Article QR

Title:	**Consumer attitude towards Pakistani Clothing Brands on Facebook before and during Covid-19 pandemic**
Author (s):	Ahmad Amjad, Farman Ali, Gulam Farroque, Fatima Nawaz, Fahad Assad
Affiliation (s):	University of Management and Technology, Lahore, Pakistan
DOI:	https://doi.org/10.32350.umt-air.21.01
History:	Received: April 3, 2022, Revised: May 27, 2022, Accepted: June 5, 2022
Citation:	F. Ali, A. Amjad, G. Farroque, F. Nawaz, and F. Assad, "Consumer attitude towards Pakistani clothing brands on Facebook before and during Covid-19 pandemic," *UMT Artif. Intell. Rev.*, vol. 2, no. 1, pp. 00–00, 2022, doi: https://doi.org/10.32350.umt-air.21.01
Copyright:	© The Authors
Licensing:	This article is open access and is distributed under the terms of Creative Commons Attribution 4.0 International License
Conflict of Interest:	Author(s) declared no conflict of interest

Consumer Attitude towards Pakistani Clothing Brands on Facebook before and during COVID-19 pandemic: A Comparitive Study

Ahmad Amjad[*], Farman Ali, Gulam Farroque, Fatima Nawaz, Fahad Assad

University of Management and Technology Lahore

Abstract-**COVID-19 has drastically affected businesses, industries, and consumers across the world. However, the rise of digital technology and advancements in e-commerce sector in the past decade has helped clothing brands to cope-up with the pandemic challenges. These developments have also shifted the perspective of founders to the new normal. This research paper provides a consumer oriented analysis of how clothing brands and consumers in Pakistan have reacted to the pandemic. Consumer reactions on these platforms are analyzed, including social media marketing and purchasing of clothes on Facebook. Specifically, it focuses on the first wave of COVID-19 as it provides core insights into business transformations from the perspectives of both business organization and consumers. Although, the situation has been appreciably restored now.**

Index Terms-**Clothing brands, cognitive behavior, exploratory data analysis, Facebook, online marketing, online shopping, social media**

I.Introduction

A. *Problem Statement*

Over the past two years , COVID-19 pandemic has harmed people the most all over the globe. Also, it has left indelible impacts on the national as well as the world economy [1], [2], [3]. Meanwhile, businesses in Pakistan are reshaping and evolving digitally. Moreover, social media is an easy go to platform to reach millions of targeted customers. Also, people are spending their maximum time on social media platforms to stay connected to each other due to the lockdown situations. In addition to it, they develop links not only with friends and families but also with online businesses through these platforms. Although, it is a risky transformation but this mode of communication has proved to be trendy, worldwide [4], [5].

---

[*] Corresponding author: ahmad.amjad@outlook.com

As the companies and organizations responded to the pandemic situation, the consumers also shifted their modes of shopping to more digital platforms. In fact, the customers are provided with more choices on digital modes and it becomes easy for them to visit different brands on the spot. This has led to more competition among online shopping businesses to stand out in environment. Though, many businesses and industries were adversely affected by this disastrous pandemic. Therefore, the current study specifically focuses on the change in broadcasting strategies of clothing businesses and the change in consumer interactions in a social media context.

Most of the clothing sector titans in the country, such as Nishat Linen, Ethnic, Khaadi, Sapphire, Generations and many others were already making the use of social media platforms to conduct relevant shopping businesses. However, with the emergence of COVID-19 in Pakistan, they also had to adapt and change their online business approach.

The current study performed a comparative analysis during both pre and post-COVID-19 situation, regarding three major clothing brands in Pakistan – Khaadi, Al-Karam Studio, and Nishat Linen.

We made a particular criterion on the basis of which we selected these three brands. We have scrapped the data and performed exploratory data analysis to extract cognitive insights regarding the worth of brands and consumers.

It needs to be investigated whether or not the COVID-19 pandemic has affected the clothing business in Pakistan. To this end, most major brands like Khaadi, Sapphire, Nishat Linen, Alkaram Studio, and LimeLight, already allowed consumers to view and purchase their products via their social media platforms such as Facebook. Another question is that how has the pandemic changed the behavior of these brands in terms of attracting business online to curb potential losses.

Along the same lines, the response of consumers in conditions of lockdown/curfew also needs to be investigated. Moreover, their behavior towards online following and purchasing changed due to the pandemic should also be explored. The efforts made by the brands to conduct and increase their business via the social media platforms, namely Facebook, were also examined.

The report then provides the analysis, results, and directs the

readers towards possible future work on this particular project.

II.Related Work

Although, online businesses and electronic-commerce have proved to be the predominant trendsetters since the unfortunate incident of COVID-19 pandemic at worldwide level. However, many retailers have put extraordinary efforts into establishing, improving, revising and promoting their online stores, doorstep services, and social media pages. Previously, small retailers started their businesses direct on social media sites before moving to their online stores. Furthermore, they offered product pick-up and delivery services to customers through their social media pages. Also, they have used paid promotional campaigns on social media platforms and offered discounts on them to sponsor their online channels. In Pakistan, the concept of electronic commerce was oblivious before COVID-19 pandemic outbreak. It is now considered as a popular setup and it is also inspiring for both youngsters as well as senior citizens. In today's world, almost all kinds of businesses are trying to adopt the online setup or at least social media platforms. As it holds a promising future in e-commerce world to encourage different online businesses of Pakistan. Some business elements such as courier services, electronic funds transfer, cash on delivery services, internet-usage and inventory management have been influenced by online facility. Furthermore, the production and supply chain management have been significantly determined by such online businesses. It is commonly observed that cash on delivery is the most popular payment mode and almost 80% of social media customer's cash on delivery. Besides, rest is possessed by the advanced payments or as posed by retailers. Hence, main factor is the credibility of the retailer.

However, the online businesses are also invested in new technical solutions and digital marketing campaigns due to increasing demands to attract customers and standout among the crowd. In this case, such creative and technical perspectives of social media are drastically improving. Moreover, advanced social media platforms are enabling these business partners to better manage their business.

Current scenario tells that online business especially with social media platforms are growing exponentially. Also, they are revealing the challenges and opportunities to improve in future.

This may include but not limited to transparency of the product/ service, lack of faith/ fraud, cybercrime, and a negative outlook towards retailers because of bad business experience. Moreover, implications of transparent policies and laws are not clearly defined. It also poses challenges to the advancements of technology to address them. In this case, the traffic to online businesses is still immense with all these challenges. Facebook and Instagram are the most leading social media platforms where people sell and buy their products on daily basis for 24 hours. Initially, it is too important to investigate the consumers' behavior and record of their online purchases during this pandemic. This effort proposes maximum solutions by ensuring the success of ever-growing e-business through social media modes. The current study puts maximum effort to analyze the behavior of consumers during this lockdown situation. For instance, [6] this particular study examined online shopping behavior of German based consumers for cloth purchasing. It was found more influenced by the COVID-19 crisis and the media coverage than the consumer's personal influence or digital social networks. This study establishes a new setup of ecommerce which is solely related to customer's intentions to

purchase. The current study deals with the convenient mode of customers to buy and of course the campaign and promotions of the brands or businesses. Similar to this, [7] it was found that anxiety and stress caused by pandemic has direct influence on this online shopping behavior of Kuwait customers. As this kind of activity provides them a pleasure to look elegant and reduces their stress level in the intense situation of COVID-19.

Moreover, [8] and [9] examined the factors in details to establish the influencing criteria among the Bangladeshi online customers. Again, this study is based on the quantitative survey which was conducted through online survey link mode as well as through live interactions with the customers. Furthermore, the factors were calculated, based on the following different dimensions (quality of the product/ services, its cost, convenience and duration to avail it and moreover security and reliability of the online purchase). In doing so, they found that the online shopping behavior is positively related to the technology incorporation that provides an ease of use, experience, and other online shopping benefits. Although, the reliable payment modes of shopping are still a challenge but still people are highly influenced to choose

online platform. Also, the current study indicates that the new wave of ecommerce provides customers with more resources and choices to compare and decide. Thus, their satisfaction level can be enhanced by performing this activity.

Another study was conducted to analyze the online shopping behavior among Indonesian customers after the outbreak of COVID-19 [10]. Similar to above studies, this fact was determined that the usefulness of online shopping experiences, and the ease and freedom it carries along with it, directly affects the customer's intention to buy clothing products in digital mode.

However, many other studies examine the online shopping behavior of the customers from variety of cultures and demographic locations of the world. Further, it is not only related to clothing or fashion domain but also to food and other basic needs [11]-[15]. Due to the generic scope of such quantitative surveys and the subjective responses, the analyses is limited to capture the influencing details., However, the current study maintains that an inspiration to buy online is rapidly growing. Hence, it is becoming a number one choice among people irrespective of their demographic nature, the challenges of trust, and security issues.

III. Methodology

A. Selecting Clothing Brands

There are many clothing brands which have Facebook pages in Pakistan but we selected only 3 having consistent traffic across the year. However, they must be established and big enough to attract large number of consumers. The main purpose of using three brands instead on one is to provide a broad and concrete analysis of the situation.

Female clothing brands draw a lot of consumers in Pakistan and as such we will be focusing on them in our analysis. The following selection criteria was used to select the brands:

1. They must be an established brand. This is important as well-established brands should attract huge number of online customers by following more data.

2. They must post regular content on their Facebook page. This is important as the current study involves evaluating data over a span of two years. Regular posts throughout the year can help to understand the consumer behavior over the year as well.

3. They must also receive interaction from their followers in the form of likes, comments, and share. This can only happen if the above two conditions are fulfilled.

Fortunately, there is no shortage of well-established clothing brands in Pakistan. In fact, Textile Industry is huge in Pakistan and our country is among the top 8 exporters of textiles across Asia.

B. Scrapping Data from Facebook

This is without question the trickiest part of the analysis as Facebook has lots of policies in place to prevent users from scrapping data off from their site. It does not matter whether it is an individual or a company, if anyone is found scrapping huge amounts of data off from their site, they can block the users IP. Also, they can suspend their Facebook account and even slap them with a lawsuit, no matter where they are in the world. There are already examples of such cases, as Facebook has filed lawsuits against developers in the recent years.

Their data usage policy is quite broad and simple. They don't want you to take data off their site unless you get an approval from them. With over 2.85 billion users they have a responsibility to ensure that their user data, especially, private data, such as profile is not taken by someone who has no connection to that relevant person. Facebook has suffered regarding this in the past with their infamous Cambridge Data Analytica Data scandal, where they sold data of millions of users to the said firm. Cambridge Data Analytica used this data for Political Advertising which caused a huge uproar.

Despite this there are many ways we can get data from the sites. These can be broadly categorized into 3 categories that we will briefly discuss below:

1. Facebook Graph API: Facebook themselves provide an API that developers can use to take data off from Facebook. The API is the primary way for apps to read and write to the Facebook social graph. All of Facebooks SDKs and products interact with the Graph API in some way. Moreover, our other APIs are extensions of the Graph API. So it is crucial to understand that how the Graph API works

2. Scrapping Tools: These are tools that are engineered to mine data from public Facebook pages. Data extracted may include posts, comments, reviews, and enumeration of likes, and shares on a post. Basically, they are

designed to extract information without any login required. Also, they want to take the advantage of unlimited scraping of Facebook public pages. As they do not require a login to get data. Although, only public pages are allowed, so checking that either URL is a confirmed page or not is mandatory. There are chances of of profiles that they may result in errors. Moreover, checking the appropriate layout based on your location is the next step as it determines the load time. Hence, these tools are mostly licensed with some of them offering trials with limited features. The examples include Apify, Face dominator, and Facebook Scraper.

3. Open-source scrapping libraries: These are publicly available open-source libraries which are used to extract data from Facebook. Furthermore, their advantage is that they don't require any cost/payment to use unlike licensed scraper tools. In addition to it, one can also modify the source code to fulfill their needs. One such example is the Facebook-Scrapper python library developed by Kevin Zúñiga. This can become our choice toscrape the data as its usage is relatively simple. There may be a chance of it to provide us the data. Ultimately, we need free of cost or free of filing out lengthy forms/agreements from Facebook, to get data directly from the online customers.

C. *Facebook Scrapper Library Usage*

The library can scrape Facebook public pages without an API key. Using an API key to scrape Facebook, would be the most common method in the last decade. Moreover, Facebook standardized this particular method with their Graph API in the recent past and put it in place-policies to impose restrictions. Now this activity don't allow users to scrape huge amounts of data, even if the data in question is public.

The fact that this library does not use an API key to scrape is appealing because it does not require any tedious configurations. All one has to do is to install and import the library and then call the GETPOSTS method with some parameters. There are the number of parameters that can be used but the most important ones are.

Similarly, the library is able to return considerable information about the posts of Facebook page. Besides, the ones we are concerned with are discussed below.

Table I
Get Posts Method Parameters

Parameter Name	Description
Page Name	Name of the Facebook Page. This can also be substituted with Group name to scrape data from a Facebook Group.
Pages	Number of many pages of posts to request. By default the library will request 10 pages.
Credentials	Username and Password to log into Facebook: This is not required but without login Facebook eventuallly redirects from the page to be scrapped to the login page, resuting in missing data being returned.

Table II
Information Returned by Get Posts

Information Returned	Description
Post ID	A unique identifier for the post either image, message, or video.
Post Text	Text of the post
Time	Time at which the post was posted
Likes	Number of likes on the post
Comments	Number of comments on the post
Shares	Number of shares of the post
Video ID	Unique Identifier for a Video Post
Video Views	Number of times the video post was viewed
Image IDs	IDs of all the images in a post

D. Analysis

The time range for the analysis is from one year prior to COVID-19 reaching Pakistan and one year after that point. The comparative analysis would be between these two periods of time. In Pakistan, the first COVID-19 case was reported on February 26th, 2020. So, our two time periods for analysis are.

Table III
Analysis Period

Period	Date Range
1 year before Covid-19	25th Feb 2019 - 25th Feb 2020
1 year of Covid-19	26th Feb 2020 - 26th Feb 2021

After analyzing the Facebook pages of these brands, we found that they had been posting on average around 4 posts each day, for the last week or so. After initial use of the scrapper library, we found that a single page would return 5 posts. Using this information, we made an estimate that we need to request 650 pages of posts to scrape data for our time period.

We want our analysis to answer two basic questions:

Research Question 1

How did the brands respond their social media presence (in terms of their Facebook marketing

strategy, interactivity and attractions for the products) in order to attract customers in lockdown situation?

Research Question 2

How did the consumers respond to the social media presence of brands (in terms of buying, appreciating and interactions) during the lockdown situation?

This will give us core insight to investigate the transformation that started to happen and is responsible for future changes and opportunities.

The following statistics will be used to answer these questions

Table IV
Required Statistics

Viewpoint	Statistics
Brands	Monthly number of posts 1 year pre pandemic and 1st year of pandemic
	Monthly number of video posts, 1 year pre-pandemic and 1st year of pandemic
Consumers	Monthly likes on posts, 1 year pre-pandemic and 1st year of pandemic
	Monthly comments on posts, 1 year pre-pandemic and 1st year of pandemic
	Monthly shares on posts, 1 year pre-pandemic and 1st year of pandemic.
	Monthly video views on video posts, 1 year pre pandemic and 1st year of pandemic

We are aimed to take the following visualization approaches to analyze and compare the statistics between these two time periods; i) Pre-COVID-19 (1st March, 2019- 29th February, 2021) and ii) First wave of COVID-19.

1. Scatter Plot: To visualize the first look of complete data spread over the two specified time periods and view extreme values or outliers.

2. Bar Plot: comparison of statistical data to compare the values of two durations.

IV.Data and Methods

In this study, we are specifically limited to Facebook platform, as it is quite popular among Pakistani people especially for connectivity and entertainment purposes. We used facebook_scaper library to extract the data from the top clothing brands of Pakistan.

The second specification is about selection of brands, which is limited to very small number; three, the main reason of doing so is to keep things simple and at this initial stage. We are looking at six different parameters (as show in Table II) so, we are not sure which parameters are competing with each other. Moreover, it encapsulates the required information or which parameters/ features are best to

look/advance in future as it carries further user's interest. No doubt, it was difficult to select three names out of so many brands that are famous and leading. As clothing brands are the most popular businesses among Pakistani people with food.

Based on the existence of brands on Facebook and in terms of their history, the following three brands were selected:

1. Khaadi

2. Nishat Linen

3. Alkaram Studio

After we have scraped the data, we did the necessary cleaning and pre-processing on it. We arranged the data according to our specified time durations. Furthermore, we used google colab and open-source Facebook scrapping library to carry out all the exploratory analysis.

Results for all three brands are discussed below. As mentioned earlier to get the general attitude of the data, we used 'scatter plots' and 'bar plots' to compare the statistical differences based on the listed parameters in Table II.

A. Khaadi

In this section, we examine and present the data patterns reflected by *Khaadi* brand's Facebook page. First we examine the behavior of brands in interacting with users via offering them some sort of content. For this, we first examine the number of posts (static and dynamic) published by brands to showcase their items.

1. Number of Posts
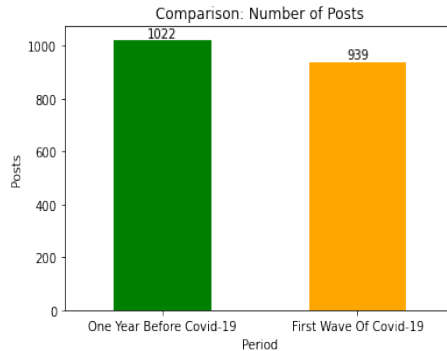
Fig. 1. Number of posts before and during Covid-19.

In Fig 1, above we can see that the total number of posts published during the first wave of pandemic was less than a year before. Same pattern was found with the number of video posts as shown in Fig 2.

2. Number of Video Post
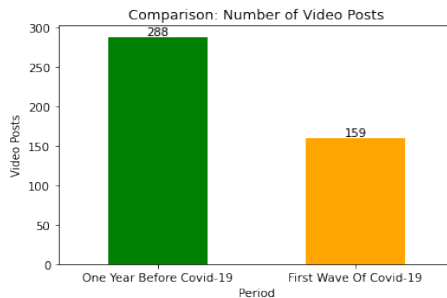
Fig. 2. Number of video posts before and during Covid-19.

3. Number of Likes
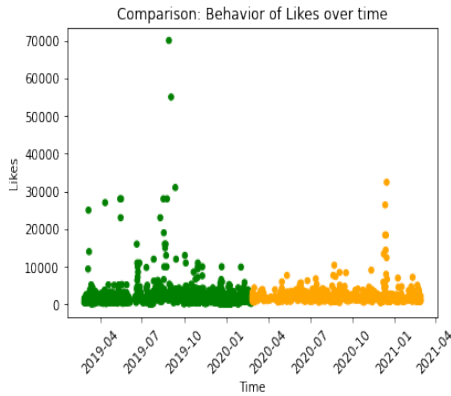
Fig. 3. Behaviour of likes w.r.t. time before and during Covid-19.

Here, we examine the user's behavior in terms of interacting with provided content by brands. Fig 3, reflects the overall patterns of likeness among users. The green region and dots represents time before COVID-19 and orange represents the time during the first wave of COVID-19. We can see that before pandemic the behavior of likes before pandemic is more erratic. Whereas, during COVID-19 the behavior is relatively more consistent. It's difficult to say that from this visualization, whether the average number of likes is greater during the pandemic period. To tackle this, we will use another visualization to determine this (refer to Fig 4).
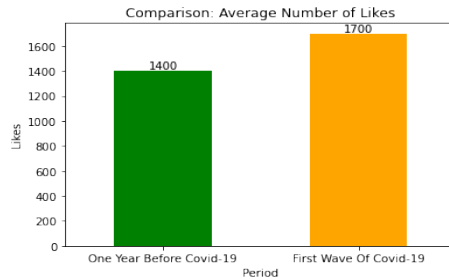
Fig. 4. Average likes per post before and during Covid-19.

Fig 4 shows that the average number of likes per post during pandemic was increased. This is quite interesting if we compare it with brands interactions (Fig 1 & 2), users are interacting on an average increased level than earlier. To examine it further, we drill down the Fig 4 into Fig 5(a) and Fig (b) to reflect us on the transition patterns of likes over the span of months. Fig 5(a) shows the patterns carried by first six months of the first wave of COVID-19 and it tells us that the likes were reached to the peak of 2000 when it was just the start of the first wave.
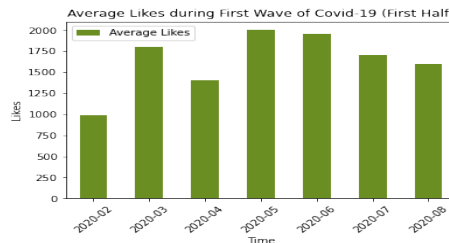
Fig. 5(a). Data distribution of 'likes' in 1st half of 1st wave of pandemic.
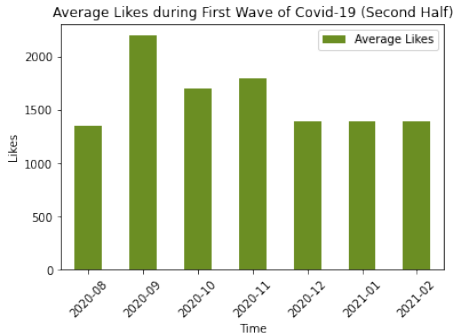
Fig. 5(b). Data distribution of 'likes' in 2nd half of 1st wave of pandemic.

4. Number of Comments and Share

Similar to the likes, we analyze the comments and shares of pattern of the users. In doing so, we found that user interaction is increased on average basis as shown in Fig 6 &7.

Fig 6 shows that the average number of comments were increased by 10 and Fig 7, shows that it is increased by ratio of 3.
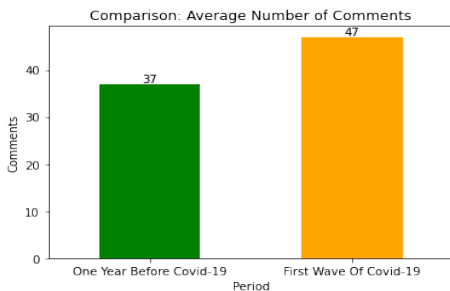

Fig. 5. Average comments per post before and during Covid-19.

Hence, we can say that the users seem to be more engaged and active in the content offered by Khaadi.

The respective monthwise aspects of comments and shares are shown in Fig 8(a), Fig 8 (b), Fig 9 (a) & Fig 9 (b).
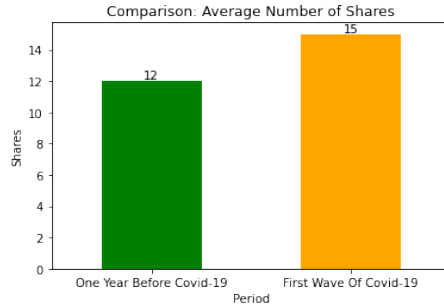
Fig. 6. Behaviour of shares w.r.t. time before and during Covid-19.

Fig 8(a) and Fig 8(b), shows that highest number of comments on monthly basis was reached on September, 2020, followed by the 70 comments in May, 2020. Though, average number of comments is 47 which is quite sufficient for the brand maintenance to engage its potential customers (users).
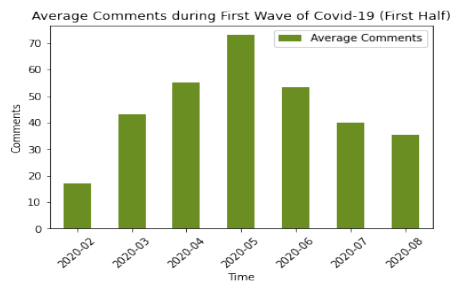
Fig. 8(a). Data distribution of comments w.r.t. time before and during Covid-19.
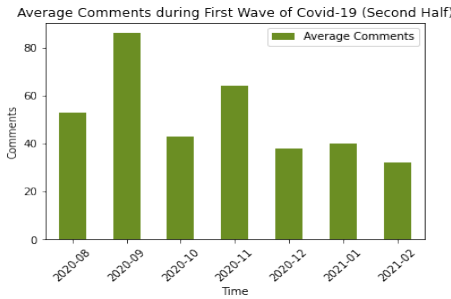
Fig. 8(b). Data distribution of comments w.r.t. time before and during Covid-19

As we have seen in Fig 7 that the average pattern of shares before and during COVID-19 is quite similar. We just explored the patterns of shares shown in Fig 9(a) & Fig 9(b), during first wave of pandemic to analyze it as we did for likes and comments. It is obvious that average number of post sharing among the users is minimum of 12 and maximum of 16. And all the peaks are usually credited to first half of pandemic.
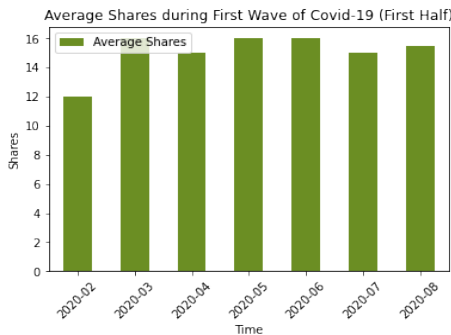
Fig. 9(a). Behaviour of shares w.r.t. time before and during Covid-19.
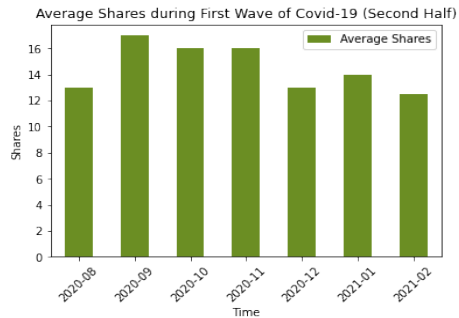
Fig. 9(b). Behavior of shares w.r.t. time before and during Covid-19.

After analysing the patterns on average basis we can establish that Khaadi was less engaging in offering its users the content during the Covid-19 first year as compared to earlier pandemic time. However, the users seemed to be more involved in interacting with contents.

B. Nishat Linen

Similar to *Khaadi*, in this section we inspect the patterns of Nishat Linen brand. Similar to *Khaadi*, in this section we inspect the patterns of Nishat Linen brand.

1. Number of Posts
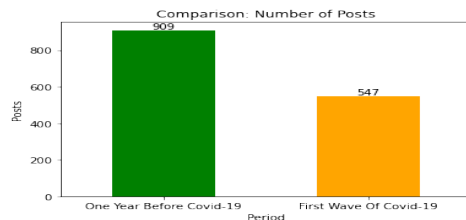
Fig. 10. Comparison of count of posts before and during Covid-19.

There is an average of 39.8 % decline in posting the posts overall (as given In Fig 10), however, there is a slight increase in video posts (as shown in Fig 11) which is in a way interesting and it also explains that video posts are more engaging with users of Facebook.
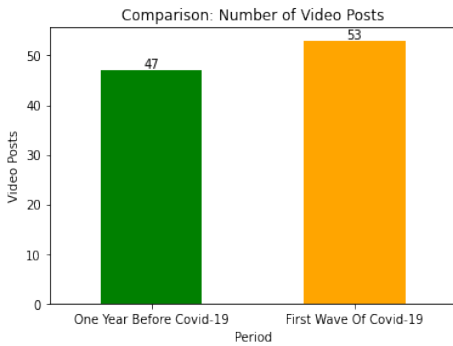
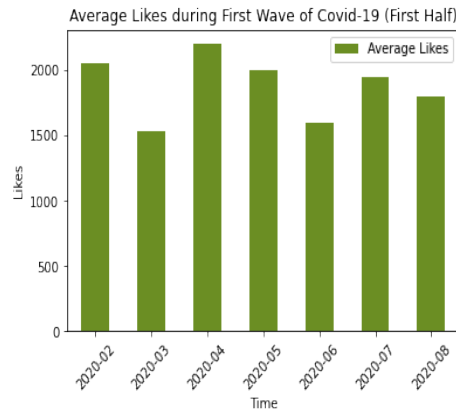**Fig. 11.** Number of posts before and during Covid-19.

2. *Number of Likes*

Similarly, we also examine the users interactions of Nishat Linen followers in terms of (post) likes is increased by 23%. This is similar to the pattern observed in Khaadi.
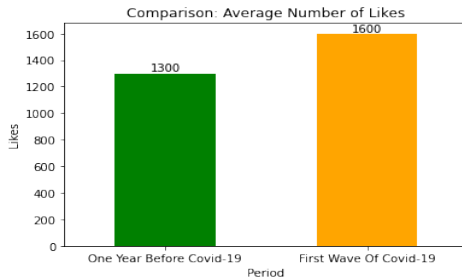
Fig. 12. Average likes per post before and during Covid-19.

However, when we closely pay attention to this pattern in monthly fashion, we can see the likes distribution is not uniform and is higher during the first half of the first wave and it eventually started to decrease but has maintained the ~1200 value (as shown in Fig 13(a) & Fig 13(b).
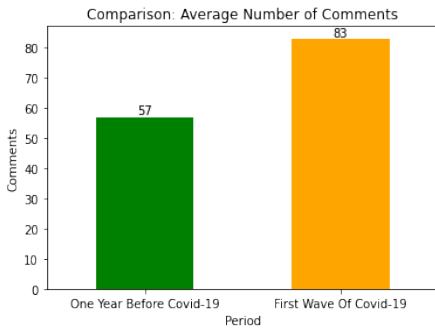

Fig. 13(a). Average likes per post before and during Covid-19.
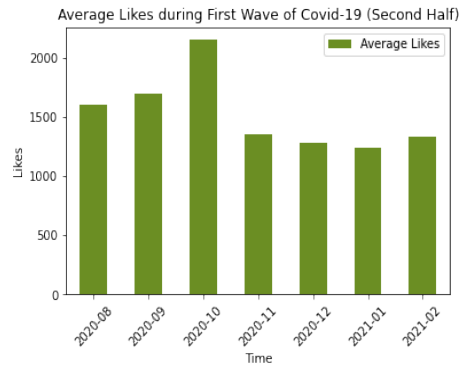
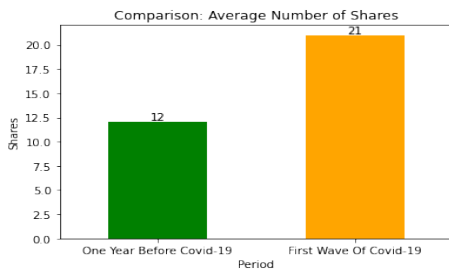**Fig. 13(b).** Average likes per post before and during Covid-19.

3. Number of Comments and shares

Fig 14 & Fig 15, shows that the data distribution of comments and shares. We see a quite expressive user patterns. There is an average of 45% and 75% increase in comments and sharing of Nishat Linen posts.
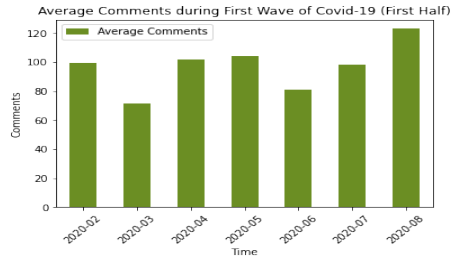

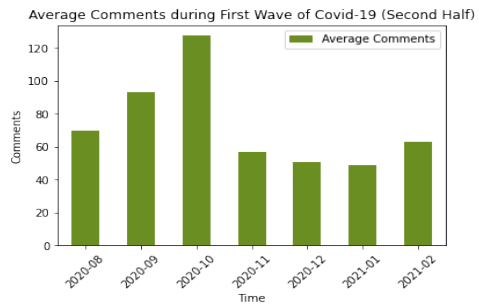**Fig. 16(a).** Average comments per post before and during Covid-19

Fig. 14. Average comments per post before and during Covid-19

Fig 16(a) & 16(b) highlights this behavior on monthly and on an average basis. They show that number of comments were higher in the first half of the first wave, and it start abruptly decreasing in November, 2021.

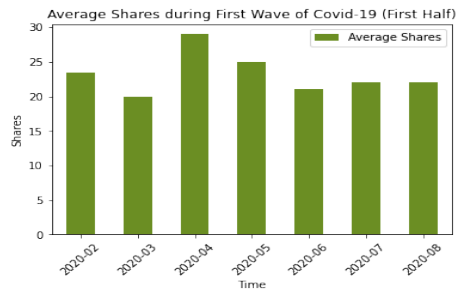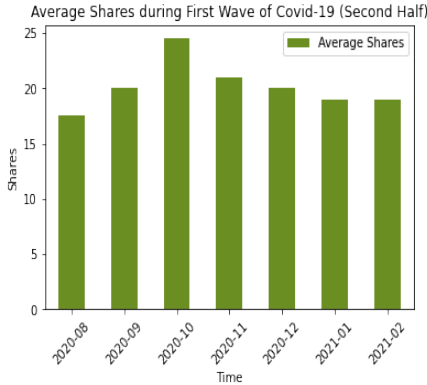**Fig. 16(b).** Average comments per post before and during Covid-19

Similarly, Fig 17(a) & 17(b), underlines the pattern of shares on monthly and on an average basis. They show that the number of shares were approximately 20 and no abrupt pattern was reflected

Fig.15. Average comments per post before and during Covid-19

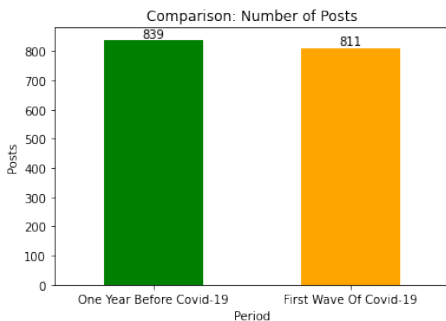**Fig. 17(a).** Average shares per post before and during Covid-19.

Fig. 17(b). Average shares per post before and during Covid-19.

C. Alkaram Studio

Here we analyze the statistical reading of the Alkarm Studio data on the same pattern.

1. Number of Posts and Video Posts

Fig. 18. Number of posts before and during Covid-19.

As similar to Khaadi and Nishat Linen, there is decline in publishing the contents by Alkaram Studio as well (see Fig 18). However, same goes with video posts as they were
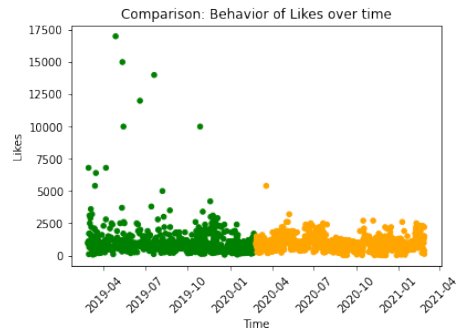
declined by average of 40.7% as shown in Fig 19.
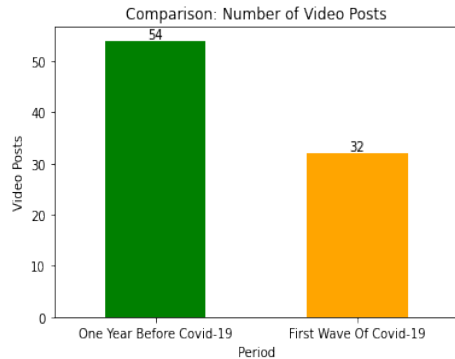
Fig. 19. Number of video posts before and during Covid-19.

Next, we examine the user engagements in terms of likes, comments and share for Alkaram studio.
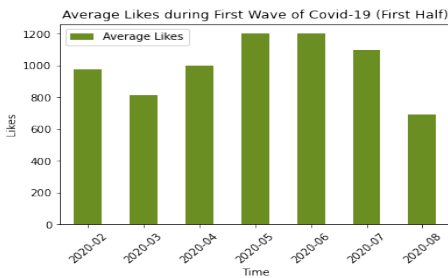
2. Number of Likes

**Fig. 20.** Behaviour of likes w.r.t. Time before and during Covid-19.

Fig 20 & Fig 21, depicts that the engagement of users in respect of likes before and during the first year of pandemic is different with more higher values in the pre-Covid-19

area. This creates a variational aspect on brand basis as compare to our pre-discussed brands. As we further dig out this behavior, the data showed up a mixed pattern.

With Reference to this Fig, there was a rise observed in the average number of likes during May & June, 2020 of average of 1200 of likes and then there is a sudden fall in August, 2020 to almost half. Also, there was not so much upsurge in likes however, the lost peak was reached again in February, 2021.
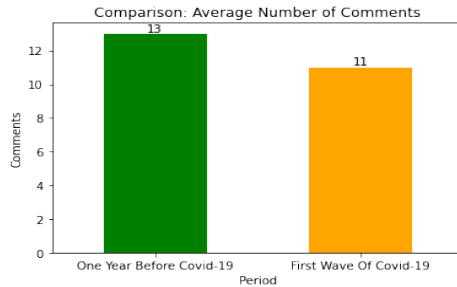

Fig. 21(a). Average likes on posts per month during Covid-19.
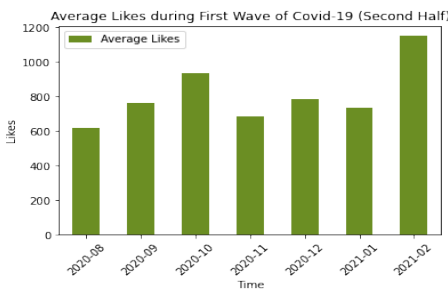
Fig. 21(b). Average likes per post before and during Covid-19.

3. Number of Comments and Shares

The data distribution of comments is also showing decline in the number of the comments.

Fig. 22. Average comments per post before and during Covid-19.

We also analyzed the spread of the comments over the span of 12 months of pandemic in Fig 23. It reveals that only during July month the peak count was reached around 35. During rest of the time, there is fluctuation between 5~15, on an average.
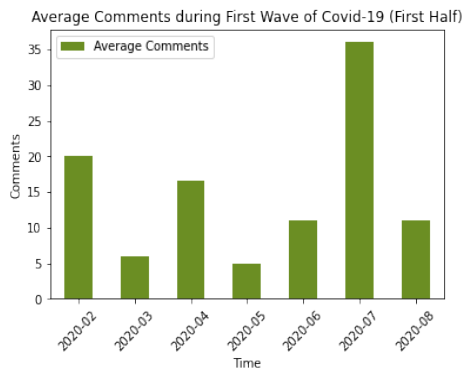
Fig. 23(a). Average comments per post before and during Covid-19.

Fig. 23(b). Average comments per post before and during Covid-19.

Fig. 24. Average shares per post before and during Covid-19.

Fig 24, shows that share count was fixed during both durations, and in Fig 25(a) & Fig 25(b) above we can see that the balance is actually reached by one outlier value. Though, the average pattern is about 3 and 6 shares on both halves of the first wave of Covid-19.

Fig. 25(a). Average comments per post before and during Covid-19.

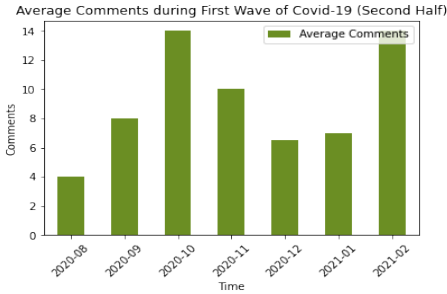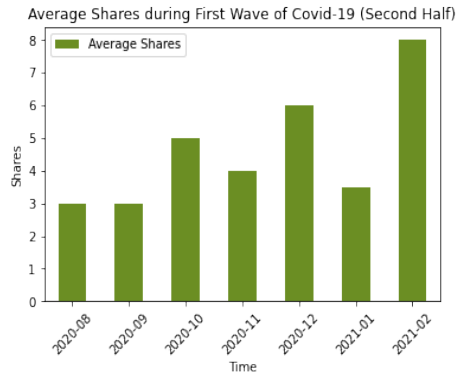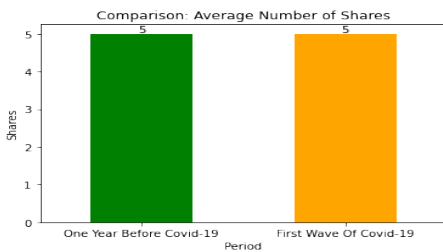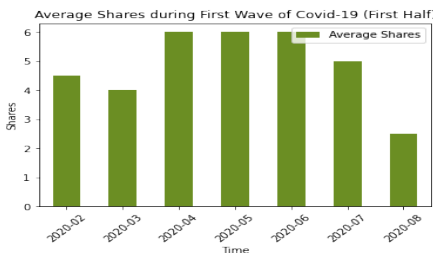**Fig. 25(b).** Average comments per post before and during Covid-19.

D. Summary Statistics

In this section, we summarize, analyze, compare, and discuss the patterns revealed by the Facebook official pages of the respective brands.

In general, we observed that all these brands were less active in engaging the customers and advertising their contents on social media during the lockdown situation. This pattern is fully conformed despite of increase in video posts by Nishat Linen, which we can ignore as the actual number of posts by Nishat Linen were dropped. One possible reason of publishing the content online by brands could be the closure of factories and industries. As a result, the online display of the brand's content is not much focused or offered in the pandemic situation. Another possible and more

plausible reason could be that there was no immediate plan by brands available to utilize the power of social media platform. Possibly, all these brands were looking for the innovative strategies to use in the development process of dedicated social media team.

Table V
Khaadi Stats

Period	Posts	Video Posts	Avg Likes	Avg Comments	Avg Shares	Avg. Video Views
Pre Covid-19	1022	288	1400	37	12	31552
1st Wave of Covid-19	939	159	1700	47	15	54308

Table VI
Khaadi Stats

Period	Posts	Video Posts	Avg Likes	Avg Comments	Avg Shares	Avg. Video Views
Pre Covid-19	909	47	1300	57	12	36467
1st Wave of Covid-19	547	53	1600	83	21	48697

Table VII
Alkaram Studio Stats

Period	Posts	Video Posts	Avg. Likes	Avg. Comments	Avg. Shares	Avg. Video Views
Pre Covid-19	839	54	741	13	5	23482
1st Wave of Covid-19	811	32	910	11	5	32802

IV. Conclusion

Based on the above discussed results, we found that a long range of brands could not increase their activity on Facebook during the time period of COVID-19. In fact, in most of the cases the number of posts during COVID were lesser as compared to the number of posts prior to it. We discovered some interesting patterns as we analyzed the Tables V, VI, and VII such as, Comparatively, Khaadi has been the most active brand on Facebook. The main purpose of using this app is to promote their business in both time periods. Ultimately, Khaadi reflects higher number of posts as compare

to other brand pages. Despite the decline in posts by Khaadi, ratio of likes to those particular posts has been increased from 1.36 ratio to 1.8. Nevertheless, Nishat Linen is showing remarkable performance for ratio of likes to their posts. It is irrespective of less content as compare to Khaddi and is dominanting by 1.43 and 2.92 in pre-pandemic time and during first year of pandemic. Alkaram Studio is not very active in gaining interests of any competitve users. Last but not the least, there is an increase in the usage of social media platforms among many brands. It was obvious because of the curfew and lockdown situations. In this case, many old businesses have been transformed and many new small businesses have been established. Now, targeted customers are not only limited to these established and renowned brands. Anyhow, these customers are not open to many other creative and similar businesses which can also compete on the 'cost' factor. However, the current study was only bound to see the transformations of limited brands on social media platforms. This quality can give some useful insights on generic basis about which factors to look forward to get more users interest. Finally, we propose some interesting future directions with regards to the current study. Other social media platforms like Instagram could be included to compare these brands on wide range of market. Also, at least few more famous brands could be included to see whether the establishment of the facts that brands were less active in promoting their businesses is valid or not. We found a significant difference in terms of activity from the consumers. The average number of likes, comments, shares, and video views during COVID-19 pandemic was increased from 25-30%. Which is significant and expected as consumers want to remain connected and able to fulfill their basic requirements like buying clothes. It also opens up another psychological aspect to investigate the urge of buying clothes, when life is in danger. However, this is not under the scope of the current study's perspective, as we are focused on learning change in consumer transition that leads to change in business strategies as well.

References

[1] B. Ali, "Impact of COVID-19 on consumer buying behavior toward online shopping in Iraq," *Econ. Stud. J.*, vol. 18, no. 42, pp. 267-280, Nov. 2020.

[2] A. Bhatti, H. Akram, H. M. Basit, A. U. Khan, S. M. Raza,

and M. B. Naqvi, "E-commerce trends during COVID-19 pandemic. *Int. J. Future Gener. Commun. Network.*, vol. 13,no. 2, pp.1449-1452, 2020.

[3] M. Shafi, J. Liu, and W. Ren, "Impact of COVID-19 pandemic on micro, small, and medium-sized enterprises operating in Pakistan," *Res. Glob.*, vol. 2, Art. no. 100018, Dec. 2020, doi: https://doi.org/10.1016/j.resglo.2020.100018

[4] A. R. Ahmad, and H. R. Murad, "The impact of social media on panic during the COVID-19 pandemic in Iraqi Kurdistan: Online questionnaire study. *J. M. Inter. Res.*, vol. 22, no. 5, Article no. 19556, Apr. 2020. https://doi.org/10.2196/19556

[5] D. J. Severinus, Z. B. B. Faisal, A. D. B. Rumaizi, and P. R. B. M. Yusoff, "Customer purchasing behaviour in online shopping during pandemic (COVID-19)," Nov. 2020. [Online]. Available: http://repository.psa.edu.my/bitstream/123456789/3515/1/DPI5B%20GROUP%208%20A%20STUDY%20ON%20CUSTOMER%20PURCHASING%20BEHAVIOUR%20IN%20ONLINE%20SHOPPING%20DURIN

G%20PANDEMIC%20%28COVID-19%29.pdf

[6] J. Koch, B. Frommeyer, and G. Schewe, "Online shopping motives during the COVID-19 Pandemic—Lessons from the crisis," *Sustainability*, vol. 12, no. 24, Art. no.10247, Dec. 2020, doi: https://doi.org/10.3390/su122410247

[7] R. Alhaimer, "Fluctuating attitudes and behaviors of customers toward online shopping in times of emergency: The case of Kuwait during the COVID-19 pandemic. *J. Internet Commer.*, vol. 21, no. 1, pp. 1-26, 2022, doi: https://doi.org/10.1080/15332861.2021.1882758

[8] F. Fatema and M. A. Siddiqui, "Factors affecting customers' online shopping behavior during Covid-19 pandemic in Bangladesh," *ABC Res. Alert*, vol. 9, no. 2, pp. 67-79, Aug. 2021, doi: https://doi.org/10.18034/abcra.v9i2.567

[9] D. G. Y. Showrav, M. A. Hassan, S. Anam, and A. K. Chakrabarty, "Factors influencing the rapid growth of on in-shopping during covid-19 pandemic time in Dhaka city,

Bangladesh," *Acad. Strategic Manag. J.*, vol. 20, no. 2, pp. 1-13, 2021.

[10] E. Sumarliah, K. Usmanova, K. Mousa, and I. Indriya, " E-commerce in the fashion business: the roles of the COVID-19 situational factors, hedonic and utilitarian motives on consumers' intention to purchase online," *Int. J. Fashion Des. Technol. Edu.,* vol. 15, no. 2, pp. 167-177, Jul. 2021, doi: https://doi.org/10.1080/175432 66.2021.1958926

[11] B. Armstrong and C. Reynolds, "China and the USA, a higher perceived risk for UK consumers in a post COVID-19 food system: The impact of country of origin and ethical information on consumer perceptions of food," *Emerald Open Res.*, vol. 2, no. 35, pp. 1-10, 2020, doi: https://doi.org/10.35241/emeral dopenres.13711.1

[12] E. Pantano, G. Pizzi, D. Scarpi, and C. Dennis, "Competing during a pandemic? Retailers' ups and downs during the COVID-19 outbreak," *J. Bus. Res.*, vol. 116, pp. 209-213, Aug. 2020, doi: https://doi.org/10.1016/j.jbusres .2020.05.036

[13] M. N. A. Khan, "Intention to reserve food during COVID-19 Pandemic among Bangladeshi internet users: Based on theory of planned behaviour," *Eur. J. Med. Edu. Technol.*, Vol. 13, no. 2, Art. no. em2010, 2020, doi: https://doi.org/10.30935/ejmets/ 8299

[14] H. M. Wati, *Online shopping at COVID-19 pandemic*. Tangerang: Faculty of science and technology universitas Buddhi DHARMA, 2020.

[15] X. Xie, L. Huang, J. Li, and H. Zhu, "Generational differences in perceptions of food health/risk and attitudes toward organic food and game meat: The case of the COVID-19 crisis in China," *Int. J. Environ. Res. Public Health*, vol. 17, no. 9, Art. no. 3148, Apr. 2021, doi: https://doi.org/10.3390/ijerph17 093148