

# INFLUENCING FACTORS AND IT'S IMPACT ON THE SUCCESS OF SMALL AND MEDIUM CONSTRUCTION ENTERPRISES (SME's) IN INDIA

<sup>1</sup>Shubham Jain

Student,

M.Tech (construction Engineering and Management)  
MIT - World Peace University, Pune, India

<sup>2</sup>Dr. S.S. Pimplikar

Program Head,

M.Tech (Construction Engineering and Management)  
MIT - World Peace University, Pune, India

## ABSTRACT: -

Several studies have identified the Construction Industry as one of the main engines of performance in any economy. On other side of the industry are Small and Medium Construction Enterprises (SMCEs) which form an important sector of any construction economy. Small and medium construction enterprises (SMCEs) are vital in their contribution to employment creation and value reorientation. The process of performance of these enterprises needs to be well understood and addressed. The objective of this study was to study some of the factors influencing the performance and there level of impact on the performance of SMCEs in India. The findings of this study make a contribution to the search for solutions to the problems facing the performance of SMCEs in India and provide insight for further research in this sector.

**Keyword:** - Small and Medium Enterprises (SMEs), Project Performance, Impacting factors, Organizational Structure

## INTRODUCTION: -

Construction industry of India is the indicator of the development of the country, as it creates investment opportunities across various related sectors. Quick development in the construction sector can boosts up other industrial sectors like cement, paints, fitting and fixtures, chemicals and steel industries, etc. The Indian construction industry mostly comprises of small and medium construction firms which are also known as backbone of the economy because they employ about 40% of India's workforce and contribute 45% to India's manufacturing output. So Indian government as formed the special Ministry for development of SMEs which is known as "Ministry of Micro, Small and Medium Enterprises". According to The Micro, Small and Medium Enterprises Development act (MSMED), 2006, the Ministry has defined the small and medium enterprises under two categories based on the investment made in it, as manufacturing industry and service industry, but changes in government rules and implementation of new taxation laws as well as change of market conditions has forced to change the previous defination.so the government of India has given amendment 2018 to define units producing goods and rendering services in terms of annual turnover of MSMEs in February 2018, which is as follows :-.

Table 1 Classification of SME's. according to MSMED 2006

| Classification of the MSME | New Classification (annual turnover) |
|----------------------------|--------------------------------------|
| Micro                      | Not exceeding Rs 5 crores            |
| Small                      | Between Rs 5 crores to Rs 75 crores  |
| Medium                     | Rs 75 to Rs 250 crores               |

According to new definition and the report of CIDC (2017), the no. of small construction agency or contractor in India are 27000 which comprises about 96.4% of total construction agency in India, while 800 agencies are medium sized agency which formed around 2.86% of the total construction agency in India, while only 200 agencies are there which can be called as major construction agency. As the Indian Planning Commission had projected USD 65 billion investments in real estate and urban infrastructure for next 20 years. There is a need of efficient and competent organizations to execute the work and thus arises the need to organize this highly fragmented construction industry. This is only possible if the construction SMEs scale up their business operations. However, over years and from previous works it has been found that their effectiveness is not up to the mark as the risk involved in Industry is big due to which the possibility of business failure always exists.

#### **LITERATURE REVIEW: -**

From the existing literature reviewed, some following points were observed: -

- The main and motivations of rural SMEs is to survive in this highly competitive field. As the survival is their main objective concern due to which there is no proper policy of organizational structure or on the use of modern technology on construction sites which directly affect the growth of the organizations. (Karthik Kumar (2015), E. Kamal (2014), J. Yang (2007)).
- The most important barriers for growth of small and medium construction firms are inability to recruit the quality staff with motivation, good qualification and past experiences. It was found that finance is one of the major barriers due to which the staffs recruited are less and more staff tends to leave the organizations. (Mona Shah (2017), C. Osunde (2016), A. Gadekar (2014)).
- Small and medium construction organizations find difficulty in monitoring activity, performance reports, safety and quality control mechanism at site due to constrains of staff and money. The lack of access to new technology is another vital factor which has limited the growth and expansion of SMEs in India. (Parthajeet Das (2017), Gunatilake (2016), C. Osunde (2016), R. Stewart (2003).

#### **NEED AND IMPORTANCE**

The Indian construction industry contribute almost 40% employ of India's workforce and contribute 45% to India's manufacturing output which comprises of 99% of small and medium construction enterprises (SMEs). Its growth could generate higher earnings for low-income households. Hence, understanding the various factors that affect the SMEs to grow, would help to take the necessary actions in order to mitigate its impact.

#### **OBJECTIVES: -**

To examine the factors which influence the success of small and medium enterprises (SMEs) and its level of impact on growth of small and medium construction enterprises?

#### **SURVEY: -**

With this context, a survey was carried out among 92 Indian construction companies which are located in the Maharashtra region of India. In this survey, Top-level managers, owners, senior engineers were selected because they are assumed to have enough knowledge about the organizational structure, culture and strategies. The survey questionnaire was administered during face-to-face interviews, as well as Google form for distant companies and it consisted of 24 questions including both closed and open-ended questions. It is divided into two main sections. Section I covered general information about the organization. Section II dealt with factors which influence the success of the small and medium enterprises (SMEs). Although survey results reflect the opinions of experts from 92 firms, it is believed that they can give an idea about the factors which influence the organization of SMEs. Point Rating Scale method is used to determine the factor which Influence SMEs. The decision maker is asked to rate each of the attributes out of 100%. The factors considered in the study were identified based on a literature review. A total of possible factors that were felt to influence the construction companies in India were determined. The factors were rated according to their importance and an average ranking of factors was calculated according to the responses.

## SURVEY RESULTS

The average rating of all main factors was calculated from responses received by 92 firms which include 39 medium and 53 small sized firms. The ranking of main factor was done based on its average impact on the different aspect of parameters which may leads to success/failure for small and medium construction firms in India.

**Table 2 Average Rating of Factors Affecting the Medium Sized Firms.**

| Sr. no.  | Main Factors                            | Impact<br>(on a scale of 5) | Average Impact<br>(on a scale of 5) |
|----------|---|-----------------------------|-------------------------------------|
| <b>1</b> | <b>Use of expert advice/consultants</b> |                             | <b>3.59</b>                         |
|          | i. Project performance                  | 3.59                        |                                     |
| <b>2</b> | <b>Operation and maintenance</b>        |                             | <b>4.20</b>                         |
|          | i. Project performance                  | 4.20                        |                                     |
| <b>3</b> | <b>Bank finance</b>                     |                             | <b>4.08</b>                         |
|          | i. Level of production                  | 4.20                        |                                     |
|          | ii. Operation performance               | 4.00                        |                                     |
|          | iii. Introduction to new technology     | 4.00                        |                                     |
|          | iv. New business strategies             | 4.12                        |                                     |
| <b>4</b> | <b>Maintaining Quality control</b>      |                             | <b>4.28</b>                         |
|          | i. Roles and responsibility             | 4.50                        |                                     |
|          | ii. Standard procedure                  | 4.34                        |                                     |
|          | iii. Co-ordination with others          | 4.27                        |                                     |
|          | iv. Site review meetings                | 4.21                        |                                     |
|          | v. Quality lab                          | 4.23                        |                                     |
|          | vi. Sampling and testing                | 4.22                        |                                     |
|          | vii. Workmanships skills                | 4.29                        |                                     |
|          | viii. Quality audits                    | 4.17                        |                                     |
| <b>5</b> | <b>Project performance</b>              |                             | <b>4.18</b>                         |
|          | i. Reputation of organization           | 4.20                        |                                     |
|          | ii. Repeat business                     | 4.07                        |                                     |
|          | iii. Growth of organizations            | 4.32                        |                                     |
|          | iv. Profit margins                      | 4.15                        |                                     |
|          | v. New opportunities                    | 4.15                        |                                     |
| <b>6</b> | <b>Project manager</b>                  |                             | <b>4.37</b>                         |
|          | i. Organizational performance           | 4.20                        |                                     |
|          | ii. Project performance                 | 4.54                        |                                     |
| <b>7</b> | <b>Human resource management</b>        |                             | <b>3.99</b>                         |
|          | i. Employees productivity               | 4.17                        |                                     |
|          | ii. Organizational performance          | 3.98                        |                                     |
|          | iii. Organizational structure           | 3.83                        |                                     |
|          | iv. Project performance                 | 3.98                        |                                     |
| <b>8</b> | <b>Organizational structure</b>         |                             | <b>4.27</b>                         |
|          | i. Working of organization              | 4.27                        |                                     |
| <b>9</b> | <b>Use of modern technology</b>         |                             | <b>4.09</b>                         |
|          | i. Productivity of employees            | 4.22                        |                                     |

|           |   |      |             |
|-----------|---|------|-------------|
|           | ii. Speed up the process                | 4.37 |             |
|           | iii. Efficiency of organization         | 4.10 |             |
|           | iv. communications                      | 4.20 |             |
|           | v. Indirect cost                        | 3.98 |             |
|           | vi. Dispute resolution                  | 3.68 |             |
| <b>10</b> | <b>Over budgeted cost/cost over run</b> |      |             |
|           | i. Profit margins                       | 4.03 |             |
|           | ii. Reputation of organization          | 4.05 |             |
|           | iii. Generation of new opportunities    | 3.88 |             |
|           | iv. Quality of work                     | 3.93 |             |
|           | v. Other ongoing projects               | 3.93 |             |
| <b>11</b> | <b>Delays/time overrun</b>              |      | <b>4.03</b> |
|           | i. Reputation of organization           | 4.05 |             |
|           | ii. Generation of new opportunities     | 4.00 |             |
|           | iii. Repeat business                    | 3.95 |             |
|           | iv. Work load on employees              | 4.07 |             |
|           | v. Quality of work                      | 4.05 |             |

Table 3 Average Rating of Factors Affecting the Small Sized Firms.

| .Sr no.  | Main Factors                            | Impact<br>(on a scale of 5) | Average Impact<br>(on a scale of 5) |
|----------|---|-----------------------------|-------------------------------------|
| <b>1</b> | <b>Use of expert advice/consultants</b> |                             | <b>3.72</b>                         |
|          | i. Project performance                  | 3.72                        |                                     |
| <b>2</b> | <b>Operation and maintenance</b>        |                             | <b>4.15</b>                         |
|          | i. Project performance                  | 4.15                        |                                     |
| <b>3</b> | <b>Bank finance</b>                     |                             | <b>3.84</b>                         |
|          | i. Level of production                  | 4.16                        |                                     |
|          | ii. Operation performance               | 3.88                        |                                     |
|          | iii. Introduction to new technology     | 3.76                        |                                     |
|          | iv. New business strategies             | 3.58                        |                                     |
| <b>4</b> | <b>Maintaining Quality control</b>      |                             | <b>4.23</b>                         |
|          | i. Co-ordination with others            | 4.27                        |                                     |
|          | ii. Workmanships skills                 | 4.20                        |                                     |
|          | iii. Sampling and testing               | 4.14                        |                                     |
|          | iv. Site review meetings                | 4.16                        |                                     |
|          | v. Standard procedure                   | 4.41                        |                                     |
|          | vi. Quality audits                      | 4.12                        |                                     |
|          | vii. Quality lab                        | 4.12                        |                                     |
|          | viii. Roles and responsibility          | 4.42                        |                                     |
| <b>5</b> | <b>Project performance</b>              |                             | <b>4.19</b>                         |
|          | i. Reputation of organization           | 4.44                        |                                     |
|          | ii. Repeat business                     | 4.30                        |                                     |
|          | iii. Profit margins                     | 3.94                        |                                     |

|           |   |      |             |
|-----------|---|------|-------------|
|           | iv. Growth of organizations             | 4.26 |             |
|           | v. New opportunities                    | 4.02 |             |
| <b>6</b>  | <b>Project manager</b>                  |      | <b>4.26</b> |
|           | i. Organizational performance           | 4.04 |             |
|           | ii. Project performance                 | 4.49 |             |
| <b>7</b>  | <b>Human resource management</b>        |      | <b>3.94</b> |
|           | i. Employees productivity               | 4.08 |             |
|           | ii. Organizational performance          | 4.00 |             |
|           | iii. Organizational structure           | 3.62 |             |
|           | iv. Project performance                 | 4.06 |             |
| <b>8</b>  | <b>Organizational structure</b>         |      | <b>4.29</b> |
|           | i. Working of organization              | 4.29 |             |
| <b>9</b>  | <b>Use of modern technology</b>         |      | <b>3.99</b> |
|           | i. Speed up the process                 | 4.35 |             |
|           | ii. Productivity of employees           | 4.04 |             |
|           | iii. Efficiency of organization         | 4.10 |             |
|           | iv. Dispute resolution                  | 3.67 |             |
|           | v. Indirect cost                        | 3.82 |             |
|           | vi. communications                      | 3.96 |             |
| <b>10</b> | <b>Over budgeted cost/cost over run</b> |      | <b>3.93</b> |
|           | i. Profit margins                       | 4.08 |             |
|           | ii. Reputation of organization          | 4.08 |             |
|           | iii. Quality of work                    | 3.92 |             |
|           | iv. Generation of new opportunities     | 3.84 |             |
|           | v. Other ongoing projects               | 3.73 |             |
| <b>11</b> | <b>Delays/time overrun</b>              |      | <b>4.1</b>  |
|           | i. Reputation of organization           | 4.28 |             |
|           | ii. Generation of new opportunities     | 4.08 |             |
|           | iii. Quality of work                    | 4.04 |             |
|           | iv. Repeat business                     | 4.02 |             |
|           | v. Work load on employees               | 4.04 |             |

Table 4 Average rating of Factors affecting the all sized firms.

| Sr. No.  | Main Factors                            | Impact<br>(on a scale of 5) | Average Impact<br>(on a scale of 5) |
|----------|---|-----------------------------|-------------------------------------|
| <b>1</b> | <b>Use of expert advice/consultants</b> |                             | <b>3.66</b>                         |
|          | i. Project performance                  | 3.66                        |                                     |
| <b>2</b> | <b>Operation and maintenance</b>        |                             | <b>4.17</b>                         |
|          | i. Project performance                  | 4.17                        |                                     |
| <b>3</b> | <b>Bank finance</b>                     |                             | <b>3.93</b>                         |
|          | i. Level of production                  | 4.17                        |                                     |
|          | ii. Operation performance               | 3.93                        |                                     |
|          | iii. Introduction to new technology     | 3.87                        |                                     |
|          | iv. New business strategies             | 3.78                        |                                     |

|           |   |      |             |
|-----------|---|------|-------------|
| <b>4</b>  | <b>Maintaining Quality control</b>      |      |             |
|           | i. Co-ordination with others            | 4.27 | <b>4.25</b> |
|           | ii. Sampling and testing                | 4.18 |             |
|           | iii. Workmanships skills                | 4.24 |             |
|           | iv. Quality lab                         | 4.16 |             |
|           | v. Site review meetings                 | 4.18 |             |
|           | vi. Standard procedure                  | 4.38 |             |
|           | vii. Quality audits                     | 4.14 |             |
|           | viii. Roles and responsibility          | 4.46 |             |
| <b>5</b>  | <b>Project performance</b>              |      |             |
|           | i. Repeat business                      | 4.20 | <b>4.19</b> |
|           | ii. New opportunities                   | 4.08 |             |
|           | iii. Reputation of organization         | 4.33 |             |
|           | iv. Growth of organizations             | 4.29 |             |
|           | v. Profit margins                       | 4.03 |             |
| <b>6</b>  | <b>Project manager</b>                  |      |             |
|           | i. Organizational performance           | 4.11 | <b>4.31</b> |
|           | ii. Project performance                 | 4.51 |             |
| <b>7</b>  | <b>Human resource management</b>        |      |             |
|           | i. Employees productivity               | 4.12 | <b>3.96</b> |
|           | ii. Project performance                 | 4.02 |             |
|           | iii. Organizational structure           | 3.71 |             |
|           | iv. Organizational performance          | 3.99 |             |
| <b>8</b>  | <b>Organizational structure</b>         |      |             |
|           | i. Working of organization              | 4.28 | <b>4.28</b> |
| <b>9</b>  | <b>Use of modern technology</b>         |      |             |
|           | i. Efficiency of organization           | 4.10 | <b>4.04</b> |
|           | ii. Dispute resolution                  | 3.67 |             |
|           | iii. Productivity of employees          | 4.12 |             |
|           | iv. Indirect cost                       | 3.89 |             |
|           | v. Speed up the process                 | 4.36 |             |
|           | vi. communications                      | 4.07 |             |
| <b>10</b> | <b>Over budgeted cost/cost over run</b> |      |             |
|           | i. Reputation of organization           | 4.04 | <b>3.94</b> |
|           | ii. Other ongoing projects              | 3.82 |             |
|           | iii. Quality of work                    | 3.92 |             |
|           | iv. Generation of new opportunities     | 3.85 |             |
|           | v. Profit margins                       | 4.06 |             |
| <b>11</b> | <b>Delays/time overrun</b>              |      |             |
|           | i. Reputation of organization           | 4.18 | <b>4.06</b> |
|           | ii. Generation of new opportunities     | 4.04 |             |
|           | iii. Quality of work                    | 4.04 |             |
|           | iv. Repeat business                     | 3.99 |             |
|           | v. Work load on employees               | 4.05 |             |

**CONCLUSION:-**

This study represented the survey carried out among Indian construction companies. According to the results obtained from survey, we can conclude that

1. The 3 main factors which have maximum influence on the success of medium size firms are project manager, maintaining quality control and organizational structure where project manager has a maximum impact on project performance (4.54), maintaining quality could be achieve by properly defining the roles and responsibilities (4.50) and organizational structure has a maximum impact on working of organization (4.27), respectively.
2. The 3 main factors which have maximum influence on the success of small size firms are organizational structure, project manager performance, maintaining quality control where organizational structure has a maximum impact on working of organization (4.29), project manager has a maximum impact on project performance (4.26) and maintaining quality could be achieve by properly defining the roles and responsibilities (4.23) respectively.
3. If we consider The 3 main factors which have maximum influence on the success of small and medium firms are project manager, organizational structure, and, maintaining quality control where project manager has a maximum impact on project performance (4.51), organizational structure has a maximum impact on working of organization (4.28), and maintaining quality could be achieve by properly defining the roles and responsibilities (4.46) respectively.

**REFERENCES:-**

1. Kumar, K. and Raghavan, S (2015). "Problems Faced By Small Scale Construction Contractors In India". International research journal on engineering and technology (IRJET), 2 (2), 105 – 107.
2. Kamal, E, and Flanagan, R, (2014). "Key Characteristics Of Rural Construction SMEs". Journal of Construction in Developing Countries, 19 (2), 1 – 13.
3. Yang,J, Ahuja,V, and Shankar, R, (2007). "Managing building projects through enhanced communication - An ICT based strategy for small and medium Enterprises", CIB World Building Congress, 9 (2), 2344 – 2357.
4. Shah, M. (2017). "Barriers to Growth and Scale of Small and Medium Enterprises (SMEs) in Construction Businesses". Research Gate. (4).
5. Osunde, K. (2016). "Project Management Problems In Small And Medium Enterprises In Nigeria". Journal of entrepreneurship and organization management, 5 (1), 169 – 172.
6. Gadekar, A. And Pimplikar, S, S. (2014). "Success and Failure Factors of Indian Construction Companies", Journal Of Mechanical And Civil Engineering, 3 (6), 52 – 58.
7. Das, P. (2017)." Micro, Small And Medium Enterprises (MSME) In India Opportunities, Issues & Challenges". Great Lakes Herald,11 (2), 77-88.
8. Stewart ,R , and Miller, C, (2003). "Sustainable Development Of Construction Small And Medium Enterprises (Smes) It Impediments Focus" , University of Glamorgan, Pontypridd, Wales, UK, 8 (7), 361-368
9. Amaradiwakara, A, U. and Gunatilake, M, M (2016)"Factors Affecting Growth of Small and Medium Enterprises in Sri Lanka".Journal of business and economic policy,3(4), 62-72.
10. Bageis, A. and Brown, A. (2017). "Business Success Factors And The Small And Medium Sized Construction Company In Saudi Arabia". School Of The Build Environment Heriot – Watt University Edinburgh, UK.
11. Wanjari, S and dobariya, G. (2016). "Identifying factors causing cost overrun of the construction projects in India". Indian Academy of Sciences, 41 (6), 679–693.