



## Study of Factor affecting on Micro, Small and Medium Sized Enterprises (MSMEs) in Construction Industry

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**Abstract :** Construction Micro, Small and Medium Enterprises (MSMEs) perform a significant amount of the industry's work and play a crucial role in the economy. There is no way to overstate the importance of effective MSMEs. MSMEs contribute significantly to the creation of jobs. Their in-process functions, however, are poorly understood and haven't received much attention. There are many obstacles hindering the sustainable growth and development of MSMEs in the construction industry. This research is done for factor affecting MSMEs in construction projects. This research focuses on a construction companies that listed with Ahmedabad. From analysis, it can be concluded that top five factors which are affect MSMEs in construction industry is, 1) Regular employee training, 2) Conducting continuous assessment about the business environment, 3) The absence of necessary equipment or the availability of insufficient equipment, 4) The firm focuses on improving brand recognition, 5) Awareness in top management about benefits of various IT technologies

**Index Terms** - Micro, Small and Medium Sized Enterprises (MSMEs) in Construction Industry, Factors, Construction Projects, Frequency index method, Questionnaire survey

### I. INTRODUCTION

The Micro Small and medium-sized businesses (MSME) have developed into a significant and varied sector of the Indian economy. MSMEs not only help to industrial rural and underdeveloped areas, thereby reducing regional imbalances and ensuring a more equitable distribution of the nation's wealth, but they also contribute to the development of a significant number of jobs at a lower cost of capital than major factories. MSMEs serve as auxiliary units for larger companies, and this industry has a consider impact on the financial growth of the nation.

Construction companies give some major innovation due to produce job and lower fence. Construction provides a living for about 15 percent of India's working population. The construction sector in India employs about 29 million people and brings in more than \$199 billion annually. More than 4.9 percent of the nation's GDP and 79 percent of all business expansion are accounted for by it. Construction employs consider so many business of MSME.

### II. OBJECTIVES

- To study and analyze the factors affecting of MSMEs in construction industry at Ahmedabad city.
- To implement MSMEs' requirements in order to help them grow in the competitive world

### III. RESEARCH METHODOLOGY :

#### 1) LITERATURE REVIEW:

This research base on construction in MSMEs is evaluated use a number of national, worldwide, and other online and local magazines, conferences, reports, master's and doctoral dissertations, publications, and standards made by various authorities.

#### 2) DATA COLLECTION:

This data information was gathered from Online questionnaires and by visiting with the site supervisor, contractors, and builders using a questionnaire form. The survey was circulated to a number of parties.

#### 3) DATA ANALYSIS:

Every question on the survey has a unique importance and is encouraged to share a specific answer. Using the Importance Index (IMPI) Method, the results of different searches are displayed in a variety of graphs, tables, and charts.

**IV. LITERATURE REVIEW**

Ebitu, Ezekiel Tom (Ph.D), Basil Glory and Ufot Juliet Alfred, (2016),This study of paper was According to the entrepreneurship is a reactant in most developing nations and is critical to Nigeria's economic growth and development.Publicpolicies support the formation, growth, and spread of SMEs. Nigerian universities must promote the formation of Entrepreneurs Centers. Abel John Tsado, Winston W. M. Shakantu,(2020) New products, management innovations, and service modernization are the transcendent types of modernization within CMSMEs in the northern region of Nigeria. In this someinnovationpare is the product, management, logistic,technological innovation etc detail of how their develop.service innovation, customer co-creation Innovation are the most of use full from this research.

Sheetal, Sangeeta, Rajiv Kumar (2012) Small and medium-sized businesses are very happy with the cost of their products and the way they are priced. But because pricing affects their total marketing tactic, SMEshould concentrate on pricing methods. The cost of the productfrom small and medium-sized business also receives high marks from the customer.

**V. METHODOLOGY**

**5.1 DATA COLLECTION :**

**5.1.1 GENERAL :**

- Data collection, which may be divided into two categories, quantitative approach and qualitative approach, generally refers to a plan of action that allows the objectives of the study to be questioned.
- Qualitative and quantitative approaches are the two categories into which the information received is split in order to create a plan that can be reviewed in order to accomplish the study goa
- The less systematic research method known as a qualitative survey is used to gather information about people's innermost thoughts and sources of inspiration

**5.1.2 SURVEY PLANNING :**

The Survey are sent through email and online platform is used for data collection work. The main goal is gathered information of factors affecting Construction MSME in Ahmedabad.

**5.1.3 QUESTIONNAIRE DESIGN :**

To obtain the opinions of diverse respondents in the construction business, questionnaire surveys were undertaken. The results of the survey are utilised to enhance the capabilities of construction MSMEs.

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>Not Needed</b>	<b>Less Needed</b>	<b>Somewhat Needed</b>	<b>More Needed</b>	<b>Highly Needed</b>

Table 1. Liker Scale

**5.1.4 DETERMINATION OF QUESTIONNAIRE & SAMPLE SIZE DETERMINATION :**

Several Owners, Engineers, Partners, and Project Managers received the questionnaire after being informed of the study's goals and having their agreement to participate in the study sought. Once the respondents in Ahmedabad demonstrated their initial consent. Calculator.net is used to determine the sample size.Here 98% confidence level is taken. e is the sampling error to be estimated is 12%

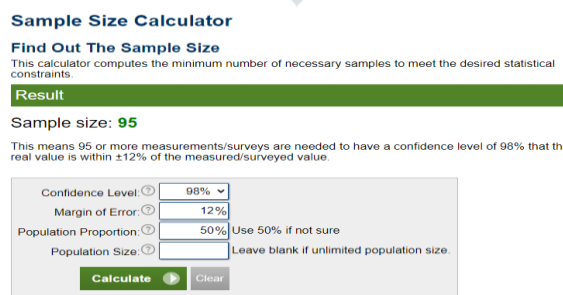


Figure 1. Sample Size

Sr.No.	Factors
1	Additional planning at the company and project levels
2	Encouraging the advancement of regional technology
3	Works that need to be redone or fixed because to poor execution
4	The absence of necessary equipment or the availability of insufficient equipment
5	Shortage of resources when they are needed as a result of insufficient planning or delivery delays
6	Government polices affecting the building business are certain
7	Digitalization of several project and corporate records
8	Creating a long-term vision for a particular industry
9	Offering workers, the most productive working circumstances possible
10	Regular employee training
11	Change of owner attitude towards business from revenue focused to creating long term value
12	Creating a long-term vision for a particular industry
13	Give importance to marketing strategy
14	Awareness in top management about benefits of various IT technologies
15	Establish a culture of best professional practices within the company
16	Compiling sufficient data on funding sources
17	Ability of employees to adapt new technologies
18	Conducting continuous assessment about the business environment
19	The availability of affordable IT tools and software
20	The firm focuses on improving brand recognition
21	Development of financial knowledge and skills
22	In decision making process company have to involving employees
23	Create a best professional practice culture in the firm
24	Lack of management in construction company

Table -2: List of Factors

## 5.2 DATA ANALYSIS :

For the data analysis Frequency Index Method was used and, formula of FI is given below;

$$\text{Frequency Index FI (\%)} = \sum a \times \frac{n}{N} \times \frac{100}{5}$$

Where,

a is the constant weight given to each response (range from 1 to 5),

n is the frequency of the index and

N is the total number of responses.

### 5.2.1 SAMPLE SIZE DETERMINATION :

No. of questionairedistributed	Total Responses	Responses in %
95	90	94.74 %

Table -3: Details of Responses

5.2.2 RELIABILITY TEST :

A researcher study's or a measuring test's consistency is referred to as its reliability. Under this work, Excel was used for analysis using CRONBACH'S $\alpha$ method.

$$\alpha = \frac{K}{K - 1} \left[ 1 - \frac{\sum s^2 y}{s^2 x} \right]$$

Where,

K = Number of the test items

$\sum s^2 y$  = Sum of the item variance

$$s^2 \alpha = \frac{K}{K - 1} \left[ 1 - \frac{\sum s^2 y}{s^2 x} \right]$$

$$\alpha = \frac{24}{24 - 1} \left[ 1 - \frac{13.189}{47.60} \right]$$

$$\alpha = 0.75$$

VARIABLES	DESCRIPTION	Values	Internal Consistency
K	No. of test items	24	Acceptable
$\sum s^2 y$	Sum of the item variance	13.189	
$s^2 x$	Variance of total	47.6	
$\alpha$	Cronbach's Alpha	0.75	

Table 4. Reliability test Result

5.2.3 FI & RANKING OF FACTORS AFFECTING LABOUR PRODUCTIVITY :

SR.NO.	FACTOR	FI	RANK
1	Regular employee training	89.4	1
2	Conducting continuous assessment about the business environment	73.51	2
3	The absence of necessary equipment or the availability of insufficient equipment	73.3	3
4	The firm focuses on improving brand recognition	73.02	4
5	Awareness in top management about benefits of various IT technologies	72.18	5
6	Encouraging the advancement of regional technology	71.76	6
7	Lack of management in construction company	71.76	7
8	Creating a vision for a particular industry	71.18	8
9	Create a best professional practice culture in the firm	71.08	9
10	In decision making process company have to involving employees	70.52	10
11	Ability of employees to adapt new technologies	70.41	11
12	The availability of affordable IT tools and software	69.96	12
13	Digitalization of several project and corporate records	68.98	13
14	Creating a long-term vision for a particular industry	68.4	14
15	Government policies affecting the building business are certain	68.12	15
16	Works that need to be redone or fixed because to poor execution	68.04	16
17	Shortage of resources when they are needed as a result of insufficient planning or delivery delays	67.96	17
18	Compiling sufficient data on funding sources	67.62	18
19	Offering workers, the most productive working circumstances possible	67.38	19
20	Establish a culture of best professional practices within the company	67.38	20
21	Give importance to marketing strategy	67	21
22	Change of owner attitude towards business from revenue focused to creating long term value	65.36	22
23	Development of financial knowledge and skills	63.74	23
24	Additional planning at the company and project levels	62.62	24

Table 5. FI & Ranking of Factors

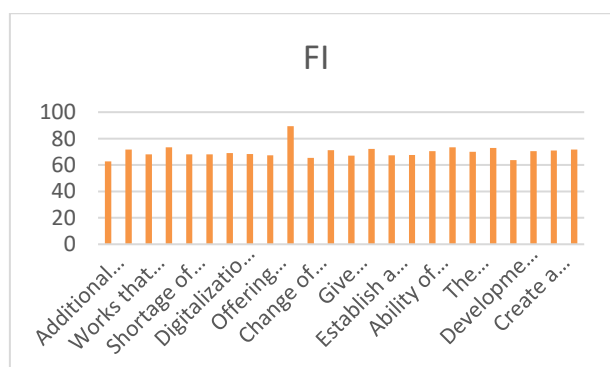


Chart 1. FI of Factors

**5.2.4 TOP 10 FACTORS AFFECTING LABOUR PRODUCTIVITY :**

SR.NO.	FACTOR	FI	RANK
1	Regular employee training	89.4	1
2	Conducting continuous assessment about the business environment	73.51	2
3	The absence of necessary equipment or the availability of insufficient equipment	73.3	3
4	The firm focuses on improving brand recognition	73.02	4
5	Awareness in top management about benefits of various IT technologies	72.18	5
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7	Lack of management in construction company	71.76	7
8	Creating a vision for a particular industry	71.18	8
9	Create a best professional practice culture in the firm	71.08	9
10	In decision making process company have to involving employees	70.52	10

Table 6. Top 10 Factors

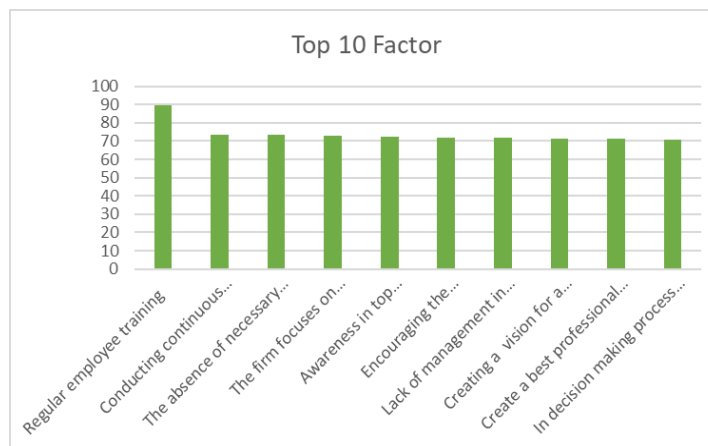


Chart 2. Top 10 Factors

**VI. CONCLUSION :**

Thesis work of above is factor affecting in MSMEs at Construction Industry how MSMEs and Construction Industry are Join & what type of factor are mostly affected in this thesis about.

All data are collected from online platform, first of all data collection needed a factor and respondent that's why, I find some factor from so many literature read and collect factor, after find factor I listed all factor and top 30 are selected for validation, all factor are validate from project manager, experience engineer, owner etc.

- 1)Regular employee training
- 2)Conducting continuous assessment about the business environment
- 3)The absence of necessary equipment or the availability of insufficient equipment
- 4)The firm focuses on improving brand recognition
- 5)Awareness in top management about benefits of various IT technologies
- 6)Encouraging the advancement of regional technology
- 7)Lack of management in construction company
- 8)Creating a vision for a particular industry
- 9)Create a best professional practice culture in the firm
- 10)In decision making process company have to involving employees

**VII. FUTURE SCOPE:**

In this thesis all kind of construction industry was occupied for this research. Outcome of study, the researcher can do any further city and state, this study conducted in Ahmedabad city. Frequency Analysis method are use for collection data & analysis from survey, in this top 10 factor are very use full for study or reference for another researcher.

**VIII. ACKNOWLEDGEMENT:**

I would like to thank to my Guide PROF. JAYRAJ V. SOLANKI, Assistant Professor of Civil Department & P.G. HEAD M. Tech. (CEM), UVPCE, for his support, constant unceasing encouragement, suggestion, constant guidance throughout this project. With reverence and gratitude, I would like to thank PROF. ANKIT .S. PATEL, Professor of Civil Department & Coordinator M. Tech. (CEM), UVPCE, Contractors & site engineers who has provided me the necessary knowledge and guidance for completion of this research work successfully.

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