

Initial Assessment on Feasibility of Remanufacturing Practice: Case of Air Conditioners

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Abstract- Due to the environmental regulations and economic viability, many industries show growing interest in the product recovery. Product recovery strategies (sometimes called end-of-life (EoL)) are recycling, remanufacturing, reuse, and refurbishment of components. Remanufacturing is a process that brings end-of-life product to its "like-new" conditions, the process recover product functions and quality, the remanufactured product is as its equivalent new with same warranty and less purchasing price. The price difference is associated with saving in energy, material and other resources recovered from the EoL product. The air-conditioning is the most energy consuming sector in Saudi Arabia (the geographical location of the study) where it consume 60-70% of the total residential energy. This study provide initial investigation and assessment of Business models for remanufacturing of window air-conditioner., a survey regarding the customer behavior has been conducted, it assesses how users deal with EoL Air-Conditioner, it also measures their perceptions about the remanufacturing process. Moreover, the paper describes the importance of remanufacturing in the context of reverse logistics. Results show that the cost structure is the driving force of conducting the remanufacturing of the air-conditioner.

Keywords: Remanufacturing; business model of remanufacturing; air conditioner.