

C-H. CHOI, J. LEE, Y-J. PARK, J-Y. SOH, C-H. HAN. **A preliminary study on a visual quantity takeoff manual.** *Gerontechnology* 2012;11(2):72; doi:10.4017/gt.2012.11.02.403.00 **Purpose** The purpose of this research is to suggest system configuration for a visual quantity takeoff manual<sup>1-3</sup>. **Method** (i) Literature Review: IETM (Interactive Electronic Technical Manual), BIM (Building Information Modeling), estimation and quantity takeoff. (ii) Surveys: survey on the current status of estimation tasks and demands for technological advancement to professionals; survey on level of understanding in estimation and quantity takeoff and knowledge acquisition methods for young engineers (e.g. undergraduate students). (iii) Conceptual design for a visual manual: defining the contents and procedures for quantity takeoff; investigating knowledge acquisition methods and new trends for communication in education; conducting UI (user interface) for IETM-type manual. **Results & Discussion** The main result of the research is a visual quantity takeoff manual (Figure 1). The manual includes contents such as the quantity takeoff task-related process, scope, useful arithmetic formula, etc. The contents will be expressed in an integrated multimedia format of text, pictures, video, 3D-model, animation, and so on. The manual will be used as a reference guide for experts. This active and dynamic learning method will also help young architectural and civil engineers.

**References**

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*Affiliation:* Kyung Hee University, Seoul, South Korea; *E:* choich@khu.ac.kr

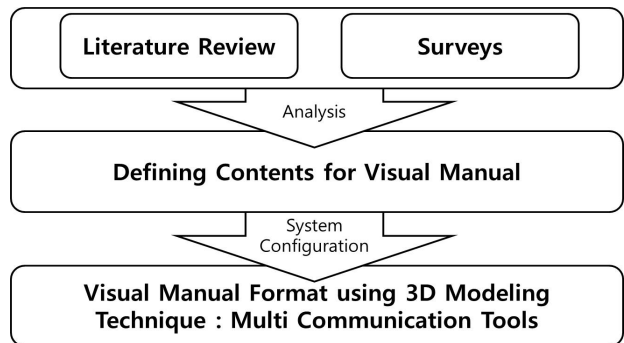


Figure 1. Concept of Visual Quantity Takeoff Manual