Innovative Turbidity Meter

ENGG6150 Bioinstrumentation Final Project Part II

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Market Analysis:

Drinking water and industrial water all require to pass stringent requirements prior to further using. There are many specifications that water needs to pass. One of requirement is Total Dissolved Solid (TDS) and it can be measured through turbidity meter. Two types of turbidity meter are commonly used in the market including holdheld and benchtop. According to Future Market Insight [1], global turbidity meter will reach one billion US dollar in 2029 end. Handhold turbidity meters will reach 400 million by 2029 end. There are many bodies might require turbidity meters as shown in figure 1. My business proposal is targeting on handhold turbidity meter only.

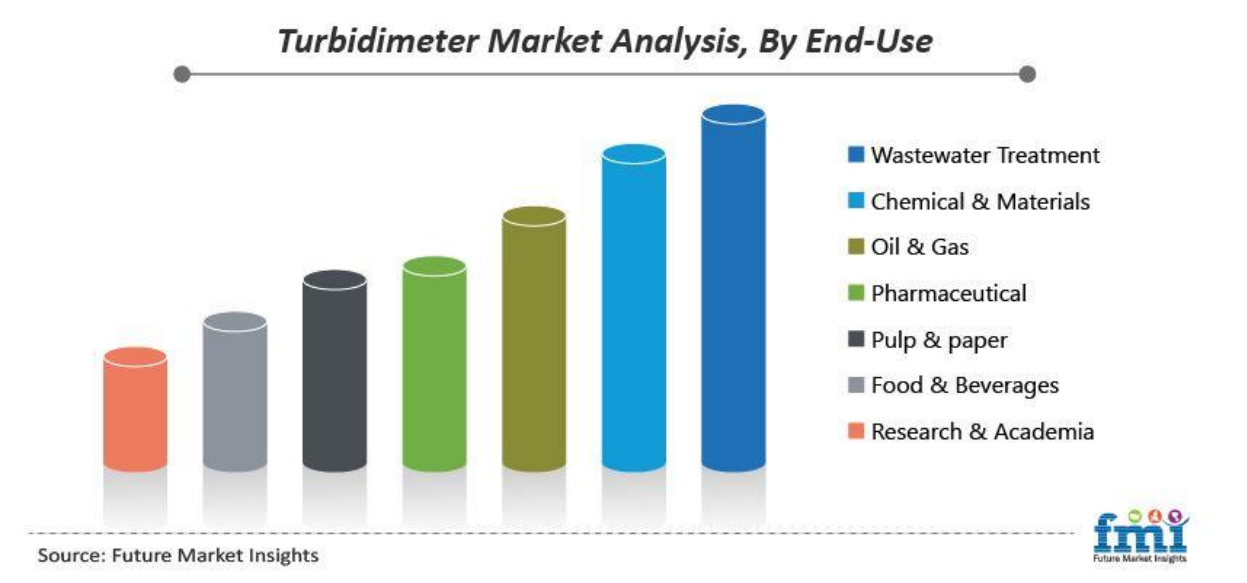

Figure 1: Turbidity meter market demand [1]

Current Market Competitors:

There are many brand companies manufacturing this device including Thermo Scientific. Lowest price of turbidity is $913.5 Canadian dollars and highest one is $2224.82 Canadian dollars base on table 1. Since this is new product, I will make my product lowest on the market in order to sell quickly. I will set my price approximately around $500 Canadian dollars. After generating quick cash and will use the profit to manufacture more products.

Table 1: Major vendors of Handheld Turbidity Meter in Canadian dollars $ *[2]*

brand	lowest_price	highest_price
Oakton	1259.01	1617.05
Hach	1969.92	1969.92
Extech	913.50	913.50
Thermo Scientific	1804.90	2224.82
HF Scientific	1565.48	1565.48

Lovibond	1613.36	1613.36

Detailed Business Plan:

In the first stage, funding is required. Potential funding partner includes school entrepreneurship plan and Federal and Provincial level government funding organization for startup for entrepreneurship as well. T able 2 has listed major government bodies that provides funding.

Table 2: Potential Funding bodies for Turbidity Meter Startup [4]

Organization	Govern_body
BDC Small Business Loan	Federal
BDC Newcomer Entrepreneur	Federal
Canada Small Business Financicing Program	Federal
MaRS Investment Accelerator Fund	Ontario
OCE Market Readiness Program	Ontario
OCE Voucher Programs	Ontario

Second stage is manufacturing sample step, we will manufacture just a few samples by myself for demostration only. I can just use my garage to assemble turbidity meter in order to save cost in beginning.

Third stage is marketing step, I will call all of water treatment related companies to seek for potential customers. Table 3 lists biotechnologies companies and university research labs that might potentially require turbidity meter. In the early stage, I will send out emails to them or call them to promote this product.

Table 3: Potential customers[3]

Company	Location	Category
Protected Elsius	Alberta:Calgary	Industry Service & Support
Genome Alberta	Alberta:Calgary	Early stage biotechnology
Xenon Pharmaceuticals Inc	British Columbia:Burnaby	Early stage biotechnology
Takeda Canada Inc	Ontarion:Oakville	Commercial biotechnolgoy
BIOTECanada	Ontario:Ottawa	Industry Organization
MaRS Discovery District	Ontario:Toronto	Incubator & Accelerator
University of Waterloo	Ontario :Waterloo	Research and Academia
Merck Canada	Quebec:Kirkland	Commercial biotechnology
Pfizer Canada Inc	Quebec:Kirkland	Commercial biotechnology
Valeant Canada	Quebec:Montreal	Industry Service & Support
BioAuxilium Research	Quebec:St Laurent	Commercial biotechnology

Forth stage is to proceed massive manufacture stage. A lab or manufacturing site will be used to manufacture these equipements.

Reference:

[1] https://www.futuremarketinsights.com/reports/turbidimeter-market. 03/05/2020

[2] https://www.coleparmer.ca/c/turbidity-meters. 03/05/2020.

[3] http://www.biotech.ca/biolist/. 03/05/2020.

[4] https://innovation.ised-isde.canada.ca/s/group-groupe?language=en_CA&token=a0B5W000000ArMcUAK. 03/05/2020

[5] https://www.mentorworks.ca/what-we-offer/government-funding/funding-regions/ontario/ . 03/05/2020