Abstract

By the end of the 1990s, the origination of the industrial evolution has occurred. The product and process were redesigned to the new paradigm in order to achieve the maximum productivity. By means of the economies of scale, the production has been expanded to achieve the lowest cost of production. Researchers mentioned that plant maintenance is to repair defective equipment, maintain equipment so as to prevent failure, complete small to medium sized capital project, keep track of the capital equipment inventory, provide some utilities and monitor the receipts of others, provide or purchase painting and cleaning. Its activities affect the performance of the plant in five of its major responsibilities-production, quality, cost, safety and housekeeping.

The Interruption of the production is one of the most significant problems that resists the reaching of economies of scale. Down time of the machinery is the enemy of production, and since the production is what we all live from, down time must be kept at the minimum. When the machine broke down in the recent years, it generated the difficulties in repairing it due to the unconditional and unskilled labor that would bring about the longer downtime.

In pursuant to the early statement of the problem of this research , we may query " What factors are associated with selection of maintenance service provider ?". We put the attempt in the petrochemical industry as the key target respondents with the aim to identify their specific needs in the selection of the maintenance service provider.

Results from the test of 18 hypotheses as shown in table 5.6 confirm that 14 out of 18 are said to bear relationship between pairs of independent and dependent variables. Only 4 out of 18 hypotheses do not show the statistical significance, which means there is no relationship between pairs of independent and dependent variables. Since the concepts, as mostly appear in the independent variables, are composite measures, an index measure technique is used. Reliability test of such concepts by "Cronbach alpha" value indicates the certain acceptance of whether such particular concepts are statistically

applicable for further test of association with the dependent variables. From the analysis part , it can be concluded that the factors that are associated with the selection of maintenance service provider consist of:

1. Tangibles

❑ The equipment used in maintenance service activity,

2. Reliability

❑ Price or wages of the maintenance service,

❑ Meeting project deadlines criteria ,

❑ The completed agreement and specification between provider and client on goals and objectives,

3. Responsiveness

❑ Quick Responsiveness in Service,

❑ Rapidity of Service,

❑ Convenience of communication,

4. Assurance

❑ Quality of Staff / serviceman,

❑ Working Experience,

❑ Past job performance,

❑ Service provider's current client,

❑ Service Provider's National Prestige and Reputation,

5. Empathy

❑ Location of service station and

❑ Client production comparing to market demand