TIA Technology Programs:
SMART BUILDINGS

A Holistic Approach to Assessing Smart Buildings

With the commercial smart building market expected to grow to $70 billion by 2023 according to reports from CABA, Navigant Research and Markets and Markets, and an estimated 10% increase in value for occupant-optimized facilities, as reported by Morgan Stanley, the Information and Communications Technology (ICT) industry, commercial Real Estate Investment Trusts (REITs), building owners, and governments are embracing the smart building concept as the new gold standard in today's commercial construction world. Emerging 5G, low-latency networking, sensor technologies, and IoT applications are now paving the way for advancements that will make buildings even smarter.

Within the smart building ecosystem, key stakeholders are looking to define investment strategies, planning tactics, design principles, and operational procedures that will deliver maximum return on investment (ROI) and increased revenue through higher occupancy rates and property values. To drive wider adoption of smart buildings, both as standalone real estate assets and as building blocks of smart cities, the industry needs a comprehensive, reliable, and measurable framework of assessment criteria for smart buildings.

LEADING THE WAY

The Trusted Industry Association for the Connected World.

As both a standards organization and an industry trade association with more than 400 members and 2,500 key contributors and thought leaders representing all aspects of ICT, TIA has the industry experience, expertise, advocacy, and leadership to unite the various stakeholders across the smart building ecosystem. TIA is also leading the way in successfully launching related technology programs for 5G edge data centers and supply chain security which are fundamental to enabling smart buildings and smart cities.

In 2017, TIA merged with QuEST Forum, an organization that has successfully delivered effective third-party performance-based measurements, assessments, and benchmarking programs for many of the world's leading companies for over 20 years. This experience provides a successful foundation for the development and evolution of new assessments and benchmarking to help guide smart building planning, design, development, and operations.

The TIA Smart Building Working Group

TIA's Smart Buildings Program brings together ICT professionals with real estate, architecture, engineering, and construction experts into a Working Group comprised of various teams that are:
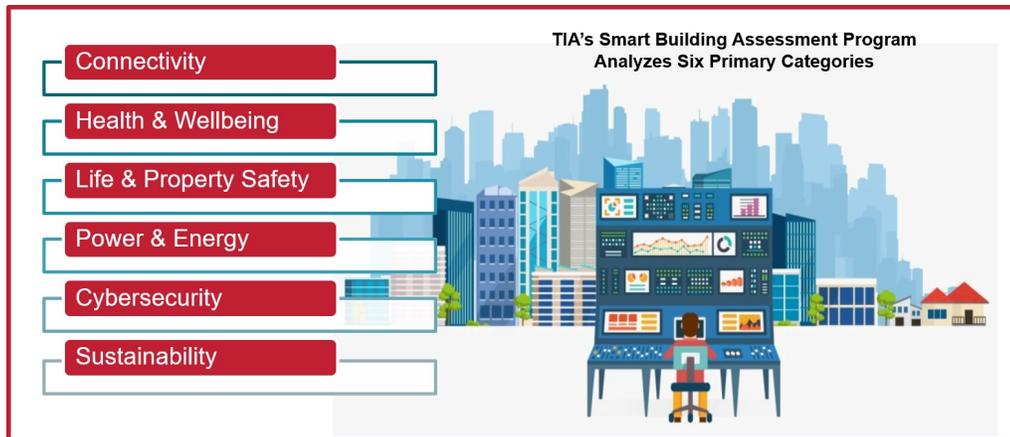
- Developing holistic assessment criteria around six primary smart building categories: connectivity, health and wellbeing, life and property safety, power and energy, cybersecurity, and sustainability.

- Establishing a smart building assessment program that will produce a verified rating score for smart buildings and provide valuable benchmarking and performance data.

- Gathering subject matter expertise and data collected through smart building assessment verifications to develop consensus-based, industry-driven standards for smart buildings.

TIA's Smart Building Program

Holistic Assessment Criteria

The definition of a smart building has evolved over time, but only when all building systems are fully integrated and sharing data, so they be managed through a single pane of glass with minimal human intervention, can a building truly be considered smart by today's expectations.

While some building assessment tools, certifications, and ranking indices provided valuable insight as smart buildings emerged, they have remained fragmented in their approach, focusing on a singular building category. With rapid advancements in technology, assessment criteria must account for all six major aspects of a smart building.

TIA's Smart Building Assessment Program Analyzes Six Primary Categories

- Connectivity
- Health & Wellbeing
- Life & Property Safety
- Power & Energy
- Cybersecurity
- Sustainability

Who Will Benefit from the Program?

The design and build of smart buildings involve a highly complex ecosystem of stakeholders that spans multiple industries, all of whom benefit from accelerated smart building adoption enabled by a holistic approach to assessment.

Commercial REITs, building owners, and developers will benefit from higher property values, while building operators and facility managers will decrease operating expenses and reduce risk. The entire ICT industry will see growth from the deployment of ICT infrastructure and connectivity that comes with accelerated smart building adoption.

At the same time, building tenants will see improved safety, security, health, wellbeing, and productivity, while visitor experience will be enhanced through services like smart parking, digital signage, and wayfinding. Through smart buildings that serve as the building blocks to smart cities, governments and municipalities will improve public safety, emergency response, and quality of life for residents, while reducing energy and resource consumption.

GET INVOLVED

Join TIA's Smart Building Program as we establish the framework for assessing, benchmarking and standardizing smart buildings. Contact us today at sbinfo@tiaonline.org.

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