

Chapter 3: Research Methodology

This chapter discusses the research methodology used in the study. It begins with research instrument; follow by sampling design, data collection procedure and data analysis techniques. The selection of measure and scale reliability is discussed at the end of the chapter.

3.1 Research Instrument

Quantitative methodology via survey research is the most appropriate method in explaining the behavioural patterns as the measures are based on reliable scales, and able to quantify the strength and relationship amongst the variables.

The structure of questionnaire is comprised of two main sections, where section one represents the main questionnaire, which consists of seven (7) parts. Part one is to identified the type of construction materials being considered in the evaluation, part two examines “brand sensitivity”, part three covers “perceived purchase risk” on organizational level, part four examines “perceived purchase risk” on individual level, part five investigate on “purchase importance”, part six inspects “purchase complexity”, and finally part seven measures the “time pressure”. Section two of the questionnaire basically captured the respondent’s demographic profiles, includes: gender, age, education background, roles & function with the company, job title, years of experience in construction industry, years of attachment with current

employer, roles of the company, estimated size of the company and the company's ownership structure.

The initial questionnaire was pre-tested with approximately fifty respondent, slight revisions were made to the questionnaire based on the feedback from the respondents and review from supervisor. The revision mainly involved stating clearer instruction and expands the information covers under the respondent's demographic details.

3.2 Sampling Design

The targeted respondents are professional that participate various stages of purchase decision making process in the construction industry, which includes: property developers, architects, ID designers, civil and M&E consultants, quantity surveyors, various level of contractors, installers, manufacturers, distributors, dealers, agents and etc. This study drawn ad hoc sample on a cluster basis, by taking consideration on the heterogeneity (esp. on roles & functions) among the respondents under study. Unlike simple random sampling, cluster sampling enable elements that have heterogeneity among the members within each group are chosen for study. Cluster sampling also offers more heterogeneity within group and more homogeneity among groups.

3.3 Data Collection Procedure

The research data was collected by means of survey. Survey questionnaire was distributed via convenient method, covering mainly construction professionals in Klang Valley area. Majority of the respondents are those who have been dealing with the author in various stages of the purchase decision making process. The author has over 10 years of working experience in distributing construction materials, and represents over 200 principals/brands. Most of the respondents were contacted via telephone and face-to-face interview.

A total of 500 survey questionnaire were distributed and 325 questionnaires were completed and returned, reflecting a response rate of 65.0%. Others respondents have been refused to participate in the survey due to reasons such as: busy, prohibited by management, and etc. However, only 318 questionnaires were deemed usable for data analysis due to the remaining questionnaires were incomplete.

3.4 Data Analysis Techniques

Screening was done to check common errors such as missing values and etc. upon the returned of questionnaire. The questionnaires that were incorrectly fill in or illogically answered will be discarded, and replaced by another set of completed questionnaire.

Next, data was coded following the scales measurements. The data was analysed using SPSS version 17. Frequency and percentage counts were calculated when generating demographic profile of respondents, mean and standard deviation was calculated for all variables.

Prior to the testing on the hypotheses, the reliability and validity of the measures is to be tested using Cronbach's Alpha reliability test. Cronbach's Alpha is a reliability coefficient that indicates how well the items in a set are positively correlated to one another, and the scores are computed in terms of the average inter-correlations among the items measuring the concept. The closer Cronbach's Alpha score is to 1.0, the higher the internal consistency reliability. In general, reliabilities than is less than 0.60 are considered to be poor, those in the 0.70 range are considered acceptable, while those over 0.80 are considered good (Sekaran, 2003). The Cronbach's Alpha reliability test also help to determine whether any items within a measure should be included or to be discarded from the analysis. Once the reliability of the measure is determine, correlation analysis is to be run on the six measures to determine if there are any significant correlation exist between the variables:

- Dependent variable : "brand sensitivity"
- Independent variables : "purchase importance",
"purchase complexity",
"Time pressure"
- Intervening variables : "perceived purchase risk"
- Control variables : "Gender",
"Roles & functions"