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Adaptive Employee Profiling through Advanced Clustering Techniques

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Abstract: *The Implementing training is a crucial tactic for creating workers with the abilities needed by the company and current trends. The present training procedure, however, is ineffective as it disregards the findings of yearly employee assessments and does not sufficiently take into account the demands of the workforce. As a result, there is now a discrepancy between corporate expectations and personnel skills. Finding appropriate training programs can be aided by using clustering techniques to categorize employees according to their annual assessment criteria. The clustering techniques K-Means and K-Medoids are used in this work. Work performance, discipline, loyalty, accountability, compliance, integrity, teamwork, initiative, and leadership are among the qualities that are evaluated. When employing k=3, the results reveal that K-Means and K-Medoids generate equal cluster groupings, with K-Means exhibiting a somewhat higher Davies-Bouldin Index (DBI) score than K-Medoids.*

Keywords: Employee performance → Workforce effectiveness, enterprise measurement → Company performance monitoring, evaluation management → Assessment process, and PSO algorithm → Swarm Intelligence approach

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