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**COVID-19 PANDEMIC AFFECTS
GLOBAL SUPPLY CHAINS.
WILL THIS CHANGE
FUTURE BUSINESS MODELS?**

**SYNDICATE - 03
INTAKE 37**

**FACULTY OF DEFENCE AND
STRATEGIC STUDIES**

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DEFENCE UNIVERSITY**

2021

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ACKNOWLEDGEMENT

We would like to express our deep gratitude to Colonel HMGE Herath RSP USP psc for his advice and assistance in keeping our progress on schedule. We would also like to thank Major IC Wijedoru, our research supervisor for his patience, guidance and enthusiastic encouragement provided on this research work. Our thanks are also extended to DR. NS Fernando who guided us throughout and helped us. Finally, we wish to thank our parents and family members for their support and encouragement throughout this study.

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ABSTRACT

Businesses have been exposed to various challenges during the global pandemic and their response to this disruption has impacted their resilience as well as their chances to overcome this crisis. Small and medium-sized enterprises are changing their business models to adapt to this changing environment. Service-based industries have been hit particularly hard. This research investigates how small and medium-sized enterprises operating in service industries have been coping with the disruptions caused by the COVID-19 pandemic. This research aims to gain insights into which transformation drivers they have focused on and which technologies they have selected as means to respond to the disruption. These insights regarding small and medium-sized enterprises are then explored according to their influence on the redefinition of sustainable business models in small and medium-sized enterprises. The highly unpredictable environment allows for only a few feasible strategic approaches regarding a small and medium-sized enterprise's decision to follow incumbents, to become a challenger or to reinvent themselves based on their transformation drivers and readiness to apply digital technologies.

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CHAPTER 1

INTRODUCTION

COVID -19 PANDEMIC

1. The first known infections from Severe Acute Respiratory Syndrome -Corona Virus -02 were discovered in Wuhan, China. The source of viral transmission to humans remains unclear, as does whether the virus became pathogenic before or after the spillover event. Standard recommendations to prevent the spread of COVID-19 include frequent cleaning of hands using alcohol-based hand rub or soap and water, covering the nose and mouth with a flexed elbow or disposable tissue when coughing and sneezing.

2. A novel Coronavirus is a new strain that has not been previously identified in humans. Coronaviruses are a large family of viruses that cause illnesses ranging from the common cold to more severe diseases. In more severe cases, the infection can cause pneumonia, acute respiratory syndrome and sometimes death.

3. The COVID-19 pandemic has changed the business environment for many organizations around the globe and has highlighted the importance of being able to react, adapt and set up crisis management mechanisms to weather situations of uncertainty. As the acute restrictions and lockdowns created many urgent situations that required immediate attention in the early days of the pandemic, many companies have now begun to move to a "recovery mode" and have started planning for the longer term. As companies seek to strengthen operations and business resilience, the importance of supply chain resilience and risk management is more apparent than ever.

SUPPLY CHAIN MANAGEMENT

3. Supply Chain Management is the management of the flow of goods and services. It includes the movement and storage of raw materials, work in process inventory and finished goods from points of origin to point of consumption. Every product that reaches an end-user represents the cumulative effort of multiple organizations. Some organizations have only paid attention to what was happening within their four walls. Well, some did not. But the entire trade of activities ultimately delivered products to the final customer. The result was disjointed and often in an effective supply chain.

BUSINESS MODELS

4. A company or an entrepreneurial entity engaged in commercial, industrial or professional activity is referred to as a business. Individuals' organized efforts and actions to create and sell goods and services for profit are sometimes referred to as "business." By the mid-1990s, the term "Business Model" came to the fore as a word of mouth in business discussions and practical journals, emphasizing the growth of businesses beyond traditional business art to electronic businesses.

5. The term Business Model refers to a company's plan for making a profit. It identifies the products or services the business plans to sell, its identified target market and any anticipated expenses. Business Models are important for both new and established businesses. They help new, developing companies to attract investment, recruit talent and motivate management and staff. Established businesses should regularly update their business plans or they'll fail to anticipate trends and challenges ahead. Business plans help investors evaluate companies that interest them.

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CHAPTER 2

AIM

This presentation aims to critically evaluate if and how Business Models have been changed due to the affection of global supply chains by COVID 19.

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CHAPTER 3

COVID-19 GLOBAL PANDEMIC

ORIGIN OF THE CORONAVIRUS

6. Experts say Severe Acute Respiratory Syndrome -Corona Virus -02 originated in bats. That is also how the Coronaviruses behind the Middle East respiratory syndrome and severe acute respiratory syndrome got started. It made the jump to humans at an open-air "wet market" in Wuhan, China. Crowded conditions can let viruses from different animals swap genes. Some wet markets sell wild or banned species like cobras, wild boars and raccoon dogs.

7. Still, the Wuhan market did not sell bats at the time of the outbreak. That is why early suspicion also fell on pangolins, also called scaly anteaters, which are sold illegally in some markets in China. Some Coronaviruses that infect pangolins are similar to Severe Acute Respiratory Syndrome -Corona Virus -02.

8. Humans can be infected by seven different Coronaviruses. Severe Acute Respiratory Syndrome -Corona Virus -02 was first detected in southern China in 2002 and it rapidly spread to 28 other countries. By July, almost 8000 people had been sick and 774 died.

SYMPTOMS

9. Symptoms that can be inspected by the COVID patients are listed below.
- a. Shortness of breath.
 - b. Persistent stomach pain.
 - c. Severe or persistent headaches.
 - d. Chest pain.
 - e. Leg swelling.
 - f. Easy bruising or tiny red spots on the skin beyond the injection site.
 - g. Blurred vision.

SPREADING

10. COVID-19 is thought to be passed mostly from person to person, according to experts. Spreading can occur in the following ways:

- a. Droplets or aerosols.
- b. Airborne transmission.
- c. Surface transmission.
- d. Fecal-oral.

GLOBALLY AVAILABLE COVID-19 VACCINES

Vaccine Brand	Delivery Method	How many doses? Time between	Effectiveness	Storage	Estimated Cost per dose
Oxford-AstraZeneca	Adenovirus transports genetic material (DNA)	2 (28 days)	62% (2 full doses) 90% (1/2 first dose, full 2 nd)	Standard refrigeration	~\$4 USD
Moderna	mRNA	2 (28 days)	95%	-20C special refrigeration	~\$25-37 USD
Pfizer-BioNTech	mRNA	2 (21 days)	94%	-70C Special refrigeration	~\$20 USD
Gamaleya-Sputnick V (Russia)	Adenovirus transports genetic material (DNA)	2 (28 days)	~91% Limited data	Dry form can be stored at 2-8C	~\$10 USD
Sinovac (China) Sinopharm (China)	Inactivated viral particles (similar to a classical flu shot)	2 (3-4 weeks)	~65-91% Limited data ~79-86% Limited data	Standard refrigeration	~\$30-60 USD
Johnson & Johnson (Janssen)	Adenovirus transports genetic material (DNA)	1	~57-72% in moderate/severe disease	Standard refrigeration	~\$10 USD

Figure 2.1
Globally Available Vaccines for COVID-19
 (Link-<http://parkinsonsecrets.com/blog/2021/1/18/covid-19-vaccine-comparison-chart>)

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EFFECT OF VACCINES

11. Like any vaccine, COVID-19 vaccines can cause mild, short-term side effects, such as a low-grade fever or pain or redness at the injection site. COVID-19 vaccines can cause mild side effects after the first or second dose. Symptoms are following.

- a. Fatigue.
- b. Headache.
- c. Muscle pain.
- d. Negative affect on mental health.
- e. Fever.
- f. Pain.
- g. Redness or swelling.

PREVENTIVE MEASURES

12 Preventive measures that should be taken are as follows.

- a. Maintain a safe distance from others, even if they do not appear to be sick.
- b. Wear a mask in public, especially indoors or when physical distancing is not possible.
- c. Choose open, well-ventilated spaces over closed ones. Open a window indoors.
- d. Clean your hands often. Use soap and water or an alcohol-based hand rub.
- e. Get vaccinated when it's your turn. Follow guidance about vaccination.
- f. Cover your nose and mouth with your bent elbow or a tissue when you cough or sneeze.
- g. Stay home if you feel unwell.

QUARANTINE

13. People who have been exposed to infectious disease and may be infected but are not yet ill may be quarantined. This is for individuals who are sick from contagious diseases. It will last enough time for medical personnel to assess the situation or for the duration of the contagious period.

CHAPTER 4

EFFECT ON GLOBAL SUPPLY CHAIN

INTRODUCTION

14. A supply chain is a global network used to deliver products and services from raw materials to end customers through an engineered flow of information, physical distribution and cash. The below figure 4.1 illustrates a very basic supply chain with three entities. A producer with one supplier and one customer. A basic supply chain in this figure is made up of these entities.

15. Seller is a supplier who provides goods and services or a person or an organization with whom the buyer does business. Their generic term in the marketplace is the seller. The supplier provides materials energy services or components for products or services. Such as plastic, fabric, electric wiring or aircraft.

16. Producer is the one who receives components from the seller to produce a finished product or service such as shirts from fabric, crockery from plastic, power from electric wiring or provide transportation through aircraft. The customer is the one who receives the finished product. That is the one who wears those shirts, uses crockery, turns on the lights or flies in an airplane.

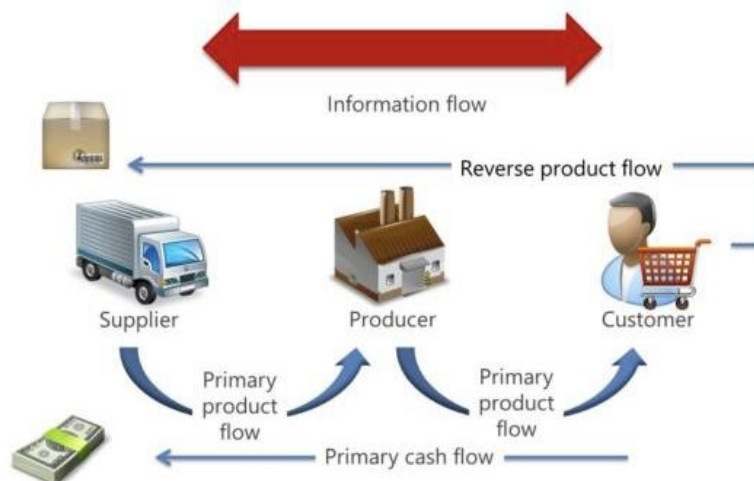


Figure 4.1
Basic Four Flows Among the Three Main Components
(Link-<https://aims.education/study-online/what-is-supply-chain-management-definition/>)

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17. Four basic flows that connect the supply chain entities are as follows.
- a. The flow of physical materials and services from suppliers to the end customer.
 - b. Flow of cash from the customer to the raw materials supplier.
 - c. Flow of information back-and-forth along the chain.
 - d. Reverse flow of products returned.

STRATEGIES

18. There are three types of supply chain strategies. They are as follows.
- a. Stable.
 - b. Reactive.
 - c. Efficient reactive .
19. Stable Supply Chain Strategy is appropriate for chains that are focused on execution efficiencies and cost performance. They use simple connectivity technologies and have little need for real-time information. For example, table salt manufacturers use scale production and dedicated capital assets.
20. Reactive Supply Chain Strategy works well when the chain is asked to fulfill demand from trade partners. For example manufacture of sports team apparel for fans. When it seems to make it to the next round more products are needed. However, for the losing team demands have virtually disappeared.
21. Efficient Reactive Supply Chain Strategy focuses on the efficiency and cost management on the total delivered cost to finish goods. For example in supermarket chains distribution centers, logistics providers and manufacturers co-operate to replace a good sold in the shops within less than 24 hours.

POST PANDEMIC EFFECTS ON GLOBAL SUPPLY CHAIN

22. **Post Pandemic Logistics.** The challenge for the post-pandemic logistics industry will be to ensure the high performance of lean supply deliveries without compromising its flexibility. Solutions of predictive analytics offer a way to achieve more responsive supply chains.

23. **Data Logistics And Demand-Driven Supply Chain.** For an enterprise to ship towards adaptive operating models to mitigate risk in deliveries, supply chains should begin the transformation to demand-driven logistics.
24. **Omnichannel Logistics As a New Standard.** E-commerce businesses and online retailers have become the winners in 2020 with the Omnichannel strategy becoming a new standard. Logistics processor supply chain management and the overall process of order fulfillment appropriately adapt to Omnichannel principles.
25. **Lean Warehousing.** As a trend of Omnichannel Logistics develops and services aimed at filling individual customer preferences expand, the concept of the lean warehouse is becoming a key feature in inventory and warehouse management.
26. **Hybridization Of Logistic Strategies.** The scaling of Internet Of Things and logistic operations from the upstream and downstream contributes to improving agility, performance and responsibility for further improvements will be driven by a variety of dynamic logistic strategies and customized operating buffets.
27. **Dynamic Synchronization Of Manufacturing.** Companies are looking to transition to a demand-driven supply chain model with a holistic approach to digital transformation and the intelligent automation of logistics. This requires a closer integration between logistics and manufacturing and their dynamic collaboration.
28. **Reverse Flows And Circular Logistics.** Omnichannel logistics heralds another significant development in sustainability with reverse flows playing a critical role. Closing the product life cycle loop with circular logistics foreshadows the transition to a circular economy.
- 29.. **From Supply Chains To Supply Network.** When the new technology and deceleration of globalization, and the increase in regionalization will accelerate the transformation of supply chains into supply networks through decentralized management models.

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CHAPTER 5

BUSINESS MODELS

PRACTICAL BUSINESS MODEL

30. There are nine points to consider when designing a Business Model. They are listed below.

- a. Key partners.
- b. Key activities.
- c. Key resources.
- d. Value propositions.
- e. Customer relationship.
- f. Channels.
- e. Customer segment.
- g. Cost structure.
- h. Revenue streams.

31. These nine topics are divided into three main areas. They are:

- a. Customer segment
- b. Value propositions
- c. Key partners

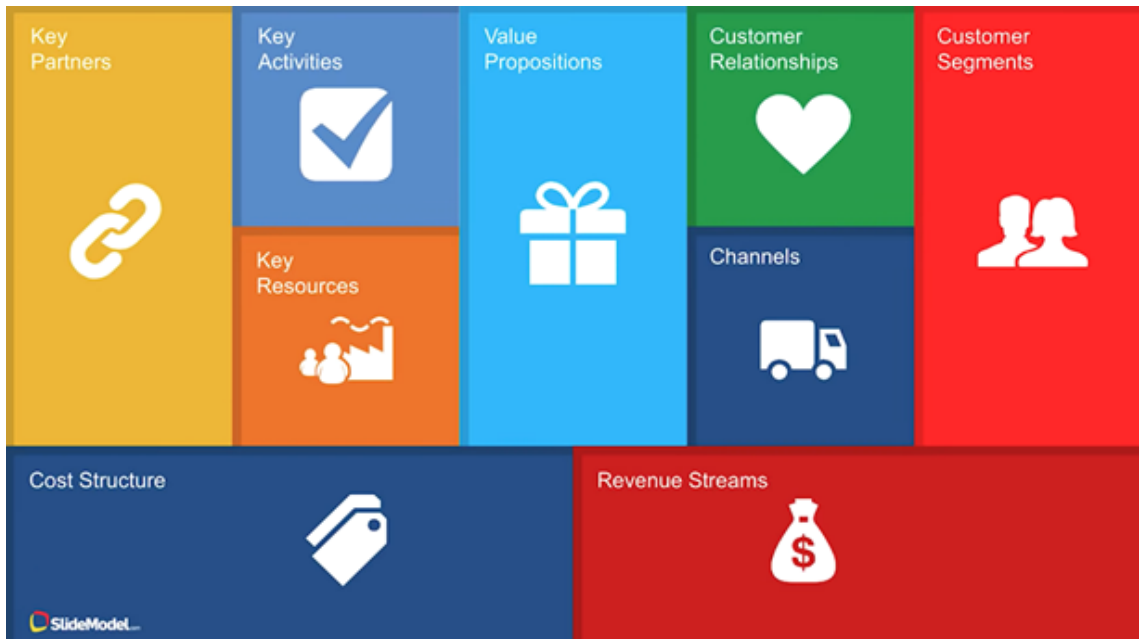


Figure 5.1
9 Characteristics of a Business Model
(Link-<https://www.youtube.com/watch?v=kLF2VYtKn-I&t=630s>)



Figure 5.2
Three Main Areas of a Business Model
(Link-<https://www.youtube.com/watch?v=kLF2VYtKn-I&t=630s>).

32. Customer segment is an important factor. This involves selecting the right group of people for the business to be started. This is also called the customer base of the business. Just as the demands of society to start a business directly affect the demand for an existing business in society. That is, the customer base can be developed. It depends on the skills of the parties running the business.

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33. After the customer segment issue value propositions are identified. They measure what kind of support the business provides to the customer segment of the business to meet their needs and how valuable it is to the customer segment.

34. Concurrent with the above, the next major focus is on key partners. Steps will be taken to contact the parties who can provide support to carry on this business. They are called stakeholders. Their co-ordination is important for the raw materials needed for the business, financial assistance, management, etc. The above key points are very helpful to strengthen the beginning.

35. The started business needs to be socialized. That is, transmitted to the community based on its customer base. The ways and means the goal is achieved, are as follows.

- a. Customer relationship.
- b. Channels strategies.

36. A customer relationship is a way in which we maintain a relationship with the customer with whom we are associated. It has two ways of processing. They are:

- a. One to one
- b. One to many

37. Small businesses often use one-to-one but widely available businesses connect to their customers in a variety of ways. It is expressed as one to many. Channels are the tricks they use to socialize their business. Popular electronic media such as Facebook, Instagram as well as newspaper posters are used. The main purpose of channels is to somehow promote their business in the community or to raise awareness.

38. **Key Activities.** Simply put, key resources are the core facts and resources of the business. Key activities are the maintenance of the processing process using the help of the key resources used.



Figure 5.3

Cost Structure and Revenue Streams

(Link-<https://www.youtube.com/watch?v=kLF2VYtKn-I&t=630s>)

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39. **Cost Structure.** The main goal is to make a profit in a business. To make a profit, financial management must be good and transparent. It includes total cost of production, such as raw material costs, labor costs, etc. It is the responsibility of the business manager to manage it.

40. **Revenue Streams.** In this section, several positive aspects of the existence of the business emerge. This is because talking about business revenue is what happens on this topic. The source of income is not just the profit earned here. Sponsors, donations, profits from business-related real estate exchanges, etc.

TYPES OF BUSINESS MODELS

41. The main classification of the Business Models is as follows.

- a. Bundling Model.
- b. Freemium Model.
- c. Razor Blades Model.
- d. Product to Service Model.
- e. Crowdsourcing Model.
- f. One-for-one Model.
- g. Franchise Model.
- h. Distribution Model.

42. **Bundling Model.** Bundling is a marketing approach or practice in which many items or services are offered as a single integrated product or service. In situations where products or services are characterized by high volume and high margins, a bundling strategy or practice can be beneficial to a company. The strategy simplifies customer decision-making and allows consumers to gain from owning or consuming the given combination.

43. **Freemium Model.** A term made up of the terms "free" and "premium." The term "freemium" refers to a business strategy in which consumers are given basic capabilities for free and are charged a fee for additional or advanced features. A freemium Business Model offers basic services for free, generally in a "free trial" or limited version for the user, while charging a fee for more sophisticated services or features.

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44. **Razor Blades Model.** The razor and blades business strategy is one in which one item is sold cheaply (or given away for free) to boost sales of a complementary offering, such as consumable supplies. Inkjet printers, for example, necessitate ink cartridges, while game consoles necessitate peripherals and software. Loss leader marketing and free sample marketing, on the other hand, do not rely on complimentary items or services.

45. **Product To Service Model.** Product-service systems(PSS) are business models that provide for the cohesive delivery of products and services. Product Service Systems models are emerging as means to enable collaborative consumption of both products and services, with the aim of pro-environmental outcomes.

46. **Crowdsourcing Model.** As the name suggests, the crowdsourcing Business Model refers to when the crowd act as a source for the business – usually some multisided platform. There are many options of crowdsourcing, but all of them involve opening tasks or issues to a large group to receive their input for operation. The “crowd” of this Business Model may be made up of customers ordinary citizens, specialists, other entrepreneurs and business owners/managers, etc.

47. **Franchise Model.** A franchise model is a business organization where an individual may start a business that sells goods or services developed by another individual or company. Common franchises include retail outlets, restaurants, cleaning services and other similar businesses. Franchises allow entrepreneurs to build a business based on the success of a time-tested Business Model.

48. **Distribution Model.** When deciding how to distribute your product, use the traditional distribution model as a starting point. The conventional distribution model has three levels: the producer, the wholesaler and the retailer. This is a time tested system with many well-established members at all levels.

CHAPTER 6

EFFECTS ON BUSINESS MODELS

WORKING FROM HOME

49. What lots of businesses have experienced is that they should have people working from home. Because of the Coronavirus pandemic and lots of businesses are now rethinking the entire Business Model they are really thinking, “Do we still need offices? But if we are honest with ourselves, productivity has gone up for businesses but the way people work from home is not necessarily great for everyone. There are some people that have amazing and comfortable offices in their houses. They have all the equipments, so that they can do this very well. There are lots of people that work on a kitchen table that have not got a comfortable chair. So, what businesses now really need to do is, they need to reimagine their workspaces, their offices and support people working from home. They need to give them the right office equipments, computers, comfortable chair and the right setup. They also need to provide the mental health support and everything that goes with it to make sure everyone can work from home comfortably in the future.

ADVANTAGES FOR EMPLOYEES WORKING FROM HOME

50. Before the Coronavirus pandemic, working from home was on the increase as many employers identified the benefits that it can bring to their businesses and improved work-life balance for their employees. Home-working has given some employers the flexibility they need to continue their business operations while prioritizing staff and customer health and wellbeing as part of their public health responsibility.

51. With an increasing number of people working from home - or using the home as a work base for at least part of the week - it's evident that there are several advantages for businesses. Listed below are them.

- a. Flexibility and agility.
- b. Improved employee retention.
- c. Attract new talent.
- d. Increased productivity.

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- e. Increased staff motivation.
- f. Improved staff health and wellbeing.
- g. Financial benefits.
- h. Convenience.
- i. Better work and life balance.
- j. Technology makes it easier.
- k. Fewer sickness absences.
- l. Less need for regular holidays.

DISADVANTAGES OF EMPLOYEES WORKING FROM HOME

52. Working from home might not be suited to everyone's personality or ability. Some employees might prefer the routine and structure that working in an office environment provides them. Some staff may prefer personal interaction with colleagues and also find face-to-face guidance with their manager extremely beneficial in helping them complete tasks and achieve their goals. You also need to be mindful of employees with a disability. Working from home may harm the support they need to do their job.

53. There are some disadvantages to employees working at home, most of these relate to those working from home for all, as opposed to part, of their working week. They are mentioned below.

- a. Staff feeling isolated.
- b. Difficulty in monitoring performance.
- c. Home distractions.
- d. Potential burnout.
- e. Cost of working from home.
- f. Problems with staff development.
- g. Information security risk.
- h. Negative impact on mental health Decreased staff morale.
- i. Not all jobs suit home working.

BUSINESS MODEL INNOVATION

54. What we need to do now is to reflect on what we are offering our customers and how we operate as a business. What we have seen is that lots of industries have been completely transformed during 2020. We see this in the hospitality industry in the events industry and businesses that have carried on thriving are the ones that have been able to react to this quickly. If you are a restaurant and on day one of lockdown you rethought your restaurant and make sure that you have taken out and abilities and there are companies like even the Formula one company that were producing ventilators. Then this is something businesses have always needed to think about how the market is shifting and how do we transform our own Business Model and innovate our own Business Model. It is more important in 2021 than ever before.

VIRTUAL INTERFACES

55. Virtual interfaces are another big trend where we think about how we can deliver some of the services in a digital format. Especially using things like automated reality, virtual reality and mixed reality. Again during the pandemic people realize if they need to go to the shop to try on makeup or if they can use an augmented reality app that allows them to put makeup on. If they need to have a consultation with a fashion advisor or if their virtual avatar can try this on in virtual reality and virtual interfaces. So this whole try before we buy in this new world of virtual interfaces will continue in 2021 and transform how businesses offer their services

AUTOMATION

56. Automation is the focus on manufacturing products using mechanical equipment. Through this, the production process that took place in the world using human labor and time is completely handed over to man-made automation machines. Artificial intelligence and robotics, which are much talked about in the computer world, can be cited as the key phenomena in bringing about this revolution. Despite these slow developments, much attention has been paid to the automation process through the legal systems that have been put in place to mitigate the human impact of the unexpected COVID-19 epidemic. That is to maintain remoteness and do the work in the face of the current epidemic. The ability of people to leave for work was blocked. This led to a major breakdown in the manufacturing process globally. While this did not have a major impact on the wealthy leading countries, it did have a significant impact on the middle and third class countries. Therefore, steps are being taken to build the necessary infrastructure to sustain the production process.

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57. Business Models must change accordingly. Where the main impact is on labor costs. Just as the concept of automation has been used to facilitate human activities, it has also had the effect of increasing human unemployment. The reason is simply that if there is a person who has already done the product packaging process in any business, he should be replaced by a robot for that task. The person who previously took over the job will be demoted or lose his job. This shows the impact on unemployment. Also, Business Models have to pay more attention to cost structure and revenue streams as they have to spend more on mechanical costs than human labor costs.

GOING FROM GLOBAL TO LOCAL

58. Production should be done as well as product sales. Profits should also be made. That profit will help you plan for the future of the business. However, except for the communications and medical sectors, businesses in many other sectors experienced a breakdown or a shutdown in the face of the epidemic. Excess production was seen in some businesses but there was a shortage of products in some businesses. However, in this situation, both imports and exports are declining in the sales process. That is, the products made by the institutions in the country have to be sold within the country. It helps to get accustomed to a self-sufficient economic pattern.

59. In the past, during the period of industrialization, Japan was not allowed to export any of its products. The use of imported goods was also banned in Japan. It helped to accustom them to a self-sufficient economic pattern. But in the current situation, it is extremely difficult for a country like Sri Lanka to bear such sanctions. Increasing dollar reserves in the export process affect Sri Lanka's economic stability. But Sri Lanka has had to adapt to a short-lived or self-sufficient economy in the face of the epidemic. In a strong Business Model, a business must be built to cope with the COVID-19 epidemic to adapt to a self-sufficient economy.

SOCIAL ENGAGEMENT

60. When a business feels unstable, it is common for the parties around it to gradually disintegrate. But the reason is that when we look through Business Models, it directly affects our key partners. It can disrupt the very existence of a business. This is further illustrated when looking at the matter with the stock market.

61. Divide a business through the stock market and give value to each share and make a profit by selling it to a profitable group of people. It's the foundation of the business. Accordingly, when we look back at the Business Models, this revenue is also the most valid expected revenue in the section called revenue streams.

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62. Thus, the breakdown of key partners and customer segments becomes the beginning of the collapse of the foundation of the business. In the event of a business collapse in the current epidemic situation, the assembled division must be protected to continue the business after COVID-19. It must be done at this time. That is, the instability of the business in the individual should not be shown. It should be pointed out that the business has a strong foundation. Maintaining a customer relationship is mandatory here. The use of social media for that is very practical. This is because of the high level of social media usage during this period. Here we explain the current state of our business and make reminders about the assets of the business, which helps to show the transparency and stability of the business to the people gathered around the business. It is also important to explain to business partners the plan of the business, the business plan they hope to pursue after the COVID-19 epidemic, to build their confidence in the business.

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CHAPTER 7

RECOMMENDATIONS

BUSINESSES FLUCTUATION WITH COVID 19 IN THE FUTURE.

63. Creating Business Models with COVID-19 can be done in three ways. They are listed below.

- a. Succeeding at existing businesses.
- b. Rebuilding broken businesses.
- c. Starting a new business.

SUCCEEDING AT EXITING BUSINESS

64. At present, most of the businesses in the communications and medical sectors are stable. Distribution businesses have also been successful. The current situation has also made a positive impact on doing business on social media as the focus on online businesses have increased.

65. However, it is not clear how long this situation will last. So, what should we do? If this is a business venture that is popular nowadays, then retaining that business brand will help you to achieve future business goals. If so, how do Business Models affect this.

66. In Business Models, however, the nine elements of the maintenance framework are as common as ever. However, owning one is still beyond the reach of the average person. Accordingly, more attention should be paid to customer segment, channels and customer relationship. The main objective of this is to maintain the desired customer base and to make the community more aware.

REBUILDING BROKEN BUSINESS

67. Some large-scale businesses have largely collapsed, while some suffered setbacks. Here, according to Business Models, the customer relationship should be maintained no less than the people who still have confidence in the business. Strict attention should be paid to cost structure. The working class has to make some

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sacrifices, that is, be prepared to resort to temporary pay cuts. Care must also be taken to protect key partners. You may have to enter into business agreements for this. It must be done intelligently and opportunistically. Key resources also refer to obtaining insurance or financial loans. Be sure to refer to this when something else is impossible.

STARTING A NEW BUSINESS

68. The best business to start with during this time is an online business. In the online system, you can start a business both short-term and long-term. These businesses can be started as a single or group business. Business Models change according to that situation. Business opportunities can be categorized into 10 categories. The need for each of these businesses already exists in society. They are as follows.

- a. Electrical items.
- b. Packaging material.
- c. Herbal and Ayurvedic products.
- d. Computer and mobile phone accessories.
- e. Building and construction items.
- f. Bakery products.
- e. Educational products.
- f. Sports products.
- g. Gift Items.
- h. Agriculture.

69. That is, the customer segment has already been created. What is needed is a good relationship with key partners, the people who contribute the resources. Also, channels should be properly maintained to provide good competition to other businesses that are starting businesses and to promote the brand name.

70. However, as e-commerce usage is on the rise, debit cards, credit cards and checks should be allowed to be used in financial transactions as well as banknotes and coins. It is also important to have good knowledge for that. Quick Response codes can also be used to further validate the value of the online banking business.

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CHAPTER 8

CONCLUSION

71. COVID 19 pandemic is a widely spoken topic globally. A critical study on its impact on the present world has been thoroughly made by analyzing both quantitative and qualitative data found from reliable sources.

72. This presentation will undoubtedly enlighten the audience on how the world of commerce has been affected due to the pandemic. The main focus will be to present to the audience the facts and information as they are from a neutral perspective and let the audience conclude whether it's advantageous or not.

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CHAPTER 9

REFERENCES

WEB LINKS

1. <https://hbr.org/2020/09/global-supply-chains-in-a-post-pandemic-world>
2. <https://www.investopedia.com/terms/s/supplychain.asp>
3. <https://www.investopedia.com/terms/b/businessmodel.asp>
4. <https://fourweekmba.com/what-is-a-business-model/>
5. <https://www.who.int/emergencies/diseases/novel-Coronavirus-2019>
6. <http://parkinsonsecrets.com/blog/2021/1/18/covid-19-vaccine-comparison-chart>

PREVIOUS STUDIES

1. Gregurec, I.; Tomic'ić Furjan, M.; Tomic'ić -Pupek, K. The Impact of COVID-19 on Sustainable Business Models in Small and Medium-sized Enterprises. Sustainability 2021, 13, 1098.

PERSONAL INTERVIEWS

1. Dr. W.J.S. Dharmarathna, MBBS, DFM
2. Dr. U.G.P. Mahinda, BAMS (Colombo)- Borella Ayurveda Teaching Hospital
3. Mr. Dinusha Kalyananda, Marketing Manager- MAS Holdings PLC.
4. Mrs. B.D. Krishanthi Anandawansa MA (Kelaniya), MA (Colombo), BA (Hons) (Peradeniya)