

Role of Business Model Innovation in Fireworks Sectoring During Pre and Post Covid19

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ABSTRACT

In India, 9% of the production of fireworks is at Sivakasi alone. This business is a highly profitable one in Sivakasi for the employers. Around 3000 crore worth of firecrackers were produced in 2020. But during this lockdown period, it was Rs. 1500 crore. The market for fireworks is likely to grow at the rate of 10 percent per annum. Nearly five hundred factories are running in Sivakasi. After the ban, the impact would be around 500 crore losses. It is the livelihood of Eight Lakhs Workers. This pandemic hits fireworks industries also. This article focuses that, how fireworks industries sustained during this pandemic situation and the Business model innovation of that in pre and post covid19.

Keywords: Fireworks, Sivakasi, Pre Covid, Post Covid, Business Model Innovation

1. Introduction

Sivakasi, in the Virudhunagar District of Tamil Nadu, India, is famous for its firecrackers and has gained national and worldwide recognition for them. The match, fireworks, and printing industries are all well-known in the Virudhunagar District. It is also well-known for its fireworks manufacture around the world. Approximately 90% of India's fireworks are made here. During the summer, the environment of Virudhunagar District is extremely hot and dry, making it ideal for the production of crackers and fireworks, as well as the match industry. This business is a highly profitable one in Sivakasi for employers. Around 3000 crore worth of firecrackers were produced in 2020. But during this lockdown period, it was Rs. 1500 crore. The market for fireworks is likely to grow at the rate of 10 percent per annum. Nearly five hundred factories are running in Sivakasi. After the ban, the impact would be around 500 crore losses. It is the livelihood of Eight Lakhs Workers. This pandemic hits fireworks industries also. This research focus that, how fireworks industries sustained during this pandemic situation and the Business model innovation of that in pre and post covid19.

a. Objectives of the study

- To study the impact made by covid19 on fireworks industries.
- To analyze how the fireworks sector overcome this supply process during the pandemic period.
- To analyze how the fireworks sector is functioning during post covid19 period.

b. Statement of the problem

Sivakasi, in Tamil Nadu in southern India, is considered the “fireworks capital” of India. The town produces more than 90% of India’s fireworks and India is the second-largest producer of fireworks in the world, next to china. Almost every household used to contribute to India’s festive joy by contributing almost 90% of the fireworks made in the country. 300,000 people worked in the industry directly and another 500,000 indirectly. At least 200 fireworks units have closed down in the last year. Those units that are still open are working at a capacity of only 20-30 percent. Due to covid19, prices of raw materials are also rising. In this study, researchers attempted analysis how covid19 make an impact on the fireworks industry and how the fireworks industries are recovering from covid19 and improving their sales through various business model innovation.

c. Scope of the Study

In this research paper, the researcher examines how this pandemic hit the fireworks industry. This paper take an effort to portray how these sectors are fightback to overcome their impact during covid19 and analyze how their supply model is changed to retain their customer and sales in the market.

2. Theoretical framework of the study

A business model describes, in a model-like and holistic manner, the logical connections and how a company generates value for its customers [1-3]. A company can operate several business models at the same time. It describes how companies are generating values. **The Revenue Model is therefore an important component of the business model**

[4]. The difference can be illustrated by the individual components of a business model. In essence, four factors describe a business model:

- WHO are the target customers (segments, relationships)?
- WHAT is the benefit that a company provides to its customers and most important partners in the value chain (value promise or value proposition) [5]?
- HOW does the company deliver this benefit (partners, activities, resources)?
- HOW does the company earn money (revenue model or revenue structure) [6]?

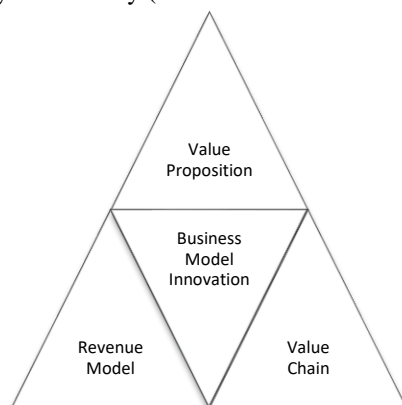


Figure 1. Business Model Innovation

(a) Value Proposition

A value proposition refers to the value a company promises to deliver to customers should they choose to buy their product [7]. A value proposition is part of a company's overall marketing strategy. The value proposition provides a declaration of intent or a statement that introduces a company's brand to consumers by telling them what the company stands for, how it operates, and why it deserves their business. What do companies offer to customers? That will come under value proposition. During the pandemic situation, firework businesses are also hit but during that time also they offered quality products to customers. There was no compromise on the quality of products.

(b) Revenue Model

A revenue model describes the structure of how a company generates revenue or income [8]. Each customer segment can contain one or more revenue streams. The Revenue Model describes how a company generates revenue from the value it has generated for customers. In the year 2020, firecrackers worth almost 3000 crores were created. It was, however, Rs. 1500 crore during the lockdown. The fireworks industry is expected to increase at a 10% annual pace. In Sivakasi, over 500 factories are operating. Around 500 crores will be lost as a result of the prohibition. Eight lakhs of workers rely on it for their livelihood. The fireworks industry is also affected by the epidemic. The top companies in Sivakasi, are running different factories to produce fireworks products. During the pandemic situation, most of the factories are closed, even though they proceeded with good products to the customers.

(c) Value chain

A Value Chain is a chain of activities for a firm operating in a specific industry [9].

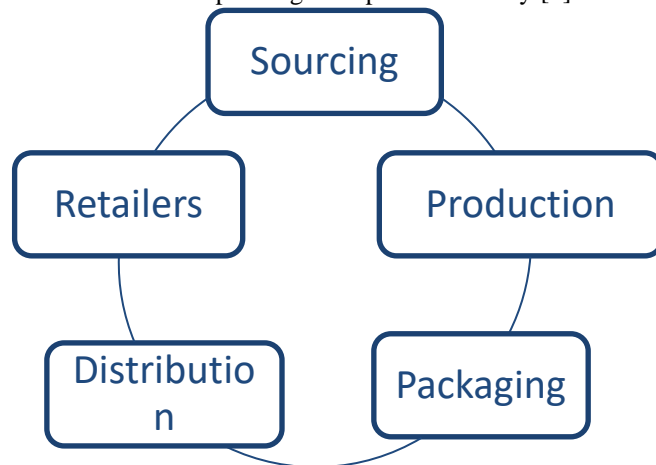


Figure 2. Fireworks Industry Supply Chain PreCovid

Products pass through all activities of the chain in order and at each activity, the product gains some value. The chain of activities gives the products more added value than the sum of the independent activities value. Figure 2 explains the supply chain of the fireworks industry. The industry changed its supply chain management during the covid19 period. Normally customers will reach out through retailers. But after covid19, most the fireworks company used social media for selling their product like Facebook, Whatsapp, youtube, Twitter, websites, etc.... Through that customer directly contacts the manufacturer and purchased their products also. Figure 3 is the new supply chain model for fireworks.

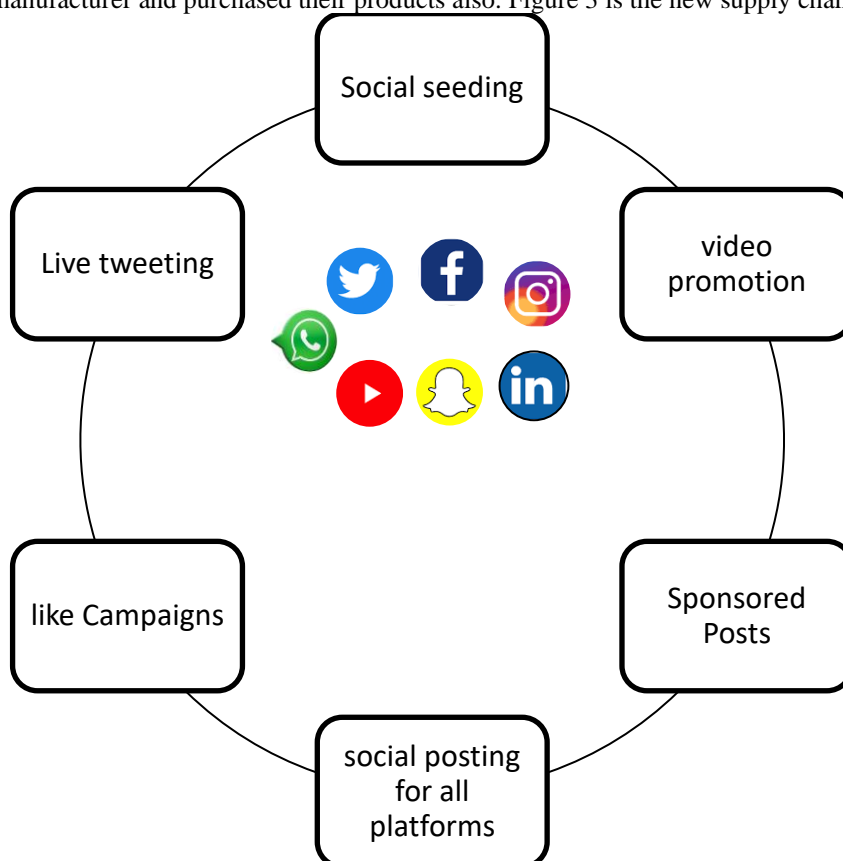


Figure 3. Fireworks Industry Supply Chain PostCovid

3. Analysis

3.1 Business Model – The value proposition – During Pre and Post Covid19

After Analysing the different companies, the researcher came to know that company's business model was hit by the coronavirus crisis. Almost 80% of the participants' companies are affected but their business continues. The business stopped continuously for over 8% of the participant's companies as shown in Figure 4.

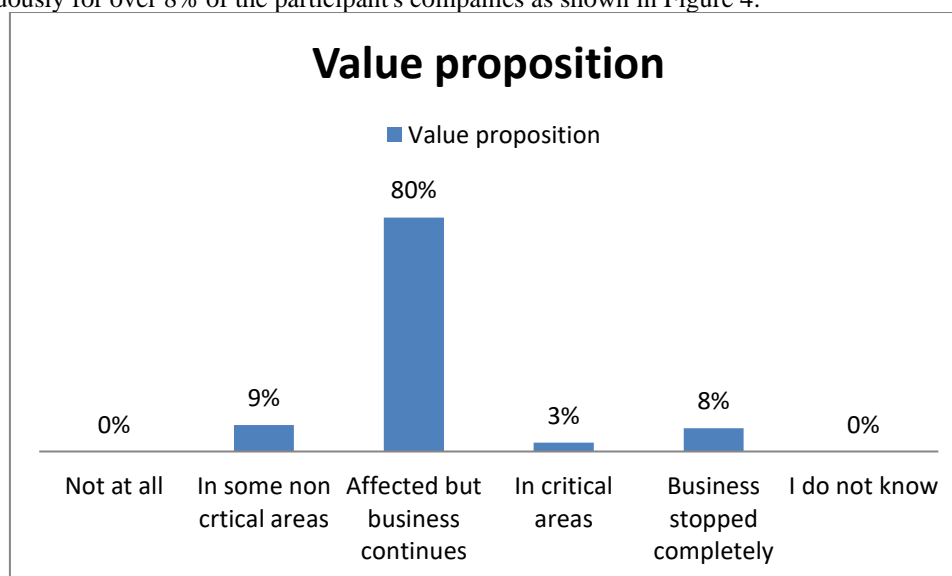


Figure 4. Value Proposition

3.2 Business Model – Revenue Model – During Pre and Post-Covid 19

The firecracker manufacturing headquarters of the country is Sivakasi which normally earns 6000 crores as revenue during Diwali. But during this pandemic, it was reduced by half. After following various techniques and tactics using social media, they improved their revenue during this pandemic situation. Fireworks companies have decided to achieve sales of 7000 crores for the forthcoming year as shown in Figure 5.

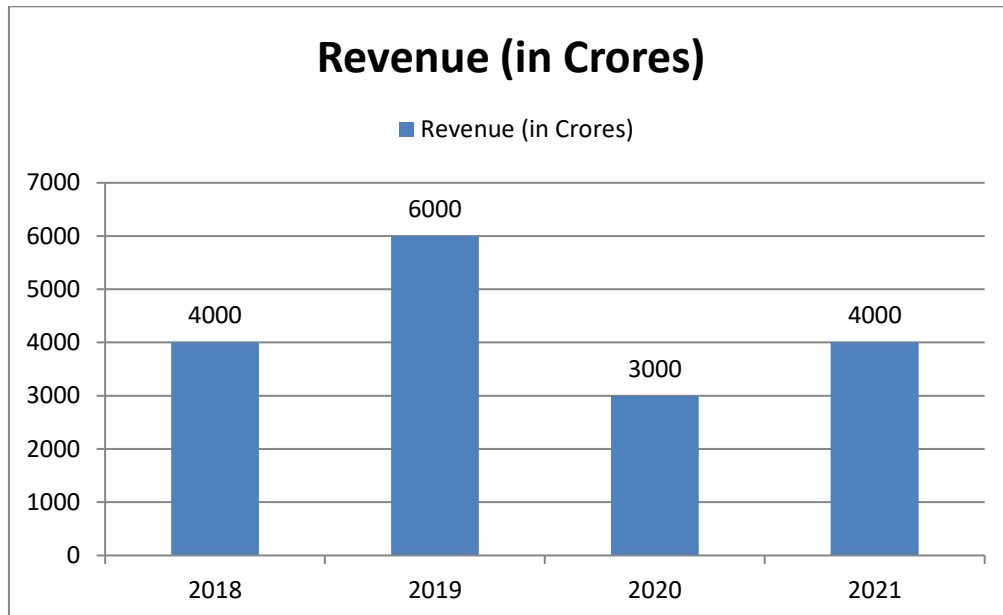


Figure 5. Revenue Model

3.3 Business Model – Supply chain – During Pre and Post covid 19

Figure 5.a shows the supply chain model pre covid and figure 5. b shows the adapted supply chain model post covid.

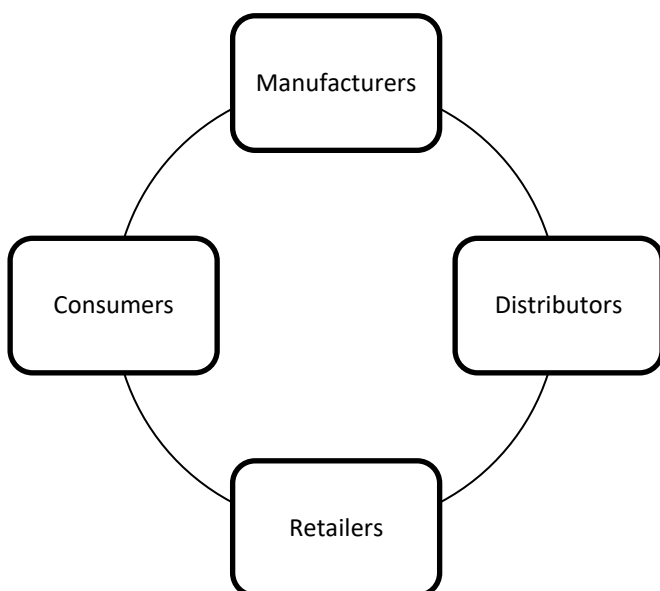


Figure 5.a PreCovid

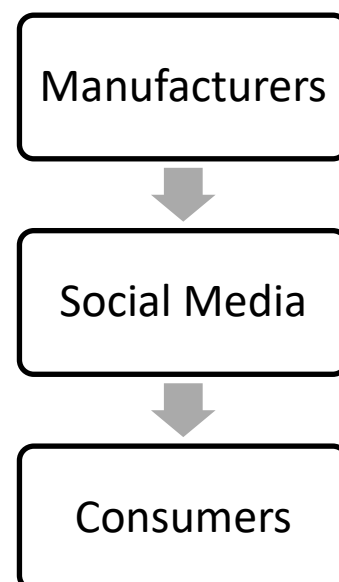
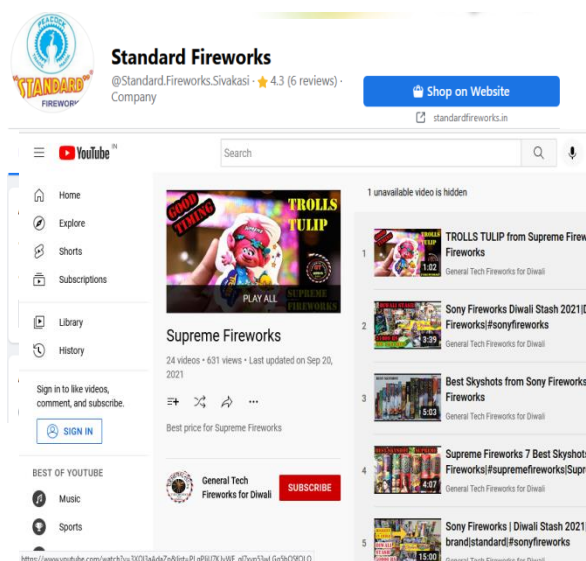


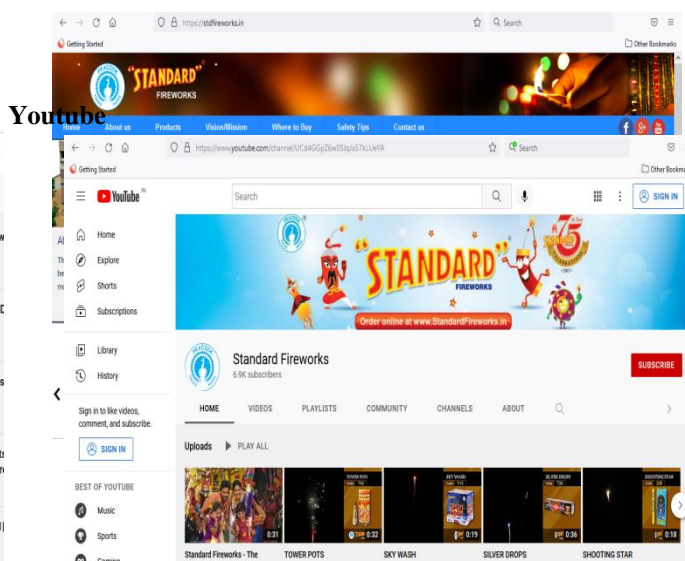
Figure 5.b PostCovid

As the researcher discussed in the theoretical framework, the fireworks industry changed its supply chain by using social media through which they are directly connected with customers. Some companies started a youtube channel where they are discussing their product. The following are some companies' social media pages.

Facebook



Website



4. Conclusion

The researcher found that the pandemic hit the fireworks industry also. But the industry did not affect fully like other industries. The industry earned somewhat more while comparing with other industries even during this pandemic situation. Finally, their supply is also not affected much since they followed different innovation models in their supply chain. With this, the researcher concludes a lot of business model innovation happened during this pandemic situation, particularly in the fireworks industry. They can even succeed in any epidemic situation also.

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