SUMMARY

Since the eighties, Singapore has seen rapid developments in information technology (IT). In addition, with the advent of the Internet, electronic commerce or e-commerce has developed at a tremendous rate and is taking the world by storm. Within the scope of the real estate and construction sector, in an attempt to provide a faster approval for development applications, the Urban Redevelopment Authority has looked into IT to provide the quantum leap in the processing of development applications. A new service called the Electronic Development Application (EDA) System was established to allow architects to make development applications electronically over the Internet. EDA is the among the first system in the world that allows for the electronic submission of both textual information and CAD drawings for processing and approval by a public agency on a national level. EDA is also among the first systems in Singapore to make use of NETRUST certificates for authentication and verification on the Internet.

The implementation of EDA is not without its teething problems. The implementation of the EDA system involves a major change in the mindset of developers, architects, owners as well as other government consultation agencies as it involves the latest in technology and is treading on grounds which is relatively uncharted. The transition from processing manual plans to processing development applications electronically in a paperless environment is long and difficult with many obstacles - technological, financial, legal, political, social, in the way.

In the findings, with the increasing use of IT in the construction sector today, it is necessary for the government to provide systems that help ensure greater efficiency and productivity for the architects and developers. There is also a need for close collaboration between all sectors of the industry to work together to bring the level of IT literacy to a higher level.
On the industry's end, while the level of IT literacy is high, there is a need to establish a common standards both in CADD usage as well as in CADD layering conventions. Not only will the establishment of a national standard benefit the government agencies, the standards will also enable architects to share the CADD files with downstream processes like quantity surveyors, engineers and surveyors etc.

Within the organisation, one of the biggest challenge is to manage the transition of the manually operated work processes to that of the electronic version. The re-engineering of the existing process should be carried out in tandem with the conception and development of such a system.

One cannot emphasise enough the importance not to blindly get on the IT bandwagon as the successful user of IT is not necessary the one who employs all that is available but he who picks the most appropriate for the class of business whose problems are to be addressed. One should gauge the level of readiness of the industry and more importantly the readiness of its internal structure and system.