

A Work Project, presented as part of the requirements for the Award of a Master's degree in Management from the Nova School of Business and Economics.

SCALING IMPACT:  
FACILITY LOCATION SELECTION FOR  
SOCIAL ENTERPRISES

BERNARDO MATIAS GONÇALVES | 31836

Work project carried out under the supervision of:

Utku Serhatli

16-12-2021

## **Abstract**

Migration crises and climate change pose numerous challenges to countries and international agencies. Nonetheless, social enterprises represent a change in the industry that fights these challenges. This thesis aims to elaborate on the expansion processes of social enterprises while focusing on the Facility Location Selection problem by presenting a model which can be used as a guide for companies operating in the social sector. Having had the opportunity to intern at Makers Unite, a social enterprise acting in the apparel industry, this firm will exemplify the theory throughout this thesis.

**Keywords:** Sustainability, Social Entrepreneurship, Social Impact, Business Strategy, Facility Location Selection

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 222

## **1. Introduction**

### **1.1 Problem Definition**

#### **1.1.1 Refugee Crisis**

Recently, the world population has been increasingly migrant, the idea of a global society is more and more a reality. However, the reasons for this so-called migration of individuals are recurrently varying and, even if a portion of this group moves voluntarily, the reality is that nowadays over 82 million people have been forcibly displaced worldwide (UNHCR 2020).

The causes which triggered the forced displacement of individuals range from wars, conflicts, and violations of human rights to natural catastrophes and climate change consequences (Friedrich Ebert Stiftung 2014). As a consequence of the variability in causes for displacement, it seems inevitable that migration crises continue happening around the world and through the years (European Parliament 2020).

This trend is supported by two recent examples – the current Afghan conflicts and the still ongoing Syrian Civil War. Firstly, on the 15<sup>th</sup> of August of 2021 the Taliban group captured Kabul, 20 years after the American forces removed them from power (BBC 2021). Since August, the group that dominates the country enforced strong and radical measures which consist of extreme violations of human rights such as the sports ban for Afghan women and the end of mixed classes in university (Cabot 2021). Logically, the conflicts have created an unstable environment mainly for children and women and more than half a million Afghans were forced to move from their homes in 2021 – among these, women and children represent 80% of Afghanistan's internally displaced people, according to UNHCR (2021). Secondly, as a consequence of the Syrian Civil

War and a similar instability in the country, almost 7 million refugees were seeking asylum as of mid-2021 – Turkey hosted 3.5 million of these refugees (UNHCR 2021).

Consequently, problems at the host countries arose stemming from this influx of new people. In fact, 86% of the world's refugees are hosted by developing countries and 73% are hosted by countries neighboring their original country (UNHCR 2021). As a result of this uneven distribution of refugees, the integration problems are several spanning through the professional, economic, and social areas. Additionally, 70% of the Syrian refugees are living in poverty (ANSA 2021) proving that this is where the action of NGOs and social enterprises is crucial, as the policies implemented by most countries and world agencies are more directed towards prevention of future crisis rather than optimizing the integration of new refugees” (Kaymaz and Kadkoy 2016).

### **1.1.2 Climate Crisis**

According to NASA (2021), “Direct observations made on, and above Earth’s surface show the planet’s climate is significantly changing. Human activities are the primary driver of those changes”. It is generally known that the temperature of the planet is rising which is creating environmental degradation with extreme weather, natural disasters, food and water scarcity, conflict and terrorism, and the rise of sea levels. The Arctic is melting, the coral reefs are dying, the acidity of the ocean is increasing, and forests are burning.

Due to the increase of carbon dioxide and other harmful emissions, the temperature of the planet already increased 1.18 degrees Celsius since the 19th century, and it's predicted that it will increase by more than two degrees by 2100. As a consequence of the melting of glaciers and ice sheets, the sea level is increasing rapidly positioning almost 2/3 of the world’s cities in areas with sea-level rise risk. Scientists predict that more than 550 species will be extinct if countries don’t take action. (NASA 2021)

Climate change is also responsible for soil degradation. The changes in climate create more erosion in soils and limit the availability of drinkable water as well as agriculture-destined water. African countries are suffering every day with more droughts and food scarcity, extreme rainfall also destroys the crop fields, and the extreme heatwaves can transform the farmland into deserts thus increasing poverty and the number of people with hunger.

All these factors contribute to the increase of migrations and violence in the populations. In fact, it is estimated that 140 million people from Africa and Latin America will be forced to migrate by 2050 (The World Bank 2018).

According to the World Resources Institute in 2018, the main contributors of Greenhouse gas emissions were Electricity and Heat (31.9%), Manufacturing and Construction (12.6%), Transportation (14.2%), Buildings (5.9%), Industrial Processes (5.9%), Agriculture (11.9%), and Waste (3.3%). It is possible to conclude that companies need to rethink their business models (World Resources Institute 2018).

## **1.2 What is being done: Solutions**

For the last 30 years, the UN has been reuniting countries for global climate summits, the COPs (Conference of the Parties). 2015 marked the year of COP21, one of the most important conferences as it was where the Paris Agreement was created. This agreement aims to keep global warming to a maximum of 1.5°C and, with this objective in mind, different types of goals were defined with deadlines until 2030 and 2050. The main goal was to achieve net-zero emissions by 2050 (UN Climate change conference UK 2021).

This year (2021) marks the COP26. Here, the entities and countries involved want to achieve: Secure global net-zero by mid-century and keep 1.5 degrees within reach, adapt to protect communities and natural habitats, mobilise finance and work together to deliver. In the first measure, countries must achieve some goals until 2030 in order to be able to be net-zero in 2050.

For this, countries need to accelerate the phase-out of coal, encourage investment in renewable energy, stop deforestation, and speed up the change to electrical vehicles. Then, with respect to the second objective, it is meant that even with all the measures proposed, the climate is already changing and impacting brutally some countries. All countries need to work together to enable and encourage the affected countries to protect and restore the ecosystems, build defences, put in place warning systems, and make the agriculture and the infrastructures more resilient to avoid the loss of homes and lives. In the financial area, the developed countries need to raise at least \$100bn in climate finance per year and International financial institutes need to do their part to unleash the trillions in private and public sector finance required to secure the global net zero. And finally, the fourth objective is to finalize the Paris Rulebook and accelerate the collaborations between governments, businesses, and civil society to achieve the goals faster (UN Climate change conference UK 2021).

Also in 2015, the United Nation member states adopted the 2030 agenda for sustainable development which include the 17 Goals that tackle climate change, preserve the oceans and the forests, recognize the poverty ending, improve health and education, reduce inequality, and spur the economic growth. Summing this, it is possible to focus on three different pillars that aggregate the 17 goals: a positive impact on people and the environment, and the guarantee of economic growth. Companies can create business models based on these three factors, maintaining and improving the social quality, reducing their carbon footprint and waste, managing the water usage, respecting the biodiversity, while still being profitable and with growing perspectives (United Nations 2021).

One example of a company that created an innovative business model based on the three pillars is Makers Unite. From June to September, Maria and Bernardo had the opportunity of doing an internship in the Partnership Development team at this enterprise the students developed their

business development skills and got to understand from an inside perspective how Makers Unite aligns their social, environmental, and economic factors while still prospering as a growing enterprise. An extensive analysis on the company's business model and the students' functions on the organizational model will be provided in the following section.

Even though the uniqueness of Makers Unite's business model is uncontested, there are still several companies who operate under the focus of the three pillars, the SDGs, and even in similar fields of action such as the fashion industry with a social focus on refugees. Companies like "Atelier Made Here", and "SEP Jordan" are examples of competitors who perform a similar service to the community in a comparable field of action.

### **1.3 Research Questions**

The present field lab will focus both on the macro and micro levels of analysis. The macro-level will be the focus of the first research, Maria Feio's work, and the micro-level, will be part of Bernardo Gonçalves' research.

The first analysis will focus on the structure of a Business Model Innovation: What decisions are involved in the strategy when the decisions are made, who should take them, and why the decision-maker chooses a certain decision the way he does. After that, the research will go deep into the Sustainable model and the three pillars: social, environmental, and economic. Which factors need attention, what actions need to be made and what's the best planning strategy. Examples of three companies who are succeeding in this model will be presented in an interview format: two small enterprises – IVORY and Leilanishells – and Kraft Heinz. The research will also analyze the Life-Vest collection from Makers Unite that was managed by Maria Feio. The project will end with the presentation of the conclusions of the application of this model that looks for the future of companies, the planet, and people.

In a second moment, the focus will be turned to the topic: “Scaling Impact: Facility Location Choice for Social Enterprises”. The study will stem firstly from the perspective of a social enterprise who wants to internationalize and the motivations that are inherently related to this decision. The concrete example of Makers Unite’s expansion to Turkey, more concretely Istanbul, will be introduced in this section in the form of a country analysis to Turkey and next the concrete opportunities and challenges that Makers Unite as a social enterprise can face in an expansion to this country. In a second stage, the emphasis will be directed to the Facility Location Selection Problem. After a discussion on the relevance of this problem and its impact on a firm’s performance, a model adapted from Network Design Networks will be presented as a possible solution for Location Choice Problems for social enterprises. Makers Unite will once again be relevant at this stage since a location for a new facility will be determined at this stage and results will be discussed. Additionally, an interview with a partnerships manager from the Istanbul office of an NGO acting in conflict areas was conducted to get a local perspective on the social environment of the country.

#### **1.4 Makers Unite**

In the past summer, from June to September, Bernardo Gonçalves and Maria Feio did an internship in “Makers Unite” in Amsterdam. The role of each of them was to be a Partnership Developer responsible to manage and create different proposals according to clients. Makers Unite works both with B2C and B2B, the latter comprises not only big companies but also SMEs. During the internship it was possible to work with companies like “Ben & Jerry’s”, “Nivea”, and “Puka” to create proposals of sustainable merchandising, provide market analysis, help in the creation of goals in the long and short-term for Makers Unite to become a B-Corp, and create an up-cycling collection with Life-vest materials. These activities took into account the sustainable pillars.

As stated by the enterprise on its website, “Makers Unite is a textile based creative agency



with a big social mission” (Makers Unite 2021). The Amsterdam-based social enterprise was established in 2016 with the mission of “supporting newcomers with access to the job market through the collaborative design and production of sustainable products, in the process shifting narratives around migration globally” (Makers Unite 2021).

In order to generate positive impact for newcomers, the company diversified its sources of revenue through the years and nowadays it operates in both B2B and B2C fields. Firstly, in the B2B field, the company is currently working with big companies such as “Ben & Jerry’s” in projects to produce any type of sustainable merchandising and creative services – the options are endless since the company relies on a robust imaginative power. Besides this, Makers Unite works with smaller scale companies providing a whole range of customizable creative services from product design and development to marketing of the end products. Additionally, the company also provides creative upcycling workshops (for instance the transformation of a t-shirt in a “hot mug holder”). Looking at the B2C, Makers Unite does partnerships with other companies/agencies/designers in the co-creation of new collections that are then sold in the company’s website (it may be part of the B2B business as well since some co-creations are not sold in the company’s website but exclusively on the partner selling point) and they have their own collection of hand-made fashion items and accessories (available on their online shop) consisting of products made of upcycled life-vests collected from locations where migrants come ashore from their journeys such as Greece. With all this, Makers Unite was able to generate a total revenue of 1.1 million € until the end of 2020 (Makers Unite 2020).

A portion of the company’s revenue is then reinvested in the social side of the business. As mentioned above, Makers Unite’s main mission lies in the professional integration of refugees and with this goal in mind the enterprise generates impact in several fields. Firstly, the company hosts a 6-week free “Creative Lab” program providing soft and hard skills to engage the newcomer’s

community in the Dutch textile industry. As of now, 209 participants attended the 17 Creative Labs already launched resulting in a 60% matching rate with a professional opportunity after the program and 9 newcomers are currently employed in the Makers Unite Tailor Team (Makers Unite 2021). Moreover, the impact is expanded through their whole supply chain: as mentioned above, it starts with the collection of life-vests in Greek beaches that are then used to create a collection; then through the collaborations and partnerships the company raises awareness on the migration crisis topic; parallelly the company has already launched a shared collection with Ramzi, “a former tailor at Makers Unite who was connected to full-time employment in The Netherlands”; lastly, the company makes an effort for all the materials used to be either upcycled or from an organic/sustainable origin.

#### **1.4.1 Communication**

A crucial element of the Makers Unite brand is the choice of proper partners thus making the brand’s social reputation intact as it is one of its main assets. The social enterprise stands by values such as transparency, inclusion, diversity, and sustainability, and only brands who are aligned with these values will be able to become clients/partners.

Further important components of the enterprise’s communication strategy are the sharing of real stories about newcomers and the association with the social cause as brands want to be associated with it therefore transmitting the idea that the company cares about this matter and general ongoing social issues.

In addition, the “stamp” of European production and design of products using sustainable and upcycled materials also plays a major role in the reasons why clients choose working with/buying from the company.

#### **1.4.2 Why do they align with the three pillars?**

Makers Unite is an agency that claims to be sustainable: “we design circular products that

will help brands to connect to their clients base. We source and produce refugee-run factories. We provide marketing, distribution, and fulfillment solutions” (Makers Unite 2021). To fulfill the three pillars’ conditions, the company needs to create a positive impact on people and on the environment while still presenting a growing and profitable economy. Makers Unite can succeed on the three of them.

In a first analysis, their mission contains a few SDGs goals: 1. No Poverty; 8. Decent work&economic growth; 9. Industry Innovation & Infrastructure; 10. Reduce Inequalities; 11. Sustainable Cities & Communities; and 12. Responsible Consumption and Production. Therefore, the mindset to create a sustainable strategy is already in course.

Going deep into an analysis of the three pillars, the first is related to a positive social impact. It is known that one of the main objectives of the company is to include refugees in the working market in the Netherlands. At the moment, they have three actions that take this into account: first, they employ refugees in their factory and provide six-week long workshops dedicated to refugees who come to Amsterdam and that used to work in textile factories in their home countries; secondly, they help them create good CVs and networks to reintroduce them into the society; lastly, they have their own MU collection made by upcycling life-vests that the refugees bring to cross the Mediterranean.

When it comes to the positive environmental impact, Makers Unite incentivizes their clients to choose materials with less impact and with sustainable certificates. In the work they do with some clients they also try to always use upcycling materials like old T-shirts from events, guaranteeing less impact on the environment.

Finally, it is possible to conclude that Makers Unite is a growing economy, having presented rising operating results from -56.461€, in 2019, to 61.084€ in 2020 (Makers Unite 2020).

### **1.4.3 Competitor's analysis**

Even though Makers Unite's business model is rather original and unique, there are some enterprises who stand by the same values and work in the same field of action as the Dutch enterprise. The local company "Atelier Made Here" is an illustration of an enterprise aligned with three pillars as the professionals employed are refugees from countries like Iraq and Syria, the production of clothing is "Made to order" implying that the clothes that are produced are only the ones that are sold (production is only based on actual demand), and because of this a higher cost is paid by customers generating a mindful choice and driving a conscious mindset to the consumers (Atelier Made Here 2021). The second example is "SEP Jordan", a Jordan-born company that was set up in the "Gaza" camp. This enterprise shares similar values and operations to the ones of Makers Unite since it produces handmade high-quality products with sustainable garments, and it provides work and above-market rates to over 500 refugee embroidery artists (SEP Jordan 2021).

Due to the uniqueness of Makers Unite business model, the enterprise stands on its own in terms of direct competitors. The sustainable merchandising line is distinctive from other social enterprises, and it generates funds that the company uses to scale their social impact.

*Individual Work by Bernardo Gonçalves*

## **2. Internationalization Process**

"Globalization of economy and intense competition force businesses to look for new ways to sustain their competitiveness" (Kubíčková, Votoupalová, and Toulová 2014). The internationalization process represents one of the means not only for large enterprises but also for SMEs to remain competitive in the current global market setting. Drivers behind the

internationalization of firms include mainly market-seeking, resource or asset-seeking, and efficiency-seeking motives among others (Collison, Narula, and Rugman 2017).

Even though the aforementioned motives are applicable to the expansion processes of social enterprises, further specific reasons arise due to the social nature of their action. The key drivers which were associated to the emergence of international firms who address social issues are global wealth disparity, corporate social responsibility (CSR), institutional failures, and technological advances (Zahra et al. 2008).

Income disparities are more evident in less developed countries that hold the majority of socially vulnerable people. Social enterprises are, in turn, drawn to the needs present in these areas while grasping new social and economic opportunities (Zahra et al. 2008). Secondly, throughout the past decades, the progress of CSR has become more prominent as a response to increasing customer demand for corporate transparency and socially responsible actions (Färdig and Håkansson 2014). Prospects for new business arise as social enterprises are specialized in facing and exploiting societal issues while large corporations often have a hard time keeping up with the consumers' rising expectations of involvement in this field and with the growing rate of current social issues (Jiao 2011; Zahra et al. 2008). Moreover, problems are frequently left unaddressed by governments as they may lack "the power, will, or means to induce efficient market-based remedies that reduce persistent social issues" (Färdig and Håkansson 2014). Lastly, the evolution of technology allowed straightforward access to information which consequently led social entrepreneurs to become more aware of the global social challenges and organize their operations in an international scale (Zahra et al. 2008).

## **2.1. Makers Unite Internationalization**

Makers Unite will be used throughout this report as an example for the application of the theoretical concepts that will be covered. Firstly, the social enterprise already defined a target for their expansion, Turkey. Thus, a discussion of the Turkish political, economic, and socio-cultural context as well as a specific breakdown of the country's textile-garment industry will be conducted in the following section. The main objective is to understand the macro-environmental aspects that might have a direct or indirect influence in the company's activities. For this, various statistics will be provided and analyzed, and reliable sources will be quoted to support the statements concluded in this segment. Further reference to an interview (transcription in Appendix 7) conducted related to this topic will be used with the goal of having a local perspective on issues which are not obvious and transparent for a non-local person. The reasons behind the decision of Makers Unite to define Turkey as the target expansion will be elaborated in section 1.1.2. as well as further opportunities and challenges the enterprise might encounter in the internationalization project.

### **2.1.1. Analysis of Target Country for Expansion: Turkey**

Recep Tayyip Erdoğan is the current president of Turkey since August 2014, yet he was Turkey's Prime minister from 2003 until 2014. In an initial phase, Erdoğan's boost to the economic development of the country and negotiations with the EU to make the country a candidate member to the political and economic union made him popular in what was a decade of actual prosperity (Spicer 2021). However, in recent years an economic crisis has emerged once again generating an extremely unstable economic environment mainly attributable to unusual economic policies and rampant political frictions, both on an international and national spectrum (Gürsel 2018).

Another essential piece to the Turkish political context, is understanding the evolution of

Erdogan's political measures. Firstly, according to the Economist Intelligence Unit's Democracy Index, Turkey is a hybrid regime scoring 4.48 out of 10, in what represents a downfall from what once was a 5.70 score in 2006. The main causes for this decrease are illustrated in the aforementioned political shift. Originally, Erdogan's election as the country leader was marked by the image of a modern Muslim leader who would modernize Turkey without completely disregarding its Islamic origins. However, problems arose in the negotiations with the EU for Turkey's entry in the Union (firstly, due to the non-recognition of the EU member Cyprus by the Turkish government, and more recently because of Human's rights violations) (Cámara 2021) which generated a swing to a more middle eastern approach to politics by Erdogan and Turkey became active in the Arab Spring revolutions, in the Palestinian cause, and in the Syrian War (Westmacott 2017). As of today, Erdogan leads a government that imprisoned several of its opponents for alleged with threats of terrorism and "coups d'état".

In the economic sector, in 2020, Turkey's GDP was of \$720bn (The World Bank 2020) which represents a GDP per capita of 8,538.2\$/capita (The World Bank 2020). While these values demonstrate a thriving economic growth since Erdogan's rise to power, the gradual decrease of almost 40% (Koc 2021) since the record high values of 2013 serves as a proof of the economic consequences resulting from the prevalent authoritarian measures which began after the protests in 2013 (Spicer 2021).

In fact, since 2018, a recession has hit Turkey and the Covid-19 pandemic has only accelerated this economic downturn. The government has recently adopted an economic plan with the intention of pursuing financial stability by changing a few of its previous risky policies. However, the annual rate of inflation as of October 2021 was around 20% and the local currency, the lira, devaluated 40% of its value in 2021 (Horowitz, Sariyuce, and Karadsheh 2021). This comes as a result of the President's pressure applied to central banks to lower interest rates as it

would reduce inflation and boost production and exports (Horowitz, Sariyuçe, and Karadsheh 2021).

Moreover, the country ranks on the 76<sup>th</sup> place in the 2021 Index of Economic Freedom with a score of 64.0, meaning a “moderately free” economy. Deconstructing this ranking, the conclusions drawn are that even though Turkey’s economy has grown and its openness to foreign investors has followed this trend, improvements on the judicial area (courts are slow), corruption, labor laws, bureaucracy, and transparency are required for a further progress in Turkey’s economic freedom.

Furthermore, according to OECD (2018), “Turkey has the lowest employment rate and one of the highest broad labor underutilization rates among OECD countries, mainly due to low participation of women. The unemployment rate is also significantly higher than the OECD average”. In June of 2021, the unemployment rate was 10.6% with only 31.7% of women participating in the workforce and the youth (15-24 years old) unemployment rate reached 22.7% (Bicer 2021). The services sector embodies the highest rate of employment 54.5%, followed by industry with 21.8%, and agriculture with 17.2% (Bicer 2021).

Additionally, when observing Turkey’s exports, it is concluded that exports in the automobile industry, textile industry, and machinery industry comprise the biggest percentages of products exported predominantly to European countries like Germany, the United Kingdom, and Italy (OEC 2019). The importance of exports to the Turkish economy is highlighted upon examining its value relative to the GDP in 2020 – 28.6% (The World Bank 2020). Turkey presents substantial needs of external financing along with a private sector highly indebted in foreign currency making the nation, as observed in recent times, extremely responsive to instability on global financial markets (Economist Intelligence Unit 2021).

Finally, the Doing Business Ranking allows companies to evaluate several parameters that



will indicate how easy it is to do business in each country. In the case of Turkey, it is ranked at the 33<sup>rd</sup> spot with an overall score of 76.8 being included in the group of countries where it is “easy to do business”. Reforms on the “property registration” field (by making it cheaper and faster) and on the “paying taxes” area (making taxes easier to pay), generated a positive impact in this ranking in 2020. However, resolving insolvency is still a major concern with a period of up to 5 years to finish the legal procedures as well as a recovery rate of only 10.5 cents on a dollar (The World Bank 2020).

As argued in the preceding economic analysis segment, the garment industry plays a major role in Turkey’s economy with a value that reached \$29.7bn of exports in 2019 indicating a percentage of 15% of the country’s total exports in the same year – these numbers are expected to have increased significantly in the following years and to maintain its growth in the near future (OEC 2019). Likewise, according to the Fairwear Foundation, “the garment industry is Turkey’s second largest industry” and the country is “the eighth largest garment exporter in the world” (Fair Wear Foundation 2021). It is estimated that  $\frac{1}{4}$  of the national manufacturing industry employment corresponds to the textile and apparel industry (Cengiarslan 2020).

In a country characterized by the massive predominance of SMEs constituting 99.8% of the registered enterprises, the garment industry is no exception (TOBB 2020). This industry is characterized by the existence of subcontracts as most of the big suppliers work with smaller enterprises, which are often undetermined, to increase their production instead of increasing their own capacity. Hence, the existence of an informal economy appears as a natural consequence of this industry. However, the success of this industry is highly influenced not only by its geographic location which connects Europe to the middle east but also by the informal economy which generates a cheaper and more flexible labor in a global highly competitive industry focused mainly on low prices (Fair Wear Foundation 2018).

From the Syrian refugees who arrived in Turkey, 19% were working in the textile industry (Turkish Red Crescent and World Food Programme 2019) and presently around 98% of the migrants employed in the garment manufacturing are illegally working without a work permit (Fair Wear Foundation 2019). The sector exploits the working poor in fragile situations who have no solution but to accept an informal job and face challenges such as “low and fluctuating incomes, difficult working conditions, lack of legal protection, numerous legal and physical risks, and often low social standing” (UNDP 2015). Policy makers and the government should not be excluded when analyzing the sector since it is currently in force a law that only allows a quota of 10% refugees to be employed in each company. With uneven distribution of refugees throughout the country (see Appendix 1), there are provinces where refugees comprise 25% of the population making it impossible for them to access legal jobs (Kaymaz and Kadkoy 2016).

According to the Global Rights Index of 2021, Turkey is one of the 10 worst countries in the world for working people. Recent reports on violations of the right to free speech, violent attacks on workers, union-busting, and prosecution of union leaders for participating in strikes are among the events describing the poor ranking (ITUC 2021). During 2021, the imposition of constraints on civil liberties and workers’ freedom and rights by the government (supported by police force) were a reality along with “employers engaging in systematic union-busting by methodically dismissing workers who attempted to organize” (ITUC 2021).

Enterprises working or planning to work with suppliers from Turkey or to do business in the country should be aware of the challenges and limitations of the market. Child labor limited or even no protection to refugees against mistreatment and poor working conditions, difficulty on tracking undocumented refugees working in subcontractors (2<sup>nd</sup> or even 3<sup>rd</sup> tier suppliers), and the vulnerable status of refugee woman that increases the risk of sexual exploitation are amid the most frequently reported complications (Fair Wear Foundation 2019).

Turkey is a multicultural country influenced by both the Eastern and Western world. In recent years, as a result of President's Erdogan influence, Islamism has become increasingly prominent. However, this does not necessarily mirror the nation's overall population as Turkey has a particularly young one (two-thirds of the population aged between 16-64 years) (Statista 2020) and a big portion of them present a more humanistic approach to religion.

According to UNHCR (2020), Turkey is the country that hosts the largest number of refugees and asylum seekers, close to 4M, which represents around 1/21 of its 84M population. After conducting an interview with a Partnership Developer employed in Istanbul by an NGO (available in Appendix 7) that operates in several fragile states to generate employment and education for socially vulnerable people, it was possible to understand that the real number of refugees (between registered and unregistered) might be almost double than the amount stated by UNHCR. Turkey has always been prone to be a host country for refugees and asylum seekers since, as stated above, it provides a connection between the Eastern and Western world, and it is a fairly safe country in its region. Thus, refugee influxes have been existent after conflict in middle eastern countries – examples include the Iran-Iraq War, the Gulf War, the Afghanistan War, and more recently the Syrian War which generated close to 6.8 million refugees in total (UNHCR 2020).

Logically, if a country has such a sudden inflow of people several challenges on the receipt and integration of newcomers arise. These challenges might be of several nature such as political, economic, logistic, social, and many more – this is currently the case of Turkey ever since the aggravation of the Syrian War situation in 2014. Firstly, the intervention of governments and organizations was slow and with a larger focus on “hospitality” instead of “integration” (Kaymaz and Kadkoy 2016) – proven by the current status, “Syrians Under Temporary Protection”, of over 3.7M Syrian refugees (Directorate General of Migration Management 2021). During the aforementioned interview, a subsequent problem was discussed: there is not a clear path for Syrians

to obtain a citizenship and become permanent inhabitants of Turkey, the criteria are not clear and few government plans for social integration. Aligned with the previous problem is the major language barrier between Syrians and locals which obstructs the access to the job market for the migrants. As of 2019, only 117 thousand Syrians (Güney 2019) had obtained Turkish citizenship and, for example, from the Killa's refugee camp hosting 35 thousand people only 39 individuals had received C1-level certificates in the Turkish language needed to attend local universities (Kaymaz and Kadkoy 2016). Stemming from this problem, a “ghettoization” effect is observable among the Syrian community as most of them live in “ghettos” inhabited exclusively by Syrian nationals with no direct contact with Turkish people which in addition hampers the process of learning the language and further not only social but also cultural integration in the society (Kaymaz and Kadkoy 2016). Lastly, according to the interviewee questioned and to meetings conducted with the managing director of Makers Unite, there are ongoing tensions between the working-class citizens and Syrian refugees who are in a vulnerable situation. These immigrants feel pressured to take lower-paying jobs and worse working conditions, consequently decreasing the standard of an already precarious market and directly “steal” local jobs in a country where the unemployment rate in 2020 was roughly 14% (Statista 2020).

### **2.1.2. Reasons for Expansion, Opportunities, and Challenges for Makers Unite**

The subsequent section discusses the main opportunities and reasons for Makers Unite to select Turkey as the expansion's destination. Moreover, challenges in the particular context of the company will be discussed as the case may be applicable to other companies in a similar sector and expansion context. The previous chapter was essential to gather the necessary understanding to discuss Makers Unite's specific case.

Makers Unite is a social enterprise meaning that its “main objective is to have a social impact rather than make a profit” (European Commission 2021). However, according to the company’s business model, already covered in this report, to generate more impact the company needs to create more revenue by producing more products which require an increase in the company’s capacity since the company is presently already declining business opportunities due to full capacity. Hence, the first main reason for the company’s expansion is the necessity for a capacity increase. Production needs to be more affordable and effecting after a decision from the company to focus mainly in B2B circular sustainable merchandising and creative service to achieve a better competitive position and generate a larger volume of revenues. A new facility in Turkey would provide an answer to one of the main motivations for customers to not want to do business with the enterprise: high price. Costs associated to a production in the Netherlands are high compared to the industry standard therefore it is common for possible customers to discard Makers Unite even if they are normally moved by the company’s mission. Turkey represents an opportunity not only because of the general cheaper costs but also because of the devaluation of the local currency which signifies a saving for Makers Unite who normally sells products in euros or dollars. A further desired improvement point achievable with the internationalization of the company is to scale the company’s impact. One of the most important ideas behind Makers Unite was to locate the business in a place where the impact could be enormous. The number of refugees in The Netherlands is around 79 thousand (Macrotrends 2020) and the company often struggles to find participants for their programs. On the contrary, Turkey holds the largest number of refugees in the world and a textile industry cluster that would allow the company to be successful while being able to scale their social impact. Lastly, the company has a strong contact in Istanbul that would be able to facilitate the navigation of logistic problems such as finding a suitable facility, employees, and machinery.

In the previous chapter, challenges were discussed in a broad concept. An analysis of how they may affect the company's activities and brand image will be given in what remains of the present section. Initially, Makers Unite presently retains an image valued by its sustainable production, social mission, as well as by its European production. Besides Turkey not belonging to Europe in its entirety, its garment-textile industry is stained with a terrible reputation of bad practices. The company is risking not only its European production "stamp" but also the customers' perception on the brand. One effective approach to ensure the conservation of the enterprise's mission and values is the application to become a member of the "Fair Wear Foundation". Becoming a member would mean that the company needs to comply with a specific set of requirements that guarantees the social mission attainability and sustainable production of products. However, complying the foundations' requirements might turn out to be a challenge on its own as one of the requirements is a €10M turnover of products sold (Fair Wear Foundation 2021) – a value still far from Makers Unite's volume of sales. Supplementary research indicates that other certificates such as the "Fairtrade International" and the "Social Accountability International" certificates might be more achievable in the short-term and have a similar effect. In addition, each company based in Turkey can only employ 10% of Syrian refugees in their workforce. This constraint will limit the social impact's scope Makers Unite wishes to reach by employing refugees. Moreover, tensions between locals and newcomers are still part of the country's social environment and hostilities directed to a new facility practicing formal employment measures might arise from local factory owners. Consideration and precaution are absolutely necessary when making location choice and employment decisions in the Turkish garment-textile industry. Lastly, the choice of a correct location for a new facility constitutes the ultimate challenge for firms expanding to unstable scenarios such as the Turkish one. Finding a method that considers the requirements of social enterprises is a daunting task in and of itself, hence

the next chapter will be dedicated to the exploration of this problem and presentation of a further model suggestion for social enterprises.

### **3. Facility Location Selection Process**

After a firm decides to internationalize or expand, a chain of choices will be directly associated with the enterprise's future success. In this paper, an analysis of the Location Choice Problem in the framework of social enterprises will be made as it is associated with an actual challenge the company, Makers Unite, is currently facing.

The choice of a location is a strategically important decision which “displays a direct impact on the company's competitiveness and performance” (Koç and Burhan 2015). Its influence is extended over areas such as the availability of products, market size and potential, cost structure among several other factors. An inaccurate location choice might lead to overspending, high costs, loss of skilled labor and future profits, and, more catastrophically, to a completely failed internationalization strategy that might result in a company's bankruptcy (Koç and Burhan 2015). To be successful, a company should clearly define its needs and objectives which will serve as the “North Star” guiding the company's decisions throughout the process. A full-profit organization may align its needs and objectives with profit-related factors such as the need of skilled labor for a lower cost in order to increase its profit margins. However, even if social enterprises are similarly concerned about profits, additional interests and concerns are correlated to the company's social landscape. In a further chapter, the specific case of Makers Unite will be discussed covering the firm's objectives and opportunities on a possible expansion plan to Turkey in what will serve as an example for social enterprises' motivations to internationalize and to choose a specific location.

Location selection problems have been subject to several studies and still constitute a main challenge due to its criteria's dual nature, since normally qualitative and quantitative variables are

considered, and to conflicting multiple goals in the location choice process (Ho, Chang, and Ku 2011). A common problem-solving tactic for this question is the integration of analytic hierarchic process (AHP) to obtain weights for each considered variable and obtain a solution which weights both tangible and intangible factors (Ho, Chang, and Ku 2011). Additional multi-criteria approaches include the analytic network process, TOPSIS, ELECTRE, and the utilization of an adapted methodology of network optimization models (Koç and Burhan 2015). The latter will be used in this report in an approach that will encapsulate Makers Unite's particular case besides a general model appropriate for social enterprises.

### **3.1. Facility Location Selection Model**

As acknowledged before, location choice processes are significant for a firm's success. According to Chopra and Meindl (2007), Network Design decisions incorporate the selection of facilities' roles, location of supply chain facilities, and the allocation of capacity and markets to each facility. An approach using Network Design models was developed to explore the possible locations for a firm's facility, more specifically for social enterprises. This study will focus on a methodology to determine the optimal location according to predetermined destinations using a mixed approach of two different network design models: network optimization and gravity location.

The general framework for network design decisions comprises 4 stages: definition of a supply chain strategy/design (1), definition of the regional facility configuration (2), selection of a set of desirable potential sites (3), and location choices (4). Network optimization models are used both in phase 2 and 4, yet a model from the latter phase was used to define a location choice: The Capacitated Plant Location Model with Single Sourcing. This model's objective is to establish a



connection between a market and one factory, where a market is supplied by only one factory referred to as single source (Chopra and Meindl 2007). The second model applied is the Gravitational Model which is used generally in phase 3 and its main goal consists of finding a location which minimizes costs of transportation.

In both models described above, there is a set of variables which ideally should be available in the network decision process, however some requirements were adapted or even erased to deal with more uncertain scenarios. One essential step for the construction of the new model was the possibility of not having a forecast for demand or having an extremely volatile demand – this is relevant for several SMEs who may lack the data to infer about forecasted demand. Another essential argument which justifies the design of an adapted model is the selection of a location for either an expansion or for a new firm in a market according to variables relevant for the firm's performance.

The model was constructed with the objective of choosing one location for a facility between a range of possible options. With this in mind, the inputs found on Appendix 2 are required even though the model can be changed according to each firm's needs by changing variables or even adding new ones. Similarly, to the "Capacitated Plant Location Model", the decision variable was described as follows:

- " $z_i = 1$  if facility  $i$  is open, 0 otherwise".

Additionally, the objective function was defined to minimize the decision variable according to three objectives: distance from facility  $i$  to a fixed main supplier ( $d_i$ ), cost of operating facility  $i$  ( $c_i$ ), and average distance from facility  $i$  to cluster of employees/socially impacted people ( $r_i$ ) (the equations which lead to the values for these parameters can be found in Appendix 5). Generally, the objective was to select a location which minimized both distances described above and the operating costs. However, to be able to compare values of different units such as the

distances (in km) and operating costs (in €), the variables  $d_{ip}$ ,  $c_{ip}$ , and  $r_{ip}$  were created as it was extremely complicated to obtain a sound result for F by comparing the three variables ( $d_i$ ,  $c_i$ ,  $r_i$ ) in one function. As such, the variables  $d_{ip}$ ,  $c_{ip}$ , and  $r_{ip}$  represent the relative value (in percentage of the total for each facility) for each parameter ( $d_i$ ,  $c_i$ ,  $r_i$ ). Thus, these parameters may be calculated as follows:  $d_{ip} = \frac{d_i}{\sum_{i=1}^n d_i}$ ,  $r_{ip} = \frac{r_i}{\sum_{i=1}^n r_i}$ , and  $c_{ip} = \frac{c_i}{\sum_{i=1}^n c_i}$ . It is important to the note that the parameters  $d_i$ ,  $c_i$ , and  $r_i$  can still be used directly in the calculation of the objective function, however the weights should be selected in a way to make the values of each F1, F2, and F3 comparable. Additionally, F1, F2, and F3, were used as auxiliary equations since each one has a different minimization objective. F1 is the function which goal is to minimize  $d_{ip}$  and is calculated with the following equation:  $F1 = \sum_{i=1}^n (z_i \times d_{ip})$ . F2 minimizes  $r_{ip}$  and can be obtained through the expression:  $F2 = \sum_{i=1}^n (z_i \times r_{ip})$ . F3 minimizes  $c_{ip}$  and it is defined as:  $F3 = \sum_{i=1}^n (z_i \times c_{ip})$ . What these minimization objectives mean is that F1 minimizes the distance from the facility to the supplier, F2 minimizes the average distance from the facility to the clusters of employees/socially impacted people, and F3 minimizes the operating costs of the facility. These minimization objectives were defined after considering both the economic side of a business and the social side that plays a big part in the business scope of social enterprises. Lastly, an important part of the objective function are the weights represented by  $W1$ ,  $W2$ , and  $W3$ . These weights allow firms to define the relevance they want to give to each function F1, F2, and F3, thus focusing on what is more important for the firm at the moment. Considering the previous information, the model was defined as follows:

- $F = Min_z(F1 \times W1 + F2 \times W2 + F3 \times W3)$

Subject to

- $d_i \times z_i \leq D, \forall i$  **(1.1)**

- $c_i \times z_i \leq C, \forall i$  (1.2)

- $r_i \times z_i \leq R, \forall i$  (1.3)

- $\sum_{i=1}^n z_i = 1, \forall i$  (1.4)

- $\sum_{i=1}^3 W_i = 1, \forall i$  (1.5)

- $z_i$  is binary,  $\forall i$  (1.6)

Where,  $d_i$  corresponds to distance from facility  $i$  to a fixed main supplier (in km),  $c_i$  corresponds to cost of operating facility  $i$  (n €),  $r_i$  corresponds to average distance from facility  $i$  to cluster of employees/socially impacted people (in km),  $d_{ip}$  corresponds to the relative distance from facility  $i$  to a fixed main supplier (in percentage),  $c_{ip}$  corresponds to the relative cost of operating facility  $i$  (in percentage), and  $r_{ip}$  corresponds to the relative average distance from facility  $i$  to cluster of employees/socially impacted people (in percentage). Moreover, the equations (1.1), (1.2), and (1.3), ensure that there is a maximum value for each parameter considered as limitations either for costs or distances are part of most firm's constraints.  $D$ ,  $C$ , and  $R$  correspond to the firm's maximum acceptable values for distance to supplier (in km), cost of operating the facility (in €), and average distance to the cluster of employees/socially impacted people (in km), respectively. The equation (1.4) guarantees that only one facility is open since  $Z_i$  can only take the values 0 or 1 (equation (1.6)) and the equation (1.5) satisfies the condition that the sum of the weights should be exactly 1.

The model is solved using Solver in Excel and can be provided upon request. In the following section, an example will be provided to test and calibrate the model with real data.

### 3.1.1. Model Application – Makers Unite

Following the theoretically explanation of the model, a practical example will be presented

by analyzing the Makers Unite's possible expansion to Turkey. In a previous chapter, the company's main motivations and objectives to move to Istanbul were clarified and as a result only locations within the area of Istanbul were considered for the application of this model. The steps taken to reach a final conclusion about the best choice of location for a new Makers Unite facility in Istanbul were as follow:

- 1) The first step taken was holding a meeting with the company's managing director in which variables, parameters, and constraints relevant to the company's goals as well as the attributable weights to each variable were defined. The variables identified were: "average distance from refugee employees/social impacted people to the facility i" ( $r_i$ ), "distance from main supplier to the facility i" ( $d_i$ ), and "cost of operating facility i" ( $c_i$ ). After taking into consideration the ideas of Makers Unite's manager director and studying the market by talking to locals and experts, and analyzing quantitative data, the constraints were defined as: " $d_i \times z_i \leq 0.3, \forall i$ ", meaning that the distance from facility i to the main supplier should be less or equal to 0.3km,  $c_i \times z_i \leq 1000, \forall i$ , signifying that the cost of operating the facility i should be no more than 1000€, and  $r_i \times z_i \leq 0.3, \forall i$ , meaning that the average distance from facility i to the clusters of refugees should be less or equal to 0.3km. Further, the weights were defined as:  $W1 = 0.35$ ,  $W2 = 0.35$ , and  $W3 = 0.3$ . These values were chosen since the company gives relatively the same importance to all the variables chosen however renting price in Turkey is considered low when compared to The Netherlands, therefore a lower importance ( $W3$ ) was attributed to this parameter.
- 2) The next stage of the process was to gather a set of possible locations for the facility, the locations Fathi, Zeytinburnu (main supplier's location), and Bağcilar were suggested by the company's founder following a "field-recognition trip" to Istanbul. After examining the

commercial space renting market and selecting concrete space listings, the locations of (1) Fathi (41.014368, 28.937129), with a price  $c_1 = 354$ , (2) Bahçelievler (41.006847, 28.855024), with a corresponding price of  $c_2 = 514$ , and (3) Gaziosmanpaşa (41.064556, 28.921265), with a price of  $c_3 = 1000$ , were elected.

- 3) Thirdly, a decision on the areas where possible employees/social impacted people were located was made based on the locations were previously chosen. Even though refugees are present in the whole city, the biggest clusters are located in the areas of Küçükçekmece (41.052950, 28.794223), Fatih (41.018002, 28.954120), and Bağcılar (41.052884, 28.838564) according to the information exposed in Appendix 3 and 4. Hence, these areas and subsequent coordinates were inserted in the model.
- 4) Given that the supplier's location was fixed, every condition was gathered to calculate the values for the parameters,  $d_i$  and  $r_i$  (values for  $c_i$  had been collected in step 2). Thus, the final values were  $d_1 = 0.145$ ,  $d_2 = 0.064$ ,  $d_3 = 0.148$ ,  $r_1 = 0.090$ ,  $r_2 = 0.075$ , and  $r_3 = 0.089$ . To calculate  $r_i$ , an intermediary parameter was calculated,  $r_i^h$  (distance from cluster of employees/impacted people to location  $i$  (in km)). The calculation of this parameter comprised on the distance from each facility location ( $X_i, Y_i$ ) to each cluster of employees/socially impacted people ( $X_h, Y_h$ ). The values for each  $r_i$  were then the sum of the  $r_i^h$  for each facility location (check Appendix 5 for equation). Then, the values as a relative percentage to the corresponding totals of their original parameters were calculated thus obtaining the new parameters  $d_{ip}$ ,  $r_{ip}$ , and  $c_{ip}$ . The values of the new standardized parameters were  $d_{1p} = 0.407$ ,  $d_{2p} = 0.178$ ,  $d_{3p} = 0.415$ ,  $r_{1p} = 0.355$ ,  $r_{2p} = 0.294$ ,  $r_{3p} = 0.351$ ,  $c_{1p} = 0.190$ ,  $c_{2p} = 0.275$ , and  $c_{3p} = 0.535$ .

5) Lastly, the constraints specific to Makers Unite mentioned in step 1 and the general model constraints cited in the previous section were inserted in Solver. During this process, the objective function was inserted in an empty cell and the decision variables' ( $z_i$ ) cells were empty as these are the values which solve is going to alter in order to find the optimal solution for the objective function, in this case the minimum value for it so that only one location is chosen. The minimum values for each objective function were  $F_1 = 0.323$ ,  $F_2 = 0.248$ , and  $F_3 = 0.429$ .

### 3.1.2. Discussion of results

The optimal solution subject to the restrictions stated above was opening a new facility in Bahçelievler as this decision minimizes the value of the objective function,  $F = 0.248$ . The optimal solution of F does not have a tangible meaning as F is an ordinal function which main goal is to order preferences, in this case minimize the value according to the constraints in order to select the best location to open a facility. Nevertheless, by observing each percentual parameter total value ( $d_{ip}$ ,  $r_{ip}$ ,  $c_{ip}$ ) for each location it is clear that Bahçelievler was the most adequate option as it presents the minimum values for  $d_{ip}$  and  $r_{ip}$ , and the second best in  $c_{ip}$ .

Additional conclusions may be drawn from the analysis of other parameters. While discussing the most relevant variables for the model, the three stated above were selected but a few more were considered. Firstly, the presence of nearby textile industry cluster might facilitate logistical maneuvers as well as indicate that the area is suited for the best possible functioning of the facility. According to the information exposed in Appendix 4, Bahçelievler is inserted in an area where, in 2009, there seemed to be a moderate level of clothing companies which might indicate a possible growth in the infrastructure systems around the area. In contrast, taking in

consideration the context provided in previous chapters about the state of the textile industry in Turkey, the facility being implanted in an area near other factories might generate a competition problem since Makers Unite is planning to operate in a legal and fair manner contrary to the industry standard. Secondly, the crime and conflict rate in Istanbul is relatively high, yet both Bahçelievler and its outskirts are far from areas where crime and conflicts are more frequent such as Gaziosmanpaşa and Tarlabaşı (All Luxury Apartments 2021). The socioeconomic ranking of Bahçelievler is “B+” (score 75/100) (IBB 2020) indicating that the area should be safe and economically prosperous. Lastly, constraints such as the availability of a suitable facility and the size of the facility (around 200m<sup>2</sup>) were already considered when choosing a physical facility for each location.

#### **4. Conclusion and Limitations**

The general purpose of this project was to grasp a general understanding of the expansion process of social enterprises that comprises not only scaling revenues but also impact. The identification of the Facility Location Choice as a main challenge directed the paper to a more specific emphasis granted to a model created to help social enterprises (even though it is applicable to full for-profit enterprises if the variables are changed) in finding the solution for this problem. The example of Makers Unite was always present as the enterprise is currently facing this same challenge.

Firstly, an analysis of the selected country for Makers Unite’s expansion was conducted. Turkey constitutes an exciting opportunity for the scaling of the firm’s social impact and economic revenues. While the macro-environment’s setting might appear unstable and uncertain, a micro-environment assessment concludes that, even though the Textile Industry is still evolving in social

positions, the market potential and opportunities outweigh the challenges. Secondly, the presentation of a model based in network design decisions was conducted. Once again, Makers Unite was used as an example and the location of Bahçelievler was suggested as the destination for a new Makers Unite facility after considering specific constraints for the company. Further discussion of results based on other criteria indicated that the location's choice was a sound and reasonable option.

Nevertheless, throughout the development of this study, limitations which might affect the veracity of results and the accuracy of the analysis provided were encountered. Initially, the difficulty to find interviewees who were able to speak English and who had the time and will to answer the questions was immense. After having conducted one interview, the realization that the insights were valuable and distinct transmits an understanding that more information could have been obtained from a conversation with locals and people involved in the social sector. Secondly, the lack of updated data, and occasionally even data at all, might have generated inaccuracies not only in the country analysis but mainly in the practical application of the model where data was minimal when selecting possible facility locations for the company. Also, the utilization of only three quantitative variables in the mathematical model might have limited the results' magnitude of accuracy. Lastly, by working with a solvable model some realities were abstracted – in particular, the disregard of social and political implications



## 5. References

- 2020 Annual Report. Amsterdam: Makers Unite, 2020.
- All Luxury Apartments, “All About Istanbul's Crime Rate”. Accessed November 4, 2021, <https://www.all-luxury-apartments.com/blog-article-1522-all-about-istanbul-s-crime-rate.html>
- ANSA, and Info Migrants, “UNHCR: 5.5 million Syrian refugees, 70% in poverty”. Accessed November 21, 2021, <https://www.infomigrants.net/en/post/30887/unhcr-55-million-syrian-refugees-70-in-poverty>
- Atelier Made Here, “Made to Order”. Accessed November 10, 2021, <https://www.ateliermadehere.nl/>
- BBC News, “Taliban are back - what next for Afghanistan?”. Accessed November 9, 2021, <https://www.bbc.com/news/world-asia-49192495>
- BBC News, Science, “What is climate change? A really simple guide”. Accessed on September 2021, <https://www.bbc.com/news/science-environment-24021772>
- Bicer, Aysu. “Turkey's unemployment rate down to 10.6% in June”. *Anadolu Agency*. August 10, 2021. <https://www.aa.com.tr/en/economy/turkeys-unemployment-rate-down-to-106-in-june/2329685>
- Cengiarslan, Fatih. “Textile Industry became an employment warehouse”. *Textilegence*. March 6, 2020. <https://www.textilegence.com/en/adaso-textile-industry-employment-warehouse/>
- Chen, Martha, Chris Bonner, and Fraçoise Carré. 2015. “Organizing Informal Workers: Benefits, Challenges and Successes”. *United Nations Development Reports*. <http://hdr.undp.org/en/content/organizing-informal-workers-benefits-challenges-and-successes>
- Chopra, Sunil, and Peter Meindl. 2007. “Chapter 5: Network Design in the Supply Chain” in *Supply Chain Management: Strategy, Planning, and Operations*”, 114-152. New Jersey: Pearson Education.

Collison, Simon, Rajneesh Narula, and Alan M. Rugman. 2017. “Chapter 2: General Frameworks in International Business” in *International Business*, 56-62. Edinburgh: Pearson Education.

De la Cámara, Manuel. 2021. “Turkey and the European Union: A difficult but critical relationship”. *CDIOB notes internacionales*.

[https://www.cidob.org/publicaciones/serie\\_de\\_publicacion/notes\\_internacionales\\_cidob/256/turkey\\_and\\_the\\_european\\_union\\_a\\_difficult\\_but\\_critical\\_relationship](https://www.cidob.org/publicaciones/serie_de_publicacion/notes_internacionales_cidob/256/turkey_and_the_european_union_a_difficult_but_critical_relationship) .

Directorate General of Migration Management, “Temporary Protection”. Accessed November 3, 2021. <https://en.goc.gov.tr/temporary-protection27>

Economist Intelligence Unit, “Global democracy has a very bad year”. Accessed November 15, 2021, <https://www.economist.com/graphic-detail/2021/02/02/global-democracy-has-a-very-bad-year>

Economist Intelligence Unit, “Turkey”. Accessed November 13, 2021, <https://country.eiu.com/turkey>

European Commission, “Social Enterprises”. Accessed November 15, 2021, [https://ec.europa.eu/growth/sectors/social-economy-eu/social-enterprises\\_en](https://ec.europa.eu/growth/sectors/social-economy-eu/social-enterprises_en)

European Parliament, “Exploring migration causes – why people migrate”. Accessed November 10, 2021, <https://www.europarl.europa.eu/news/en/headlines/world/20200624STO81906/exploring-migration-causes-why-people-migrate>

Fair Trade, “Fair Trade International”. Accessed December 1, 2021, <https://www.fairtrade.net/>

Fair Wear Foundation, “Turkey – Fair Wear Foundation”. Accessed October 3, 2021, <https://www.fairwear.org/programmes/countries/turkey/>

Fair Wear Foundation, “Who can join?”. Accessed November 4, 2021, <https://www.fairwear.org/join-the-movement/become-a-member/who-can-join/>

Fair Wear Foundation. “Country Study 2017/2018”. Country Report, November 2018. <https://api.fairwear.org/wp-content/uploads/2018/11/Turkey-Country-Study-20172018-def.pdf>

Fair Wear Foundation. “Guidance on risks related to Turkish garment factories employing Syrian refugees”. Country Report, September 2020. <https://api.fairwear.org/wp-content/uploads/2020/09/Risks-related-to-Turkish-garment-factories-employing-Syrian-refugees-2019.pdf>

Färdig, Kristina, and Maria Håkansson. 2014. “The Internationalization of Social Enterprises: Mapping patterns in the internationalization process of social entrepreneurs”. M.Sc. diss. Uppsala University.

France 24, “Sports ban, segregated education: Afghanistan women worried by first Taliban measures”. Accessed November 17, 2021, <https://www.france24.com/en/asia-pacific/20210911-sports-ban-segregated-education-afghanistan-women-worried-by-first-taliban-measures>

Friedrich Ebert Stiftung, “Causes of Displacement”. Accessed October 20, 2021, <https://www.fes.de/en/prototype/causes-of-displacement>

Friedrich, J. 2021 “World Greenhouse Gas Emissions: 2018”, *World Resources Institute*. Accessed on September 2021, <https://www.wri.org/data/world-greenhouse-gas-emissions-2018>

Güney, Ülkü. 2021. “Syrian Refugees between Turkish Nationalism and Citizenship”. *Journal of Immigrant & Refugee Studies*. <https://doi.org/10.1080/15562948.2021.1950256>

Gürsel, Kadri. “Analysis: Turkish economic crisis recalls Erdogan's 2002 rise — but don't expect replay”. *Al-Monitor*. October 12, 2018. <https://www.al-monitor.com/originals/2018/10/turkey-can-economic-crisis-lead-to-erdogans-downfall.html>

Haggeman, Anke. 2015. “From Flagship Store to Factory: Tracing the Spaces of

Transnational Clothing Production in Istanbul”. *Inconspicuous Globalization*, 12.  
<https://doi.org/10.4000/articulo.2889>

Heritage, “2021 Index of Economic Freedom”. Accessed November 20, 2021,  
<https://www.heritage.org/index/country/turkey>

Ho, Hui-Ping, Ching-Ter Chang. 2010. “On the location selection problem using analytic hierarchy process and multi-choice goal programming”. *International Journal of Systems Science*, 44(1): 94-108. <https://doi.org/10.1080/00207721.2011.581397>

Horowitz, Julia, Isil Sariyuce, and Jomana Karadsheh. “Turkey is going its own way on inflation. The lira is crashing”. *CNN Business*. November 24, 2021,  
<https://edition.cnn.com/2021/11/24/investing/turkish-lira-crash/index.html>

International Trade Union Confederation, “Turkey – ITUC GRI 2021”. Accessed November 27, 2021, <https://www.globalrightsindex.org/en/2021/countries/tur>

İstanbul Büyükşehir Belediyesi, “My Neighborhood Istanbul SES Scores for 2016”. Accessed November 16, 2021, <https://data.ibb.gov.tr/en/dataset/mahallem-istanbul-projesi-ses-sosyo-ekonomik-statu-skorlari/resource/859f3f2d-d06e-4f1c-ba3d-5fcf89744048>

Jiao, Hao. “A conceptual model for social entrepreneurship directed toward social impact on society.” *Social enterprise journal*, 7(2): 130-149.  
<http://dx.doi.org/10.1108/17508611111156600>

Kaya, Ayhan, and Aysu Kiraç. 2016. “Vulnerability Assessment of Syrian Refugees in Istanbul”. *Support to life*. <https://data2.unhcr.org/en/documents/download/54518>

Kaymaz, Timur, and Omar Kadkoy. 2016. “Syrians in Turkey – The Economics of Integration”. *Alsharq Forum Expert Brief*. [https://www.tepav.org.tr/upload/files/1473326257-7.Syrians in Turkey The Economics of Integration.pdf](https://www.tepav.org.tr/upload/files/1473326257-7.Syrians%20in%20Turkey%20The%20Economics%20of%20Integration.pdf)

Koc, Cagan. “Turkey’s Economy Outperformed Most Peers -- But at a Cost”. *Bloomberg*.

May 31, 2021. <https://www.bloomberg.com/news/articles/2021-05-31/turkey-s-economy-outperformed-most-peers-but-at-a-cost-kpc9wch8>

Koç, Eylem, and Hasan Burhan. 2015. "An Application of Analytic Hierarchy Process (AHP) in a Real World Problem of Store Location Selection". *Advance in Management & Applied Economics*, 5(1): 41-50.

Kubíčková, Lea, Marcela Votoupalová, and Martina Toulová. 2014. "Key motives for internationalization process of small and medium-sized enterprises". *Procedia Economics and Finance*, 12: 319-328. [https://doi.org/10.1016/S2212-5671\(14\)00351-7](https://doi.org/10.1016/S2212-5671(14)00351-7)

Macrotrends, "Netherlands Refugee Statistics 1960-2021". Accessed November 5, 2021, <https://www.macrotrends.net/countries/NLD/netherlands/refugee-statistics>

Makers Unite, "About". Accessed October 15, 2021, <https://makersunite.eu/about/>

Makers Unite, "Work". Accessed October 15, 2021, <https://makersunite.eu/work/>

Martins, J. & Rodrigues T. 2021 "A Lei Europeia do clima: A revolução silenciosa do nosso tempo". *In Green savers*, n.4: page 71

NASA, Global Climate change, Facts, Evidence. "Climate change: How do we know?" Accessed September 2021, <https://climate.nasa.gov/evidence/>

OECD, "Turkey (TUR) Exports, Imports, and Trade Partners". Accessed October 25, <https://oec.world/en/profile/country/tur?depthSelector1=HS2Depth&tradeScaleSelector1=tradeScale0&depthSelector2=HS2Depth>

OECD, "The new OECD Jobs Strategy". Accessed November 26, 2021, <https://www.oecd.org/turkey/jobs-strategy-TURKEY-EN.pdf>

SEP Jordan, "About us". Accessed November 11, 2021, <https://sepjordan.com/pages/about-us>

Social Accountability International, "SA8000 Standard – SAI". Accessed December 1,

2021. <https://sa-intl.org/programs/sa8000/>

Spicer, Jonathan. “Analysis: When Erdogan's Turkish economic miracle began failing”. *Reuters*. July 7, 2021. <https://www.reuters.com/world/middle-east/when-erdogans-turkish-economic-miracle-began-failing-2021-07-15/>

Statista, “Age structure in turkey”. Accessed November 23, 2021, <https://www.statista.com/statistics/255474/age-structure-in-turkey/>

Statista, “Unemployment rate in Turkey”. Accessed November 7, 2021, <https://www.statista.com/statistics/263708/unemployment-rate-in-turkey/>

The Union of Chambers and Commodity Exchanges of Turkey, “SMEs in Turkey”. Accessed November 4, 2021, <https://www.tobb.org.tr/KobiArastirma/Sayfalar/Eng/SMEsinTurkey.php>

The World Bank, “Business Reforms in Turkey”. Accessed November 2, 2021, <https://www.doingbusiness.org/en/reforms/overview/economy/turkey>

The World Bank, “Doing Business in Turkey”. Accessed November 2, 2021, [https://www.doingbusiness.org/en/data/exploreconomies/turkey#DB\\_ri](https://www.doingbusiness.org/en/data/exploreconomies/turkey#DB_ri)

The World Bank, “Exports of goods and services (% of GDP) - Turkey”. Accessed November 10, 2021, <https://data.worldbank.org/indicator/NE.EXP.GNFS.ZS?locations=TR>

The World Bank, “GDP (current US\$) – Turkey”. Accessed November 10, 2021, <https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=TR> .

The World Bank, “GDP per capita (current US\$) – Turkey”. Accessed November 10, 2021, <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD?locations=TR> .

The World Bank. 2018. “Climate change could force over 140 million to migrate within countries by 2050: World Bank Report”. Accessed on October 2021, <https://www.worldbank.org/en/news/press-release/2018/03/19/climate-change-could-force-over->

[140-million-to-migrate-within-countries-by-2050-world-bank-report](#)

Turk Kizilay, World Food Programme. “Refugees in Turkey: Livelihoods Survey Findings”. Country Report, 2019. <https://data2.unhcr.org/en/documents/download/70508>

UN Climate change conference UK 2021, “COP26 Explained”. Accessed on September 2021, <https://ukcop26.org/wp-content/uploads/2021/07/COP26-Explained.pdf>

UNHCR, “Humanitarian crisis in Afghanistan”. Accessed November 20, 2021, <https://donate.unhcr.org/int/en/afghanistan-situation-v1?gclid=aw.ds>

UNHCR, “Refugee Data Finder”. Accessed November 13, 2021, <https://www.unhcr.org/refugee-statistics/>

United Nations, “The 17 Goals”. Accessed November 2021, <https://sdgs.un.org/goals>

United Nations, Shaping our future together, “The Climate Crisis – A Race We Can Win” Accessed September 2021, <https://www.un.org/en/un75/climate-crisis-race-we-can-win>

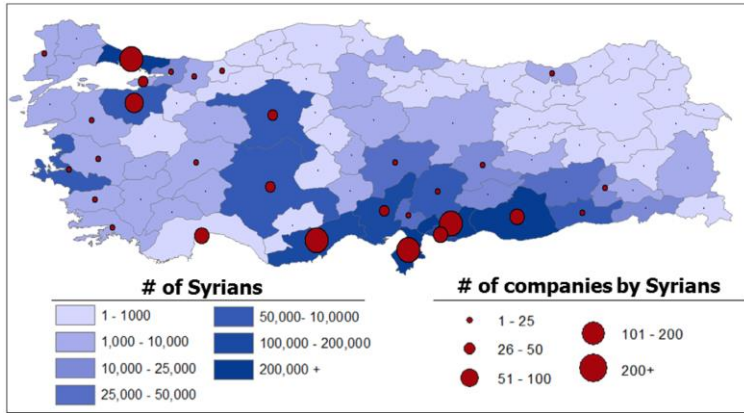
Vreeken, Rob. “Turkey becoming more Islamic? On the contrary”. *De Volkskrant*. November 13, 2020. <https://www.volkskrant.nl/nieuws-achtergrond/turkey-becoming-more-islamic-on-the-contrary~bf9c4f9f6/?referrer=https%3A%2F%2Fwww.google.com%2F~>

Westmacott, Peter. 2017. “Turkey’s European Journey, a ringside view”. *The Atlantic Council*.

Zahra, Shaker, Hans Rawhouser, Nachiket Bhawe, Donald Neubaum, and James Hayton. 2008. “Globalization of social entrepreneurship opportunities.” *Strategic Entrepreneurship Journal*, 2(2): 117-131. <https://doi.org/10.1002/sej.43>

## Appendixes

Appendix 1: Distribution of refugees and of Syrian-owned enterprises in Turkey (2016)



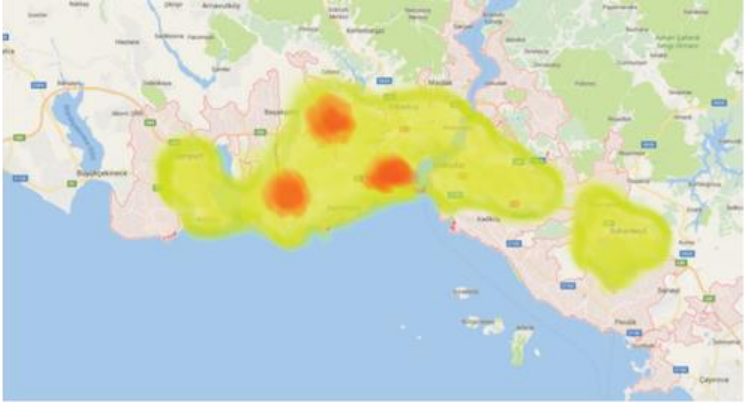
Source: Kaymaz and Kadkoy 2016.

Appendix 2: Notation table for parameters of the model.

$(X_i, Y_i)$	Coordinates (X, Y) for facility $i$
$(X_s, Y_s)$	Coordinates (X, Y) of supplier $s$
$(X_h, Y_h)$	Coordinates of cluster of employees $h$
$d_i$	Distance from supplier to location $i$ (in km)
$c_i$	Cost of operating facility location $i$ (in €)
$r_i$	Average distance from cluster of employees/impacted people to location $i$ (in km)
$d_{ip}$	Distance from supplier to location $i$ (in relative percentage to total $d_i$ )
$c_{ip}$	Cost of operating facility location $i$ (in relative percentage to total $c_i$ )
$r_{ip}$	Average distance from cluster of employees/impacted people to location $i$ (in relative percentage to total $r_i$ )
$r_i^h$	Distance from cluster of employees/impacted people ( $h$ ) to location $i$ (in km)
$W_n$	Weight attributed to factor $n$
$D$	Maximum distance from supplier to location $i$ (in km)
$C$	Maximum operational costs (in €)
$R$	Maximum distance from cluster of employees/impacted people to location $i$ (in km)

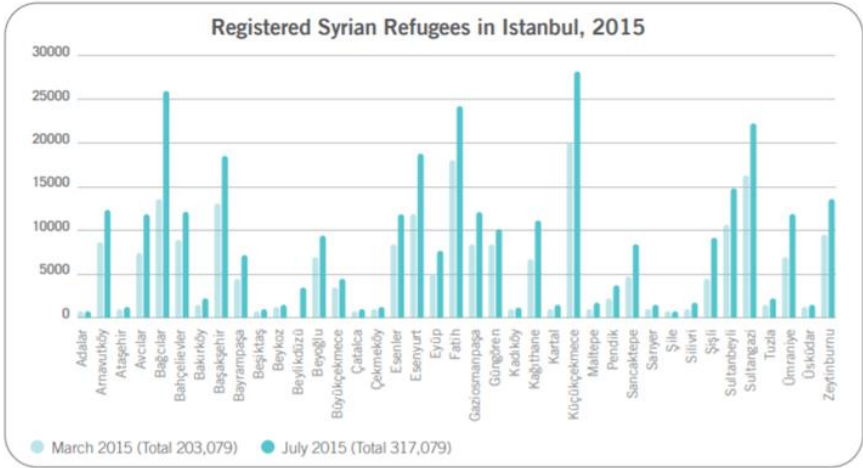


Appendix 3: Clusters of Registered Syrian Refugees in Istanbul (2015)



Source: Kaya and Kiraç 2016.

Appendix 4: Syrian Refugees distribution by area (2015)



Source: Kaya and Kiraç 2016.

Appendix 5: Equations for parameters  $d_i$  and  $r_i$

- $d_i = \sqrt{(Xs - Xi)^2 + (Ys - Yi)^2}$
- $r_i = \frac{r_i^1 + r_i^2 + \dots + r_i^h}{h}$ ,  $r_i^h = \sqrt{(Xh - Xi)^2 + (Yh - Yi)^2}$

*Appendix 6: Distribution of clothing companies in the Istanbul urban area (2009)*



Source: Haggeman 2015

*Appendix 7: Interview*

**Bernardo:** “The first question I have is what does this integration of socially vulnerable people actually mean for spark and what role does the company have in supporting it?”

**Interviewee:** “That's a big question! So, we have two main components that we are working with refugees.

One is the higher education, basically providing scholarships for university students and curriculum design at the same time, so that the universities are offering courses that are market relevant – it will help people find jobs after graduation. That is one pillar of our approach.

The second pillar is what we call a jobs programme – it is targeted towards SMEs and start-ups. Many refugee entrepreneurs have businesses in their home countries, and they come to Turkey and start their businesses here. This is actually how they have the best chance of

integrating economically and creating employment. Summing up, our ultimate goal in both these programmes is employment creation and this is also how we measure success.

For the SMEs, we provide training, coaching and financial aid components based on an analysis of what the businesses need; we also offer targeted tailored coaching to help solve the business problems. Then, based on business plan submissions by people, we give a monetary reward to the people that submitted the best business plans – of course this reward is not in cash but in a grant type where we can buy them equipment and useful stuff to build their businesses.

For the start-ups side of our project, we have this entrepreneurship training and investment readiness programmes, in which we help we like entrepreneurs to create a business plan, register the business and prepare pitching documents for like venture capitalists or VC funds. We also make introductions to potential suppliers. So basically, helping them with establishing the business.

We also have the “skillup” which is basically courses to offer to students as well as business owners to basically upgrade their skills for what is needed in the market. For example, students are graduating without knowing how to use CAD software, so it's more like technical training.

Lastly, we have “matchup”. “Match up” is job placement support - what we do is finding that are working with companies and helping companies get work permits for refugees and also offering the refugees soft skills training as they might not know the cultural sensitivities and how they need to behave in a more formal job environment.

We have a very comprehensive programme basically touching both job seekers, entrepreneurs and businessmen. We're trying to cover the whole spectrum.”

**Bernardo:** “So in line with what you're saying, I understood that entrepreneurship is basically a big part of the integration of these refugees, right? But how hard is it for refugees to start a new business in Turkey? Do they encounter a lot of obstacles to start a new business?”

**Interviewee:** “I mean the entrepreneurship is difficult for everybody but one advantage that Turkey offers is that it allows Syrian nationals to establish businesses, meaning to create Turkish companies. This is not the case for other countries. For example, in Lebanon and in Jordan it's very hard for Syrian refugees to establish a formal business, there are restrictions. Turkey doesn't have any such restrictions. So, that's a big advantage and a lot of people are actually coming to Turkey as people with business ideas from Syria especially.

Additionally, we have a country of 82 million people and we have about 7,000,000 refugees registered and unregistered. There is also quite a bit of sentiment against refugees, especially among working class people. These social tensions exist and that is a big problem. Actually, a lot of success examples I've seen are actually people who are either very good at what they're doing - they have capital, they have sector knowledge - or they have good partnerships – good Turkish partners who open doors for them in their host country (Turkey).”

**Bernardo:** “Just touching in one point that you've just mentioned: I've been doing some research in this topic and I had this question about the general perception that the Turkish population has about refugees. According to some news I've read, there are social tensions because refugees (mainly due to their situation) end up accepting lower paid jobs and worse working conditions. Are these tensions still a reality, even though this refugee crisis started a few years ago already?”

**Interviewee:** “Yes, yes, and the thing is most of the refugees living in Turkey are under a special status, called Syrians Under Temporary Protection (SUTP), so most of the Syrians that

are registered live under this. However, there are a lot of informal refugees not registered mainly Afghans.

The ones who are living in Turkey are just like guests like. The Syrian Under Temporary Protection means that this person is here until the war is over and the situation is temporary. In the Southeast of Turkey along the Syrian borders these cities have a refugee population approaching 20/25% of the province which is a significant number.

As years pass, I'm just sharing my personal opinion here, we are having economic difficulties in the country generally speaking like devaluation and because of COVID... but even before COVID there were major economic problems. Unemployment is also rising and as the time progresses, these temporary guests have been living with the general population for around 6-7 years. All these things accumulate and especially among the working-class people, they are feeling that it is not possible to find a job. Syrian refugees accept working informally and they end up “making life” harder for working class Turkish people. For a few years that was acceptable, but it is taking longer than expected so I think that is causing some increasing tensions in the society.”

**Bernardo:** “Yes, I completely understand and that goes in line with what I heard before. Basically now, in your personal opinion, what do you think were and still are the biggest challenges in the integration of these refugees in Turkey?”

**Interviewee:** “The first challenge is the language. There is no program for naturalising these Syrians refugees, the numbers are so large that almost nobody is teaching them the local language (Turkish), there are no government programmes for the social integration of refugees. I mean there are some NGOs like us working on it, but the general policy of the government is not clear, so there are no policies for learning the language and a path for a citizenship. There are almost about one hundred thousand of Syrian refugees who have gained citizenship so far but

there are no clear paths for integration – no language courses, no clear criteria to become a citizen. It's a temporary situation and that is the biggest hurdle: they can't see a clear road to stay in this country.

The second is the limited contact with the rest of the society because of the high volume of refugees coming from the same destinations. Basically, they live in ghettos and do business with each other, have social contacts within their community – that is also making it harder for them to integrate, to learn the language, and learn the culture.”

**Bernardo:** “Another issue that you just spoke about as well: I also did some research on the impact generated by companies and NGOs on these communities. According to what I've researched, help generally comes from smaller scale companies instead of in a macro level from big companies. Is this also happening in Turkey?”

**Interviewee:** “The main issue is about informal employment. Mainly in the Southeast, a lot of companies are using Syrian laborers and relying on Syrian labour rooms and don't pay Social Security and taxes. Medium-sized and large companies don't have those kind of informal employment policies – normally smaller companies have it more frequently. Even before the refugee crisis, SMEs had this policy of keeping the cost as low as possible and tendency to employ people informally. That is why SMEs have more refugee workers – that's the main reason, I think.”

**Bernardo:** “Now, more in line with the Spark NGO field of action, what were the most successful programmes implemented in Turkey?”

**Interviewee:** “The higher education programme has recently surpassed 10.000 scholars, more than 5.000 of them are in Turkey. This program consists of offering higher education to Syrian youth refugees and it has been very successful. Secondly, under our jobs programme we are working with the Turkish NGOs, like local Chamber of Commerce, to have

training, coaching, and financial aid. We see that as a result of our intervention, these SMEs are hiring more people giving them a better access to integration. Both these programmes are having a visual impact in the community and actually these businesses are growing as a result of our activities.”

**Bernardo:** “That’s great that in a short span of time you’ve been able to create such an impact. What were the main obstacles in the implementation of this programme – logistical or even strategic? I imagine that due to the immense influx of refugees and also the amount of people seeking help, some obstacles must’ve been hard to surpass.”

**Interviewee:** “Under the jobs programme, the main difficulty I can think of is once again the language barrier. We have trainers and coaches who know the Turkish market and the Turkish language, but they don’t have the Arabic language skills. Also, many of the company’s owners have very limited Turkish skills. Currently, we have a database of Arabic speaker coaches and trainers, we want to expand that. This is one of the key necessities we want to fulfil right now to make the programmes more effective.

For job seekers, the formalisation of these jobs is an issue. So, even getting the job permits and then having a formal job paying Social Security and all that is a major challenge. Businesses employing the refugees tend and prefer to employ them in an informal way for obvious reasons – there is a bit of resistance here.”

**Bernardo:** “Is there any incentive from the Turkish Government to formalize employment in this sense?”

**Interviewee:** “The problem is that many of these refugees are not in the country officially, a big portion of them is unregistered with the government so with this portion there is nothing to be done. But the short answer is no, they are competing with locals for jobs at the end

of the day. Any incentive by the government to favour or help refugees in this sense, it is an extremely sensitive political decision.”

**Bernardo:** “I understand that this is a really complicated issue. I also read in a paper that there is a quota of the percentage of refugees that could be employed by the same company. I think it was 10%.”

**Interviewee:** “Yes, yes. 10% rule, yes. That is another reason for informal employment, because if you're a Syrian entrepreneur, you have to hire Turkish people - 9 Turks for each Syrian. But then since they're from the same community, they have a better chance of hiring Syrian refugees. What happens is that officially they hire one Syrian refugee but then they have a lot of unofficial workers employed to maintain this 10% ratio.”

**Bernardo:** “Ok, makes sense and it is an unfortunate situation. So, last question: in which ways did the pandemic affect all these opportunities, the social integration and the working conditions of these people?”

**Interviewee:** “A lot of Syrians are working in factories in the industry so that was obviously affected during lockdowns. Their income was also severely affected. Several of our programmes are now online because of the pandemic and we also designed digitalization support for businesses to help them migrate their businesses to the online world – this is the new trend. There is a major e-commerce company in Turkey and in collaboration with that e-commerce company we had training for refugee-owned and women-owned businesses to onboard these companies on these e-commerce companies and make them sell through the online sales channels. We also provided some financial aid for the businesses to adapt.”

**Bernardo:** “That’s perfect! Thank you so much, I’ve covered everything that I wanted to ask you and I don’t want to take more of your time! You were a major help for my project!”

**Interviewee:** “You’re welcome, wish you the best in your career!”