POLYTECHNIC OF TORINO FACULTY OF ARCHITECTURE 2 Degree in Architecture <u>Honors theses</u>

The architectural artefact between knowledge and preservation. Survey and analysis : a comparison between traditional methods and information technology

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Before I get to the heart of this thesis, I think I should explain why I chose to tackle this subject with methods and principles completely different by comparison to those used in the past.

The last fifteen years have witnessed tremendous advances in the technology concerning personal computers, that is little systems for personal use as opposed to the great international nets on which the big industries and the top-level research rely, and this has produced machines with a calculation power which had been hardly reached by the big systems of the past.

This fact has had a favourable effect on the way work is organised in all those workplaces where management of data and scientific rigour have always been necessary to provide quality products.

Many production sectors have been invested by what has been defined as the computer revolution, first of all the economic world where computers could process considerable amounts of data in a short time transforming and processing them using complex mathematical formulas. Secondly the publishing industry where a massive computer presence has made it possible to produce magazines and printed matter with great accuracy and countless possibilities of revision and subsequent corrections. The world of big industries, where the so-called "numerical control machines", that is traditional machines controlled by computers, and actual robots have replaced man in some particularly delicate or risky operations.

The world of architecture too has been able to take advantage of this technological innovation, especially since machines, the so-called hardware, and the programs, the so-called software, have been offering design an adequate support. As we said this special machine has attracted the attention of many people who have expressed their need for software suitable for them, possibly straightforward and easy to learn to avoid long periods of training which would be totally unproductive and therefore very costly for a company's budget.



For this reason there has been a proliferation of software that has been improved through use and given the possibility of testing on the job the working potential of instruments, and has produced some very powerful and reliable backup information.

The very strong impact of the computer revolution is only starting to be felt now. The explosion of Internet as the main means of goods and services distribution throughout the world is changing economy, markets, company structure, work, consumers' attitude, but overall our world is changing and so is our role in it.

Today using personal computers and information systems to perform both simple and complex operations isn't unusual anymore: this fascinating world, made for the experts, of infinite sequences of 0 and 1, results, for the people who use a personal computer to play or for work in an endless number of sounds, colours, texts, pictures, animations and interactive services. The software which can provide a variety of services performing in real time such complex operations that would be practically impossible for men even if given infinitely longer times.



A lot of the software widely commercially available, from the most sophisticated to the simpler ones, are devised in such a way as to give the user the possibility to model and to manipulate their internal functions and to allow him to create new functions or to personalize the existing ones according to his needs.



Moreover the technological evolution of the so-called hardware (all those parts that are commonly called "computer", from the screen to the physical memory, from the keyboard to the mouse) has been nearly as fast as software development and therefore today we have at our disposal a really big potential with systems which are within everybody's reach, in fact very often the most sophisticated systems available today are often used more for entertainment and amusement, with really captivating games, than for work.

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