USING ANP TO EVALUATE RFID SYSTEM ADOPTION FOR MANUFACTURING INDUSTRY

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ABSTRACT

After the economic downturn in 2008 and 2009, of RFID in 2010, recovering well, The future five-year period of the fastest growing application projects in the manufacturing, business services, healthcare and life sciences, retail and logistics.
Due to production and manufacturing core industries in Taiwan, Lead to study manufacturing import RFID factor analysis of decision mechanism issues.
First extensive collection of RFID literature, various industries into the case of RFID applications, Understanding of RFID in various industries to import considerations, To explore the manufacturing import RFID Evaluation factors, ANP analysis of the weight of evaluation factors,
List 4 dimensions and 12 assessment indicators, weight and rank,
Cost dimensions- RFID Hardware costs:weight 0.1906;rank 1, Maintenance costs:weight 0.0838;rank 6, System integration costs:weight 0.1535;rank 3,
Efficiency dimensions- Improve operational efficiency:weight 0.0861;rank 5, Production tracking:weight 0.0302;rank 10, Information accurate real-time share:weight 0.0317;rank 9,
Corporate environment dimensions- IT Base:weight 0.0354;rank 8, leader determination:weight 0.1568;rank 2, Team technical capacity:weight 0.1444;rank 4,
Other considerations dimensions- Operating environment and interference problems:weight 0.0186;rank 11, Partners technical capacity:weight 0.0111; rank 12, System flexibility:weight 0.0577; rank 7,

Keyword: ANP RFID