

# Factors Affecting Turnover Intention of Construction Professionals in Nepali Construction Industry

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## Abstract

Retention of skilled technical manpower is essential for gaining competitive edge against the competitors, increasing organizational efficiency and profit, boosting employees' morale, strengthening company culture and gaining various other benefits. Due to its special nature, the rate of employees' turnover is higher in construction industries than other industries. Employee turnover refers to the voluntarily leaving the organization by the contracted employees under a given period of time. Turnover intention refers to the thinking or intending to leave the organization. The turnover intention closely relates with the actual turnover since employees leave the organization after thinking about leaving. This paper aims to determine the factors that determines the turnover intention of construction professionals in Nepali construction industries. In order to achieve the objective, quantitative research method is applied. Questionnaire Survey based analysis is conducted consisting turnover intention scale and 7 major factors consisting 33 measurement items is done among the class A and class B construction companies registered in FCAN and response from 61 respondents is used for analysis. The data analysis conducted using SPSS and MS excel results showed all the 7 identified factors are significantly correlated with the turnover intention. The most imperative factor is identified as Work Environment with the highest value of Relative Importance index followed by Work Benefits, Organizational Politics, Job Satisfaction, Organizational Commitment, Colleague Relation and Person-Organization Fit respectively. The result obtained from this research will be useful to identify the important factors affecting turnover of construction professionals which in turn helps to reduce turnover and develop retention strategies in Nepali construction industry.

## Keywords

Employees' Turnover, Construction Professionals, Construction Industry, Quantitative Research, Correlation

## 1. Introduction

Turnover means the number of employees leaving an organization in a given time period. Yang and Cherry (2008) claimed that the level of service that an organization can provide can diminish significantly because of employees turnover whereas [1] considered employee turnover as a natural process of downsizing the workforce, but they have also verified that the effect of high labor turnover affects the profitability of the organization as well as the efficiency and productivity. Employees' turnover may be the movement of employees from one job to another, one organization to another or even to being jobless by leaving the current job. [2] refers employees' turnover as a negative aspect to the organization and is evident to failed retention strategies of the organizations. High turnover has

become a factor inhibiting development of workforce and also causing huge profit decline to the organization [3].

Employee turnover (also called churn) is found to be more in construction companies in comparison to other sectors. While it can be seen that employees remain in the same organization for very long period even decades in other industries but this is very rarely seen in the construction industry [4]. In Nepal, experts believe that the construction industry representing one of the highest employment providing sector suffers from a frequent shortage of skilled manpower, low work productivity, and high absenteeism and turnover of the employees. Due to high work stress, repetitive nature of work, unsatisfying job environment and an unstable working environment, the turnover of construction professionals is an important issue from a practical viewpoint. Surprisingly, however, this

subject has not been studied as required in Nepal. Among various determinants, job satisfaction, organizational commitment, work benefits, work environment, colleague relation, organizational politics and person-organization-fit appear to be good predictors of turnover rates and these are the factors investigated here in this research, together with the individual characteristics of construction professionals. A study from Overseas Development Institute ODI predicted that Nepal may face labor shortage of 3.6 million by 2030 and even if no one leaves the country for foreign employment there may be the labor deficit of 600,000 by then which significantly affects the target of Nepal Government to transform into middle-economy country in next 7 years. The study emphasized the alarming condition in Nepali labor market and showed the importance of developing better employee retention strategies. The objective of this study is to work out the correlation between the identified factors and turnover intention of construction professionals in Nepali construction industry and categorize the Relative Importance Index (RII) of the identified factors.

## 2. Literature Review

### 2.1 Construction Industry in Nepal

The construction industry is an important sector in the Nepalese economy because it contributed 5% to 8% of the total GDP of Nepal since the last decade. The construction industry constitutes 6.17% of national GDP of Nepal in the fiscal year 2078/79 and the industry is worth 681 billion Nepali rupees or US \$5.5 billion [5]. This industry is the second largest employment generating industry of the country only behind agriculture sector. It provides employment to about 978 thousand people [6]. However, the construction industry is labor intensive, less modernized and less integration of technologies. Industrial Enterprises Act 1974 was the first act provided for registration and classification of contractors. Accordingly contractors were classified as Class A, B, C and D depending upon their physical facilities, resources and experience. After implementation of the construction classification Regulation in 1975, it provides provision for licensing and classification of contractors. Construction Business Act CBA 2055 came into enactment from Baisakh 1, 2056 (April 14, 1999). Now, the construction companies are registered as per CBA 2056. Federation of Contractors Association of Nepal

(FCAN) is the umbrella organization for construction entrepreneurs of Nepal. The number of registered contractors in Nepal are 266 Class A, 267 Class B, 1,102 Class C and 13,365 Class D respectively.[7]

### 2.2 Turnover Intention

Turnover intention refers that the workers in particular organization have thought or planned to quit their job voluntarily. Voluntary employee turnover shows that perception of leaving from a contracted employee usually lead to their turnover. Employees' turnover intention is seen to be closely related to the actual turnover of the employees because the actual turnover behavior of the worker relies on his/her intent to leave their current job [8].

### 2.3 Factors Affecting Turnover Intention

There are several factors that are the determinants of turnover intention. Based on extensive literature review, the following 7 major factors are identified that contribute to the turnover intention of construction professionals in Nepali construction industry:

1. Job Satisfaction: It may be defined as a pleasant or positive emotional condition that is obtained from the satisfactory appraisal of one's job or experiences in that job or the degree of positive attitude towards a job. According to [9] concluded that engineers were more likely to have low degree of satisfaction in their job as they have increased job stress.
2. Job Commitment: It is an expression of employees' feeling of emotional and psychological attachment towards the job and organization. It can determine the extent to which employees' are willing to stay working in the company even in the future.
3. Work Environment: [10] defined it as the whole materials and the equipment faced, the encompassing environment where an individual works, working strategies, and working courses of action both as people and as a bunch.
4. Work Benefits: It is the work compensation given to an employee. With respect to employee compensation, there are two components. The first is the direct financial payments and the second one is the indirect payment [11]. Direct compensation includes "salary, wages, bonus, incentives etc." whereas indirect compensation includes "medical facilities, insurance, retirement schemes, holidays etc."

5. **Colleague Relation:** It means the relationship with the people that an individual works with in an organization. Colleague relationship within the work environment can be watched through their qualities such as trust among each other, participation, and so on [12]. The relationship between the colleagues may influence the work enjoyment since large amount of time is spend with the co-workers during the work hour. If one has a great relationship with colleague, he/she makes delight out of the work and stay committed to the work.

6. **Organizational Politics:** It is the work behavior of employees working in an organization or a workplace. [13] perceived organizational politics as an attitude that is not under the formal authorization of the employer, clashes and disputes that may develop within the workplace setting by contrasting people or their groupism against each other.

7. **Person-Organization Fit:** [14] defined it as the compatibility between employees, their job title and the workplace in which they work for. Several studies concerning the P-O fit have indicated that if an employee is deemed job-fit in the job, it is increases the chance of the employee to stay in the same job.

### 3. Research Methodology

#### 3.1 Research Design

The quantitative technique of research was adopted in this study. The tools of quantitative research design that were used in the study were Descriptive and correlational analysis. The descriptive analysis tool includes the test population and the correlational analysis tool was used to demonstrate the relationship of the dependent variable with the independent variables. Relative Importance Index was used to rank relative importance of the determinants of Turnover Intention. Questionnaire survey method was used as a method for data collection. Web-based questionnaires (Kobo Toolbox) was applied in this research and thus the questionnaires were prepared in Kobo Toolbox and distributed to Class A and Class B construction companies of Nepal through email.

#### 3.2 Conceptual Framework

The conceptual framework for the research was made based on the dependent and independent variables for the research. The conceptual framework for this research is shown in figure 1.

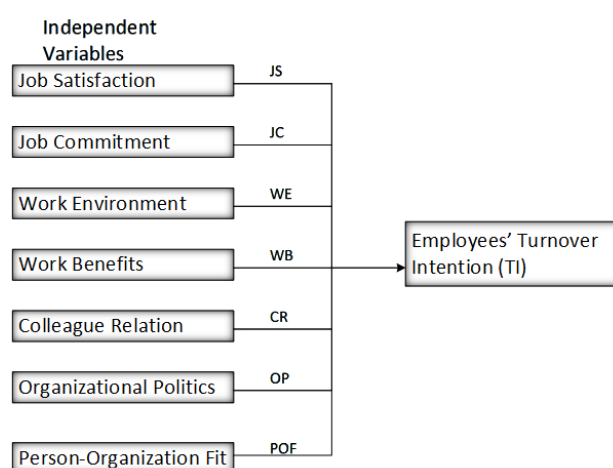


Figure 1: Conceptual Framework

#### 3.3 Data Collection

In this research, firstly the information were first collected through journals, articles as a source of secondary data to identify the factors and then online kobo toolbox questionnaire were deployed and the responses was used as a source of primary data. Questionnaire was designed setting in mind the comfort to the respondents to answer the questionnaire. Close end questions were mostly used and lengths of questions was carefully selected. In this questionnaire design process, the entire form was divided into three sections i.e. Section I: Demographic, Section II: Turnover Intention Scale and Section III: Determinants of Turnover Intention. Objective Questions, Subjective questions and Five Point Likert scale were used in the questionnaire form.

#### 3.4 Population and Sample size

The respondents in this research includes construction professionals (Engineers and Architects) working in Class A and Class B construction companies in Nepal. In order to avoid biasness in data, only one construction professional from one Construction Company was provided with the questionnaire form. There are a total population of 267 Class A and 268 Class B contractors in Nepal (FCAN souvenir, 2020). Thus the population size is worked out to be 535. Using Cochran's formula, a sample size of 60 was obtained. Probability sampling was used in this research as the respondents were chosen through random sampling technique.

**3.5 Data Analysis**

The Spearman’s correlation coefficient analysis and Relative Importance Index (RII) analysis were conducted to identify the factors affecting turnover intention, show their relationship with turnover intention and determine their relative importance. Before conducting correlation and RII analysis, reliability and internal consistency test was done to make sure the questions in Five Point Likert scale were internally consistent.

**3.6 Survey Procedure**

**3.6.1 Pre-test**

In the Pre-test, expert opinion survey was conducted to validate the factors and improve the questionnaire. Three construction experts working in Class A construction company, having more than 15 years of experience of hiring and dealing with employees were selected for the purpose expert opinion survey to validate the identified variables and make necessary corrections. The comments from expert were recorded down and necessary correction was incorporated before conducting other tests.

**3.6.2 Pilot Test**

The pilot test is a test done as a practice of the main survey which allows testing the study approach with few number of participants similar in nature to that of the target population before conducting the main survey to ensure that all the respondents understand the questionnaire and research approach. Based on [15] and [16], 15 questionnaires was given to the construction professionals working as full time contracted employee in Nepali construction contractors other than class A and class B contractors in Nepal. The duration required to answer all sections of the questionnaire were recorded, the suggestions and feed backs regarding the questions were also recorded and incorporated. Other than that, the pilot test was also needed to test the internal consistency and reliability of the measurement scales used in the survey form by analyzing the Cronbach’s Alpha coefficient determined from SPSS. The results of Cronbach’s Alpha coefficient value shown in the table 1 for all factors measuring scale were greater than 0.7, which means all the variables were internally consistent and reliable. Hence, there was no measurement element from each scale that needs to be removed, and it can proceed to the deployment of

questionnaire to the design population.

**Table 1: Pilot Test**

<b>Independent Variables Scale</b>	<b>No. of Items</b>	<b>Cronbach’s Alpha</b>
Job Satisfaction (JS)	5	0.863
Job Commitment (JC)	5	0.811
Work Environment (WE))	5	0.760
Work Benefit (WB)	6	0.884
Colleague Relation (CR)	5	0.833
Organizational Politics (OP)	4	0.809
Person-Organization Fit (POF)	3	0.779

**3.6.3 Main Survey**

The amended and improved questionnaire was be distributed to the construction professionals working with time employment contract in the Class A and Class B construction companies in Nepal, which are the registered member in FCAN. A total of 118 sets of the online kobo toolbox survey form given to the construction companies through email. In order to prevent the bias in data, only single set of questionnaire was deployed to one construction company (Class A and Class B) which means each of the response form the population represented unique construction company. After the final collection of data, a total of 61 responses was collected from the deployed questionnaire. The percentage of responses from total deployed questionnaire was 50.84%, which is considered good and acceptable [17]. The total responses were more than the sample size (60 respondents) determined previously by sample population design.

**4. Results and Discussion**

**4.1 Respondents’ Demographics**

First of all the analysis was done for the demographic section of the questionnaire to determine the demographic representations of the respondents involved in the survey. The table 2 shows that the gender of most of the respondents participated in this research is male, which is 90.2% out of 61 respondents. While respondents consist of only 6 females representing 9.8% of the total respondents used for the analysis. The age group representing highest number of respondents was 26 – 30 years of age group, which was 39.34% of the total respondents. The age group 31-35 years’ old consisted of 31.15% of the respondents. There were 8 respondents who

**Table 2: Demographic Analysis**

Demographic	Components	Number of Respondents	Percentage
Gender	Male	55	90.02
	Female	6	9.80
	Others	0	0.00
Age	20 Years and below	0	0.00
	21-25	8	13.11
	26-30	24	39.34
	31-35	19	31.15
	36-40	5	8.20
	41-45	3	4.92
	46-50	1	1.64
	51 and above	1	1.64
Marital Status	Unmarried	41	67.21
	Married	20	32.79
Profession	Engineer	57	93.44
	Architect	4	6.56
Position in the Company	Management Level	13	21.31
	Supervisor/Foreman	6	9.84
	Site Based	16	26.23
	Office Based	24	39.34
	Others	2	3.28
Years of Experience in Present Company	Less than 1 Year	7	11.48
	1 to 3 Years	27	44.26
	3 to 5 Years	13	21.31
	5 to 10 Years	11	18.03
	10 to 20 Years	4	6.56
	more than 20 Years	3	4.92
Years of Experience as Construction Professionals	Less than 1 Year	7	11.48
	1 to 3 Years	27	44.26
	3 to 5 Years	13	21.31
	5 to 10 Years	11	18.03
	10 to 20 Years	4	6.56
	more than 20 Years	3	4.92
Number of Times Promoted	None	32	52.46
	1 Time	12	19.67
	2 Times	10	16.39
	3 Times Years	3	4.92
	more than 3 Times	4	6.56

**Table 3: Spearman's Correlation Analysis**

Dependent Variable↓	Independent Variables⇒	JS	JC	WE	WB	CR	OP	POF
Turnover Intention	Spearman's Correlation Coefficient	-0.786	-0.734	-0.694	-0.693	-0.3.3	-0.661	-0.585
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	N	61	61	61	61	61	61	61



constitute 13.2% of the total respondents who belongs to the age group of 21-25 years old. Similarly, the least number of respondents belong to age group 41-50 years old and more than 50 years old. Most of the respondents were unmarried which represented 67.20% of the total respondents. For education background, Bachelor's level degree has the highest number of participants, which is 68.85% while Master's degree educational background has the fewer number which represents 31.15%. There were no participants with diploma degree and PhD degree. Most of the respondents are engineers which represent 93.44% of the respondents while there were only 6.56% of architects. Most of the participants have office based lower and middle level job position which represents 39.34% of the respondents. 26.23% of the respondents have site based job position and 21.31% of the respondents have management level of job position. It is also seen that highest number of the participants (42.26%) had 1 to 3 years of work experience in their current job. However, most of the respondents representing 34.43% of the total respondents have 5 to 10 years' experience as engineer or architect in their respective construction career. 52.46% of the respondents were never promoted in their current job. Only 11.48% of the respondents have received the promotion of 3 times or more.

**4.2 Spearman's Correlational Analysis**

Spearman correlation coefficient determination is a non-parametric test that is used to measure the degree of association between two variables. The Spearman rank correlation test is without any presumptions regarding the distribution of the data used for analysis and is the one of the better method for determining correlation between the variables which are measured on ordinal scale. Since Likert scale which is the ordinal scale of measurement is used in the research, the Spearman's correlation analysis is found to be more useful to the research.

If the significance value is less than 0.05, that means the relationship between independents variable and dependent variable are significant. In the Table 3, it is seen that all the independent variables had a significance value less than 0.05, which prove that the significant association between all the identified factors with turnover intention of construction professionals. Therefore, all the independent variables considered in this study; Job Satisfaction, Job

Commitment, Work Environment, Work Benefit, Colleague Relation, Organizational Politics and Person-Organization Fit are considered as the factors that affect Turnover Intention of construction professionals in Nepal. The Spearman's Correlation coefficient values as seen in Table 3 also shows that all the independent variables have significantly negative relationship with the turnover intention of construction professionals in Nepali construction companies. Since all the questions in the questionnaire were designed in the positively written statement, thus, the negative value of Spearman's Correlation represent a negative relationship between the dependent variable and independent variables.

**4.3 Factors Affecting Turnover Intention**

Table 4 the summary of the analysis of relative importance for the determinants of turnover intention among construction professionals in Nepali construction Industries. The relative importance in Table, identifies that the Work Environment to be the most important group of variables of turnover with RII of 69.64%. It is closely followed by the Work Benefits with RII of 69.23%. Organizational politics is ranked third with RII of 68.20%. It is then followed by Job satisfaction, Job commitment, Colleague Relation and Person-Organization Fit with RII of 66.03%, 56.33%, 45.70% and 45.57% respectively. Thus, the work environment is more important than the work benefits and organizational politics, also the job satisfaction within construction professionals is shown to be more valued than job commitment. Furthermore, the colleague relation is more important than person-organization fit. The Person-Organization fit is found to be least valued variable.

**Table 4:** Relative Importance Index Analysis

<b>Factors of Turnover Intention</b>	<b>RII Percentage</b>	<b>Rank</b>
Job Satisfaction (JS)	66.03	4
Job Commitment (JC)	56.33	5
Work Environment (WE))	69.64	1
Work Benefit (WB)	69.23	2
Colleague Relation (CR)	45.70	6
Organizational Politics (OP)	68.20	3
Person-Organization Fit (POF)	45.56	7

## 5. Conclusion

The research studied the factors affecting turnover intention of construction professionals in construction companies of Nepal. The aim of this research is to find out the determinants of turnover intention of construction professionals in construction industry of Nepal and determine the directional relationship of the identified factors with the turnover intention of construction professionals. The relative importance index analysis result showed Work Environment had the highest RII value in comparison to other factors. Work environment is followed closely by Work benefits and Job satisfaction. Thus, work environment, work benefits and job satisfaction are the factors that mostly influence the turnover intention of the construction professionals. Besides that, the Spearman's correlational analysis showed all seven identified factors (Job Satisfaction, Job commitment, Work Environment, Work Benefit, Colleague Relation, Organizational Politics and Person-Organization Fit) had significant correlation with the turnover intention of construction professionals. The results from this study may be useful to human resource department of construction companies to focus on major factors affecting turnover intention and develop better retention strategies.

In order to increase the reliability of the research, the scope of study can be extended to class C and Class D construction companies in Nepal as well. Also the relationship between the demographic characters such as gender, marital status and job position can also be analyzed. Furthermore, qualitative research design can also be added in the future studies. When both qualitative and quantitative research are added it may improve and enhance the findings of the result.

## 6. Acknowledgments

The authors would like to express the sincere gratitude towards whole faculty members, friends, respondents and all supporting hands whose help in finalization of this research within the limited time frame is valuable.

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