are people who speak both languages and may be able to translate

You must know that blabla there are about 40 people

#### Sarah Affani (SINGA Global Coordinator)

I'm in charge of the communities at a global level and I've visited different SINGAs in the world to see what community activities are working (since not all the SINGAs are doing community activities) and to determine new strategies for the whole network. Right now, only 5 out of 18 SINGAs are doing community activities and my goal is to have them all working on community activities.

You guys can tell me what you have observed so far and after that I might be able to share some relevant documents with you all. I have some questions that were targeting the SINGA organizations and not the community.

Most of SINGAs advertisements are by word of mouth. SINGA is all about experiences. SINGA could have the best and meaningful activities in the world, but if you don't have someone to guide you and communicate with you what's going on, you won't go there. That's why you just pinpoint why it is hard for us to measure our impact. How do you evaluate whether you are feeling more at ease in your new environment or not?

#### Has there being a pilot project to try to measure that impact?

Yes. We worked with Impact46. They tried to create metrics (for the SINGAs) to help us evaluate our impact. However, SINGAs were not answering those questions because they couldn't imagine ways to gather that data. SINGA Switzerland and Stuttgart were really good at it, but all the other ones dropped the questions. So, we tried but it didn't work out.

#### Were they survey questions?

Yes, let me show you. We had 40 questions, some for the community, some for communication, and some for-entrepreneurship programs. Wrong idea to send all thos questions together in the first place. The second time was only about the program, where most of them were answered. I'll send you the results of all the questionaries.

#### Is it only SINGA Global that uses Salesforce?

Within the network, SINGA is the only one so far. It should be active in the next few months. We are trying to reach out to our alumni. My colleague is recruiting 2 people to write down a new questionnaire, spend time on the phone with them to evaluate what SINGA brings them, and also how we can provide better support. I might be able to put you in touch with those people Are you guys only focusing on the community activities or in all SINGA Lyon activities?

# Community starting point for you will be the definition. Did someone explain to you what SINGA is about and how it started?

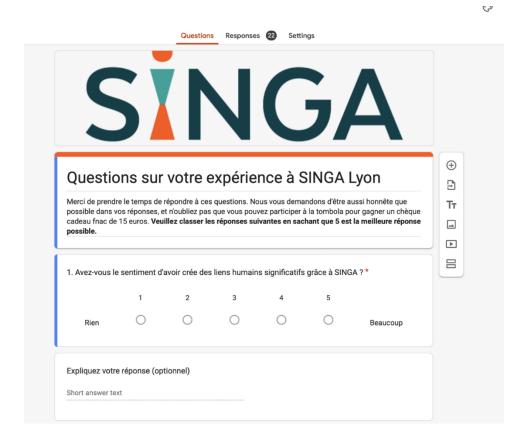
So SINGA was born from 2 friends Guillaume Capelle and Nathanael Molle, who were working with asylum seekers. They shared their experiences and identified that there was a lot more to be done in that area, especially to help refugees. For instance, once you obtain the international protection in France and you become a refugee, you are kind of left alone. You have to find a job, learn a language all by yourself, etc. In reality, there is only social workers that talk to you, but nobody else. SINGA was born to create spaces and links between newcomers (refugees) and the locals. SINGAs aim to foster social connections, have dialogues in french, and improve self-confidence overall. All SINGAs are different because they have different nationalities represented within their territories and you chose the right one. SINGA Lyon is the best one in community activities (but SINGA Brussels is doing a great job as well).

In the case of SINGA Brussels, the community itself is creating spaces to gather in SINGA activities. What you should track is how SINGA Lyon is able to serve its community. How SINGA Lyon is creating spaces for the community.

SINGA Lyon has 3 types of events for the community: workshops (17), long projects, events (big 1-time activities)

#### Appendix C: Survey Data

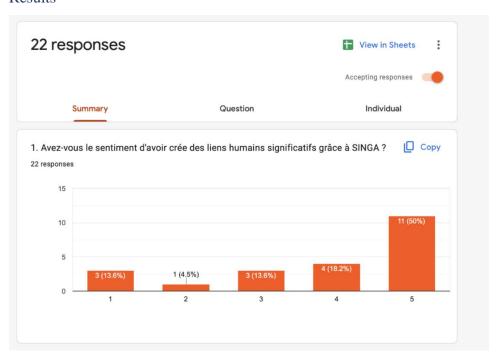
#### Questions



	e SINGA ?		u de français				Ð
	1	2	3	4	5		Тт
Rien	0	0	0	0	0	Beaucoup	<u> </u>
Expliquez votre	e réponse (op	tionnel)					8
Short answer te	xt						
3. Depuis que	vous avez rejo	oint SINGA, av	/ez-vous senti	r plus de conf	iance en vous	?*	
	1	2	3	4	5		
Rien	0	0	0	0	0	Beaucoup	
Expliquez votro	e réponse (op	tionnel)					
ong answer tex	ct						
		tez-vous aux	événements S	SINGA?*			<b>(</b>
1. C'est la prer 2. Chaque ser 3. 1 fois par m 4. Plusieurs fo	mière fois maine nois ois par mois	tez-vous aux	événements \$	SINGA ?*			÷ † Tr = 1
1. C'est la prer 2. Chaque ser 3. 1 fois par m 4. Plusieurs fc 5. Plusieurs fc 5. Temps pass	mière fois maine nois ois par mois ois par an		événements \$	SINGA ?*			Tr 4
1. C'est la prer 2. Chaque ser 3. 1 fois par m 4. Plusieurs fc 5. Plusieurs fc 1. De 0 à 6 mc	mière fois maine nois sis par mois sis par an sé chez SING		événements \$	SINGA ?*			Tr 4
1. C'est la prer 2. Chaque ser 3. 1 fois par m 4. Plusieurs fc 5. Plusieurs fc 5. Temps pass	mière fois maine nois bis par mois bis par an sé chez SING.		événements \$	SINGA ?*			Tr 4
1. C'est la prer 2. Chaque ser 3. 1 fois par m 4. Plusieurs fo 5. Plusieurs fo 1. De 0 à 6 mo 2. De 6 mois à 3. De 1 année	mière fois maine nois pis par mois pis par an sé chez SING	A *	événements \$	SINGA ?*			Tr 4
1. C'est la prei 2. Chaque ser 3. 1 fois par m 4. Plusieurs fc 5. Plusieurs fc 1. De 0 à 6 mc 2. De 6 mois à 3. De 1 année 6. Temps pass	mière fois maine nois pis par mois pis par an sé chez SING pis 11 année à 2+ ans	A *	événements \$	SINGA ?*			Tr 4
1. C'est la prei 2. Chaque ser 3. 1 fois par m 4. Plusieurs fc 5. Plusieurs fc 1. De 0 à 6 mc 2. De 6 mois à	mière fois maine nois pis par mois pis par an sé chez SING, pis 11 année à 2+ ans sé en France?	A *	événements \$	SINGA ?*			Tr 4

	<b>⊕</b>
5. Temps passé chez SINGA *	<b>3</b>
1. De 0 à 6 mois	Тт
2. De 6 mois à 1 année	_
3. De 1 année à 2+ ans	▶
6. Temps passé en France? (optionnel)	
1. De 0 à 6 mois	
2. De 6 mois à 1 année	
0.04	
3. De 1 année à 2+ ans	
Si vous voulez participer à la tombola, indiquez votre nom et votre numéro de téléphone ou votre	
email (optionnel)	
Short answer text	
Pays d'origine (optionnel)	
Pays d'origine (optionnel) Short answer text	

#### Results



#### Expliquez votre réponse (optionnel)

7 responses

À travers la confrontation de cultures différentes, ces rencontres favorisent l'évolution des regards, mais aussi le rapprochement. Il s'agit également, des deux côtés, d'inspirer et d'encourager les jeunes à s'engager pour un monde meilleur à leur échelle

Grâce à Singa, j'ai rencontré beaucoup de bonnes personnes qui étaient aussi des réfugiés comme moi.

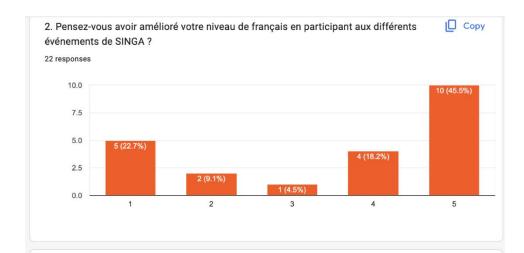
Des rencontres intéressantes mais ce ne sont pas des personnes que j'ai revues

les fois où j'y suis allé, j'ai pu parler et m'amuser même avec des gens que je ne connais pas

Vu mon expérience, je dirais que on est concentré sur une seule communauté (je vais lpas a citer ).et on laisse les autres communauté. En tout cas c'est mon ressenti

Je suis intégré avec singa blabla et j'ai beaucoup des amis a grace de singa.ations avec le gens

C'est normal lorsqu'on a affaire à une très belle organisation et tout le personnel qui s'y trouve est très formidable pour nouer des relations utiles et belles



#### Expliquez votre réponse (optionnel)

8 responses

La répétion est la mère de la science, en commettant des erreurs on accueille la sagesse à chaque formation, rencontre nous accueillions les savoirs , ce qui fait nous améliorons la langue française

oui, j'ai essayé de ne parler que le français dans tous les événements Singa et j'ai fait de grands progrès dans l'apprentissage du français.

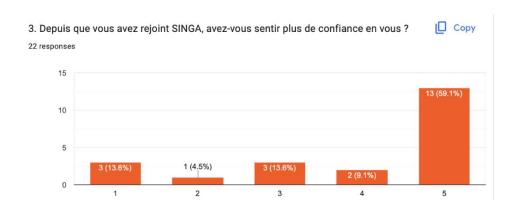
je suis déjà natif

parce que je parlais peu et pas de choses que je ne savais pas dire

Moi je parle un peu français déjà.mais jai pas l'impression d'avoir améliorer mon niveau. Ya un seul niveau (A0-A1). je trouve ça dommage.

I'm French so no

Normalement je suis sociabl singa blabla j'ai amélioré la langue français a grace le conversation j'ai amélioré la langue français parce que j'ai fais ioré la langue français parce que il y a beaucoup conversation avec l'es gens français dans singa.depuis nge temps avec singa depuis 2018



#### Expliquez votre réponse (optionnel)

8 responses

#### Oui Suite à l'intégration

Bien sûr, parce que tous les employés de Singa sont gentils avec moi. Et ils n'hésitent pas à m'aider dans les moments difficiles. Merci beaucoup pour Singa!

parce qu'on s'amuse ensemble sans être jugé

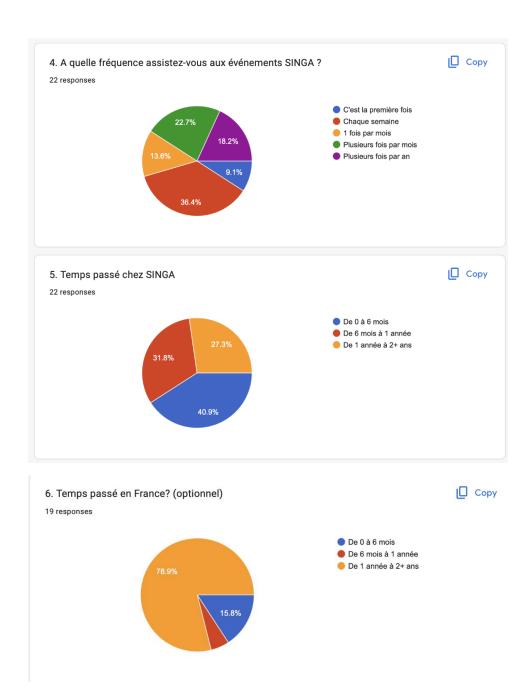
Ça n'a pas changé

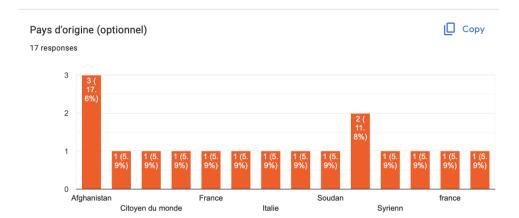
ldk

J'étais joint en 1918 avec singa et je confian

Les relations sincères génèrent toujours la confiance, et c'est ce que nous avons trouvé avec vous

Cela fait quatre mois que je suis arrivé en France. Quand on est nouveau et qu'on ne connaît pas la langue, il est difficile de communiquer avec les gens. Depuis que j'ai rejoint SINGA, je me sens à l'aise pour parler aux gens, même si je suis encore débutante, mais je suis également sûre que dans un avenir proche, je





#### Appendix D: Survey Deliverable



### Questions sur votre expérience à SINGA Lyon

Questions about your experience at SINGA Lyon SINGA Lyon أسئلة حول تجربتك في SINGA Lyon سوالاتي در مورد تجربه شما در Вопросы о вашем опыте в SINGA Lyon

Veuillez classer les réponses suivantes en sachant que cinq est la meilleure réponse possible.

Please rank the following answers knowing that five is the best possible answer.

يرجى ترتيب الإجابات التالية مع العلم أن خمسة هي أفضل إجابة ممكنة

لطفاً با دانستن اینکه پنج بهترین پاسخ ممکن است، پاسخ های زیر را رتبه بندی کنید

Пожалуйста, ранжируйте следующие ответы, зная, что пять — лучший из возможных ответов.

пожалуиста, ранжируите следующие ответы, зная, что пять — лучший из возможных ответов.						
<ol> <li>Avez-vous le sentiment d'avoir crée des liens humains significatifs grâce à SINGA?</li> <li>Do you feel you have created meaningful human connections thanks to SINGA?</li> <li>مان تشعر أنك قد أنشأت روابط بشرية ذات مغزى بفضل SINGA?</li> <li>ارتباطات أنساني معندادري إيجاد كرده إيد؟ SINGA إيا احساس مي كنيد به لطف . Считаете ли вы, что благодаря SINGA у вас установились значимые человеческие связи?</li> </ol>						
	1	2	3	4	5	
Rien	0	0	0	0	0	Beaucoup
2. Pensez-vous avoir amélioré votre niveau de français en participant aux différents événements de SINGA ?  2. Do you think you have improved your level of French by participating in the various SINGA events?  2. المختلفة؟ SINGA هل تعتقد أنك قمت بتحسين مستواك في اللغة الفرنسية من خلال المشاركة في أحداث .  2. سطح زبان فرانسه خود را ارتقا داده إيد؟ SINGA آيا فكر مي كنيد با شركت در رويدادهاي مختلف .  2. Как вы думаете, вы улучшили свой уровень французского языка, участвуя в различных мероприятиях SINGA?						
	1	2	3	4	5	
Rien	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	Beaucoup

3. Depuis que vous avez rejoint SINGA, avez-vous sentir plus de confiance en vous ? * 3. Since joining SINGA, have you felt more self-confidence? 3. هل شعرت بمزید من الثقة بالنفس؟ ، SINGA منذ انضمامك إلى الا عثماد به نفس بیشتری احساس کرده اید؟ SINGA ایرا از زمان پیوستین به . 3. С тех пор, как вы присоединились к SINGA, стали ли вы более уверенными в себе?						
	1	2	3	4	5	
Rien	0	0	0	0	0	Beaucoup
4. Time spent الذي يقضيه في .4 صرف شده در .4	SINGA الوقت	* NGA				
From ) شهور نا 6 ماه	à 6 mois 0 to 6 months من 0 إلى از 0 ن до 6 месяцев					
O 2						
From إلى سنة 1 سال	mois à 1 année 6 months to 1 y من 6 أشهر از 6 ماه تا месяцев до 1 го					
○ 3						
From ن سنتين 2 سال	année à 2+ ans 1 year to 2+ yea من سنة إلى أكثر من از 1 سال تا года до 2+ лет	ars				

#### Appendix E: NLP Code

#### Frequency Analysis

```
import nltk
from nltk.corpus import stopwords
from nltk.tokenize import word_tokenize
from string import punctuation
import matplotlib.pyplot as plt
# Specify the path to your PDF file
pdf_file = '/Users/thomasrua/Desktop/SINGA/Interview Transcripts/CombinedTranscripts.pdf'
# Function to extract text from PDF
def extract_text_from_pdf(file_path):
     with open(file_path, 'rb') as f:
          pdf_reader = PyPDF2.PdfReader(f)
          text = ''
          for page in pdf_reader.pages:
               text += page.extract_text()
     return text
# Call the function to extract text from the PDF
pdf_text = extract_text_from_pdf(pdf_file)
# Convert text to lowercase
pdf_text_lower = pdf_text.lower()
# Tokenize the text
tokens = word_tokenize(pdf_text_lower)
# Remove punctuation and symbols
tokens_filtered = [token for token in tokens if token not in punctuation and token.isalpha()]
# English stopwords removal
stop_words_english = set(stopwords.words('english'))
words_to_exclude_english = ['there', 'their', 'because', 'going', 'really', 'about'] # Specific words to exclude in English
stop_words_english.update(words_to_exclude_english)
tokens_filtered_english = [token for token in tokens_filtered if token not in stop_words_english and len(token) > 4]
# French stopwords removal
stop_words_french = set(stopwords.words('french'))
words_to_exclude_french = ['là', 'leur', 'parce', 'aller', 'vraiment', 'à'] # Specific words to exclude in French stop_words_french.update(words_to_exclude_french)
tokens_filtered_french = [token for token in tokens_filtered if token not in stop_words_french and len(token) > 4]
# Calculate word frequencies for English
freq_dist_english = nltk.FreqDist(tokens_filtered_english)
# Calculate word frequencies for French
freq_dist_french = nltk.FreqDist(tokens_filtered_french)
# Exclude the specific words from English word frequencies for word in words_to_exclude_english:
     freq_dist_english.pop(word, None)
# Exclude the specific words from French word frequencies
for word in words_to_exclude_french:
     freq_dist_french.pop(word, None
# Merge English and French word frequencies
merged_freq_dist = freq_dist_english + freq_dist_french
# Select the most common words
most_common_words = merged_freq_dist.most_common(num_common_words)
# Extract word and frequency information
words = [word for word, _ in most_common_words]
frequencies = [freq for _, freq in most_common_words]
# Plot the most common words
plt.figure(figsize=(12, 6))
plt.bar(words, frequencies)
plt.xlabel('Words')
plt.ylabel('Frequency')
plt.title('Most Common Words')
plt.xticks(rotation=90)
plt.tight_layout()
plt.show()
```

#### Sentiment Analysis

```
import PyPDF2
import nltk
from nltk.tokenize import word_tokenize
 from nltk.corpus import stopwords
from string import punctuation import matplotlib.pyplot as plt
 from textblob import TextBlob
# Function to extract text from PDF
def extract_text_from_pdf(file_path):
     with open(file_path, 'rb') as f:

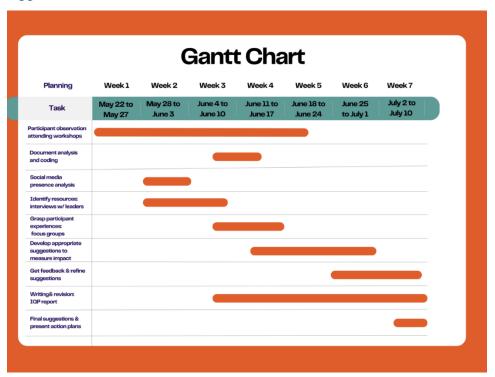
pdf_reader = PyPDF2.PdfReader(f)

text = ''
           for page in pdf_reader.pages:
                 text += page.extract_text()
# Specify the path to your PDF file
pdf_file = '/Users/thomasrua/Desktop/SINGA/Interview Transcripts/CombinedTranscripts.pdf'
 # Call the function to extract text from the PDF
# Convert text to lowercase
pdf_text_lower = pdf_text.lower()
# Tokenize the text
tokens = word_tokenize(pdf_text_lower)
# Remove punctuation and stopwords
stop_words = set(stopwords.words('english'))
 tokens_filtered = [token for token in tokens if token not in stop_words and token not in punctuation]
# Perform sentiment analysis
blob = TextBlob(' '.join(tokens_filtered))
sentiment = blob.sentiment
# Print sentiment polarity and subjectivity
print("Sentiment Polarity:", sentiment.polarity)
print("Sentiment Subjectivity:", sentiment.subjectivity)
# Create a figure with two subplots
fig, (ax1, ax2) = plt.subplots(nrows=2, figsize=(6, 6))
plt.subplots_adjust(hspace=0.4)
# Visualize sentiment analysis
labels = ['Polarity', 'Subjectivity']
values = [sentiment.polarity, sentiment.subjectivity]
ax1.bar(labels, values)
ax1.set_xlabel('Sentiment')
ax1.set_ylabel('Value')
ax1.set_title('Sentiment Analysis')
 # Add text annotations to the second subplot
polarity_reference = 'Negative \mapsto 0 \rightarrow Positive' subjectivity_reference = 'Objective \mapsto 0 \rightarrow Subjective'
ax2.text(0, 0.4, polarity_reference, fontsize=10, color='black', ha='center')
ax2.text(0, 0.3, subjectivity_reference, fontsize=10, color='black', ha='center')
# Add description of the graph
subjectivity_description = 'The polarity indicates the sentiment\nof the text ranging from negative to positive.'
subjectivity_description = 'The subjectivity represents the degree\nof personal opinion ranging from objective to subjective.'
 ax2.text(\emptyset,\ \emptyset,\ polarity\_description,\ fontsize=8,\ color='black',\ ha='center') \\ ax2.text(\emptyset,\ -0.1,\ subjectivity\_description,\ fontsize=8,\ color='black',\ ha='center') \\ 
 # Add source information
source_text = 'Source: Impact SINGA report'
ax2.text(0, -0.4, source_text, fontsize=8, color='gray', ha='center')
# Hide axes and labels for the second subplot
ax2.axis('off')
plt.show()
```

#### **Topic Modeling**

```
from collections import Counter import matplotlib.pyplot as plt from wordcloud import WordCloud from gensim import corpora, models
# Function to extract text from PDF
with open(file_path, 'rb') as f:
    pdf_reader = PyPDF2.PdfReader(f)
    text = ''
            for page in pdf_reader.pages:
    text += page.extract_text()
      return text
def preprocess_text(text):
      # Convert text to lowercase
      # Tokenize the text
      tokens = word_tokenize(text_lower)
      # Remove punctuation and stopwords for both English and French
      stop_words_en = set(stopwords.words('english'))
stop_words_fr = set(stopwords.words('french'))
stop_words = stop_words_en.union(stop_words)fr
tokens_filtered = [token for token in tokens if token not in stop_words and token.isalpha() and len(token) > 4]
      return tokens_filtered
# Function to perform topic modeling
def perform_topic_modeling(tokens_filtered, num_topics=4):
    # Create dictionary from the tokens
    dictionary = corpora.bictionary(tokens_filtered))
      corpus = [dictionary.doc2bow(tokens filtered)]
      lda_model = models.LdaModel(corpus, num_topics=num_topics, id2word=dictionary)
      # Get the top words for each topic
topics = lda_model.print_topics(num_topics=num_topics)
      # Extract topic words and probabilities
topic_words = [(topic_num, [word for word, _ in lda_model.show_topic(topic_num)]) for topic_num in range(num_topics)]
      return topics, topic words
# Specify the path to your PDF file
pdf_file = '/Users/thomasrua/Desktop/SINGA/Interview Transcripts/CombinedTranscripts.pdf'
# Call the function to extract text from the PDF
pdf_text = extract_text_from_pdf(pdf_file)
# Preprocess the text
tokens_filtered = preprocess_text(pdf_text)
# Define the number of topics
num_topics = 3
# Perform topic modeling
topics, topic_words = perform_topic_modeling(tokens_filtered, num_topics=num_topics)
# Generate and display word clouds for each topic
for topic_num, topic in enumerate(topics):
    # Select a maximum of 20 unique words per word cloud
      random.shuffle(topic_words[topic_num][1])
      word_subset = topic_words[topic_num][1][:20]
      # Adjust word frequencies to limit repetition
      word_freq = dict(Counter(word_subset))
word_freq = {word: freq if freq <= 2 else 2 for word, freq in word_freq.items()}</pre>
      wordcloud = WordCloud(width=800, height=400, background_color='white').generate_from_frequencies(word_freq)
      plt.figure(figsize=(10, 5))
      plt.imshow(wordcloud, interpolation='bilinear')
plt.axis('off')
plt.title('Word Cloud - Topic {}'.format(topic_num))
      plt.show()
```

### Appendix F: Gantt Chart



#### Appendix G: IRB Approval

### Worcester Polytechnic Institute

100 Institute Road, Worcester MA 01609 USA

#### **Institutional Review Board**

FWA #00030698 - HHS #00007374

#### **Notification of IRB Approval**

**Date:** 30-May-2023

PI: Farley J Chery
Protocol Number: IRB-23-0650

Protocol Title: Creation of methods for SINGA Lyon to determine their

social impact.

Clift, Maxwell M~Chery, Farley J~Gealow, Rachel M~Low,

**Approved Study Personnel:** Stephanie~Rua, Thomas~Paradis, Emma E~Abel, Curtis

A~

Effective Date: 30-May-2023

**Exemption Category:** 2

Sponsor\*:

The WPI Institutional Review Board (IRB) has reviewed the materials submitted with regard to the above-mentioned protocol. We have determined that this research is exempt from further IRB review under 45 CFR § 46.104 (d). For a detailed description of the categories of exempt research, please refer to the <a href="IRB website">IRB website</a>.

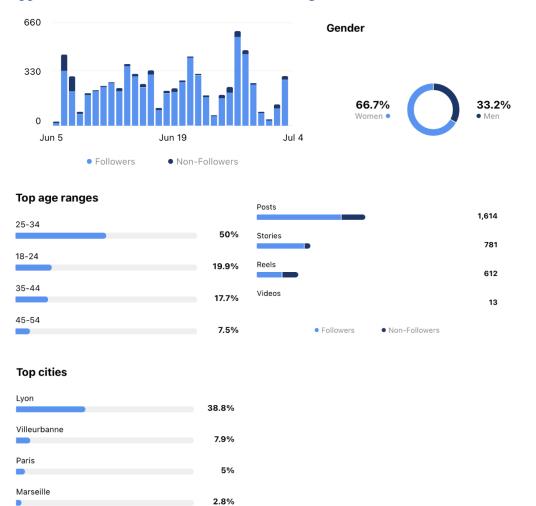
The study is approved indefinitely unless terminated sooner (in writing) by yourself or the WPI IRB. Amendments or changes to the research that might alter this specific approval must be submitted to the WPI IRB for review and may require a full IRB application in order for the research to continue. You are also required to report any adverse events with regard to your study subjects or their data.

Changes to the research which might affect its exempt status must be submitted to the WPI IRB for review and approval before such changes are put into practice. A full IRB application may be required in order for the research to continue.

Please contact the IRB at <a href="mailto:irb@wpi.edu">irb@wpi.edu</a> if you have any questions.

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### Appendix H: Social Media Statistics - Instagram



### Appendix I: Social Media Statistics - Facebook

### Découvrir

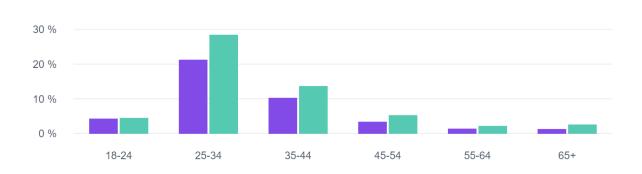
Couverture des publications	4 674
Interaction avec les publications	2 362
Nouvelles mentions J'aime la Page	19
Nouveaux followers de la Page	45

### **Interactions**

	Réactions	306
•	Commentaires	27
<b>*</b>	Partages	12
	Vues de photo	728
<b>h</b>	Clics sur un lien	16

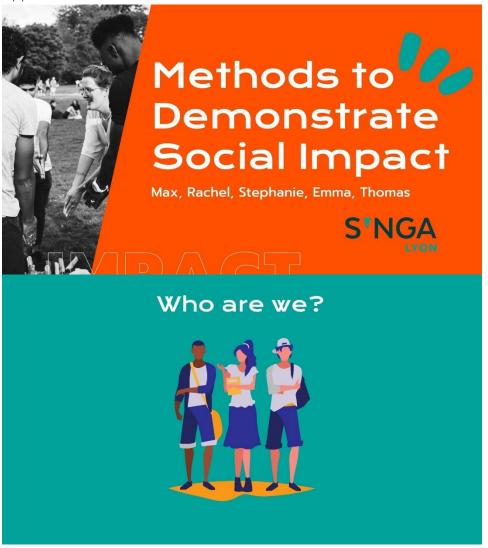
### Âge et genre

Hommes 42.60%Femmes 57.40%



Lieu	Villes Pays
Lyon	2 584
Paris	309
Villeurbanne	246
Marseille	101
Vaulx-en-Velin	58

Appendix J: Final Presentation



# Understanding Core Values is critical to truly assess impact

#### **Document Analysis**

SINGA fosters inclusive societies and innovative economies through diversity, connections, and changing the immigration narrative.

#### Interviews with leaders

SINGA prioritizes people, builds relationships, and strives for a society where their existence is no longer needed.







Mettre l'humain au coeur de l'action

# Grasping participant experiences can demonstrate key performance indicators

#### **Participant Observation**

conversation and participation



exploring possible key performance indicators

#### **Focus Groups**

Encourages participants to share their stories in a group setting

#### Surveying

Provided confirmation of previously determined key performance indicators



# Identifying Resources is essential for success

#### **Interviews**

Understanding financial ability, expertise, willingness of volunteers to implement methods, and time constraints

#### **Media Analysis**

Understanding the demographic of participants and reach of social platforms



# Attending workshops helped us get to know many participants at SINGA

#### **SINGA Workshops**

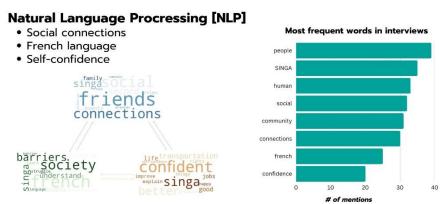
- Migration Mapping
- Asylum Awareness
- Blabla
- Geocashing
- Singing
- Rock Climbing
- Be My Guest
- Nail Decorating

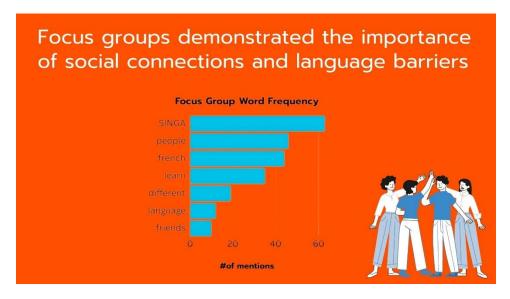






# Interviews Analyses revealed patterns and connections





# Surveys can give us insight into participation levels and demographics

- 22 responses
- Qualitative vs quantitative data

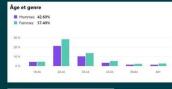




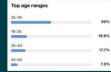
"Of course, because all Singa employees are nice to me. And they don't hesitate to help me in difficult times. Thank you very much for Singa!"

# Social Media insights to understand user demographics











# Pre and Post Surveys are the most time and cost effective way to assess impact

- 5 Languages
- French
- English
- Arabic
- Persian

- **4 Questions**
- Friendships
- Speaking French
- Confidence
- Time With SINGA

Questions sur votre expérience à SINGA Lyon

Veuillez classer les réponses suivantes en sachant que cinq est la mellieure réponse possi Please rank the following answers knowing that five is the best possible answer: عرض ترتبه الإسالة الثانية مع الشر أن عسة مي أفضل الجانة بعالمة الم







### Implementation of Salesforce

- 153

Loss Prompson

Nonprofit Success Pack is the foundation of Salesforce for Nonprofits.

Many of our customers start their Nonprofit Cloud journey with the Nonprofit Success Pack (NPSP) which takes the world's #1 CRM and reimagines it for your nonprofit organization. NPSP is a mature, industry standard-data model with objects and capabilities to help manage your income streams, inbound grants, and programs in one place.

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