

SMART HOUSING & INTELLIGENT BUILDINGS

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“Smart housing” is a new concept that would change the lifestyle. The rapid advances of IT and automation has allowed application of many concepts, man has been dreaming of since the beginning of this century. Modern “smart homes” and “intelligent buildings” define a building using a controller integrating; management, security, appliances and multimedia communication systems. SH objectives are achieving comfort, security in addition to time, energy and management cost savings. Automation and multimedia has been successful in helping handicapped and monitoring old people.

However, application has revealed that some SH were inappropriate, costly and complicated to normal users, with average intelligence. Moreover, over fulfilling of personal desires and simplifying of home duties, would disorder the lifestyle, and could harm the inhabitants, socially, physically and finally psychologically.

SH should be appropriate to all involved parties, and coexist in a favorable context of intelligent users and cities. Automation technologies require widespread changes to the housing process, changes that call for cooperation among architects, systems’ designers, manufacturers of construction components, utility suppliers, and regulatory agencies. Review and analysis of some recent SH projects, shows that there is no consistent method of developing appropriate technologies for smart housing, which meets the true needs of the end user.

The research investigates applications’ shortcomings, and tries to define a frame work of appropriate SH, which does not neglect the known architectural requirements to achieve function, stability, flexibility, ethics, psychological and physical comfort in a reasonable cost. The paper concludes that a real smart home should comfort body and soul of inhabitants, respond to new life functions while developing positive lifestyles. As SH offers new horizons in the housing concepts and applications, appropriating SH would represent a turning point in the in the housing growth.