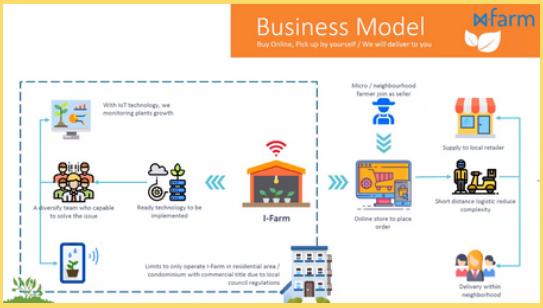
NEWSLETTER

SUNDAY 14/01/2024

INDUSTRIAL TALK 3 (TECH-DRIVEN INNOVATION)

TECHNOLOGY INFORMATION SYSTEM



SUMMARY

We have invited Dr Seah Choon Sen to give a talk about unleashing the power of buisness growth in urban farming solution. I-Farm is a group of environment friendly member dedicated to establish indoor farming in urban areas providing for local communities while working closely with micro farmers in generating fresh, pesticide-free vegetables for consumers.He stated that shortage of fresh vegetables due to Movement Control Order (MCO).

PROPOSED SOLUTION

Introduce integrated urban farm in every residential area. Residents can order and pick up vegetables that freshness are highly maintained while radical transparency of the growing process. I-Farm proposed a buisness model which monitoring planth growth offering insights of ideal environment for different types of plant. A diverse team is capable to solve problem by using technologies implemented. Users have control through I-Farm, making informed decision on both consumption and planting.

For social Impact, it could be approached by three aspects.
Environment: Unaffected by adverse weather conditions, energy consumption reduction and environment friendly. Social: achieve food security, reliable food source, sustainable food supply within city and reduction of foot wastage. Economic: sustainable consumption and production patterns, resilient infrastructure and higher productivity.

Three main focuses of I-Farm's value proposition are sustainability, efficiency and quality. I-Farm promises to use Controlled Environment Agriculture (CEA) and Information on Technology (IoT) to harvest 100% fresh product. I-Farm strategically targeting on customers who willing to spend on quality products, family household with stable income, stay in city or urban area and those apply a healthy lifestyle.

Out of 290 people surveyed by I-Farm, 190 respondents are staying in residential area. 160 of them are interested in purchasing vegetables from neighbourhood micro-farm. 220 respondents prioritize quality of vegetables than prize to ensure a healthy lifestyle. I-Farm also analyzed preference of clients, yielding in ratios such as 110:20 for limited stock, 70:20 for traffic, 30:40 for price and 150:10 for quality, with first number signifying prioritize aspect.

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DISCUSSED ISSUE

During the talk, several issues were discussed, such as how I-farm solves the shortage of fresh vegetables and labour through their technology. The talk also highlighted their business model and how they operate. This provided valuable insights into how we should run our business in the future by utilizing the application. Besides, the talk summarized some of the value propositions of their application and explained why customers should choose them over other companies such as AEON, NSK Trade City, HJ Farm, and Jaya Grocer after conducted a competitor analysis from different aspects.

Moreover, the talk also discussed their market segmentation and market validation. Based on their market analysis, I-farm has come up with three marketing strategies. They are focusing on residents in residential areas or condominiums as their first-tier customers, same-day delivery, and studying customer preferences through big data analysis. I-farm also shared their revenue streams and cost structure with us, giving us an idea of the cost required to run a business.

TECHNOLOGIES

I-Farm - Offers a variety of fresh vegetables for residents to obtain within their arm's reach via an e-commerce marketplace.

Vertical farm plant racks are one of the few suggested technologies used. By installing them in residential areas, residents may pick the vegetables they want to pick just near their homes.

I-Farm also implements machine learning technology. Examples of the usage of the technology are identifying needs and suitability of planting the specific fruit or vegetable. For example, a strawberry can only be farmed in a cold area, hence the technology will inform the suitability of planting at which locations.

REFLECTION

First of all, I would like to thank Dr. Seah for his insightful sharing of knowledge and expertise about the usage of technology that he had implemented in the I-farm. It was an enlightening experience to learn about the implementation of Vertical Farming technology with Controlled Environment Agriculture (CEA) and IoT system.

The integration of an Internet of Things (IoT) system into the agriculture field helps to improve the efficiency of I-farm. Users can monitor the growth of the crops and choose to harvest the amount they need. Besides that, I-farm also eases the work of users so they do not have to go to grocery stores to purchase fresh groceries.

From this talk, I have learned that it is crucial to do market segmentation so that we can identify the right group of targeted customers. I have also learned how important it is to make a competitor analysis. As system developers, we can identify our system's strengths and weaknesses compared to potential competitors that are available in the market. It helps us to improve what we are weak at in order to make sure we can stand out among our competitors and make sure the targeted group of customers will choose us over our competitors.

I am amazed by the potential of technology, and I look forward to applying it in my future career to be like Dr. Seah and build a system that brings plenty of benefits to people and the environment. We can apply technology in many fields, such as automation, hospitality, and agriculture. I will always remember what I have learned from Dr. Seah and contribute to the country and its people to make their lives easier and healthier.

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