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A Scorecard Profile for the Auto Parts Industry In A Mexican Region

J Sillero-Pérez

Universidad de Monterrey

Corresphonding author's Email: jsillero@udem.edu.mx

Author Note: Juan Sillero Pérez made his Industrial Engineering Ph.D. from Texas A&M University in 1985. He has been working in the education service for higher education since 1971 in several Universities in México. Currently he is an associate professor of the Engineering Academic Department of the University of Monterrey.

Abstract: Productive practices in the automotive sector have evolved since the original assembly line for manufacturing the vehicle Ford T, until the new techniques of lean manufacturing derived from the Toyota Production System TPS which boom at the end of the last century. Today, most of the companies related to the automotive sector have adopted the principles of Lean Manufacturing as a strategy to improve its global competitiveness. Mexico is a good example of applying lean manufacturing in the cars and auto parts industry. Within each company, manufacturing operations are monitored for converting strategy plans into real value added operations, using lean manufacturing techniques and monitoring the KPI´s through a scorecard of the entire system. This research is focused to identify the common Scorecard Profile that characterized those automotive parts industry which production follows lean manufacturing principles, methodology and practices; the methodology consists in making a comparative analysis of scorecards between six companies of the sector from the same industrial region location. The sample includes two companies recognized as having good practice of lean manufacturing principles and techniques; other two with a medium degree of development, and the other two with an incipient development. Similarities and differences were identified based in the analysis of their scorecard; as a result, a common profile were developed which represent an 80% of the total list of metrics reported, including the following broad components: a) Quality of goods and services, b) Productivity and process performance, c) Product Delivery, and c) Safety and Human Resources. The other 20% of the metrics were devoted for other specifics aspects of their particular operations strategies. As a result, having a generic scorecard profile of the auto parts industry, it is possible to make comparisons where a company can derive benchmark programs and undertake actions for improve and raise its productivity rates. Other relevant finding from this research is a lack of important metrics in the lean manufacturing scenario, recommended for accreditation purposes, such as kaizen activity, leadership, employee's job satisfaction, and the innovation and continuous improvement, among others.

Keywords: Lean manufacturing, Scorecard profile, Auto parts industry