

## UFCF95-15-3 – Entrepreneurial skills for computing

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### Advisory notes:

- Read through the questions fully before starting your answers.
- Pay attention to the 'What we're looking for' points – they are there to help you.
- Consider the scoring system – it will guide you on where your efforts should be directed.
- Always be clear and concise in your answers and avoid repetition.

Once you have completed your entry, please attach this file along with any diagrams, spreadsheets, pictures and submit to [jeff.graham@uwe.ac.uk](mailto:jeff.graham@uwe.ac.uk).

The mentors will mark your entry and email back your score and feedback within 2 weeks (estimated)

Good Luck  
Jeff Graham

## Section 1 – Executive Summary (10 points)

**Question 1:** Describe your product or service idea and either the problem it solves or the gap that it fills. Explain how your business will make money from the product/service. Briefly explain your ambition for the business: for example, is the intention to sell the business within three years or is this a longer-term proposition that you want to lead and grow?

**Note that your answer to this question should summarise your answers to subsequent questions, so consider completing this answer last!**

**Your Response:**

**1.1 Business summary (what is your product/service idea and what is the problem/opportunity gap):**

The core of our business is e-bike conversions, with different angles based around that core concept. The initial business will be based around bespoke e-bike conversion where a customer will mail to us, or bring into a local store, any standard bicycle, which we will then assess and recommend an appropriate conversion style, with a few options in different financial strata and intended application. Additionally, we would provide the option to purchase compiled conversion kits for the more DIY focussed customer, with the stipulation that the customer will have to determine its viability for themselves and have some degree of mechanical skill and tools.

This will be presented as a more affordable alternative to buying an e-bike outright. Installation of off the shelf Bafang mid drive and hub drive motors, as well as Heilong batteries, both manufacturers that are well regarded within DIY bike conversion communities as being reliable and quality, as long as certain maintenance checks are implemented.

Our intent is to target a demographic who cannot typically afford the expensive e-bikes currently on the market, but, like many do, already own a bicycle. Especially targeted would be individuals who commute by bicycle but cannot afford an e-bike.

**1.2 Business aims (who are your initial target customers; will your customer profile change over time and, if so, how; how big (in £) is the market that you are targeting):**

E-bikes are increasingly growing in popularity but due to the added cost of lithium batteries and electric motors, components that, while decreasing in price, are still as expensive as the entire cost of many affordable non-electric bicycles themselves. Because of this steep price, many prebuilt e-bikes are prohibitively expensive for a wide swath of potential customers. Regular bicycle use is generally more common among younger, lower income individuals. This is a demographic not typically capable of purchasing the current crop of affordable e-bikes, which typically bottom out in price at around £500



## Assist Hybrid Electric Bike 2021 - 20" Wheel 457678



4.3

(286)

[Write a review](#)

**£499.00**

**halfords**

This is in comparison to our base price of a £72 motor kit, with a £122 battery. In addition, typically there would be only an hour's labour at £20 as it is relatively easy to train someone to convert e-bikes. This allows for a 20% profit margin and 9% to dedicate to external costs such as location rental, equipment upkeep, and consumables. At a final per conversion cost of £300, extremely competitive with even the lowest cost e-bike.

In addition to this, it is notable that the battery size of our conversion would be over double the cheapest available bikes, with the cheapest providing only 4.8ah, realistically only providing around 15miles while our bike will provide as much as 10ah of battery with a realistic range of 40 miles, both at their most optimal. We believe this is a much more practical range, as it opens up a great deal more potential for the average commuter. In addition, it provides the flexibility required to increase the assistance minimum speeds and maximum wattage at output from the often cited "most economical" setting, to a setting that will provide a considerably more effortless and enjoyable commute for the 68% of commuters who daily travel under 5 miles each way. The nearest economical competitor to our conversion is this bike



## Carrera impel im-3 Electric Hybrid Bike Microshift - S/M, M/L Frames 514550



3.9

(15)

[Write a review](#)

**£1,499.00**

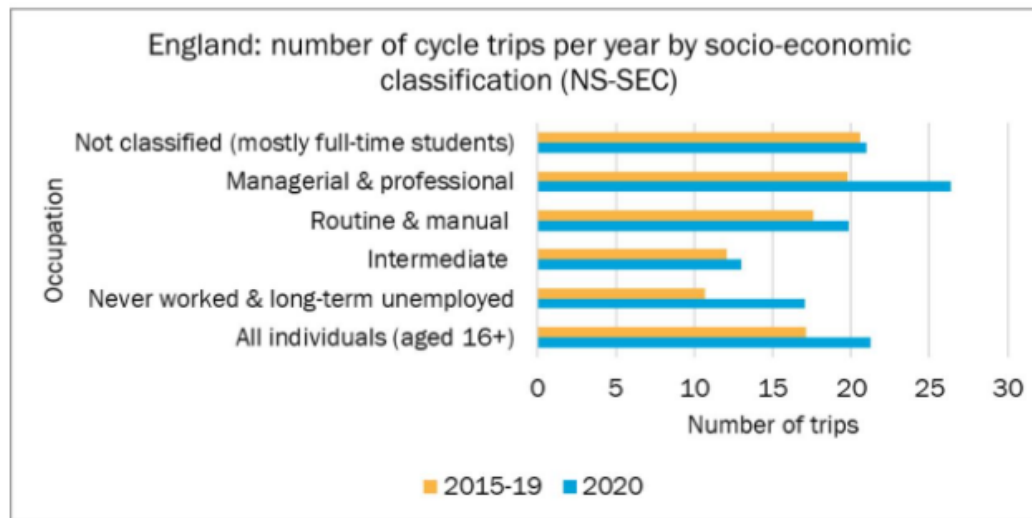
**halfords**

As you can clearly see, the cost to value ratio of our product is exceptional compared to available prebuilds. The only prerequisite of this affordability being that the customer already own (or is able to cheaply acquire, with many bicycles being sold second hand for £100's) a bicycle to convert. Virtually all bicycles are convertible with a comprehensive library of parts and tools making the potential market extremely large.

In addition to this strong economic base that will likely have a solid throughput, we would like to provide a wide variety of possible conversion parts for more niche uses including offroad and private location exclusive parts not for road legal use, higher torque applications such as cargo bikes (many of which are still non-electric), extreme range applications, and most exotically, all wheel drive. Providing a wide variety of customizability to the customer really widens the customer base, while providing a simple affordable option for the bulk of customers.

After building a strong base in budget conversions, providing conversions in multiple areas and establishing a stable income stream, we would like to begin offering a small range of prebuilds, each broadly fitting a separate demographic. To increase throughput for the better bikes and help promote the current conversion business it would be preferable to offer the cheapest option as a loss leader, being sold at its base price of parts and labour, which would ultimately be around £700, 665 in parts and £35 in labour, however it would still maintain our standard of quality and be able to provide the standard cheapest conversion rate of 40miles range, outpacing the competition.

Our initial target of the lower income cyclist targets an extremely underserved portion of the industry as we can see from existing prices. As you can see from this graph provided by cycling uk, a significant portion of the cycling demographic falls under lower income socio-economic groups. We believe by targeting this demographic initially we can capture a large portion of an underserved market.



From that underserved market we will ideally construct a well-regarded brand name and reputation, as well as a strong economic base, from which we can progressively target more high-end customers.

We would provide in addition to our loss leader e-bike, a mid-range e-bike at £1800 and a high-end bicycle at £9000. This should allow us to capture a portion of the extremely profitable higher end e-bike industry and allow us to diversify our market and improve economic resiliency, with relatively low risk. And provide a good basis for potential future expansion.

Only 4 years ago the e-bike market was labelled as worth 26 billion USD, and is estimated to grow as large as 53 Billion USD in 2027, suggesting that there is a

huge potential for growth in this market. And we believe we can capture the least served portion of that market.

### 1.3 Financial summary (what are the broad £ values for income and expenditure over the next three years):

Per shop base expenditures

hourly rate £ 20.00	weekly hours £ 32.00	num of engineers  1	net labour cost £ 640.00
shop rental monthly £ 3,000.00	consumables £ 100.00	utilities £ 50.00	net building cost £ 3,150.00
Shop Costs			£ 3,790.00

Estimate costs of typical conversions (pricing done on a per case basis)

basic	motor cost £ 72.56	battery cost £ 122.13	net parts cost £ 194.69
	motor cost £ 346.70	battery cost £ 280.15	net parts cost £ 626.85
mid range example	motor cost £ 749.00	battery cost £ 612.91	net parts cost £ 1,361.91

Estimate required incomes and sales forecast for profitability

shop costs	cheapest bike costs	cheapest bike total price	cheapest bike profit	monthly required sales of minimum priced unit	maximum monthly sold units	maximum possible minimum spec profit
£ 3,790.00	£ 214.69	£ 300.00	£ 85.31	45.00	140	£ 8,104.45

minimum three year expenditure: 45,480

maximum baseline conversion three year profit: 97,248

**1.4 Your business name:** Electrify

**1.5 Strapline:**

**“Because freedom is for everybody”**

**1.6 Long term plan (what will you do with the business in the future; what are the factors that will affect your decision):**

As established in an earlier section, we will start off with a reliable baseline aiming for affordable budget conversions. We will then progressively expand to a greater diversity of conversions, then on to a selection of prebuilds at competitive prices.

What we’re looking for:	Score: out of		Confidential panel feedback:
The product/service is described clearly and concisely including: how it works, it’s features, how it will be used		4	
The answer describes the offer in terms of its value to the potential customer, using clear, precise, and common jargon-free language		3	
A financial proposition is described and the ambitions for the business have been outlined		2	
Diagrams, photographs or other graphics are used to illustrate the proposition		1	
<b>Total</b>		<b>10</b>	

## Section 2 – Describe the Market (35 points)

**Question 2: Who is your product/service aimed at? Describe your target market(s) and who might buy this product/service**

**Your Response:**

**2.1 Are your customers individuals, businesses or both:**

Predominantly, our customers will be individuals looking to get an electric bicycle. There is also the option to target businesses as some offer ride to work schemes which encourage their staff to take a more environmentally friendly mode of transport to work such as cycling.

**2.2 Describe your typical customer:**

Our typical customer will already own a bicycle or want to get into cycling. Age wise we predict our customer would be 41+ years of age. However, e-bikes cover such a wide demographic which is why this is only 'typical'. We anticipate our product could be most popular with people aged 41+, however this isn't limited to the younger generation in their early 20's who may not own a car and are looking for their own cheap transport to get them about the city, without the cost of public transport or renting an electric scooter which can cost as much as £0.20 per minute of usage.

**2.3 Where are your customers based?**

Initially our customers will be local to us in Bristol as they will be bringing their bicycle to us to be converted, however there will also be an external delivery service available at an extra cost for people who don't wish to transport the bicycle themselves or live afar.

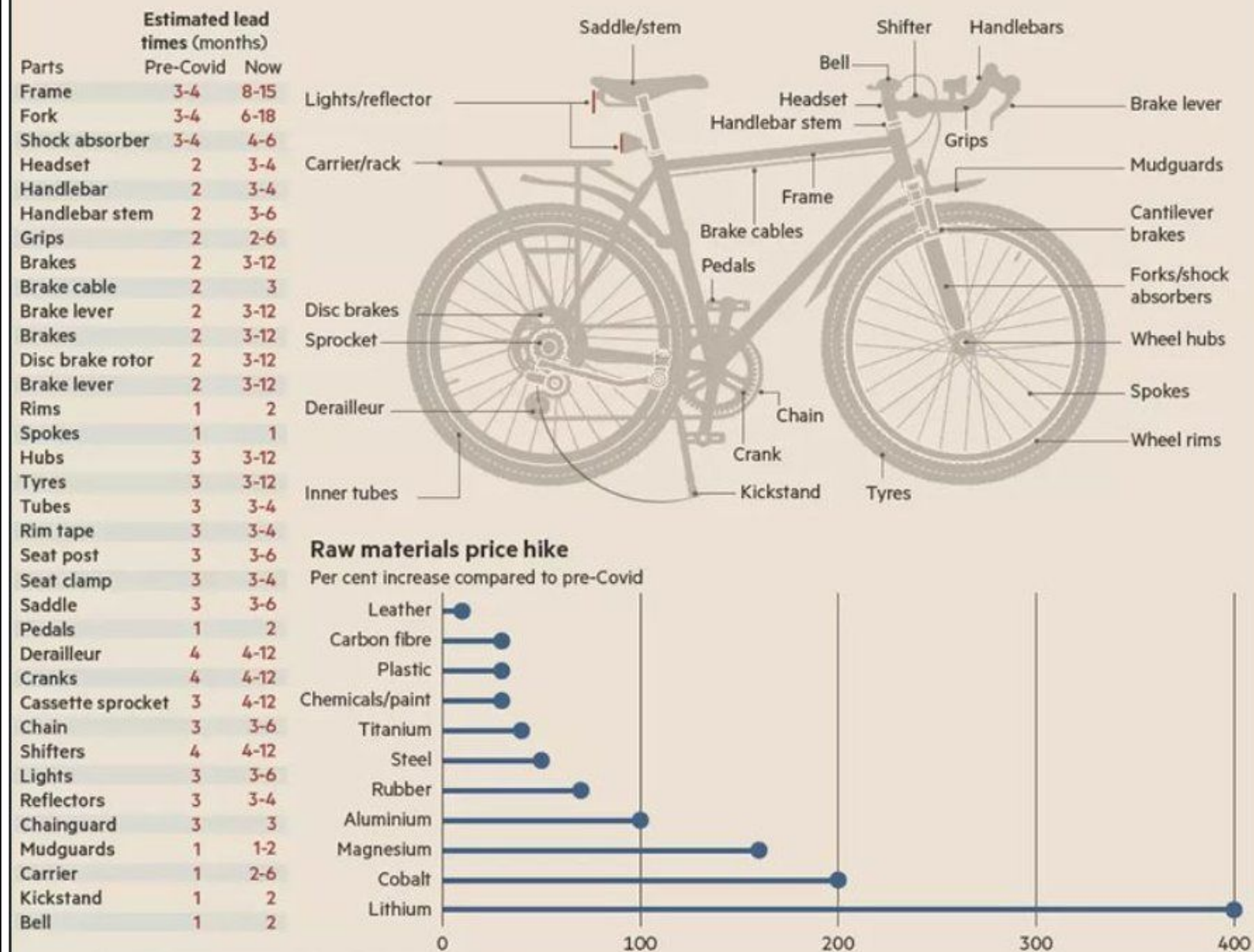
**2.4 What prompts your customers to buy your product/service?**

What prompts our customers to buy our service is the competitive price compared to buying a readymade electric bicycle from somewhere like Halfords, along with the fact the customer will be having their own bicycle which they're used to converting at a lower cost than what it would be to buy one new.

Additionally numerous global supply line issues including the war in ukraine, global sanctions against suppliers in russia, covid-19, and global shipping infrastructure problems have severely affected the price of bicycles. Being able to convert rather than purchase a whole new bike neatly avoids the majority of this problem for the average consumer by reducing the number of individual parts that need to be sourced, and thus the price increase. Looking at the graph below we can see what an attractive proposition this is likely to be for consumers.

## Strains in the bicycle chain

How the invasion of Ukraine, Russia sanctions, Covid-19 and shipping problems have delayed the supply of bicycles



Source: World Bicycle Industry Association. Graphic: Graham Parrish; Dreamstime



## 2.5 What factors help your customers choose which business to buy from?

Factors that help consider how our customers choose which business to buy from could consist of things like business popularity and rating, what the reviews are like, how competitive the price is and how our product compares to what other big brands are offering.

## 2.6 Identify the customer segments you plan to target:

One demographic customer segmentation we plan to target is the older generation (61+) who could be retired and may have some disposable income to spend. A 2nd segment we plan to target are people in the 41-60 age range who want a cheap mode of transport to get them about the city which will either get them to work or just ride for leisure. Geographically we will only be targeting customers in the UK because of logistical issues we may face.

*Who uses e-bikes in the UK and why? Melia, S. and Bartle, C. (2021) Who uses e-bikes in the UK and why?. International Journal of Sustainable Transportation, pp.1-13.*

	<i>N</i>	%
Currently using e-bike	1217	58.2%
Previously used e-bike	130	6.2%
Considering e-bike purchase	425	20.3%
Considering e-bike hire	157	7.5%
Previously considered e-bike	163	7.8%
<b>Total</b>	<b>2092</b>	<b>100.0%</b>
Gender - Female	630	30.1%
Age: > 61	821	39.6%
Age: 41 – 60	915	44.1%
Age: < 41	339	16.3%
Employed full-time	738	39.6%
Degree education	1168	55.8%
Income: > £55k	634	30.3%
Income: £25 to £55k	901	43.1%
Income: <£25k	487	23.3%
Children in household	504	24.1%
Car always available	1513	80.6%
Car sometimes available	289	15.4%
Car never available	76	4.0%

Out of a study conducted by Melia & Bartle (2021) through a survey of 2,092 people based in the UK who were using an e-bike or considering the purchase or hire of one, the table above demonstrates that the highest percent of people who use e-bikes were between 41-60, whilst the 2nd highest percentage was in the 61 and above age range bracket. These findings backed up our initial thoughts. The survey also shows how 80.6% of the people who took part in the survey have a 'car always available' which could mean people are looking for a cheaper mode of transport to get around locally considering the recent increase in fuel prices.

## 2.7 Have you got customers waiting to buy your product/service or have already sold to customers?

Not currently

*If you answered "yes", give details:*

Not applicable

## 2.8 How did you identify your customers?

We identified our customers through researching recent surveys conducted and academic journals regarding statistical data around use of e-bikes in the UK. We also looked at who are riding these electric bicycles first hand. It was noted that the older generation was a common occurrence which was backed up through a survey conducted in 2021 mentioned in 2.6. The electric Voi scooters also seem to be very popular with students around campus and the city, so we also hope our one off conversion cost will help persuade students to turn to our product even though <41 was the lowest percentage age demographic that used e-bikes in the UK.

What we're looking for:	Score: out of		Confidential panel feedback:
One or more types of potential paying customer are described, including any key differences between target markets		4	
A clear explanation of how the target market(s) have been identified is presented		3	
<b>Total</b>		<b>7</b>	

**Question 3:** Estimate a price for your product/service. Where do you plan to position your product in a price spectrum? Will you offer different price points for different versions of your product/service or different prices to different customer segments?

**Response:**

**3.1 Outline the price you plan to charge:**

As each conversion will be bespoke, there is a degree of variation in what the cost of any individual conversion will be. However the absolute baseline and the reference for all other conversions will be set at £300

Estimate costs of typical conversions (pricing done on a per case basis)

	motor cost	battery cost	net parts cost	net plus labour	net plus profit margin
basic	£ 72.56	£ 122.13	£ 194.69	£214.59	£300
mid range example	£ 346.70	£ 280.15	£ 626.85	£647	£911.27
upper range example	£ 749.00	£ 612.91	£ 1,361.91	£1382	£1946.48

**3.2 Explain how you decided on the price – cost+, perceived value, comparison with competitors etc.:**

The baseline price was specifically selected as it is highly competitive with even the most affordable e-bikes, while still being a practical and useful upgrade.

It was extremely important to avoid the absolute cheapest possible conversion as this would provide a final product of poor quality and convenience. It was imperative that any customer entering the shop be confident that they will obtain an effective, reliable, high-quality upgrade that gives a marked improvement to their experience.

We do not want to produce “cheap tat”. In essence we feel the perceived value should be \*higher\* than that of a more expensive prebuilt, to encourage significant growth.

The closest obvious competitor being Halfords, who provide their cheapest e-bike at a cost of £500, much more expensive than our £300. and the bike we would provide you with is significantly less practical.

In the table below you can see a breakdown of all financial costs associated with the company broken into sections. Some important definitions are.

First Shop Cost: This price is determined based on the presumption that as the first shop, the majority of staff roles will be filled by the founders. This is to reduce the initial start-up costs until profitability has been achieved.

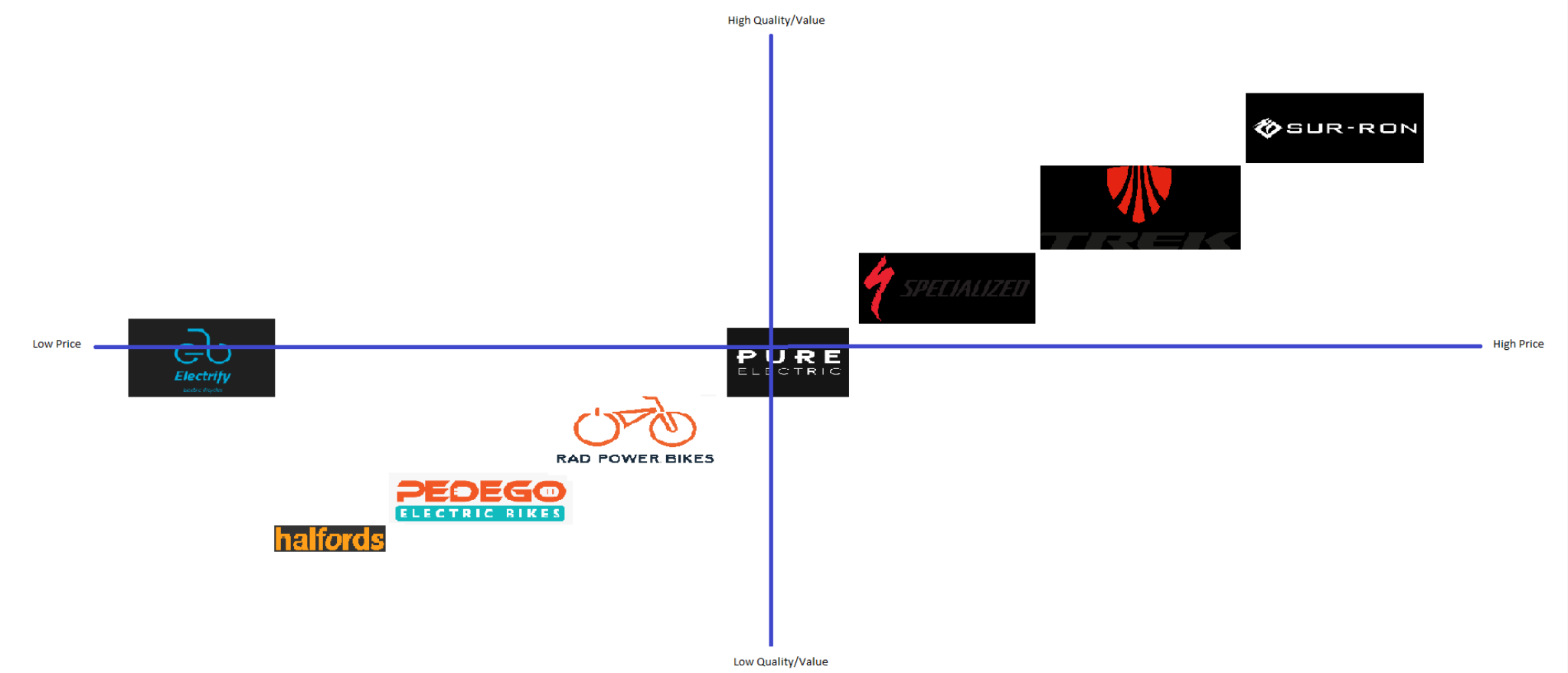
Non-expansionist / expansionist: These are alternative three year plans, ideally we would follow an expansionist route however if profitability is not high enough, the safer non expansionist route is a good fallback.

Cost per chain shop in area: The cost of a chain shop is derived from the cost a typical store, plus the cost of the administrative staff required to manage the chains in that area, for example the west midlands. If there are more chains in an area that cost is more evenly divided making individual stores more profitable. Once high density is reached individual stores can become extremely profitable.

**3.3 Provide an outline of all costs and expenses (preferably in a spreadsheet):**



3.4 Detail where the product/service is positioned in the market:



The core value of our product is that while our costs are lower than any of our competitors, the quality of the parts and the capabilities of the final converted bike is significantly higher than the vast majority of our competitors.

What we're looking for:	Score: out of		Confidential panel feedback:
The estimate clearly covers the cost of producing the product/delivering the service, running the business, winning sales, and outlines the profit that needs to be made		7	

Total		7	
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#### Question 4: Who is your competition and why will customers buy your product/service instead of the competition's?

##### Response:

##### 4.1 Identify the competition:

Voi – An electrical scooter rental company, a user will hire an electric scooter for a certain amount of time. This will be for a variety of reasons. A commute to work, travel to the shops. Voi is fairly affordable and charges by the minute with an upfront payment as well upon starting. VOI's 2019 revenue was \$33.93M, and VOI's valuation in August 2021 was \$807.64M. (<https://www.cbinsights.com/company/voi-technology/financials>)

Halfords – The UK's leading provider of cycling services, with a big reach into the electrical bike market. Halfords report a staggering 230% increase in e-bike and scooter sales(<https://www.bike-eu.com/38694/halfords-report-a-staggering-230-increase-in-e-bike-and-scooter-sales>)

Electric Bike Conversions - A small UK based company, offering DIY electric bicycle conversion kits

##### 4.2 Provide an analysis of the competing product/service, with a description of the strengths and weaknesses:

### Voi

#### Strengths

Cheap short term costs

If not looking for a long-term solution Voi provides a fairly cheap method of transport. (Unlock the scooter for £1, then 20p each minute after activation)

Payment Plans

Voi offers a 24-Hour pass and a Monthly subscription. This gives the user a greater incentive to use their product more frequently due to the reduced costs and benefits.

Maintenance

As customers rent these e-scooters, general wear and tear is not up to the customer and falls on Voi themselves to maintain.

Theft

These e-scooters do not belong to the customer, therefore responsibility about the e-scooters security does not concern them

#### Weakness

Expensive long term costs

If a commute to work on a voi e-scooter takes 10 minutes, a 2-way commute will cost £6. There's roughly 256 working days making the annual cost of a Voi £1536.

No sense of ownership

The scooter does not belong to the user, some users have pride in their vehicle and it gives them a boost to be able to display this in public

No customizability

Each Voi e-scooter is an identical product, no option for faster, safer or any other option.

## **Halfords**

### Strengths

Well established brand

At over 100 years old, Halfords is essentially a household name and would be most people's first thoughts when thinking of getting an electric bicycle.

Large Range

Being such a large brand, Halfords has a large catalogue of electric bicycles.

## **Electric Bike Conversions**

### Strengths

Already established brand

As an already existing brand, they already have their foot in the door

### Weakness –

Only offers DIY kits

Customers who would rather offset the work or are unable to have no other option.

Low brand awareness

Not a well known brand means their market share is weaker

### **4.3 Are there any other emerging competitors or competing technologies?**

There are other emerging companies offering a similar service to use. These include 'Electric bike conversions', however they sell the kits and expect the customer to convert the bicycle themselves.

Electrical bicycle renting is starting to emerge as a competitor, since the popularity of rentable e-scooters it is only a matter of time until this is widespread.

### **4.4 For each type of customer, describe the offer and why your offer has a competitive advantage:**



For retired and elderly people, we are offering an easy way of ditching the car for a more relaxed retired life. Many elderly people have an interest in getting involved in an electric bicycle. As an added advantage especially towards older people, we offer to do the conversion ourselves taking pressure off the customer.

As younger people generally have less money, we provide different tier conversion kits allowing them an easier avenue into electric bicycles.

For the ambitious customers, we offer higher tier conversion kits, providing the specifications for on our website.

An all-encompassing competitive advantage is that our service of electrifying a standard bicycle, is that the customer won't have to sell their current bicycle or search the market for a brand new electric bicycle. This comes at the advantage of a reduced cost to them, and a similar experience to a bicycle they are already comfortable with.

#### 4.5 Provide any evidence that supports your intentions:

Electric bicycle sales are growing 16x faster than general cycling

(<https://electrek.co/2021/10/05/electric-bicycle-sales-are-growing16x-higher-than-general-cycling-heres-why/>)

In 2020 the Electric Bicycle market was valued at an estimated £275 Million, reaching 23% of all Bicycle expenditure, this is expected to grow in 2022 (Mintel, 2021). (Mintel (2021) *Cycling – UK – March 2021* [online]. Mintel Oxygen. [Accessed 28 February 2022])

The majority of riders are 40 to 70 years old, but 25 to 35 year-olds are adopting e-biking at a quick clip. (<https://bikesmakelifebetter.com/infographic-the-rise-of-e-bikes/>)

What we're looking for:	Score: out of		Confidential panel feedback:
Has identified the other offers competing for the customer £ and their strengths and weaknesses relative to the offer and the customer needs		5	
Has included emerging competition and inertia, if relevant, as well as the established players and has presented an explanation of relative market position for the business		2	
Describes a valuable and compelling offer to each type of customer, relative to the competition and has articulated the competitive advantage that the business has		3	
Includes evidence that the customer will consider this price gives good value, both for the benefits this product/service brings and compared with the price and value provided by the competition		4	
<b>Total</b>		<b>14</b>	

**Question 5: How will you sell your product/service? How will you create interest and acquire customers?**

**Response:**

**5.1 Identify the channels you intend to use for each customer segment:**

There are two primary channels we intend to use for the sale of our conversions and conversion kits.

The first is a physical shop, this will be the primary channel for sales as well as the location at which conversions are actually realised. This is ideal for capturing a local market who might want to avoid the added costs of shipping a bike to the store, as well as opening up the potential for “walk ins”. This is ideal for targeting the lower income portions of the market we want to target

The second channel is through a website, this enables us to operate on a national scale as well as locally. The downside of this is that the shipping costs of a bicycle can be expensive (and the return shipping of an e-bike doubly so) however the flexibility this adds is well worth it. Given the additional cost this is more valuable for targeting the higher income portions of the market we want to target.

**5.2 Outline the marketing strategy for each customer segment:**

We intend to use a rolling marketing strategy, starting with affordable or free marketing techniques and then implementing progressively more expensive techniques as our business becomes more established

Phase 1:

Dense social media saturation across every available platform including

Facebook

Instagram

Twitter

Youtube

TikTok

In person advertisements including:

Flyers

Posters

Billboards

Postal leaflets

Additionally Radio Stations will also be advertising our brand.

As e-bike acquisition interest is similar across all age groups (Ling *et al*, 2017) we aim to target all age groups, by advertising online and in person, we will spread awareness to a large base of both young and older consumers.

Additionally some small amount of paid advertising on these networks would form an affordable basis for our marketing campaign

Phase 2:

Viral Marketing

Once profitability has been established we will separate more funds for our online advertisement methods. This will be done in a few specific ways

Sponsored conversions for notable social media stars in exchange for a review video

Group rideouts organised on social media with prizes to attract people and generate a lot of attention

Increase in paid advertisement on social media

Phase 3:

Local advertisements within the same district as the shop

Once a sufficient amount of capital has been established, we can begin advertising locally through a variety of means

First we will establish a flyering campaign, targeting low income and student housing. We will extensively flyer these locations with an advertisement including directions to the address of our shop and prices, this should capture the attention of a significant portion of our target market.

Next we will place posters around campuses and workplaces with cycling schemes to grab the attention of people with a pre-existing propensity for cycling.

After this we will hire a few strategically placed billboards (specifically across bicycle paths stretching between residential districts and commerce districts) to gain the general attention of all demographics who are regularly commuting, the group most likely to find our product appealing

Generally we will not focus on TV as a form of entertainment does not generally skew towards our targeting demographic, we will also try and focus all marketing attempts around certain time periods, for example the period when students typically receive their student loans, when potential customers are more flush with disposable income

### **5.3 Provide an estimate of the effort required to make a sale and how your marketing activity will be turned into sales:**

As it exists we aren't sure what to expect from initial marketing success but conservatively, assuming we manage to generate the baseline 45 sales monthly required to break even, we would desire a marketing return on investment of 100% or higher at each stage. Assuming we attempt to double our sales every two months, we will increase our profits by 3825 every two months. From this it is reasonable at least at the start in the growing business stage to take half of this profit as advertising funds, leaving the rest for upkeep and expansion. This leaves us with a marketing budget every two months of £1912 or or £42 per sale.

Ideally the majority of these initial sales will be generated from walkins from local customers reading the advertisements, however if this is insufficient national sales should ideally fill in any gaps in sufficient sales.

What we're looking for:	Score: out of		Confidential panel feedback:
Has identified a number of sales channels to use to get attention from potential customers for each customer segment and has described the benefits of each channel and thus the optimum approach for each segment		3	
Has considered ways to present the offer to potential customers and create the circumstances where they buy the product/service		2	
Has estimated how many leads/enquiries may be needed to make a sale and how these lead/enquiries may typically be converted into sales		2	
<b>Total</b>		<b>7</b>	

## Section 3: Describe the Business Plan (50 points)

**Question 6: What is the plan for the business over the next 12 months, and what overall is the plan for the next 3 years?**

**Response:**

**6.1 List and summarily describe the main objectives of the business:**

To summarise our business, the main objective is to provide a service of converting customer's standard bicycles into electric bicycles, using parts bought online from retailers.

**6.2 Outline the immediate target for 12 months' time:**

Our targets will be:

To reach a goal of 500 bike conversions done

£10,000 net profit

1000 Followers on Instagram

1000 Followers on Facebook

1000 Followers on Tiktok

1000 Followers on Twitter

50+ Reviews on Google reviews

**6.3 Describe the plan to get from today to your target in 12 months' time:**

We will order electrical bicycle components online and begin taking orders from customers, starting locally they will drop off or transport their bicycle to us themselves or via courier and we will let them collect or ship the newly converted electric bicycle to them. To reach our social media follower base target we plan to have a large focus on advertisements, we will run targeted advertisement schemes on Google, Facebook, Instagram, Twitter, and TikTok. An advertisement campaign will also be launched on radio stations, stations have a large reach to key demographics we wish to target. In person we will have poster and billboard advertisements, we will also hand out flyers, and business cards, whilst also posting informative leaflets about Electrify through letterboxes.

We will post to build awareness and generate interest with our service. To further build brand awareness we plan to attend conventions focused around cycling such as the Cycle Show, the UK's biggest bike event, and Bike Europe, an international biking event. We will set up a stand to promote Electrify. On social media, we will run giveaways where we award discounts to winners, building our follow base.

**6.4 Outline the long-term plan over 3 years:**

Year 1:

Find and a suitable building to lease

Targeted Advertisements

Hand out flyers  
 Attend cycling conventions and setup a stand promoting our service  
 Limited Range. Roughly 3 tiers of electrical bicycle components provided (low to high)  
 Grow on social media

#### Year 2:

Obtain a lease, begin decoration, stocking, shelving, signage, set up display models, etc.  
 Increase sales, more sales, we will scale up our stock giving us the readiness for an increased demand  
 Range Expansion. Increase our range of products giving users more choice  
 Expanded Advertisement campaign. As our co  
 If not already, get on the first page of Google, this would be a huge awareness increase and show validity in our service as well.  
 Build brand recognition, we can achieve this by hosting our own events, social media, etc.

#### Year 3:

Open leased property to customers  
 Hiring new employees for specific roles that fill a niche within our business (Accountants, Mechanics, Customer Support, etc.)  
 Expanding into selling fully Electric Bicycles, our original idea we have put to one side to focus on the service of converting bikes to electric, could be brought back and become a subset of our company now we have a larger platform, team and more money.

#### 6.5 How will the business evolve over the next 3 years?

As the business grows, we hope to expand our headquarters to a workshop if growth exceeds our expectations we could even set up multiple workshops spread out over the UK.

We would begin to hire more people to relieve some pressure on us founders

What we're looking for:	Score: out of		Confidential panel feedback:
Has identified the main objectives of the business		4	
Has identified a sequence of objectives for the business in the next 12 months and outlined a set of longer term objectives		4	
Has provided a clear coherent plan of how to get from the start of the business to the identified objective in 12 months' time		5	
Has identified the various stages the business will pass through during the first three years		2	
<b>Total</b>		<b>15</b>	

**Question 7: What are the barriers you need to overcome to succeed and how will you do this?**

**Response:**

**7.1 List the barriers you anticipate for each of the objectives in Q6:**

A big barrier that is anticipated is acquiring Investors. These investors will be needed as the biggest barrier of entry to get this business going is the funds to purchase necessary hardware such as the kits and equipment needed for installation. Without the investors, we will not be able to supply kits at a reasonable price to create a larger profit margin. Also, it will prevent us from converting customer bikes.

Another barrier to entry is a lack of social media presence. The goal for the business is to reach 1000 followers on Tiktok, Facebook, Instagram & Twitter. As electrify is a brand new start-up, our business as a brand is new so as a brand we are not yet notable.

Also as there are competitors already in this sector, It will be difficult for us to stand out. As compared to other competitors such as pure, we have far less notability. As they appear earlier in search engines due to their higher Google review rating.

**7.2 Describe what could go wrong and how you will tackle the problems:**

A big problem that could arise is not being able to supply the conversion kits. To tackle this we have to ensure to have a good working relationship with the manufacturer. As if we see a surge in sales, we could prompt them to increase the rate of production.

Another problem that could arise as mentioned in question 7.1 is the lack of notability, this is a problem that could stop us from selling any kits. A way around this is creating a large social media precedence through a variety of applications. One of the more popular social media sites is Tiktok, we could create small but informative videos of the benefits of having an e-bike and our conversion kits. This will drive more traffic towards our business and could increase product sales.

Another problem that we could face is the level of competition. We could be overshadowed by larger businesses such as Halfords or Pure. A way around this could be to ask customers to review our business on google. A business with a higher google review rating will show up higher in the search engine list. Also, we could provide customers with referrals that could be sent to their friends or family that can be used to provide discounted prices. This will bring more customers as the customer who purchased the kits will have some reward, which will make them more likely to tell others about our business.

**7.3 Describe how you could plan for pre-emptively managing the barriers:**

There are multiple ways to get funding for our business, one such way is using a venture capitalist. A venture capitalist does not use their own money but the money of investors so it will be easier to get a larger amount of money. A downside of venture capitalists is that they usually take a large share of the business and will have a lot of control over how the business will move along.

A great way of gaining social media presence is by sponsoring current creators on these platforms to showcase our product. Also, advertisements can be bought on both Instagram and Facebook, so for people who use these platforms and are interested in bikes our ads will be placed on their feed.

Also, a way around the problem of competitors is to ensure that our customer service is impeccable, this will make us stand out against the crowd of other businesses. Also, our price to performance will make the customer more inclined to come to us as it is far cheaper to convert a bike to an e-bike than it is to buy a brand new e-bike.

What we're looking for:	Score: out of		Confidential panel feedback:
Has identified the barriers to the objectives outlined in the previous question		4	
Has identified what could go wrong and how to address those problems		4	
Has thought about which of these areas should be tested and how, e.g. by: building prototypes or models or creating a questionnaire		2	
<b>Total</b>		<b>10</b>	

**Question 8: How do you plan to finance the business? Who are the stakeholders and what roles will they play in making the business a success?**

**Response:**

**8.1 Describe your financial plan, to start and sustain the business (a spreadsheet would be preferred). Include £ amounts where appropriate:**

To start our business we will initially buy a small number of electrical bike components of each tier, this gives us the stock to convert peoples bicycles into electrical bikes, without a big financial dent.

We will spend money on adverts on social media (Facebook, Instagram, TikTok) targeting those who have shown an interest in bicycles or electric bicycles.

If demand is high at the start, we order parts as customers order their conversion, production as a whole will be slower as we wont have stock due to waiting on the delivery of components.

A profit could be made right in the beginning depending on what we decide our profit margins to be on components.

**8.2 List the people and/or institutions involved:**

Luke Goodman, Alastair Langmead, Iftiak Hussain, Christopher Edmunds - Founders

A lot of responsibility will fall on us

Account - Financing, cost of components delivery, conversion costs, etc.

Advertising - We will work with social media to buy targeted advertisements

Branding - How the company is perceived



Conversion - Once we have received the bicycle we will be in charge of converting to an electric bicycle.

Customer Service - Direct contact to the customer about problems with their recently converted bicycle or questions about the service in general.

Property Management - Communicating with property providers

As the business expands, we will look to hire for specific roles to alleviate pressure on our team.

## Customer

Provides the bike in which will be converted by us

## Delivery service (Fedex, Bikedelivery, Parcelforce, Paisleyfreight, Parcelmonkey, etc.)

Responsible for the shipping of the customer's bicycle to us, and returning to the customer from us after being converted.

## Electronic Bike Component Suppliers (Alibaba, etc.)

To obtain the components for converting the bicycles we will use electronic suppliers who sell the individual components.

## Property

If we rent out a workshop as our main workspace, we will have to communicate with a property provider

## Social Media

Displays our targeted adverts to the potential customer.

### **8.3 Explain what help you expect to get from investors:**

#### Financial

Financial support behind building our business, this will allow us to kick start out business. We will be able to use the investment on advertisement, buying components and other avenues.

#### Business knowledge

Investors could provide insight on certain business methods, to give us a step up in the market.

#### Suppliers

Investors may know better suppliers or ways to get discounts.

#### General Support

Investors would be able to provide general support towards the business, hopefully giving an effective boost when needed.

**8.4 Describe your plan should the financial plan not work or take longer than originally planned:**

If the financial plan does not work, we could downscale our business to a 'made to order' style approach, where we only order components for a bicycle conversion when an order is made. This allows us to have minimal financial involvement into the business until an order is placed as we will have no stock, where we then order the parts, convert the bicycle and make a profit.

Bicycle conversion can be kept to a local area, where we could do a collect or drop-off scheme instead of relying on a shipping service.

Conversion can be done in one of our houses instead of in a dedicated workshop.

What we're looking for:	Score: out of		Confidential panel feedback:
Has thought about financing the project and provided avenues for investment and has identified all the stages of finance for the business idea, including estimating when the business will start making a profit		3	
Has ability to find resources needed to start the business, e.g. funding and team		2	
Has identified the stakeholders in the business (e.g. employees, suppliers, customers, shareholders, distributors), their importance to the business, and how to gain the stakeholder's help in succeeding		3	
Has a survival plan that allows for it taking longer than expected to generate a living income from this idea		2	
<b>Total</b>		<b>10</b>	

**Question 9: What is involved in bringing the product/service to market, in terms of infrastructure, people, and skills?****Response:****9.1 Identify the Key Resources, Key Activities, and Key Partners you need to get the product/service in front of your customers (i.e., from now to sale-ready):**

The biggest key partner that will be needed to get our product up and running is the manufacturer. Having good contact and relationship with the manufacturer will also allow the business to create better deals and ensure that supplies will be available in the future.

Another key activity that will be needed is marketing. This will allow the business to showcase the product which in turn will create more revenue. The marketing will be done through a variety of social media from Facebook, Twitter, Instagram & Tiktok. The use of a variety of social media will guarantee that the product will be shown to the most amount of viewership from a wide range of ages.

Also, good customer service is a key resource in ensuring that the customer feels happy with the services. Having good customer service will also make sure that we retain customers who repeatedly shop with us. Also, it is important as it builds brand recognition, as positive brand recognition will attract more customers.

Another key resource that will be necessary is the investors, as they will supply us with the initial cash flow. This money will be used to get physical resources such as machinery and equipment. This will ensure that the business grows quickly.

Another key resource that will be needed is trained manpower. The business will need a lot of human resources from technicians who will install the kits. To customer assistants which will allow us to sell the product.

### **9.2 Provide an analysis of the staff you need and the skills they provide:**

To get the business up and running we will need technicians that specialise in bicycle repairs and modifications. These staff will need to be able to repair any faults that arise with the kit promptly and also the installation of the kits.

To market to the appropriate customer base, we will need a marketing specialist. They will help strategize for advertising, planning promotional events, sales tactics, and create and develop advertisements.

Another key member that is needed is the Admin. An Admin will specialise in answering queries and also any calls and responding to emails. Admins will also carry out the task of selling the product and taking payments.

Another member of staff that will be needed is an accountant. The accountant will help the business to make sure that it follows all statutory obligations. It will also make sure that the business's finances are correct, to ensure that taxes are paid correctly and on time.

### **9.3 Describe the equipment, the facilities, and hardware you need:**

One of the most important things to ensure that the business runs smoothly is to have the correct equipment to install the kit.

To install the hub motor the equipment that will be needed are:

- Wheel Truing
- Spoke Wrench
- Tire Pump
- Inner Tube Levers
- Chain Whip

For the installation of the mid driver motor the equipment that will be needed are:

- Bottom brackets tools
- Chain Breaker
- BBSO2 Wrench
- Crank Puller

For the installation of the battery the equipment that will be needed are:

- Bottle mount screw set
- Generic Screwdriver Set

To display and store the conversion kits we will need shop fittings. The type of fittings needed will vary from storage shelving and boxes to keep the kits in. As well as product displays to display the kits and its various parts. We will also need trolleys to move around the bikes, to reduce exhaustion and improve safety for staff. Other shop fittings will be needed for pos and retail, such as security and safety signage, ppe, pricing/tags and promotional signage, shop counter, shop sign. All these items are incumbent for the business to function on a commercial level.

The main hardware that is needed is conversion kits and computers to allow POS to work. A large workplace will also be needed to allow the technicians enough room to fix kits and installation of the kit. It will also ensure a safer workplace as will it lessen the risk of injury.

What we're looking for:	Score: out of		Confidential panel feedback:
Has considered what assets must be put in place before the product/service can be provided for sale, e.g. the manufacture of a quantity of product, recruiting and training staff, building a website with sufficient traffic to persuade advertisers		7	
Has identified the people involved in the business and the skills they bring		3	
Has identified what skills are required to make the business a success and to address everything in Q6, Q7, and Q8		5	
<b>Total</b>		<b>15</b>	

## Section 4: The Longer Term (5 points)

**Question 10:** What is your exit strategy from the business?

**Note that this should be described in terms of a timescale and an approach (such as sale, flotation, retirement, etc.).**

## Response:

### 10.1 Describe your short-term plan (what will you do after the first three years; what might the exit look like at this point; what factors might your decision):

For the first three years we will have a main focus on converting customers' bicycles to electric. Over the three years, the net profit gained will help enable us to explore different avenues which will be discussed in the long-term plan.

To begin with, we will focus on making our brand presence known through online advertisement through social media and building a portfolio of conversions which can be displayed on our site, along with generating positive reviews which will encourage other potential customers.

We will begin with a single shop, then depending on income either expand to multiple shops in a single area, and only when we have reached saturation in a single area seek to expand out towards other areas. Or focus on a single shop to build a strong financial bed for expansion later. This area based approach allows us to only have to fund administrative level facilities such as logistics in a single place, as opposed to having to establish a logistical network for large swathes of the country to support a small number of shops.

Factors determining our exit at this point would be how much profit we're turning over, our relation with the conversion kit supplier along with how many of us are still active in the business. If we have a steady amount of conversions each month we would then look at expansion.

However if we're not getting as much demand as predicted, as well as not meeting profit goals over a set time period of time. We may consider winding down the company prematurely.

If we were to exit at this point, the timescale should be no longer than 6 months as we would not have a huge number of assets since we wouldn't keep more than 10 kits in stock at a time per-shop. This wind down would be a matter of returning the kits to the supplier if a return option is provided, failing that it would be a matter of selling these kits and selling any other small assets we have.

However should our company see out the three year initial development stage, we may still wish to retire out of the business and hand it off to a larger organisation.

If we were to exit at this point, we would ideally sell our company and brand to another competitor, likely one with a higher existing recourse pool such as halford or pure electric, so that they can continue the expansion of the business. Ideally we would sell with a marginal profit on existing stock and stores, but retaining either a stock option or a 0.3% (spread across all founders) share of future profits so that we can continue to profit off of our idea if it turns out to be the success that we believe it can be.

### 10.2 Describe your long-term plan (what is your overall exit timescale; what might the exit look like at this point; what factors might your decision):

Our long-term plan for the business would be to expand into selling ready made electric bicycles with our brand. This would involve offering three different levels of e-bicycle. Entry, mid and high, as in initial offering. The high level would offer the most powerful motor and battery out of the three available; this would go alongside providing a conversion service which our initial idea was built upon. Below is a spreadsheet detailing predicted costs of construction as well as potential parts for each model.



If demand continues to rise, we may look at establishing additional models of bikes, with different styles of frame and design. As it exists our designs are targeted at multiple facets of the market from road legal commuter to off road enthusiast. But we believe there exist sub categories such as cargo and long range commuter bikes which we haven't fully served.

Additional concepts for upscaling we haven't realised could also consist of renting out a storage facility for the increase in assets instead of storing in our own home / garage / store. Regarding whom the business could be sold to, if we are achieving a high demand of conversions and net profit is enough to provide a sufficient income for staff involved, we would look at contacting bicycle shops or big retailers such as Halfords.

Our primary long term exit strategy is much the same as our short term exit strategy

Sell our company and brand to another competitor so that they can continue the expansion of the business. Ideally we would sell with a marginal profit on existing stock and stores, but retaining either a stock option or a 0.3%

However if our business has reached this stage, there is one other option we may consider as a long term exit strategy.

We could, if our business has sufficient size, consider listing our organisation on the stock market so it can be publicly traded. We would then sell a non-majority share to fund a significant expansion of the business to drive up the stock value, then sell our majority shares while retaining a small minority share to continue to profit off of the expansion of the organisation. This could ultimately net us more than directly selling to a major competitor, but it is contingent on us reaching a sufficient scale to be worth trading.

Ultimately we would always like to realise some sort of exit strategy within a ten year time period. We believe this is a sufficient amount of time for our business to be established enough to be profitable, without allowing enough time for fundamental systematic problems with our realisation of the organisation to become apparent to external organisations that might wish to adopt it. Unfortunately systematic problems like these are an inevitability in all business with a logistical factor and we would prefer to exit before these become apparent, as they can be something of a "Gordian Knot"

### **10.3 What if things do not go as well as you hoped? What is your "Plan B":**

We are somewhat fortunate that our business plan involves maintaining a stock of parts and assets that generally do not depreciate in value significantly over time. Particularly in the modern bike industry most parts and design standards no longer change commonly, and standards have been established across the industry.

Given this, should our business begin to fail, before we reached a point of significant insolvency we would sell or return (if possible) any remaining conversion kits left in stock to try and regain any money lost, as well as resale all of our equipment. For our lease or leases we would need to either seek premature closure of the lease, or sub-let to other businesses. There does exist a healthy industry of seasonal and "pop" up businesses that utilise sub-let high street shops so this likely would be doable, however we would likely have to sublet at cost or a small loss.

Alternatively we may still be able to sell our company to a competitor, but we would likely need to offer them extremely favourable conditions if our business is failing, so the pros and cons of these two methods would need to be appraised depending on the situation at the time.



What we're looking for:	Score: out of		Confidential panel feedback:
Has defined the ambition/scale of the business over a longer period in order to get to a point where exiting the business becomes feasible		3	
Presents a credible explanation of when and to whom the business may be sold, transferred, or floated and what the assets might be at this stage		2	
Total		5	