



Control Network Solutions

O P E N I N G N E T W O R K F R O N T I E R S

The 21st Century Building Debate

*It's not just about the building's structure,
It's about the substance,
Its impact on the people and the environment it shares*

Mike Welch 2005

The discussion on the future of commercial and industrial buildings has never been more intense. Dialogue between designers, constructors and users now centres on how Information Technology is shaping the way buildings are being designed, built, operated, and experienced in the connected world we live in today.

It will be an experience borne from intricately intertwining the buildings and the facilities within them with Internet technologies and with the users' desire to live in a 21st century environment. It is an experience we will demand; that the buildings of our future are controlled, managed and connected in a way that goes far beyond simply installing a web server that displays abstract data from the control system.

It will result in how Internet related technologies and Web Services will transform the manner in which buildings and business systems connect to each other, blowing away the limitations of traditional integration.

There will be a need to look at buildings in a fresh light, considering the experience of the building user and owner in order to deliver a **"Strategy for the most efficient use of equipment to meet operational needs of business"** based upon Open and De-facto Standards.

21st century buildings will be considered a living entity that continually adapts itself to the changing internal and external environment, the use to which it is being put and the needs of the businesses it supports.

Such a paradigm requires that building systems and business data can no longer be isolated from the minute to minute changes in these issues.

This new 21st century experience must be sensitive to the immense investment owners have in their buildings, and must present a way for facility managers to leverage existing systems and assets to work in this context.

It is incredibly important that the opportunity afforded by this new 21st Century experience addresses and contributes to the care for the scarce resources we have on planet Earth. Enormous opportunities exist today to adopt technologies that will enable buildings to use less or even no fossil-based energy, and so produce less harmful carbon emission.



Control Network Solutions

O P E N I N G N E T W O R K F R O N T I E R S

21st Century Experience Delivery –

- ❖ This cannot be owned by any one element, but driven for and by all those involved in how buildings need to adapt to the enormous opportunities enabled by the Internet revolution.
- ❖ Present to building owners, developers and operators a new and alternative value proposition, an alternative view of the traditional ways we have looked at buildings in the past. This proposition goes beyond looking at buildings simply as a box to house people or things, but an active component of real-time enterprises that makes the world what it is today.
- ❖ Defines new ways to design buildings, from the strategic thought process of space allocation to the architectural and mechanical/electrical designs that occur before buildings are constructed. It will recognise that the design only represents a small part of the life of a building, which if done right can make the building flexible and valuable for decades of productive use.
- ❖ Define the manner in which we construct buildings, specifically how we include the myriad of disciplines that operate buildings into a well-woven integrated partnership ensuring an on-time, on-budget delivery of the vision of the owner or developer.

21st Century Solutions based upon Open or De-facto Standards must –

- ❖ Fundamentally be technology neutral.
- ❖ Recognise that almost all of the technologies in use today have only existed for a fraction of the time that most buildings have remained standing.
- ❖ Recognise that flexible Open or De-facto standards must be adopted to make technology work. Adopted technologies must be truly open, be uncontrolled by any single entity, and unencumbered by any unreasonable economic constraints for its use.
- ❖ Recognise that information is the true currency of technology.
- ❖ Focus on information models that cover the broadest perspective of buildings from design to operation; information models must easily enable interoperability between the seemingly disparate stakeholders who have interests in buildings.
- ❖ Recognise security and regulatory constraints as well as issues such as privacy and safety.



Control Network Solutions

O P E N I N G N E T W O R K F R O N T I E R S

CNS's Team Offers -

Innovative technology and solutions that can deliver this 21st Century experience today. Yet in many ways the history and tradition that has rooted the industry to old ways remains strong, creating barriers that would inhibit the realisation of these new opportunities. There is a need to work with all parties involved at the very earliest stages including the client/architect and client consultant so that all participants can be involved in the rewards afforded by these new opportunities.

Contact CNS and we will help you develop, adopt and implement these 21st Century solutions, and make it the only acceptable way we should be looking at buildings.