ABSTRACT

Refuse collection is an essential service of buildings. With increasing demand for quality waste management and increasing shortage of labour, a pilot project using fully automatic pneumatic refuse collection system was carried out at one of the Housing & Development Board (HDB) estates. However, the system was discontinued because of high cost. The aim of this study is to evaluate this system via another perspective i.e., using Value Management. The assessment of Value Management tool is based on the functions of the system through interviews with various stakeholders.

The study showed that the pneumatic refuse system scored the highest point on a set of criteria (i.e., ease of maintenance, efficient use of resources in terms of initial and running cost, does not pollute environment, minimal reliance on human workers, convenient and safe to contractors and residents) against alternative refuse systems such as the centralised refuse chute and individual refuse collection systems in HDB estates. However, using value/cost ratio in value management, the study found that the pneumatic refuse collection system is still high on cost.

Keywords
Refuse, HDB estates, Pneumatic Refuse Collection System, Value Management, Function, Value/Cost ratio