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Evaluating the Factors that Affect the Reverse Logistics Performance in Plastic Supply Chain

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Abstract - **Reverse Logistics includes all the processes involved in moving goods from their typical final destination to recapture value or for proper disposal. This study aims to identify the factors affecting reverse logistics performance within the plastic supply chains in Sri Lanka and theidentification of factors that would facilitate the enhancement ofreverse logistics performance. Factors were identified through literature review and by industry experts. Factors were classified under five domains: economic and market factors, knowledge and awareness factors, policy and legislature factors,management and leadership factors, and technology and infrastructure factors. Factors were analyzed using the Partial Least Squares, Structural Equation Modelling (PLS-SEM) technique to evaluate their effect on reverse logistics performance. Results of the analysis show that the policy and legislature factors are the only significant factor to affect reverselogistic performance in plastic supply chains in Sri Lanka. All the remaining factors do not show a significant relationship withthe reverse logistics performance though they show a positive correlation with the performance.**

Keywords - barriers, factors, PLS-SEM, reverse logistics, supply chains