# Appendix A: Research Covering App Income, Advertising Costs, Pricing Strategy, Marketing, Wages, and Other Asset Research: (Per Marketing, Finance, and Project Managers):

# **Contents:**

1. Fotal Product Income covering App Subscription Income and App Advertising Income: Version 1 -V1 - Preliminary results submitted for Financial Performance Review on 25 May 201	
Version 2 -V2 - Updated results submitted with final deliverables on 7 June 2018	35
2.Other Direct Costs – Advertising and Marketing Costs:	
(Unchanged between preliminary and updated results)	37
3. Pricing Strategies, Volumes, Prices, and Market Research, including Marketing Manag	er`s
Product Marketing Report:	
-This produces:	
A: Total App Subscription and App Advertising Income (pre applying retention rates to	
derive Total Product Income in 1 above).	
B: Advertising Costs (ie: 2 above).	
C: A Derived Marketing Mix (via market research)	38
4.Retention and Churn Rates for Mobile Apps applied to Subscription Income to derive	Total
Product Income in 1 above and further App Development/Marketing Points52	
5. Approach Taken on Salaries, Fixed, and Other Assets	60

# 1.Total Product Income:

(Version 1 - V1 - Preliminary results submitted for Financial Performance Review on 25 May 2018;

Version 2 - V2 - Updated results submitted with final deliverables on 7 June 2018).

Year 2Year 3Version 1: Total Product Income:(52wks)(52wks) $\underline{\pounds}$  $\underline{\underline{\pounds}}$ 

#### A. App Subscription Income:

#### V1 – Yr 2 and Yr 3:

Sweng 3 aimed at a target market of 30,000 annual subscriptions at £12 a year each:

360,000

360,000

(Appendix A: page 42)

( V1 results did not apply retention and churn rates and did not accumulate subscription income from year 2 into year 3. But V1 results did use a lower-end £1 price rather than the subsequently confirmed £2 price for annual subscriptions).

# **B. App Advertising Income:**

#### V1 - Yr 2 and Yr 3:

Sweng 3 researched a market with a range of 1k to 10k volume available for one-off hits.

Adopting a "median" approach and recognising the 17p mode price would need to remain the same once set, a volume of 5,000 was assumed to be attainable.

(Lowest price = 13p,

Highest price = 22p,

Mode price = 17p)

(V1 did not apply retention and churn rates to one-off hits,

but did use a lowe- end 17p price).

(Appendix A: page 46) Assume 5,000 Assume 5,000 5,000 x 17p = £850 £850

<u>V1 - Total Product Income:</u> <u>£360,850</u> <u>£360,850</u>

Version 2: Total Product Income:	(52wks) <u>£</u>	(52wks) <u>£</u>
A. App Subscription Income:		
V2 – <u>Yr 2 and Yr 3 :</u>		
Applying travel and lifestyle Appendix A page 52 app retention ra	tes to	
Appendix A page 42 income numbers:		
<u>Yr 2</u> :		
Annual target market = 30,000 subscriptions at £24 a year each =	<u>£720,000</u>	£720,000
Only part of this is likely to be retained as follows:		
-month 1: 44% retention x 30,000 = 13,200 x £2 a month =	26,400	
-month 2: 35% retention x 30,0000 = 10,500 at £2 for a month =	21,000	
-month 3: 29% retention x 30,000 = 8,700 at £2 a month =	17,400	
-Assuming retention rates then stay at 29% for the rest of year 2:		
-months 4 to 12 = 9 months		
-9 months: 29% retention x 30,000 = 8,700 at £2 for 9 months =	<u>156,600</u>	
Total Year 2 App Subscription Income:	£221,400	
<u>Yr 3:</u>		
-Assuming 29% of our first 30,000 subscribers are retained from y	ear 2	
for the whole 12 months in year 3:		
-Year 2 (whole year 3): 29% retention x 30,000 = 8,700 at £2 for 1	2 months =	208,800
-Assuming a fresh 30,000 subscription volume and £720,000 inco	me is	
available for year 3 with similar retention rates to year 2:		
-month 1: 44% retention x 30,000 = 13,200 x £2 a month =		26,400
-month 2: 35% retention x 30,0000 = 10,500 at £2 for a month =		21,000
-month 3: 29% retention x 30,000 = 8,700 at £2 a month =		17,400
-Assuming retention rates then stay at 29% for the rest of year 3	:	
-months 4 to 12 =9 months		
-9 months: 29% retention x 30,000 = 8,700 at £2 for 9 months =		<u>156,600</u>
Total Year 3 App Subscription Income:		£430,200
B. App Advertising Income:		
V2 – <u>Yr 2 and Yr 3 :</u>		
Sweng 3 researched a market with a range of		
1k to 10k volume available for one-off hits.		
Adopting a "median" approach and recognising the 17p mode pr	ice	
would need to remain the same once set, a volume of		
5,000 was assumed to be attainable.		
(Lowest price = 13p,		
Highest price = 22p,		
Mode price = 17p)		
(V2 does not apply retention and churn rates to one-off hits, but	does use	
a lower-end 17p price).		
(Appendix A: Page 46)	Assume 5,000	Assume 5,000
5,000 x 17p =	£850	£850
•		

# 2. Advertising and Marketing Costs:

**V2 - Total Product Income:** 

£222,250 £431,050

(Unchanged between pre	liminary and	updated results)
------------------------	--------------	------------------

(Onenanged between premimary and	apaatea results,		
	Period 1	Year 2	Year 3
	(24wks)	(52wks)	(52wks)
	<u>£</u>	<u>£</u>	£
Advertising Costs:			
Domain Costs: (Same for V1 and V2) (Same for YR 2 and YR 3) (Appendix A: page 46) Domain Costs: £264.96 divided by 10 = £26.50 per year	yrs -	26.50	26.50
		_5.55	
Other Non Domain Advertising Costs (Same for V1 and V2)  A. AdWord - £1,200 for 12 Months: (Appendix A: page 47)	<u>:</u> -	14,400	14,400
B.Social Media -£80 a day: ((Appendix A: page 47)	-	29,200	29,200
C. Other Advertising Costs:  -This provision has been set not to exceed the opportunity cost represented by further advertising using platforms such as Adword).  (-Freshers Fairs costs = £8,000 of this opportunity cost provision.  -£6,400 is therefore available for stall flyers, leaflets, brand tie-ups, and any other media advertising or marketing costs).  (Appendix A: page 47)	- S,	14,400	14,400
Total Non Domain Advertising Costs:	-	£58,000	£58,000

£58,026.50 £58,026.50

# 3.Pricing Strategies, Volumes, Prices, and Market Research, including Marketing Manager`s Product Marketing Report: -This produces:

Total Advertising/Marketing Costs: -

A: Total App Subscription and App Advertising Income (ie:1 above)

B: Advertising Costs (ie:2 above):

C: A Derived Marketing Mix (via market research- below)

Income comes from App Subscriptions and App Advertising Income and is based on what the market will take and can provide rather than on full absorption costing plus a profit margin.

# **Pricing/Strategy Model Adopted:**

We've already decided on the freemium model where subscription will give the user access to an ad free platform which offers an O2 priority like 'members club' where the users can get discounts for products, entry to events and freebies.

#### Freebies, Events and Partnership Strategies: Perks and Publicity Approach:

These could include:

#### **Product Freebies : Spices and Sauces:**

Herbs and spice samples – we could think about partnering with a brand such as Schwartz or Knorr

Bottles of sample sauces from new or existing companies looking to promote their products – Lea and Perrins/ Heinz/ Nandos/ Encona etc we can maybe have a similar partnership with such companies. There are fairly new brands such as Bandar Sauces which isn't available in the UK but have sachets and Naan chips in their product range.

#### **Event Freebies : Classes, Food Shows etc:**

BBC Good Food subscribers can apply for tickets to events put on by BBC Good Food, at first it's probably not going to be feasible to put on events ourselves so we should maybe pursue looking into tickets to farmers markets and maybe negotiating a discounted entry fee or a free meal at a stall at an event like this.

Events BBC GoodFood put on include cocktail masterclasses and food shows. Cocktail masterclasses on a first come first serve basis to members could be offered. Entry to cooking classes at universities could be offered where the member actually goes to a cooking class with a chef but the recipe is on the app and they cook along with the chef.

#### **Exploring Partnerships:**

A partnership with a supermarket would be a good avenue to explore, not high end like M&S or Waitrose or even Sainsbury's and Morrison's maybe ASDA, Tesco, LIDL, ALDI or Iceland. The cheaper supermarkets will be more appealing to our target audience. BBC GoodFood already had ties with ALDI when they were promoting healthy eating in the New Year.

# Market Research into Pricing and Volumes for the Freemium Model:

#### **Typical App Subscription Prices:**

Most apps are free and offer some sort of in app purchase system. [27]https://drive.google.com/drive/folders/1uqRCgPDMYEOPG94sdWLuQ9\_hqsnJMMaN.

So far these are the results of the pricing question in the survey (21/2/18)

11.	How much would you expect to pay for a monthly	subscription to the app described above?		Create Chart
			Response Percent	Response Total
1	Less than £1		44.57%	41
2	£1-2		26.09%	24
3	£2-3		21.74%	20
4	£3-4		5.43%	5
5	£4+		2.17%	2
			answered	92
			skipped	0

BBC GoodFood charges £43 for 12 issues which is roughly £3.58 each. I don't feel as though we can compete just yet with them nor are we targeting the same audience, BBC GoodFood demographic is mostly middle class, middle aged people –

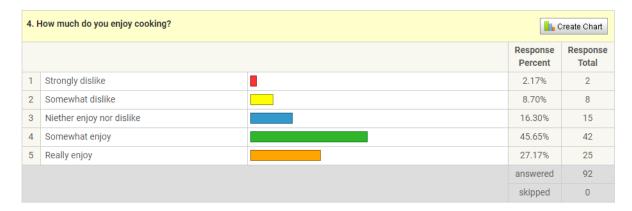
[18]https://www.bbcgoodfoodshow.com/images/uploads/docs/GFS Sponsorship Deck Aug 17.pdf

These people have more disposable income than our audience so we shouldn't be charging as much as them. From the survey most people would pay less than £1 however without having a product we can show them showcasing the benefits of our app it's difficult to 100% trust this information. KitchenStories don't charge and rely on their shop and ads, M&S app is free but encourages shopping in their stores. All student apps/websites are free but are littered with ads. Jamie Oliver charges £6.99 for a one off purchase of his ultimate recipes, 600 recipes – free version doesn't have as many recipes, limited to 15 a week.

34% of 16-24 year olds have Spotify premium, which is £10 full price or £5 for students and around 58% of the same ages group have a Netflix account, ranges from £5.99 to £9.99 depending on package. This shows our target audience are willing to pay for desirable subscriptions.

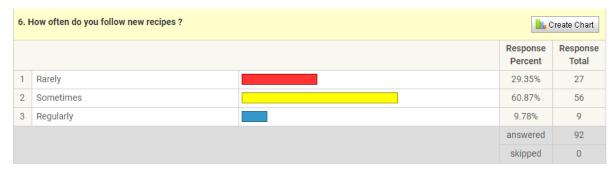
## Market Research into Popularity and Demand for our App:

How desirable is our product?



5. 0	On a scale of 1-5 (5 being the highest), how do you rate your cooking ability?	<u>■</u> C	Create Chart
		Response Percent	Response Total
1	1	1.09%	1
2	2	11.96%	11
3	3	47.83%	44
4	4	34.78%	32
5	5	4.35%	4
		answered	92
		skipped	0

Our audience seem to enjoy cooking, most people cook 6-8 meals a week, and the vast majority said they cooked themselves. There's a definite need for cooking apps:



7. I	How important is the length of time it takes to cook v	hen deciding to follow a recipe?		Create Chart
			Response Percent	Response Total
1	Not important at all		9.78%	9
2	Somewhat important		51.09%	47
3	It's a priority		39.13%	36
			answered	92
			skipped	0



These results show that our audience are searching for new recipes online and looking to cook new things. I would conclude there's a need for our product and it solves the problem of scrolling through recipes with dirty fingers. The other benefits include the social media integration as well as the subscription benefits already mentioned. I would suggest somewhere between £1.49-£1.99 a month fee as an initial stab in the dark estimate (for App Income).

## A. App Subscription Income; Volumes, Prices and Related Advertising Costs:

I'm struggling to find data on downloads directly from Facebook adverts etc. Millennials spend 34 hrs a month on facebook on average and roughly 88% of our target audience use facebook so that's approximately 8.2 million facebook users. By advertising on this platform we can hope to reach millions of users. If we target 20,000 views of our advert per day on facebook then 400 (2%) of these views will become click throughs resulting in 80 downloads per day (20%). Out of these 80 downloads per day we aim to have a 60 subscribers resulting in 60 subscribers per day. **Per year we aim to achieve 21900 subscribers**.

If we get around 300 downloads per month from advertising on keyword searches and aim for 75% subscription rate as before then we can achieve 225 subscribers per month. Over the year this become 2700 subscribers. If we include other social media platforms such as twitter and pinterest then we can aim to achieve **30000 subscribers a year.** 

This sort of advertising costs and it is up to us to decide on what we'll spend on this. Considering **AdWord advertising**, we can spend anywhere between £0.17-1.96 per click depending on how high on the list we want to reside. **Let's say we spend £0.2 per click we would spend £1,200 per month on advertising. On social media** if we spend the same per click then we would spend £80 per day on advertising. **Over the year the total cost of this advertising would be £43,600.** 

## This could therefore result in A1. App Subscription Income pre retention rates as follows:

	Year 2	Year 3
	(52wks)	(52wks)
	£	£
A1. App Subscription Income:		
<b>V1</b> – Yr 2 and Yr 3:		
30,000 SUBS at £12 a year each	360,000	360,000
<b>V2</b> – Yr 2 and Yr 3 :		
30,000 SUBS at £24 a year each	720,000	720,000

# NB:V2: These income numbers are before the application of retention and churn rates in section 4.

# NB:V2 = VERSION 2: The Updated App Subscription Income Results for the submission of deliverables on 7 June 2018:

-If we aim to achieve 30,000 subscribers a year all paying £2 per month (£24 per year) then we can expect to achieve £720,000 per annum. This is based off only achieving 30,000 subscribers per year. I would suggest this is a good aim for year one.

# NB: V1 = VERSION 1: The Preliminary App Subscription Income Results submitted in 25 May 2018 Financial Performance Review:

-If we aim to achieve 30,000 subscribers a year all paying [£1 to £2] per month (£12 per year) then we can expect to achieve £360,000 per annum. This is based off only achieving 30,000 subscribers per year. I would suggest this is a good aim for year one.

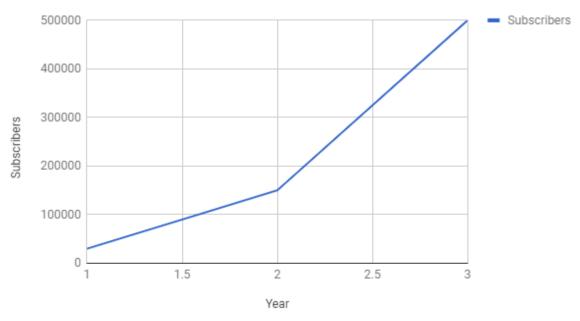
[32]https://sproutsocial.com/insights/new-social-media-demographics/

[33]https://www.facebook.com/help/community/question/?id=4903375074247

#### **Performance over the Next 3 Years:**

Below is an estimate of how we can progress in terms of subscribers over the next three years based on popularity of similar apps since they we released and their marketing budget.





This is based off research into advertising online and on social media. There will be other ways of reaching people described in the marketing plan.

In order to increase growth we would need to spend more on advertising per year until we have such a large customer base that we can reducing spending on our own advertising and start to charge larger companies more money to advertise with us. This is similar to what tasty have achieved with their success and product placement advertising in their videos. At first we start off small as we won't have the budget to achieve the level of subscribers we desire but hopefully by the second year we can spend what we need to on marketing to achieve this level of growth.

# App Advertising Income: Pricing of Typical Sales Volumes and Related Advertising Costs:

App downloads over time information is not freely available. Developers don't tend to publish this information. However the table below shows some information obtained from the google play store on number of install since release.

Name	Release Date	Current Number of Downloads	Avg Review /5
BBC Good Food	1/9/12	50,000+	3.4 (151 reviews)
Kitchen Stories	Early 2014	1,000,000+	4.6 (21579 reviews)
Tasty	27/7/17	1,000,000+	4.7 (25197 reviews)

The Tasty app is part of the buzzfeed group so it's rapid uptake is due to huge backing and investment from the parent company. The closest rival i would suggest we have is kitchen stories in terms of starting out small and growing steadily. In four years they have over 1 million installs from google play store, lets estimate that they have 2 million downloads including other app stores.

Therefore, relevant apps with big brand advantage resulting in backing, followings, and market uptake traction are: BBC Good Food, and Tasty

#### More comparable start up apps are: Kitchen Stories, Budget Bytes, Panna, and Paprika:

	Current	Rating	Review
	<u>Downloads</u>	out of 5	<u>Number</u>
1.Kitchen Stories: app released early 2014	21,582	4.6	21,579

[7]https://www.crunchbase.com/organization/kitchen-stories

https://play.google.com/store/apps/details?id=com.ajnsnewmedia.kitchenstories&hl=en\_GB

**2.Budget Bytes**: earliest review 2017 343

 $\begin{tabular}{l} \textbf{[8]} \underline{\textbf{https://play.google.com/store/apps/details?id=com.sidechef.sidechef.partner.budgetbytes\&hl=e} \\ \underline{\textbf{n}} \underline{\textbf{GB}} \\ \end{tabular}$ 

**3.Panna**:2011 71

[9]https://play.google.com/store/apps/details?id=com.pannacooking.panna&hl=en

**4.Paprika**:4.10.2014 1,230

[10]:https://www.crunchbase.com/organization/paprika

https://play.google.com/store/apps/details?id=com.hindsightlabs.paprika&hl=en\_GB

Kitchen Stories appears a comparable competitor because it has achieved:

- -1 million google installs in 4 years.
- -2 million downloads including other apps.

If we look at keyword searches from **Google's AdWord Tool** then we can gauge a picture of the number of people searching for phrases that are closely linked to our product. The table below shows data from the previous year for searches relating to our product.

				Top of page	Top of page bid
	Min search	Max search	Competiti	bid	(high range)
Keyword	volume	volume	on	(low range) /£	/£
recipe app	1,000	10,000	Low	0.17	0.61
cooking app	100	1,000	Medium	0.22	1.45
recipe book	1,000	10,000	High	0.15	0.32
dinner ideas	10,000	100,000	Low	0.17	1.45
easy dinner					
recipes	1,000	10,000	Low	0.13	1.96
cookbook	1,000	10,000	Medium	0.22	0.9
free recipe apps	10	100	Medium	0.18	0.46
Total	14,110	141,100		1	7

This table shows the search volume per month and the bidding price for having an advert on these keyword searches. Based on these seven phrases then potentially we can have 141,100 adverts being seen per month on google. If we take into account other search engines plus all of the other thousands of keywords that we can advertise with then i estimate that we can have 300,000 adverts seen per month. Google estimate that 2% of all ads seen result in a click through so per month we can hope for 6000 clicks. Of these 6000 clicks we can assume that around 1500 are of our target audience. This assumption is based on the fact there are approximately 9.3 million people in the uk aged 18-30 out of about 65 million, and that this generation spend more time online than older generations. Conversion rate is unlikely to be above 20% so let's say that monthly from this sort of advertising alone 300 new customers download the app.

This is on one advertising platform and we are far more likely to get customers from social media advertising.

[30]https://www.wordstream.com/average-ctr

[31]https://www.linkedin.com/pulse/20141102220536-50610275-how-to-forecast-sales-for-ansmart-phone-app

#### **Typical AdSense Advertising Revenue:**

Again this very much depends on how big we are as a company and what we can dictate to people wanting to advertise on our platform. Average cost per click varies depending on time of year i.e greater at christmas etc, 'Throughout 2015-2016 period CPC varied from roughly \$0.35 in Q2, 2015 to \$0.27 in Q2, 2016. During this time the peak value CPC reached was in Q4, 2015, a quarter that covers the Christmas season when all advertisers are doing their best to reach more of their target audience and hence CPC should go up.'

[28]http://www.mobyaffiliates.com/guides/mobile-app-advertising-cpm-rates/

#### **Advertising Income Strategy:**

We are having an advert at the start of the recipe slideshow on the free version, but this should be varied. Therefore we should follow a similar model to google whereby the highest bidder gets more share of the adverts displayed on customers phones. Maybe advertisers pay a certain amount per month for % share.

Another method is to do pay per view so for every 5000 times an ad is displayed they pay a certain amount. This company charges \$50AUS for every 5000 views of an ad on their platform. [29]https://teamappadvertising.com/business/pricing

# This could therefore result in A2. App Advertising Income as follows:

Year 2 Year 3 (52wks) (52wks) £ £

Volumes between1k and 10k:

At Prices ranging from 13p to 22p

Range 1k to 10k volume Assume 5,000 Assume 5,000 Price17p-will stay same once set £850 £850

(Lowest 13p, highest 22p, mode 17p)

(Appendix A: page 45)

# B. Advertising Costs:

## 1. Domain Advertising Costs:

To advertise our App, a domain name is required.

#### **B1.** Domain name:

handsoffcooking.co.uk for ten years: £264.96

.UK (.CO.UK) Domain Registration handsoffcooking.co.uk

£90.90 1st year £0.99 then 2+ years £9.99 (9% off 10 Years)

Privacy & Business Protection handsoffcooking.co.uk @ £129.90 72% off 10 years (Renews at £25.97/yr), keeps private information from public database so we can only publish names addresses etc if we want to.

£220.80+£44.16 (Taxes & Fees) Totalling £264.96 [19]https://uk.godaddy.com/dpp/find?checkAvail=1&tmskey=&domainToCheck=handsoff.com

# **B2.** Other Advertising Costs: Social Media: Google, Facebook, Twitter and Pinterest:

This sort of advertising costs and it is up to us to decide on what we'll spend on this. Considering **AdWord advertising**, we can spend anywhere between £0.17-1.96 per click depending on how high on the list we want to reside. **Let's say we spend £0.2 per click we would spend £1,200 per month on advertising. On social media** if we spend the same per click then we would spend £80 per day on advertising. **Over the year the total cost of this advertising would be £43,600.** 

# **Facebook Costs and Advertising Pages:**

There is no minimum charge for advertising on facebook, we tell facebook how much we want to spend and they try to get as much publicity as possible for that amount. It is free to create and run a page, we would only have to pay for advertising that page.

# **Social Media Campaign: from Posts to Quizzes:**

The advertising campaign should include short videos, of our recipes as well as videos of the screen as people use it. There should be a link to our product page on facebook which will have all the relevant information on it about the product plus some free bonus items such as videos from the premium version. Lots of these pages regularly post videos, share articles and engaging content such as quizes etc - a possbility for us?

#### **Video Impact Potential linked to Product Placement:**

It is estimated that tasty make between \$20,000 and \$50,000 per video they make through product placement and adverts. Example tasty case stud: 45-second guide to making <u>a</u> cheese-stuffed pizza pretzel had 37 million views, 650,000 likes, and 750,000 shares within 24 hours.

#### **Social Media Pricing Strategy resulting in Other Advertising Costs:**

To set a budget we have two options, pay X amount and see how it goes, carefully monitoring page views and click throughs from facebook to app store. The other option is to set a target revenue from these adverts alone, how many premium subscriptions do we need to cover advertising cost and generate revenue. Must be patient, it will not be an overnight success, it can take months to achieve desired revenue.

# **Using Google experience to quantify Other Advertising Costs:**

AdWord, on google adverts are ordered based on quality score, based on click through rate and relevance of keywords etc, and ad rank, set by google. We pay per click given by the ad rank of the ad below/ quality score + 1p. Advertisers bid on keywords and we would bid as much as we can depending on our budget. Once we set a budget we can estimate revenue from it.

- [20]https://www.facebook.com/business/help/201828586525529
- [21]https://www.facebook.com/business/help/201828586525529
- [22]https://www.quora.com/How-much-money-do-the-Tasty-videos-on-Facebook-make#
- [23]http://fortune.com/2016/01/19/buzzfeed-tasty-proper-tasty/
- [24]https://www.socialmediaexaminer.com/facebook-ad-budget-how-to-set/
- [25]https://www.wordstream.com/blog/ws/2015/05/21/how-much-does-adwords-cost
- [26]https://adwords.google.com/intl/en\_uk/home/how-it-works/search-ads/

# **B3. Other Marketing Plan and Advertising Costs:**

These costs could cover:

- Freshers Fairs (10 fairs at £800 = £8,000)
- Advertising on Facebook (also in B above)
- Advertising on search engines(also in B above)
- Pop up stalls at universities, supermarkets and in town centres
- Advertising with brands

The above points are all avenues we can explore in order to push our product into the mainstream.

#### **Freshers Fair:**

As our target audience is young people aged 18-30, setting up a stall at freshers fairs are a great way to tap into a mass of young people living in one area. The beauty of this is that there will be different freshers every year to visit, the downside is that there is a limited window of opportunity as freshers weeks are usually only in one six week window, mid august to october.

If we were to have a stall at freshers fairs we could have live demonstrations of the app as well as tasters of the food you can cook with the app, this will appeal to students. Costs can vary and there's not a lot of information out there however from University of greenwich, who have 9000+ students visiting, prices vary depending on location: £480 - £800 (see link).

York Freshers Fair: The 2016/17 price for a Freshers Fair stall for a private business was £525 for a standard stall and £825 for a premium stand (Email from YUSU).

	2009/0	2010/1	2011/2	2012/3	2013/4	2014/5	2015/6	2016/7	2017/8
UG	10,365	11,220	11,770	11,890	12,165	12,300	12,520	12,925	13,415
PGT	2,410	2,675	2,785	2,760	2,775	2,665	2,480	3,145	3,360
PGR	1,125	1,170	1,190	1,250	1,280	1,370	1,390	1,410	1,335
Grand Total	13,900	15,065	15,745	15,900	16,220	16,335	16,390	17,480	18,110

Leaflets are a must to give to students to encourage downloads. With vistaprint 20000 budget, glossy, a6 sized flyers would cost £86.61 excl VAT. If there are around 9000 students attending then we could aim to hand out at least 1000 flyers and free food samples.

So a typical cost of campaigning at a freshers fair would be around £500 for a standard stall, around £4.33 for cost of 1000 leaflets and maybe £300 on tasters ( around 30p per sample). **Per event : £804.33.** 

Of the thousand leaflets handed out we should aim for around 400 downloads of which we should aim for 300 subscribers. If these subscribe for a year at £2 per month then we can achieve £3600 revenue from this initial £800 outlay. If we aim to do ten freshers events a year with the same figures we can achieve 3000 subscribers in this one month window resulting in £36,000 yearly revenue.

As students begin to use the app, they will share it with their friends, colleagues, housemates and family and hopefully the app will begin to circulate.

[34]https://www.vistaprint.co.uk/marketing-

<u>materials/flyers?txi=16907&xnid=TopNav\_Flyers++(linked+item)\_Marketing+Materials&xnav</u> =TopNav

[35]https://www.suug.co.uk/aboutus/advertise/freshersbookings/

[36]https://www.york.ac.uk/about/student-statistics/

#### Pop Up Stalls, Flyering/Leaflets, and Big Brand Tie-Ups:

These have not been separately priced, as costs are both volume and calendar dependant and remain currently unplanned in full detail.

(Basically, a provision approach has been adopted to cover the following costs and this total provision has been set at a maximum relating to the opportunity cost of further Adword advertising where higher returns can be obtained for money spent).

# **Pop Up Stalls:**

**Pop up stalls** would be similar to those described for freshers fairs but be on a much smaller scale. For example we could return to the universities throughout the year but with a smaller setup which would lead to lower cost but also few new subscribers. Another way to promote our app is to hand out leaflets in town centres and at shopping centres to passers by. This would result in less yield as most people will take a leaflet and throw it away **however leaflets are very cheap to produce**, **£86.61 for 20000.** 

#### Flyering/Leaflets:

2% of all adverts online result in click throughs to the actual product, if we apply this rate of uptake to leaflets then per 20000 leaflets handed out in the street to our target audience then we can aim for 400 downloads per 20000 leaflets of which 300 become subscribers. We would have to employ someone to hand out leaflets etc in town centres and supermarkets, if they are paid £10/hr, work six hours a day and hand out around 720 leaflets ( 2 per minute) then total cost of this exercise would cost, £60 in wages and £3.18 in leaflet cost totalling £63.18 a day. Again assuming 2% download rate then we can achieve 14 downloads and 10 new subscribers. Paying £2 a month for the subscription for a year yields £120 a year from these subscribers. This isn't a great return but it does however get the brand name amongst supermarket products and the high street. These estimates rely on a pessimistic 2% yield but it shows how this sort of marketing can still make a profit with a pessimistic approach.

# **Big Brand Tie-Ups:**

Another avenue to explore would be getting ties with big brands. By having QR codes on the packaging of products such as Pringles, Cadbury's and Robinsons. These brands have a big impact on younger generation and as they are food companies so we could include some advertising on the app for them as part of any deal. This idea might have to be something that we cannot explore immediately as we do not have the market share or brand power that most of these companies would look to promote. I have sent emails to Heinz, Mondelez (Cadbury), and Kellogg's (Pringles) asking about the likelihood of a deal like this happening but all responded saying it wouldn't be possible. I also tried to ask ASDA and ALDI about having ties with a supermarket but neither got back to me.

[37]https://www.slideshare.net/Voxburner/youth-100-2017-the-top-brands-according-to-uk-1624s

This could therefore result in B. Adver-	tising and Mar	keting Costs as follows:	
(Unchanged between preliminary and u	updated results	5)	
	Period 1	Year 2	Year 3
	(24wks)	(52wks)	(52wks)
	£	£	£
Advertising Costs:			
Domain Costs:			
(Same for V1 and V2)			
(Same for YR 2 and YR 3)			
(Appendix A: page 46 above)			
Domain Costs: £264.96 divided by 10 years	rs		
= £26.50 per year	-	26.50	26.50
Other Non Domain Advertising Costs:			
(Same for <b>V1</b> and <b>V2</b> )			
<b>B1. AdWord</b> - £1,200 for 12 Months:	_	14,400	14,400
(Appendix A: page 47)		14,400	14,400
(Abbellance, base 17)			
<b>B2.Social Media</b> -£80 a day:	-	29,200	29,200
(Appendix A: page 47)		•	,
<b>B3. Other Advertising and Marketing C</b>	Costs:		
-This provision has been set not to			
exceed the opportunity cost			
represented by further advertising			
using platforms such as Adword).	-	14,400	14,400
(-Freshers Fairs costs = £8,000			
of this opportunity cost provision.			
-£6,400 is therefore available for stalls,			
flyers, leaflets, brand tie-ups, and			
any other media advertising or			
marketing costs).			
(Appendix A: page 47 above)			
Total Non Domain Advertising Costs:	_	£58,000	£58,000

£58,026.50

£58,026.50

**Total Advertising/Marketing Costs:** 

# C. To Summarise this Market Research:

Our Preliminary Marketing Mix [66] as a result of our Market and Pricing Strategy Research above is therefore as follows:

# **Product:**

- -Our product is a cooking app whose unique feature is its hands-off approach (the USP is in the name).
- -Our target market is 18-30 year olds interested in cooking apps.

# Price:

- -Our price depends on what type of app service the customer wants:
- A. If this a one-off app usage, then the price is 17p.
- B. With the aim being to secure a more lucrative, reliable annual subscription from the user, the annual subscription rate is £2 per annum for which the subscriber receives freebies and/or events access.

# Place:

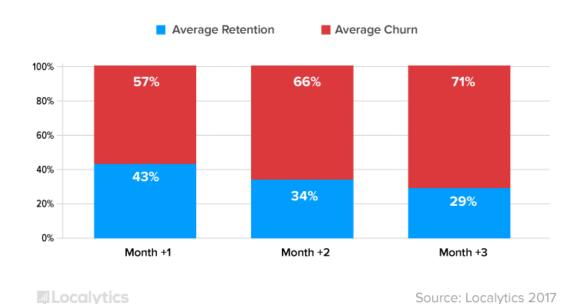
-Our product will be sold, accessed, and available through the well-established current app market on the internet (via mobile, computer, and Ipad app usage).

# **Promotion:**

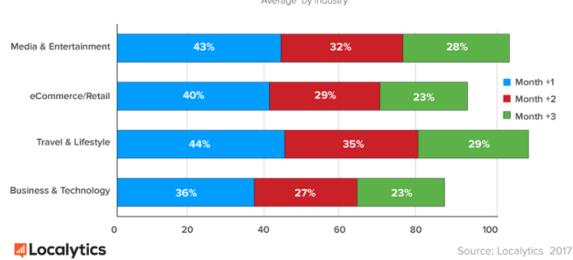
- -Our product will be promoted, advertised, and marketed through:
- A. Internet searches for cooking apps.
- B. Advertising on social media platforms.
- C. Freshers Fairs promotions.
- D. Pop up stalls, flyering/leaflets, tie-ups with big brands.

# 4. Retention and Churn Rates for Mobile Apps applied to Subscription Income to derive Total Product Income in 1 above and further App Development/Marketing Points:

- -App income cannot be guaranteed on an annual basis (Localytics [68] and Stasista [67] provide similar information supporting this).
- -There appears to be a churn rate average of 71% after 3 months resulting in a 29% retention rate after 3 months for mobile app income [67 and 68].
- This will severely dent our expected app subscription income, as media and entertainment apps appear to retain only 28% of users after 3 months, and travel and lifestyle apps (our cooking app market) appear to retain only 29% of users after 3 months.
- -Using 2017 data, Localytics [68] agrees with Statista [67] that 71% of all app users churn within 90 days, ie 3 months. This is shown as follows:



# Three Month User Retention



Localytics also propose the following 8 ways to improve mobile app retention:

- **"1.)** App Onboarding: If users don't clearly understand the value of your app and how to use it, their odds of churning drastically increase. We've seen app user retention rates increase by 50% after implementing a solid onboarding.
- 2. )In-App Messaging: In-app messages are received while a user is within your app, and is usually based off of some action taken. Because of this, they're highly relevant to the end user and also make it easier for them to move through your app experience. Plus, they've been known to drive retention up over 3x. 2.) Push Notifications Rich Push & Geopush: Push notifications are crucial to engaging with users outside of you app. But because they're sent right to a user's homescreen, the stakes are high to do it right. That means having compelling messaging that is personalized to the user, and combining that with the latest and greatest in push notification technology.
- 3) <u>Individualization:</u> App users crave individualization. They want their interactions to be tailored to their preferences, location, and in-app behavior. In fact, a recent study our data team did found that <u>individualized push</u> & <u>in-app messages</u> performed much better than broadcast.
- **4.)** <u>Predictive Insights:</u> Understanding which users are at risk of churning gives you the opportunity to save them. Using <u>predictive app marketing</u>, you can design highly personalized messaging campaigns to re-engage these users before it's too late.
- **5.)** Remarketing: 50% of all app users opt-out of push messaging, making it increasingly hard to draw users back into your app. The solution? Remarketing. Sending a compelling reminder about your app to lapsed users outside of the app is an effective way to re-engage them. You can do this through email, social, and search advertisements. Be sure to tap into data insights about your lapsed app users' behaviors, interests, and preferences to ensure your remarketing ad is relevant and thus, effective.
- **6.)** A/B Testing: The only true way to know which marketing strategies are working and which are falling flat is through A/B testing. A/B testing makes you smarter and more efficient when it comes to your campaigns, and helps you to pinpoint the messaging and features driving engagement and conversion. For example, you should A/B test CTAs to see which entice users to move through your key app funnels as well as different push and in-app offers to see which are drive higher conversion rates. The more in-app activity and conversion actions a user has, the more sticky your app becomes to them.
- 7.) Omni-channel Experience: One of the biggest mistakes marketers make is not integrating their app into their overall marketing channels. Too often, apps are siloed from the rest of the marketing strategy, resulting in a disconnected brand experience for the user. Instead, promote and infuse your app across all other channels to create a seamless experience for users. This seamless experience will translate into having a very sticky app, boosting your retention.
- **8.)** <u>Use Data to Guide You</u>: As with any channel, in order to truly win at mobile you need to lead with data. That means having a <u>mobile engagement platform</u> that

grants you the insights you need to understand how well you are retaining users, and how impactful your app marketing campaigns are in moving that needle. Having the right data insights will allow you to strengthen your interactions with users, ultimately resulting in a positive uptick in retention."

-Applying Localytics and Statista retention rates to our App Subscription Income only produces the following:

(Version 1 - V1 - Preliminary results submitted for Financial Performance Review on 25 May 2018; Version 2 - V2 - Updated results submitted with final deliverables on 7 June 2018).

	Year 2	Year 3
Version 1: Total Product Income:	(52wks)	(52wks)
	£	£

# A. App Subscription Income:

#### V1 – Yr 2 and Yr 3:

Sweng 3 aimed at a target market of 30,000 annual subscriptions at £12 a year each:

360,000

360,000

(Appendix A: page 42)

( V1 did not apply retention and churn rates and did not accumulate subscription income from year 2 into year 3. But V1 results did use a lower end £1 price rather than the subsequently confirmed £2 price for annual subscriptions).

# **B. App Advertising Income:**

## V1 – <u>Yr 2 and Yr 3</u>:

Sweng 3 researched a market with a range of

1k to 10k volume available for one-off hits.

Adopting a "median" approach and recognising the 17p mode price would need to remain the same once set, a volume of

5,000 was assumed to be attainable.

(Lowest price = 13p,

Highest price = 22p,

Mode price = 17p)

(V1 did not apply retention and churn rates to one-off hits,

but did use a lower end 17p price).

(Appendix A: page 46) Assume 5,000 Assume 5,000 5,000 x 17p = £850 £850

V1 - Total Product Income: £360,850 £360, 850

Version 2: Total Product Income:		
A. App Subscription Income:	Year 2	Year 3
A. App Subscription meome.	(52wks)	(52wks)
	£	£
V2 – Yr 2 and Yr 3 :	~_	_~_
Applying Appendix A travel and lifestyle page 52 app retention rates to	0	
Appendix A page 42 income numbers:	_	
<u>Yr 2</u> :		
Annual target market = 30,000 subscriptions at £24 a year each =	£720,000	£720,000
Only part of this is likely to be retained as follows:		
-month 1: 44% retention x 30,000 = 13,200 x £2 a month =	26,400	
-month 2: 35% retention x 30,0000 = 10,500 at £2 for a month =	21,000	
-month 3: 29% retention x 30,000 = 8,700 at £2 a month =	17,400	
-Assuming retention rates then stay at 29% for the rest of each year:		
-months 4 to 12 = 9 months		
-9 months: 29% retention x 30,000 = 8,700 at £2 for 9 months =	<u>156,600</u>	
Total Year 2 App Subscription Income:	£221,400	
<u>Yr 3:</u>		
-Assuming 29% of our first 30,000 subscribers are retained from year 2	2	
for the whole 12 months in year 3:		
-Year 2 (whole year 3): 29% retention x 30,000 = 8,700 at £2 for12 mo		208,800
-Assuming a fresh 30,000 subscription volume and £720,000 income is	5	
available for year 3 with similar retention rates to year 2:		
-month 1: 44% retention x 30,000 = 13,200 x £2 a month =		26,400
-month 2: 35% retention x 30,0000 = 10,500 at £2 for a month =		21,000
-month 3: 29% retention x 30,000 = 8,700 at £2 a month =		17,400
-Assuming retention rates then stay at 29% for the rest of each year:		
-months 4 to 12 =9 months		456.600
-9 months: 29% retention x 30,000 = 8,700 at £2 for 9 months =		<u>156,600</u>
Total Year 3 App Subscription Income:		£430,200
B. App Advertising Income:		
V2 – Yr 2 and Yr 3:		
Sweng 3 researched a market with a range of		
1k to 10k volume available for one-off hits.		
Adopting a "median" approach and recognising the 17p mode		
price would need to remain the same once set, a volume of		
5,000 was assumed to be attainable.		
(Lowest price = 13p,		

Highest price = 22p,

Mode price = 17p)

(V2 does not apply retention and churn rates to one-off hits, but does use

a lower end 17p price).

(Appendix A: page 46) Assume 5,000 Assume 5,000 5,000 x 17p = £850 £850

# <u>V2 - Total Product Income:</u> <u>£222,250</u> <u>£431,050</u>

# 5. Approach Taken on Salaries, Fixed, and Other Assets:

# A. Launch and Growth Phase Salaries:

- -Longer term, a formal enterprise reporting structure and incorporation of the enterprise as a private company could be required, although currently our project focuses on a 3 year time frame only covering Development (Yr 1), Launch (Yr 2), and Growth (Yr 3) phases.
- -As a result, overlap between roles within the enterprise is initially expected, along with lower salary costs. (Wages have been restricted to a maximum of three staff working for part of a year only during our next Launch and Growth phases).
- Therefore, our conservative approach results in the following wage costs for the Development, Launch, and Growth phases:

Period 1	Year 2	Year 3
(24wks)	(52wks)	(52wks)
£	£	£

(Unchanged between preliminary and updated results)

# **Direct Wage Costs:**

# **Development Phase: Year 1:**

Per Work Breakdown Schedule

and Cash Flow updates: 17,406

Launch Phase: Year 2:

3 staff performing overlapping roles, using top-end £29k salary estimates from Target Recruitment [53], for 3 months/13 weeks

= 3 x 29k x 3 months = £21,750

(Target [12] = 26-29K, Telegraph [11] = 27K,

Reed [13]= 39K) 21,750

Growth Phase: Year 3:

£21,750 x CPI 2.5% [14] = £22,294

# (CPI: Consumer Price Index Rationale:

# **Per Office of National Statistics:**

-to March 2018 = 2.3%

-to February 2018 = 2.5%

-Annual Average Rate March 2017

to March 2018 = 3.2%

-Therefore, median 2.5 % rate

used for inflationary price increases). 22,294

# <u>Longer term: Potential Future Hiring Positions and Hours that could need to be</u> Worked:

CEO: £50,000 p/A (Full time)

The CEO will fill Project managing and HR roles, as well as supporting staff wherever necessary.

Accounting, Finance: £50,000 p/A (Full time)

Throughout this project, the accounting and finance team has been working around the clock. This role is essential in maintaining investment, and so a full time position is absolutely necessary.

Programming Manager: £120k - £150k p/A (Full Time)
Software Engineer: £70k - £100k p/A (Full Time)

Thus far (up until the week of 21<sup>st</sup> May 2018) the team has spent 489 hours (net) programming. With an estimated\* 350 hrs of work remaining until prototype completion, this will result in about 840 hours programming work throughout this project. Programming started from 29<sup>th</sup> January, and is expected to be finished by 4<sup>th</sup> June, which in total spans 17 weeks. This points to an estimated average work time of 50 hours per week.

Future roles of the software team will include:

- Server maintenance
- Designing & developing App / features
- Bug fixing

And so a minimum of 2 full time employees (each working 48 hours per week) will be employed.

# Marketing Manager: £50,000 p/A (Full Time)

The success of the project hangs on popularity, resulting in a large and growing number of consumers. Marketing will boost brand awareness, and draw users to our platform.

## **Longer Term: Potential Typical Future Salaries:**

According to the below site the avg salary for someone in a startup is £36k. This varies with software manager earning £44k, a developer earning £32k etc.

#### [40]https://www.payscale.com/research/UK/Employer=Startup/Salary

Salaries will depend on growth of company, are we going to be regularly publish vast updates or will a lot of the work be just maintenance with occasional updates? Good start ups need to attract people so we should aim to pay at least 10% higher for staff that established companies. A graduate software engineer can expect about £32k starting salary, so we should be offering around £35k for graduates with no experience. This is probably a minimum for these sorts of roles. We should also include bonuses based on performance as well as shares in our company. Marketing graduates probably expect £27k starting salary for a good marketing role.

- [41]https://www.payscale.com/research/UK/Job=Software Developer/Salary
- [42]https://medium.com/swlh/why-great-startups-pay-higher-salaries-60255c75aa1e
- [43]https://jobs.theguardian.com/jobs/marketing-and-pr/graduate/

# B. Longer term Fixed Asset Purchases, such as Premises and Cars:

- -Consideration will need to be given to obtaining and furnishing business premises longer term, although this will remain dependant on achieving app subscription volume. (Currently, all premises expenses are covered through rent and utilities and it is envisaged that this will continue throughout the Launch (Yr 2), and Growth (Yr 3) phases of app development).
- -Longer term other fixed assets are also likely to be required, such as company cars.

# C. Longer Term: Other Asset Purchases- Server Research:

- -IT costs will also need to adjust from using a service to in-house development longer term, although what the enterprise can afford will remain dependant on what market share is gained and uptake traction for our cooking app product.
- Therefore, at present, the cost of a server has not been taken into account within the 3 year time window, as it is assumed IT will continue to be provided by a service until certainty over app income volume can emerge.
- -A cautious view has therefore been adopted for IT, and the actual purchase of a server has not finally been included until reliable app subscription volumes are known, likely, and realisable.
- -Preliminary research has, however, been undertaken into a server only, as this is likely to be the most urgent asset needing to be bought.

#### **Server Expenses**

Our app relies on a server to communicate with. For this, there are two options:

- Server Hire
- Purchasing a server

#### Server Hire

# Pros:

- No up-front costs
- No hardware maintenance costs

#### Cons:

- Storage space can be somewhat limited
- High long-term costs (£3-4k p/A)

#### **Server Purchasing**

#### Pros:

- Flexibility & control
- Can easily upgrade system

#### Cons:

- Large up-front cost

The application of our servers will primarily be the storage and transfer of large and growing amounts of data, largely images. Our financial plan is looking to start making profit within the 5 year mark, and so we feel that the up-front purchasing of a server best suits our needs.

# **Server Up-front Budget Estimate**

Server Computing Unit [1]	£3000
Storage Upgrade [2]	£360
<ul> <li>3TB SAS Hot-swap HDD (Can add more</li> </ul>	
as necessary)	
Rackmount Server Cupboard [4]	£450
TOTAL	£3810

# **Ongoing costs**

Maintenance	£500 p/A
Upgrades	£3000 once every 5 years

[61] - <a href="http://www.dell.com/en-uk/work/shop/servers-storage-and-networking/smart-value-flexi-r640-8x25-4114-1x16gb-1x300gb-15k-sas-h740p-idrac9-enterprise/spd/poweredge-r640/per6401">http://www.dell.com/en-uk/work/shop/servers-storage-and-networking/smart-value-flexi-r640-8x25-4114-1x16gb-1x300gb-15k-sas-h740p-idrac9-enterprise/spd/poweredge-r640/per6401</a>

[62] - <a href="https://www.ebay.co.uk/itm/NEW-Dell-Equallogic-3TB-3000GB-7-2k-7200-RPM-SAS-6Gbps-3-5-HDD-4CMD9/401496720655?epid=1190017491&hash=item5d7b11c50f:g:h4QAAOSwmLIX8Tyf">https://www.ebay.co.uk/itm/NEW-Dell-Equallogic-3TB-3000GB-7-2k-7200-RPM-SAS-6Gbps-3-5-HDD-4CMD9/401496720655?epid=1190017491&hash=item5d7b11c50f:g:h4QAAOSwmLIX8Tyf</a>

[64] - <a href="https://www.racksolutions.co.uk/portable-server-rack.html?gclid=CjwKCAjwopTYBRAzEiwAnU4kbxTHu\_zLsVVXsJqciWEGT-jymTWIGtCxZHG97Kx74HyH8">https://www.racksolutions.co.uk/portable-server-rack.html?gclid=CjwKCAjwopTYBRAzEiwAnU4kbxTHu\_zLsVVXsJqciWEGT-jymTWIGtCxZHG97Kx74HyH8</a> yaOW8XAhoCk-wQAvD BwE

# **Appendix D- References:**

# **Finance Manager References:**

# 1. Finance Manager References for Financial Performance Review - Preliminary and Updated Reviews:

- [1] Staff, "Freemium", *Investopedia*, 2018. [Online]. Available: https://www.investopedia.com/terms/f/freemium.asp. [Accessed: 25- May- 2018].
- [2] "How Spotify's Business Works", Business Insider, 2018. [Online]. Available: http://www.businessinsider.com/how-spotifys-business-works-2011-10?IR=T. [Accessed: 25-May- 2018].
- [3] Pplay.google.com, 2018. [Online]. Available: https://play.google.com/store/apps/details?id=com.pannacooking.panna&hl=en. [Accessed: 25- May- 2018].
- [4] "Freemium Business Model | The Psychology of Freemium | Feedough", Feedough, 2018. [Online]. Available: https://www.feedough.com/freemium-business-model/. [Accessed: 25- May- 2018].
- [5] S. Gilbert, "Hands Off! Cooking app survey", Smartsurvey.co.uk, 2018. [Online]. Available: http://www.smartsurvey.co.uk/s/CP2SH/. [Accessed: 25- May- 2018].
- [6] See Appendix A Pages 7-9-per Marketing Manager Research and Analysis.

# 2. Finance Manager References for Appendix A - Research:

- [7] https://www.crunchbase.com/organization/kitchen-stories
- https://play.google.com/store/apps/details?id=com.ajnsnewmedia.kitchenstories&hl=en\_GB [8]
- https://play.google.com/store/apps/details?id=com.sidechef.sidechef.partner.budgetbytes&hl =en\_GB
- [9] https://play.google.com/store/apps/details?id=com.pannacooking.panna&hl=en
- [10] https://play.google.com/store/apps/details?id=com.hindsightlabs.paprika&hl=en\_GB

# 3. Finance Manager References for Profit &Loss and Balance Sheets in Financial Performance Review - Preliminary and Updated Reviews: -Wages:

- [11] https://jobs.telegraph.co.uk/article/average-engineer-salary/ (Says £27k)
- [12] https://targetjobs.co.uk/.../engineering/.../284465-engineering-salary-round-up-from-... (Says £26k to £29K)
- [13] <a href="https://www.reed.co.uk/average-salary/engineering">https://www.reed.co.uk/average-salary/engineering</a> (Says £39k)
- **-Inflation Rates:** (CPI = 2.5%)(per the Office of National Statistics).
- [14] https://www.ons.gov.uk/.../inflationandpriceindices

# -Small Business Rates;

Small Business rates are lower than 16.86%

- [15] https://fitsmallbusiness.com/sba-loan-rates (rates set at maximum 9%)
- [16] <u>https://www.santander.co.uk/uk/business/borrowing-finance/business-loans</u> (offers between 4.9% and 24.9%)
- [17] www.businesscomparison.com/Small-Business/Loan-Comparison (rates as low as 3 % available)

# 4. Finance Manager - Other Marketing References in Appendix A:

[64] ME .E. Porter, 9 January 2008, The Five Competitive Forces that Shape Strategy,

Harvard Business Review

[65] Albert Humphrey, December 2005, "SWOT Analysis for Management Consulting"

http://www.sri.com/sites/default/brochures/dec-05.pdf).

SRI Alumni Newsletter, SRI international

[66] N. H. Borden, "The Concept of the Marketing Mix," Journal of Advertising Research. 1964, pp2-7, reprinted in M.J. Baker (ed) "Marketing: Critical Perspectives on Business and Management" Vol5, Routledge, 2001,pp3-4, and available online at Google Books.

- [67] <a href="https://www.statista.com/statistics/384224/monthly-app-launches-churn/">https://www.statista.com/statistics/384224/monthly-app-launches-churn/</a>
- [68] http://info.localytics.com/blog/mobile-apps-whats-a-good-retention-rate

# 5. Marketing Manager - References for Appendix A:

[18]

https://www.bbcgoodfoodshow.com/images/uploads/docs/GFS Sponsorship Deck Aug 17.pdf [19]

https://uk.godaddy.com/dpp/find?checkAvail=1&tmskey=&domainToCheck=handsoff.com

- [20] https://www.facebook.com/business/help/201828586525529
- [21] https://www.facebook.com/business/help/201828586525529

[22]

https://www.quora.com/How-much-money-do-the-Tasty-videos-on-Facebook-make#

- [23] http://fortune.com/2016/01/19/buzzfeed-tasty-proper-tasty/
- [24] https://www.socialmediaexaminer.com/facebook-ad-budget-how-to-set/
- [25] https://www.wordstream.com/blog/ws/2015/05/21/how-much-does-adwords-cost
- [26] https://adwords.google.com/intl/en\_uk/home/how-it-works/search-ads/
- [27] https://drive.google.com/drive/folders/1uqRCgPDMYEOPG94sdWLuQ9\_hqsnJMMaN
- [28] <a href="http://www.mobyaffiliates.com/guides/mobile-app-advertising-cpm-rates/">http://www.mobyaffiliates.com/guides/mobile-app-advertising-cpm-rates/</a>
- [29] https://teamappadvertising.com/business/pricing
- [30] https://www.wordstream.com/average-ctr
- [31] <u>https://www.linkedin.com/pulse/20141102220536-50610275-how-to-forecast-sales-for-an-smart-phone-app</u>
- [32] https://sproutsocial.com/insights/new-social-media-demographics/
- [33] https://www.facebook.com/help/community/question/?id=4903375074247
- [34] https://www.vistaprint.co.uk/marketing-

<u>materials/flyers?txi=16907&xnid=TopNav\_Flyers++(linked+item)\_Marketing+Materials&xnav</u> =TopNav

- [35] https://www.suug.co.uk/aboutus/advertise/freshersbookings/
- [36] https://www.york.ac.uk/about/student-statistics/
- [37] https://www.slideshare.net/Voxburner/youth-100-2017-the-top-brands-according-to-uk-1624s

# 6. Other References Used Throughout Appendix A - by Marketing Manager:

- [38] https://monetizepros.com/cpm-rate-guide/mobile/
- [39] <a href="http://www.businessofapps.com/data/app-statistics/">http://www.businessofapps.com/data/app-statistics/</a>
- [40] https://monetizepros.com/cpm-rate-guide/video/
- [41] https://www.quora.com/What-are-the-average-CTR-for-in-app-advertising-on-iPhone-and-Android
- [42] https://www.quora.com/What-are-the-average-CTR-for-in-app-advertising-on-iPhone-and-Android
- [43] <u>https://www.quora.com/What-is-the-typical-CTR-one-should-expect-from-native-ads-in-feeds-on-mobile</u>
- [44] http://blognife.com/2017/02/09/native-ads-cpm-rates-2017/
- [45] https://apps.epom.com/
- [46] http://www.reviveconsultant.com/articles/what-is-ecpm-and-how-is-it-calculated/
- [47] http://www.mobyaffiliates.com/guides/mobile-app-advertising-cpm-rates/
- [48] <a href="http://www.mobyaffiliates.com/guides/mobile-app-advertising-cpm-rates/">http://www.mobyaffiliates.com/guides/mobile-app-advertising-cpm-rates/</a>
- [49] https://enigma.swiss/en/2012/04/13/what-are-cpm-cpc-ctr-and-cpa/
- [50] <a href="http://www.mobyaffiliates.com/guides/mobile-app-advertising-cpm-rates/">http://www.mobyaffiliates.com/guides/mobile-app-advertising-cpm-rates/</a>
- [51] https://enigma.swiss/en/2012/04/13/what-are-cpm-cpc-ctr-and-cpa/
- [52] https://www.clickz.com/native-advertising-101-the-good-the-bad-and-the-ugly/89584/
- [53] http://coull.com/our-blog/digital-advertising-click-through-rates/
- [54] <a href="https://www.smartinsights.com/internet-advertising/internet-advertising-analytics/display-advertising-clickthrough-rates/">https://www.smartinsights.com/internet-advertising/internet-advertising-analytics/display-advertising-clickthrough-rates/</a>
- [55] https://www.mobilemarketer.com/ex/mobilemarketer/cms/news/research/16373.html
- [56] https://blog.hubspot.com/agency/google-adwords-benchmark-data
- [57] <a href="https://www.payscale.com/research/UK/Employer=Startup/Salary">https://www.payscale.com/research/UK/Employer=Startup/Salary</a>
- [58] https://www.payscale.com/research/UK/Job=Software Developer/Salary
- [59] https://medium.com/swlh/why-great-startups-pay-higher-salaries-60255c75aa1e
- [60] <a href="https://jobs.theguardian.com/jobs/marketing-and-pr/graduate/">https://jobs.theguardian.com/jobs/marketing-and-pr/graduate/</a>

### 7. Project Manager - References for Appendix A:

- [61] <a href="http://www.dell.com/en-uk/work/shop/servers-storage-and-networking/smart-value-flexi-r640-8x25-4114-1x16gb-1x300gb-15k-sas-h740p-idrac9-enterprise/spd/poweredge-r640/per6401">http://www.dell.com/en-uk/work/shop/servers-storage-and-networking/smart-value-flexi-r640-8x25-4114-1x16gb-1x300gb-15k-sas-h740p-idrac9-enterprise/spd/poweredge-r640/per6401</a>
- [62] https://www.ebay.co.uk/itm/NEW-Dell-Equallogic-3TB-3000GB-7-2k-7200-RPM-SAS-6Gbps-3-5-HDD-
- 4CMD9/401496720655?epid=1190017491&hash=item5d7b11c50f:q:h4QAAOSwmLIX8Tyf
- [63] http://www.broadbandbuyer.com/products/22387-watchguard-

wgm20003/?gclid=CjwKCAjwopTYBRAzEiwAnU4kb\_CYgWoHpap-

 $\underline{\mathsf{MNRLxM6OgAoysOnhkrsVFd1czsu0nqC8ym5CChzuZhoCrcoQAvD}\_\mathsf{BwE}}$ 

[64] - https://www.racksolutions.co.uk/portable-server-

rack.html?gclid=CjwKCAjwopTYBRAzEiwAnU4kbxTHu\_zLsVVXsJqciWEGT-

jymTWIGtCxZHG97Kx74HyH8\_yaOW8XAhoCk-wQAvD\_BwE