



WPI

EXPANDING BUSINESS AND CRAFTING PARTNERSHIPS LOCALLY AND GLOBALLY

CRAFTED

VENEZIA

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This report represents the work of one or more WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on the web without editorial or peer review

ACKNOWLEDGEMENTS



Figure i : St. Mark's Square

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Professor Ingrid Shockey: For editing our initial project proposal, including the background and methodology.

Professor Fabio Carrera and Professor William Michalson: For advising our project from the beginning of A term to the end of B term, and for the editing of the final report.

Silvio Meazza: For creating the project and presenting us his startup company, and informing the team of his past projects, current partnership, and plans for expanding his startup.

Daniele Modesto: For presenting the team his company and informing the team about their projects and future expansion.

Authorship

This report was written by Madison Gass, Anshika Jain, Patrick Mejia, and Antonio Torres, with all work distributed equally between group members. Each section was divided into four for ease of writing and edited as a group. In addition, advisors Fabio Carrera and William Michalson contributed greatly to editing efforts for our final report. ID2050 Professor Ingrid Shockey also edited our original proposal, from which our final report draws occasionally.

ABSTRACT

The goal of our project was to assist Crafted in its diversification efforts by assessing its expansion potential and opportunities for partnerships with local sustainable startups. To meet this goal, we worked with Crafted Italy to study their business model and observe their current project with Zero Farms, a vertical farming company. We observed the current project with Zero Farms, This is Frank, to research future products they can use to expand within the same industry in Venice. Finally, the team researched other cities that have similar attributes as Venice for Crafted to expand internationally.



EXECUTIVE SUMMARY

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VENEZIA

Executive Summary

Introduction

Venice has the potential to be an authentic center for economic growth and diversity for startups and local talent, but tourism has remained the main economic industry in the city since the 18th century. Venice needs start-ups to arise and stay in the city to **diversify the economy**, and among the organizations supporting this initiative include SerenDPT, an innovation incubator, and **Crafted Italy, a digital production company**. Crafted is a startup built and run by **Silvio Meazza**, co-founder of M&C Saatchi Milan. The company has the goal to “feed the world” using vertical farming, and Zero Farms’ ambition to expand globally aligns well with this. The future of Crafted is in expansion in Northern Europe, as well as partnerships with sustainable start-ups similar to Zero Farms.

Origin Story

At the height of the pandemic, Silvio Meazza had an idea to improve the outreach and impact of M&C Saatchi, and from this, he created Crafted, a digital communications company in Venice that produces marketing and communications to local partners. Crafted focuses on combining hard skills of marketing with digital production to **promote novel talent** at local universities, offering the opportunity to work full-time in Venice in an industry other than hospitality. Crafted has **three major goals**. The company wants to be the most effective digital production hub in Europe by providing services for its clients everywhere. Crafted also wants to **attract highly skilled people to Venice** to develop high-quality projects. Lastly, it wants to create sustainability projects in the field of digital production. The company is committed to producing the best digital assets for its clients using its “Zero Impacts Technology.” **The company’s newest mission, which will be a part of our focus, is to diversify its client base by assessing expansion potential and opportunities for partnerships with local sustainable startups.**

Crafted Italy is searching for **cutting-edge** partners ready to change the world with **new technology** and **big ideas**. Vertical farming shows promise in this area and has attracted the attention of Crafted Italy as a potential opportunity, specifically in partnership with a company called **Zero Farms**.

Executive Summary

Duplicating success in Venice elsewhere

Our sponsor, Silvio Meazza, requested that we search for cities in Northern Europe for future expansion. Our team created a list of criteria for **determining the best location for Crafted to expand**, which would enhance Crafted's opportunity for success. The team settled with the following criteria to decide which city would be best for expansion: **large university, high emigration rate of students, low accommodation costs, main job sectors for the city, near a large metropolitan city, lack of job diversity, unemployment rates, and university tie-ups and local startup partnerships.** After settling Crafted's criteria, we combined our research in a spreadsheet to differentiate potential cities for expansion. The cities that fitted the criteria were **Lund, Heidelberg, Bordeaux, Valencia, Edinburgh, Aberdeen, and Paris.** Crafted prioritize two key criteria to choose the city for expansion: **high unemployment rate and low hourly wage.** Two cities stood out: Valencia and Bordeaux. Both cities have close M&C Saatchi offices and partners, but going through the criteria, **Bordeaux is the best city for Crafted to expand.**

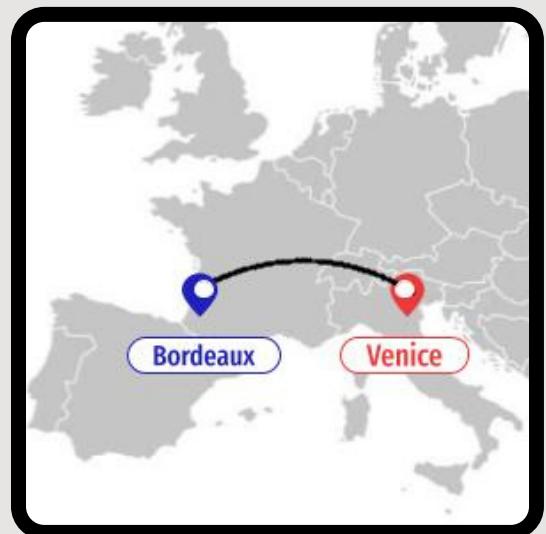


Figure ii : Venice to Bordeaux



Crafted came up with the consumer brand **This is Frank** to sell **aeroponically grown lettuce** from their partnership with Zero Farms. They will sell 80 grams of lettuce per package, and the cost of the lettuce and packaging is 60 cents. Crafted is leaning more towards a 2.39 euro price tag for the This is Frank salad. The cost covers the **labor and production cost**, in addition to Zero Farm's **seeding process, software, and water consumption**. With the knowledge gained on how Crafted and Zero Partnership worked on the salads project, our team translated the same process into the selected products discussed in the **case study**.

Figure iii : This is Frank Product (Crafted, 2021)

Executive Summary

Zero Farms currently partners with Barilla, producing basil and herbs for their ready-to-eat sauces. The question is whether other kinds of partnerships can work with Zero Farms to widen their path and **promote "locally grown products"** in Venice and elsewhere. As an example of this partnership, Crafted created a new brand in which they are attempting to market globally to supermarkets. After reviewing the financial opportunities of different vegetables, they settled on advertising **lettuce**. This decision was made because Zero Farms had already begun experimenting with lettuce, there was a **very large consumer market** for the product, and the duration of the lettuce cycle was very fast in comparison to other products.

Crafted Future Partnerships

The first product our team researched was **strawberries**. We researched the benefits of the fruit and found other bi-products that could be made from them. With the help of **Crafted's advertising** and Zero Farm's ability to make products quickly and in high volume, the product could be marketed very quickly as a **strawberry-infused lotion or antioxidant cleanser**. The second product that our team researched was **blueberries**. Similar to strawberries, blueberries can be used as **antioxidant cleansers as well as being food items**. Blueberries can grow quicker aeronomically, which reduces the production cost. By extension of the This is Frank brand, Crafted and Zero Farms can continue working together with a goal to "**feed the world**".



Figure iv : This is Frank Potential Products

Executive Summary

Zero Farms has expressed interest in **expanding their facility to Venice**, where they could continue to sell under the “This is Frank” branding in conjunction with Crafted Italy. Zero Farms needs at least 400 square meters in order to develop a fully functional office. The company also cares very much about **energy efficiency** and **creating low or zero carbon emissions**. All of these factors limit the possible locations for a Venice facility. The team found an 800 square meter warehouse for sale located approximately 12 kilometers away from the historical city of Venice in Favaro-Tessera, Mestre. The second of these abandoned properties are bell towers- there are currently around **107 unaffiliated abandoned bell towers** located throughout Venice, which have enough space to at least triple the current height of production infrastructure. Although Zero Farms' current infrastructure is not compatible with the required space for vertical towers, this project can **attract media from around the world** while preserving antique buildings in the historic city of Venice. Zero Farms currently uses hydroelectric power, but the CEO Daniele Modesto showed interest in biomass-based energy which aligns well with plans Venice Port Authority has to build an algae-based biomass reactor.

Conclusion

To tie our ideas together, we designed a **decision tree for Crafted** with ideas for their near future. By having two options, **“Expand to more Local Venetian Startups”** and **“Crafted 2.0”**, the company can look at a path to follow to determine where they want to spread their roots. Through this, Silvio Meazza would be able to “feed the world” and **preserve the student population** of cities by providing job opportunities to college graduate students.

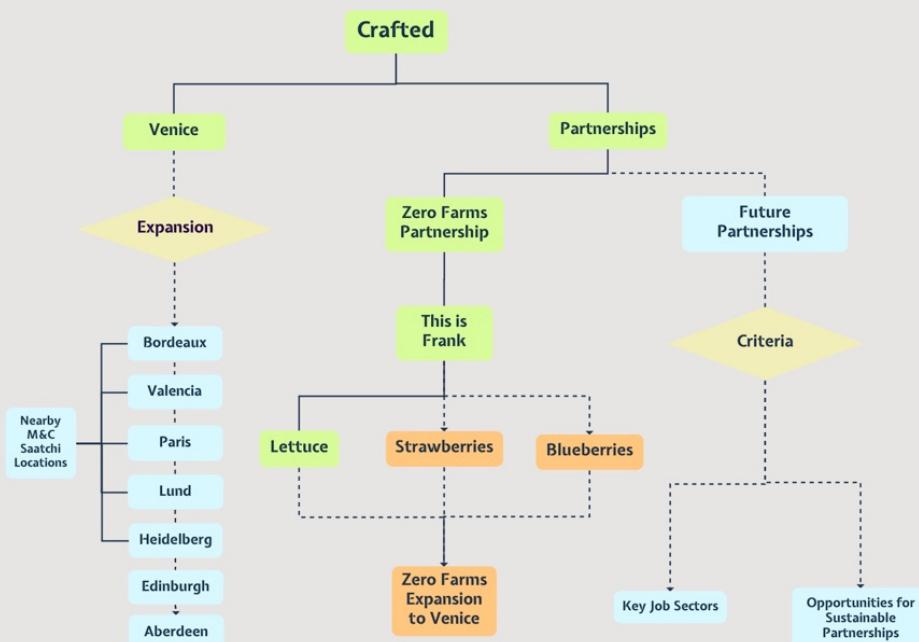


Figure v : Full Project Diagram

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CRAFTED
VENEZIA

INTRODUCTION

Venice, Italy has the potential to be a veritable hub of economic growth and diversity. It is for this reason that Venice is the perfect place to culture individualized talent and encourage start-ups to set down roots. **Tourism** has become the main source of income in Venice since the 18th century, attracting an average of **14 million visitors** into the city every year, as well as an estimated **2.3 billion euros in revenue** into the Venetian economy. Currently, with **tourism as the main source of income** in Venice, the residents that live in the city have expressed **concern regarding overcrowding**, making it difficult for residents to **find jobs in non-tourism industries**. This has contributed to the **decrease of the full-time resident population** in Venice by about **100,000 residents** over the span of the last **40 years** (Safe and Sustainable Tourism: 18). Consequently, the Venetian **economy needs start-up** businesses to arise and remain in the city. Among the organizations supporting this initiative include **SerenDPT**, an innovation incubator, and **Crafted**, a digital production company.

"Venice is a beautiful, very well-known, but extremely fragile city/environment. Settling a company in Venice means giving the town potentially new residents, shops, families, and therefore fighting its strong decline towards a "Disneyland-like" 100% touristic venue. Anything happening here has a strong potential media value worldwide"

- S. Meazza, personal communication. 9/9/2021



CRAFTED
VENEZIA

INTRODUCTION

Crafted Italy is a start-up in and of itself, built and run by **Silvio Meazza**, who is quoted above describing Venice. Meazza, originally of Milan and the well-known marketing company **M&C Saatchi**, moved to Venice and created Crafted in collaboration with the **Universita Ca' Foscari**. The company hosts a mix of designers, project managers, code masters, and content creators, all university students educated by Crafted and Ca' Foscari, intent on using their newly acquired **skills** to meet their **clients' needs**. They are based in H3, a renovated church owned and operated by **SerenDPT**, which works as an incubator aspiring to create **100 new jobs** in the city of Venice through **start-up development**. Crafted is the one of the first of hopefully many start-ups to utilize SerenDPT's space.

Venice has a lot to offer new start-ups. It is one of the most **dynamic** cities of the Italian regions, drawing close to its ancient culture and vast economic development. The city is strategically **located** for **business development**; not far from major foreign cities like Paris and London, and only a car ride away from major Italian cities like Milan and Bologna. Located an hour away from Venice, within the small city of Pordenone, is Zero Farms, an innovative contractor in the vertical farming industry. Meazza developed a partnership with **Daniele Modesto, CEO of Zero Farms**, as soon as he saw the technology they were and are currently using in order to grow and deliver produce, as well as their ambition to **expand** on an **international level**. Within this partnership, Crafted supplies marketing and product ideas and uses their resources to take those ideas from the brainstorming stage to reality. Zero Farms supplies the technology to grow and package these products, and Crafted receives a percentage of the profit.

Vertical farming is promising for its process of growing food indoors in a **climate-controlled environment**, providing ultimate efficiency and sustainability. As it is indoors, it is a relatively transportable process in comparison to normal field growth or even greenhouse growth, allowing diverse food to be sold globally. Zero Farms will not sell to consumers outside of a **100 kilometer radius** of their warehouse as a matter of honor- all produce grown will be sold fresh. Crafted has the goal to “feed the world” using vertical farming, and Zero Farms’ ambition to expand globally aligns well with this. The future of Crafted is in expansion in northern Europe, as well as partnerships with **sustainable start-ups** similar to Zero Farms.

The below diagram represents the trajectory of our research: beginning with the origin of our sponsoring company, Crafted Italy, we then progress through Crafted in Venice and elsewhere, Crafted's current and future partnerships, and finish with the expansion of one of those partnerships into Venice for mutual future success of both companies.

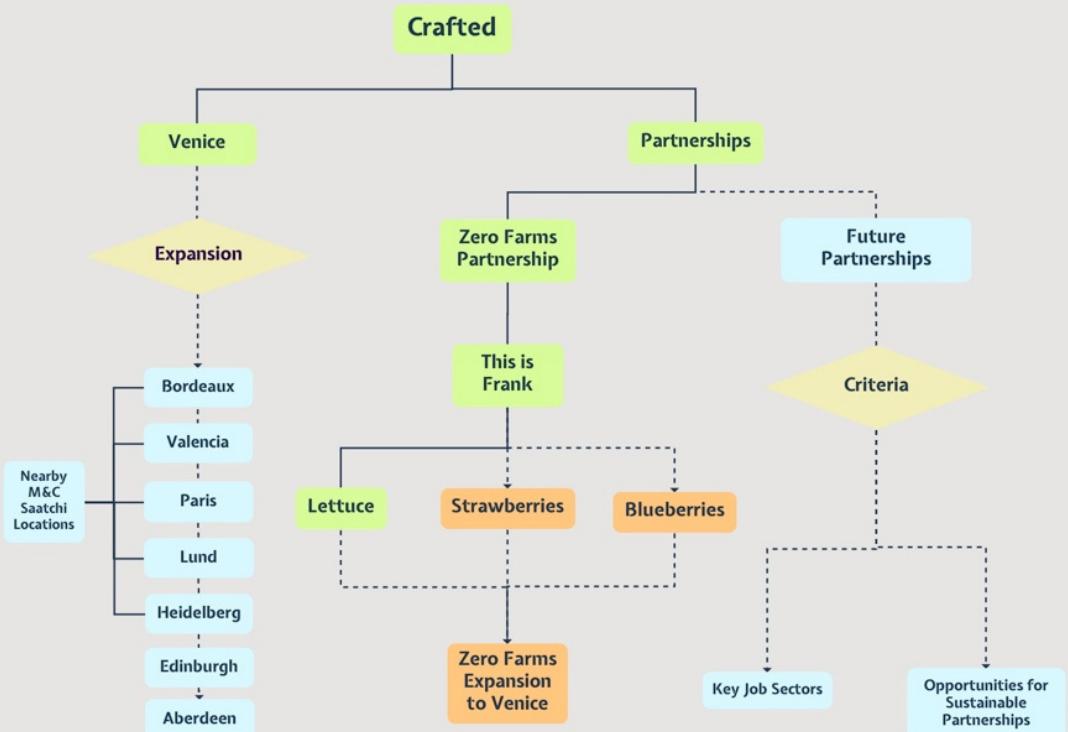


Figure 1: Full Project Diagram

CRAFTED'S ORIGIN STORY

Chapter 1

Crafted Italy

Crafted is a **digital communications company** located in Venice, created by Silvio Meazza in order to produce marketing and communications for the local clients of the Milan **M&C Saatchi** branch. Meazza is the co-founder and digital producer for the prominent marketing company, starting in 2010 through to the present. During the height of the **COVID-19 Pandemic**, while Italy was under lockdown, Meazza had an idea to improve the outreach and impact of M&C Saatchi. This idea finally came into fruition in the form of Crafted (Silvio Meazza, n.d.).

The company works with M&C Saatchi to develop and promote the innovations designed at the Milan location. Crafted focuses on combining the hard skills of marketing and digital production by encouraging **novel talent at local universities** to pursue the field while offering an opportunity to work full-time in Venice in an industry other than hospitality. Some alumni of their **masterclass program** are shown in Figure 3. Crafted **creates jobs** in five different domains: Specialized Design Services; Software Publishers; Professional, Scientific, and Technical Services; Commercial art; and graphic design software (Crafted SRL Profile).

The company has had clients across various industries and regions, but always follows the same design phrase with each new project: "Brutal Simplicity of Thought" (M&C Saatchi). Some of their **previous clients** include BMW, Mini, General.it, and Geox Respira (M&C Saatchi). Crafted was created to help with the **product creation** side of marketing, allowing for the parent company M&C Saatchi to put their focus into idea development.



Figure 2: M&C Saatchi Milan

Crafted's Launch in Venice

Crafted Italy currently partners with Universita Ca Foscari Venezia, Academia di Belle Arti Venezia, Istituto Universitario Salesiano Venezia, and the IAB Certification Agency, all of which help to enable the **masterclasses** Crafted offers students. The company employs frontend and backend developers, development operations directors, data engineers/scientists, e-commerce specialists, and cloud architects, all of which are proficient or are taught how to be proficient in both the hard and soft skills necessary for technical marketing. Crafted also employs UX/UI & Web designers, Product designers, Visual designers, Art directors, and Brand designers for the artistic part of marketing development. PMOs, Digital producers, Project managers, Digital Solution Architects, and Production directors run the business side of the company. Content writers, copywriters, transcreation experts, sentiment analysts, validators, and fact-checkers work to meet clients' expectations while following the idea design created by M&C Saatchi (Crafted.IT). The company also **hires** the **students** through its masterclass who assist **M&C Saatchi clients in Milan**.



Figure 3: Crafted Master Class Alumni (Crafted.it)

Crafted's First Steps in Venice

Crafted has three major goals. The company wants to be the **most effective digital production hub** in Europe by providing service for their clients everywhere. Crafted also wants to attract highly skilled people to Venice to develop high-quality projects. Lastly, it wants to **create sustainability projects** in the field of **digital production**. The company is committed to producing the best digital assets to their clients using their "**Zero Impacts Technology**".

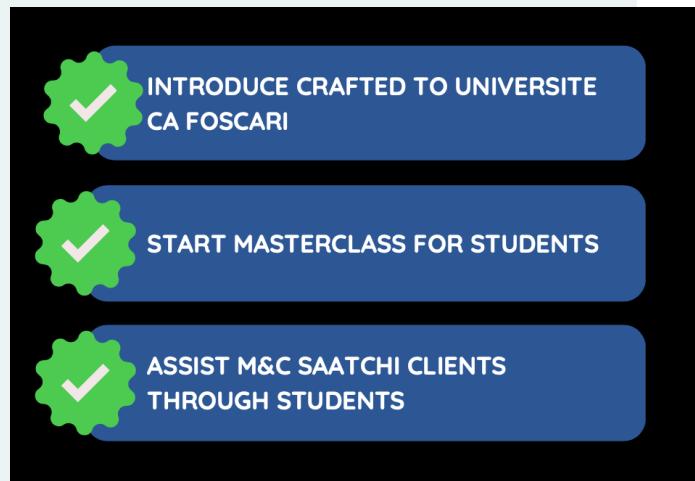


Figure 4: Crafted's Next Steps

Crafted's Success in Venice

Using these ambitions, Crafted has offered its services to multiple high-end brands such as **Sky, DeLonghi, Vodafone, Geox, and Leroy Merlin**. By using their one-production platform, **Rio**, they are able to deliver efficiency and control to their clients all over the world. It is a collaborative space where all their digital production projects are available on a single dashboard, and digital reports and insights are always updated. Crafted manages **all digital communication, provides plug and play platforms to sell content, and creates landing pages** and digital campaigns for all its clients. Currently, Crafted has 10 masterclass students and 16 employees and by 2021, the company is going to generate **1 million euros in revenue**.

The **company's** newest **mission**, which will be a part of our focus, is to **diversify their client base** by assessing Crafted's expansion potential and **opportunities for partnerships with local sustainable startups**. (Crafted.IT).

of Masterclass Students

10

of Employees

16

Major Clients



2021 Revenue

1 Million €



Zero Farms

Crafted Italy is searching for cutting-edge partners ready to change the world with new technology and big ideas.

Vertical farming shows promise in this area and has attracted the attention of Crafted Italy as a potential opportunity. Vertical farming is a multilayer indoor crop production system in which all growth factors are controlled. Light, temperature, humidity, carbon dioxide concentration, water, and nutrients are all growth factors that are controlled to ensure high quality and quantities of fresh food. The system can run without the **use of pesticides** since these farm structures are located in an indoor controlled environment where diseases and pests are kept out by a high level of hygiene and monitored non-chemical disinfectants (SharathKumar, Heuvelink, & Marcelis, 2020). Furthermore, the vertical farming systems are very sustainable concerning water and fertilizer uses, but energy consumption remains a great challenge.

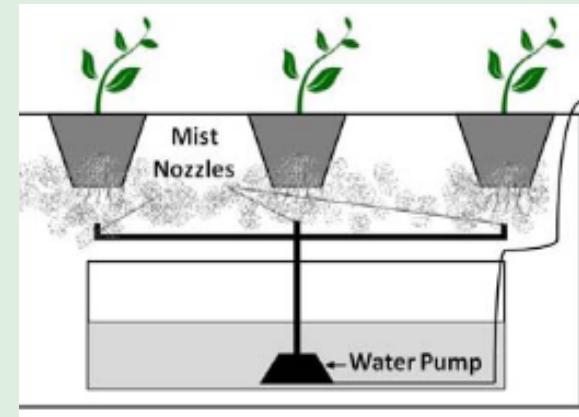


Figure 5: Aeroponics (Birkby, 2016)



Figure 6: Zero Farms (zero.it)

Vertical Farms exist in different forms, from large warehouses to multilevelled wall-mounted systems. They are growing systems that use three soil-free systems that provide nutrients to crops - hydroponics, aeroponics, and aquaponics. The **Aeroponics** system is the most efficient plant-growing system for vertical farms because it uses **90 percent less water** than the best hydroponics. This is because the system uses a **mist environment with no soil** to grow its plants, making the system substrate free. Furthermore, it has been shown that the aeroponic system uptakes more minerals and vitamins, making the plants grow healthier and potentially more nutritious (Birkby, 2016).

Zero Farms has been able to make its business model more accessible, reliable, and ultimately scalable. Zero Farms uses an **aeroponic system with no substrate** as their type of vertical farm, and they build from the base concept of this type of vertical farm to create their own custom one depending on the customer.



Figure 7: Zero Farms (zero.it)

Zero Farms has cracked the code! They have been able to create a sustainability equation to produce products. In order to succeed, the company had to start from ZERO (Zero Farms). The CEO of Zero Farms, Daniele Modesto, visited Expo Milano in 2015 and noticed basil growing in multiple layers inside a glass cube with LED lights, the embryonic prototype of vertical farming. Daniele tracked down its designer, **Paolo Battistel**, one of Europe's greatest experts in soilless cultivation and he later became the scientific supervisor of Zero Farms. Finally, in 2018, Zero Farms was launched in Pordenone, Italy (Vertical Farm Daily, 2021). Their approach is to do everything from scratch. By truly understanding the sustainable equation, the company builds every single hardware and software component. In 2021, Zero Farms entered the **agriculture technology** market by creating an industrial vertical building system called **Zero Modular Architecture**.

Root

Zero Farms

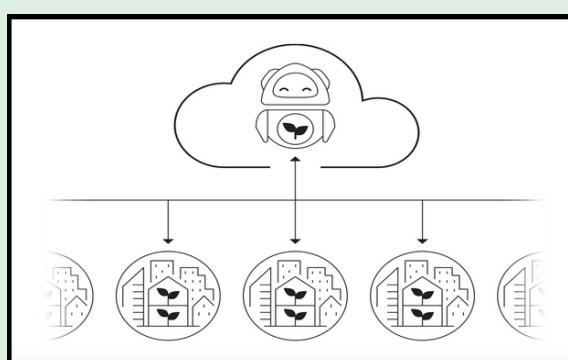


Figure 8: Company Robot, Root (Zero Farms)

Root is the software component and one of the most valuable parts of Zero Farms technology, but the hardware component is very creative in and of itself. It is implemented using specific mechanical infrastructure developed for each individual crop. However, Zero Farms uses square plastic trays divided into grids in order to culture each seed. These seeds are formed into identical pills for controlled sowing, which is done using a machine developed to lay each seed down evenly spaced. Together, the software and hardware components are state of the art.

Root, the company cloud program, handles all the network operations for the company, as seen in Figure 8. She is designed to learn from different resources like farmers, agronomists, and engineers to create a program where she "hacks yield and flavor, **controls the environment**, sees the grow, gathers data up to the points she can predict what's going to happen" (Zero Farms). Furthermore, Zero Farms scientists and botanists can control the parameters, layers, irrigation, lighting, HVAC, and power usage of the Root cloud system when they need to prepare a different crop.



Figure 9: Zero Farms (Agrifood Tech, 2021)

By having this advanced technology, Zero Farms is focused on building the largest vertical farming capacity more efficiently with the help of Root. The cloud program explains the details of cost as well as the **density and growth cycle** of each crop. Their approach is to have a "**distributed but a unifying growing platform**" by making sure that they have the optimal resources and environment to create the optimal product for their customers.

Since Zero farms is an Italian-based company, and they take pride in their legacy. The scientists and engineers of the company work hard to maintain the Italian reputation of mastery in food quality and have spent **6 years in R&D** research regarding vertical farming in order to do so. For this reason, Zero Farms is **not interested in selling their technology**; they do, however, **see partnerships through joint investments as the ideal pathway for expansion**.

Partnership

Zero Farms & Crafted

The organization has already forged a partnership with **Barilla**, which opened up its ventures to vertical farming through its innovation arm Blu1877. Zero Farms focuses on producing vegetables and herbs such as **basil** for the Barilla's **ready-to-eat sauces**. With this partnership, it was noted that "Barilla and Zero have set themselves the goal of perfecting together a path that begins with research and development and then moves on to preliminary studies of industrial feasibility". (Vertical Farm Daily, 2021). The question is whether other kinds of partnerships can work with Zero Farms to widen the path and promote "locally grown products" in Venice and elsewhere.

As an example of this partnership, Crafted created a **new brand** in which they are attempting to market globally to supermarkets. Zero Farms and Crafted created a product called "**This is Frank.**" This is Frank is packaged lettuce that uses phrases that hints the aeroponic systems that Zero Farms uses in their agricultural rooms. The purpose of this was to present the This is Frank brand and provide an immediate connection to the vertical farming system. By doing so, the product would immediately catch the eye of the consumers at the supermarkets and they would then read more about the product and the "This is Frank" brand.

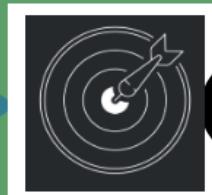
This idea was presented by Silvio to Zero Farms as an opportunity to create a **mutually beneficial partnership** between a vertical farming company and Crafted. Silvio met the CEO of Zero Farms, **Daniele Modesto**, through Ca 'Foscari University where they began devising ideas on what products would be most beneficial for Zero Farms to produce and for Crafted to advertise to supermarkets globally.

After reviewing the financial opportunities of different vegetables, they settled on advertising **lettuce** as their product. The decision was made because Zero Farms had already begun experimenting with lettuce, there was a very large consumer market for the product, and the duration of the lettuce cycle was very fast in comparison to other products.

Crafted reviewed the cost of production of the lettuce and all of the resources required for Zero Farms to produce it. They began reviewing how they were going to market the products and decided to create a general formula for the marketing of This is Frank.

THIS IS FRANK.

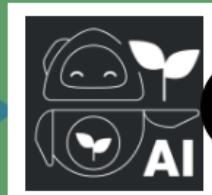
Steps to Create Partnerships with Zero Farms



1

The Partner Set the Goals

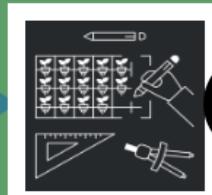
The partner reaches out to Zero Farms and tells them what crops to grow? The quantity? Logistics? Packaging?



2

Hack the Crop

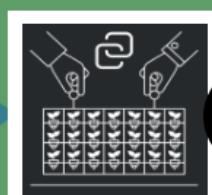
After the brief, Zero Farms research and create the specific hardware and softwares to unlock the optimal recipe. They are able to do this by utilizing their large databases where the data is processed by ROOT.



3

Design the ZERO Farm

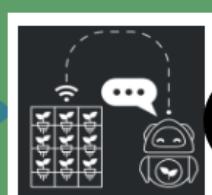
They build smaller modular industrial units that are easily installable. Along with the technical design, the company is able to project the financial performances of the project through crop hacking.



4

Execute with the Partner

At this stage, they execute the project with the partner by exploiting it to generate revenues. Zero Farms takes care of all the technicality and when it is time to scale up, they are able to do it in the blink of an eye!



5

Improved Performance

As ROOT gathers data from the production process, the robot is able to improve the overall performances of the production!

THIS IS FRANK.

Crafted came up with the consumer brand **This is Frank** to sell **aeroponically grown lettuce** from their partnership with Zero Farms. They will sell 80 grams of lettuce per package, and the cost of the lettuce and packaging is 60 cents. Crafted will also sell different types of lettuce to have more variety of their salad's product. even though This is Frank salads contain different types of lettuce, the production cost and packaging are still fixed. The final price of the product is still under discussion. There are three prices being discussed: **2,39, 2,19, or 1,99 euros** for the **final product price**. Although three prices are being discussed, Crafted is leaning more towards the **2,39 euro price tag** for the This is Frank salad. The cost covers the **labor** and **production cost**, in addition to Zero Farm's seeding process, software, and water consumption. The amount of lettuce production depends on the aeroponic module that Zero Farms provides.

Under this brand name, Crafted wanted to expand This is Frank with different products that can have **value added** to them. With this, our team researched different crops that can potentially be grown in the custom aeroponic vertical system that Zero Farms has. After confirming if the crops can be grown, the team found an appropriate **market** that Crafted can tackle. Furthermore, for the selection of the next possible product, the team needed to research the **location** where this product can be sold. With the knowledge gained on how Crafted and Zero Partnership worked on the salads project, our team translated the same process into the selected products discussed in the case study.



Figure 11: This is Frank Product (Crafted, 2021)

DUPPLICATING SUCCESS IN VENICE ELSEWHERE

Chapter 1

CRAFTED 2.0

Our sponsor requested that we search for cities in Northern Europe for **future expansion**. Our team brainstormed a list of criteria for determining the best locations for expansion that would enhance the opportunities for success in Crafted's creation of Crafted 2.0. Our sponsor checked our list and listed the most **important criteria** from it. After reviewing many different factors that could help Crafted succeed in Venice, our team settled with the following criteria to decide which city would be best for expansion:

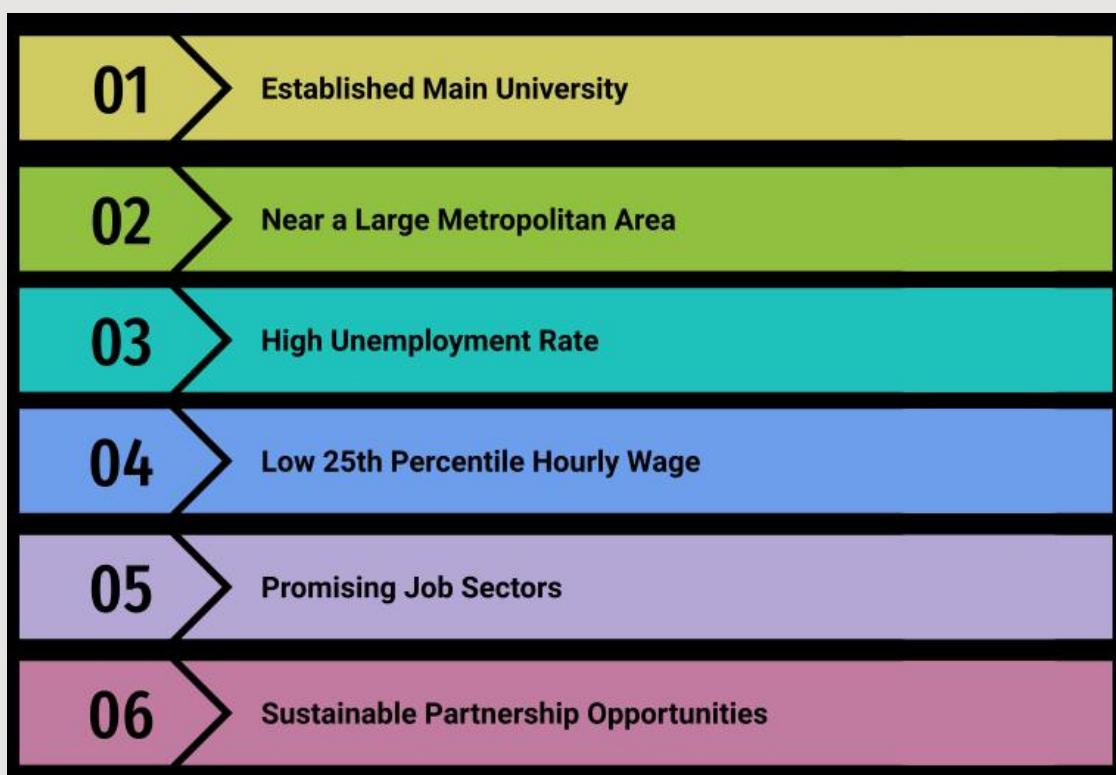


Figure 12: Criteria for Expansion

DUPLICATING SUCCESS IN VENICE ELSEWHERE

Our team used our research to create a list of cities that Crafted could expand to. Once our sponsor reviewed the list, the next step was to look for locations that Crafted already had connections with. After establishing that some of the cities that were listed had **no immediate connections**, we were able to remove some of the cities that we brainstormed. The cities that were left are **close to a M&C Saatchi location**, which gives Crafted an immediate connection to the city and some of the clients that the M&C Saatchi location has partnered with already. This led to our finalized list of cities:

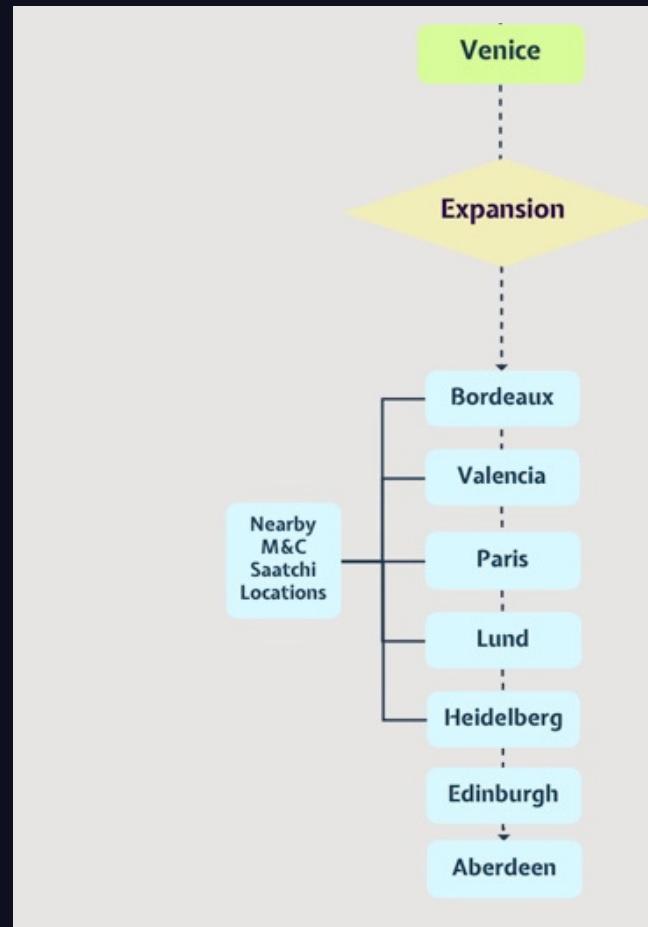


Figure 13: City Expansion Diagram

POTENTIAL CITIES FOR EXPANSION

Crafted 2.0

City Name	Venice	Lund	Heidelberg	Bordeaux
Population	261,905	91,940	160,355	969,000
Main University	Universite Ca Foscari	Lund University	Heidelberg University	Bordeaux University
University Students	21,000	44,000	28,649	56,000
Graduating Students	5250	11000	7162	14000
Large metropolitan cities nearby (within 300 km distance)	Milan	Copenhegan Neckahr City	Frankfurt	San Sebastian
25th percentile hourly wage (college students)	10€	13.76€ (138 SEK)	13€	12.50€
Key Job Sectors	Tourism, Manufacturing, Construction	Educational institutions, hospitals, packaging and manufacturing industries	Tourism, Heavy Manufacturing and Hospitality	Tourism, Wine, Laser and Plasma Tech Fish and Agriculture
Unemployment Rate	6.20%	3.70%	5.00%	8.10%
Monthly Cost of Living (€)	1,600	1,600	1,800	1,753
Opportunities for Sustainable Partnerships	SerenDPT	BID Malmo	IASP Global Directory	Entrepreneurship encouraged Aquitaine

City Name	Edinburgh	Aberdeen	Valencia	Paris
Population	542,599	229,060	800,215	11,079,000
Main University	Univeristy of Edinburgh	Robert Gordon University	University of Valencia	University of Paris
University Students	35,375	17,000	51,058	64,100
Graduating Students	8844	4250	12765	16025
Large metropolitan cities nearby	Haddington Roslin	Glasgow	Barcelona	London
25th percentile hourly wage (college students)	24.23€ (20.4 GBP)	21.38€ (18.2 GBP)	10.00€	13.90€
Key Job Sectors	Digital Tech, Tourism, Global Business Services	Tourism, Oil and Gas, Renewable energy	Tourism, Ceramic, Services, Automotive	Services and commerce, transportation, construction, tourism
Unemployment Rate	4.40%	4.00%	17.26%	8.10%
Monthly Cost of Living (€)	1,600	1,500	1,125	1,955
Opportunities for Sustainable Partnerships	Iceni Earth	Pawprint, Net-Zero Narrative, Opportunity North East RGU - carbon net zero narrative	Pycno, Quibim	Zero Ganchis, GreenOn, Green Republic, EcoSummit Paris

Figure 14: Data Researched for Expansion

Crafted's Next Steps...

Crafted 2.0

When choosing the **city for expansion**, we looked at the excel sheet data with our sponsor. The **hourly wage** and **unemployment** weighted most when finding the right fit for Crafted. This eliminated cities like Lund, Heidelberg, Edinburg, and Aberdeen. In an expansion point of view, it is important to find a location that has **a high unemployment rate**, since that will create less competition for Crafted in the market. It will also be easier to hire people as there would be a lack of high skilled jobs. This also correlated with the **hourly wage**. Crafted is looking for a place where it is feasible for them to hire locals and support their lifestyle. After a meeting with our sponsor, we were able to eliminate the cities that did not meet the criteria and the three cities that we discussed further were Bordeaux, Paris, and Valencia. Since Silvio Meazza does not want Crafted 2.0 to be in a large metropolitan city, we came to a consensus that Bordeaux would be a better option than Paris. Next, we discussed more about the connections that Silvio has with other organizations in Spain and France. Since M&C Saatchi has established sites located in Paris, Barcelona, Madrid, and Sevilla, this provided new cities that Crafted could expand into. Crafted has more connections in France compared to Spain. This allows them to **expand** into a **familiar client base** and provides **more opportunities for success**.



Figure 15: Bordeaux University (u-bordeaux)

Based on the criteria listed above in Figure 12, the **next city that Crafted should expand into is Bordeaux, France**. The city is closer to Venice than Valencia, has an **unemployment rate of 8.10%** with a **25th percentile hourly wage of 12.50€**. The economy of Bordeaux is highly dependent on the wine, tourism, and agriculture sector, which will give Crafted more opportunities to partner with local, sustainable startups. Bordeaux highly encourages startups in the city and Crafted would be the perfect company to help startups advertise their company and create partnerships with them. In order to launch Crafted 2.0 in Bordeaux, the first step that Crafted has to do is introduce themselves to local large universities like Bordeaux University.



Figure 16: Wine Image (Robillard, 2021)

Crafted needs to present their mission and create a partnership between the universities, where they can then hire students after graduation. Since there is an **M&C Saatchi office in Paris**, dispersing Crafted to Bordeaux would be helpful. Silvio Meazza plans on partnering with M&C Saatchi to hire new locals and then expand to university aspects. The connections between the two companies will help Crafted expand easily to Bordeaux and create connections and partnerships with other local start ups. By expanding to Bordeaux, Crafted will be able to **provide jobs to university graduates** and **preserve the young, emigrating population** in the city. Through this, we will be able to create Crafted 2.0 globally and help Silvio Meazza "**save the world.**"

Crafted's Next Steps: Bordeaux Edition

- INTRODUCE CRAFTED TO BORDEAUX UNIVERSITY**
- START MASTERCLASS FOR STUDENTS**
- ASSIST M&C SAATCHI PARIS CLIENTS THROUGH STUDENTS**

Figure 17: Crafted's Next Steps in Bordeaux

In **Bordeaux**, Crafted can work with entrepreneurial organizations like **Aquinum** and **Bordeaux Entrepreneurs**. These associations focus on helping entrepreneurs with their startups. By partnering with them, Crafted will be able to provide its **digital marketing services** to these startups while creating **connections** and **brands**. Aquinum is partnered with companies like **Tedx Bordeaux, French Tech, and Qonto**. Partnering up with these organizations in Bordeaux will increase Crafted's client base rapidly. These organizations will also **market Crafted** as a digital production hub.



Figure 18: Aquinum Logo (aquinum.fr)



Figure 19: Bordeaux Entrepreneurs Logo (bordeaux-entrepreneurs)

After expanding to Bordeaux, Crafted plans on branching out to **Valencia**, Spain soon after. Through the connections with **M&C Saatchi Barcelona** and **Madrid**, Silvio Meazza will use the same approach to create connections with the local universities and implement sustainable partnerships. Crafted has the intentions to expand to **Bordeaux and Valencia** around the **same time** to have multiple opportunities to make connections.

Chapter 3:

THE FUTURE OF CRAFTED'S PARTNERSHIPS

To **expand Crafted's business** locally, we took a look at how Zero Farms can translate its vertical farming structure to Venice. After learning more about Crafted's partnership with Zero Farms, our team decided to come up with an idea for **local expansion**. Following the This is Frank lettuce project, we decided to research spaces for Zero Farms in Venice, and how residents of Venice could benefit from a **new location of Zero Farms**.

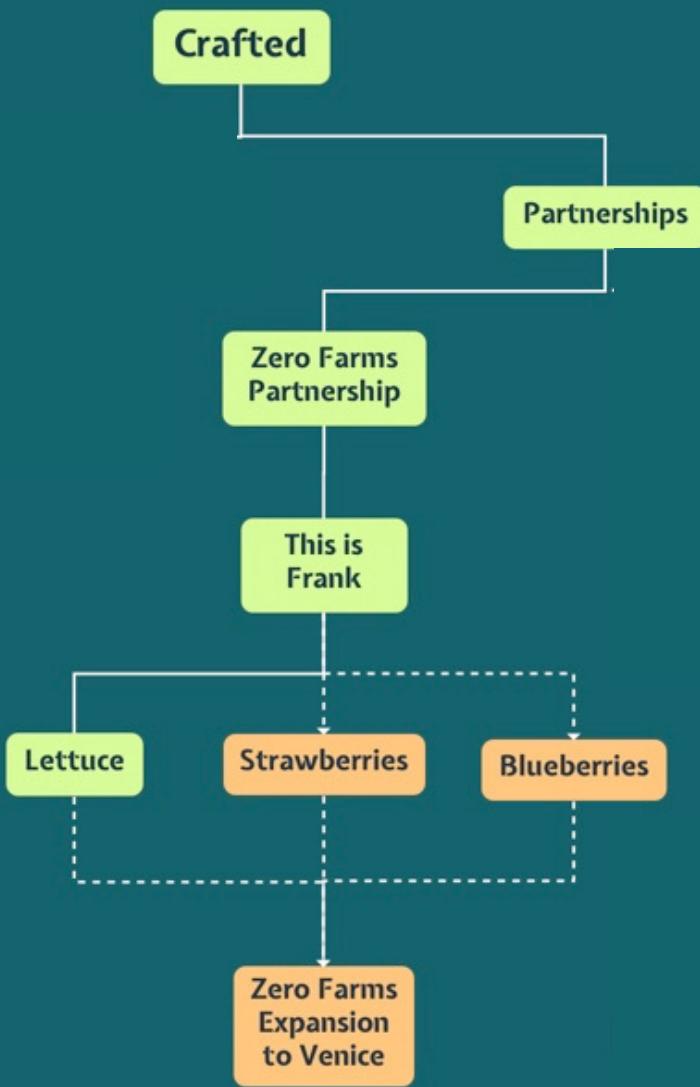


Figure 20: Diagram of Crafted's Partnerships

The Four Considerations of Produce Selection

1

Technology

Root is capable of growing many different types of produce, but there are some mechanical limitations. The final height of the plant, for example, or air pressure control.

2

Market

Will this product be most successful sold to one company or to multiple supermarkets? This will determine the quantity of produce that needs to be grown.

3

Location

Zero Farms sells to consumers within 100 kilometers of their growing facility. Does a new facility need to be built in order to sell to a specific consumer, and if so which industrial players will need to be convinced? Does limiting the consumers change any of the previous steps?

4

Funds

Convincing financial investors is easy once the previous three steps have been defined! The value in Zero Farms products has never been lost on any previous financial investor.

"GOOD FOR PEOPLE, GOOD FOR THE ENVIRONMENT, GOOD FOR BUSINESS."
-DANIELE MODESTO ON VERTICAL FARMING

CASE STUDY

Potential Products

In order to discuss Crafted's next steps and future aspirations, we met with our sponsor to review **Crafted's current business plan**. We learned about their current partnerships and projects with the local startups. After diving deeper into the "This is Frank" partnership with Zero Farms, our team decided to come up with another project idea for their collaboration. By using a case study approach, we discussed **what products** Crafted should focus on, **how long** this project would take, and **how the products could benefit the consumer** rather than just providing a food product. This detailed study would be beneficial for Crafted's CEO to guide the company's next steps with Zero Farms.

The first product our team researched was **strawberries**. We researched the benefits of the fruit and found other bi-products that could be made from them. What we found was that strawberries can be used for **cosmetics** as well as for **food**. Since strawberries are very rich in **vitamin C**, **contain salicylic acid and ellagic acid**, they help reduce hyperpigmentation and dark spots. The fruit removes excess oil from the skin, which results in less acne, less breakouts and ultimately clearer skin. With the help of Crafted's advertising and Zero Farm's ability to make products quickly and in high volume, the product could be marketed as a strawberry infused lotion or antioxidant cleanser. This would present a very **large profit margin** compared to the production cost required for the strawberries.



Figure 21: This is Frank Strawberries
(crafted.it)

CASE STUDY

Potential Products

The second product our team researched was **blueberries**. Similar to strawberries, blueberries have many applications outside of just being eaten. We found that blueberries can create a very **strong cleanser** due to its **high level of antioxidants**. Blueberries can help reduce premature aging of the skin and can also naturally boost collagen synthesis in the body. Similar to strawberries, blueberry bi-products such as antioxidant cleansers can help reduce acne related inflammation and studies have shown that some blueberry cosmetics have lead to healthier skin and reducing conditions such as eczema and psoriasis.

Blueberries can also be grown **very quickly aeronomically** as opposed to growing it in a field outside. This would mean the **production cost** of blueberries would be **even less**. Using Crafted's marketing and advertising and the brand, This is Frank, **strawberries and blueberries** can provide Crafted and Zero Farms a great opportunity to continue working together and "**feed the world.**"



Figure 22: This is Frank Blueberries
(Crafted.it)

Application in Venice

Zero Farms

Zero Farms operates under a **strict honor code** that is clearly reflected in the "This is Frank" branding produced by Crafted. One of the biggest benefits of vertical farming is the ability to grow produce at **any location**, and therefore sell fresh food without extended transportation times (which tends to result in less than fresh food). Zero Farms sells only to consumers within a **100 kilometer radius** of their growing facility; this ensures optimal freshness of produce, but does limit the consumer base they are currently able to supply with product. **Zero Farms has expressed interest in expanding their facility to Venice**, where they could continue to sell under the "This is Frank" branding in conjunction with Crafted Italy. Venice's position as a highly viewed city worldwide offers an opportunity to bring much positive media attention to Zero Farms and Crafted Italy.

Currently, the consumption of lettuce in the city of Venice is providing a promising consumer base for the current "This is Frank" lettuce product. In order for Zero Farms to expand to Venice, there are a few **key factors** that they must consider:

- 1.) The company cares very much about **energy efficiency** and creating low or zero carbon emissions. The new facility for Zero Farms must have space for some type of renewable energy source.
- 2.) Although vertical farming as a whole requires 99 percent less space than traditional field farming (Eden Green Technology), there are **limits to how small the farm can be scaled down**, especially in order to produce crops in the quantities Zero Farms is looking for.
- 3.) On top of the mechanical infrastructure limitations, Root itself needs **large computer servers** in order to function. Zero Farms requires these servers to be owned and operated by their own personnel.

Zero Farms currently uses **hydroelectricity** as a means of energy production for their facilities, according to Daniele Modesto in an interview. However, in this same meeting, Modesto mentioned Zero Farms' future interest in **biomass-based energy production systems**. Currently, the Venice Port Authority has announced a plan to use the algae coating in the Venetian lagoon as fuel for a new **biomass reactor** with the potential to power the whole city (Port of Venice). If Zero Farms remains interested in the continued exploration of biomass-based energy systems, then **the potential to use such methods in Venice is high**, especially if it is already being done by the city itself.

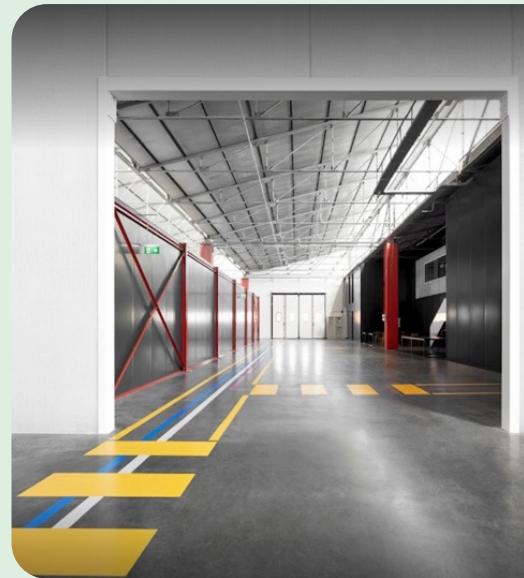


Figure 23: Zero Farms Warehouse (Zero Farms)



Figure 24: Mazzorbo Bell Tower (Taccioli, 2021)

Using their technology, Zero farms could help with the **preservation of Venetian culture** through the rehabilitation of architectural buildings that would otherwise continue to erode. Overall, Zero Farms needs at least **400 square meters** in order to develop a fully functional office, as well as house computer servers to run Root. Unfortunately, warehouses such as this are few and far between within the historic city of Venice; there are currently three of these warehouses listed for sale commercially, and one is on the island of Burano, not in the historic city. **The lack of adequate warehouses that fit the space requirement** for Zero Farms suggests a need to look deeper into other options. Our recommendation is the use of **unaffiliated abandoned bell towers**.

There are currently around **107 unaffiliated abandoned bell towers** located throughout Venice, which is data collected from a previous study done by WPI students. Bell towers have plenty of vertical space, enough to at least **triple the current height** of production infrastructure. The only drawback is that the infrastructure currently used by Zero farms would need to be reworked. Although there are no limits to the number of farming trays that can be stacked, the length of the growth trays would need to be readjusted. However, a project such as rehabilitating abandoned bell towers within the city of Venice in order to bring fresh produce to the city would **generate** enough **worldwide media value**, and therefore profit, that it would make up for the time and money needed to shorten the farming trays. Rehabilitating bell towers will help to preserve original Venetian architecture, and therefore culture, by **bringing back its past beauty**.

CONCLUSION

In summary, it is our suggestion that Crafted's efforts to diversify their business should begin with **expanding to Bordeaux**, before continuing expansion into another Northern European cities. In addition, "**This is Frank**" can be expanded by adding products other than lettuce. Our suggestion is **strawberries and blueberries**, as they both have great product value as "This is Frank" supermarket produce as well as in other product industries. Finally, **expanding Zero Farms into Venice** could be beneficial to both Crafted Italy and Zero Farms, bringing eyes to both companies. It will also **benefit** the city itself, by **providing Venice with fresh, local produce**.

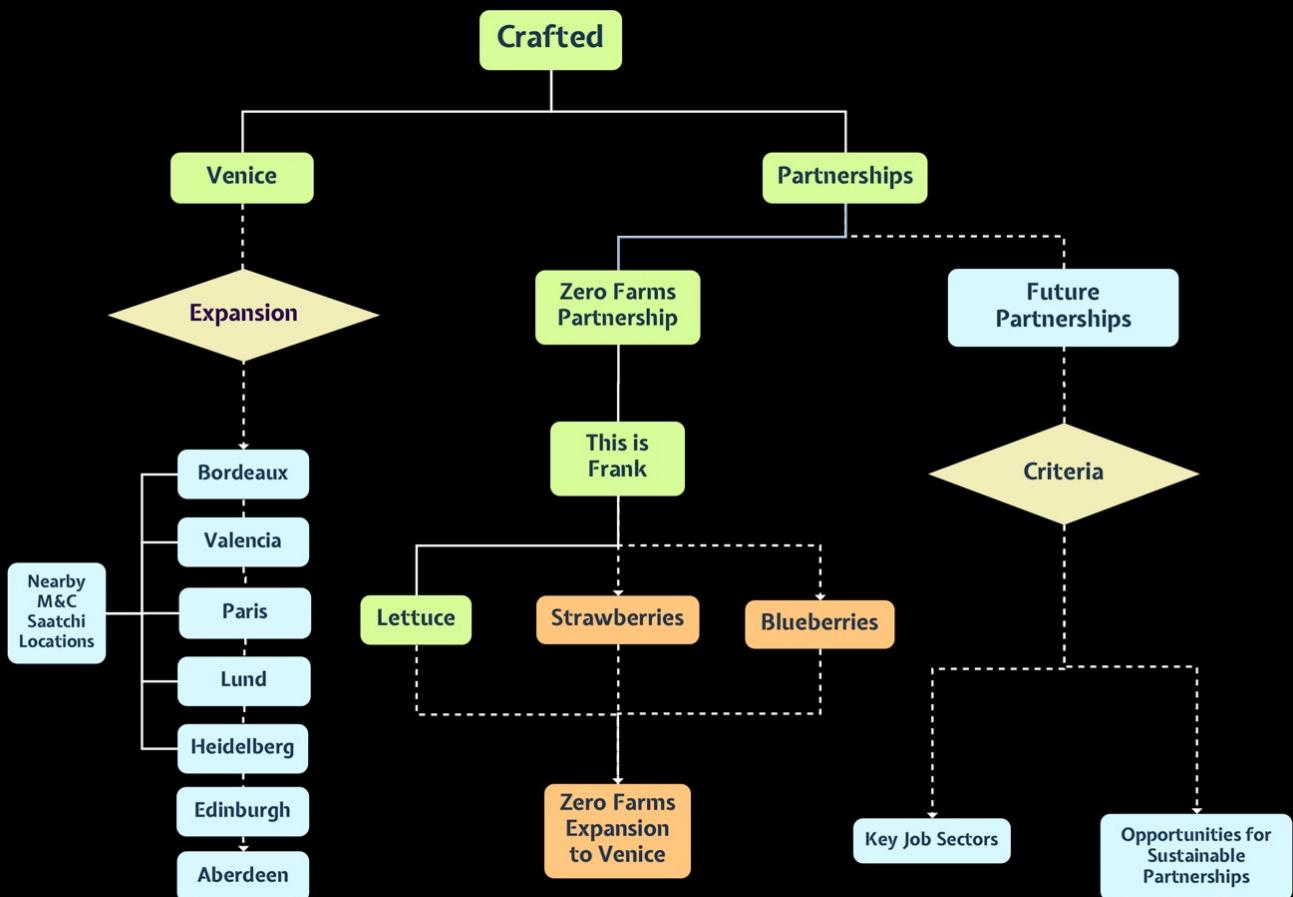


Figure 25: Full Project Diagram

Meet
OUR TEAM



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