Executive Summary

FIBOS is a start-up, founded in July 2016, in Toronto. The company produces fiber-optic sensors, which can work in environments where electrical sensors cannot, due to their immunity to electromagnetic interference and to their inherent inertness. The sensors produced by FIBOS have benefits over traditional fiber-optic sensors as they are capable of operating between a large temperature range, are physically adjustable to several different configurations, and have high resolution and sampling times. Such a technology has applications in industries such as metrology, oil and gas, life sciences, energy, and aerospace. The company currently has clients in the first market, is working to expand into the second market, and has asked the APS1013 class to investigate the feasibility of expansion into the latter two markets.

An investigation was performed by the team to determine the feasibility of expansion into the aerospace and energy markets by performing a market scan on the sensor industry. Upon analysis, it was determined that the life sciences industry would also be a potential avenue for investigation. After research on the company's technology and culture, a market analysis on the sensor industry, and consultation with industry experts, suitable recommendations were proposed to develop a strategic plan for market expansion.

The recommendations were made after accounting for the existing resources and capabilities of the company, and the priority was to make the proposed recommendations as feasible and practical as possible for FIBOS to execute. Based on the theoretical research, the proposed solutions, if implemented, could significantly increase both- the market share as well as the client portfolio for the company.

Based on the results of the analysis, it is the recommendation of this report that FIBOS should enter the power industry next. The only major obstacle of the power industry is a resilience to change; however, FIBOS may be able to contact new plants or maintenance ventures, such as the current refurbishment of the Darlington Nuclear Plant, which may be more willing to adopt new technologies.

The life sciences industry has a large potential for expansion, and FIBOS may be able to expand within this industry by contacting faculty members at universities to test their sensors and fine tune to applications. FIBOS could then obtain the requisite standards and market their sensors according to these researched applications.

FIBOS should also undertake a passive approach for expansion into the aerospace sector, as the sector is heavily regulated and does not have the same potential as the life sciences industry. In addition, FIBOS may be able to enter the aerospace industry in the future using the power industry as a launching point, and may be able to utilize registrar contacts from the life sciences industry to assist in regulation compliance. As such, this report recommends that FIBOS does not enter the aerospace industry until a suitable foothold in the life sciences and power industries is established.

Team Leader

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