

Employers' Federation of India

and

International Labour Organisation

Jointly presents

Survey Report

Assessment of the Needs of Enterprises resulting from COVID-19

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Foreword



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Since 1933 the Employers' Federation of India (EFI) has been an established platform to protect, promote and champion issues in the labour and human resource ecosystem.

One of the important functions of the EFI is to do evidence-based research on significant issues being faced in the World of Work. The outbreak of the current COVID-19 pandemic, on a scale the likes of which has never been experienced before, has disrupted social, financial and economic structures and systems. This has created traumatic stress, fear, uncertainty and a sense of helplessness. In this context, in collaboration with the ILO the EFI conducted a Survey to assess the most pressing challenges and needs of enterprises across the value-creation chain covering cash flow, staffing, supply chain disruption, lower demand etc.

The ILO format was modified to suit the Indian context and 59 organizations from 21 business sectors spanning small-scale, medium and large enterprises responded to the Survey. A significant percentage of the respondents were non-members of EFI.

This survey tool is designed to support enterprises during the COVID-19 crisis and enable them to :

1. Assess the level of risk and vulnerability of the organization's business; &
2. Develop an effective risk and contingency plan or system for the business.

The risk profile of enterprises and the level of vulnerability to COVID-19 was assessed in terms of the impact on People, Processes, Profits, and Partnerships (the “4Ps”). The findings indicate that there are 6 major challenges faced by respondent companies related to Finance, Business Operations, Employee Availability, Suppliers, Customers, and Business Partners.

I hope you will find the Survey findings and analysis useful.

I would like to congratulate and thank the EFI for the speed and rigour with which they have carried out the survey, and wish them all the best for continuing the work they are doing at the level of both the country as well as the enterprise, to create an ecosystem which is competitive, fair and inclusive.

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Note: This survey analyses the situation before announcement of containment zones and announcement of red, orange and green zones.

Assessment of Needs of Enterprises resulting from COVID-19

1. Context:

In the dawn of the new decade starting 2020, businesses across globe were dreaming about advent of the Industrial Revolution 4.0 phase, characterised by Artificial Intelligence(AI), BlockChain, Cloud Computing, Chatbots, IOT, Robotics etc. Most of senior business leaders and entrepreneurs were also concerned on how they would be able to 'include' the millennial generations, who would bring their unique & diverse attitudes and lifestyles to workplace. World and specifically India, was also preparing the movement towards achievement of 17 Sustainable Development Goals (SDGs) -2030, notified by the United Nations. However, a new invisible substance of nano size - a virus with the name of 'Novel Corona' entered into the lives of all human beings, triggering an unforeseen pandemic of catastrophic magnitude, seriously impairing both the business world and the global economy. All of us are left hanging on a 'fine life line', as good health and survival have become paramount.

Corona invasion triggered a complete lockdown in India, resulting in tremendous pain and suffering, caused by sudden unemployment, hunger, and threat of loss of livelihood. The pandemic has not spared even well run business enterprises. The supply lines have been broken leading to disruption of essential goods and services to customers and consumers.

The only and most difficult question remains, as how the country, the society and enterprises should normalise life? Psyche of the country and businesses have predominantly been consumed by negative spiralling thoughts and feelings around disaster, depression and economic dilemma. Yet, the show has to go on. India and its enterprises have to find a way out of the overcast clouds. It is better to find a way, soon even if it may not be most ideal, but ensuring it is in the right direction, should be sustainable and deliver continuity of human life, customers, societies and businesses.

2. Introduction:

International Labour Organization (ILO) had perceived the Covid-19, early, and visualised its likely impact on organised and unorganised workers and even predicted its cataclysmic effects in to the near future. To ensure that security is provided to the affected workforce, it is equally important for protecting the interests of employers from going belly-up due to the aftermath of the pandemic. Hence, ILO conceptualised and launched a global survey in March 2020, to assess the needs of enterprises resulting from the crisis.

To operationalize the survey effectively, ILO designed the tool and assigned data collection processes to Employers and Business Membership Organizations (EBMOs). In India, ILO collaborated with Employers' Federation of India (EFI), an apex body of employers' organizations and industries on matters concerning labour and human resources. The needs assessment survey has helped EFI to conduct a preliminary scan of the impact of COVID-19 on enterprises and its business performance, specifically in India.

3. Objectives:

Following were the objectives of survey :

1. To highlight the main challenges that enterprises are experiencing from COVID-19,
2. To identify the main needs and priorities of enterprises that need to be addressed, and
3. To determine the strategies of financial measures for worst-affected sectors.

4. Research Questions:

The needs assessment survey has 10 research questions related to COVID-19 issues. The subsequent analysis enables answering following questions:

- R .1** Which types of enterprises are being most impacted by COVID-19 (small, medium, large)?
- R .2** Which sectors are being most impacted by COVID-19?
- R .3** Which geographical regions are being most affected?
- R .4** What is the current state of business operations (open, teleworking, relocated or closed)?
- R .5** Are enterprises experiencing large drop in demand for key products/services?
- R .6** What are the most pressing challenges faced by enterprises (e.g. cash flow, staffing, supply chain disruptions, lower demand)?
- R .7** Will these challenges create impediments to doing business over the short-and/or long-term?
- R .8** What is the financial impact on enterprises?
- R .9** Can enterprises access loans or grants to support business recovery?
- R .10** Are business owners considering permanently closing their business?

5. Tool used for Analysis:

The tool that was developed and deployed, to assess ‘Needs of Enterprises resulting from COVID-19’ consisted of following factors/variables:

1. Impact on type of enterprise
2. Impact on sectors
3. Impact on geographical regions
4. Current state of business operations
5. Status of demand and supply
6. Type of major challenges
7. Long term or short term impediments
8. Financial impact
9. Access of financial support for business recovery
10. Future plan – closure or sustain

6. Sampling Framework:

Above mentioned tool, developed by ILO and EFI, was deployed during 17th April to 29th April 2020. Data was collected from 59 small, medium and large enterprises across India. Service sector contributed to 32.2% of surveyed enterprises while 67.8% were manufacturing companies.

EFI introduced some changes in the ILO developed tool, to enable collection of data, from different types of enterprises operating in India. Through Google form, the survey tool was circulated to EFI member companies and organizations. Among respondents, 29.5 % are members whereas rest i.e. 70.5% are non- members. Participation of non members in the survey is a serious indication of the gravity of the situation, including anxiety and expectations of assistance from governments. It is important to mention that, survey form was completed by HR or IR managers, owners or senior leaders from respondent companies.

7. Data Analysis:

7.1 Profile: Respondents' organisations:

Table No. 7.1: Details : Respondents:

Reference Question in Survey Form	Demographic Profile Total N =59	Groups/ Categories	Frequency	
			N	Percentage
Enterprise	Type of Industry	Service Industry	19	32.2%
		Manufacturing Industry	40	67.8%
Location (City)	Location	Mumbai Region	17	28.8%
		Pune Region	15	25.4%
		Single State	11	18.6%
		Pan India Operation & MNC	16	27.1%
1. Total number of employees before spread of COVID-19	Company Size (Full Time, Part Time & Temp)	< 10 Employees	3	5.1%
		>9 < 101 Employees	10	16.9%
		>101 < 250 Employees	3	5.1%
		> 250 Employees	43	72.9%
3. Is your enterprise currently in operation?	Operation Status during Pandemic	Fully On-Site	9	15.3%
		Fully But Remotely	7	11.9%
		Partially	20	33.9%
		Not Operating	23	39.0%
5. Does your enterprise have a written business continuity plan?	Written Business Continuity Plan	Yes	40	67.8%
		No	19	32.2%
8. Did you change your business operations or service delivery to protect your enterprise against COVID-19?	Change in Nature of Operation during COVID -19	Yes	42	71.2%
		No	17	28.8%
10. Was your business fully, partially or not insured before the COVID-19 crisis occurred?	Insurance of Business	Fully	27	45.8%
		Partially	15	25.4%
		Not At All	17	28.8%
11. What has been the level of financial impact on your business and disruption to business operations?	Financial Impact due to COVID-19	High Impact	34	57.6%
		Moderate Impact	18	30.5%
		Low Impact	7	11.9%
12. Do you have own funding or access to alternative/external sources of funding to help the business recover?	Own Funding or Alternate Source of Funding	Yes	39	66.1%
		No	20	33.9%
13. How long would it take your enterprise to fully restore operations?	Required Time for Restoration Normalcy	Less Than 7 Days	9	15.3%
		Between 8 And 30 Days	16	27.1%
		Between 31 And 90 Days	12	20.3%
		Between 91 And 180 Days	15	25.4%
		Over 181 Days	7	11.9%

Prepared

Observations

More than 54% of respondent companies are from two metropolitan regions of Maharashtra State. Almost 73% of respondent companies employ more than 250 employees. Due to the severity of COVID-19 impact, nearly 39% of companies were not operating at all. Other respondent companies were operating either partially or maintained their operation by working remotely.

67% respondent companies have written business continuity plans (BCP) and 71% have had to change their business operations flow, during the pandemic 2020. Among the respondents companies, 71% reported that they have partially or fully insured their businesses. 66% reported that they have their own funding or alternative source of funding to support their businesses. Due to complete lockdown in India, 37% respondent companies required more than 90 days to restore their operations back to normalcy, while 57% have suffered a major financial impact on their businesses.

The respondent companies represented 21 sectors (Annexure 2). During the lockdown period, none of the respondent employers had any plans to relieve or dismiss any employees. 93% of employees and/or their family members were not infected by the virus at the time of survey. Almost 96% respondent companies supported their employees with sanitizers or personal protective equipment.

7.2 Challenges faced:

Following table presents the responses received vis-a-vis main challenges industry owners face due to COVID-19

Table No. 7. 2: Challenges

Sr. No	Challenges: COVID-19	Service Sector Companies Total Frequency – 19 Total Percentage - 100		Manufacturing Companies Total Frequency – 40 Total Percentage - 100	
		Frequency & Percentage Yes	Frequency & Percentage No	Frequency & Percentage Yes	Frequency & Percentage No
1	Cash flow to maintain employees on the roll and business operations is inadequate.	11 57.9%	8 42.1%	29 72.5%	11 27.5%
2	Employees are absent from work due to illness or government orders.	9 47.4%	10 52.6%	27 67.5%	13 32.5%
3	Raw materials are not in supply or have become very expensive disrupting operations.	6 31.6%	13 68.4%	26 65%	14 35%

4	Suppliers are unable to provide inputs.	8 42.1%	11 57.9%	28 70%	12 30%
5	Business partners have been badly affected and are not operating normally.	13 68.4%	6 31.6%	29 72.5%	11 27.5%
6	Customers/clients have been affected and demand is lower than normal.	16 84.2%	3 15.8%	29 72.5%	11 27.5%

Prepared

Observations

Table No.7.2 indicates 6 challenges faced by respondent companies related with Finance, Business Operations, Employee Availability, Suppliers, Customers and Business Partners. Almost 72% companies faced cash flow issues and 67% were affected by absenteeism of employees. A similar percentage of manufacturing respondent companies had to face supply chain issues and badly affected business partners. On the other hand, disruption in operations and low demand from customers were prominent issues faced by service sector respondent companies.

8. Findings:

Pandemic crisis continues to significantly affect enterprises based in the Pune region. 73.3% of respondent companies from Pune are severely impacted and completely shut down. Annexure 3 indicates that during the pandemic, 82.4% respondent companies from Mumbai are operating either fully, remotely or partially.

This study covered a range of 21 sectors including automobile, engineering, construction, consultancy, etc (Annexure 2). The respondent companies employed a range of employees with a minimum of 5 to more than 250. Almost 73% of respondent enterprises have more than 250 employees on their rolls.

Regarding current state of enterprises, the needs assessment survey have identified following:

- ▶ 39% of surveyed enterprises were forced to completely stop operations, due to COVID-19. The worst-affected enterprises were primarily large companies employing more than 250 employees. From among the manufacturing companies surveyed, 19 were not operating at all whereas 13 companies could maintain partial operations. In the case of service sector industries, 78.9% of the companies were operating fully, remotely or partially during the pandemic period.
- ▶ 93% of enterprises during Covid-19 lockdown period did not relieve or dismiss their employees.
- ▶ Majority ie 67% enterprises face a key challenge of cash-flow. Inadequate cash flow prevented these enterprises to pay wages to their employees. Shortage of cash also curtailed the ability of businesses to quickly restore operations. 39% enterprises stated that they did not have their own funding and/or did not have access to alternative sources of funding which is required to maintain operations and employee levels.
- ▶ 61% of the surveyed companies reported challenges related to suppliers as the latter could not provide timely input of materials. 76% enterprises reported that customers/clients have been affected and demand is lower than normal.
- ▶ Serious disruption of supply chains is another key issue impacting businesses. 54% opined that raw materials are not in supply and/or have become very expensive leading to serious disruption

of operations. Nearly 71% respondent companies mentioned that their business partners had also been significantly impacted by COVID-19.

On being asked whether the enterprises had their businesses fully or partially insured before the COVID-19 crisis, more than 70% responded in the affirmative. 67% enterprises had a written Business Continuity Plan in place; and yet, due to this unforeseen and unexpected pandemic, all respondents were worried about the delay in the recovery process of their enterprises.

Lastly, the survey revealed that, by and large, business owners expect the crisis to last for six months and it was unlikely they would be able to fully restore operations or sales to pre-crisis levels. Fortunately, none of the respondent enterprises indicated any intention of either temporary or permanent closure.

The impact on the overall Indian economy could be significant, if timely measures for business continuity are not taken.

Apart from the ILO template for analysis of findings, EFI India applied inferential statistics to deepen the analysis and generate findings/insights. Chi-square test, t-test and one-way ANOVA were calculated by analysing the above mentioned variables and following points were derived. For details kindly refer Annexure -5 (A to H Sections):

- A.** It is observed that 72% of the companies have written business continuity plan (BCP) and that they could maintain some level of operations during the lockdown period. However, there was **no statistically significant association** between written BCP and operating status. In other words, having a written BCP and operational status during pandemic 2020 is not related to causation. Probably, while preparing the BCP, a pandemic of such a nature was not envisaged by any of the respondents.
- B.** Six challenges faced by respondent companies are independent of restoration time for restarting operations. These two factors are independent of each other and are **not significantly associated**. Most companies stated that they will require more than 30 days to resume operations.
- C.** 45.7% of the respondent companies reported full insurance of their businesses. However, above 25% of the respondent companies expected that they would require more than 30 days

restoration time. There was **no statistically significant association** between a respondent company having any type of insurance cover and the time required for restoration after lockdown.

- D. 61% respondent companies, who have either their own source of funding or alternate source of funding stated that they will require more than 30 days restoration time. There was **no statistically significant association** between availability of funding provision to a company with that of time required for restoration.
- E. An independent t-test indicated that the financial impact is similar for both service and manufacturing sector organizations. There was **no significant difference** between service industries or manufacturing industries in terms of degree of financial impact. Which means both are impacted equally badly.
- F. Respondent companies despite having written BCP reported experiencing severe financial impact. There was **no significant difference** between two groups of companies i.e. having a BCP or not.
- G. One-way ANOVA indicated that respondent companies from Mumbai region faced the highest level of financial impact compared to other regions of India. There was a **statistically significant difference in respect of impact on business** among the four locations indicated in the study.
- H. All respondent companies whether possessing full/partial/no business insurance, faced financial impact. There was **no statistically significant difference** among the stratified three groups. This infers that business insurance did not provide any immediate succour to the respondent companies.

9. Inferences derived from inferential statistics:

1. There is no significant association between 'Written Business Continuity Plan' and 'Operating Status' during crisis.
2. Estimated 'Restoration Time (normalcy of operation)' is not significantly associated with 'Type of Challenges', 'Business Insurance' and 'Availability of Funding Options'.
3. Severe level of 'Financial Impact' is faced by all respondent enterprises irrespective of maintaining a 'Written Business Continuity Plan' or not. Similarly, despite 'Insurance Coverage' of the businesses, the financial impact is severe and has spared no one.
4. Mumbai region faced highest level of financial impact compared to other regions of India.

In short, due to the pandemic 2020, there is a high level of financial impact on Indian enterprises which is indicated by 1.54 mean score and 0.70 standard deviation (Annexure -4).

10. Conclusions:

Present survey and its subsequent findings throw light on following issues -

- R .1** Compared to small and medium, large type of enterprises have been more seriously impacted by COVID-19.
- R .2** Manufacturing companies indicated serious impact. Further, with reference to t-test analysis, both service as well as manufacturing organizations experienced financial impact.
- R .3** All enterprises from Pune are severely affected and remained completely shut down during pandemic 2020. However, one-way ANOVA indicated that Mumbai region faced most significant and highest level of financial impact compared to other regions of India.
- R .4** During the survey time, 39% from among all respondent companies were forced to close down their operations.
- R .5** 76% respondent enterprises experienced a large drop in demand for products/services.
- R .6** Lower demand created a dominant or pressing challenge on 76% of respondent companies.
- R .7** 37% respondent enterprises will require more than 90 days to restore business normalcy.
Therefore, it can be derived that the above challenges have created impediments for doing business, in the short and long-term.
- R .8** Generally, there was a high level of financial impact on all Indian enterprises.
- R .9** Almost 61% respondent companies have access to loans or grants to support business recovery.
- R .10** Fortunately, none of the respondent enterprises at the time of survey indicated any intention of closing either temporarily or permanently their business.

11. Recommendations:

Consequently, EFI believes that following measures will be critical to enable enterprises, their employees and families to cope up with challenges resulting from COVID-19 epidemic:

- ▶ **Health an important economic agenda:** During last 20 years world has witnessed multiple attacks of virus infections impacting businesses. Therefore, Indian Government henceforth will have to factor health as an important agenda to protect businesses and therefore Indian economy.
- ▶ **Government grants:** The hardest-hit enterprises need cash grants to pay their employees. Government grants to enterprises should cover at least Rs. 7500/- per month per employee for six months in respect of all employees drawing a wage of upto Rs. 21000/- per month. A similar measure has already been implemented by Malaysian government to support industry and to protect employment.
- ▶ **Low-interest loans:** The Ministry of Finance should allow business owners access to low-interest soft loans, taking a leaf from what has been done in Bangladesh.
- ▶ **Tax relief measures in worst-hit sectors:** We also believe that all enterprises should be granted temporary tax relief for six months over and above already granted. Enterprises in every sector especially exports and MSME require our greatest support for recovery considering the level of damage they experienced.

Annexure -1

Questionnaire Form

Needs assessment survey: The impact of COVID-19 on enterprises

EFI is conducting an enterprise survey to understand your situation and challenges due to the on-going crisis of COVID-19. We will use the survey response to channel your concerns to government authorities, banks and other stakeholders and also alter our services to you. The information you provide will be kept confidential. The survey will take 10 minutes to complete. We thank you for your support during these difficult times – we are fully operational during the pandemic and we will continue to provide the services you depend on.

Respondent Name and position

Mobile number and email

Enterprise name

Location (City)

1. Total number of employees before COVID-19 hit (full-time, part-time, and temporary):

- ☐ 1-10 ☐ 11-100 ☐ 101-250 ☐ 251 or more
-

2. Sector(s) of operation:

- | | |
|---|--|
| <input type="checkbox"/> agriculture/farming/fishing | <input type="checkbox"/> metal fabrication and machinery |
| <input type="checkbox"/> chemicals and plastics | <input type="checkbox"/> mining and refining |
| <input type="checkbox"/> construction | <input type="checkbox"/> oil and gas |
| <input type="checkbox"/> education | <input type="checkbox"/> real estate activities |
| <input type="checkbox"/> electronics and electrical equipment | <input type="checkbox"/> restaurants |
| <input type="checkbox"/> financial or insurance activities | <input type="checkbox"/> retail/sales |
| <input type="checkbox"/> food and beverage | <input type="checkbox"/> textile, leather and apparel |
| <input type="checkbox"/> forestry/wood/paper products | <input type="checkbox"/> transportation and transportation equipment |
| <input type="checkbox"/> information and communication | <input type="checkbox"/> Other, please specify |
| <input type="checkbox"/> hotel/tourism | |
-

3. Is your enterprise currently in operation?

- ☐ Fully on site ☐ Partially
☐ Fully but remotely (teleworking) ☐ Not operating
-

4. Have you dismissed or do you plan to dismissed/relieved any employees due to COVID-19?

- ☐ Yes ☐ No
-

4.1 If yes, what is the percentage of employees released? Check the percentage of employees dismissed/relieved compared to your total workforce.

- ☐ 1-10% ☐ 21-30% ☐ Over 41%
☐ 11-20% ☐ 31-40%
-

5. Does your enterprise have a written business continuity plan (BCP)?

- ☐ Yes ☐ No
-

6. Are any of your employees or their families infected by COVID-19?

- ☐ Yes ☐ No
-

7. Does your enterprise have adequate access to sanitizers and other personal protective equipment and products?

- ☐ Yes ☐ No
-

8. Did you change your business operations or service delivery to protect your enterprise against COVID-19?

- ☐ Yes ☐ No
-

9. Which are the main challenges your enterprise currently faces resulting from COVID-19?

- ▶ Cash flow to maintain employees and business operations is inadequate. ☐ Yes ☐ No
▶ Employees are absent from work due to illness or government orders. ☐ Yes ☐ No

- ▶ Raw materials are not in supply or have become very expensive disrupting operations. ☐ Yes ☐ No
 - ▶ Suppliers are unable to provide inputs. ☐ Yes ☐ No
 - ▶ Business partners have been badly affected and are not operating normally. ☐ Yes ☐ No
 - ▶ Customers / clients have been affected and demand is lower than normal. ☐ Yes ☐ No
 - ▶ Others, please specify.
-

10. Was your business fully, partially or not insured before the COVID-19 crisis occurred?

- ☐ Fully ☐ Partially ☐ Not at all

10.1 If yes, what type of insurance did your business have?

11. What has been the level of financial impact (revenue or sales) on your business and disruption to business operations (high, medium, low, not applicable)?

- ☐ High ☐ Medium ☐ Low ☐ NA
-

12. Do you have your own funding (e.g. cash on hand, savings) or access to alternative/external sources (e.g. loans or grants) of funding to help the business recover?

- ☐ Yes ☐ No

12.1 If yes, is this funding a sufficient amount?

- ☐ Yes ☐ No
-

13. How long would it take your enterprise to fully restore operations?

- ☐ Less than 7 days ☐ Between 91 and 180 days
- ☐ Between 8 and 30 days ☐ Over 181 days
- ☐ Between 31 and 90 days ☐ I am considering closing temporarily or permanently.
-

14. Do you have additional comments regarding your most pressing needs?

15. Do you have any best practice examples of how your enterprise is responding to COVID-19? Please describe or share a link of your work.

Annexure -2

Sectors participating in the Survey

Table No. A2.1:

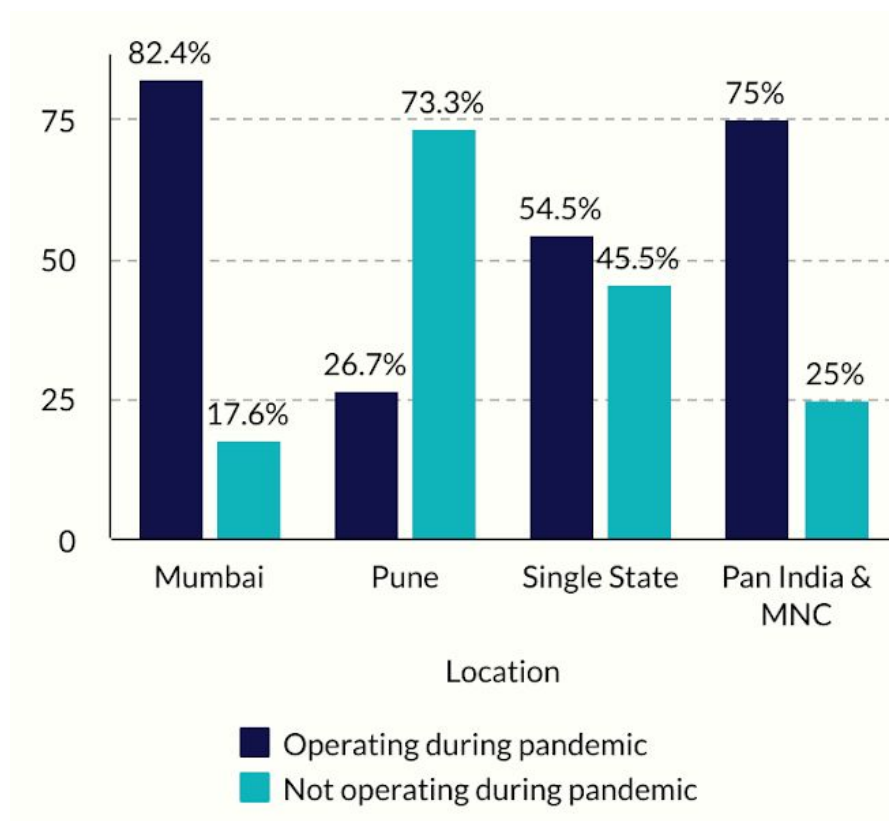
Sr. No.	Sectors
1	Agriculture/Farming/Fishing
2	Automobile & Auto Comp (Automobile/ Automobile components/Battery manufacturing/Tyre manufacturing)
3	Chemicals and Plastics
4	Construction & Real estate
5	Consultancy, Consultancy & Compliance Management
6	Defence
7	Education
8	Electronics & Electronic equipment
9	Employment
10	Engineering
11	Facility Management & services
12	Fertilizers and chemicals
13	Food & Beverages
14	Health care & Pharma
15	IT & ITES
16	Manufacturing/Metal fabrication & Machinery
17	Oil & gas/Offshore oil field services
18	Sanitary ware & Glass
19	Textile
20	Transportation and Logistics
21	Warehousing

Annexure -3

Analysis related to Location

Descriptive Statistics: Impact of COVID -19

Crosstabulation: LOCATION * OPERATING STATUS IN LOCKDOWN



Annexure – 4

Descriptive Statistics: Overall Financial Impact

Table No. A4.1:

Sr. No.	Variables	Mean	Median	5% Trimmed Mean	SD	Variance
1	Overall Financial Impact	1.5424	1.00	1.4915	0.70275	0.494

Prepared

Annexure – 5

Inferential Statistics

Further statistical analysis was conducted to find out the impact level on respondent companies due to COVID-19 and subsequent lockdown by Government Of India (GOI).

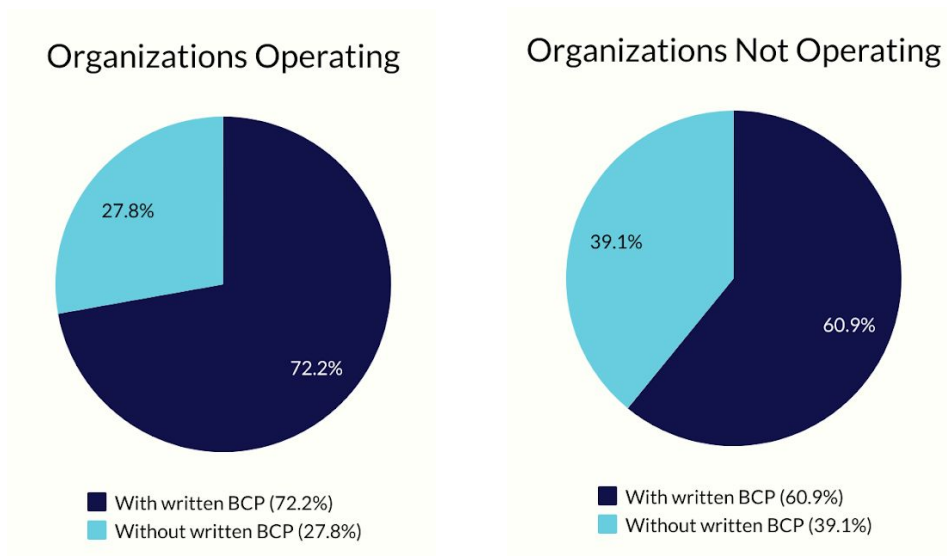
A} Written Business Continuity Plan (BCP) and Operating Status

Research Question: *Is there any association between Written Business Continuity Plan and Operating Status in Lockdown?*

Variables: 1) Written Business Continuity Plan (Categorical and Dichotomous)
2) Operating Status in Lockdown (Categorical and Dichotomous)

Statistical Test: Chi-Square test for Independence

Crosstabulation: Written Business Continuity Plan * Operating Status in Lockdown



Chi-Square Test Result:

Table No. A5.2:

Test	Value	Asymptotic Sig. (2-sided)
Pearson Chi-Square	0.828	0.363
Continuity Correction ^b	0.390	0.532

Likelihood Ratio	0.821	0.365
Linear-by-Linear Association	0.814	0.367

0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.41.

Interpretation:

There was no significant association between a Written Business Continuity Plan (BCP) and Operating Status during Lockdown. The 2*2 table indicated Yates' Correction for Continuity $\chi^2 (1) = 0.390$, $p > 0.05$ with 1.73 effect size. This could mean BCP had not factored such eventuality and thus were not good enough.

B} Type of Challenges and Restoration Time after Lockdown

Research Question: *Is there any association between Type of Challenges and Restoration Time after Lockdown?*

Variables: 1) Type of Challenges [C1, C2, C3, C4, C5, C6] (Categorical and Dichotomous)
2) Restoration Time after Lockdown (Categorical and Dichotomous)

Statistical Test: Chi-Square test for Independence

Crosstabulation: Type of Challenges * Restoration Time (RT) after Lockdown

Table No. A5.3:

Sr. No.	Challenges: COVID-19	Number of Companies Facing Challenges	Less than 30 Days RT	More Than 30 Days RT
C1	Inadequate Cash Flow	40 (67.8%)	14	26
C2	Absenteeism of Employees	36 (61.01%)	15	21
C3	Disrupting Operations	32 (54.24%)	12	20
C4	Supply Issues	36 (61.02%)	14	22
C5	Badly Affected Business Partners	42 (71.18%)	15	27
C6	Low Demand	45 (76.24%)	16	29

Prepared

Chi-Square Test Result:

Table No. A5.4:

Sr. No.	Challenges: COVID-19	Pearson Chi-Square	Continuity Correction	Likelihood Ratio	Linear-by-Linear Association	Phi	Asymptotic Sig. (2-sided)
Degree of Freedom -1		Value					
C1	Inadequate Cash Flow	$\chi^2 = 2.765$	$\chi^2 = 1.907$	$\chi^2 = 2.753$	$\chi^2 = 2.718$	-0.216	p >0.05
C2	Absenteeism of Employees	$\chi^2 = 0.019$	$\chi^2 = 0.000$	$\chi^2 = 0.019$	$\chi^2 = 0.019$	-0.018	p >0.05
C3	Disrupting Operations	$\chi^2 = 0.680$	$\chi^2 = 0.314$	$\chi^2 = 0.680$	$\chi^2 = 0.668$	-0.107	p >0.05
C4	Supply Issues	$\chi^2 = 0.459$	$\chi^2 = 0.166$	$\chi^2 = 0.458$	$\chi^2 = 0.451$	-0.088	p >0.05
C5	Badly Affected Business Partners	$\chi^2 = 2.647$	$\chi^2 = 1.785$	$\chi^2 = 2.631$	$\chi^2 = 2.602$	-0.212	p >0.05
C6	Low Demand	$\chi^2 = 3.610$	$\chi^2 = 2.529$	$\chi^2 = 3.590$	$\chi^2 = 3.548$	-0.247	p >0.05

0 cells (0.0%) have expected count less than 5.
Computed only for a 2x2 table

Interpretation:

Table No. A5.4 indicated that challenges faced by companies necessitated more than 30 days restoration time after lockdown period. The Chi-Square Tests indicated that there was no **significant association** between challenges (C1, C2, C3, C4, C5, C6) faced by the respondent companies and restoration time required after lockdown.

C} Business Insurance and Restoration Time

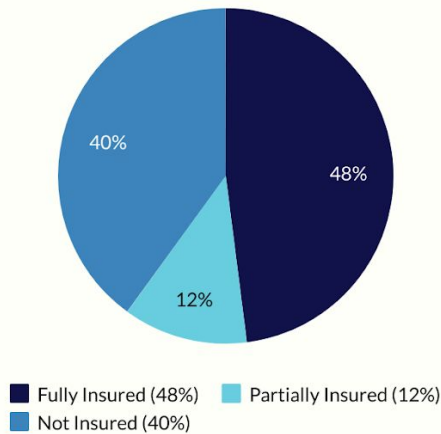
Research Question: *Is there any association between Business Insurance and Restoration Time after Lockdown?*

Variables: 1) Business Insurance (Categorical)
2) Restoration Time after Lockdown (Categorical and Dichotomous)

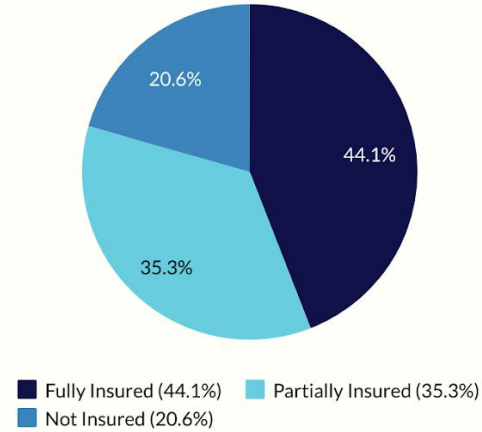
Statistical Test: Chi-Square test for Independence

Crosstabulation: Business Insurance * Restoration Time

Restoration time less than 30 days



Restoration time more than 30 days



Chi-Square Test Result:

Table No. A5.6:

Test	Value	Asymptotic Sig. (2-sided)
Pearson Chi-Square (DF:2)	5.006	0.082
Likelihood Ratio (DF:2)	5.270	0.072
Linear-by-Linear Association (DF:1)	0.476	0.490

Prepared
0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.36.

Interpretation:

There was **no significant association** between whether or not businesses have any type of business protection insurance and time required for restoration after lockdown. The Pearson Chi-Square indicated that $\chi^2 (2) = 5.006$, $p > 0.05$. The value of Cramer's V is 0.291 with $p > 0.05$.

D} Funding Provision and Restoration Time

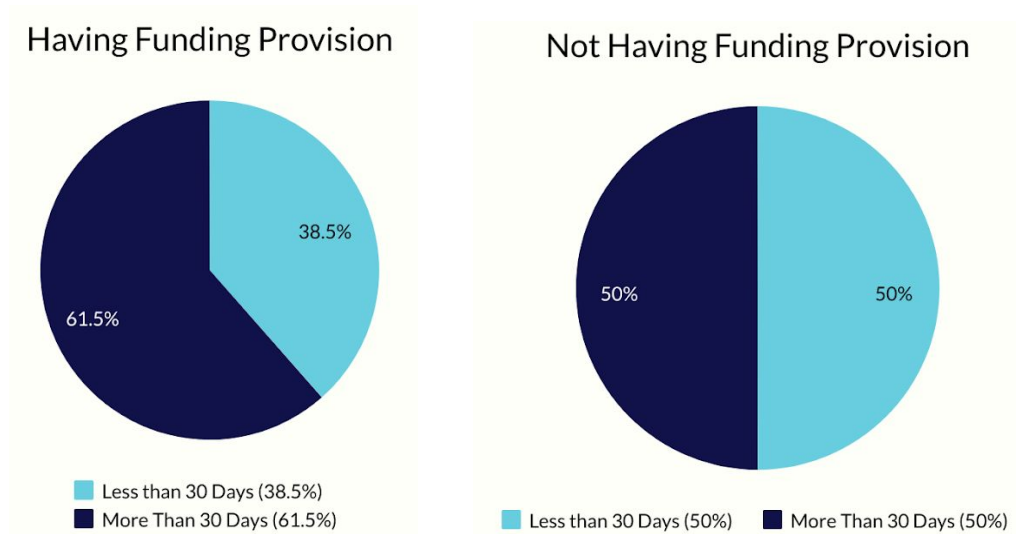
Research Question: *Is there any association between funding provision and restoration time after lockdown?*

Variables:

- 1) Funding Provision (Categorical and Dichotomous – Yes/No)
- 2) Restoration Time after Lockdown (Categorical and Dichotomous)

Statistical Test: Chi-Square test for Independence

Crosstabulation: Funding Provision * Restoration Time



Chi-Square Test Result:

Table No. A5.7:

Test (DF:1)	Value	Asymptotic Sig. (2-sided)
Pearson Chi-Square	0.721	0.396
Continuity Correction	0.326	0.568
Likelihood Ratio	0.718	0.397
Linear-by-Linear Association	0.709	0.400

Prepared
0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.47.
Computed only for a 2x2 table

Interpretation:

There was **no significant association** between whether or not companies have funding provision or alternate source of funding and restoration time after lockdown. The 2*2 table indicated Yates' Correction for Continuity $\chi^2 (1) = 0.326$, $p > 0.05$ with the Phi value -0.111, $p > 0.05$.

E} Financial Impact and Type of Industry

Research Question: *Is there a significant difference in the mean financial impact scores for service and manufacturing companies?*

Variables:

- 1) Type of Industry (Categorical and Independent variable)
- 2) Financial Impact (Continuous Dependent Variable)

Statistical Test: Independent-samples t-test

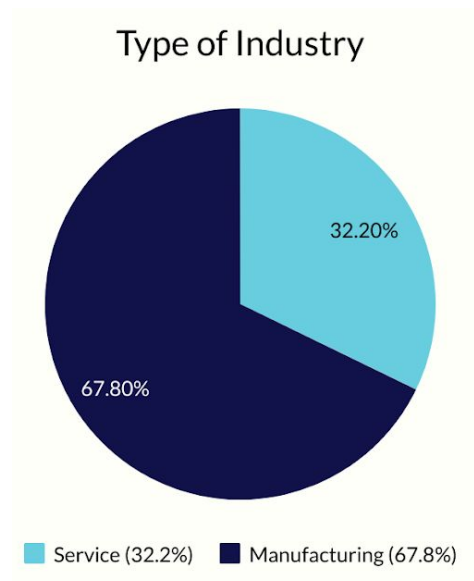


Table No. A5.8:

Independent Variable	Service Industry	Manufacturing Industry	t Value	Sig. p-value	Significant / Not Significant (S/NS)
N= 59	19	40			
Dependent Variables	Mean SD	Mean SD			
Financial Impact	M: 1.736	M: 1.450	1.480	0.144	NS
	SD: 0.805	SD: 0.638			

Prepared

Interpretation:

An independent t-test was conducted to compare the financial impact scores for service and manufacturing industries. There was no significant difference in scores for service organization ($M = 1.736$, $SD = 0.805$) and manufacturing organization [$M = 1.450$, $SD = 0.638$; $t(59) = 1.480$, $p = 0.14$]. The magnitude of the differences in the means was very small ($\eta^2 = 0.036$).

F} Written Business Continuity Plan and Financial Impact

Research Question: *Is there a significant difference in the mean financial impact scores for two groups of written business plan?*

Variables: 1) Written Business Continuity Plan (Categorical and Independent variable – Yes/No)

2) Financial Impact (Continuous Dependent Variable)

Statistical Test: Independent-samples t-test

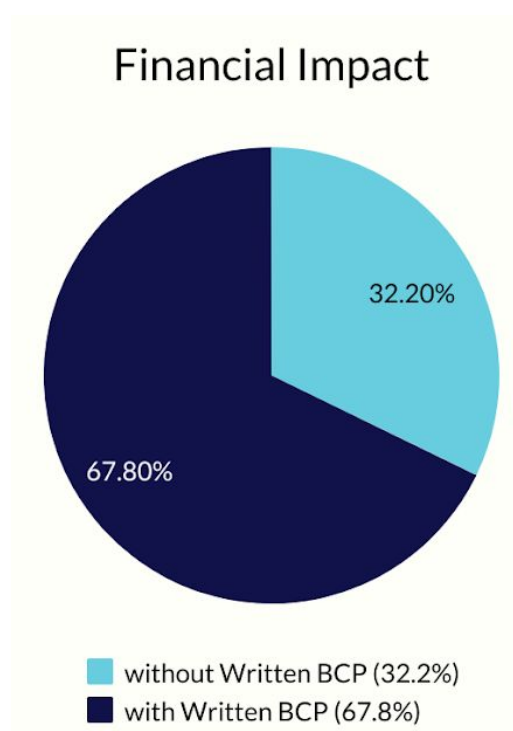


Table No. A5.9:

Independent Variable	Written Business Plan - Yes	Written Business Plan - No	t Value	Sig. p-value	Significant / Not Significant (S/NS)
N= 59	40	19			
Dependent Variables	Mean SD	Mean SD			
Financial Impact	M: 1.50 SD: 0.640	M: 1.631 SD: 0.830			

Prepared

Interpretation:

An independent t-test was conducted to compare the financial impact scores for two groups of written business plan. There was **no significant difference** in scores for having written business plan (M = 1.50, SD = 0.640) and not having written business plan [M = 1.631, SD = 0.830; $t(59) = -0.669$, $p = 0.506$]. The magnitude of the differences in the means was very small (eta squared = 0.007). This means business plans are not robust enough to deal with such pandemic. Henceforth, the government of India, state government and business will have to factor health as an important aspect of business

and create capacity to deal with virus attacks likes of which world has experienced in the last two decades.

G} Location and Financial Impact

Research Question: *Is there a significant difference in the mean financial impact scores for four locations of India*

Variables: 1) Four Locations of Respondent Companies (Categorical and Independent variable)
2) Financial Impact (Continuous Dependent Variable)

Statistical Test: One Way ANOVA

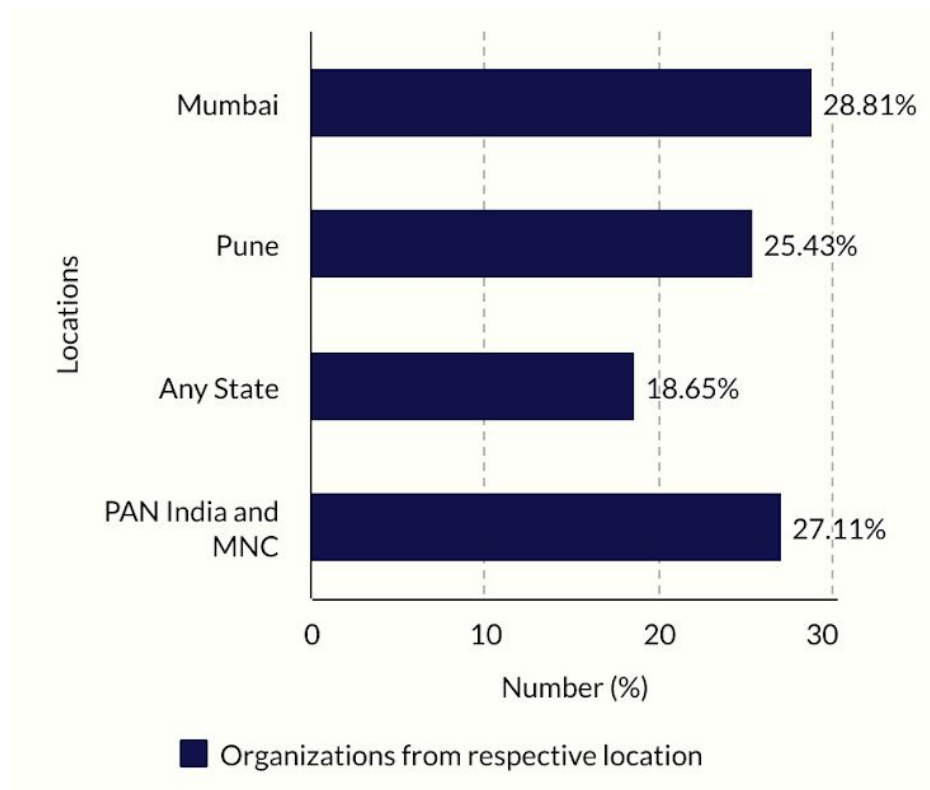


Table No. A5.10: Descriptive Statistics and ANOVA (One Way)

Locations	Mumbai	Pune	Any State (One)	Pan India & MNC	F Value	Sig. p-value	Significant / Not Significant (S/NS)
N = 59	17	15	11	16			
Variable	Mean SD	Mean SD	Mean SD	Mean SD	3.713	0.017	S
Financial Impact	1.941 0.747	1.333 0.617	1.636 0.809	1.250 0.447			

Interpretation

A one-way between-groups analysis of variance was conducted to explore the financial impact on four locations of India where respondent companies are operating namely, Mumbai, Pune, Any State of India and Pan India & MNC. Preliminary assumption testing was conducted to check for normality and homogeneity of variances. There was a **statistically significant difference** at the $p < 0.05$ level in financial impact scores for the four locations [$F(3, 59) = 3.713, p = 0.017$]. The actual difference in mean score between the four groups is considerable. The effect size calculated using eta squared was 0.16 and can be classified as a large effect explained by Cohen, 1998.

The post hoc comparisons using Tukey HSD test indicated that the mean score of Pan India & MNC ($M = 1.250, SD = 0.447$) was significantly different from Mumbai location ($M = 1.941, SD = 0.747$). However, the mean score of Mumbai location does not differ significantly from either Pune or any other State of India.

H} Business Insurance and Financial Impact

Research Question: *Is there a significant difference in the mean financial impact scores for three groups of Business Insurance?*

Variables: 1) Business Insurance (Categorical and Independent variable –Fully, Partially & Not at all)
2) Financial Impact (Continuous Dependent Variable)

Statistical Test: One Way ANOVA

Businesses Insured

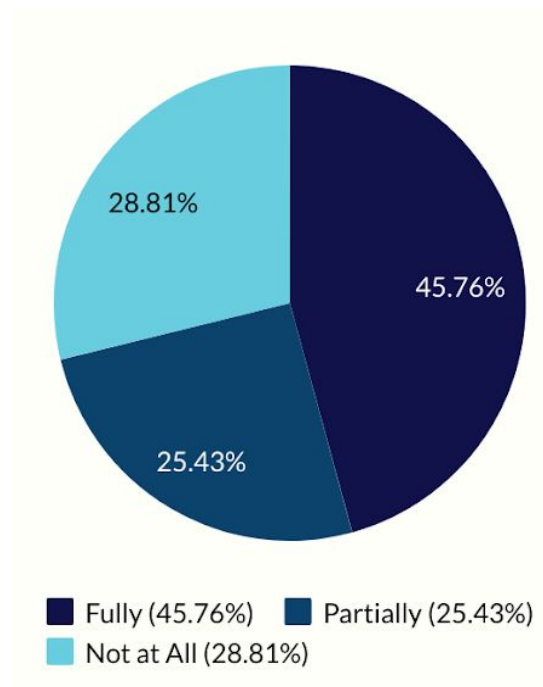


Table No. A5.11: Descriptive Statistics and ANOVA (One Way)

Business Insurance	Fully	Partially	Not At All	F Value	Sig. p-value	Significant / Not Significant (S/NS)
N = 59	27	15	17			
Variables	Mean SD	Mean SD	Mean SD	0.009	0.991	NS
Financial Impact	1.555 0.751	1.533 0.743	1.529 0.624			

Prepared

Interpretation

A one-way between-groups analysis of variance was conducted to explore the financial impact on three groups of business insurance namely fully insured, partially insured and not insured at all. Preliminary assumption testing was conducted to check for normality and homogeneity of variances. There was no statistically significant difference at the $p > 0.05$ level in financial impact scores for the three groups of business insurance [$F(2, 59) = 0.009, p = 0.991$]. The effect size calculated using eta squared was 0.0003 and can be classified as a very small effect explained by Cohen, 1998.

Annexure – 6

Respondent Companies

Sr. No.	Name of the Company
1	ABC
2	Avinash Cargo Private Ltd. (ACPL)
3	Adient India Pvt Ltd
4	Ashiana Housing Ltd
5	Bansal Spinning Mills Ltd
6	Bennett, Coleman & Co Ltd, Times Group
7	Bombay Chamber Of Commerce And Industry
8	Bharat Petroleum Corporation Ltd. (BPCL)
9	Coromandel International Limited
10	Cummins India
11	Damodar International
12	Dexterity Ansatte Management Solutions Pvt Ltd
13	Dalsey Hillblom Lynn Express India Ltd. (DHL)
14	Dinesh Chandra R Agrawal Infracon Pvt Ltd
15	Domain GTSC
16	Earth Care Equipments Pvt. Ltd.
17	Everest Industries Ltd
18	Exide Industries Limited
19	Exotech Plastics Pvt Ltd
20	Frisca Facility Services Pvt Ltd
21	Godrej Agrovvet Limited
22	Goel Institute Of Technology And Management, Lucknow
23	Grasim Industries Ltd. Aditya Birla Group
24	Gujarat State Fertilisers And Chemicals, Limited
25	Hindustan Petroleum Corporation Ltd. (HPCL)
26	Hindustan Sanitaryware and Industries Ltd. (HSIL)
27	Huhtamaki Paper Product Ltd
28	Infiillom India Pvt.Ltd
29	Integrated Equipment (India) Pvt. Ltd.
30	Indian Tobacco Company (ITC)
31	Jetmobility Private Limited
32	Jk Tyre & Industries Ltd
33	Jones Lang LaSalle India Ltd. (JLL)
34	Kalyani Technoforge Group
35	Kellogg India
36	L&L Products India
37	Lucas TVS Ltd Chakan
38	Madras Engineering Industries Pvt Ltd
39	Mahindra & Mahindra Ltd
40	Mahindra Cie Automotive Ltd -1

41	Mahindra Cie Automotive Ltd -2
42	National Bulk Handling Corporation
43	Nitta Gelatin India Limited
44	Paramount Placement Services
45	Piramal Enterprises Ltd.
46	PMT Machines Limited
47	Rashtriya Chemicals And Fertilizers Limited
48	Reliance Industries Limited Nagothane
49	Saint-Gobain India Pvt Ltd
50	Saurabh Flexipack Systems Pvt Ltd
51	Seamec Limited
52	Share Your HR Consulting Pvt Ltd. (SYHR)
53	Tata Consulting Engineers LTD.
54	Teamlease Services Ltd
55	Tema Management Services
56	The Crescent Group
57	Vista India
58	Voltas Limited
59	VPD Consultants Private Limited

Thank You