Fundamentals of Stock Analysis

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Topic: Assignment 1.

Notes:

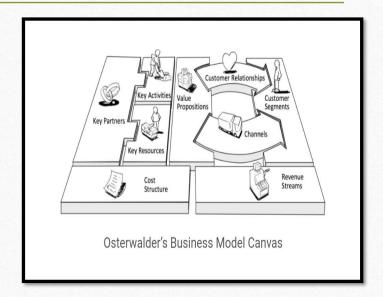
- First two questions made me think a lot and look around for inferences. I have tried to express all the factors which made me think the way I have thought.
- I have tried to reason out why the two startups stood out as my favorites according to given constraints. Also, I have tried to check out various questions about these startups, which are raised in Q.5.
- I would have liked to explain in more details, why some sectors don't stand up to the competetion even after expecting revolutionary tech releases.
- Really liked the first assignment, expecting a good learning experience ahead!! ©

Q.1 What is business?

- **Definition:** When a group of people collectively works towards providing solution for some problem through a well pre-planned framework, by making and selling some product or by providing services to the customer, to generate revenue is called as business.
- Explaination of various phrases:-
 - The group of people is known by the name of company or organization.
 - The well pre-planned framework is referring towards the business model of that company.
 - The solution for problem implies providing the solution in an easy, accessible and affordable way, for some problem.

• Business model:

• The effectiveness of a business depends on efficiency of the business model. A business model is the blue print which defines all the roles and activities in an organization. It acts like a guide book which defines the relations between various divisions of a company. It answers the most important question, how the company will generate revenue? ... how it will earn profits?



Comparison b/w two similar local shops:

Sapna collection

- Location: situated on main road, near bus stand.
- Variety: any new design first appears in this shop.
- **Price range:** typically prices are higher as compared to other shops.
- **Discount:** good Discount offered in festival season only.

Tirupati Dresses

- Location: located near main market area.
- Variety: most of the clothes are regular wear, not much choice.
- **Price range:** prices are lower as compared to others.
- **Discount:** modest discount offered on products.

Conclusions:

- Sapna collection, located near bus stand attracts more customers from nearby towns. On the other hand, Tirupati dresses finds crowded by people from small villages in the surroundings.
- The variety offered at Sapna makes it a first choice for festival shopping. In contrast people find themselves at Tirupati for buying a regular wear.
- The distribution of customers also due to the price range and discounts offered by them.
- In spite of attending to almost same number of customers, Sapna collection generates a lot of revenue due to 1. Higher prices, 2. Richer customers, 3. New designs. It has became a 3 floor shop now, but Tirupati remains as it was before.

Q.2 Which will be the most profitable sector in coming 5-10 years?

From my perspective, following are the potential candidates. We will discuss each of them one by one.

- Telecomm sector, introduction of 5G and various enhancements.
- Automobile sector, shift from conventional fuels to Electric vehicles.
- Automation and AI in daily use.
- Data analytics and machine learning.
- Healthcare sector.(It will increase, but magnitude will be much smaller than IT.)

• Telecomm sector:

- People are expecting a very good response to introduction of 5G, but there sre some hurdles which might affect it's impact.
 - Most of the operators in market are currently in debt, due to providing services at below par prices to keep up in the fierce competition with others.
 - Jio was able to offer those services in nominal costs, since it had acquired the networks from small operators or used the resources from Reliance Communications, and designed the whole network from scratch. Others had upgraded their 2G/3G network to 4G.
 - This time, no any operator gets such head start and hence impact of 5G won't be revolutionary as was the case with 4G.
 - Also, 4G offers sufficient speed that people won't rush over 5G unless it is absolute necessity, unlike the case of 3G which gave an under par performance as compared to 4G. 4G offered cheaper plans with improved performance.

• Automobile sector:

- Automobile sector seems to have gone in a saturation phase from last some years. The pandemic has affected it further. There is some hope from introduction of Electric vehicles in the segment. If following hurdles related to infrastructure are attended, then it will boost significantly.
 - Availability of charging infrastructure across country. If we run out of petrol/diesel, petrol pumps are located frequently. Similar infrastructure for recharging is necessary if electric vehicles are to be adapted in place of conventional vehicles.
 - Travel range of vehicles in one full charge. It restricts the usage of electric vehicles for local small distance travels. Even if recharging spots are available, the time spent in recharging is a significant factor which demands improvement on this aspect.
 - Recharging time for one full charge needs to be decreased.

Automation and AI in daily use:

- Introduction of automated machines for literally every household chore, introduction of self driving cars, advancement in the field machine learning,....there are many factors which can be listed as catalysts in boosting this sector over coming years.
- IT sector is the only sector running at it's pace even after the pandemic(its not over yet ②). And resources in IT sector are very useful in making the AI dream into reality.
- Lot of innovation is coming from students, which is remarkable. Students are ready to invest their brain and time in this field. This makes it a very strong candidate.

Machine learning and Data Science:

- Data has now became one of the most powerful tools to generate profits. The stalwarts in the industry have realized the fact that data analysis can significantly improve the performance of the company. It gives very useful insights by observing patterns in collected data.
- One of the most useful tool in data analysis is machine learning. One or two decades ago, application of ML were not possible to implement due to absence of faster computers and availability of data. These days, both of the resources are affordable and available.
- So, use of data analysis and ML is definitely increasing, but due to some limitations in modeling, it's applications may or may not.

Conclusions:

• AI and machine learning, along with data analytics may be collectively referred under IT sector. By analyzing current scenario, the restrictions to go out due to pandemic, lack of skills in employees in other sectors as they have very little work experience in these times, will affect almost all the other sectors. But IT sector is almost untouched by these, and running at its pace.

So, in coming 5-10 years, IT sector and its applications in other sectors will come out as most profitable investment at this point. Some handful examples are self-driving cars, automated assistants, etc.

Q.3 Which is your favorite startup?



InterviewBit is one of the most popular interview preparation websites. Hundreds of thousands of elite software engineers around the globe have joined the platform to upskill themselves. They are also source of pre-screened candidates for different companies and startups around the world. InterviewBit was founded by ex-Facebook and Fab.com executives Anshuman Singh and Abhimanyu Saxena.

Interview61

Learn.Code.Practice.Repeat.

Why InterviewBit?

- It provides a wide variety of problems for practice, previously asked in the interviews of some top brands in industry.
- We can practice questions for free, but if we want to learn something related to computer science, we have to pay the fees.
- The interface is very good, and the timer feature is excellent. A timer runs parallel as you open a question and your score will be dependent on time taken by you to solve the problem as compared to average time, as well as use of hints and solution approach.
- It offers you chance to take mock interviews with peers, and also with mentors. Mock interviews help us understand our problems in speaking our thought process out.
- The content is very well arranged sequentially according to depth of knowledge required for that topic. It displays your ranking among peers from your university on basis of your performance.

Q.4 What is your favorite startup from consumer point of view?



Swiggy is India's leading on-demand delivery platform with a tech-first approach to logistics and a solution-first approach to consumer demands. With a presence in 500 cities across India and a 2 lakh+ strong independent fleet of Delivery Executives, Swiggy offers a seamless, lightening fast delivery to millions of customers. With Swiggy's New Supply and the recent launches of Swiggy Instamart, Swiggy Genie and Health Hub, we are consistently making waves in the market, while continually growing the opportunities we offer our people.

No customer goes hungry

Why Swiggy?

- Swiggy has developed a very strong delivery network across the country. This is what makes it different from other food delivery platforms, especially Zomato. They call this network "to the last mile delivery network."
- Swiggy focuses more on lightening fast delivery of orders, and it is using this strong network in delivery of groceries, flowers, parcels etc.
- The services like Swiggy Genie, Swiggy Go are unique and extremely useful in our daily lives. These services have made swiggy different from other's in the domain.
- Swiggy Go offers "pick up and drop" service from anywhere in selected cities. It will deliver lunchbox, forgotten items, deliveries, laundries etc.
- Swiggy stores offer instant delivery of flowers, groceries, medicines and others to the customers.

Q.5 Some technical aspects of startups: -- InterviewBit --

- Scalable or not: being an online platform, Yes!!
- Profitable or not: doesn't seem much @
- Capital intensive: Yes, it requires funds to provide a seemless experience with the platform and to provide quality training to one's joining academy.
- Competition: There are many other online training platforms for software engineers, but only few are able to maintain their name, like Leetcode, HackerRank, Codeforces, CodeChef, Geeksforgeeks, etc.
- **Future scope:** Since the IT sector is about to take a big leap in coming time, it will need quality software engineers. So, such online edTech ventures have a very good future ahead. ©

Q.5 Some technical aspects of startups: -- Swiggy --

- Scalable or not Yes, scaled their business to 14 million orders per month!!!
- **Profitable or not -** Yes!! It is one of the fastest startups to reach Unicorn status(1 Billion dollar evaluation).
- Capital intensive Yes, it requires more capital in order to increase its delivery network across the country.
- **Competetion-** As a food delivery platform, swiggy has some good competitors like Zomato, FoodPanda, etc. But there is key difference, as mentioned before.
- **Future scope-** As increasing urbanization, and boost up in IT sector is expected, delivery chains will be one of the key services in the residents. So, there is a good scope of improvement in future.

Q.6 Try devising a marketing strategy for the startup mentioned in Q.3.

- IB may reach out to top colleges across country and conduct free contests for interested students. This will help students in getting known with the platform and increase the reach of the platform.
- IB can refer the paid courses to students who are trying regularly (daily logins, trying new problems).
- It can offer some specialized sub-courses to coders who are weak at some particular topic.

