INTERNATIONAL TRANSFER OF CAD/CAM CONSTRUCTION TECHNOLOGIES: CASE STUDY OF A GERMAN–IRANIAN PARTNERSHIP

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Abstract

Considering the increasing interest in international technology transfer, and the increasing need of Iranian society for safe housing, this paper examines the multinational contributions that help assure successful introduction of advanced CAD/CAM construction technologies into developing countries, taking Iran as promising example and considering Germany as the technology source. In particular, the paper focuses on construction of safe housing as the major burden of sustainable development in emerging nations. Technology transfer projects include transfer of knowledge (software) and skills/tools (hardware). In this case, the technology project has been divided into three parts, the CAD/CAM software, the automated CNC-machines and the knowledge/skills to run the enterprise. Based on technology transfer models gathered from previous literature, and consideration of existing technical, organizational, and cultural issues a model for the successful transfer, localization and implementation of CAD/CAM construction technologies is developed. This study reveals that successful transfer of the high-level CAD/CAM technologies requires involvement of a diverse group of individuals, corporations, and non-business organizations in both countries. These stakeholders have been identified and their involvement in the process of preparation, planning, decision-making, construction and implementation has been demonstrated.

Keywords
CAD/CAM, Germany, Iran, developing country, international technology transfer, earthquake proof housing.