

# Clustering Analysis Report

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## Executive Summary

This report presents a comprehensive analysis of the clustering of learners based on various metrics including Cost to Company (CTC), job position, work experience, designation, class, and tier. The insights drawn from each cluster have led to tailored recommendations aimed at enhancing learner placement with potential employers, thereby maximising their career opportunities. The data reveals significant variations across clusters, indicating a diverse talent pool.

## Insights and Recommendations

### Cluster 1: Exemplary Backend Engineers with Mid-Level Experience

**Insights:** This cluster comprises outstanding performers with a median CTC of 3,800,000, primarily holding the position of Backend Engineer, possessing 6 years of work experience, and classified as outperformers across designation, class, and tier.

**Recommendations:** Given their high performance and experience, it is advisable to connect these learners with leading technology companies that highly value such talent, ensuring they are placed in environments where their skills can be fully utilised and appreciated.

### Cluster 2: Seasoned Engineering Leadership with High Experience

**Insights:** Learners in this cluster predominantly occupy Engineering Leadership roles, with 15 years of median work experience and a median CTC of 2,940,000. Despite their extensive experience, their CTC matches the average within their companies, suggesting potential for higher earnings.

**Recommendations:** Focus should be on matching these highly experienced individuals with companies seeking seasoned professionals to leverage their extensive knowledge and leadership skills.

### Cluster 3 & 4: Developing Backend Engineers with Lower Experience Levels

**Insights:** Clusters 3 and 4 consist of Backend Engineers with low to very low median work experience (3 to 4 years) and CTC (800,000 to 600,000), indicating these learners are in the early stages of their careers.

**Recommendations:** Efforts should be concentrated on upskilling these learners, particularly in cutting-edge technologies and soft skills, to enhance their marketability to employers looking for promising, yet less experienced candidates.

### Cluster 5: Potential Medium Performers with Room for Growth

**Insights:** This cluster's learners are Backend Engineers with 3 years of experience and a median CTC of 750,000, positioned as medium performers. Their performance is average, indicating potential for development.

Recommendations: Upskilling and developing negotiation skills are critical for these learners to secure better positions and compensation, aligning with their capabilities.

#### Cluster 6: Engineering Leadership with Room for Advancement

Insights: With 10 years of experience and a median CTC of 1,130,000, these medium performers in Engineering Leadership roles demonstrate adequate performance but have potential for further growth.

Recommendations: These individuals should seek additional experience and upskilling opportunities to enhance their leadership capabilities and market value.

#### Cluster 7: Undervalued Backend Engineers with Moderate Experience

Insights: This cluster highlights Backend Engineers with 7 years of experience and a median CTC of 1,700,000, who are performing well but may not be fully valued by their current companies.

Recommendations: Advising these learners to seek opportunities elsewhere where their skills and experience are more aptly rewarded is recommended.

#### Cluster 8: High-Potential Young Backend Engineers

Insights: Young Backend Engineers in this cluster, with 3 years of experience and a median CTC of 1,500,000, are identified as top performers, indicating a strong foundation for a promising career.

Recommendations: Mapping these high-achievers to top tech firms eager to onboard young, talented candidates can offer them accelerated career growth.

#### Cluster 9 & 10: Diverse Performers with Significant Upskilling Potential

Insights: Clusters 9 and 10 showcase Backend Engineers with median work experiences of 3 and 7 years, respectively, with varying performance levels but generally positioned for significant growth.

Recommendations: Focused upskilling and career guidance can help these learners achieve their full potential, with Cluster 10, in particular, standing out for their high CTC (8,000,000) and performance, meriting placement with leading technology companies that value exceptional talent.