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KUNNO
Business Plan

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ABSTRACT

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<p>The aim of this research was to write down a business plan focused on the relation between housing and energy savings possibilities. After several drafts, different ideas/possibilities and discussions, the business idea was established in Cork, south of Ireland and mainly focused on renovation of houses and apartments. This will enable owners to save money and even create a profit out of their renovations, while improving the efficiency of their houses either in energy or life experience. The service provided by the company will be a full expertise on possible installations which can be done in the owner's dwelling according to their requests, needs and possible investment.</p> <p>One of the first business plan draft was established while taking part of a lesson of Centria. I, then, continued to invest myself in it while I moved to Ireland. When I compared the energy capabilities of Ireland and Finland, I realized that the Irish country is far behind though they have all the resources available. So why not to use the knowledge acquired from Finland and implement it there.</p>		
Key words Business plan, Entrepreneurship, Housing, Innovation, Renewable, Renovation.		

CONCEPT DEFINITIONS

BTU: British Thermal Unit

CEO: Chief Executive Officer

CIF: Construction Industry Federation

DIY: Do It Yourself

CFL: Compact Fluorescent Lamp

HRI: Home Renovation Incentive

LED: Light-Emitting Diode

RMI: Repair, Maintenance and Improvement

R&D: Research and Development

SCSI: Society of Chartered Surveyors Ireland

SEAI: Sustainable Energy Authority of Ireland

VAT: Value-Added Tax

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1. WRITING PROCESS

Before going further, I would like to mention that this business plan is based on a previous idea which was part of a project done while taking part in the lesson “Entrepreneurship” in Centria given by Kaija Arhio. After a few more thoughts on the main idea of this business plan established, I decided to do a second batch based on my first vision, developing the idea and creating something much more structured and concrete, as if I would start my own company.

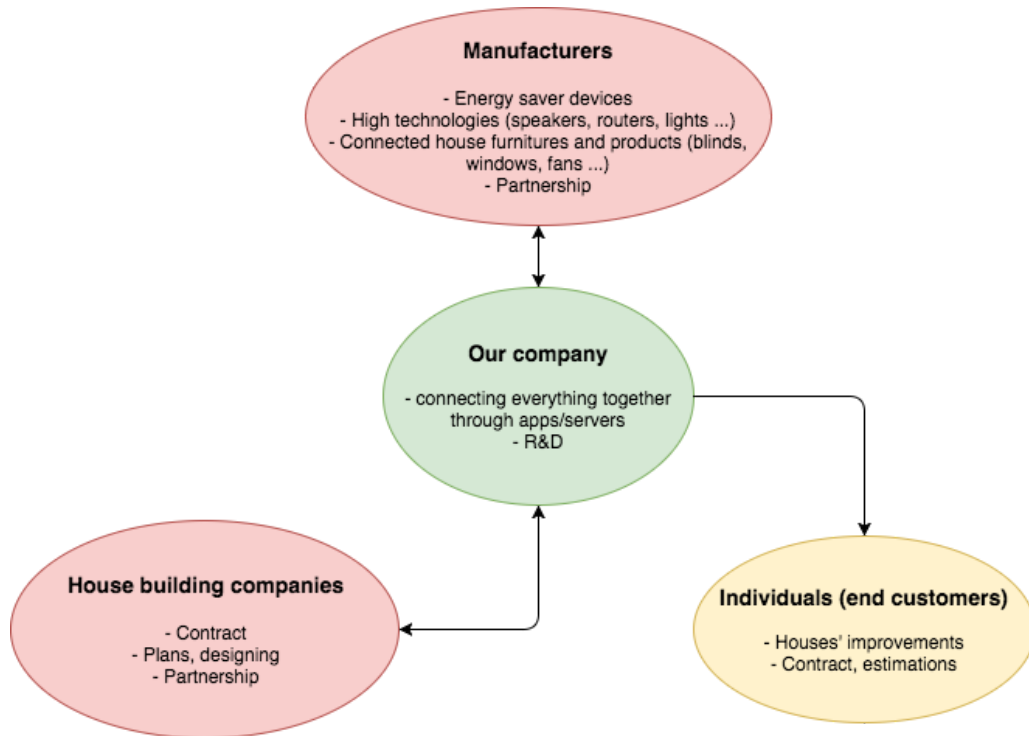
After some researches and basically a relocation of myself in Ireland, I decided to focus on this main idea in Ireland, and realised that a company named “Renova” was already pretty close to what I wanted to achieve. Furthermore my main idea was really ambitious, and a startup could never start as such. I then decided to focus on one of the main targeted ideas of my first business idea, which is the smart house renovation mainly driven on the internet of things, modernizing houses or flats, using technology already existing and guiding customer to fully set up their home.

I was assisted by many persons while writing this thesis and setting up the idea. I would like to thank Kaija Arhio for her patience, her lesson of entrepreneurship who drove me into this whole project and her comments always guiding me further since the beginning. Furthermore, two Irish persons have been really helpful for my study and development of this idea. Barry McAuliffe and Carlynn McCarthy have been discussing with me much about it, giving me tips, advice and contacts. They had already some background in startups and businesses which has been a really major advantage in the writing and research process.

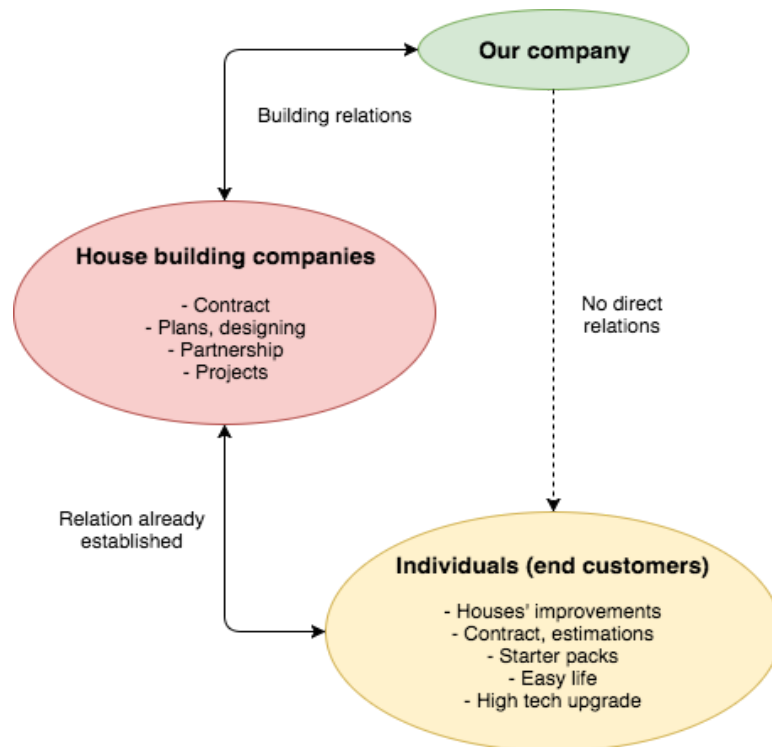
The main outcome of this experience of writing a business plan is to simply have conviction in what you are doing. One is going to spend much time on one’s idea and dig as far as one can to be an expert on the targeted area. One cannot set up a business without having any knowledge of what the business is going to sell. Moreover, to be expert it takes time and conviction.

I firstly made a draft of the business and idea I just had to visualise the whole process and get to know where to focus first. It helped me much in knowing where I am going and where to investigate. Those first drafts can be seen in graph 1 and graph 2.

GRAPH 1. Draft relationship company



GRAPH 2. Draft relationship company 2



From those drafts I was able to write my first business idea and identify my key points. Reading and writing a business plan are two different things, and I highly recommend to just try to write one and get an overview of the process. One will be able to know what are the good questions to ask oneself and how one should focus on the relations between, customer, the business idea and one's products and/or services.

While writing this business plan, I firstly read much about the economical and housing situation in Ireland, which is completely different than in Finland. Based on those researches, I was able to really understand the type of customer I am facing, how I could attract them and what they are looking for. After defining properly the business idea with the steps above, it will then possible to focus on the product. Targeting the customers of the business is an essential point to start writing properly the business plan. You can find some researches which has been done with Carlynn McCarthy in table 1. We have been discussing a lot in order to help me understand what I am looking for and to get a big picture of the business I would like to set up.

TABLE 1. Key words linked to the business idea

Product	Impact	Product user	How?
Help	Decrease	Local	Valuable renovation
Assisting	Valuable	Proximity	Local
Delivering	Profit	Experience	Partnership
Expertize	Attract	Expertize	Articles
Guide	Save money	Similar priorities	Internet
Evidence	Green	Shared context	Magazines
	Environmentally friendly	Low impact on day to day life	Eco-groups
	Necessary for the world	Time investment	Flyers
	Feels good to do not destroy		

1.1 Business plan's summary

Kunno will assist customer to increase their home and energy efficiency while decreasing their bills. Those customers will be mostly private home owners and will have different profiles and needs from the renovation handled in their house. Kunno's vision is to focus on the impact that our generation has on our planet and to reduce the environmental footprint we have on the earth.

The next pages present the business plan at the stage I achieved it after a year of researches, thinking about this idea and improving it. One last point, before continuing to read, always criticise one's own work and dig as far as possible to find the deepest issues which could be destroying the business. Always focus on improving and modifying the business plan to enhance the power of the company. Because if someone does not trust the idea, no one will.

2. GENERAL COMPANY DESCRIPTION

2.1 Mission statement

Kunno helps simplify daily life at home and in offices in a way that one will save energy consumption and enhance the technological possibilities of these places. The business provides an environmental friendly installation of items which will help the customer to create and save energy, improve interactions with dwelling installations and make daily tasks easier.

2.2 Company goals and objectives

The company's target will be to successfully create a service providing customers and offices to improve the interactions between the devices within their facilities/houses. In order to offer the best service possible, the company would launch collaborations with local companies/suppliers to access the clientele in an easier way and have a wider panel of possibilities with customers and services provided.

2.3 Business philosophy

The marketing idea would be to focus on the renovation and improvement of individual homes and business offices. It will help persons willing to improve the house's efficiency of the places where they are everyday (workplace or home) and to be much more environmental friendly.

The main vision and will of the company will be to properly penetrate the market by building a confident relation with customers and potential suppliers or partners. There are some services companies already existing which could implement Kunno's services to their portfolio and vice-versa.

2.4 Stages

You will find below the stages of development that Kunno will follow to establish within the Irish market. This is used as guideline to always keep the business focus on the good track. It is good to note that this statement might not be what is going to happen to this business and focuses might change. (Adopted from Churchill Neil C. & Lewis Virginia L 1983)

TABLE 2. Stages of Development (Adopted from Churchill Neil C. & Lewis Virginia L 1983.)

Stage	Existence	Survival	Succes
Timeframe	1 year - 2 years	2 year - 4 year and half	5 years
Description	Company is starting over, looking for customers and partnerships	Profit is now visible, customer demand is constant and the company can run much more smoothly Partnerships are getting stronger	Company is now opening a R&D department to enable a growth and create its products and services by its own

Find in the next chapters the statement of each the above stages following a theoretical guideline.

2.4.1 Stage 1: Existence

At this stage, the company is just starting and looking for customers by advertising while creating partnership with local shops and delivering expertise to customers. Kunno will need to provide easy and valuable renovation services, by this way it will catch attention and will be attractive to wide range of customers.

What will be offered? Our services and expertises on the modification available in clients' homes based on their needs and requirements. We will highly focus on the housing experience improvement and energy savings (money).

How? The business will get in touch with local supplier/reseller of electronic resources and arrange partnership. Kunno will provide a better customer experience while purchasing partners' products by offering "expertise and installation assistance" to customers willing to improve houses.

Target? Kunno attracts customers and create a profit out of the activity. The business is getting known and creating a way of advertising through our partners.

2.4.2 Stage 2: Survival

After a certain concrete activity with clients, the company is now creating a stable and proper income which can allow to create a valuable profit to the company. The company is now settled in the renovation market. The circle of the customers has grown, customers are either coming through partners or straight to the company's offices. Employees have to be able to respond properly to the growing demand.

What will be offered? The company will provide a more developed investigation of the house, increasing the capabilities of the company by offering new products and following up with older customers to have a history and some examples to advertise the services provided by Kunno.

How? This can be done by hiring new employees, creating new positions in order to increase the potential of the company and implementing a better management and organisational structure in the company.

Target? The target is to have a constant demand, providing a sufficient profit. This will open up open possibilities such as technological improvement of the company or contracts with manufacturers and partners.

2.4.3 Stage 3: Success

The company is now wealthy, and sufficiently meets the demand of its main activity. It generates now extra profit which create bigger possibilities. The main activity is providing enough implement new departments and stronger strategies. The company will not anymore focus only on the idea which launched the company but focuses also on establishing a R&D department to develop new ideas gain even more significant share of the market.

What will be offered? The company will now be able to offer technologies and solutions which are not already existing on the market and will be developed directly by the company (applications, devices).

How? The sales and profit growth is now stabilized and the company runs a constant activity. Managers are implemented to take over management of the business. The owner and head of management are now able to focus on expanding the business. The CEO will be able to focus on hiring managers and creating new departments with an eye to the company's future rather than its current condition.

Target? The target is now to set up a R&D department and keep running smoothly the main activity of the company. The main activity of the company will provide enough benefits to hire, conduct researches and create new products which are not yet available on the market. Kunno will begin to be a producer and not anymore a reseller.

3. PRODUCTS AND SERVICES

3.1 Products

Kunno will be mostly a service company providing expertise on possible installation and renovations in apartments, houses or offices. The installation will be done using technologies such as the internet of things, solar panels, insulating and renovations which will save energy and thus money in long term. In order to do so the business will offer different type of products. Each categories will be covering a certain aspect of the housing duties.

There are six main categories of products which can be significantly improve the daily home life.

3.1.1 Plugs & electrical installation

Having a wifi-enabled plug gives full control over household appliances, such as TV, coffee machine or laundry machine. One can save up to 80€ a year by only switching off the appliances instead of putting them on standby.

3.1.2 Lights

There now exists great bulbs which are wifi-managed and can offer so much in terms of convenience. Lights can be setup in a way that they will be fading with time, presence of persons in the room or the actual weather. Those possibilities are possible with the internet of things; sensors communicating together and simple algorithm created on the user's needs.

3.1.3 Heat

Working together with the internet of things, it is now possible to heat the house whenever it is needed. Sensors, geolocalization and schedule helps to warm up houses when specified. One's can set its algorithm based on his/her own preferences. With the assistance of an application, it is possible to select areas and temperatures. Huge savings can be done just by heating appropriately through monitoring the daily consumption.

3.1.4 Safety

Fire or intoxication are not hopefully frequent, but one can enhance safety by using the latest technologies of smoke detectors. One could even get benefits by getting the level of humidity or sending directly an alert on one's smartphone.

3.1.5 Security

There are now many different locks, cameras or sensors linked directly to one's smartphone. The house is locked up when one leaves the place or one can have a look at the entrance to know who is visiting the house.

3.1.6 Energy monitoring

As mentioned about heating facilities in chapter 3.1.2, consuming the exact amount of energy required by the family helps reducing the overall cost of the household. One's can easily keep his/her habits and living preferences and still reduce his/her living costs. By choosing lower energy consumption items, and using them exactly when it is needed, house owners are able to reduce consumption by 30%. (Eleanor Revelle 2014.)

3.2 Technologies & implementation

3.2.1 Weatherstripping

There are many different ways nowadays to use weatherstripping for homes. Weatherstripping is the process of sealing openings of one's dwelling in order to reduce heat consumption and improve houses quality.



FIGURE 1. Weatherstrip installation (Adapted from Monzon Sarah 2014.)

3.2.2 European Union energy label

Many of the household are now consuming energy. It is important to choose the items accordingly to his/her needs and preferences. The European Union energy label is a mandatory scheme nowadays while renovating or buying a new appliance. It assists customers to differentiate easily which product is more efficient and/or saving more energy than the others. The efficiency is rated from A to G and provides useful information to the buyer such as the noise produced, the amount of energy consumed

instead of the appliance's output or insulation. It is directed from the European Union Law and has its own Directive 2010/30/EU. (J. Buzek 2010.)

The European Union and its countries are now more and more enforcing laws and regulations about home or office appliances to reduce energy waste and improve life quality of the users.



Vehicle Information		
CO₂ emission figure (g/km)  <p>Scale: A (≤ 120), B (120+ to 140), C (140+ to 155), D (155+ to 170), E (170+ to 190), F (190+ to 225), G (225+)</p>		
Fuel Use (estimated) for 18,000 kilometres A fuel use figure is indicated to the consumer as a guide for comparison purposes. This figure is calculated by using the combined drive cycle (urban and extra urban fuel consumption cycles). Motor Tax for 12 months Motor Tax varies according to the CO ₂ emissions of the vehicle. Vehicle Registration Tax (VRT) Rate Percentage rate of VRT payable of the value of the vehicle is dependant on the CO ₂ emissions.		774 litres €100 14%
Environmental Information A guide on fuel economy and CO ₂ emissions which contains data for all new passenger car models is available at any point of sale free of charge or directly from the Society of the Irish Motor Industry, 5 Upper Pembroke Street, Dublin 2, Tel: 01-6761690, web address: www.simi.ie. In addition to the fuel efficiency of a car, driving behaviour as well as other non-technical factors play a role in determining a car's fuel consumption and CO ₂ emissions. CO ₂ is the main greenhouse gas responsible for global warming.		
Make:		
Model/Version:		
Carbon dioxide emissions (g/km): 104 g/km This figure may be obtained from the vehicle's Certificate of Conformity. Important note: Some specifications of this make/model may have lower CO ₂ emissions than this. Check with your dealer.		
Fuel Consumption:		
Drive cycle Urban Extra-urban Combined	Litres/100km 5.0 4.2 4.3	Fuel Type: Petrol Engine Capacity (cc): 1497 Transmission: Automatic

FIGURE 2. European Union energy label for an Irish car (Adapted from Sun Ladder 2008.)

3.2.3 Window treatments

There are many different types of window treatments, either to enhance the house brightness or heat loss during winter. There are alternatives based on the desired design and budget, from improving a basic window by adding draperies to replacing it with a new gas filled window. We can easily find more than 10 different treatments only by looking up in a DIY store and even more if you research focuses on new innovation and window types possibilities relevant to the localization and climate.

3.2.4 Beam light projector

Beam is an innovative company combining lighting with displays. Their main products are lamp featuring a projector to display phone, TV or PC's screens.



FIGURE 3. Beam wireless smart projector (Adapted from Don Molenaar 2017.)

3.2.5 Different light types

Here is a list and explanation of how a proper choice of lighting equipment can affect the billing and life experience.







		* DIMMER  BRIGHTER 			
LUMENS		450	800	1100	1600
MOST EFFICIENT ↓ LEAST EFFICIENT	Standard Incandescents 	40W	60W	75W	100W
	New Halogen Incandescents  Save up to 28%*	29W	43W	53W	72W
	CFLs  Save up to 75%*	9W	14W	19W	23W
	LEDs  Save up to 77%*	8W	13W	17W	N/A
	*Percentage of energy saved by replacing a standard incandescent light bulb; based on usage of approximately 796 hours annually and average residential electricity rate of \$0.15/kWh				

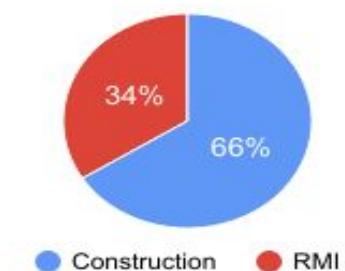
TABLE 3. Percentage of energy saved while changing lights efficiency (Adapted from McAllen David 2014.)

The table above presents that the technologies that we have nowadays. Today's technologies are efficient, energy saving and less expensive than dwelling owners would think. Most of homeowners tend to buy the cheapest option, because as persons we are attracted by the cheapest things on a given time. However, in the long run those equipment would cost you so much more than if one would purchase for once and for all the most efficient light provided on the market. Many of us maybe cannot afford it, but this is when Kunno arrives on the market and assists people to purchase those equipment through plans and buying schemes.

4. MARKET RESEARCH

As explained in chapter 1, firstly I wrote a business plan focusing on Finland's possibilities. This market research was driven on the overall renovation and maintenance of dwellings, offices and buildings. This possibility was the most interesting and profitable, but unfortunately would not be as efficient as it could in Ireland. In this chapter, I will describe the Irish market and the interesting point of this location for this business ideology. Each sub-chapter represents a point on which the business can focus. In the writing method of a business plan, researches are a major part of the process and can be sometimes frustrating since one does not really know if one is targeting the best focuses for the business or not.

4.1 Renovation and homes



12,5€ billion of construction made in 2015

4,2€ billion (34%) of RMI

469€ million growth for the RMI between 2014 - 2015

GRAPH 3. Shares of Renovation and Construction in 2015 (Adapted from Molloy J. 2015.)

Renovations and maintenances are now a current issue around Ireland, since the value of houses has been rising up for a few years, and persons are willing to improve their homes rather than getting a new one. On average the value of new and secondhand houses has risen by 7% around Ireland.

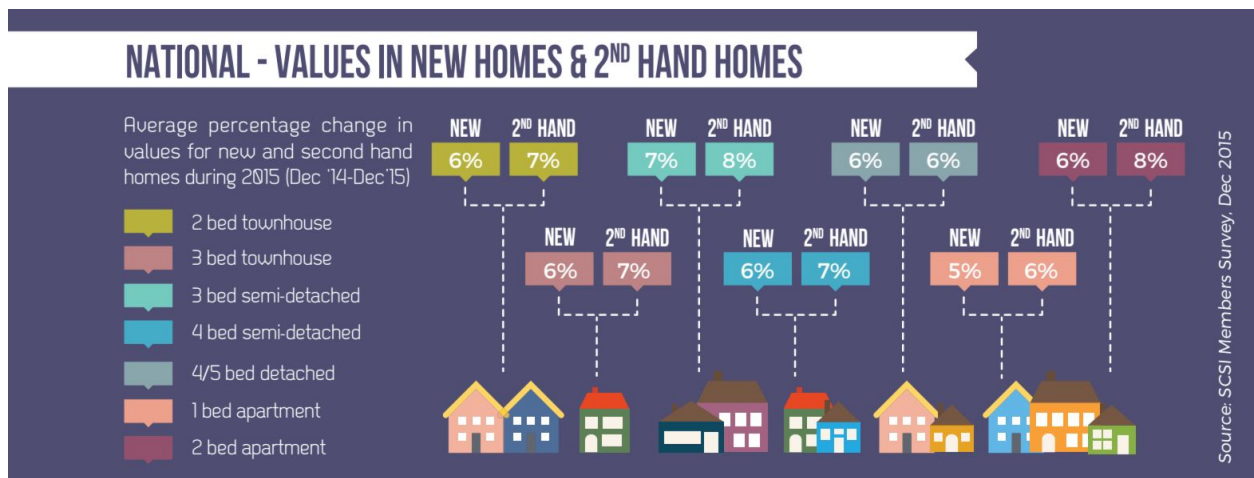


FIGURE 4. Values in new homes and 2nd hand homes in 2015 (Adapted from O’Sullivan & Meldon Brian 2017, 3)

However, related to the reviews and studies given by the government, things are planned to be changed as we can read in those few quotes below:

Residential property prices in the Dublin Region have increased by 64.7% and prices in the rest of Ireland (excl. Dublin Region) have risen by 44.7% from the trough in 2013.

The shortage in new house builds continues to be the main driver in the increasing cost of house prices. With house builds a priority in light of the housing shortage, only 37% of chartered surveyors anticipate new housing scheme coming to market in 2017. (McAulley Edward 2017, 24.)

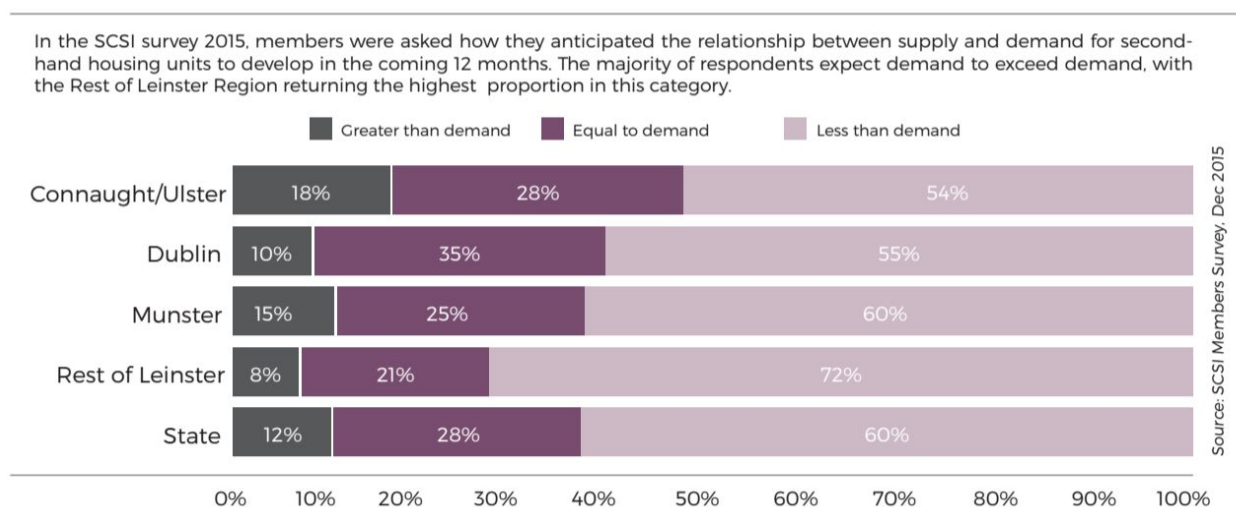
Irish homeowners spend €3.3billion on the repair, maintenance and improvement (RMI) of their homes and apartments in 2015. RMI of residential properties now accounts for 26.7% of the value of construction activity.

“The Repair, Maintenance and Improvement (RMI) sector has been growing strongly over the last number of years and now accounts for over €1 in €3 spent in the wider construction industry. This serves three important functions; it takes activity out of the black market, it helps Ireland achieve climate change targets by making buildings more energy efficient and it helps upgrade much of the office and residential infrastructure that was built in the 1970’s.” (Downey Sean 2017.)

As we can see above, the government focuses on both housing construction and renovation. Those two points are relatively important with the housing dilemma emerging from an important economical growth in the past few years around the country. This scenario gives the company a good opportunity to penetrate the market by following the stages presented in chapter 2.4. Kunno will be either able to enter the market by the renovation or the housing construction side.

Partnership will be a strategic approach while orienting on the construction, since it will be the safest and most productive way to enter the market in the smoothest way possible. One of the main focus will be to accessing the market through partners, accessing their markets and customers.

However, in the Repair, Maintenance and Improvement scheme (RMI), it will be harder to catch the attention of customers. This scheme needs much more investment in term of money and habits. The accommodation will need most of the time few days to few weeks work in order to improve it properly. This will affect the daily life's customer. Kunno will need to prove to houses' owners that these are great opportunities in term of money and life quality improvement. The few weeks of renovation are worth it. Moreover, the government is providing possibilities to customers to reduce those costs instead of the quality of your house, the region you live and the company you choose for these renovations.



GRAPH 4. Relationship between demand and disponibilities of secondhand housing units (Adapted from O'Sullivan & Meldon Brian 2017, 5.)

Graph 4 represents the demand on the quality of housing related to the buyer's expectation. We can see that 60% of the interested persons anticipated the relationship between second-hand housing supplies to be lesser than their demand. In other words, 60% of the potential buyers expect a worse quality on the second-hand housing than what they would like to get.

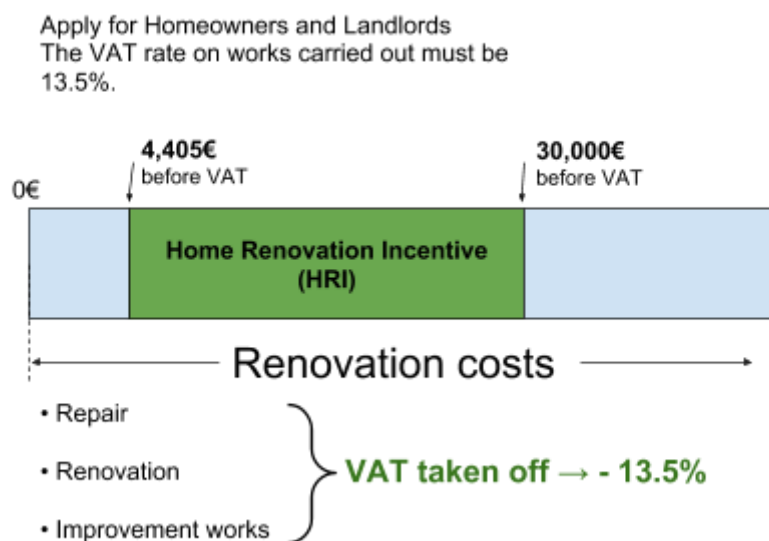
4.2 Governmental schemes

This chapter presents the possibilities offered by the government of Ireland while renovating, building or modifying one's house in order to enhance the impact the house has on the environment. One of the most famous ones is the Home Renovation Incentive plan, which is described below on graph 5.

4.2.1 Home Renovation Incentive

The home Renovation Incentive (HRI) is a famous incentive program established in order to push Irish citizens to renovate their houses while contracting these renovations with certified builders. So far, Ireland has been a country where housing standards have been rather low when building up dwellings. The government wants to change this by providing this benefit. Unfortunately, the Irish culture and the way of living are still closely attached to the old standard and have a significant impact on the environment. Many houses are still equipped with central oil heating system and low quality insulation, making winter months still really expensive. (Irish Tax and Customs 2018.)

One major issue is that even though Ireland is trying to find solutions, culture, habits and value will need to be changed as well. Focusing on Kunno, the idea will be to attract potential buyers by targeting trending points of interest for the chosen groups of buyers.



GRAPH 5. Home Renovation Incentive description

4.2.2 Sustainable Energy Authority of Ireland (SEAI)

SEAI is Ireland's national sustainable energy authority. They have a leading role in transforming Ireland into a society based on sustainable energy structures, technologies and practices.

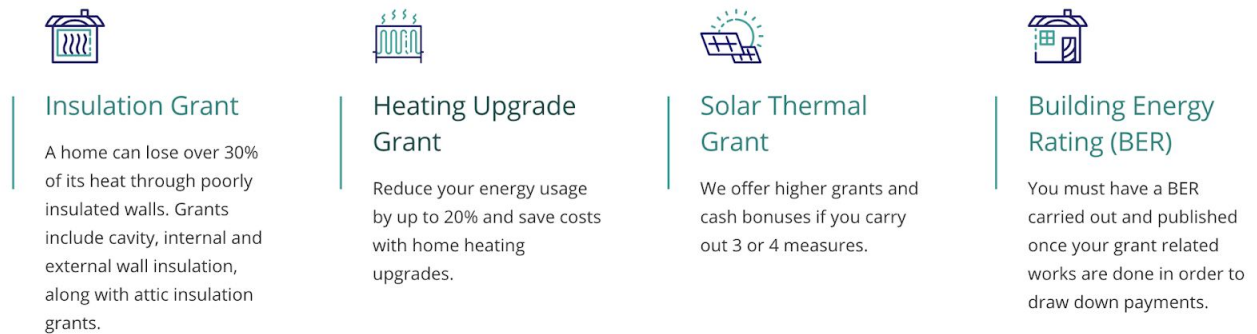


FIGURE 5. Home grants (Adapted from Gannon Jim 2017.)

The Sustainable Energy Authority of Ireland wants to make Ireland's energy production to be sustainable, secure, affordable and clean. In order to do so they implement home energy grant which can cover up to 30% of the cost of making your home more comfortable and energy efficient. SEAI grants are available for a range of measures, including attic and wall insulation, heating system upgrades and solar heating. (Gannon Jim 2017.)

4.3 Partnership / Related companies / Suppliers

In this chapter we will focus on establishing an overview of the market already present in this sector of activity, on what makes Kunno different from the rivals, and on how we can take advantage of their business and actions. The point of bringing down those companies in this chapter is to provide an overview of the actual market and company establishment in Ireland. Kunno will be either able to take advantages of these companies by concluding partnerships. It will as well set an overview of the market and target companies Kunno will be facing while entering the market.

4.3.1 Renova

This company is a direct rival of the service we are going to offer. Renova is a dedicated house renovation company specialising in bespoke house renovations and the deep retrofit of existing homes. It was founded in 2011, and has now the monopole of the renovation services market. The company is based no more than 30 kilometres south from Dublin, which can be taken as an advantage since our business will be settled in Cork, 300 kilometers south of Dublin. (John 2011.)

4.3.2 Bord na Móna

This company is one of greenest Irish companies producing energy. They focus on peatlands, biomass, waste recovery or renewable energy to produce energy for the whole Ireland. (Horgan John 2015.)

4.3.3 Linehan construction

Linehan Construction is a construction company building high quality contemporary eco-homes, house extensions and commercial buildings and providing renovations. (Linehan Ail 2010.)

4.3.4 Pinergy

Pinergy is an Irish owned company which provides electricity for households and gives an opportunity to their customer, by the use of an application and an online dashboard, to understand their consumption and to reduce their energy usage. They show directly to their consumers how they could reduce their bills and which technology they could use in order to do that. (Mackarel Stephan 2012.)



FIGURE 6. The Pinergy promises (Adapted from Mackarel Stephan 2012.)

4.3.5 Aterno

Aterno is a French company specialized in high efficiency and low consumption heating systems. Moreover, their systems are decorative with futuristic designs, which combine beauty with efficiency. This company is a great example of partners could get, Aterno has a finished products and Kunno will provide additional features.



FIGURE 7. Heating system designed for home (Adapted from Fallard Thierry 2016.)

4.4 News and customers' awareness

The time frame is really important while doing the market research. The vision of the company should fit the information circulating through citizens. This provides awareness of the company's cause by simply trying to achieve its own objectives.

4.4.1 Our planet

One can find many articles and videos over the Internet focusing on the impact we have on the earth. Authors are trying to bring awareness on the problems Humans are facing due to the degradation of the earth's condition. They strongly focus on our impact in this whole process and how we can do better by not changing our habits. A sentence such as "It's the bleakest long-term prediction the world has seen so far." appears more and more in the daily life. This message is actually one of the company's focus. The company will be able to enhance the empathy and will of the customers by introducing new technologies and devices to improve their impact on earth without affecting their daily routines. (Sarah Bernam 2016.)

4.4.2 The need to renovate

Many dwelling owners are not aware that their homes need to be renovated, or could be improved in order to significantly reduce their bills. The government wants that residents improve their quality of life. One can find frequently articles about new building methods and renovation possibilities. TV channels and national reports provide information on innovative solutions in order to inform citizens that those solutions exist and are affordable. There are well described guides detailing "How to renovate" with the government assistance. (Keenan Mark 2014.)

4.4.3 Politics

During the presidential election of the USA in November 2016, the global warming topic came up quite often since the new president of the USA, Donald Trump does not want to invest money in solving the problem. Many politicians and scientist tried to prove that it is a bad move for the humanity, but business is the first priority of USA. This example helps to understand how important is the influence of politicians on companies and civilians. (Griffin Andrew 2016.)

Moreover, in Ireland you will find labels on products in supermarket stating that your food is 100% Irish, which is more ecologic, natural and healthy. Any products brought from countries outside of the European Union is facing a 24% VAT, pushing more and more buyers to purchase domestic products. It is economically and morally better for the customer and its country.

Governments assist by providing grants, organisations and assistance for their civilians to help the country's economy grow and at the same time to save the environment. Kunno will take advantage of these schemes to upsell services. It will enable customers to avail for these grants and will generate more profit for Kunno. For example by being able to provide the Home Renovation Incentive plan seen in the chapter 4.2.

4.5 Customer journey

Potential customers will be persons who are mainly attracted by either the environment, money saving or living improvement. Each of them will have different needs from Kunno and different targets. The table 4 below is presenting the 3 different type of customers. Those groups have been established while conducting the market researches and are just strategic market targets right now, so they are subject to changes.

TABLE 4. Kunno's customers type

	Environment friendly	Money saving	Living improvement
value	Green home	Cheap home	Efficient home
Interest	Mostly attracted by the technical figures which are highlighting the impact of the customer on the environment.	The customer will be only interested to see an amount of money spent which will be as soon as possible profitable for him or her.	Customer wants to discover new technologies which will make his or her life easier. The amount of money should not be substantial neither.
Package offer	<ul style="list-style-type: none"> - Evaluation of the customer's impact on the environment - Energy production possibilities - Easy tool to improve the energy efficiency - Isolation renovation 	Evaluation of the amount of money the customer is consuming related to his or her house setup right now How can it be reduced? The customer is mostly looking for profit.	Evaluation of the lifestyle of the person How does some tool can improve his or her daily life, either at home or on the way.
Timeframe	Renovation should be ended after 2 months from first contact.	Renovation should be done as quickly as possible, maximum a month after the first contact.	This kind of setup can be taking up to one month after first contact, but within a week it is easily achievable.

<p>Payment, money solution</p>	<p>Customer will mostly ask a loan from the bank, since it might get pretty pricey. Customer will highly appreciate the gesture from the government to reduce taxes on those housing installation.</p>	<p>Payment could be done over a few months, but a loan is not necessary needed. If renovation can enter within the governmental help budget scope, customer will highly appreciate the discount.</p>	<p>Customer will most probably pay straight away since the cost will be particularly be low and affordable.</p>
<p>Follow up warranty</p>	<p>Kunno will come to the customer after a few months and ask if everything is fine with the installation and has any queries.</p>	<p>Follow up will be conduct with customer after the next electricity bill and discuss about the changes with his installation.</p>	<p>Kunno will provide assistance for setup and additional installation which might be needed.</p>

5. OPERATIONAL PLAN

5.1 Production

The company will, in the first stage, provide expertise to customers based on their needs and requirements. A contract and project plan will be signed with the customer from which we will be able to provide time frame, costs and disponibilities of the products. No production will be handled by Kunno. One important aspect of the partnership relations will be to have production handled by a third party. Kunno does not want to acquire at early stages production processes. Kunno is a company enabling actual product to be even more efficient by simple add-ons or to simply provide expertise for customers.

Taking into consideration the workflow above, production (or in our case disponibility) will be directly linked to our suppliers/partners and their availabilities. However, quality control and products will be reviewed and accepted by Kunno in order to offer the best service and customer experience with the final product and service give to the customer.

5.2 Location

The company's facility will be principally the office with storage where we will have samples of our products and mock-ups of the packages offered. The location of this office should be easy to find, in order to have an easy contact with potential customer and the facade should represent our ideology. This will assist with the marketing strategy and advertising since Cork is a place where there are many pedestrians in streets and lanes.

The office will be set with products Kunno sells to give a real test environment. It will help the customer to immerse himself and imagine a possible installation in his/her house. In addition, the company will as well need a company owned car, which will be used by consultants to meet potential customers in their houses and assist them in their home setup. Moreover, the car on circulation will

assist as well with advertisement. It will be important to show to the customers how the products look, what they could gain, and this why a representation as in figure 8 will be important to display.



FIGURE 8. \$10k DIY Off Grid Solar Tiny House (Adapted from Pino Alex 2012.)

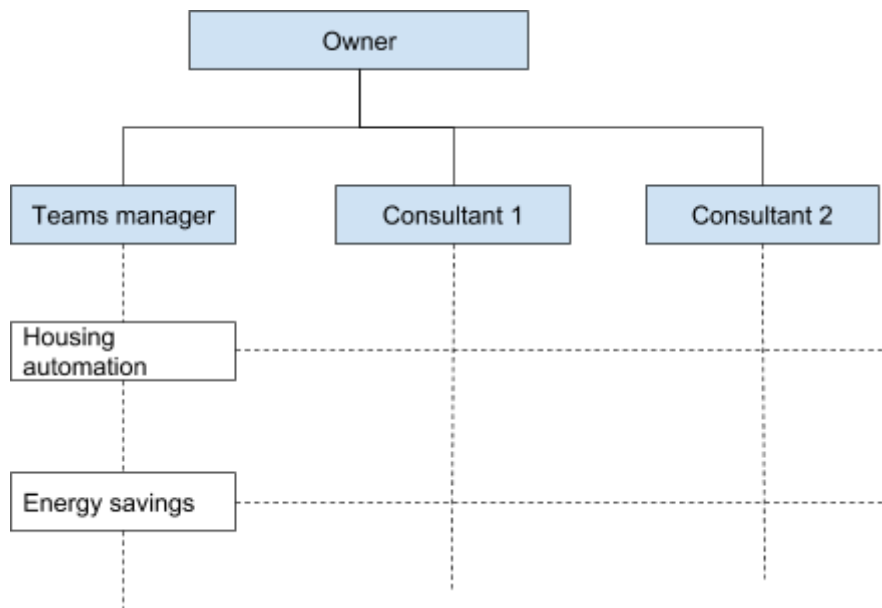


FIGURE 9. Creative Ad Campaign (Adapted from Ms. Lavinia 2011.)

5.4 Personnel

As it is explained in the chapter 2.4, the company will first of all start with only one consultant who will run from beginning until end the customer's renovation project. Further on, the organisation of the company will continue further in this way with one consultant per project to provide the best customer experience possible.

While arriving to stage 3 (2 years or more after launching), the company will change the organizational structure in order to have project managers (consultants) and teams specialized by department (energy savings, housing automation, etc.). The teams will be switching between managers, but managers will always do business with the same customers.



GRAPH 6. Kunno's organisational structure at stage 3

6. CONCLUSION

Writing clearly the business plan is extremely important for every startups willing to launch. It is the way to advertise the business and describe exactly the way how one sees the future of the company. The idea might seem simple and understandable to the entrepreneur, but a stranger would not understand what the business is developing. Therefore, the business might lose opportunities and attentions from potential buyers/investors.

Described as above, the theory seems really simple. Therefore, it was my state of mind before starting this business plan. In practice, one faces so many challenges and quite often might wish to give up. Researches take much time because the entrepreneur must be the most knowledgeable in the business domain. Most of that information will not even appear in the business business plan, but will just be classified as invaluable information. When the entrepreneur has the best vision of his/her business idea, he/she will need to properly clarify which part of the business will be profitable and attractive. This involves a second major process of the business plan writing, the overwriting and proofreading. Deleting previous information will need to be done in order to fit the original business vision and profitable part of the market. It is really important to have multiple versions of the business plan to keep traces of everything that has done.

Writing a business plan is, in my point of view, something that is really hard to write alone. The writer should get opinions and critics of his/her work from some few readers. This will provide finally the real idea of how valuable the business description is, and if it is really feasible. This will bring the focus “out of the box” and one will begin to understand where to focus and how to improve. One will certain also understand which of the assumptions were wrong.

There is no perfect business plan, there is not so far a business which could not fail. The business description should never be focusing on being utopic and never up-valued. A business cannot be falsified to attract investments. Hiding weaknesses and putting forward unrealistic strengths will not bring the business anywhere. Tools such as SWOT analysis assists in finding those points.

Unfortunately on the chapters above one will not be able to find an example since I could not reach this writing goal yet.

An important point which I realized while discussing with mentors, is the customer onboarding and its importance. A business might have the best deal on earth for a service, but customers will not be attracted if this proposed service is complicated to get and thus they will often choose to spend a little more to be assisted. Having phases and stages of the customer onboarding either on the business or client side is important. A Roadmap will always assist to understand and to know where the business is at a certain moment of its growth strategy. In business, a roadmap could be a timeline related to extra product sales, special loyalty features or custom benefits. This will not only help the business to keep the customer onboard, but as well to create a profit within one's profit. The above can explain how to start a business by only focusing on relatively small products which will be easily sold first and which will provide a feeling of confidence and trust towards the business and makes the customer come back to buy bigger products.

The main objective of this thesis was mostly to achieve a structured business plan focused in ecology and technology. I could put the knowledge I have acquired together and do something based on that. It pushed me to discuss and visit local persons/shops. I faced failures and major disappointments, and the project provided me even more desire to continue further. It provides me such a different vision of the business handling and helped me to understand how it is to launch his/her own business. It was really a great experience, and really hope I will be able to do something on the base of it in the future.

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