

Quantification Of Uncertainties Related To The Implementation Of Reverse Logistics Process

Authors : Dnaya Soukaina

Abstract : It's over six decades that Reverse logistics had appeared as a research area, and it is emerging again and again in the scientific fields. As reverse logistics presents real potential for value recovery and environmental impacts decrease, it's still necessary to extend this concept more in the industrial and commercial field especially in developing countries. The process of reverse logistics is a progression of steps beginning with the customer and finishing with the organization or even the customer, however the issue is that this cycle must be adjustable to the organization concerned, in addition of legislative, operational, financial and social obstacles. Literature had demonstrated that there are many other uncertainties while the implementation of this process that vary in function of the sector concerned and the kind of activity. Besides, even if literature is developing this topic over the last years, reseraches about uncertainties quantification in reverse logistics process still being few. the paper has the objective to fill this gap, and carry out a study to identify sustainable strategies that can be adapted to different industrial or commercial sectors to facilitate the implementation of reverse logistics.

Keywords : reverse logistics, implementation, unceratinties quantification, mathematical model

Conference Title : ICSSC 2025 : International Conference on Sustainable Supply Chains

Conference Location : Paris, France

Conference Dates : June 24-25, 2025