

The Potentials of Information and Communication Technology in Architecture

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ABSTRACT

The current development of Information and Communication Technology (ICT) has present new ways or methods, new products, and finally presents new needs to our civilization. In the field of architecture, ICT also present new things which span the conceptual dimension to practical tools and techniques. For example, the roles of ICT in Architecture have moved from a mere tool of drafting to something that is closer to the design way of modes such as a data integration and decision support. Recently with the emergence of iterative and computational design, ICT in Architecture has move a little bit more further to the realm of artificial intelligence. With the Internet, ICT has also become the tool which promotes collaborations not only among the professionals but also with other stake holders of architecture such as the clients and the users. And thus ICT has evolved from a mere tool for architecture to become “partner” for the architects, designers, the related professionals and finally the users of architectural products at large.

In order to push the frontier of ICT and architecture, one of the aspects to be seriously considered is how ICT can be integrated to the architecture education. From several sources it is known that the integration of ICT to architecture seems to be not in the form of simple extension to the present curriculum. If ICT could really be integrated to architecture education, it must not be done in a superficial manner but must also touch the deep structure of the curriculum and how we think and do about architecture. Therefore, after describing how architecture can benefit from the application of ICT, the paper will propose a curriculum development which involves the ICT and its integration the overall curriculum of architecture education in Indonesia.

Keywords: *ICT, architectural process, computational design, internet, curriculum.*