Business Planning of Micro and Small-Scale Industries during Covid-19.

Milind A Kulkarni, Savitribai Phule Pune University, Pune-411001, Maharastra, India. Hemant V More, Savitribai Phule Pune University, Pune-411001, Maharastra, India.

Abstract— Outbreak of Covid-19 initiated in India, first patient of Covid-19 found in India on 30th January 2020 and on 9th march 2020 in Pune. Maharashtra for prevention of community spread and further critical infectious situation, Government of India and Maharashtra state Government declared Lockdown. Unlock procedure initiated after more than 60 days. Covid-19 impact on economy of all Industrial sectors, large scale industries impacted but Micro and Small Scale Industries impacted strongly due to business size. For the revival of economy, Government declared various economical packages. All industrial sectors built and execute a planning to come out from the situation. Micro and Small Scale Industries from the Pimpri, Chinchwad Municipal Corporation (PCMC) area was selected for analysis of Business Planning during Covid-19 outbreak. Information Collected from selected Micro and Small Scale Industries through the Information and Communication Tools, due to the Social distancing norms. Micro and Small Scale Industries assess the current situation and built; a plan about Revenue, Inventory, Operations, Work force, Financial Situations, Consumer behavior. Analysis of information gathered through Micro and Small Scale Industries directs about some attributes; Planning of Financial Fund, Work Force management with social distancing norms and Revenue generation are critical attributes needs to be planned very precise and accurately to maintain production activity of Micro and Small Scale Industry. Government revival planning schemes were useful to Micro and Small Scale Industries; they put Good remark for the preventive and supportive measures.

Keywords: - COVID-19, Micro and Small Scale Industry, PCMC, Business Planning

I. INTRODUCTION

A cluster of pneumonia of unknown etiology appeared in Wuhan in December 2019.Central government of China confirmed the person to person transmission on 19 January 2020 of Covid-19 and on 20 January 2020 China Government declared emergency. On 30 January 2020, WHO declared the situation a public health emergency of international concern.8 Covid-19 spread globally very quickly. European nations, United States affected more due to direct connection with Wuhan. Outbreak of Covid-19 initiated in India, first patient of Covid-19 found in India on 30th January 2020 and on 9th march 2020 in Pune. To avoid the infection and protection from Covid - 19 Central Govt. and State Govt. declared a lockdown. Industry, Govt. offices, Shops, Mall, Cinema houses, schools and colleges were closed, to control the spread of infection Covid-19. Close down or partial work of Govt. offices slowed rate of Govt. official work, shops, mall, and Cinema house also impacted the economic cycle. Business drops was largest record nearly in all industries and even for incorporated business.

African American businesses, Latinx, Asian business dropped by 41%, 32% and 26% respectively. Immigrant business also at

loss around 36%, female owned business dropped by 25% approximately. Indian economy surviving at low, GDP of Indian Economy noted 6.1% in 2018-19 and 5.0% in 2019-20. Addition to this situation Covid-19 arises which threaten Indian economy. Micro and small scale industries are the backbone of economy of every country. Indian MSME contributed near around 29.7% of total GDP and around 47% of the jobs. But Covid-19 impact on MSME resulted in estimated 25-30 million job cuts by the end of June in MSME sector. Indian Government took precautionary measures to survive from the Covid-19 situations and revised the Definition of MSME sector.

| Revised MSME Classification, W.E.F. 1July2020 | | | |
|---|----------------|---------------|-------------|
| Composite Criter | ia: Investment | And Annual Tu | ırnover |
| Classification Micro Small Medium | | | |
| Manufacturing | Investment | Investment | Investment |
| Manufacturing Enterprises and | < Rs.1Cr. | < Rs. 10Cr. | < Rs. 20Cr. |
| Service | and | and | and |
| | Turnover < | Turnover < | Turnover < |
| Enterprises | 5Cr. | 50Cr. | 100Cr. |

Also announce financial packages for the Industry. Government also give some major benefits to MSME viz. Subsidy on Patent Registration & Industrial Promotion, Interest subvention schemes, Concession in electricity bills, reimbursement of ISO certificate expenditure, Collateral free loans,25% Procurement by Government departments & PSUs, Schemes for market support and export promotion, Assured payment within 45 days.

II. LITERATURE REVIEW

Covid-19 made the global impact on all over the economy. As of April 23, 2020, approximately 26.5 millions of jobs were lost in US alone. Global stocks have seen a down turn of at least 25%, US GDP to shrink 24% in second quarter of 2020. ¹ Due to Covid-19 economy got stuck, in a period after pandemic everyone tend to become less interested in investing and more interested in saving which resulted in reduced economic growth. Cash flow gets stuck due to the safety behavior of customers.Covid-19 has forced many business to close, leading to an unpredicted disruption of commerce in most industries sectors. Retailers and brands face many short term challenges such as those related to health and safety, the supply chain, workforce, cash flow, Consumer demand, sales and marketing.³ Micro and Small sale industries are major role player for the job sector. Approximately 49% of the jobs are provided by MSME

in year 2019 in India. But due to Covid-19 all the MSME are got closed from month of March-2020 to till May-2020 due to declaration of Lockdown. Unlock procedure initiated from Month of June-2020 but lockdown process all raw material supply, availability workforce, financial conditions are facing critical issues. For revive from this situation five steps models suggested. First step start with the old model which was before lockdown, so exact scenario of business recognised by the Owner or CEO. Comparison indicates the current situation of the business, which will gives leads to grow of the situation. Second step the analysis of revenue offers a projection of cash flow and highlights which customer's requirements and behaviour. Third step an analysis of value demonstrations indicates how a business can come into contact with customers and convince of them to buy the products. Fourth step, the examination of the impact capabilities indicates whether the revenue and channel expectations are aligned with situations. Fifth step is verifying the various opportunities to responds to the crisis.⁷ Business threatened because of Mass layoffs and closures into the few week of pandemic Covid-19, risk closures associated with the length of crisis. Small business was get fragile, disturbed and they planned to seek fund from CARES act.5

III. TOPIC

Micro and small scale industries are affected due to lockdown of Covid-19, to analyse current situation after unlock procedure of selected organization with respect their general information, Classification, location, product sector of Organization, No. of employees, Age of organization and Customer location. Analysis of impact of Covid-19 i.e. business affection from covid-19,Affection ways of business, Recovery time from affection, Initial activity for recovery, Revenue generation ways, Improvement of financial condition, Motivation of workforce, Control of consumer behavior and Government role etc.

IV. RESEARCH METHODOLOGY

To analyze the current situation of micro and small scale industries, Pimpri Chinchwad area selected. Pimpri -Chinchwad a twin city located in the suburbs of Pune, Maharashtra happens to be one the biggest Industrial areas in Asia. It has a rapid growth in terms of the industries and most of the major automobile companies and their headquarters are located here. There is rapid growth in the software and IT department also. PCMC area have Large scale industries like TATA Motors, Force Motors, SKF,KSB pumps, Alfa Laval, Sandvik, Kirloskar Oil Engine etc. These large scale industries required raw material which is supplied by the micro and small scale industries which are located nearby to the large scale industries means Located in PCMC area. These areas have more than 1000 Micro and Small industries. 150 industries selected from various locations i.e. Bhosari-Moshi, Chinchwad, Chakan, Pimpri, Talawade-Chikhali, Other and various sectors industries also covered from i.e. Mechanical, Electrical, Automobile, Electronics, Instrumentation, Software, Service industry and other sector for the survey. Industries should be currently in working condition.

IV.1. COLLECTION OF DATA:

Selected organization should be from PCMC and nearby area and should be currently in working after lockdown. Data collected via online software application (Google Forms). Set of 21 questions were provided to the Micro and small scale industries. Questionnaires submitted to the various WhatApp groups of the Micro and small scale Industries and feedback collected. Researcher communicated to respondents on telephone to fill the response. In some cases researcher fill the feedback form to assist the respondent through telephonic communication.

IV.2. SAMPLE SIZE:

A survey of 150 Micro and Small scale industries from PCMC was conducted to understand the impact of Covid19 during lockdown period March to May 2020.All 150 respondents were communicated about the survey and questionnaires submitted to them for the feedback. 92 Respondents were submitted their responses against the submitted questionnaire, which was approximately 61.3 %. Respondents were selected on the basis of location to cover all the industries from selected area and product or service sector selected to cover all functional characteristics of organization.

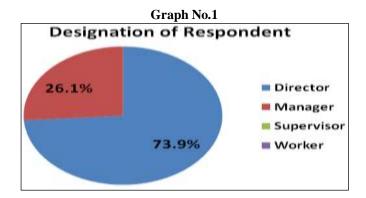
V. DISCUSSION

V.1. GENERAL BACKGROUND OF ORGANIZATION.

150 Organization were communicated for survey from PCMC and nearby area.92 Organization participated in the survey out of 150 organizations. Approximately 61.35 % organization participated in the survey. During the survey Respondents had submitted their personnel details were required for analysis and feedback. As per the information submitted, Respondents participated in surveys are male (93.5%) and Female (6.5%), which indicates male are the head of family and business also. Designation of the respondents are 73.9% Director, 26.1% Manager and no Supervisor and Worker included in the research. Most of the Respondents are CEO or owner of the organization. Age of CEO or Owner are classified as 4% are between 30 – 40 years, 60.9 % are between 41 -45 years, 28.7% are between 46 -55 years and 5.7 % are above 55 years. Research is carried out between Micro and small Scale industries, 36.8% Organization are Micro scale and 53.2% organization are small scale, as scope of study is between micro and small no respondents from Medium and large scale industries. Most of the organization having employee number is between 10 - 30 around which is around 58.8% of all population.

Table No.1

| Designation of Respondents | No. of Responses out of 92 | Percentage |
|----------------------------|-------------------------------|------------|
| Director | 68 | 73.9 |
| Manager | 24 | 26.1 |
| Supervisor | | |
| Worker | | |

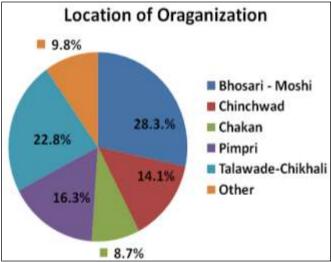


V.1. Location of organization communicated through respondents.

Table No.2

| 1 abic 110.2 | | |
|--------------------------|-------------------------------|------------|
| Location of Organization | No. Of Responses out of 92 | Percentage |
| Bhosari – Moshi | 26 | 28.3 |
| Chinchwad | 13 | 14.1 |
| Chakan | 8 | 8.7 |
| Pimpri | 15 | 16.3 |
| Talawade – Chikhali | 21 | 22.8 |
| Other | 9 | 9.8 |





In PCMC area Micro and small scale industries are distributed in various areas. Most of the industries are located in Bhosari-Moshi and Talawade-Chikhali area, so 40 Respondent selected from each area, from which 26 respondents participated in the survey which is 28.3% from Bhosari-Moshi area,21 respondents participated from Talawade-Chikali which is 22.8 %. From Pimpri, Chinchwad and other location 20 respondent were selected out of that 15,13,9 number of respondents participated in the survey, which is 16.3%, 14.1% and 9.8 % of whole count respectively, Chakan area respondents responded well out of 10

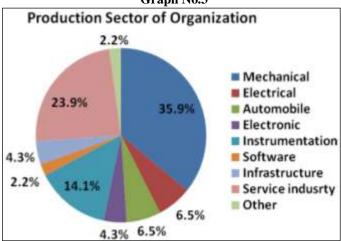
respondent 8 respondents participated in the survey, which is 8.7 % of whole count.

V.2. Main Organization communicated by Respondents.

Table No.3

| Production Sector of Organization | No. Of Responses out of 92 | Percentage |
|-----------------------------------|-------------------------------|------------|
| Mechanical | 33 | 35.9 |
| Electrical | 6 | 6.5 |
| Automobile | 6 | 6.5 |
| Electronic | 4 | 4.3 |
| Instrumentation | 13 | 14.1 |
| Software | 2 | 2.2 |
| Infrastructure | 4 | 4.3 |
| Service industry | 22 | 23.9 |
| Other | 2 | 2.2 |

Graph No.3



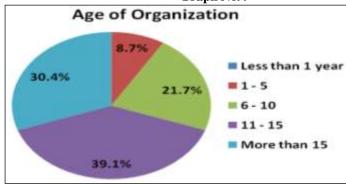
Respondent's organizations are selected on the basis of their main products sector. Most of the micro and small scale organizations are the supplier of the TATA motors, Force motors, SKF, Sandvik and Alfa Laval so requirement of raw material is mostly related to Mechanical parts which is reflected in the above chart. Mechanical industries are 35.9 %, Service industries are 23.9 % and Instrumentation industries are 14.1%.Other industries i.e. Electrical, Automobile, Electronic, Software, Infrastructure are also have some share.

V.3. Respondents inform about Age of Organization.

Table No.4

| Age of the organization | No. of responses Out Of 92 | Percentage |
|-------------------------|-------------------------------|------------|
| Less than 1 year | 0 | 0 |
| 1-5 | 8 | 8.7 |
| 6 – 10 | 20 | 21.7 |
| 11 – 15 | 36 | 39.1 |
| More than 15 | 28 | 30.4 |

Graph No.4



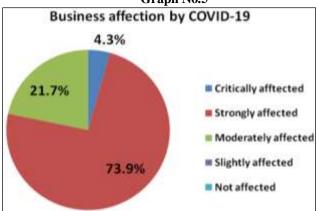
Age of the organization as per following, 8.7 % of organization have the age around 1 to 5 years, 21.7 % of organization have the age around 6 to 10 years,39.1 % of organization have the age around 11 to 15 years,30.4 % of organization have the age around More than 15 years. Approximately 70 % organizations are working more than 10 years, so though Lockdown makes impact on Organization performance but their 10 years' experience get them confidence to revive themselves.

V.4. Respondents discussed about affection level of Business.

Table No.5

| Business affection level | No. of Responses Out Of 92 | Percentage |
|--------------------------|-------------------------------|------------|
| Critically affected | 4 | 4.3 |
| Strongly affected | 68 | 73.9 |
| Moderately | | |
| affected | 20 | 21.7 |
| Slightly affected | 0 | 0 |
| Not affected | 0 | 0 |

Graph No.5



Covid -19 affected most of the Business, which is reflected in the study.68 respondents agree that they are strongly affected which is 73.9 %, Moderately affected business area are 20 which is 21.7 % and 4 business are critically affected which is 4.3%.Combine results of ways business affection and time to get

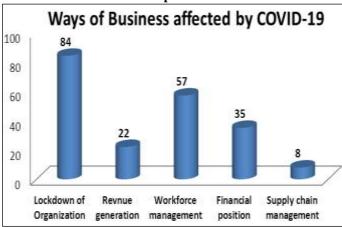
business normal decide affection intensity which explained in further questions.

V.5. Business affection reasons discussed with the Respondents

Table No.6

| Ways of Business affection | No. of Responses Out Of 92 | Percentage |
|-------------------------------|----------------------------------|------------|
| Lockdown of Organization | 84 | 91.3 |
| Revenue generation | 22 | 23.9 |
| Workforce management | 57 | 62 |
| Financial position | 35 | 38 |
| Supply chain management | 8 | 8.7 |
| All of the above | 0 | 0 |

Graph No.6



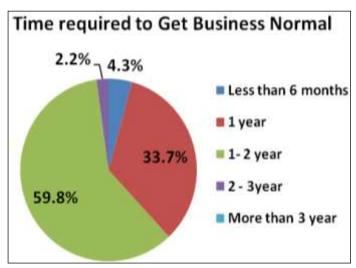
91.3% respondents select option of Lockdown of the organization and 62% respondent's select workforce management as affection reasons which more than other reasons.

V.6. Time to get Business Normal discussed with Respondents.

Table No.7

| Time for Normal condition of business | No. of Responses Out Of 92 | Percentage |
|---------------------------------------|----------------------------------|------------|
| Less than 6 months | 4 | 4.3 |
| 1 year | 31 | 33.7 |
| 1- 2 year | 55 | 59.8 |
| 2 - 3year | 2 | 2.2 |
| More than 3 year | 0 | 0 |

Graph No.7



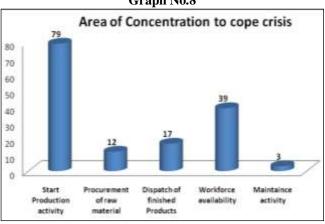
Revival of economy with all industries initiated. But for normal operations approximately 60% of respondents says business required at least 1 to 2 year to get normal and 33.7 % respondents accepts period of 1 year.

V.7. Respondents communicated about area of concentration to cope the crisis

Table No.8

| Table No.8 | | | |
|--------------------------------------|-------------------------------|------------|--|
| Area of concentration to cope crisis | No. of Responses Out Of 92 | Percentage | |
| Start Production activity | 79 | 85.9 | |
| Procurement of raw material | 12 | 13 | |
| Dispatch of finished Products | 17 | 18.5 | |
| Workforce availability | 39 | 42.4 | |
| Maintenance activity | 3 | 3.3 | |

Graph No.8



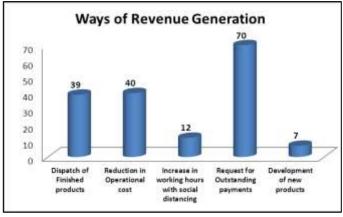
Starting of Production activity first priority 79 respondents which is about 85.9%, lockdown made impact on movement of workforce so workforce availability is second important area to concentrate.

V.8. Respondents decide prior ways of revenue generation

Table No.9

| Table 110.9 | | | |
|--|-------------------------------|------------|--|
| Ways of revenue generation. | No. of Responses Out Of 92 | Percentage | |
| Dispatch of Finished products | 39 | 42.4 | |
| Reduction in Operational cost | 40 | 43.5 | |
| Increase in working hours with social distancing | 12 | 13 | |
| Request for Outstanding payments | 70 | 76.1 | |

Graph No.9



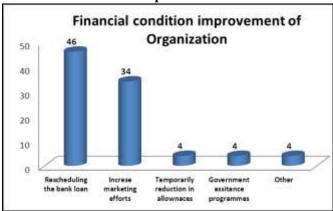
Most of the respondents preferred the request for outstanding payments which about 76.1%, dispatch of finished products and reduction in operational cost area second most preferred option with 42.4% and 43.5% respectively.

V.9. Financial condition improving ways communicated through respondents

Table No.10

| Tuble 110.10 | | |
|---------------------------------------|-------------------------------|------------|
| Ways improving Financial condition | No. of Responses Out Of 92 | Percentage |
| Rescheduling the bank loan | 46 | 50 |
| Increase marketing efforts | 34 | 37 |
| Temporarily reduction in allowances | 4 | 4.3 |
| Government assistance Programme | 4 | 4.3 |
| Other | 4 | 4.3 |

Graph No.10



50% of the respondents feel that rescheduling of the bank loan has been better option to improve the financial condition. Increase in marketing efforts selected by 37% respondents.

V.10. Workforce motivation discussed with respondents

Table No.11

| | I WOIC I WILL | |
|----------------------------------|-------------------------------|------------|
| Organization motivates workforce | No. of Responses Out Of 92 | Percentage |
| Ensure health security | 88 | 95.7 |
| Ensure about salary | 75 | 81.5 |
| Flexible working hours | 9 | 9.8 |
| Online working feasibility | 5 | 5.4 |
| Moral support | 13 | 14.1 |
| Development of new products | 7 | 7.6 |





Most of the respondent's replies that workforce required assurance about health safety and assured about the salary.

V.11. Respondents organizational thought process about control of Consumer behaviour

Table No.12

| 1 abic 110.12 | | | |
|------------------|---------------|------------|--|
| Organizational | No. of | | |
| control Consumer | Responses Out | Percentage | |
| behavior | Of 92 | | |

| Quality product sale | 79 | 85.9 |
|----------------------|----|------|
| Controlling product | 37 | 40.2 |
| price | 31 | 40.2 |
| Installments in | 16 | 17.4 |
| payment options | 10 | |
| Continuous support | 37 | 40.2 |
| Reliable delivery | 14 | 15.2 |

Graph No.12



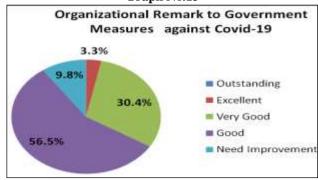
Most of the organization directed towards quality product sale i.e.85.9 % used for control of consumer behaviour. Control of product price come at second option selected by 40.2 % respondents. Continuous support option selected by about 40.2% respondents because 23.9% respondents are from the service industries.

V.12. Remarks by respondents Government measures against Covid-19.

Table No.13

| Government measures to fight against Covid-19 | No. of Responses Out Of 92 | Percentage |
|---|----------------------------------|------------|
| Outstanding | 0 | 0 |
| Excellent | 3 | 3.3 |
| Very Good | 28 | 30.4 |
| Good | 52 | 56.5 |
| Need Improvement | 9 | 9.8 |

Graph No.13



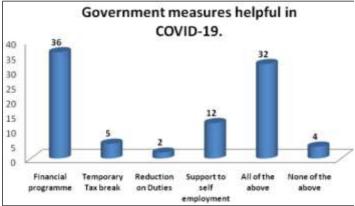
Government measures recognized by 56.5% respondents as GOOD and 30.4% as Very Good.

V.13. Government measures helpfulness discussed with respondents.

| T | sh | ما | N | ռ 1 | 1 |
|---|-----|----|-----|------|---|
| | 41) | 16 | INI | D. I | 4 |

| Government measures in COVID-19 crisis. | No. of Responses Out Of 92 | Percenta ge |
|---|----------------------------------|----------------|
| Financial Programme | 36 | 39.6 |
| Temporary Tax break | 5 | 5.5 |
| Reduction on Duties | 2 | 2.2 |
| Support to self- employment | 12 | 13.2 |
| All of the above | 32 | 35.2 |

Graph No.14



39.6% respondent's selects financial Programme option as a most useful measures by Government.35.2% respondents selected all option as helpful measure.

VI. CONCLUSION

After approximately 90 days from unlock procedure initiation, data collected, estimated and analyzed. Study indicates that 73.9% organization strongly affected due to Covid-19 lockdown, with measure reason as a lockdown of Organization,59.8% organization required 1-2 years to get business normal, 39.6% organization selected financial programmes from government to recover from current situation and 56.5% organization remarks GOOD for government preventive and supportive measures.

VII. LIMITATIONS AND FUTURE STUDIES

Though study is Restricted to PCMC area, only 150 industries selected for the survey and survey get 92 responses .Sampling area must be increased to cover all Pune Zone at least 8 MIDC should be covered out of 12 MIDC from Pune Zone. Larger sample size may be required with different MIDC's and with various sectors to analyses Impact of Covid-19.After complete unlock procedure survey needs to be done to evaluate the impact of Covid-19.

VIII. ACKNOWLEDGEMENT

I would like to thank Mr. Sandip Belsare, Chairman and Mr.Baban Dalvi, Committee member of Pimpri Chinchwad Small Industries Association, Mr. H.S. More and Mr. P. S. More as my Mentor for the study.

IX. REFERENCES

- 1. Fabian Eggers, Master of disasters? Challenges and Opportunities for SMEs in times of crisis, Journal of Business research 116 (2020), 199-208.
- 2. Thomas Ritter, Carsten Lund Pedersen, Analyzing the Impact of the coronavirus crisis on business models, Industrial marketing management 88 (2020) 214-224.
- 3. Naven Donthu, Anders Gustafsson, Effects of Covid-19 on business and research, Journal of Business research 117 (2020) 284-289.
- 4. Carolina small Business development fund, Assessing the Economic Impacts of COVID-19 on North Carolina's small business community, April 2020, Research Report
- Alexander Bartik, Marianne Bertrand, Zoe B.cullen, Edward L.Glaeser, Michael Luca, Christopher Stanton, The Impact of Covid-19 on small Business Outcomes and expectations, Harvard Business School, Working paper 20-102.
- 6. Robert Fairlie, The Impact of Covid-19 on small business owners: Evidence of early-stage losses from the April-2020 current population survey, SIEPR, May,2020,Working paper No.20-022.
- 7. Heather Bain, V. Marcine, Johnson, Institute of management Accountants, Small Business planning during Covid-19, April 2020.
- 8. Jennifer Bouey, Assessment of Covid-19's Impact on small and medium-Sized enterprises, RAND corporation, Implication from China, March 10,2020.
- Ramesh Prasad, Dr. Amitava Mondal, Impact of COVID-19 pandemic on Indian Economy with special reference to Indian MSME Sector, SKB University
- 10. The impact of COVID-19 on small business outcomes and expectations, Alexander W. Bartika, Marianne Bertrandb, Zoe Cullenc, Edward L. Glaeserd, Michael Lucac, 1, and Christopher Stantonc, June 23, 2020
- Business Standard, Special on Corona Virus, 28 July-2020.