CHAPTER 3

METHODOLOGY
3. Methodology:

3.1 Research Type:
This study falls under the category of Conclusive Research. A conclusive research is meant to provide information that is useful in reaching conclusions or decision-making and to aid decision makers in selecting a specific course of action. Conclusive research can be a) Descriptive Research or b) Causal Research. This research falls under the subcategory of descriptive research.

3.2 Sampling plan:
3.2 a) Population
Permanent employees working with IT companies located in and around Pune.

3.2 b) Sampling Frame
The website named ‘Software Technology Park of India’ developed and maintained by Ministry of Communication and Information Technology served as sampling frame for the study.

3.2 c) Sample size
Sample size for the study was calculated using the mean method for sample size calculation using the formula: 
\[ n = \frac{Z^2 \times s^2}{e^2} \]
where \( Z \) is the standard score, \( s \) is the dispersion in the data, and \( e \) stands for tolerable error\(^{40}\). The sample size calculated accordingly came out to be 668. (Ref. Annex.V)

3.2 d) Sampling technique
A two stage random sampling was used for the study. In the first stage, 20 companies were randomly selected from the sampling frame, out of which 10 were the major IT companies like Infosys, IBM etc. and remaining 10 were a mix of small and medium size IT companies, eliminating deliberately those companies where employee strength was less than 1000 employees. In the second stage approximately 30-35 respondents were randomly chosen from each company ensuring, as far as possible, a proportionate

---

\(^{40}\) Lincoln University, Student Learning Centre, semester 2, p 1-2
representation of the three categories of employees i.e. Junior Level (less than 3 years of experience, including designations like Software engineer, asst system analyst etc.), Middle Level (3-6 years of experience, including designations like senior software engineer, system analyst, business analyst, assistant project manager), and Senior Level (above 6 years’ experience, including designations like Project Manager, Lead Consultant, Delivery Manager, Account Manager etc.)

A total of 672 responses were collected, out of which 492 were from Junior Level, 131 from Middle Level and 49 from Senior Level.

3.3 Data Collection:

3.3a) Primary Data: For Employee Engagement practices, information was collected from HR employees of IT companies through Discussions and unstructured interviews. Data regarding Employee Engagement Parameters was collected through a 34 item questionnaire especially designed for the purpose. Data regarding Employee Engagement drivers was sought through a 70 item questionnaire.

3.3b) Secondary Data: Additional data related to Employee Engagement practices was collected from company websites, journals, and other publications.

3.4. Scale Development:

3.4a) Scale to measure Employee Engagement:

To develop a scale for measurement of Employee Engagement, the researcher studied the popular definitions of the concept given by various renowned researchers and relevant organizations. From these definitions, ten common parameters of Employee Engagement were identified. These were basically the elements that collectively give shape to the very concept of Employee engagement. Then for each parameter a 3 to 5 item scale was developed. Utmost care was taken to ensure that the scale items of each parameter adequately captures the essence of the same. A 5-point likert rating scale was used for each item. For the purpose of data analysis, summated rating method was used for each parameter and the multiple item scale was converted into a single item scale.

The ten parameters of Employee Engagement and their respective indicators are as follows:

1. Energy, Involvement and Efficacy
   - I feel energetic about my work most of the time throughout the day.
• I consistently go an extra mile to improve my work performance.
• I like the type of work that I currently do
• I am able to utilize all my skills, knowledge and talent while performing my job.

2. Willingness to Innovate
• I have a set pattern of doing things which I do not prefer to change.(negative question)
• According to me the changes brought in by my company related to my work and the processes involved helps me to do better in my job
• I am able to keep myself abreast about changes and developments in my work area

3. Commitment to Business Success
• I am consistently engaged in organizational activities beyond my regular work (like recruitment, volunteering for social cause, etc)
• I derive personal pride if my company performs well and meets its goal
• I do my bit to help my company achieve its long term goals.

4. Discretionary effort and commitment to the job
• I like doing more than what is actually required in my job
• I stay in my office until the job is done even if I am formally not required to do so
• I am determined to be complete and thorough in all my duties including minor details

5. Sense of meaningfulness and active participation
• I understand my organization’s business, its goals and objectives.
• I understand how my role relates to company goals and objectives.
• I volunteer as an organizer in employee welfare activities (e.g. Outings, Bring your child day, fashion show)

6. Enjoyment
• I do not suffer from Monday morning blues
• Time passes quickly when I perform my job.
• I am rarely distracted when performing my job.

7. Emotional attachment
• My feelings are affected by how well I perform my job.
• I put my heart into my job.
• Currently I feel the need to change my skill set.
8. Passion and Profound Connection with the Organization

- I’m motivated to provide a high quality service to my company’s client
- If my company’s quarter results are bad my first reaction would be to look for another job
- I value the people I work with in this organization and feel happy working with them

9. Sense of Community/teamwork

- I feel part of a team working towards a common goal
- I meet my goals better by working on individual basis
- My team members feel free to ask for any help from me
- The inputs from my team members generally helps to take better quality decisions

10. Positive attitude towards the company and Loyalty

- I am proud to tell others that I am a part of this organization
- I would recommend employment at my organization to my family and friends
- The company inspires me to do my best work
- I believe that my organization offers good products/services
- I plan to continue working with my organization for a considerable period of time in future

3.4 b) Scale to measure Drivers of Employee Engagement:

Discussions and Unstructured Interviews with people from HR department of IT companies were conducted to prepare a comprehensive list of commonly followed Employee Engagement practices. These practices were naturally targeting some prominent drivers of Employee Engagement that have been identified by renowned researchers and consultancy firms specializing in Employee Engagement as revealed by literature review. Thus the researcher identified the common drivers that each of these Employee Engagement practices aimed at. These drivers came out to be 20 in numbers. Then for each of these drivers, a multiple item scale was developed. A 5 point likert scale was used for each item.

For the purpose of data analysis, summated rating method was used, and multiple item scale was converted into a single item scale for each Driver.
The 20 identified drivers of Employee Engagement and their respective indicators are as follows:

1. *Importance to employee opinion.*
   - In my workgroup, my ideas and opinions are acknowledged.
   - I can make meaningful decisions about how I do my job.
   - I frequently make suggestions to improve the work of my team/department.

2. *Effective, Capable and Credible Leadership*
   - I have confidence in the leadership of this organization.
   - The leaders of this organization cares about it employees wellbeing.
   - My boss/es inspire me to do my best work
   - I believe that my seniors have the capability to make the organization successful

3. *Regular and Specific Feedbacks*
   - I get regular and sufficient feedback about how well I am doing.
   - My supervisor tells me promptly whenever my performance falls below expectations.
   - I get regular suggestions from my supervisor on how to improve my performance
   - I receive timely and sufficient recognition for work that is well done

4. *Role Clarity*
   - Overall I have a good understanding of what I am supposed to be doing in my job.
   - My objectives and responsibilities are clearly defined.
   - I understand the importance of my role to the success of my organization.

5. *Teamwork*
   - People in my work group cooperate with each other to get the job done.
   - People in my work group quickly resolve conflicts when they arise.
   - People in my work group treat each other with respect and dignity.

6. *Smooth and Open Communication*
   - In this organization, the corporate communications are frequent enough
   - In this organization, corporate communications are detailed enough.
   - Changes that affect me are communicated to me prior to implementation
   - There is an open and a free flow of communication in my work group.
   - Information and suggestions are readily exchanged among various work groups.
7. **Job fit**
- There is a good match between the requirements of my job and the skills and abilities that I possess.
- I feel happy and satisfied about what I do.
- The job that I currently hold gives me just about everything that I want from a job.

8. **Relationship with coworkers**
- I like the people I work with in this organization.
- I feel happy when I think about my coworkers.
- Overall I have a good relationship with my team members.
- I have at least one good friend at my workplace.

9. **Relationship with immediate supervisor.**
- My supervisor treats me with respect and dignity.
- My supervisor handles my work related issues satisfactorily.
- My supervisor handles my personal issues satisfactorily.
- My supervisor acknowledges when I do my work well.
- My supervisor tells me when my work needs improvement
- My strengths, weaknesses and problems are well understood and acknowledged by my boss.

10. **Progress, Growth and Development**
- My Job provides me with the chances to grow and develop.
- In my work group, people are encouraged to pick up new skills and knowledge.
- This organization provides training or experiences to help me explore other possible opportunities within the company.
- I trust that if I do good work, my company may increase my pay.
- I trust that if I do good work, my company may consider me for a promotion

11. **Manageable workload and Stress levels**
- Stress levels in my job are mostly low to moderate.
- Deadlines in this organization are realistic
- I am able to maintain a reasonable balance between work and my personal life.
12. **Organization’s reputation for social responsibility**
- My organization is genuinely committed to fulfilling its social responsibility.
- My organization does a good job in regularly contributing to the communities in which we live and work.

13. **Confidence in Organization’s future**
- My organization is strongly positioned in the industry.
- My organization is well lead and the work is effectively managed.
- I have confidence in the future of my organization.
- My organization competes well against others in the industry.
- My organization adapts well to the changes in the environment by making necessary changes in its plans, strategies, processes etc.

14. **Organizations’ reputation for customer support**
- I feel that my organization cares about its customers/clients and is committed to them.
- My organization attentively responds to customers/clients’ needs and demands.
- My organization consistently receives high CSR scores (Customer Satisfaction Ratings).

15. **Culture of mutual respect**
- In my workgroup everyone is treated and respected as a unique individual irrespective of gender, religion, age etc.
- People in my work group understand and respect the things that make me unique.

16. **Comfortable physical work environment.**
- Overall my physical work environment (place where I sit, room temperature, lighting etc.) is comfortable for me.
- I have an easy access to materials and equipment needed by me to perform my job effectively.
- I feel physically safe in my work environment.

17. **Fair treatment**
- All employees in my organization are treated fairly regardless of gender.
- All employees in my organization are treated fairly regardless of age.
• All employees in my organization are treated fairly regardless of religion and caste.

18. **Satisfactory training**
• This organization provided as much initial training as I needed
• This organization provides as much ongoing training as I need
• This organization enables/facilitates me to attend trainings that are required for my career growth.

19. **Fair and justified payment**
• My pay is fair for the work I perform
• Overall, I'm satisfied with this organization’s benefits package
• My remuneration in this organization is as per the industry standards

20. **Promising future for self**
• There is room for me to advance in this organization.
• My company clearly tells me what is expected for advancement.
• I see a better future for myself in this organization.

Both the scales were pilot-tested with a small number of respondents (around 30-35) and suitable modifications were made in the scale items accordingly.

**3.5 Hypotheses for the study:**
With respect to the objectives of the study, following hypotheses were set for the same:

H1: At least one of the identified drivers of Employee engagement is a significant predictor of the Employee Engagement parameter ‘Energy, Involvement and efficacy’.

H2: At least one of the identified drivers of Employee Engagement is a significant predictor of the Employee Engagement parameter ‘Willingness to Innovate.’

H3: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement parameter ‘Commitment to Business Success’

H4: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement parameter ‘Discretionary Effort and commitment to the Job’.

H5: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement parameter ‘Sense of Meaningfulness and Active Participation’
H6: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement parameter ‘Enjoyment’.

H7: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement parameter ‘Emotional Attachment’.

H8: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement parameter ‘Passion and Profound connection with the Organization’

H9: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement parameter ‘Sense of community/teamwork’

H10: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement parameter ‘Positive attitude towards company and Loyalty’.

H11: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement for junior level IT Employees.

H12: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement for Middle level IT Employees.

H13: At least one of the identified drivers of Employee Engagement is a significant predictor of Employee Engagement for senior level IT Employees.

3.6 Statistical Tools used:

3.6 a) For Validity and Reliability of the scales
- Second Order Confirmatory Analysis (software used: AMOS)
- Cronbach Alpha Scores (software used: IBM SPSS 20)

3.6 b) For Hypothesis Testing
- Stepwise Multiple Regression Analysis using a bidirectional approach (software used: IBM SPSS 20)