

### **Construction work and the worker : comparative study of Craft & Mass Scale technologies**

Two distinct technologies of construction knowingly the ancient Craft oriented form and modern Mass Scale form are commonly deployed within the construction industry. In the traditional Craft technology, one can observe the artisans building products to a customer's specifications, taking long manufacturing lead times, without any standardization, either in the products or in the manufacturing process. In contrast, Mass Scale form can be considered as a continuity of production implying a steady flow of demand; standardizations; integration of the different stages of the whole production process; a high degree of organisation of work; mechanisation to replace manual labour wherever possible; research and organised experimentation integrated with the process.

The main objectives of this research paper were to, identify the differences in terms of the nature of work and the characteristics of the workers who are involved in the two distinct construction technologies. A comprehensive literature survey, structured questionnaire survey and limited number of case studies were carried out to elicit information from workers. The questionnaire was separated in to two main sections that: (1) questioned the workers about their understanding towards the nature work they carry out; and (2) requested information regarding the personality of the individual worker. In overall terms, based on the average percentage of occurrence by two methodologies, the skills (total of 74%) and experience (65.5%) of the workers together with the responsibilities given to and taken by them (71%) gained a clear edge by the Craft technology, whereas supervision (70.6%), rules and regulations (60.8%) and management influence (62.8%) achieved high total scores in Mass Scale technology.

Detailed comparative study carried out on individual worker characteristic of personality showed some considerable variations among the workers of two technologies. It depicts that among Craft orientated workers, autonomy, achievement and nurturance are the frequently found and dominating personality traits with respective mean percentages of 18.2%, 16.4% and 11.6%, whereas among Mass Scale workers, deference (13.73%), achievement (13.33%) and order (12.87%) are the leading personality traits. All in all, one can observe a clear inter-relationship among the areas, which have scored high values in the nature of work and worker personality.