

**Integration of the Max-Min Fuzzy Delphi and Grey
Situation Decision AHP Method in equipment supplier
selection evaluation: A case study for TFT-LCDs
manufacture**

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ABSTRACT

Shift with generation trend and People's quality of life was also rising rapidly, In order to meet changes of the market demand and production life cycle was imperative for enterprises. Relatively, the quality is very important of production produced by itself to meet our customer base with the end consumer, If it caused by poor market reaction then will be effect seriously losses of enterprises. Therefore, how to prove that it's the enterprise have to respect for the responsibility.

This thesis develops aimed at integration case, the TFT-LCDs panel manufacturer, product quality verification equipment selection of suppliers. The decision process of case study consists of three phases: First at all, review past literature with used to the Max-Min Fuzzy Delphi Method for selection assessment of major / sub-criteria. Second, applied the Analytic hierarchy process (AHP) obtained the combined weight values for each level assessment criteria. Third, Used to weight values of the sub-criteria take as sample values ratio with integration of Grey situation decision making (GSDM) for the obtained combined effect measure and decision optimal alternatives. Finally, the research results of this case study for the company as supplier selection important reference.

Keyword: Supplier selection · the Max-Min Fuzzy Delphi Method · Analytic Hierarchy Process (AHP) · Gray Situation Decision Making (GSDM)