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| Smart building in Palestine |

Smart building connected much system into a single system. Smart Building involves the installation and use of advanced and integrated building technology systems. These systems include building automation, life safety, telecommunications, user systems, and facility management systems.

Smart buildings recognize and reflect the technological advancements and convergence of building systems, the common elements of the systems and the Additional functionality that integrated systems provide. It also provides actionable information about a building or space within a building to allow the building owner or occupant to manage the building or space.

In addition it provides most cost effective approach to the design and the deployment of building technology systems. The traditional way to design and construct a building is to design, install, and operate each system separately

Smart building takes a different approach to designing the systems. Essentially, one designer designs or coordinates the design of all the building technology systems into a unified and consistent construction document.

 The construction document specifies each system and addresses the common system Elements or integration foundation for the systems. These include cabling, cable pathways, equipment rooms, system databases, and communications protocols between devices.

Occupants can be controlled exiting systems through computer internet mobile and other communication devices between inside and outside building. This process reduces the inefficiencies in the design and construction process Saving time and money. During the operation of the building, the building Technology systems are integrated among all subsystems and allowing information and data about the building’s operation to be used by multiple individuals occupying and managing the building

Generally, in Smart Building various components are connected to a network that tells them when to turn on, when to turn off, Smart buildings take automatic decisions such as security and safety by itself which has been programmed by system before like Warning if their a fire or storm the building then call police or fire station, start heating at low temperatures, Open air conditioning at high temperatures ,Close the curtains when the you have glare and Close the windows if we have rain . Or manually decision introduced by occupants before time period like

Sent message to building to heat.

Smart buildings are also a critical component regarding energy usage and Sustainability of buildings. The building automation systems, such as HVAC control, lighting control, security, safety, fire, power management, and metering play a major role in determining the operational energy efficiency of a building.

The driving forces for smart buildings are economics, energy, and technology. Intelligent building is one that provides a productive and cost-effective environment through optimization of its four basic components - structure, systems, services and management - and the interrelationships between them. Smart Building provides:

* Productive and cost-effective built environment through optimization of its four basic components structure, systems, services and management and the interrelationships between them, Focusing on the benefit of the owners and their desired indoor environment.
* So as to maximize the efficiency of its occupants, Focusing on the benefit of the users and creating desired indoor environment for occupants.
* Allows effective management of resources with minimum life costs, focusing on the benefit of the managers and the environmental and economic impact of creating desired indoor environment.

Therefore:

* The built environment should be productive, safe, healthy, and thermally, aurally and visually comfortable.
* The building has potential to serve future generations: sustainability or adaptability over the life cycle of the building and safeguarding the earth and environment resources.
* Financial aspect: the building can be built within some cost constraints whilst retaining market value.

Smart building has been configured to use technology to increase comfort, enjoyment, security, energy efficiency and convenience.

Here is a list of some of the great things that you can choose from for a smart building. One-button lighting to change the scene for a room or more, Whole house audio systems – enjoy high quality music anywhere, Distributed video systems – watch a DVD or cable in any room, Access phone and Internet from any location, Monitor your house remotely via the Internet, Access and monitor security cameras from anywhere, Monitor your front door on any TV, Check your pet door remotely to see if it has been used – lock it, Manage your lawn irrigation system to save water & keep your plantings healthy, Let your refrigerator help you with a shopping list, Close the window blinds from Paris or your bedside, Check to make sure your basement isn’t flooded, Monitor temperature and/ or humidity inside to detect problems, Adjust the heating and cooling for maximum energy savings, Adjust the heating and cooling for comfort, Monitor and adjust electrical demand for energy savings and lower cost and Control or monitor just about anything you want from anywhere in the world.