PERCEPTIONS OF RISK
BASED ON LEVEL OF EXPERIENCE
FOR HIGH-RISE BUILDING CONTRACTORS

Djoen San SANTOSO 1, Stephen O. OGUNLANA 2 and Takayuki MINATO 3

1 Saitama University, International House, 645 Shimo-okubo, Saitama 338-8571, Japan.
E-mail: sgd2055@post.saitama-u.ac.jp
2 School of Civil Engineering, Asian Institute of Technology, PO Box 4, Khlong Luang, Pathumthani 12120, Thailand.
E-mail: ogunlana@ait.ac.th
3 Institute of Environmental Studies, University of Tokyo, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656, Japan.
E-mail: minato@k.u-tokyo.ac.jp

Abstract
Risk is part of everyday life. The assessment of the degree of risk is considerably influenced by the perception of the assessor towards the risk. A questionnaire survey and interviews were carried out on engineers of building contracting firms in Jakarta to determine the influence of experience on perception towards risks. The result shows significant differences in the assessment of the degree of risks due to differences in the level of experience. Experienced engineers tend to assess the degree of risk lower than less-experienced engineers. Familiarity in dealing with risks and the position of experienced engineers in the management level are the main factors contributing to the assessment. Nevertheless, experienced engineers give high rankings to political, regulatory and environmental risks. The job function of experienced engineers, i.e. planning and decision-making, have a strong influence on their perception. The unstable internal condition of Indonesia has contributed to the concern on political and regulatory risks. Meanwhile, the nature of high-rise buildings and the lack of environmental awareness in engineering life and education have contributed to risks related to environmental regulations.

Keywords
risk, experience, perception, high-rise construction, Indonesia

INTRODUCTION

It is commonly believed that construction projects, irrespective of size, are inherently risky. The heterogeneity of construction projects, the numerous processes involved, environment and organisation, are the main reasons for the risks (Flanagan & Norman 1993; Raftery 1994; Kim & Bajaj 2000).

Risk management involves predicting and anticipating events that may cause undesirable impacts on projects. Risk is an abstract concept. It is difficult to define and, in most cases, impossible to measure with any degree of precision (Raftery 1994). However, it is very important to identify potential risks as early as possible in the project preparation stage to enable preventive actions to be considered and implemented. Once a risk is identified and defined, it ceases to be a risk, it then becomes a management problem (Flanagan & Norman 1993).

In general, the degree of risk can be measured from two aspects of probability and impact (Papageorge 1988; Edward 1995; Zhi 1995; Chapman & Ward 1997; and Kumaraswamy 1997). Probability concerns the likelihood of the risks and impact concerns the magnitude of risks to the projects. The two aspects are used in this study.