

Projecting Units Sold and Sales

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BUS200: Entrepreneurship to Market

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Introduction

In this article you will find an explanation of the pricing and projection research and development process for Hydro Homes. Most of the numbers are extrapolated from part costs at current market value for hydro generators with enough power output to hit the benchmark for a high usage home. Due to the secretive nature of the market, and my product aiming to lower the production cost, I am hoping to make what is currently not economically available to middle and lower economic classes, and make it obtainable.

Projecting Sales

Google SOE and Bing SEO will be the main focus on my spending in ad space. If you rise to the first page of any keyword registry, you become one of the first stops in exploring an idea, which inturn will naturally generate attention, negating the need to buy it. My research indicates that there is no better place to buy ad space than SOE because the money you spend generates momentum that when done right, is free of cost. Because 90% of searches are conducted on Google, it would be insane not to prioritize them, but I feel right out of the gate it would be wiser to invest in Bing ads for two reasons (Ahlgren, 2023). First, Bing ads are much cheaper, second their audience leans liberal politically, and they tend to care more about the planet. I would probably start with an 80% Bing, 20% Google ads for budget, and switch after 6 months. My strategy would be to use small wins to fund more attractive keywords. Fun fact, 9% of all english words make up 90% of all search engine searches. These popular words like “health” are very expensive because they are extremely competitive. If however I can rise to the top of a less popular synonym, for example instead of health, use wellbeing, I can rise to the first page for much less, stop spending money on ads for that keyword/phrase, and try tackling a more popular association with the new income.

Social Media will be used mostly to generate warm audiences. Most people go to social media to socialize, so trying to make sales is almost inappropriate. However, starting conversations, and sharing solutions to problems works well to invite strangers to consider what you are offering. I would not invest a ton of money, mostly I would run A/B testing, roughly \$10 a day 5 days a week to hone in on my target audience. The main goal of social media would be natural growth and brand familiarity. My last marketing tactic would be to purchase event sponsorship/booth space at alternative energy expos, and events.

Hydro power competition has a large price tag ranging from \$2,000 - possibly \$50,000 plus depending on electric demand just for the unit (Alibaba, 2023). You still have to ship it and insulation is even more than the pump most of the time. Average people can't do it independently using current water pressure methods, meaning rivers and lakes. (Kindberg, 2011). You also need a battery to store the power and a way to convert it to AC for home use, that is a consistent need for my product as well. My marketing should highlight that with my modular units it's much more cost effective to dial in on your actual needs, and once the tank system is installed they can add as many microturbine units as they'd like at their own pace, or call in help. Depending on the needs of the customer and the level of help they want, projected profits after sales range from \$2,000 - \$35,000 and average at roughly \$15,000. The target of two sales a month is to manage production expectations in the first year, anything more may create a back-log making people wait. However, if grants and tax breaks for green consumption can help customers pay for most of the product like they already do for more expensive solar, I'll invest year one income into the production process with a goal of 10X output. This will be achieved through mostly expanding 3D printing capacity and outsourcing less important components like housing hardware and batteries.

Projected number of units sold:	24	
Projected Price:	\$15,000	
	Year One Total	Per Unit
Sales	\$360,000	
TOTAL REVENUE	\$360,000	15000
Administrative		
Rent	4,500	My Office (Home)
Administrative salaries	50,000	My Pay
Managerial salaries	0	
Total	\$54,500	2270.833333
Product Manufacture (or Service Delivery)		
Employee manufacturing salaries		
Manufacture equipment	20,000	3D Printers
Manufacture supplies	20,000	3D "Ink" filament
Total	\$40,000	1666.666667
Marketing & Promotional (Only those you will use)		
Radio Ads	0	
Website	5,030	URL/SOE
Newspaper	0	
Face to face sales	5,000	Sponsorship Events
Social Media	5,000	A/B Testing & contests
Direct Mail	0	
Publicity		
Total	\$15,030	626.25
New Product Development		
Product design		
Prototype development	4,000	Initial material cost
Market testing & research	2,500	Surveying
Product enhancement	0	

Total	\$6,500	\$271
TOTAL EXPENSES	\$116,030	\$4,835
TOTAL NET INCOME (LOSS)	\$243,970	\$10,165

Forging partnerships in year one will give me discounted prices on wholesale components, lowering cost. At the same time having capacity for 20 product sales a month with higher average profit margin due to saving would set up year two for massive growth. For example: Assuming two things, first a new average profit considering wholesale prices of +500 or \$15,500 as sale, and a new production range of 0 - 20 a month. This means my profit range in year two would be 0 - \$310,000 a month, or an average of \$155,000.

Conclusion

This is a loose interpretation of the sales and pricing based on competitor pricing, and asset acquisition. After all year one projections the monthly profit margin sits just over \$10,000 a month. If that target is hit, then my year two growth could easily be 10X using a 3D printer production process. My initial cost per printer is roughly \$5,000 using the Raise3D Pro 2 Plus as a benchmark for size and speed (Raise3D, 2023). With an initial budget of 20,000 I can afford 4, so I'd need 40 to 10X costing \$200,000 of my just under 250,000 profit margin for year 1. Being that purchasing more production capacity could happen over time marginally one machine at a time, I would probably scale advertising to match until I reach competitive market normals for larger companies such as a Google ad budget of \$15,000 - \$20,000 monthly (Ahlgren, 2023). I can see that it is going to be of great benefit both to the market and my company, to make hydro generators that are simple enough for the DIY experience. It will save me a ton of time and then a ton of money. If projections are even close to accurate, this product adds up nicely.

Source Page

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