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  - A. Accountants would welcome flat taxes as it simplifies the taxation processing allowing them to more quickly process individuals.
  - B. Small business owners would welcome flat taxes as it reduces the tax burden and simplifies the process.
  - C. Individuals with investments in the stock market would welcome flat taxes as it would reduce dividend taxes,
  - D. Government tax department workers would likely not welcome flat taxes as a simplification of the system could result in potential loss of employment.
  - E. Low wage earners would likely be unaffected by a flat tax as they are protected from paying high levels of tax due to their income.
  - F. The rich would welcome a flat tax as it means their tax rate would be less on account of their high incomes.
  - G. Capital equipment manufactures would approve of flat taxes because they would only be taxed on the purchase year and not later years.
  - H. Leasing companies would oppose the change because leasers pay tax on the amount leased and a flat tax would reduce the amount paid in taxes.
  - I. Welfare recipients would approve of a flat tax as there is data that suggests a flat tax may increase tax revenues benefitting welfare recipients.
  - J. As a student who does not make enough funds to have a attitude. But as my family is well off, as a family we would benefit from a flat tax.
2. The stock market would increase as companies would have more capital to make impactful business decisions.
3. Yes, having the ability to fully expense capital equipment fully in the year of purchase would change the company's decision to invest. I think this would lead to more monopolies and larger firms as they could expense and purchase assets in a single year allowing them to save money in the long. This means that large companies who can afford these expenses are much better off.

## Mission Statement

The mission of GastroCroc is to develop a holistic approach to gait rehabilitation that's not only about improving the physical but protecting and improving the mental as you progress on your rehabilitation journey. We are committed to serving our customers of all ages with the dignity, respect, and kindness they deserve.

## Market Analysis

The GastroCroc operates in the physical and occupational therapy industry, which was worth \$34.5 billion in 2018 in the United States (US). Our customer base is a much smaller subsection of children suffering from Cerebral Palsy (CP) who require gait rehabilitation. In the US, there are approximately 500 000 children under the age of 18 who have CP. Although a smaller market, this presents an optimal opportunity to meet our clients specialized needs.

Our primary competition is the "Smart Insole" market. Digitsole, (Do you need registered or trademark here?) a leader in the smart insole market, sells a smart insole capable of doing gait analysis and tracking called the PodoSmart. The PodoSmart system comes with 6 pairs of smart insoles, and the necessary equipment for 2000€. This system is designed for use by a healthcare professional and is meant to be primarily used at a practitioner's office as opposed to at home. The PodoSmart is advanced with its use of artificial intelligence to detect mobility disorders.

Another current unreleased competitor is Bonbouton, which has developed a smart insole that detects foot ulcers. While not competing with us directly, Bonbouton could easily develop their IOT smart sole to compete with our own. Bonbouton currently has no release date or price for their product but they represent a growing interest in the industry.

By marketing ourselves as an at home solution meant to improve rehabilitation and reduce the number of healthcare appointments, we can not only market to parents who want to track progress but also to physiotherapists allowing them to inflate the volume of clients they can see by allowing them to analyze this client data outside regular working ours. This also opens up opportunities for full remote physiotherapists who do not have a typical office but look at the information provided by our solution and future remote devices to prescribe stretches and routines remotely allowing them to significantly reduce costs and provide service at a much cheaper price.

## Financial Viability

We see a unique opportunity for the GastroCroc in the at home rehabilitation market. We estimate that it will cost us approximately and the breakdown is as follows:

\$20 in labour	\$14 for both FSRs	\$40 for the EMG sensor
\$1 for the EMG strap	\$2 in electrical materials	\$11 for a portable battery pack
\$13.5 for an ESP32	\$10 for the shoes	

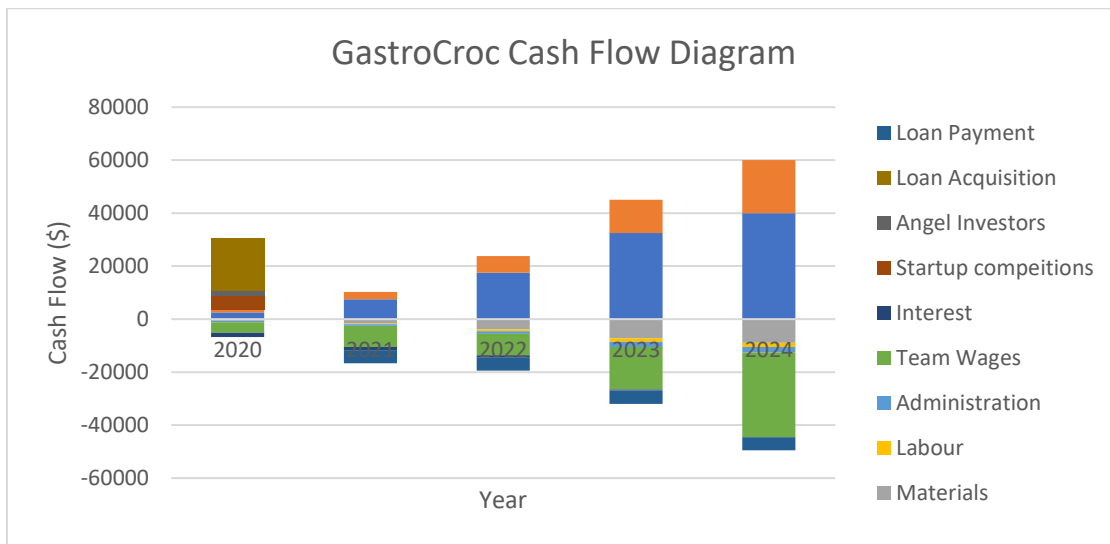
This brings us to a total cost per shoe of \$111.50. Customers would have the option of buying one or two shoes. Our cash flow analysis assumes the purchase of a smart shoe and one regular shoe.

We believe that we can sell the GastroCroc at approximately \$500. This positions us as a low-cost solution in a market presenting a potential value option for families while also leaving significant margins. At this price point it also allows physiotherapists to buy several and rent them out to potential customers creating a source of recurrent revenue for these physiotherapists. This \$500 is simply for the physical prototype. We would look to charge \$10 a month for the mobile application that is necessary to run the device. This software as a service acts as recurrent revenue to ensure that once we are established in the market, we still have the required cash flow to continue to improve our design and product stack.

## Team Members and Roles

- Jeff Sutor – Lead Software Developer and Electrical Design Lead
- Chelsea Angeles – Principal Researcher and Health Solution Point of Contact
- Lianna Genovese – Mechanical Design Lead and Funding Manager
- Kiarra McDougal – Team Coordinator and Public Point of Contact

## Cash Flow Analysis



Assuming our team has no cash reserve and an 8% annual interest rate from our loans our pricing structure would be \$500 per unit with a \$10 monthly software subscription. It costs us \$111.50 to make one shoe, we assumed that we retained 90% of our previous and current software uses year on year. We would need an initial loan of \$20 000 assuming \$5000 is won by start-up competitions and \$2000 is

garnered by angel investors. We assumed that we would sell 5, 15, 35, 65, and 80 new units respectively for 2020-2024.

## Appendix A: Excel Sheet

		2020	2021	2022	2023	2024
<b>Current Status</b>						
Monetary status						
	Funds at start of year	0	37457.50	64390	107532.50	184580
	Funds at end of year	37457.50	64390	107532.50	184580	294140
Customer Status						
	New Hardware Customers	5	15	35	65	80
	Software License Customers	10	23	52	105	167
<b>Operations</b>						
Payments from						
	Hardware Purchase	2500	7500	17500	32500	40000
	Software Purchase	1200	2760	6240	12600	20040
Payments to						
	Materials	-557.5	-1672.50	-3902.50	-7247.50	-8920
	Labour	-100	-300	-700	-1300	-1600
	Administration	-500	-500	-1000	-2000	-2000
	Team Wages	-4000	-8000	-8000	-16000	-32000
	Interest	-1600	-1200	-800	-400	0
<b>Financing Activities</b>						
Funding from external sources						
	Startup competitions	5000	0	0	0	0
	Angel Investors	2000	0	0	0	0
Loans						
	Loan Acquisition	20000	0	0	0	0
	Loan Payment	0	-5000	-5000	-5000	-5000
	Loans Owed	20000	15000	10000	5000	0
<b>Net Cash Flow</b>		37457.5	26932.5	43142.5	77047.5	109560
					Pricing Details	Price
					Hardware Cost	111.50
					Hardware Retail	500
					Software Retail	10
					Labour Cost	20