

How to Cite:

D'Silva, N., Shaikh, A., D'Silva, B., & Khan, A. (2022). The impact of COVID-19 on small businesses, with the importance of performance and innovation as a mediating factor. *International Journal of Health Sciences*, 6(S3), 3830–3839.
<https://doi.org/10.53730/ijhs.v6nS3.6636>

The impact of COVID-19 on small businesses, with the importance of performance and innovation as a mediating factor

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Abstract---This research article is based on a survey that did not provide a full or detailed assessment of the entire Indian population or segment, nor did it anticipate future actions. However, it has been closed for a few weeks in order to provide early insight into the local market, and it will remain closed until the influence of the Covid-19-transmitted community virus has not infected any humans. This poll aims to compare how India's informal sector has been affected by the lockdown. The study examines how revenue or income varied across different types of businesses during the country's shutdown. It also notes that there is no cash flow in the market because the store or shop, if not the entire market, has been shut down. The major goal of this article is to review and summarise the impact of the shutdown on small vendors who undertake daily cash business. The research based on both qualitative and quantitative method. The data has been collected from 201 respondent from small business or vendors from Mumbai City. The data was analysis with the help of SPSS software and AMOS 26 version.

Keywords---change in revenue, downsizing, online mode.

Introduction

The global health crisis caused by the Coronavirus Disease 2019 (COVID-19) pandemic began in China in December 2019 (Akpan et al., 2020a; CDC, 2020; Huang et al., 2020; Ting et al., 2020), catching the world off guard and unprepared and wreaking havoc on business activities, with serious consequences for small businesses (Akpan et al., 2020a; CDC, 2020; Huang et al. (Akpan et al., 2020b; Humphries et al., 2020). Small firms are more likely to be impacted than bigger enterprises, as they are disproportionately concentrated in sectors that have been directly impacted by the COVID-19 response measures (e.g., retail and services) and are typically more credit constrained (Cao & Leung, 2020; Kumar & Francisco, 2005).

Small firms, after all, make up the majority of businesses in the economy and employ a large percentage of the workforce (Humphries et al., 2020). Harel et al. (2019b, 2020a, 2020b) found that small businesses that used open innovation tools (Harel et al., 2019b) and implemented processes for sharing and utilising knowledge ('sharing processes'; Harel et al., 2020a) and processes for developing an innovation culture that used open innovation tools (Harel et al., 2019b) and processes for developing an innovation culture that used open innovation tools (Harel et al.).

The decision to research this subset of small enterprises was based on the fact that it was a separate group, comprised mostly of businesses that worked in traditional industrial settings. fields and only put a little amount of money on R&D. These companies aren't in the high-tech industry and sophisticated technological domains, which can be claimed to have had no material and immediate impact on their commercial operations in a conservative assessment. These enterprises, on the other hand, do not belong to a collection of companies that work in the retail, tourist, and entertainment industries and provide services to the public. COVID-19's consequences have had a direct and severe impact on end customers in face-to-face contacts.

Literature Review

Impact on revenue

Previous research findings back up the present study's findings. According to Nwokocha et al. (2019), the subcontracting relationship between large-scale enterprises and small firms is skewed toward production and product-related cooperation, with contractors concerned with addressing demand fluctuations and cutting long delivery periods. Production, according to Nwokocha et al. (2020), Small enterprises in the industrial sector rely heavily on subcontracting strategies to stay afloat. And the ability to ensure cost and risk reductions, as well as resource accessibility. There was no discernible link between income fluctuations and export sales during the pandemic. The study hypotheses H6a and H6b are not supported by these findings. The findings counter the hypothesis that enterprises operating in worldwide markets and exposed to new knowledge and ideas will be less adversely affected by extreme economic distress, uncertainty, and constraints (Autio et al., 2000; Zahra et al., 2000).

Change in pattern of business

The findings of previous studies by Zahra et al. (2000), Autio et al. (2000), and Laursen and Salter (2014) support the current study's findings about the relationship between business activity in international markets and the development of the learning skills and flexibility required to cope with market changes. OI can be expressed in a variety of ways, including the acquisition of technology or information, the usage of networking, product design collaboration with other organisations, and so on. The OI paradigm allows companies to use both internal and external paths while also acquiring knowledge from outside sources. Because only a small number of small businesses have sufficient ability to manage the entire innovation process independently, they must collaborate with other entities (Bigliardi & Galati, 2018; Chesbrough, 2003), the OI model allows them to become part of the innovation landscape (Bigliardi & Galati, 2018; Chesbrough, 2003). (Mitra, 2019).

Harel et al. (2019b) distinguished between OI tools aimed at acquiring knowledge in a unidirectional manner from external open sources of information, such as Internet searches for professional information or attending professional conferences, and OI tools aimed at acquiring knowledge in a bidirectional manner from external open sources of information. Small enterprises, according to Radziwon and Bogers (2018) and Van de Vrande et al. (2009), must find ways to benefit from economies of scale and, as a result, must build external ties in order to obtain the resources they lack for innovation. Many small firms engage in the retail and service industries, where they contact with customers face to face. Because of the limits and closures imposed by the authorities, these sectors were the hardest hit by the COVID-19 pandemic (Cao & Leung, 2020). As previously said, small firms frequently operate in narrow and highly specialised industries, allowing them to provide something unique in comparison to the standardised products and services given by huge corporations. Many of them work as subcontractors to large industrial companies and act as specialist suppliers of parts, components, and subassemblies in the industry sectors (Yew Wong & Aspinwall, 2004), which for the most part continued to operate during the COVID-19 period due to their status as vital industrial enterprises to the economy.

Objective

- To conduct a comparative analysis of Mumbai's Small business.
- To look at revenue during the lockdown.
- To assess the impact of a cashflow shutdown at the market.
- To investigate the market's lack of available stock.

Research Methodology

Research design

The research conducted was descriptive and analytical, so a Survey method was used. A Survey was conducted through a structured questionnaire tested for reliability and data was collected throughout Mumbai.

Primary data

Primary data was collected randomly through the structured questionnaire in Mumbai City, by using simple random sampling.

Sample size

The study was limited to those participants who willingly elected to complete the instruments in their entirety. There was a total of 201 respondents. The sample to which the questionnaire was administered was based on random sampling techniques. The sample distribution was given in Table 1.

Forms of Informal Business	No.of Respondent	%
Street Vendor	50	24.87
Grocery store	60	29.85
General stores	30	14.93
Clothes Shop	30	14.93
Shoes shop	20	9.95
Others	11	5.47
Total	201	100

Table 1.Source: Primary data

Sample design

The researcher relied upon simple random sampling technique, considering the research methodology and research type as per guidelines. A caution was exercised during the study that the respondents who did not show inclination to be a part of the study were not covered.

Area of research

Mumbai City

Secondary data

The secondary information or data was collected from newspapers, research articles, magazine and websites.

Research instruments

A summated closed end questionnaire was used with different viewpoints of respondents. In this questionnaire, all the questions were positively framed to study the impact of independent variables like age, gender and profession on the dependent variable.

Statistical analysis

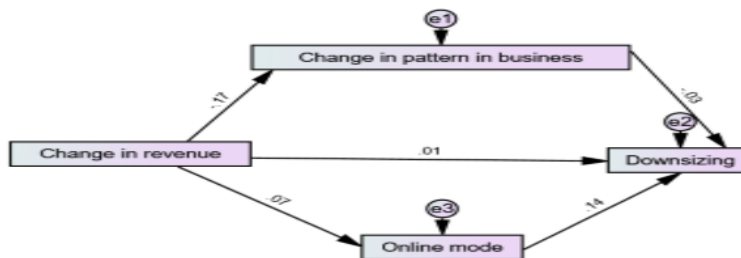
Efficient and effective data analysis is the result of effective data preparation. This was found to be very crucial between the completion of the field work and the statistical processing of the collected data. Data preparation involved transferring

the questionnaire into an electronic format which allowed and facilitated subsequent data processing. Data sheet was prepared directly at Statistical Program for Social Sciences (SPSS) software for further analysis. Code was assigned to each response for data entry and data record. Transcribed data sheet was prepared for data analysis. On the basis of data sheet, tables and graphs were prepared for the analysis.

Hypothesis

- H1: The revenue of most small businesses in the industry sector did not decrease during the COVID-19 period as compared to the corresponding period last year.
- H2: Most small businesses in the industry sector have not made changes or adjustments in their business activity during the COVID-19 period.
- H3: There is no correlation between switching to online mode and downsizing business.
- H4: There is no significant level of change in revenue and online mode of business.

Data analysis



Graph 1. Research Model by Using SEM Model

Table 2
Chi-Square Analysis

Minimum was achieved Chi-square = .005 Degrees of freedom = 1 Probability level = .945

Table 3
Estimation of Model Fit

Parameters	Effect	Parameters	Estimate	S.E.	C.R.	P
Changeinpatterninbu	<---	Changeinrevenue	-.182	.073	-	.013

siness					2.491	
Onlinemode	<---	Changeinrevenue	.051	.055	.931	.352
Downsizing	<---	Changeinrevenue	.007	.060	.122	.903
Downsizing	<---	Onlinemode	.152	.076	1.997	.046
Downsizing	<---	Changeinpatterninbu siness	-.021	.057	-.376	.707

Table 4
HOELTER Model

Model	HOELTER .05	HOELTER .01
Default model	158540	273828
Independence model	226	301

Table 5
Chi-Square Tests by Using SPSS

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	134.790 ^a	9	.000
Likelihood Ratio	113.513	9	.000
Linear-by-Linear Association	34.066	1	.000
N of Valid Cases	201		

a. 1 cells (6.3%) have expected count less than 5. The minimum expected count is 3.75.

Table 6
Crosstab

Crosstab		Effective measures			Total	
		1	2	3		
Strategies to increase your revenue during and following COVID- 19	1	Count	19	19	35	73
		Expected Count	22.9	16.3	33.8	73.0
		% Within strategies to increase your revenue during and following COVID-19 (Change in pattern in business)	26.0%	26.0%	47.9%	100.0%
	2	% within measures effective?	30.2%	42.2%	37.6%	36.3%
		% of Total	9.5%	9.5%	17.4%	36.3%
		Count	19	15	21	55
		Expected Count	17.2	12.3	25.4	55.0

Total	3	% within strategies to increase your revenue during and following COVID-19 (Change in pattern in business)	34.5%	27.3%	38.2%	100.0%
		% within Effective measures	30.2%	33.3%	22.6%	27.4%
		% of Total	9.5%	7.5%	10.4%	27.4%
		Count	13	6	22	41
		Expected Count	12.9	9.2	19.0	41.0
		% within strategies to increase your revenue during and following COVID-19	31.7%	14.6%	53.7%	100.0%
	4	% within measures effective	20.6%	13.3%	23.7%	20.4%
		% of Total	6.5%	3.0%	10.9%	20.4%
		Count	12	5	15	32
		Expected Count	10.0	7.2	14.8	32.0
		% within strategies to increase your revenue during and following COVID-19	37.5%	15.6%	46.9%	100.0%
		% within measures effective	19.0%	11.1%	16.1%	15.9%
	Total	% of Total	6.0%	2.5%	7.5%	15.9%
		Count	63	45	93	201
Expected Count		63.0	45.0	93.0	201.0	
% Within strategies to increase your revenue during and following COVID-19		31.3%	22.4%	46.3%	100.0%	
% within measures effective		100.0%	100.0%	100.0%	100.0%	
% of Total		31.3%	22.4%	46.3%	100.0%	

Finding

The results reveal that the structural model obtained satisfactory fit for the existing data, as shown in Figure 2, with a Chi-square value of 0.005. Other fit indices (df = 1, GFI = 0.847, AGFI = 0.783, TLI = 2.154, CFI = 1.0, PRATIO = 0.167 and RMSEA = 0.00) were also change in revenue to support the Chi-square. The regression table was derived from the structural model outputs to test the hypotheses. Because the results in Table 2 show that revenue of most small businesses in the industry sector did not decrease during the COVID-19 period as compared to the corresponding period last year (= 1.030, t-value = 3.741, p 0.05), H1 was approved. According to the study, change in revenue has a significant downsizing in business. Most small businesses in the industry sector have not

made changes or adjustments in their business activity during the COVID-19 period ($= -0.017$, t -value $= -0.046$, $p > 0.963$), hence H2 is rejected. H3 is accepted since the link between There is no correlation between switching to online mode and downsizing business ($= 1.019$, t -value $= 1.804$, $p 0.071$). Finally, the results demonstrated that there a more impact of the covid 19 lockdown on business. As a result, H4 is confirmed ($= 2.032$, t -value $= 5.499$, $p 0.05$). When it comes to employee engagement, there is a strong correlation between There is no significant level of change in revenue and online mode of business. The data also revealed that, for two-thirds of the small business, there was no change in the amount to which sharing activities took place within the revenue during the pandemic, while for over a quarter of the enterprises, such processes took place to an even larger extent. There were no employees in 90% of the small business. During the COVID-19 period, there was a shift in the extent to which cultural processes were implemented.

The influence of the COVID-19 pandemic on the scope of activities and revenues of small firms in industrial sectors was empirically explored in this study compared to the same period the previous year. It also looked at how firms adjusted or changed their operations to deal with the new problems brought by the pandemic. We also looked at the relationship between a company's rate of income from subcontracting work/export sales and the amount of revenue change/adjustments it had to make during the COVID-19 period. Furthermore, in order to examine the impact and future implications of COVID-19 for these enterprises, the study inquired as to whether and to what degree there had been changes in the way these businesses were run. The study investigated whether and to what extent changes in the use of online mode for business, as well as the implementation of sharing and cultural processes, had occurred, which could potentially promote online mode marketing for small business and, as a result, business performance change.

Conclusion

The findings revealed that, despite COVID-19's widespread impact on all aspects of life, particularly the economy and business sector, most small businesses in the industrial sectors did not suffer financial losses as a result of the pandemic, and that most of these businesses made no changes or adjustments to their operations, including the extent to which they used Online Marketing tools or implemented sharing and cultural processes. The data also revealed a link between revenue from export sales and the level of business activity changes or adjustments made during the pandemic. The findings revealed that businesses active in the international market, with a higher rate of revenue from export sales, were more successful in changing and adapting their business activity to the changes underway and the varying requirements of customers around the world, in accordance with the trade restrictions imposed by various countries. The study's goal was to investigate the influence of the COVID-19 pandemic on the revenues of small firms in the industrial sectors, as well as the extent to which these businesses changed their business activity, used open innovation tools, and implemented various managerial practises. During the pandemic, the researchers looked at the association between revenue from subcontracting work/export sales and changes in revenue/the level of changes or adjustments in company activity.

References

1. Akpan, I. J., Ezeume, I. C., Udomboso, E., Ezeume, A., & Akpan, A. (2020a). An Analysis of the conceptual structure of SARS-CoV-2 and COVID-19 Using network analysis and visual analytics. 1–23. <https://doi.org/10.2139/ssrn.3593142>
2. Akpan, I. J., Soopramanien, D., & Kwak, D. H. (2020b). Cutting-edge technologies for small business and innovation in the era of COVID-19 global health pandemic. *Journal of Small Business & Entrepreneurship*, 1–11. <https://doi.org/10.1080/08276331.2020.1799294>
3. Ali, M., & Park, K. (2016). The mediating role of an innovative culture in the relationship between absorptive capacity and technical and non-technical innovation. *Journal of Business Research*, 69(5), 1669–1675.
4. Cao, S., & Leung, D. (2020). Credit constraints and productivity of SMEs: Evidence from Canada. *Economic Modelling*, 88, 163–180.
5. Centers for Disease Control and Prevention (CDC). (2020). Coronavirus Disease 2019 (COVID-19). CDC. <https://www.cdc.gov/coronavirus/2019-ncov/about/symptoms.html>
6. European Centre for Disease Prevention and Control (ECDC). (2020). COVID-19. Situation update worldwide. ECDC. <https://www.ecdc.europa.eu/en/publications-data/download-todays-data-geographic-distribution-covid-19-cases-worldwide>
7. Harel, R., Schwartz, D. & Kaufmann, D. (2019a). Small businesses are promoting innovation. Do we know this? *Small Enterprise Research*, 26(1), 18–35.
8. Harel, R., Schwartz, D., & Kaufmann, D. (2019b). Open innovation in small businesses in the industry and craft sectors. *International Journal of Innovation Management*, 23(4), 1950038.
9. Harel, R., Schwartz, D., & Kaufmann, D. (2020a). Sharing knowledge processes for promoting innovation in small businesses. *European Journal of Innovation Management*. <https://doi.org/10.1108/EJIM-04-2020-0122>
10. Harel, R., Schwartz, D., & Kaufmann, D. (2020b). Organizational culture processes for promoting innovation in small businesses. *EuroMed Journal of Business*. <https://doi.org/10.1108/EMJB-03-2020-0027>
11. Humphries, J. E., Neilson, C., & Ulysea, G. (2020). The evolving impacts of COVID-19 on small businesses since the CARES Act (Cowles Foundation Discussion Paper No. 2230). <http://dx.doi.org/10.2139/ssrn.3584745>
12. Puddister, K., & Small, T. A. (2020). Trial by zoom? The response to COVID-19 by Canada's courts. *Canadian Journal of Political Science/Revue Canadienne de Science Politique*, 1–5. <https://doi.org/10.1017/S0008423920000505>
13. Vaccaro, A. R., Getz, C. L., Cohen, B. E., Cole, B. J., & Donnally III, C. J. (2020). Practice management during the COVID-19 pandemic. *The Journal of the American Academy of Orthopaedic Surgeons*, 28(11), 464–470.
14. Webster, P. (2020). Virtual health care in the era of COVID-19. *The Lancet*, 395(10231), 1180–1181
15. World Health Organization (WHO). (2019). Naming the coronavirus disease (COVID-19) and the virus that causes it.

[https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirusdisease-\(covid-2019\)-and-the-virus-that-causes-it](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirusdisease-(covid-2019)-and-the-virus-that-causes-it)