



BEYOND
SMART CITIES

LEARN.BEYONDSMARTCITIES.IN

WELCOME TO BEYOND SMART BUILDING COMMISSIONING - SBCX

ONLINE TRAINING

KRISHNAJI PAWAR - CEO & FOUNDER



3. Smart Building Assessment

KRISHNAJI PAWAR, LEED AP BD+C, GSAS CGP, ISO 14001:2015, GCP
COMMISSIONING SPECIALIST CURRICULUM



NEXT



Smart building commissioning programmes create a plan for getting the most out of a building by making sure it is properly assessed and planned. A building's long-term health can be hurt by a piecemeal approach to keeping it running well. But an integrated, smart, and digital approach that combines one-time projects with ongoing services can cut energy costs and let performance keep getting better.





Preparing Countries & Tomorrow's Commissioning Specialists

BEYOND
SMART CITIES

NEXT



Learning Objectives

- Brief Introduction
- A modular approach to commissioning
- Energy costs and aging infrastructure remain key challenges
- Leverage the data from your Building Automation System (BAS)
- Advancing the way your facilities operate



Introduction

- Costs of energy and an outdated infrastructure continue to be significant obstacles.
- Since modern buildings use a significant amount of energy and are becoming older, these structures are ideal candidates for facility upgrades that might result in reduced operating costs, increased dependability, and the avoidance of costly capital investments.
- But perhaps most crucially, building owners and facility directors alike are eager to take advantage of chances to create the perfect places to work by enhancing occupant experiences and working conditions.

SMART building commissioning programs continue to evolve.

- Our Smart Building Commissioning solution to current building commissioning enables the optimisation of building systems and equipment to optimise performance and efficiencies.
- In reality, SBCx projects can produce 10 to 20% energy savings and often pay for themselves in approximately two years.
- Nowadays, we acknowledge that all building systems and components are capable of generating and processing vast quantities of data; yet, data is only helpful when it is converted into action.
- SBCx is particularly cost-effective due to its ability to harness the power of digitalization and use available data to drive the commissioning process.

SMART Building Commissioning

Smart building commissioning programmes produce a road map for optimising the performance of a structure by utilising correct evaluation and planning. A fragmented approach to facility performance maintenance can jeopardise the building's long-term health. But, an integrated, intelligent, and digital approach that blends one-time activities with ongoing services can simultaneously decrease energy expenditures and enable continuous performance enhancements.

Smart Building Commissioning (SBCx) is a modular building performance optimization program

- Alignment of your existing building assets with the current needs of your business and facility
- Reduction of critical system failures and unexpected, costly downtime
- Extended equipment lifecycle, helping to reduce the effects of unplanned capital expenditures
- Improved performance of systems and spaces while minimizing hot/cold calls and other, similar comfort complaints
- Reduced operating costs and energy consumption





A modular approach to commissioning

We begin with a systematic process for investigating, analysing, planning, and implementing low-cost improvements to building systems and spaces; these improvements can be implemented across your entire facility or in a modular, phased approach that is aligned with your business goals and objectives. The SBCx is an alternative to conventional system and building-wide commissioning that enables a streamlined, efficient, and comprehensive process.



NEXT



We transform buildings into adaptive spaces that enhance business continuity through operational efficiency, minimize energy and deliver maintenance expenses, and energy intelligence.



Assessment

Here we assess the current state of your facilities and define our scope of work—including the application of digital tools—that will guide us moving forward.



Investigation

This step allows us to establish a baseline of performance and uncover precise issues your building systems face.



Implementation

We take corrective actions via our remote digital services; these can apply to mechanical, electrical, automation, and other building systems.



Hand-Off

Here we create required reports, data analysis, additional facility requirements, and recommendations to share with you.



Persistence

This phase takes over with monitoring-based commissioning (MBCx) and other digital strategies to continuously optimize systems and equipment.

Smart Building Assessment

A data-driven approach to the beginning your commissioning project:

- Remote/On-site Data Analysis
- Identification of CFRs
- Development of the commissioning plan
- Initial walk-through of building
- Identification of commissioning corrective actions (CCAs) and hypothetical commissioning conservation measures (CCMs)



Energy costs and aging infrastructure remain key challenges

- The buildings of today use a significant amount of energy. And as they become older, their facilities are ready for upgrades that may assist lower operating costs, enable higher dependability, and help minimise capital expenditures. These upgrades can be beneficial in all three of these areas.
- Yet, and this is arguably the most essential point, building owners and facility directors are prepared to take advantage of chances to create the perfect places to work, which are locations that have improved working conditions and the experiences of occupants.



Leverage the data from your Building Automation System (BAS)

- Modern building systems and components may produce and analyse vast quantities of data. Yet, data is only helpful when it is converted into action. BSC' alternative to conventional energy audits, Smart Building Assessments, use the power of your BAS data and reporting capabilities to intelligently identify improvement possibilities.
- Streamlined data analysis, combined with insights from BEYOND SMART CITIES' engineers and systems specialists, may find low-cost, high-impact strategies for enhancing the performance of your facility in ways that were previously impossible.



Smart Building Assessments	vs	Traditional Audit Approach
Data-driven		Clipboard driven
Low-cost, high-value repairs and sequence changes		Major equipment replacements and repairs focus
Repeatable, scalable, fully remote		Labor intensive, expensive, onsite
Complements Fault Detection + Diagnostic services		One-time, standalone analyses



Advancing the way your facilities operate

Smart Building Assessments (SBA) are the initial step towards optimising building performance. A fragmented approach to facility performance might jeopardise the long-term health of your building, whereas an integrated, intelligent, digital-first approach can cut energy costs and enable continual performance enhancements.



Advancing the way your facilities operate





Thanks

Learn From Beyond Smart Cities
Online professional courses led by
the world's top specialists



KRISHNAJI PAWARI
SUSTAINABILITY SPECIALIST

LEARN.BEYONDSMARTCITIES.IN