A Study on the Industrial Technology Forecasting Utilizing Delphi Method
- Centering around the Delphi Questionnaire -

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Abstract

When the government plans or promotes R&D, it is necessary to forecast technological trends based on the consensus of experts. Delphi method saw a usefulness sometimes in querying experts by questionnaire and recirculating questions until a consensus among experts was obtained.

In this study, preliminary question survey and 2-round Delphi technological forecasts in 103 industrial technologies were carried out. Preliminary survey was investigated to find both what industry (technology) will be main business forces about 2010 year in Korea and what should be. Delphi groups (member) that were participated to industrial technology-predicting forecasts are 875 in first round and 601 in second.

Each expert was classified into 4 groups according to self-decision by the degree of specialty on the predicting technology (area). And they were requested to predict technical importance (1~4 level), socio-economic importance (1~4 level), realization time (1~4 level), the degree of confidence (1~4 level), leading country (1~4 level), the technological level of Korea (1~4 level) and the political alternatives (1~4 level).

Based on the 2-round Delphi procedure, it is expected that incremental and significant technologies will be main business force about 2010 year in Korea than breakthrough technologies.