STUDY OF IMPACT OF JOB DESIGN ON EMPLOYEE ENGAGEMENT: A CASE STUDY OF ENERGY TRANSMISSION UTILITY IN PUNE REGION

Ms. Pratibha M. Anpat\(^1\) & Dhananjay Bagul\(^2\), Ph.D.
\(^1\)Manager (HR), MSETCL Pune, Email: pratibha@rediffmail.com.
\(^2\)Director, Saibalaji International Institute of Management Sciences, Pune, Email: dhananjaybagul@rediffmail.com

Abstract

Highly engaged manpower can increase innovation, productivity, and performance when their jobs are well designed. Job design represents the delineation of task responsibility as dictated by organizational strategy, technology and structure. This study explores the impact of job design on employee engagement at Power Sector of State Government undertaking in Pune region. The study considers the relationship between variables of job design which include skill variety, task identity, task significance, autonomy and feedback and employee engagement. The study employed cross-sectional survey design. Stratified sampling technique was used to get the sample size. Questionnaire was used to elicit information from respondents. Pearson correlation and Binomial test was adopted as a statistical tool for data analysis. Based on the data from the survey investigation of employees across three levels of employees of targeted Power sector in Pune. The results revealed that there is a significant positive relationship between job design and employee engagement. The study therefore recommends that management need to pay more attention to job design, by creating more opportunity for workers to contribute.

Index Terms - Job Design, Employee Engagement.

Introduction

The study aims to focus on correlation between Job design and Employee Engagement. The researcher aims to conduct this study at Maharashtra State Electricity Transmission Co.Ltd. (M.S.E.T.C.L.). The concept of Employee Work Engagement describes the extent to which employees are involved with, committed to and passionate about their work. In today's competitive environment, the challenge is not just retaining talented people, but truly engaging them, capturing their minds and hearts at each stage of their work lives. The researcher strongly believes that a well-designed job may foster employee well-being and engagement. Job design, basically, is specification of the contents, methods and relationships of jobs in order to satisfy technological and organizational requirements as well as the social
and personal requirements of the job holder (Buchanan, 1979). Hence in the modern management techniques, it is insisted to consider individual employees motivational needs while designing jobs so that employees can find scope for social interaction as well as personal development while performing their job, which can further lead to increased satisfaction and work engagement. The State Power Transmission utility is currently facing transition phase as more and more automation is being introduced viz. innovative training practices, fully integrated ERP/SAP system, and many more continuous technical upgradation. In view of this transition, the researcher aims to study the impact of job design on employee engagement and to find major factors that need to be taken into consideration when designing engaging jobs.

**Need of the Study:**

Highly engaged employees make a substantive contribution to their Organization and may predict organizational success. But the reverse holds true as well. Disengaged employees can be a serious liability. Customer satisfaction, employee retention, and productivity are all at risk unless disengagement can be controlled. Unfortunately, some studies show that workers in general are not engaged with their jobs. This lack of engagement affects large and small organizations all over the world, causing them to incur excess costs, to underperform on crucial tasks, and to create widespread customer dissatisfaction. Most of the recent research studies in the field provide clear indications that disengagement is a major problem for many types of the organizations. Out of the many drivers fostering Employee Engagement at workplace, the Job Design is the most important work engagement driver as it comprises of innovative and challenging work, decision making authority or autonomy as well as career advancement opportunities. The researcher proposes to design this study to help various organizations from M.S.E.T.C.L. understand and foster the positive state of staff engagement in their organizations through improved Job Design as required for transition into technological revolution.

1. **OBJECTIVES OF THE STUDY**

The study aims at making meaningful investigation into the effects and impact of Job Design in predicting employee engagement at various managerial levels of M.S.E.T.C.L.

1. To examine the relationship between skill variety and employee engagement in MSECTL.
2. To examine the relationship between task identity and employee engagement in MSECTL.
3. To examine the relationship between task significance and employee engagement in MSECTL.
4. To examine the relationship between job autonomy and employee engagement in MSECTL.
5. To examine the relationship between feedback and employee engagement in MSECTL.

**Hypothesis:**

H01: There is no significant relationship between skill variety and employee engagement.
H02: There is no significant relationship between task identity and employee engagement.
H03: There is no significant relationship between task significance and employee engagement.
H04: There is no significant relationship between job autonomy and employee engagement.
H05: There is no significant relationship between feedback and employee engagement.

**II. REVIEW OF RELATED LITERATURE**

Job design is the process of putting together a range of tasks, duties and responsibilities to create a composite for individuals to undertake in their work and to regard as their own. It is crucial: not only is it the basis of individual satisfaction and achievement at work, it is necessary to get the job done efficiently, economically, reliably and safely (Torrington, Hall, Taylor, and Atkinson, 2011). According to Armstrong (1991), job design is defined as deciding on the relationships that exist between the duties and responsibilities and the relationships that exist between the jobholder and his or her superiors, subordinates and colleagues. Job design specifies the content and methods of work by individuals and groups in the operational system. Because job design is reflected in labor expense, it affects the ultimate cost of the product or service.

Job design has been defined by Davis (1966) as the specification of contents, methods, and relationships of jobs in order to satisfy technological and organizational requirements as well as the social and personal requirements of the jobholder. Job design is concerned with a number of facets of a job such as what it consists of, the amount of variety in it, the pattern of tasks that make it up, the length of the work cycle, and so forth. Job design has two aims: first, to satisfy the requirements of the organization for productivity, operation efficiency and...
quality of product or service. Secondly, to satisfy the needs of the individual for interesting challenges and accomplishment. Clearly, these aims are interrelated and the overall objective of job design is to integrate the needs of the individual with those of the organization. Engaged employees are those who give full discretionary effort at work, and are highly vigorous and dedicated to their job, while disengaged employees are who are motivationally disconnected from work and are not enthusiastic at work. (Bakker et al. 2008, Towers Perrin 2009). Hence, the way jobs are designed and specific job characteristics affects the outcomes of the job and has strong impact on the performance of the employee, thereby leading to improved employee engagement.

III. RESEARCH DESIGN

In this study, a cross-sectional survey design is used. Cross- sectional design is used when information is to be collected only once (Malhotra et al., 1996). Cross-sectional survey design is justified on the ground that one should adopt one time observation, involving proximate and ultimate variables necessary for the study.

Collection of secondary data:

The secondary data related to the present study has been collected through various articles, research papers, published in various journals, periodicals, State Government’s White Paper, power Web portals such as PFC, Ministry of Power, REC, MERC, MahaDiscom etc. and from the manuals of Maharashtra State Electricity Transmission Company Ltd. Information available on the Internet has also been referred and considered for the purpose of the study. In brief, for the study purpose, survey was conducted for the collection of primary data. Questionnaires have been used as a main tool for collection of primary information from the well-structured questionnaires for esteemed employees of Maharashtra State Electricity Transmission Company Ltd. Their responses have been recorded and their views and opinions have been taken into consideration. The questions included in the interview schedule where developed on the basis of literature review and the objectives of the study. Several factors have been taken into consideration while formulating the questions for various sample units of the present study.

Collection of Primary data:

The primary data is collected through a well designed questionnaire. Primary data have been collected through the well-structured questionnaires for esteemed employees of Maharashtra State Electricity Transmission Company Ltd. such as Class I and class II employee.
Therefore, questionnaires have been used as a main tool for collection of primary data required for the study. The questions included in the questionnaire are open ended as well as close ended type.

**Population and Sample:** The population of the study involve employees from three managerial levels at MSECTL in Pune.

**Reliability Analysis**

- The Reliability Test was carried out to measure the value of Cronbach’s alpha.
- Reliability Statistics of Pune Region

A sample design is a technique for collection of samples from the population. Sample design is calculated before data is collected. The universe or population of the study is the whole working employees of MSETCL in Pune Zone. An individual employee of MSETCL is the sample unit of the study. Sampling frame of the study is the list of number of employees currently working in the organization at MSETCL.

Population: As per the 2018 employees in Pune Zone – 1533. Based on statistical methods the sample size for this study is considered as 225. However, 200 employees actually responded to the survey.

<table>
<thead>
<tr>
<th>Measurement(Pune)</th>
<th>Cronbach’s Alpha</th>
<th>No of items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top level</td>
<td>0.709</td>
<td>30</td>
</tr>
<tr>
<td>Middle level</td>
<td>0.716</td>
<td>50</td>
</tr>
<tr>
<td>Low level</td>
<td>0.742</td>
<td>145</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>225</td>
</tr>
</tbody>
</table>

To assess the reliability of the measurement items of all the variables, an internal consistency check was carried out. The Cronbach alpha from the test yielded a record of 0.807 for skill variety, 0.761 for task identity, 0.834 for task significance, 0.805 for autonomy, 0.764, 0.812 for feedback and engagement for 0.7330 which is far above the cut-off line of reliability.

**Framing of questionnaire**

A structured questionnaire is designed to extract information for the fulfillment of the objectives of the present study. The questionnaires are developed on the basis of literature review and the objectives of the present study. Many factors have been taken into thought, while shaping the sample population for the survey purpose. The population was limited to only employees of Maharashtra State Electricity Transmission Company Ltd.’s of Pune.
region. With a view to obtain the information regarding the researcher through this study aims to conduct an Exploratory or Formulative kind of study by formulating certain working hypotheses and discovering insights regarding impact of Job Designing driving Employee engagement and further impact of employee engagement on efficiency and productivity of MSETCL employees of MSETCL have been also included in the questionnaire.

**Analysis and Interpretation of Data**

The researcher has covered the main objectives of the study in his observations, findings and suggestions.

1. It is found that out of 200 respondents 84% respondents were male and remaining 64% were female.
2. Hence it is noticed that females are less employed in MSETCL in all three level Groups.
3. It is found that respondents from all level employees except middle level expressed that top management believes that employee is an extremely important resource in MSETCL and they have to be treated more humanly with them,
4. It is found that 46% from top level, 47% from middle level and 42% from low level stated that the senior officers/executives in MSETCL take an active interest in their juniors/subordinates and help them to some extent to learn their job.
5. It is found that majority (60%) respondents expressed that they can communicate properly and easily with their seniors/supervisors. Hence it is pinpointed that the upward communication process is well established in MSETCL.
6. From descriptive analysis majority of employee stated that job autonomy affects employee engagement to a high extent.
7. The study states that significant numbers of employees were not completely responsible for the decisions on how and when the work is done.

**IV. TESTING OF HYPOTHESIS:**

**Ho1:** There is no significant relationship between skill variety and employee engagement.

**Ha1:** There is a significant relationship between skill variety and employee engagement.

Statistical Test: Bivariate and Binomial test

Level of significance $\alpha = 0.05$ p value is less than 0.001 indicating sufficient Correlations between dependent variable. **Since p value is less than 0.05 the null hypothesis is rejected.**
Hence There is a significant relationship between skill variety and employee engagement.

Summary of correlation between skill variety and employee engagement

<table>
<thead>
<tr>
<th>Skill Variety</th>
<th>Employee Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson-Correlation Coefficient</td>
<td>1</td>
</tr>
<tr>
<td>Sig P 2 tail</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>200</td>
</tr>
</tbody>
</table>

Ho2: There is no significant relationship between task identity and employee engagement

Ha2: There is a significant relationship between task identity and employee engagement

Statistical Test: Bivariate Correlations

Variables and Measurement: Independent Variable Task identity and Dependent Variables – Employee

Observation: Level of significance $\alpha = 0.05$ p value is less than 0.001 indicating sufficient Correlations between dependent variable. Since p value is less than 0.05 the null hypothesis is rejected. There is a significant relationship between task identity and employee engagement.

From the descriptive statistical table it can be seen that, all the value is very high (when p value is more than 0.008)

Summary of correlation between Task Identity and employee engagement

<table>
<thead>
<tr>
<th>Task Identity</th>
<th>Employee Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson-Correlation Coefficient</td>
<td>1</td>
</tr>
<tr>
<td>Sig P 2 tail</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>200</td>
</tr>
</tbody>
</table>

Ho3: There is no significant relationship between task significance and employee engagement

Ha3: There is a significant relationship between task significance and employee engagement

Statistical Test: Bivariate and Binomial Test.

Variables and Measurement: Task significance and employee engagement.

Observation: Level of significance $\alpha = 0.05$ p value is less than 0.001 indicating sufficient Correlations between dependent variable. Since p value is less than 0.05 the null hypothesis is rejected.

Therefore, there is a significant relationship between task significance and employee engagement.
Summary of correlation between Task Significance and employee engagement

<table>
<thead>
<tr>
<th>Task Significance</th>
<th>Employee Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson-Correlation Coefficient</td>
<td>1</td>
</tr>
<tr>
<td>Sig P 2 tail</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>200</td>
</tr>
</tbody>
</table>

Ho4: There is no significant relationship between job autonomy and employee engagement
Ha4: There is a significant relationship between job autonomy and employee engagement

Statistical Test: Bivariate Correlations

Variables and Measurement: Independent Variable job autonomy Dependent Variables – Employee

Observation: Level of significance $\alpha = 0.05$ p value is less than 0.001 indicating sufficient Correlations between dependent variable. Since p value is less than 0.05 the null hypothesis is rejected. There is a significant relationship between job autonomy and employee engagement. From the descriptive statistical table it can be seen that, all the value is very high (when p value is more than 0.008 )

Summary of correlation between Job Autonomy and employee engagement

<table>
<thead>
<tr>
<th>Job Autonomy</th>
<th>Employee Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson-Correlation Coefficient</td>
<td>1</td>
</tr>
<tr>
<td>Sig P 2 tail</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>200</td>
</tr>
</tbody>
</table>

Ho5: There is no significant relationship between feedback and employee engagement
Ha5: There is a significant relationship between feedback and employee engagement

Statistical Test: Bivariate Correlations

Variables and Measurement: Independent Variable feedback and Dependent Variables – Employee

Observation: Level of significance $\alpha = 0.05$ p value is less than 0.001 indicating sufficient Correlations between dependent variable. Since p value is less than 0.05 the null hypothesis is rejected. There is a significant relationship between feedback and employee engagement. From the descriptive statistical table it can be seen that, all the value is very high (when p value is more than 0.008 )
Summary of correlation between Feedback and employee engagement

<table>
<thead>
<tr>
<th>Feedback</th>
<th>Employee Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson-Correlation Coefficient</td>
<td>1</td>
</tr>
<tr>
<td>Sig P 2 tail</td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>200</td>
</tr>
</tbody>
</table>

V. FINDINGS:
Findings of the study showed that the hypotheses which stated that there is no significant relationship between job design (skill variety, task identity, task significance, autonomy and feedback) and employee engagement was rejected, hence the alternative hypotheses accepted. In skill variety, this shows that employees are more likely to be engaged as a result of different range of skill possessed. Thus, people whose jobs are varied are more likely to experience a sense of energy in relation to their work. Some studies have shown that monotonous work can lead to psychological distress and disengagement (Morgeson and Humphrey, 2006). When a worker is responsible for a whole piece of meaningful work (task identity) and perceive their work as significant, then they are more likely to invest their whole self into their work and experience a sense of pride. Adam Grant, (2008) conducted an interesting experiment involving lifeguards that illustrates this point. The lifeguards were divided into two groups, the first group were read stories featuring heroic life guards and the second group were not read any stories. One month later, those who had heard the stories reported stronger feelings of self-worth than those in the second group. Such feelings of self-worth can generate high levels of engagement. Again, people whose work is autonomous experience a feeling of responsibility, and are more likely to invest effort into their work, even in the face of obstacles.

VI. CONCLUSIONS:
Based on the findings, the researcher concludes that job design has a significant positive relationship with employee engagement in the MSECTL. The way jobs are designed has a significant influence on engagement levels. This involves several inter-related areas like the design of the actual work itself; the setting within which work takes place; and the role of the line manager. The line manager has a significant and optimal role to play in creating an environment where workers can find their work engaging, through shaping job content, treatment of the role holder, and levels of trust. Consequently, jobs with these characteristics (skill variety, identity, significance, autonomy and feedback) are most likely to lead to high
levels of performance, positive attitudes towards work, and decreased negative attitudes and behaviours.

REFERENCES


Hackman, J. R., and Oldham, G. R. 1980. Work Redesign, Reading: Addison-Wesley