Reverse Logistics Information Management Using Ontological Approach

Authors : F. Lhafiane, A. Elbyed, M. Bouchoum

Abstract : Reverse Logistics (RL) Process is considered as complex and dynamic network that involves many stakeholders such as: suppliers, manufactures, warehouse, retails, and costumers, this complexity is inherent in such process due to lack of perfect knowledge or conflicting information. Ontologies, on the other hand, can be considered as an approach to overcome the problem of sharing knowledge and communication among the various reverse logistics partners. In this paper, we propose a semantic representation based on hybrid architecture for building the Ontologies in an ascendant way, this method facilitates the semantic reconciliation between the heterogeneous information systems (ICT) that support reverse logistics Processes and product data.

Keywords : Reverse Logistics, information management, heterogeneity, ontologies, semantic web

Conference Title : ICMIMT 2015 : International Conference on Mechanical, Industrial, and Manufacturing Technologies **Conference Location :** Barcelona, Spain

Conference Dates : February 26-27, 2015