

GUIDELINES FOR DEVELOPING THE DESIRABLE COMPETENCIES OF OPERATIONAL LABORS IN THE PETROCHEMICAL INDUSTRY

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ABSTRACT

Aim: This research aims at investigating guidelines for developing the desirable competencies of operational labors in petrochemical industry.

Methodology: The study has been designed as a mixed method by developing the analysis of structural equation model through qualitative data and the quantitative data were derived from the survey of 500 managers in petrochemical industry.

Finding: The results revealed that: 1) the guidelines to develop competencies consist of 4 variables, i.e. knowledge management, characteristics of professional labors, resource based management, and teamwork. The managers from plastic industries and those from injection molding and packaging industries gave the important on the guidelines at high level with 3.77 and 3.74 respectively. When considering on each variable, it was found that every variable was rated at high level. 2) The development of the SEM Model passed the criteria and congruent with the empirical data with the Chi-Square Probability level of 0.081, Relative Chi-Square was 1.204, the goodness of fit index of 0.970 and root mean square error of approximation of 0.020. And 3) the hypothesis test showed that the resource based management variable had direct influence on knowledge management with the factor loading of 0.96. The resource based management variable had direct influence on teamwork with the factor loading of 0.83. The knowledge management variable had direct influence on characteristics of professional labors with the factor loading of 0.75. The teamwork variable had direct influence on characteristics of professional labors with the factor loading of 0.30. The statistically significant level was 0.001

Conclusion: The guidelines for developing the desirable competencies of operational labors in the petrochemical industry consist of 4 variables which all are important for developing competencies of both plastic industries and injection molding and packaging industries. The factor is ranked according to their important levels referred to as Likert scale as follows: knowledge management, characteristics of professional labors, resource based management and teamwork respectively. Both types of industries gave the most important factor on teamwork variable in order to be a guideline for developing the desirable competencies of operational labors in the petrochemical industry. The evaluation of the SEM Model showed passing the criteria of the model fitting with the empirical data. It was found that Chi-Square Probability Level was 0.081, Relative Chi-square was 1.204, Goodness of fit Index was 0.970 and Root Mean Square Error of approximation was 0.020.

Keywords: Petrochemical Industries, Desirable Competencies, Developing Labor Competencies, Structural Equation Modeling.