

EDGE BUILDING INTELLIGENCE

Master Technology Planning & Adoption Process – MTP

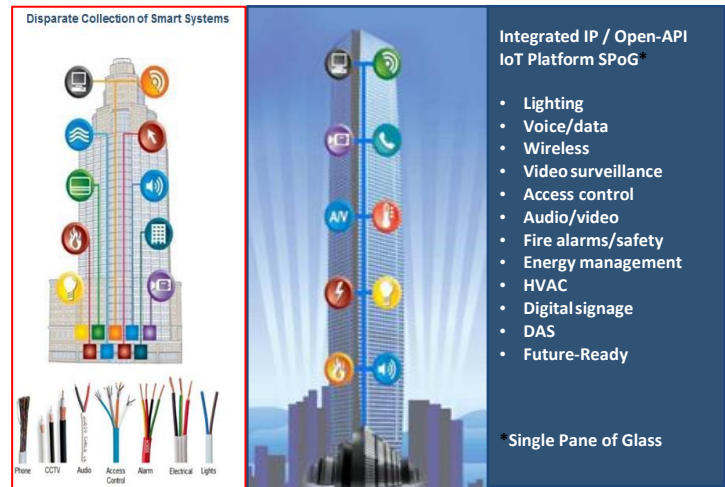
EDGE - *Building Intelligence's* proven technology adoption method replaces traditional siloed building-systems with an integrated solution that lowers cost, satisfies design goals and minimizes disruption to traditional construction efforts. EDGE simplifies adoption and data-normalization issues by establishing procurement guidelines and sequences in the early phases of development.

EDGE's *Master Technology Planning Process* (MTP) is a technology-adoption approach authored by EDGE leadership and embraced by Cisco Systems' *Smart & Connected Real Estate Division* as the standard. EDGE *Building Intelligence™* leadership completed more than 100 IP-Optimized MTP projects in the Americas.

EDGE provides for free value engineering assessments which show 1st-cost reduction opportunities. MTP's greater value is in assuring that a "smart" project will deliver on the promises of operating, energy efficiency and productivity value enhancements.

- MTP delivers a roadmap for the non-disruptive adoption intelligent technical building solutions.
- MTP supports net-zero initiatives, superior energy efficiencies.
- The MTP provides the guidelines and framework to integrate all building systems on a unified and data-normalized IP network fabric.
- MTP lowers overall construction costs \$2-\$5 sq. ft.
- MTP supports development of more valuable, responsive and energy-efficient properties.

VALUE CREATION: EDGE reviews your present-state construction documents and returns value engineering comparisons to a traditional build.



Value Engineering Opportunity – ADDRESS	
STRATEGIC ELEMENT: IP/PoE Lighting	
DATE: 03-20-2020	
Initial Strategy:	Recommended Change: <input checked="" type="checkbox"/>
Strategy Notes	Financial Implications
<ul style="list-style-type: none"> • Largest financial impact (>4000 lights) • Support net-zero initiatives • Reduce energy consumption & materials density • Migrate to lower cost material and labor • Meet/exceed code requirements 	<ul style="list-style-type: none"> • Minimum net CAPX savings \$185,000 • 7% Light Load Energy/Emission Reduction • Better value will improve speed of sale/lease • Increase cash flow, ROI & property values
Pros/Cons	Next Steps
<p>PROS</p> <ul style="list-style-type: none"> • Efficient residential platform • Less material more e-efficient • Design base for integration (-\$) • Platform focus • Responsive tenant environment • High-value features • Scalable, adaptable platform • Improved control • Reduce footsteps for staff • Improved security • Future-proofed <p>CONS</p> <ul style="list-style-type: none"> • Need to address non-LED lights • Need address space issues 	<ul style="list-style-type: none"> • Orient project team to new direction • Adjust fixtures L1, L1A, L25 (L19 3 QTY) • Define performance requirements • Redesign for IP/PoE behind lights • Integrate Telecom TC Series (Spaces) • Integrate Security SE Series (Connectivity) • Develop Optimal Technology Architecture • Create integration specification Division 25 • Modify specifications in Division 26 & 27 • Create LOI for the bid process.
Construction Documents to be Impacted	Supporting Data
<ul style="list-style-type: none"> • 25 Specifications • Divisions 26 & 27 Specifications • Division 28 Specifications • MEP Drawings • Architectural Drawings • Telecom & Security Drawings 	<ul style="list-style-type: none"> • Architecture Drawing 50% CD • Electrical Drawings 50% CD • Specifications 50% CD • Telecommunications 50% CD • Security 50% CD

Value Engineering Opportunity – ADDRESS	
STRATEGIC ELEMENT: A.I. Heat Load Management (HVAC)	
DATE: 03-20-2020	
Initial Strategy:	Recommended Change: <input checked="" type="checkbox"/>
Strategy Notes	Financial Implications
<ul style="list-style-type: none"> • Next Generation (beyond green) • Real time –dynamic HL management • Simple Installation • Show impact down to submeters 	<ul style="list-style-type: none"> • Expected Investment \$75k - \$100K • Expected annual Savings \$25k - \$30k (Shared) • Shared ROI 4 years • Speed of Lease • Tenant Satisfaction
Pros/Cons	Next Steps
<p>PROS</p> <ul style="list-style-type: none"> • Artificial Intelligence • 5-10% total load and cost reduction • Efficient Residential Platform • Better Common Area Control • Simple Installation • Major Differentiation • Higher Building Energy Grade • Lead the market GHG-ready • Exceed LEED and WELL <p>CONS</p> <ul style="list-style-type: none"> • None 	<ul style="list-style-type: none"> • Brief entire project team on new direction • Review the Energy Model • Define BMS Strategy (Sequence of Operations) • Define performance requirements • Add A.I. content to Division 23 & 25 • Create Single line controls diagram for mechanical • Create LOI for the bid process
Construction Documents to be Impacted	Supporting Data
<ul style="list-style-type: none"> • 25 Specifications • 23 Specifications • MEP Drawings • Architectural Drawings • Telecom & Security Drawings 	<ul style="list-style-type: none"> • Architecture Drawing 50% CD • Electrical Drawings 50% CD • Specifications 50% CD • Telecommunications 50% CD • Security 50% CD