# CAPSTONE PROJECT: MODULE 3

## Project Dragon:
## Catalysing Blue Ocean Strategy for Sustainable & Digitalised Excellence of Verticals at Johnson Controls

**Student: Terence Tan**
**SSBR ID#: SSBR/2023/PhD27041965 of PhD by Portfolio Program**

Submission Date: 30th April 2024

# Table of Content

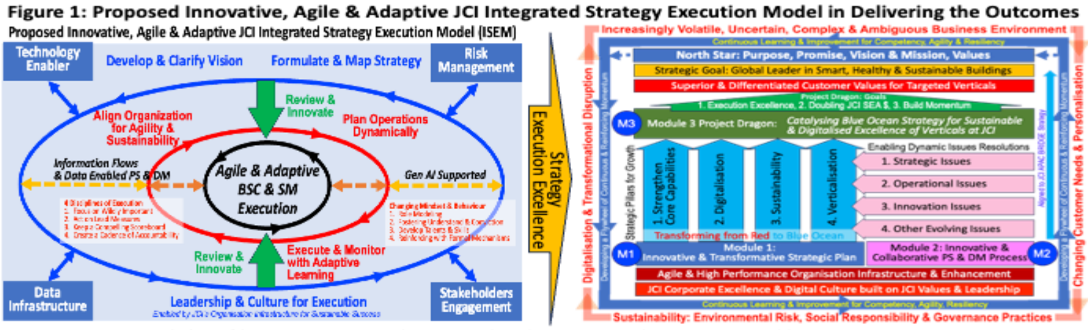
## 1.0. Executive Summary

1.1. The strategic plan detailed in Module 1 features 4 key pillars: Strengthen Core Capabilities, Digitalization, Sustainability, and Verticalization. It aims to double Johnson Controls Inc.'s (JCI) South East Asia's business growth, boost productivity and increase profitability by 5%. Supported by the collaborative problem-solving and decision-making process from Module 2 (both modules covered 50 analysis in total), JCI is well-prepared to transit from a competitive Red Ocean to a Blue Ocean environment. The objective is to leverage its customizable and comprehensive building technologies and solutions to reinforce JCI's global leadership in smart, healthy, and sustainable buildings.

1.2. It is an awakening fact that up to 90% of strategy implementations fail. Addressing this challenge is critical for many firms. This issue calls for a focused development of an integrated strategy execution model. This model underscores critical success factors such as leadership, corporate excellence culture, stakeholder engagement, communication, and risk management to ensure the success of JCI's Strategic Plan.

1.3. Titled "Project Dragon: Capitalizing Blue Ocean Strategy for Sustainable & Digitalised Excellence of Verticals at Johnson Controls", Capstone Project Module 3 is designed to meet 3 objectives. These include excelling in strategy execution, doubling the business of JCI SEA through an innovative business model, and fostering continuous momentum for business sustainability and resiliency in a VUCA environment.

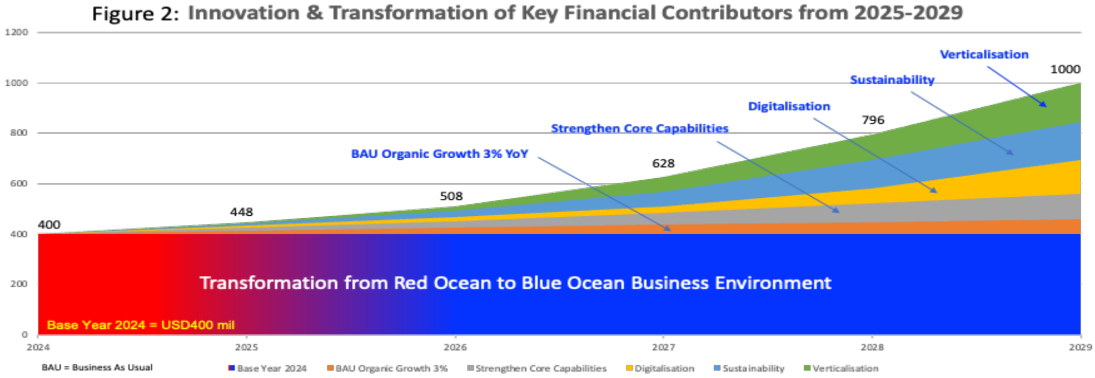
**Figure 1: Proposed Innovative, Agile & Adaptive JCI Integrated Strategy Execution Model in Delivering the Outcomes**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Proposed Innovative, Agile & Adaptive JCI Integrated Strategy Execution Model

1.4. Guided by an enhanced performance metric that comprises clear objectives, measurements, targets, and initiatives through the agile and adaptable Balanced Scorecard, Strategy Map and JCI ISEP, the strategic plan is executable in 9 steps. This methodology will enable the realization of an innovative, transformative, and disruptive Blue Ocean business model. The projections include 250% growth in Secured Orders, 270% growth in Revenue, and a 5.6% increase in profitability from the financial year 2025 to 2029.

**Figure 2: Innovation & Transformation of Key Financial Contributors from 2025-2029**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Innovation & Transformation from Red to Blue Ocean Business Environment & Key Financial Contributors

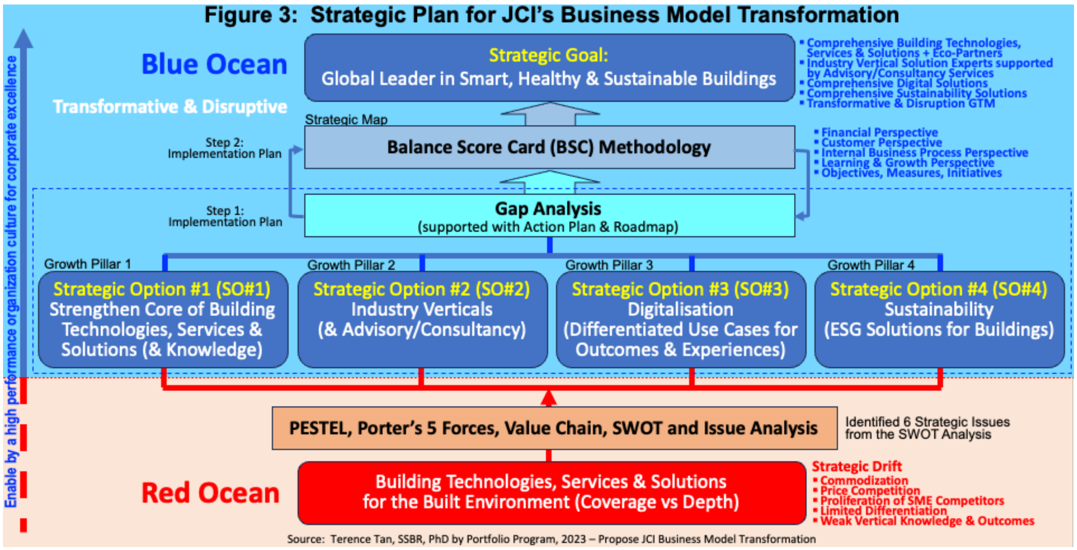
## 2.0. Introduction

2.1. Johnson Controls (JCI) delivers comprehensive solutions for the built environment. In 2023, JCI's global revenue reached US$25.98 billion TTM (Companiesmarketcap, 2024), with around 100,000 employees spanning 2,000 locations across 150 countries. JCI positions itself as a global leader in smart, healthy, and sustainable buildings, guided by a strong purpose and brand promise. Its Purpose, Vision, Mission and Values embraced by every employees within the organisation strongly reflects this commitment (JCI, 2017).

2.2. Module 1 proposed an innovative and transformative strategic plan for JCI, aimed at countering the risk of its building solutions becoming commoditized (Reimann et al., 2010) in an increasingly competitive market (see Appendix A for summary). This plan also addresses the need to shift from a competitive Red Ocean to a Blue Ocean environment within a volatile, uncertain, complex, and ambiguous (VUCA) business landscape (Bennett et al., 2014). Fueled by globalization, competitors from international, regional, and local markets have been diligently enhancing their offerings. As more players claim to deliver equal or superior solutions, the industry has become increasingly price-focused, leading to margin erosion (Parameshwaran, 2023) as encountered by JCI.

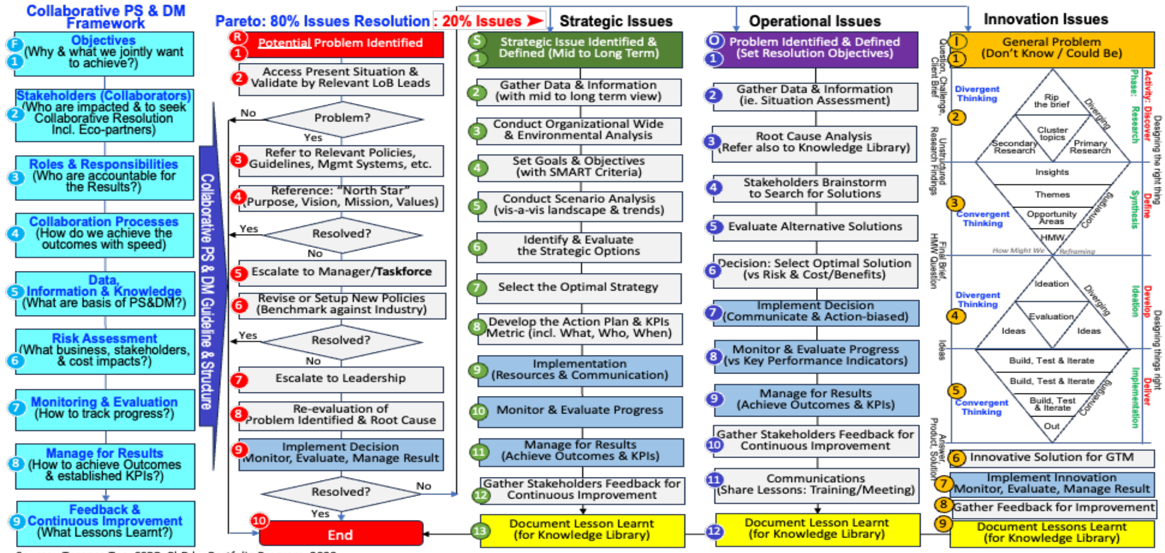
2.3. To embark on this strategic journey, JCI is developing superior capabilities and a value proposition through its 4 strategic pillars: strengthening core offerings, driving digitalization, advancing sustainability, and promoting verticalization with "Total Customized Solutions" tailored to the unique needs of each vertical. This approach promises distinctive differentiation (Jerab, 2023), fostering optimism and growth for JCI, aligned with its purpose, vision, and mission, all while being guided by its values and corporate excellence culture (Module 2, L04, Section 9.4).

**Figure 3: Strategic Plan for JCI's Business Model Transformation**




2.4. The implementation of the strategic plan proposed for JCI is expected to encounter diverse challenges in today's VUCA business environment (General et al., 2018). To navigate these challenges, JCI requires an innovative and collaborative problem-solving and decision-making (PS & DM) process, as outlined in Module 2 (see Appendix B for summary). This process aims to dismantle internal silos, synergistically leverage resources and capabilities, and address challenges through efficient and effective Pareto prioritization (Powell et al,. 2015). This prioritization enhances speed and agility in resolving various issues while engaging all stakeholders within the organization. Such a strategy allows leaders more time for forward critical thinking, which is crucial to strengthening the 4 strategic growth pillars, driving continuous momentum, and positioning JCI as the destined market leader with its comprehensive capabilities.

**Figure 4: Proposed Innovative & Collaborative Problem Solving & Decision Making Framework & Process**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023

2.5. Building on Modules 1 and 2 as scaffolds, the planned execution excellence of the combined strategic plan and the collaborative problem-solving and decision-making (PS & DM) process are set to empower JCI with a high-impact, differentiated, agile, adaptive, and sustainable strategy. This dual-pronged "proactive and responsive" model aims to continuously improve, innovate, and transform, providing the necessary balance, adaptiveness, and interdependency. It aims to disrupt and transform the built environment by capitalizing on key trends like sustainability, digitalization, and mass customization. These innovative attributes underpin Capstone Project Module 3, entitled "*Project Dragon: Capitalizing Blue Ocean Strategy for Sustainable & Digitalised Excellence of Verticals at Johnson Controls*."

**Figure 5: Empowering Cross Domains & Organisation-Wide Collaborative Problem Solving & Decision Making Process**
To support Proposed Strategic Plan in strengthening Core Offerings, Digitalisation, Sustainability & Verticalisation.


Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Organisation-wide Impacts of Proposed Collaborative PS & DM Process.

## 3.0. Strategic Context of JCI's Blue Ocean Strategy

3.1. The last decade has seen unprecedented changes in the business environment, driven by diverse and often disruptive global market trends. This overview highlights the trends that continue to shape the global business landscape, leading to evolving market dynamics.

**Table 1: Overview of the Global Market Trends**

1. Digital Transformation
2. Sustainability & ESG
3. Mass Customization incl. Personalisation at Scale
4. Globalisation & Protectionism
5. Supply Chain Resilience
6. Hybrid Work Model, eg. Remote Work & Gig Economy
7. Technology Innovation
8. Geopolitical Uncertainty & Risk
9. Economic Decoupling
10. Economic Inclusivity
11. Artificial Intelligence, ML, DL & NLP, Gen AI
12. Ethical AI & Algorithm Transparency
13. Non-Fungible Tokens (NFTs)
14. Cybersecurity & Data Privacy
15. Block-chain beyond Cryptocurrency
16. Health & Mental Wellness
17. Innovation & Agility
18. Reshaping Healthcare
19. Biotechnology & Personalized Medicine
20. Remote Healthcare, eg. Telemedicine
21. Artificial Intelligence & Automation
22. Decentralized Finance
23. Fintech Innovation, eg. Decentralised Finance.
24. Demographic Shifts, eg. Rise of Asia
25. Aging Population & Pension Systems
26. Circular Economy
27. Data Monetization & Ownership
28. Regulatory Landscape Evolution
29. Urbanization & Smart Cities
30. Energy Transition to Renewable Energy
31. Micro-Mobility & Electric Vehicles
32. Growth Plant—based Foods & Alternative Proteins
33. Urban Air Mobility
34. Growth of Space Economy
35. Changing Consumer Preference
36. Gen Z Consumer Influence
37. Resilient Food Systems
38. Augmented Reality, Virtual Reality & Mixed Reality
39. Diversity, Equity & Inclusion
40. Platform Economy
41. eCommerce to Social Commerce
42. Rise of Influencer Marketing
43. Social Entrepreneurship
44. Rise of Subscription Business Models
45. Quantum Computing
46. Reskilling, Upskilling, Microlearning & Lifelong Learning
47. Gamification of EdTech
48. Mental & Emotional Wellness Tech
49. Regenerative Agriculture
50. Indoor Farming & Vertical Agriculture
51. Sustainable Fashion

Source: Terence Tan's personal research & records from various sources (2024).

3.2. Analysing past trends provides a clear wake-up call. It is no surprise that of the Fortune 500 companies listed in 1955, only 60 remained by 2017 (Perry, 2017). A staggering 88% of these companies either went bankrupt, were acquired, merged, or dropped from the top rankings by revenue. The concept of Schumpeterian creative destruction (Boehm, 2010) explains that innovation cycles drive this turnover. New technologies, products, processes, or business models render older ones obsolete. While disruptive for those affected, this cycle boosts efficiency, spurs new industries, improves living standards, and advances global economies.

3.3. Despite its past successes, JCI cannot afford to become complacent. In today's dynamic environment, having an agile and proactive strategy is critical. It must be flexible in constant adaptation, innovation, and responsiveness to market shifts and technological advancements. Like any organization, JCI faces constraints in resources and capabilities. It must smartly prioritize its focus to ensure investments yield optimal returns. Such strategic prioritization will set a positive flywheel effect in motion for JCI, building momentum to disrupt and lead the global market in smart, healthy, and sustainable buildings, in line with its mission.

3.4. A series of situational analyses were conducted to assess JCI's internal and external environments using various analytical tools and techniques. This comprehensive analysis identified 6 issues posing risks to JCI's growth and led to the derivation of 4 strategic options. These options, being complementary, were all chosen to form the JCI's growth pillars. Examples of the analysis from Modules 1 and 2 are detailed below, with a complete list of 50 analysis available in Appendix C.

**Table 2: Examples Extracted from 50 Analysis Conducted in Modules 1 & 2 (See Appendix C for More)**

| Module, Assignment, Section | Description of Analysis Conducted |
|---|---|
| Module 1, L02, 2.1.12.<br>Module 3, 3.1 & 3.6 | Analysis of Major Global Trends |
| Module 1, L02, 2.2. | PESTLE Analysis of JCI in SEA markets |
| Module 1, L04, 4.3. | Porter's 5 Forces Analysis for JCI SEA |
| Module 1, L02, 2.3.9. | Value Chain Analysis to support differentiation in Verticalisation |
| Module 2, L01, 5.7. | Field Force Analysis of JCI's PS & DM Framework/ Process |
| Module 1, L04, 4.4. | JCI's Business Value Chain Analysis |
| Module 1, L04, 7.12.5 | Analysis of JCI's House of Capabilities |
| Module 1, L04, 4.5. | Perceptual Mapping of JCI vs Competitors |
| Module 1, L02, 2.4.10. | McKinsey's Organisation Health Index Analysis of JCI's Culture |
| Module 1, L04, 7.8. | Analysis of strategic factors required for Blue Ocean Transformation |
| Module 1, L04, 4.6. | Strengthen, Weakness, Opportunity & Threat SWOT Analysis of JCI SEA |
| Module 1, L04, 4.7. | Issues Analysis of JCI SEA (incl. Strategic Drift) |
| Module 1, L04, 7.0. | Analysis of JCI's Strategic Options |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Examples from the 50 Analysis Conducted in Modules 1 & 2

3.5. While risk is inherent in any business strategy, execution excellence requires constant agility and adaptability. To significantly enhance its chances of success, JCI must understand market trends and emphasize key success factors such as strong leadership, customer focus, market positioning, solutions differentiation, innovation, adaptability, corporate excellence culture, strategic partnerships, strategic use of technologies, sustainability, and data-driven decision-making. These factors are integral to the strategic plan proposed in Module 1, aiming to transition from a Red Ocean to a Blue Ocean environment in a highly competitive market. This strategy supports JCI's aspirations to drive growth, productivity, and profitability as it continuously learns, unlearns, and relearns, adapting with agility to sustain its market leadership in the built environment as outlined in Module 2.

3.6. Below is a summary of both the SWOT and Issues Analysis (Gürel, 2017), which provides the necessary action planning to support JCI's business model transformation.

**Table 3: Strength, Weakness, Opportunity & Threat (SWOT) & Issues Analysis**

| | *Positive* | |
|---|---|---|
| | **Strengths (S)** | **Opportunities (O)** |
| | 1. Dedicated focus and global leader in Smart, Healthy & Sustainable Built Environments. | 1. Increasing inquiries of existing clients for digital, cloud solutions with outcome-based delivery |
| | 2. Comprehensive building technologies & solutions (contribute to 90% Revenue) & industry verticals | 2. Amid climate crisis, buildings emit 40% of carbon. |
| | 3. Strong brand reputation & about 140 years legacy | 3. Smart Buildings & Smart FM solutions interest. |
| | 4. OpenBlue Digital Solutions transforming industry | 4. Smart Cities growth trajectory in Asia Pacific. |
| | 5. Strong industry relationships & ecosystem. | 5. Demand for data analytics, AI, energy management & application expertise for new business & operating models. |
| *Internal* | 6. Proven innovation, integration & R&D capabilities. | 6. Portfolio customers seeking solutions partner with global scale & service supports. |
| | 7. Strength in lifecycle service offerings & project execution capabilities. | 7. Acquisition & partnership on rapid growth |
| | 8. Large global presence & installed base. | 8. APAC region projected growth region. |
| | 9. Financial strength to support product investments & M&A. | 9. Sustainability, Health & ESG demands on the rise. |
| | **Weaknesses (W)** | **Threats (T)** |
| | 1. Not nimble enough to pivot in meeting customer needs, compared to innovative start-ups. | 1. Being out-manoeuvred by competition. |
| | 2. Unable to respond to competitive pricing by players (affecting project investment payback) | 2. Customer feedback JCI becoming a follower with marketing talks than a leader in digital software |
| | 3. Lack of differentiated solution offerings. | 3. Partners & customers becoming our competitors |
| *External* | 4. Lack of cutting-edge showpiece technologies | 4. Significant competition from established & rapidly growing number of new aggressive players. |
| | 5. Application in each market is not considered as we look at digital as a product not as outcome. | 5. Start-ups with breakthrough digital offerings. |
| | 6. Not as strong in advanced software development compared to native software & digital companies. | 6. Compete for talents given very competitive space |
| | 7. JCI USA-centric solution not address local needs. | 7. Long sales cycle leading for enterprise solution resulting to change in focus & strategy. |
| | 8. Bureaucratic inward focused top down processes a mismatch of org. culture vs customer focus. | 8. Competitors offering free POC implementation (which JCI wants to charge every customers). |
| | 9. Targeting Verticals, but lacking their domains. | 9. Government policies impartial to solution provider |
| | *Negative* | |

| | **Issues Analysis** | **SWOT Analysis** |
|---|---|---|
| 1. | Heavily dependent on existing Building Technologies & Solutions for Secure Orders. Need to expand into potential Growth Pillars. Beware of "who moved my cheese" syndrome due to Strategic Drift. Realignment of organisation culture, customer & employee focus needed | S1, S2, O1, O2, O3, O4, O5, 08, 09 |
| 2. | Expanding to target key Industry Verticals by leveraging existing expertise and building Technologies. Lacking Vertical domain expertise could compromise JCI's differentiation. Need applied knowledge to meet each Vertical's business needs like a advisor/consultant. | W9, W3, W4, W5, T3, T4, T6, T9 |
| 3. | Digitalisation's impact on building performance outcomes & experience is enticing customers' interest. Competitors' innovation speed are overshadowing JCI's differentiation. | S4, S6, O1, S3, W1, W4, W7, T1, T3, T5 |
| 4. | Long sales cycle of Digital Solutions and the misalignment of digital technologies' features versus market needs are facing push-back from local sales who are redirecting of their focus on traditional building technologies & solutions that contribute to major wins. Need to enable the Digital Threads to weave across JCI's integrated systems solutions. | W1, W2, W3, W4, W5, T1, T3, T4, T5, T7, T8, |
| 5. | Sustainability, health & wellness and smart built environments are getting increasing market demands. JCI not developing fast enough, lack solution innovation and M&A investments (relative to market trends and competitors' innovation speed). | S2, S4, S7, S9, O2, O5, O9, W1, W3, W7, W8, T3, T4, T5, |
| 6. | Increasing "Strategic Drift" on JCI's core competency, resources, capabilities, solutions offerings, structure and speed to market in meeting market requirements. Gaps in top down driven policies versus bottom-up innovation. Review its organisation culture to embrace inclusion & diversity supported, talent focus, etc. to strengthen capabilities. | S1, S2, S5, S6, S7, W1, W2, W3, W6, W7, W8, W9 |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Proposed JCI Strategic Plan's SWOT & Issue Analysis (Module 1)

3.7. A review of global market trends has identified 3 strategic thrusts for JCI: Digitalization, Sustainability, and Mass Customization (aligned to Verticalization). These priorities support JCI's strategic mission to become the global leader in smart, healthy, and sustainable buildings.

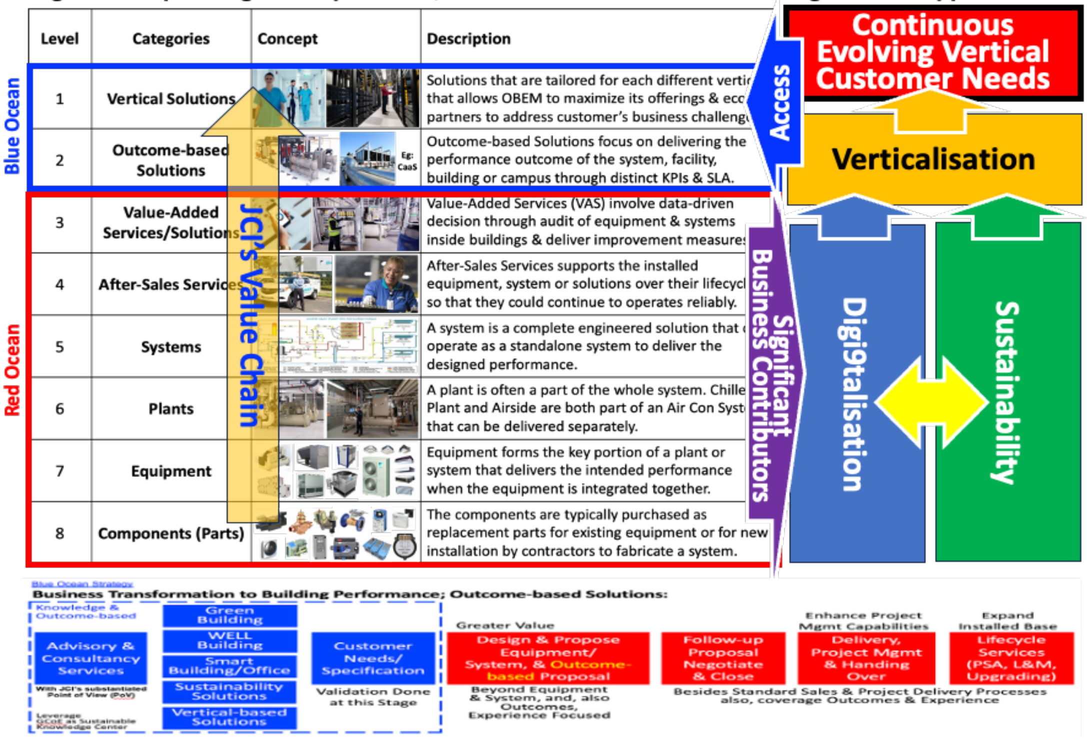
**Table 4: Key Strategic Thrusts for JCI's Prioritize Focus in the Built Environment**

| Digitalisation/Digital Transformation | Sustainability | Vertical (Customisation) |
|---|---|---|
| 1. Business Model Transformation<br>6. Hybrid Work Model, incl. Remote<br>11. Artificial Intelligence, ML, DL & NLP, Gen AI<br>12. Ethical AI & Algorithm Transparency<br>13. Non-Fungible Tokens (NFTs)<br>14. Cybersecurity & Data Privacy<br>15. Block-chain beyond Cryptocurrency<br>21. Artificial Intelligence & Automation<br>22. Decentralized Finance<br>23. Fintech Innovation, eg. Decentralised Finance.<br>27. Data Monetization & Ownership<br>38. Augmented Reality, Virtual Reality & Mixed Reality<br>40. Platform Economy<br>41. eCommerce to Social Commerce<br>42. Rise of Influencer Marketing<br>44. Rise of Subscription Models<br>45. Quantum Computing | 2. Sustainability & ESG<br>5. Supply Chain Resilience<br>7. Technology Innovation<br>8. Geopolitical Uncertainty & Risk<br>10. Economic Inclusiveness<br>17. Innovation & Agility<br>24. Demographic Shifts, eg. Rise of Asia<br>25. Aging Population & Pension Systems<br>26. Circular Economy<br>29. Urbanization & Smart Cities<br>30. Energy Transition to Renewable<br>31. Micro-Mobility & Electric Vehicles<br>32. Growth Plant—based Foods & Alternative Proteins<br>33. Urban Air Mobility<br>37. Resilient Food Systems<br>39. Diversity, Equity & Inclusion<br>43. Social Entrepreneurship<br>49. Regenerative Agriculture<br>50. Indoor Farming & Vertical Agriculture<br>51. Sustainable Fashion | 3. Mass Customization incl. Personalisation at Scale<br>16. Health & Mental Wellness<br>18. Reshaping Healthcare<br>19. Biotechnology & Personalized Medicine<br>20. Remote Healthcare, eg. Telemedicine<br>28. Regulatory Landscape Evolution<br>35. Changing Consumer Preference<br>36. Gen Z Consumer Influence<br>46. Reskilling, Upskilling, Microlearning & Lifelong Learning<br>47. Gamification of EdTech<br>48. Mental & Emotional Wellness Tech |
| **Other Global Trends Not Directly Related to Built Environment** | | |
| 4. Globalisation & Protectionism<br>9. Economic Decoupling | 34. Growth of Space Economy | |

Source: Terence Tan's personal research & records from various sources (2024).

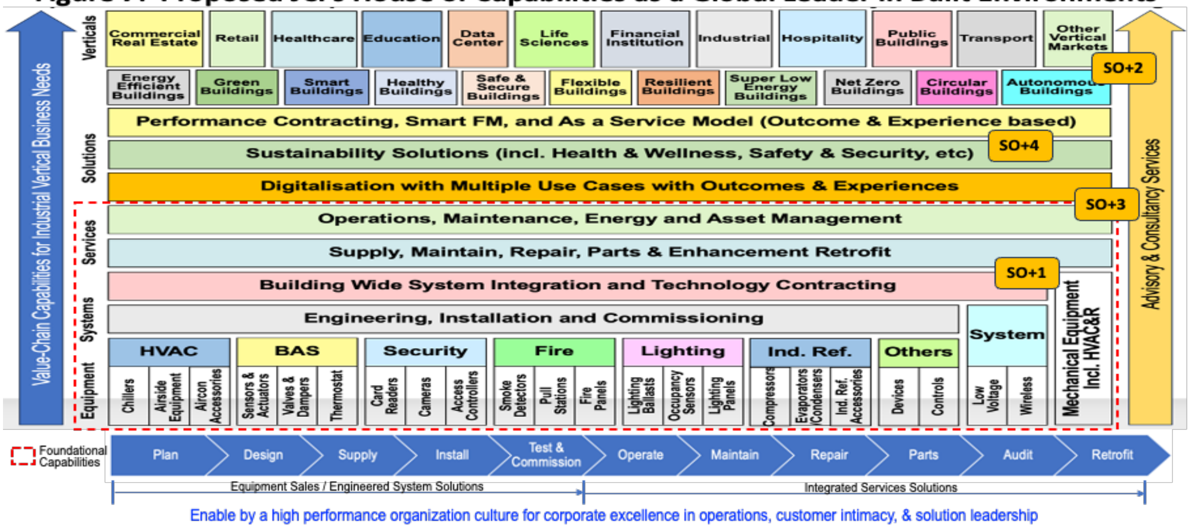
3.8. Supporting these 3 strategic thrusts requires JCI to continuously refine and enhance its core products, services, and solutions. Any changes must ensure a steady, uninterrupted cash flow from existing operations, which are crucial for generating significant revenue and profit. Additionally, these changes should position JCI on a targeted growth trajectory. The strategy, both innovative and transformative, must be scalable and build upon existing business offerings to outpace competitors.

**Figure 6: Expanding JCI Capabilities, Value Chain & Access to Evolving Vertical Opportunities**



3.9. To achieve the intent outlined above, JCI must continually review, develop, and enhance its house of capabilities as proposed in Module 2. Building owners across various verticals expect more from vendor-partners like JCI, especially in a high inflation environment coupled with tight skilled labor and operating budgets. They demand more value with fewer resources. JCI is committed to avoiding any perceptions of "competency greenwashing" by building owners (Hicks, 2023). It actively works to bridge any gaps in its skills and capabilities, including those in digitalization, sustainability, and verticalization.

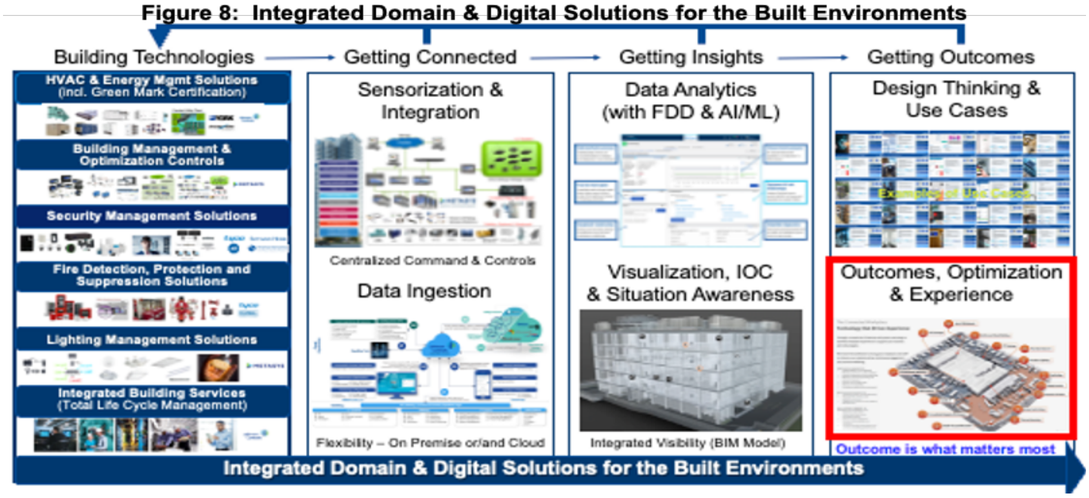
**Figure 7: Proposed JCI's House of Capabilities as a Global Leader in Built Environments**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Propose JCI House of Capabilities as a Global Leader in Smart, Healthy & Sustainable Buildings.

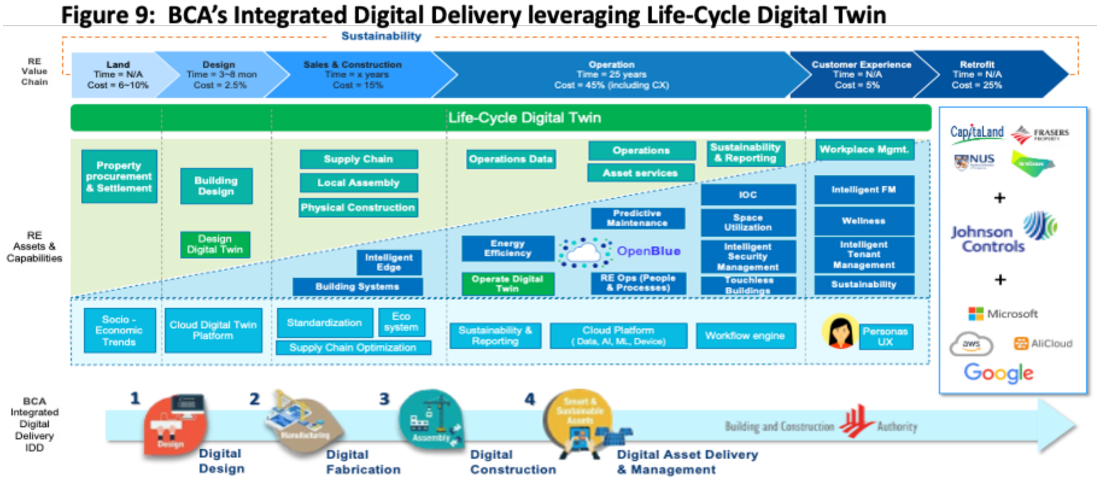
3.10. Digital technology, now mature, proven, and pervasive, has disrupted numerous businesses (Valenduc et al., 2017). As discussed in Module 1, for JCI, it facilitates the integration and utilization of data from building owners' equipment, plants, and systems, supporting a variety of use cases that drive multiple outcomes. Through data collection and analysis, actionable insights can be derived, enabling proactive measures to enhance building asset performance, energy efficiency, reliability, optimization, and manpower productivity, among others. With the extensive availability of sensor data and integration with existing enterprise systems, JCI can deliver a comprehensive suite of use cases and even transform the business models of customer verticals, showcasing the art of the possible (as illustrated in Module 1, L02). This demonstrates the strategic intent of the flexible and scalable OpenBlue cloud platform (JCI, 2024b).

**Figure 8: Integrated Domain & Digital Solutions for the Built Environments**



3.11. The advancement of Artificial Intelligence (AI) technology offers new opportunities to enhance productivity and business growth throughout the entire lifecycle of the built environment, aligning with the Building and Construction Authority's (BCA) push for Integrated Digital Delivery (BCA, 2024a). JCI is cautiously exploring trial projects across various fronts, recognizing the potential and rewards of AI while being mindful of its risks (Walsh et al., 2021).

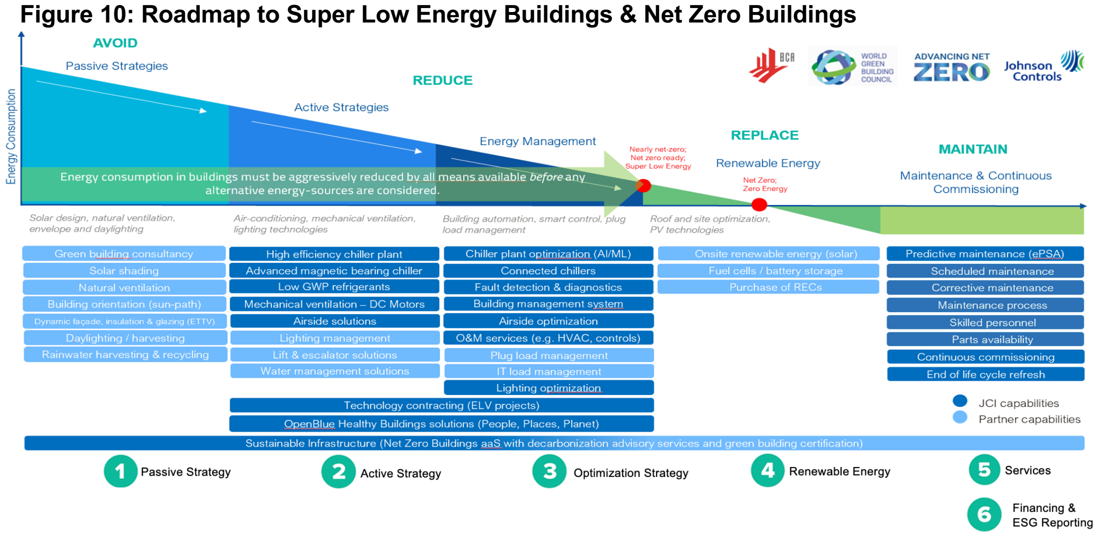
**Figure 9: BCA's Integrated Digital Delivery leveraging Life-Cycle Digital Twin**




Source: Johnson Controls, Digital Solutions, Singapore.

3.12. As climate change worsens due to global warming (Gerretsen, 2023), sustainability, particularly decarbonization, has become a crucial focus. Numerous countries, governments, and enterprises have pledged to achieve net-zero carbon emissions by 2050 to prevent irreversible environmental damage identified as the tipping point (IEA, 2021). They are also aiming for a 50% reduction in emissions by 2030. Led by the World Green Building Council, the built environment sector has developed a model for delivering net-zero buildings (WGBC, 2024) in five stages: incorporating passive design, active systems, optimization controls, renewable energy, and efficient operations & maintenance. To support these green initiatives, the uptake of green financing and environmental, social & governance (ESG) reporting has increased (Cohen, 2024).

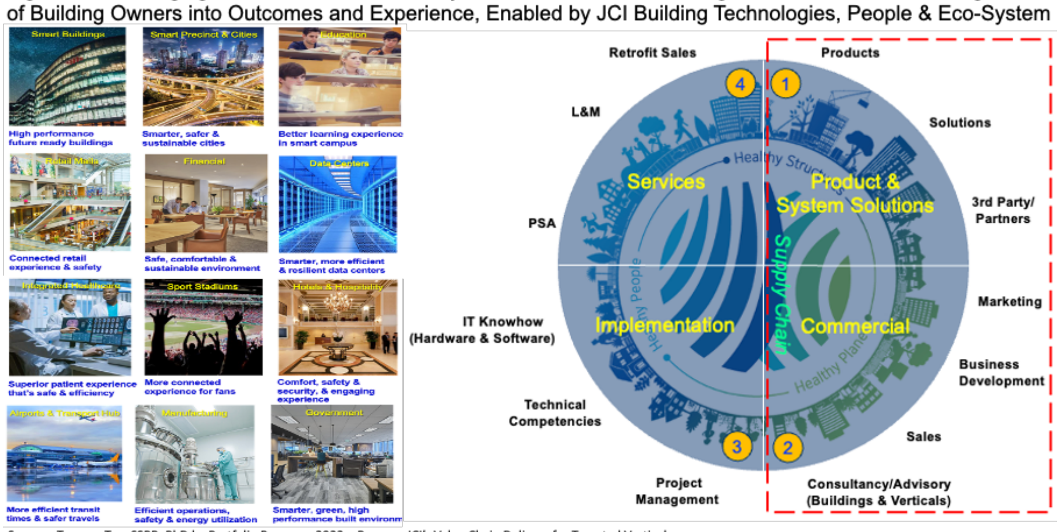
**Figure 10: Roadmap to Super Low Energy Buildings & Net Zero Buildings**



3.13. While the COVID-19 pandemic has largely passed by 2023, the staggering death toll of 7 million (Jayaram, 2024) has underscored the importance of health and wellness, hybrid working models, and their impact on productivity. Occasional spikes in infections during December 2023's endemic phase have served as stark reminders (CNA, 2023b). With most people spending up to 90% of their time indoors, local authorities now mandate that the built environment be (re)designed and operated to the highest standards of indoor air quality and hygiene. Many buildings are being transformed to support remote or hybrid work and flexible spaces for business continuity planning. In response, the Singapore government amended the Infectious Diseases Act in 2024 to enhance the country's preparedness for varying threat levels (Abdullah, 2024). This adjustment has influenced all verticals, integrating these demands into the practices of sustainability like Bedok Hospital which will be pandemic-ready (Soo, 2024).

3.14. The surge in demands on the built environment, coupled with rising consumer expectations for customized and personalized services across various verticals, has compelled building owners to master the art of differentiation (Alnagrat et al., 2022). With advancements in digital and building technologies, along with its skilled workforce, processes, and robust eco-partner system, JCI is ideally positioned to adapt and transform. This enables JCI to provide holistic solutions tailored to the unique needs of each vertical in the built environment.

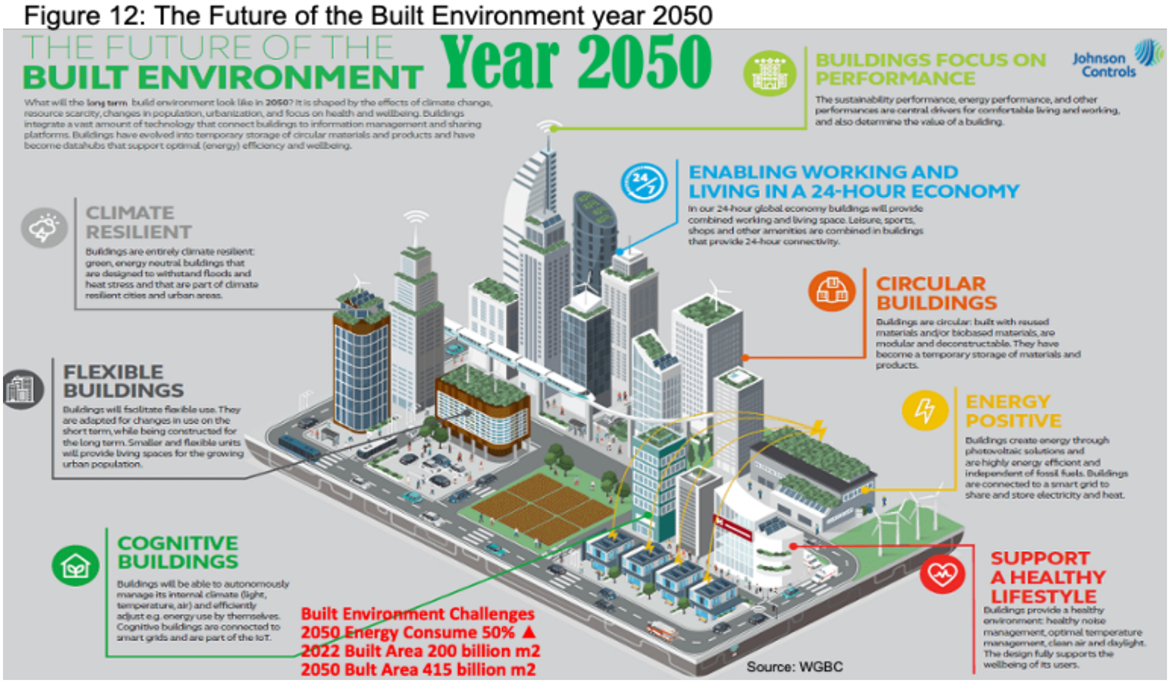
Figure 11: Leveraging JCI's Value Chain Delivery to Add/Create Value for Targeted Verticals in Translating Vision of Building Owners into Outcomes and Experience, Enabled by JCI Building Technologies, People & Eco-System




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Propose JCI's Value Chain Delivery for Targeted Verticals

3.15. Speed, agility, and effectiveness in delivering solutions, whether in pieces or as integrated offerings, are identified as JCI's critical success factors. Looking forward to 2050, the built environment is expected to focus on being energy positive, enhancing health and wellness, and supporting autonomous and responsive operations. It will also aim to be flexible, climate resilient, suitable for a 24-hour working environment, and adhere to circular economy principles.

Figure 12: The Future of the Built Environment year 2050



## 4.0. Project Dragon: Mission & Objectives

4.1. In 2024, symbolized by the Dragon as a sign of rising power in the Chinese zodiac, JCI is poised for growth in Southeast Asia, Asia Pacific, and beyond. This expansion is supported by 4 strategic growth pillars (outlined in Module 2) and a collaborative PS & DM process (from Module 1), all enabled by advanced technologies, skilled and engaged staff, efficient processes, and a robust eco-partner system. JCI recognizes that in the face of rapid changes and demands, survival does not depend solely on strength or intelligence but on the ability to manage change effectively (Charles Darwin). Embodying the adaptability of a dragon, JCI understands that to thrive, it must not just cope but adapt to win and grow. Moreover, it acknowledges that challenging the existing VUCA reality will not lead to change; instead, it must create a new model that renders the old one obsolete (Buckminster Fuller).

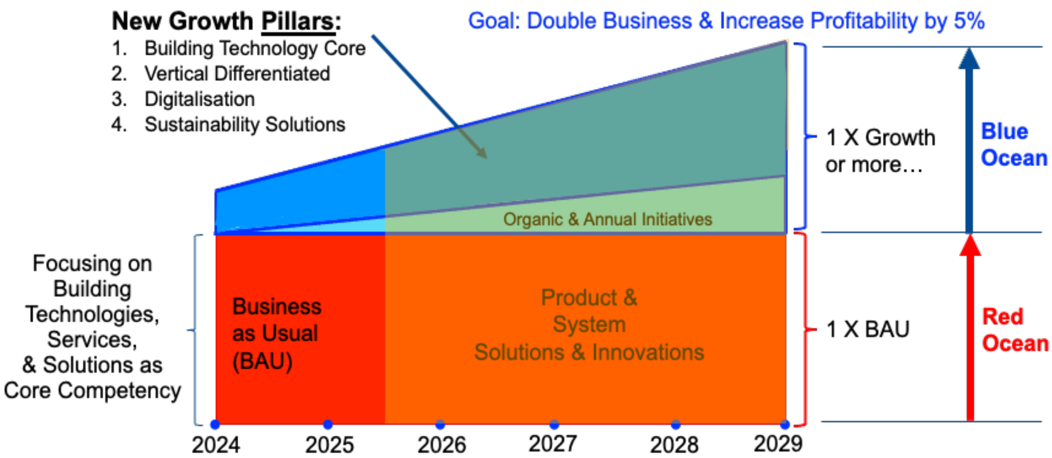
4.2. Through Project Dragon, JCI is committed to aligning with and living its Purpose, Brand Promise, Vision, Mission, and Values, which serve as guiding north stars. This alignment helps prevent strategic drift and ensures relevance to evolving market needs (Bonnici, 2015). JCI aims to build a sustainable and resilient business equipped with the right competencies to assist itself and its customers in managing environmental risks, social responsibilities, governance practices, and economic performance, reinforcing its position as a recognized global leader in the built environments. To secure market leadership, JCI acknowledges the critical need to refocus on 3 key disciplines: solution leadership, operational excellence, and customer intimacy, all vital for delivering exceptional customer value (Treacy, 2007).

| | |
|---|---|
| **Purpose:** | Our passion is to build smarter, healthier and more sustainable tomorrows – for our customers, our communities and our planet. |
| **Promise:** | We are Johnson Controls. We're here to advance the human experience by creating the smartest environments and energy solutions in the world. We are building tomorrow, today. |
| **Vision:** | A safe, comfortable and sustainable world |
| **Mission:** | Helping our customers win everywhere, every day |
| **Values:** | • Integrity First • Purpose Led • Customer Driven • Future Focused • One Team |

Source: Johnson Controls' North Stars

4.3. The proposed Strategic Plan aims to transform JCI SEA's environment into a Blue Ocean market, setting clear business objectives to double its business within five years and increase profitability by 5%.

**Figure 13: Proposed JCI Strategic Plan to Double JCI's SEA Business in 5 Years**



Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Proposed JCI Strategic Plan to Double JCI's SEA Business in 5 Years

4.4. While implementing the proposed strategic plan, JCI SEA also aims to ensure it aligns with and complements the JCI APAC BRIDGE Strategy, as outlined by Anul Rathninde, President of JCI APAC. This coherence is crucial to avoid perceptions of disjointedness among stakeholders, which is essential for gaining their buy-in.

**Table 5: JCI APAC Strategy Directive – BRIDGE for Business Alignment**

| BRIDGE Priorities | BRIDGE Strategy | BRIDGE Action Plan |
|---|---|---|
| Business Fundamentals | Be the partner of choice to our customers in smart, healthy and sustainable buildings | • Select the right customers<br>• Foster customer intimacy |
| | Retain and attract great people and reward performance culture | • Right people in the right job doing the right things as competitive advantage<br>• Accountability and ownership mentality |
| Leadership & Culture | Innovate for the real world | • Performance, efficiency and disruptive innovation<br>• New product portfolios and business models |
| | Demand competitive positioning | • Lean as way of life<br>• Fit to market benchmarking and ideal cost model |
| Profitable Growth | Grow faster than the market | • Organic growth with the right customers and technologies<br>• Select M&A opportunities |
| | Excel in execution | • Sense of business pulse and timely escalations for problem resolution: Secure-Deliver Model<br>• Do it right first time every time |
| Our Core Values Are Foundational to Our Success: Integrity First, Purpose Led, Customer Driven, Future Focused, One Team | | |

Source: Johnson Controls, APAC Strategy Directive, 2023

4.5. Project Dragon is designed to generate a self-reinforcing momentum for JCI through the flawless strategy execution. The initiative focuses on innovating with an advanced strategy execution model that emphasizes agility and flexibility, enabling adaptation to the VUCA business environment as directed by JCI's senior management.

4.6. This request acknowledges the high failure rate of strategy execution, which can reach up to 90% (Kraaijenbrink, 2019). Alarming research (Kaplan et al., 2005) reveals that 67% of HR and IT departments' strategies do not align with corporate strategy. Furthermore, 60% of organizations do not link their financial budgets to strategic priorities. Compensation for 90% of frontline employees shows no connection to the success or failure of strategy execution, and 95% of a typical company's workforce is either unaware of or does not understand its strategy. Even the best strategies can falter without a dedicated focus on advancing with an efficient and effective execution model. This explains why poor strategy execution is the leading cause of turnover among Global 500 CEOs and remains a top priority for many companies (Docherty, 2016).

**Figure 14: Proposed Project Dragon with Focus on Strategy Execution Excellence**

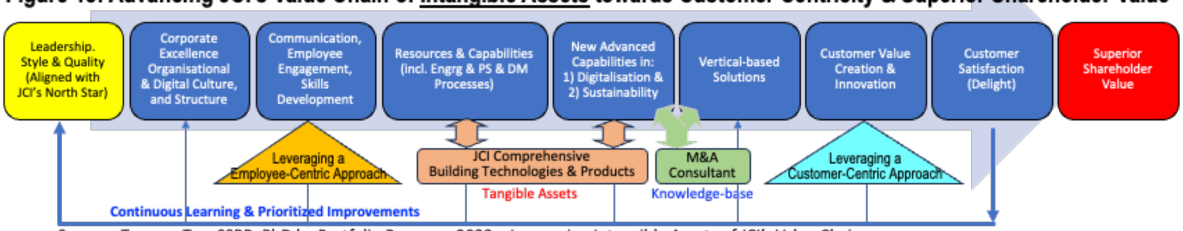

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Proposed Project Dragon with Focus on Execution Excellence

## 5.0. Proposed Innovative, Agile & Adaptive JCI Integrated Strategy Execution Model

5.1. Beyond a well-planned, customer-focused strategy, JCI requires agility, adaptability, and resiliency in today's VUCA environment, synchronizing internal and external changes. Success demands not just one-time execution but ongoing iterations, including the ability to systematically reinvent business models. To support this, JCI needs strong leadership aligned with a culture of corporate excellence ((Module 2, L04, Section 9.4) and digital innovation, rooted in its core values. Additionally, a high-performance organizational infrastructure that continually enhances capabilities is crucial for executing the strategic plan effectively and leveraging data analytics for actionable insights and proactive execution. Ultimately, JCI recognizes the importance of delivering superior, differentiated customer value (Weinstein, 2020) that aligns with market trends and stands out against competitors to ensure resilience.

5.2. Enhanced organizational infrastructure (Module 1, L04, Section 8.21.) showcases how JCI has advanced its value chain by refocusing on valuable "intangible assets" such as leadership, an employee-centric approach, resources, capabilities, knowledge building, vertical-based solutioning, and a customer-value focus. A survey indicates that tangible assets account for only 6% to 30% of a company's total worth, highlighting the crucial role of intangible assets in today's business environment (Volkov et al., 2007).

**Figure 15: Advancing JCI's Value Chain of <u>Intangible Assets</u> towards Customer Centricity & Superior Shareholder Value**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Leveraging Intangible Assets of JCI's Value Chain

5.3. This approach enables continuous learning and prioritized improvements, crucial in the face of inevitable resource constraints, especially when gaps arise in meeting customer needs due to changes. The strategic outcomes include efficient and effective processes, motivated and prepared employees, and delighted customers, all contributing to superior shareholder value.

5.4. To develop this formidable organizational infrastructure, a reiteration of the foundational factors from earlier modules highlights the importance of intangible assets. These assets drive innovative, transformational, and disruptive business outcomes through employee engagement, customer centricity, and superior shareholder value.

**Table 6: Strengthening JCI's Organisation Infrastructural Enablers**

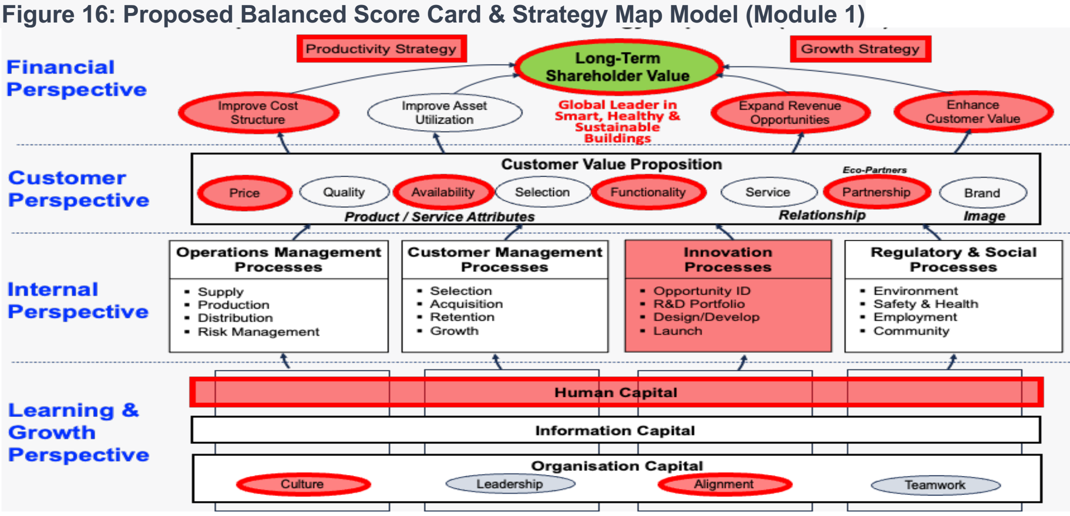
| Item | Organisation Infrastructure's Foundational Requisites |
|---|---|
| 1 | **Leadership Style & Quality:** Aligning with JCI's North Star, leadership can impact organization's culture, employee engagement, team productivity, and the overall attainment of business goals. By exemplifying qualities that cultivate trust and dedication, leaders can actively involve and engage stakeholders to drive towards successful outcomes (Item 2). |
| 2 | **Corporate Excellence, Digital Culture, and Organizational Structure:** These are key to spurring innovation, engaging employees, and ensuring seamless execution of strategy for exceptional customer experiences They also guarantee compliance and sustainability, vital for success in the fast-changing business world |
| 3 | **Employee-Centricity, Engagement, and Skills Development:** They are essential for creating a positive workplace, these elements ensure long-term competitiveness in VUCA business environment. They help attract, develop, and retain top talent, driving sustainable growth and success. |
| 4 | **Resources & Capabilities, Incl. JCI Building Technologies & Products:** They must be adequate (or need to prioritize) as they are crucial for organizational success and competitiveness. They must be strategically managed and leveraged for goals achievement, innovation, and value creation for stakeholders and business sustainability. |
| 5 | **New Advanced Capabilities in Digitalization & Sustainability:** Developing advanced capabilities in Digitalisation and Sustainability require need to invest as they are pivotal for JCI's transformation. They enable JCI to drive efficiency, agility, and resiliency while contributing to environmental conservation and social responsibility in line with customers' demands. |
| 6 | **Vertical-based Solutions (Fast Tracked through Acquisition of a Consultant):** They offer specialized expertise and give a competitive edge that enable strategic growth through verticalization, helping organizations excel in their industries to provide high value and disruptive differentiation. To fast track, propose acquiring a consultant. |
| 7 | **Customer-Centricity: Customer Value Creation & Innovation:** They are important for driving satisfaction, loyalty, and growth. By continuously innovating to deliver superior customer value, organizations can foster strong relationships and market differentiation for a profitable and sustainable success. |
| 8 | **Customer Satisfaction (Delight):** Prioritizing customer needs can help to drive customer satisfaction, retain customers, build a positive reputation, and gain a competitive edge. It enables revenue growth, enhances employee morale, builds strong foundation for a sustainable success. |
| 9 | **Superior Shareholder Value:** It is a commitment to deliver sustainable long-term growth, profitability and investment return through creating superior value for its shareholders. This enhance investor confidence to ensure long-term capital access and business sustainability. |

Advancing JCI's Value Chain of Intangible Assets Leverage

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023

5.5. The proposed Balanced Scorecard shared in Module 1, L04, Section 8.5 (Kaplan, 1996) provides a comprehensive framework for implementing a strategic plan. It helps in articulating the strategy, measuring key performance indicators, and managing an organization's strategic performance, considering both financial and non-financial factors: Customer, Internal Process, and Learning & Growth. However, concerns about its lack of agility and adaptability were raised by JCI's senior management, indicating areas for improvement.

**Figure 16: Proposed Balanced Score Card & Strategy Map Model (Module 1)**



5.6. Building on the foundational prerequisites outlined above, the goal is not to replace the proposed Balanced Score Card (BSC) but to enhance it, making it more agile and adaptable. An evaluation is needed to compare the traditional BSC with a targeted agile and adaptive version. By addressing these gaps, JCI can significantly improve its ability to execute strategies seamlessly and successfully.

**Table 7: Comparison between Traditional & Enhanced Agile & Adaptive BSC**

| Feature | Traditional Balanced Score Card | Agile & Adaptive Balanced Score Card |
|---|---|---|
| Flexibility & Adaptability | More static, with updates typically on an annual basis. | Highly adaptable, with frequent reviews & adjustments to strategy. |
| Feedback Loops & Iteration | Longer feedback cycles, which may delay strategic adjustments. | Continuous feedback loops & shorter iteration cycles for immediate strategy adjustments. |
| Collaboration Across Teams | Encourages alignment across units but tends to be formal & structured. | Promotes cross-functional collaboration, breaking down silos for faster decision-making. |
| Measurement & Metrics | Focuses on predefined objectives & KPIs. | Uses adaptable metrics that can evolve with strategy & external conditions. |
| Project & Initiative Management | Strategic initiatives are executed within set timeframes, with limited flexibility. | Initiatives are broken down into smaller pieces (sprints), allowing for rapid adjustments & pivoting. |
| Cultural Emphasis | May not explicitly focus on cultivating a specific organisational culture around the strategy execution process. | Emphasizes fostering a culture of agility, innovation, and readiness to adapt to change. |
| Strategic Planning Cycle | Often based on annual planning cycles. | Embraces more frequent, iterative planning cycles, responsive to change. |
| Cross Functional Integration | Collaboration is encouraged but can be siloed. | Strong emphasis on cross functional teams and integration across the organisation. |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Comparison between Traditional & Targeted Agile & Adaptive Balanced Scorecard

5.7. To foster an innovative and pragmatic strategy execution model, 27 best practices were evaluated as benchmarks (refer to Appendix D). Below is a summarized table that outlines models capable of adding value to JCI by enhancing the proposed BSC, SM and with the Execution Premium Process XPP (Kaplan, 2008). This integration also incorporates key features from other relevant models, as detailed below.

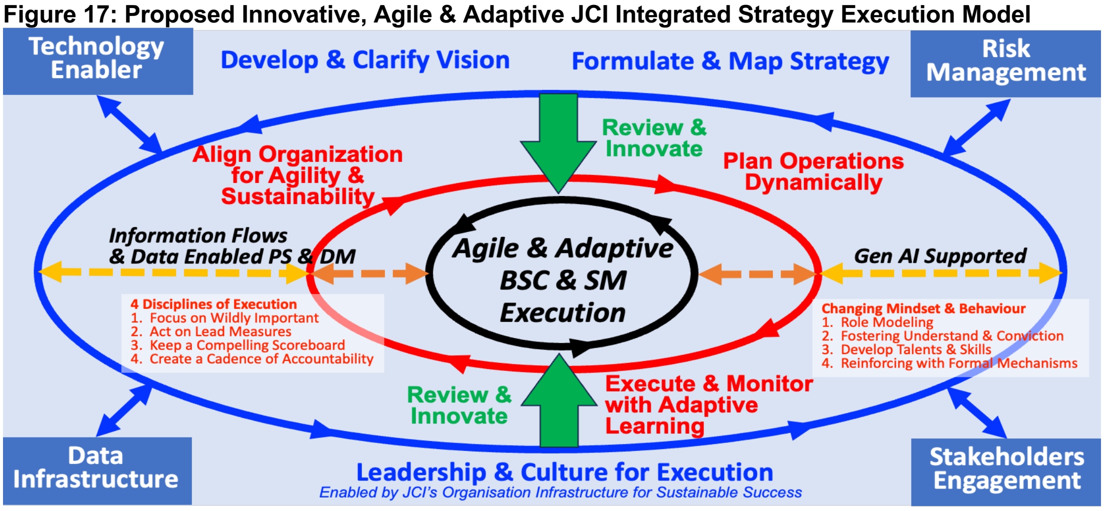
**Table 8: Selected Strategy Execution Models for Enhancement**

| Item | Selected Strategy Execution Models | Remarks |
|---|---|---|
| 1 | **Balanced Scorecard (BSC) & Strategy Map (SM)**<br>Developed by Robert Kaplan and David Norton, it's a strategic planning and management system that uses financial and non-financial measures to monitor performance against strategic goals. SM visually represents an organization's objectives and the causal relationships between them.<br>Source: https://online.hbs.edu/blog/post/balanced-scorecard | Adopted Module 1, L04 With BSC & SM |
| 2 | **Execution Premium Process (XPP):**<br>This process, also developed by Kaplan and Norton, integrates strategy formulation, planning, and execution into an agile, adaptive and continuous loop of activities.<br>Source: https://strategsys.com/xpp | Selected. Congruent with agile BSC & SM |
| Ref. A | **The 4 Disciplines of Execution (4DX):**<br>A simple, repeatable, and proven formula for executing on your most important strategic priorities in the midst of the whirlwind of the daily workload through managing leading versus lagging indicators.<br>Source: https://www.franklincovey.com/the-4-disciplines/ | Adopt as subset of agile BSC & SM (Item 2). |
| Ref. B | **Scaled Agile Framework (SAFe):**<br>A set of organization and workflow patterns for implementing agile practices at enterprise scale.<br>Source: https://scaledagileframework.com | Relevant reference as subset of agile BSC & SM (Item 2) |
| Ref. C | **Integrated Strategy Execution (ISE):**<br>Combines the formulation and implementation of strategy into a single, ongoing process with a strong emphasis on stakeholder engagement.<br>Source: https://www.processexcellencenetwork.com/business-transformation/whitepapers/executive-briefing-how-to-build-a-world-class-stra | Relevant reference: Strategy Execution Maturity Model. |
| Ref. D | **Strategic Governance Model:**<br>Provides a framework for governance mechanisms to ensure that strategies are executed as intended, with regular oversight and adjustment.<br>Source: https://www.diligent.com/resources/blog/how-to-build-a-strong-governance-model | Subset of agile BSC & SM (Item 2) |
| Ref. F | **Change Capability Framework:**<br>Focuses on building organizational capabilities to adapt and thrive through continuous change, which is crucial for long-term strategy execution.<br>Source: https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/the-four-building-blocks--of-change | Important as subset of agile BSC & SM (Item 2) |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Comparison between Various Strategy Execution Models Available.

5.8. Building on the earlier highlights, the proposed JCI Integrated Strategy Execution Model (ISEM) is designed to meet the expectations of JCI's senior management. Below is a conceptual mindmap that illustrates the causal relationships between strategic elements, which are central to enabling agile and adaptive strategy execution.

**Figure 17: Proposed Innovative, Agile & Adaptive JCI Integrated Strategy Execution Model**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Propose Enhanced JCI Agile & Adaptive BSC & SM Execution Model

5.9. This model outlines a comprehensive approach that begins with vision and strategy formulation and progresses to organizational alignment for agility and sustainability. It includes dynamic operations planning and continuously cycles back through execution, monitoring, and innovation. Enabled by continuous information flows through the knowledge nerves, data-enabled PS & DM form a critical component of the ISEM. The model also integrates advanced data analytics and artificial intelligence to enhance decision-making and strategic adaptation.

5.10. The "Technology Enabler" supporting "Data Infrastructure" plays a pivotal role in data analytics and strategy execution, including AI applications, which must be monitored due to potential risks (Brass for Brain, 2023a). As technology evolves, JCI plans to hire an AI consultant to craft a long-term AI strategy. Meanwhile, business units are encouraged to pilot AI projects, enhancing their learning and understanding of AI's potential benefits. This initiative also helps JCI fortify its digital culture. For example, the JCI OpenBlue team is currently testing the OBEM solution with Gen AI that could transform the built environment. Effective "Stakeholder Engagement" and "Risk Management" are crucial, ensuring open communication and controlled risks for enduring success.

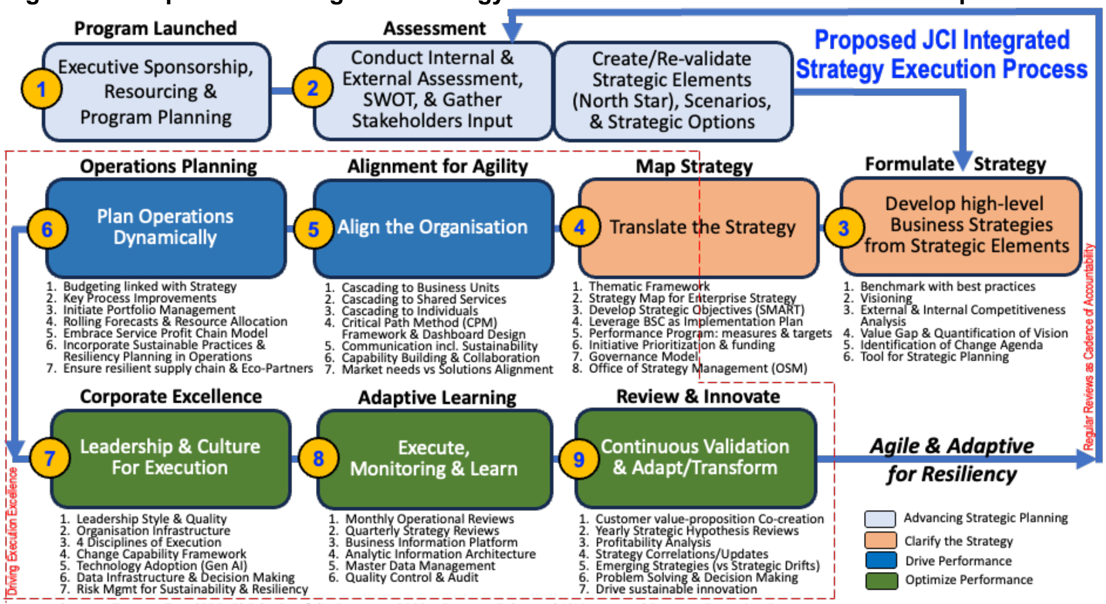
**Table 9: Actions to Foster AI-Driven Innovation Digital Culture**

| Action | Initiatives to Develop AI-Driven Innovation Culture | Remarks |
|---|---|---|
| 1 | Invest in Education & Training on AI, Benefits & Impact | Educate employees through programs on AI technologies, applications & impact on business. Empower employees to leverage AI in their roles to strengthen customer centricity. |
| 2 | Fostering Cross-Functional Collaboration | Promote collaboration across organisation & diverse teams while driving interdisciplinary projects to share knowledge & use AI for innovation, problem solving & decision making. |
| 3 | Encourage Experimentation & Risk-Taking | Support experimentation of AI driven solutions & encourage employees to take calculated risks by providing resources of pilot projects and proof of concepts to test ideas & impact. |
| 4 | Prioritize Customer Insights & Feedback | Leverage Knowledge Infrastructure to analyze customer insights to inform AI-driven & customer centric innovative solutions across different LoBs & teams. |
| 5 | Embrace Agile and Iterative Processes | Foster a digital culture of adaptability in responding to dynamic market conditions & customer needs by using agile methodologies & iterative development approaches. |
| 6 | Provide Access to AI Tools, Platforms & Resources | Support employees with access to advanced AI tools, platform & resources to deliver the plan & also facilitate collaboration with eco-partners on emerging AI technologies. |
| 7 | Promote Transparency & Open Communication | Enable open communication & feedback on AI technologies & related innovation & job security, with transparent decision making on how AI is used to drive positive business outcomes. |
| 8 | Celebrate Successes & Learn from Failures | Successes through AI-driven innovation efforts to be recognized & celebrated while embracing failures as opportunity to learn & grow as part of experimentation to build resilience. |
| 9 | Align Incentives with AI Strategic Objectives | Behaviors & outcomes that support AI-driven innovation culture & drive positive business impact & customer centricity to be rewarded with incentives & recognition programs. |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Actions to Foster AI-Driven Innovation Digital Culture

5.11. Here is the proposed 9-Step JCI Integrated Strategy Execution Process (ISEP). It incorporates enhancements to the XPP into the earlier proposed Balanced Scorecard and supplements it with other best practices. These enhancements include linking strategy to operations and addressing prevailing gaps in the respective models. The improvements also place greater emphasis on Leadership & Culture in strategy execution.

**Figure 18: Proposed JCI Integrated Strategy Execution Process of 4 Phases in 9 Steps**



Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Propose Enhanced JCI Integrated Strategy Execution Process

5.12. The goal is to design a strategy planning and execution process that is straightforward enough for all stakeholders to follow, adhering to Einstein's principle of making things as simple as possible, but no simpler (Einstein, 1950). The 9-step process aligns with Module 1 (Strategic Plan) and Module 2 (Collaborative PS & DM), aiming to achieve JCI's strategic goals. Steps 1 to 4, covered earlier under Module 1, include the initiation of the Strategic Plan Program, assessment of internal and external environments with detailed and SWOT analyses, strategy formulation with four strategic options, and strategy map development.

5.13. Execution planning begins at Step 4, focusing on aligning the organization by cascading strategic goals and business objectives (Step 5). Operations are then dynamically planned (Step 6), with a strong emphasis on corporate excellence through agile leadership and culture, ensuring that activities are performed correctly and are the right actions to take (Step 7). During execution, performance is closely monitored, tracked, and analysed (Step 8), facilitating the delivery of results through continuous validation and adaptation at JCI (Step 9).

5.14. The JCI ISEP is innovative due to enhancements that render the strategic execution process agile and adaptive. It incorporates a continuous feedback loop with shorter reiteration cycles, enabling frequent reviews, strategy adjustments, and innovations. This process promotes seamless cross-functional collaboration and progressive metrics that adapt to external conditions, with a leadership focus on cultural and situational agility. These features make JCI more sustainable and resilient. Below is a summary of the JCI ISEP features and benefits, specifically designed to meet JCI's expectations.

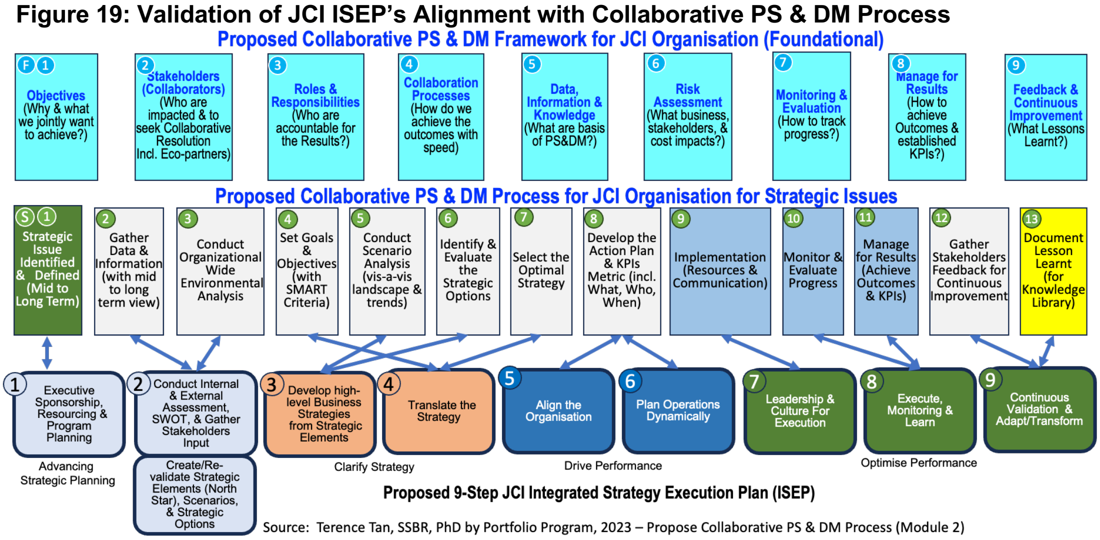
**Table 10: Features & Benefits of JCI Integrated Strategy Execution Process**

| Item | Features of Proposed JCI's ISEP | Benefits of Proposed JCI's Integrated SEP |
|---|---|---|
| 1 | **Strategic Clarity & Communication**<br>By integrating BSC's clear articulation of strategy through objectives, measures, targets, and initiatives with XPP's emphasis on communicating and linking strategy to operations, it ensures the strategy is understood throughout the JCI organization. | **Enhanced Strategic Alignment**:<br>The integrated model ensures that JCI's organizational activities, from top-level strategic planning down to daily operations, are all aligned with the strategic vision and objectives, promotes cross functional collaboration, leading to more coherent and unified efforts across the JCI organization. |
| 2 | **Comprehensive Performance Measurement**:<br>JCI ISEP integrates financial and non-financial measures from BSC across multiple perspectives (financial, customer, internal process, and learning and growth) with XPP's systematic approach to measure and monitor strategy execution with clear deliverables & outcomes | **Improved Organizational Performance**:<br>By clearly linking strategic objectives to performance measures and initiatives, the JCI ISEM model drives focused execution that can lead to improved performance across all levels of the JCI organization and faster decision making. |
| 3 | **Aligned Strategic Initiatives**:<br>JCI ISEM uses BSC to align strategic initiatives with strategic objectives and XPP's process for selecting and managing strategic initiatives, and integrated execution approach with strategic governance, ensuring that all efforts contribute to strategic goals. | **Increased Agility & Responsiveness**:<br>JCI ISEM integration of dynamic execution processes with continuous feedback loop enables the JCI organization to quickly adapt to changes in the internal and external environment, maintaining strategic relevance and competitive advantage with shorter iteration cycles. |
| 4 | **Integrated Strategy & Operations Planning**:<br>JCI ISEM merges BSC's strategy-focused planning with XPP's closed-loop process for planning and executing strategy, aligning operational activities with strategic objectives supported with execution disciplines. | **Greater Accountability & Engagement**:<br>The clear definition of objectives, measures, and targets with adaptable metrics that can evolve with strategy & external conditions, along with regular performance reviews, fosters a culture of accountability. |
| 5 | **Dynamic Strategy Management**:<br>JCI ISEM incorporates the agility of the BSC in adapting and updating the strategy based on performance feedback with XPP's disciplined approach to strategy review and adaptation with robust change management, facilitating a responsive and dynamic strategy management process. | **Systematic Execution Discipline**:<br>JCI ISEM fosters a culture of agility, innovation & readiness to adapt to change. It enables a structured yet agile & adaptable framework for executing strategy, which targets to overcome the common pitfalls of strategic initiatives getting lost amidst daily urgencies, ensuring disciplined progress towards strategic objectives. |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Propose Enhanced JCI Integrated Strategy Execution Process

5.15. To successfully execute JCI's Strategic Plan (outlined in Module 1), which JCI's senior management has identified as a potential challenge, a collaborative PS & DM process is essential. Below is a validation and quick benchmark showing that JCI's ISEP aligns well with the proposed PS & DM framework and process in Module 2.

**Figure 19: Validation of JCI ISEP's Alignment with Collaborative PS & DM Process**



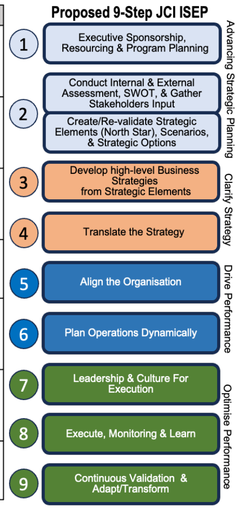

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Propose Collaborative PS & DM Process (Module 2)

## 6.0. Macro and Micro Level Considerations

6.1. Within the context of JCI's business environments, various surveys have been conducted earlier to gather stakeholders' perceptions of potential existing gaps and those that may arise during strategy execution. Here is a compilation of pre-emptive feedback at both the macro and micro levels, which JCI’s senior management is aware of. These concerns are valid and require appropriate attention. The JCI ISEP has been benchmarked against these insights and confirmed to effectively address the concerns raised in each of the 14 identified areas.

**Table 11: Benchmarking Survey Feedbacks on Strategy Execution from JCI Stakeholders**

| Item | Internal Survey Various Feedback | JCI ISEP | Item | Internal Survey Various Feedback | JCI ISEP |
|---|---|---|---|---|---|
| 1 | **Poor Strategic Fit**: Ensure alignment between the strategy & both the external environment & the organization's internal capabilities. Keep customers at the center of strategic focus to ensure relevance and effectiveness. | Addressed in Steps 2 & 3 | 8 | **Poor Communication**: It is essential to ensure that the strategy is communicated effectively across all levels of the organization. Utilize clear, consistent messaging & provide regular updates to ensure alignment among all team members. | Addressed in Step 5 |
| 2 | **Lack of Agility in Strategy Revision**: Maintain readiness to pivot & make strategic adjustments when certain approaches fail to yield the expected outcomes. Agility in strategy revision is crucial for adapting to changing circumstances effectively. | Addressed in Steps 6 & 9 | 9 | **Inaccurate Data or Poor Decision-Making**: Make strategic decisions based on accurate and relevant data. Poor-quality data can result in misguided strategies that fail to address key issues effectively. | Addressed in Step 7 |
| 3 | **Lack of Leadership Commitment**: It is vital to engage leadership at every stage of the process. Their active participation & visible support are essential for legitimizing the strategy & inspiring the workforce. | Addressed In Step 7 | 10 | **Inadequate Execution**: Ensure that execution is as robust as the planning phase. Detail execution plans thoroughly & establish clear accountability measures to drive effective implementation. | Addressed in Steps 4 to 9 |
| 4 | **Overly Ambitious Goals**: Set realistic and achievable objectives. Goals that are excessively ambitious can demotivate & increase the risk of failure, as they may appear unattainable. | Addressed in Steps 4 & 5 | 11 | **Ineffective Monitoring & Control**: Establish robust tracking & reporting mechanisms. Utilize key performance indicators (KPIs) & milestones to monitor progress & performance effectively. | Addressed in Step 8 |
| 5 | **Inadequate Resources**: Ensure the allocation of sufficient resources, including budget, time, & personnel, to support strategic initiatives. Implement ongoing monitoring & reallocation strategies to address any resource gaps as needed. | Addressed in Step 6 | 12 | **Lack of Flexibility**: Embrace adaptability in response to changing circumstances. Implement feedback loops & periodic reviews to refine & adjust the strategy as necessary, ensuring agility & responsiveness. | Addressed in Step 9 |
| 6 | **Insufficient Alignment**: Align the strategy with the organization's vision, culture, & operational realities. Ensure that individual & departmental goals are in harmony with the overarching strategy to foster cohesive progress. | Addressed in Step 5 | 13 | **Resistance to Change**: Proactively address resistance through effective change management practices. Take the time to understand the concerns of stakeholders & involve them in the change process to foster buy-in and cooperation. | Addressed in Step 7, 8 & 9 |
| 7 | **Silos and Lack of Collaboration**: Foster collaboration & information sharing by breaking down organizational silos. Enhanced collaboration is essential for cohesive strategy execution. | Addressed in Step 5 | 14 | **Failure to Learn and Adapt**: Cultivate a learning environment that promotes feedback & encourages the application of lessons learned to current & future strategies. | Addressed in Step 8 & 9 |




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Internal JCI Survey Findings on Strategy Execution Concerns (2020-2023)

6.2. Successful strategy execution requires dedicated focus; it cannot rely solely on individual business units with minimal alignment guidance. In Step 4 of JCI's ISEP (Section 5.9), the creation of an Office of Strategy Management (OSM) is proposed. This office will coordinate and oversee strategic planning and execution. It serves to bridge the gap between strategy development and implementation, ensuring strategies are turned into actionable steps with meticulous performance monitoring. The OSM doesn't manage all tasks but supports the processes, ensuring stakeholder alignment and integrating activities across the organization to achieve desired outcomes (Kaplan et al., 2005).

6.3. Below are the proposed roles and responsibilities of the OSM, designed to address concerns at both the macro and micro levels and aligned with the survey feedback.

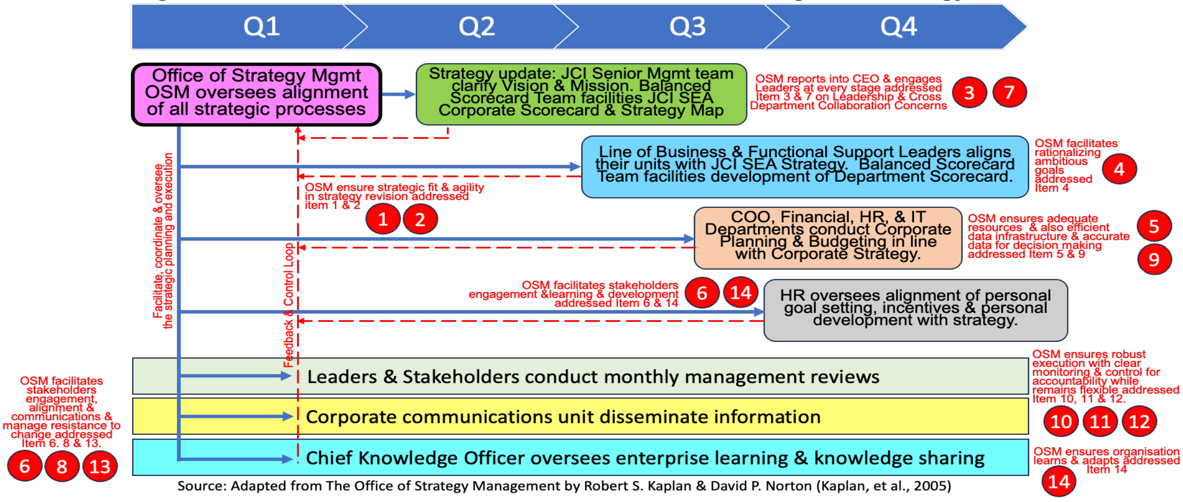
**Table 12: Office of Strategy Management (OSM) – Purpose, Roles & Responsibilities**

| Purpose of Office for Strategy Management (OSM) | Item | Roles & Responsibilities of OSM |
|---|---|---|
| 1. **Ensure Strategic Alignment**: Confirm that all parts of the organization are aligned with the strategic goals. 2. **Facilitate Communication**: Enhance communication between the leadership team and the rest of the organization regarding strategic objectives. 3. **Monitor Execution**: Track the implementation of strategic initiatives to ensure they are progressing as planned. 4. **Coordinate Strategic Initiatives**: Oversee various strategic projects to prevent overlap and to ensure efficient use of resources. 5. **Promote Organizational Agility**: Help the organization remain flexible to adapt its strategy in response to internal and external changes. 6. **Support Decision-Making**: Provide data and insights that inform strategic decisions at the executive level. | 1 | **Strategic Planning Facilitation:** Lead the strategic planning process & update strategic plans as necessary |
| | 2 | **Communication Champion:** Communicate the strategy throughout the organisation & foster understanding of strategic goals & initiatives. |
| | 3 | **Scorecard Management:** Develop & manage the Balanced Scorecard or other strategic management tools to measure performance against strategic objectives |
| | 4 | **Strategic Initiative Portfolio Management:** Manage a portfolio of strategic initiatives, ensuring they are aligned with strategic objectives & delivering the expected results. |
| | 5 | **Change Management:** Facilitate change management processes to support strategy execution, addressing organisation resistance & culture change. |
| | 6 | **Alignment of Budgets & Resources:** Align budgeting & resource allocation with strategic priorities, working closely with finance & other departments. |
| | 7 | **Learning & Development:** Support training & development initiatives that build the capabilities required to execute the strategy. |
| | 8 | **Leadership Support:** Provide support to the leadership & executive teams in their role as sponsor of strategic initiatives. |
| | 9 | **Performance Analysis:** Analyse performance data to identify areas for improvement & regularly report on the progress towards strategic goals. |
| | 10 | **Strategic Governance:** Develop & oversee the governance structures that manage & guide the JCI Integrated Strategy Execution Process |
| | 11 | **Risk Management:** Identify & manage risks associated with strategic plans & initiatives. |
| | 12 | **Continuous Improvement:** Implement a continuous improvement process for the strategy management system itself, ensuring it evolves with the JCI organisation needs. |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Proposed JCI’s Office of Strategy Management (OSM)

6.4. Here is an overview of the planning cycle, illustrating how the OSM is structured to report to the JCI APAC President/CEO (and JCI SEA GM), thereby empowering it to mitigate power-play issues. The OSM can facilitate, coordinate, and oversee the proposed JCI Integrated Strategy Execution Process, helping to address the 14 areas of concern by collaborating with key stakeholders within the JCI's organization to manage any reactions and foster positive change during execution.

**Figure 20: Macro & Micro Level Considerations in JCI Integrated Strategy Execution**




Source: Adapted from The Office of Strategy Management by Robert S. Kaplan & David P. Norton (Kaplan, et al., 2005)

## 7.0. Business Sustainability and Resilience Planning

7.1. Sustainability is now a crucial trend, driven by the intersection of environmental, economic, and social factors alongside growing market demands. Understanding the "why" behind sustainability is vital as it can profoundly impact businesses and many countries. Therefore, incorporating sustainability and resilience planning is essential. Here are the reasons why JCI advocates for sustainability as an imperative today more than ever.

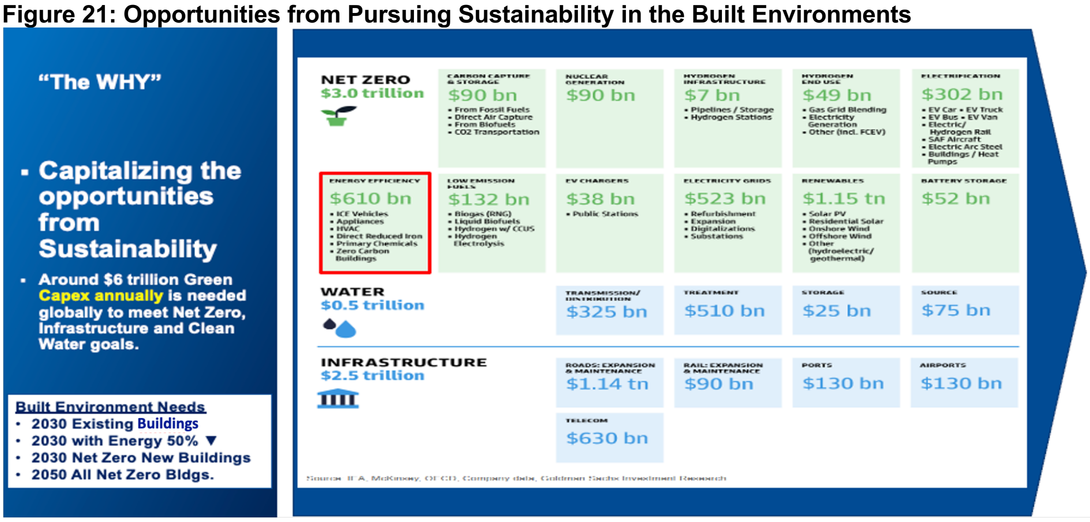
**Table 13: Reasons: Sustainability is a Significant Global Trend**

| Item | Why Sustainability is Imperative |
|---|---|
| 1 | **Environmental Concerns**:<br>▪ Climate Change: Global warming and its impacts, eg. extreme weather events, are driving the need for sustainable practices to reduce carbon emissions and mitigate climate change and significant economic loss.<br>▪ Resource Depletion: Tragedy of Commons: Over-exploitation of natural resources is leading to shortages of water, minerals, & raw materials.<br>▪ Biodiversity Loss: Unsustainable practices are leading to the destruction of habitats and the extinction of species. |
| 2 | **Economic Factors**:<br>▪ Long-term Viability: Sustainable practices ensure that businesses can continue to operate & grow in the future without being hampered by resource scarcities.<br>▪ Cost Savings: Energy efficiency & waste reduction can lead to significant cost savings (& helps our environment).<br>▪ Innovation Driver: Sustainability challenges are inspiring innovations in technologies, processes, and disruptive business models. |
| 3 | **Social Responsibility**:<br>▪ Equity & Wellbeing: Sustainable development aims to meet the needs of the present without compromising the ability of future generations to meet their own needs, promoting intergenerational equity.<br>▪ Health & Wellness: Environmental degradation has direct & indirect impacts on human health, which sustainability efforts aim to mitigate. |
| 4 | **Governance & Regulatory Pressure**:<br>▪ Governments worldwide are implementing regulations aimed at protecting the environment & encouraging sustainable practices.<br>▪ Compliance with these regulations is becoming a fundamental aspect of operational legality & corporate responsibility. |
| 5 | **Consumer Demands**<br>▪ Increasingly, consumers are demanding products & services that are produced in an environmentally & socially responsible manner.<br>▪ Brand Loyalty: Companies that are seen as sustainable can enjoy stronger brand loyalty & reputation. |
| 6 | **Investor Expectations**:<br>▪ Investors are looking to support businesses with sustainable practices, as these are perceived to have lower risks & better long-term prospects.<br>▪ Sustainability Reporting: There's a growing trend for ESG (Environmental, Social & Governance) reporting eg. GRI, SASB, TCFD, GRESB, CDP, SBTi, UN PRI, etc, which influence investment decisions. |
| 7 | **Attract & Retain Talents**<br>▪ Create a workplace and corporate culture that is attractive to talented individuals looking for meaningful, engaging, and long-term employment.<br>▪ Companies that integrate sustainability into their core business strategies can gain a competitive advantage in the talent marketplace. |
| 8 | **Technological Advancement**:<br>▪ Innovations are enabling more sustainable solutions in energy, manufacturing, transportation, and other sectors, which can be more cost-effective & efficient that also contribute to lower carbon emissions. |
| 9 | **Market Opportunities**:<br>▪ New markets are created for sustainable products & services due to the increasing demands, creating evolving opportunities for all. |
| 10 | **Global Initiatives**:<br>▪ International frameworks, such as the United Nations Sustainable Development Goals (SDGs), are setting global targets for sustainability that countries & companies are working to achieve net zero carbon emission by 2050 or earlier. |

Source: Johnson Controls' Sustainability APAC Alignment Communication, 2022.

7.2. Given that the built environment is a significant carbon emitter, accounting for up to 40% of emissions that exacerbates global warming and climate change, the United Nations and the World Green Building Council have mandated that all buildings must achieve net-zero emissions by 2050 (WGBC, 2023). Additionally, existing buildings should aim to enhance energy efficiency by 50% by 2030. This heightened focus on sustainability presents a substantial global market opportunity for JCI that is in its direct influence on building upgrades and retrofits, estimated at approximately US$610 billion per year (McKinsey, 2010).

**Figure 21: Opportunities from Pursuing Sustainability in the Built Environments**




Source: Johnson Controls' Sustainability APAC, 2022.

7.3. As the global leader in smart, healthy, and sustainable buildings, JCI has leveraged its comprehensive building solutions and robust domain capabilities to develop a suite of Sustainability Solutions. These solutions, continuously refined over time, are designed to support its customers. They are accompanied by robust project references and customer-centric case studies.

**Figure 22: JCI's Comprehensive Offering of Sustainability Solutions**


Source: Johnson Controls' Sustainability APAC, 2022.

7.4. JCI demonstrates its commitment to sustainability through various commitments, including active participation in global conferences and seminars. This engagement helps position the company as the preferred partner for clients worldwide. It proudly presents its Sustainability Solutions, supporting customers in over 150 countries. JCI also communicates its sustainability initiatives through detailed reports. These include Scope 1, 2, and 3 emissions, underscoring a strong leadership commitment and clear performance metrics. Moreover, the company invests heavily in innovative and advanced technologies to enhance energy efficiency, reduce emissions, and support positive social causes (JCI, 2023).

7.5. Considering the importance of sustainability and resiliency to JCI, it is crucial to align these values at every business level, including the guiding north star. This alignment will enhance JCI's market position, capitalize on emerging opportunities, meet evolving stakeholder expectations, and contribute to a sustainable and resilient future. The proposed approach systematically incorporates sustainability and resiliency planning into every stage of the JCI ISEP. This ensures long-term viability, competitiveness, adaptability, and value creation in the built environment. It also prepares the organization for future crises and challenges, including potential resurgences of the COVID pandemic, with an intensified focus on health and wellness for both internal and external customers.

**Table 14: Advancing JCI ISEP with Sustainability & Resiliency Practices**

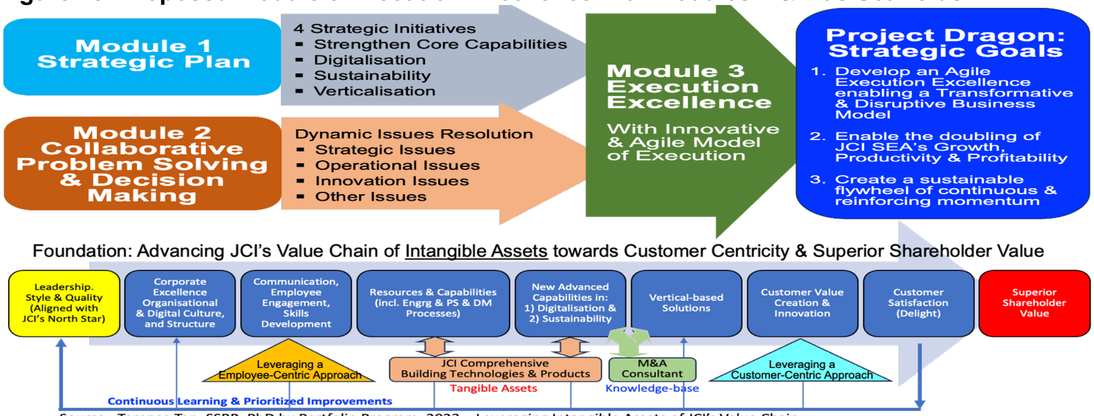
| Item | Systematic Approach to Incorporate Sustainability & Resiliency into JCI ISEP |
|---|---|
| 1 | **Regular Strategic Review for Innovation & Improvement:**<br>Continuously Review Sustainability & Resilience Needs: Conduct a thorough review of JCI's current sustainability & resilience practices, regularly identifying gaps and opportunities for improvements. Benchmark against JCI corporate directive.<br>Integrate into Vision & Objectives: Ensure that sustainability & resilience are integral to JCI's vision & strategic objectives, reflecting their importance in the company's market differentiator & success |
| 2 | **Operational Planning & Execution**<br>Embed in Operations: Integrate sustainable practices & resilience planning into the operational strategies. This could involve adopting green technologies, optimizing resource use, & ensuring operations are flexible enough to withstand disruptions.<br>Supply Chain & Ecosystem: Work with suppliers & partners who prioritize sustainability, & build a resilient supply chain that can adapt to changes & recover from disruptions efficiently. |
| 3 | **Human Capital**<br>Employee Empowerment & Involvement: Develop programs that empower employees to contribute to sustainability & resilience initiatives, such as green teams or innovation challenges.<br>Skills Development: Invest in training programs to upskill employees in areas critical to sustainability & resilience, ensuring the workforce is prepared for future challenges. |
| 4 | **Stakeholder Engagement & Communication for Alignment**<br>Engage Stakeholders: Actively engage with stakeholders, including employees, customers, eco-vendor partners, investors, NGOs & communities, to communicate the sustainability & resilience goals of Project Dragon. Gather their input & incorporate it into planning & execution.<br>Transparency & Reporting: Maintain transparency through regular reporting on sustainability & resilience efforts, achievements, and challenges. Utilize frameworks like GRI (Global Reporting Initiative) or CDP (formerly Carbon Disclosure Project) for standardized reporting. |
| 5 | **Monitoring, Learning, & Adaptation**<br>Performance Indicators: Establish clear metrics & KPIs for sustainability & resilience, monitor regularly to gauge progress.<br>Continuous Improvement: Foster a culture of continuous improvement & learning, where feedback loops help refine sustainability & resilience strategies over time.<br>Adaptation Mechanisms: Develop mechanisms to quickly adapt strategies based on external changes, technological advancements, & stakeholder feedback. |
| 6 | **Leadership & Culture**<br>Leadership Commitment: Ensure strong commitment from leadership towards sustainability & resilience, setting a tone that permeates throughout the organization.<br>Cultivate a Sustainable Culture: Promote a culture that values sustainability & resilience, encouraging innovation & responsible decision-making at all levels. Actively participate in public policy discussions & advocacy efforts. |
| 7 | **Risk Management & Compliance**<br>Comprehensive Risk Assessment: Regularly assess risks related to sustainability & resilience, incorporating climate risk as a significant factor. Ensure cost & benefit analysis makes investment sense.<br>Compliance & Beyond: Comply with all relevant environmental regulations & standards, aiming to exceed them where possible to position JCI as a leader in sustainability & resilience. |
| 8 | **Innovation & Product Development**<br>Sustainable Innovation: Focus on developing products & solutions that are not only innovative but also environmentally friendly & sustainable. Leverage JCI's expertise in building & digital technologies to pioneer sustainable building solutions.<br>Resilience Features: Incorporate features that enhance the resilience of products & services, ensuring they contribute to making infrastructures more adaptable & robust against climate change & other risks like COVID pandemic resurgence. |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Proposed Sustainability & Resiliency Practices in JCI ISEP

## 8.0. Making It Happen: Implementation Plan for the Proposed JCI Strategy

8.1. Alignment is key to the success of any strategy implementation. Leveraging Modules 1 and 2 as scaffolds, the following mindmap outlines the implementation plan for Project Dragon, aimed at delivering execution excellence. This includes strengthening the foundation of JCI's organisation infrastructure through its leadership and corporate excellence culture as proposed in earlier Section 5.2.

**Figure 23: Proposed Module 3 Execution Excellence with Modules 1 & 2 as Scaffolds**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Leveraging Intangible Assets of JCI's Value Chain

8.2. The BSC and SM have been refined to align with the advanced JCI ISEP. This alignment features clear deliverables and key focus areas, identified through a Gap Analysis in Module 1. It highlights JCI's commitment to delivering innovative solutions and driving disruptive changes in the built environment. Presented here is the JCI One Page Balanced Strategic Plan. This plan integrates deliverables from Modules 1, 2, and 3, positioning JCI to evolve into an innovative and disruptive business model. It remains agile and adaptive to the VUCA environment and includes Key Performance Indicators for measuring strategic execution success.

**Table 15: JCI SEA – One Page Balanced Strategic Plan (Integrating Modules 1, 2 & 3)**

| | | | | |
|---|---|---|---|---|
| **Vision** | A Safe, Comfortable & Sustainable World | | | |
| **Mission** | Help our Customer Win Everywhere, Every Day (as a Global Leader in Smart, Healthy & Sustainable Buildings) | | | |
| **Strategic Themes** | Strengthen Core Capabilities | Digitalisation | Sustainability | Verticalisation |
| **Strategic Results** | Yearly validated engineering & solution competencies enabling superior value-chain, supported with Knowledge Library for continued growth. | Comprehensive OpenBlue platform & smart solutions of use cases with unlimited possibilities, enabled by Skilled Digital Talents, Processes & Eco-partners. | Advance & integrate Sustainability Solutions as core capabilities, enabling outcome based with ESG impact towards Net Zero Buildings | Positioned as domain expert of end-use vertical needs & business model, enabled by consultancy & comprehensive solution suites. |
| **Execution Excellence** | JCI Integrated Strategy Execution Process (based on Agile & Adaptive Balanced Scorecard, Strategic Map & enhanced Execution Premium Process) | | | |
| **Strategy Map** | | **Balance Score Card** | | **Action Plan** |
| **Strategic Theme Innovative Transformation** | **Objectives** | **Measurements** | **Targets** | **Initiatives** |
| **Financial** Growth, Profitability; Improve Cost Structure, Expand Revenue | ▪ Growth<br>▪ Profitability<br>▪ Improve Cost Structure<br>▪ Expand Revenue Opportunities | ▪ Growth Pillars Quantity<br>▪ GM% Increase<br>▪ Inquiry Increase (by Industry Vertical, Digital vs Sustainability) | ▪ 4 Growth Pillars<br>▪ +20% YoY Revenue<br>▪ +20% YoY Secured<br>▪ +5% GM<br>▪ 30% Increase Inquiry | ▪ Review & Adopt Strategic Plan<br>▪ Drive Inquiries, Closure & GM%<br>▪ Weekly Cadence |
| **Customer** Enhance Value of Features, Leverage Eco-partners | ▪ Enhance Value of Features<br>▪ Leverage Eco-partners (Collaboration) | ▪ Key Features (vs Market Needs)<br>▪ Strategic Eco-partners (by Industry Vertical) | ▪ Key Features Qty (vs Market Needs = Gap)<br>▪ 5 Eco-partners per Vertical | ▪ Survey Customer Specific Needs<br>▪ Develop Solutions (with Eco-partners) |
| **Internal** Invest in Innovative Development, Localize Customization | ▪ Invest in Innovative Development<br>▪ Localize Customization (Relevancy) | ▪ Innovation Partners Quantity<br>▪ Enhanced Localized Solutions | ▪ 5 Collaboration Agreements (with Innovation Partners)<br>▪ 10 Local Customized Solutions | ▪ Find Partners with Goal to Collaborate<br>▪ Establish Local Customized Solution Delivery Approach |
| **Learning** Leadership & Culture Alignment, Intangible Assets Focus | ▪ Leadership & Culture Alignment<br>▪ Intangible Assets Focus (Knowledge-based) | ▪ Employee Focused Leadership<br>▪ Service Value Chain Model Adoption<br>▪ Learning & Development | ▪ 12 Employee Engagement Events<br>▪ < 10% Employee Attrition<br>▪ 1 L&D/Mth per Staff | ▪ Modify or Adopt Service Profit Chain Model<br>▪ Transform Knowledge-base business. |
| **Core Values:** | • Integrity First • Purpose Led • Customer Driven • Future Focused • One Team | | | |

Delivering the Strategic Alignment & Results through 4 Themes

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – JCI One Page Balanced Strategic Plan

8.3. The proposed JCI ISEP includes 4 phases, encompassing a total of 9 steps. Here is a detailed step-by-step breakdown of the strategy execution across this process.

**Figure 24: Proposed Actions as per JCI ISEP in 4 Phases & 9 Steps**


8.3.1. **Phase 1 - Advancing Strategic Planning**: involves executive sponsorship, resource allocation, and program planning, as well as conducting assessments with stakeholder inputs. This phase primarily seeks re-endorsement of the proposed JCI Strategic Plan outlined in Module 1, along with the collaborative PS & DM framework and process detailed in Module 2. All reaffirmations have been completed.

**Table 16: Phase 1 – Advancing Strategic Planning: Step 1 & 2 Actions**

| Step | Action | | Purpose | Accountability | Start-Date | End-Date | Action % | Status | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | **Executive Sponsorship, Resourcing & Program Planning** | | | | | | | |
| | 1 | Reaffirm Executive Sponsor's commitment & resourcing | Leadership | MD & LoB Heads | 1-Mar-24 | 5-Mar-24 | 100% | Complete | Reaffirmed |
| | 2 | Reaffirm high level strategic direction & organisation infrastructure | Leadership | MD & LoB Heads | 1-Mar-24 | 7-Mar-24 | 100% | Complete | Reaffirmed |
| | 3 | Setup Strategic Planning Taskforce with Key Executive Members | Leadership | Taskforce | 10-Mar-24 | 15-Mar-24 | 100% | Complete | Taskforce with key LoB Heads & Mgrs |
| | | | | | | | | | |
| 2 | | **Conduct Assessments, SWOT, & Gather Stakeholders Input** | | | | | | | |
| | 4 | Review 50+ Analysis conducted on Internal/External Environments | Alignment | Taskforce | 16-Mar-24 | 30-Mar-24 | 100% | Complete | Reaffirmed |
| | 5 | Re-validate with Key Stakeholders for alignment of SWOT findings | Alignment | Taskforce | 20-Mar-24 | 30-Mar-24 | 100% | Complete | Reaffirmed |
| | 6 | Revalidate Issues Analysis & Gaps that must be addressed | Alignment | Taskforce | 25-Mar-24 | 30-Mar-24 | 100% | Complete | Reaffirmed |

8.3.2. **Phase 2 - Clarify Strategy**: involves developing high-level business strategies and translating them into clearer initiatives. Reaffirmations and approvals for this phase have been completed, with the exception of two new initiatives. These initiatives involve the proposed acquisition of a domain consultant to expedite in-house vertical capability building for swift go-to-market strategies, and engaging an AI consultant to develop a blueprint for the progressive rollout of Gen-AI technology aimed at enhancing productivity and driving revenue generation.

**Table 17: Phase 2 – Clarify Strategy: Step 3 & 4 Actions**

| Step | Action | | Purpose | Accountability | Start-Date | End-Date | Action % | Status | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 3 | | **Develop high-level Biz Strategies (from Strategic Elements)** | | | | | | | |
| | 7 | Reaffirm JCI's Vision of the Built Environment over 1-3-5 Years | Direction | MD & LoB Heads | 25-Mar-24 | 28-Mar-24 | 100% | Complete | Reaffirmed |
| | 8 | Reaffirm JCI's Value Proposition & competitive gaps | Direction | MD & LoB Heads | 28-Mar-24 | 30-Mar-24 | 100% | Complete | Reaffirmed |
| | 9 | Reclarify the proposed strategy options against best practices | Transformation | MD & LoB Heads | 28-Mar-24 | 30-Mar-24 | 100% | Complete | Reaffirmed |
| | 10 | Reaffirm the 4 Growth Pillars (as Strategic Themes) | Transformation | MD & LoB Heads | 29-Mar-24 | 30-Mar-24 | 100% | Complete | Reaffirmed |
| | 11 | Reaffirm to adopt agile & adaptive BSC, Strategic Map & ISEP execution | Execution | MD & LoB Heads | 30-Mar-24 | 30-Mar-24 | 100% | Complete | Reaffirmed |
| | | | | | | | | | |
| 4 | | **Translate the Strategy** | | | | | | | |
| | 12 | Review the Strategic Thematic Framework (ie. Strengthen Core Capabilities, Digitalisation, Sustainability & Verticalisation) | Alignment | MD & LoB Heads | 1-Apr-24 | 5-Apr-24 | 100% | Complete | Reaffirmed |
| | 13 | Review the BSC & Strategy Map (with prioritised focused areas) | Alignment | MD & LoB Heads | 1-Apr-24 | 5-Apr-24 | 100% | Complete | Reaffirmed |
| | 14 | Review Strategic Objectives, Measurements, Targets & Initiatives | Alignment | MD & LoB Heads | 1-Apr-24 | 5-Apr-24 | 100% | Complete | Reaffirmed |
| | 15 | Setup Office of Strategy Management (OSM) as Governance Model | Enabling Focus | MD | 3-Apr-24 | 10-Apr-24 | 100% | Complete | Approved with OSM Lead appointment |
| | 16 | Identify BSC Lead for each LoBs to facilitate deployment | Agile BSC & SM | MD & LoB Heads | 8-Apr-24 | 10-Apr-24 | 100% | Complete | Approved with BSC Lead appointment |
| | 17 | Identify Chief Knowledge Officer (to develop Knowledge Infrastructure & validate JCI evolving engineered solution competency) | Knowledge | MD | 8-Apr-24 | 10-Apr-24 | 100% | Complete | Approved with CKO appointment |
| | 18 | Identify M&A Target of Consultant with Vertical Domain Expertise | Deploy Speed | MD & LoB Heads | 1-Mar-24 | 30-Jun-24 | 60% | Progress | Alternative to develop in-house capability |
| | 19 | Engage AI Consultant (propose blueprint for progressive Gen-AI roll-out) | Gen-AI Plan | MD | 1-Mar-24 | 30-Jun-24 | 50% | Progress | Aligning with JCI HQ for cost effectiveness |

8.3.3. **Phase 3 - Drive Performance**: focuses on aligning the organization and dynamically planning operations, which are progressing well with the cascading of business goals and the realignment of existing targets and initiatives. A major milestone in communicating the strategic plan, its goals, and the rationale and methods behind the strategy is set for July 2024. The list of recommended software to support agile BSC, SM, and JCI ISEP adoption is included in Appendix E. The newly appointed Chief Knowledge Officer (CKO) will play a crucial role in enhancing organizational knowledge and competency, including fostering continuous innovations.

**Table 18: Phase 3 – Drive Performance: Step 5 & 6 Actions**

| Step | Action | | Purpose | Accountability | Start-Date | End-Date | Action % | Status | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 5 | | **Align the Organisation** | | | | | | | |
| | 20 | Cascading Strategic Objectives to LoBs, Shared Services & Individuals | Alignment | LoB Heads | 15-Apr-24 | 30-May-24 | 50% | Progress | Assigning & cascading targets |
| | 21 | Identify software to support agile BSC & Strategy Map adoption ease | Productivity | IT Head | 30-Mar-24 | 30-Jun-24 | 20% | Progress | List of potential software partner identified |
| | 22 | Convene Town Hall Meeting, Sharing through Email & Company Portal | Engagement | MD & LoB Heads | 1-Jul-24 | 5-Jul-24 | 0% | Pending | Preparing for the communications |
| | 23 | Communication: Strategic Goals, Plan & Mission to seek alignment | Engagement | MD & LoB Heads | 8-Jul-24 | 12-Jul-24 | 0% | Pending | Preparing for the communications |
| | 24 | Awareness & Urgency: Market needs (+ Gen AI) vs JCI building solutions | Engagement | MD & LoB Heads | 8-Jul-24 | 12-Jul-24 | 0% | Pending | Preparing for the communications |
| | 25 | Awareness & Urgency: Importance of enhance capability & collaboration | Engagement | MD & LoB Heads | 8-Jul-24 | 12-Jul-24 | 0% | Pending | Preparing for the communications |
| | 26 | Identify stakeholder groups, interest & align engagement communications | Engagement | MD & LoB Heads | 8-Jul-24 | 12-Jul-24 | 0% | Pending | Preparing for the communications |
| | | | | | | | | | |
| 6 | | **Plan Operations Dynamically** | | | | | | | |
| | 27 | Assign budget based on Strategy Initiatives & Impact | Agile Ops | MD & Finance | 15-Apr-24 | 30-May-24 | 30% | Progress | Refining budget aligned with strategic initiatives |
| | 28 | Deploy rolling forecast for agility & efficient resource allocation | Agile Ops | MD & Finance | 30-May-24 | 15-Jun-24 | 0% | Pending | Seeking alignment with JCI HQ planning |
| | 29 | Leverage collaborative PS & DM to identify key process improvements | Improvements | LoB Heads | 15-Mar-24 | 30-Jun-24 | 20% | Progress | Reinforcing of existing PS & DM process |
| | 30 | Incorporate Sustainable Practices & Resiliency Planning in Operations | Resiliency | LoB Heads | 30-Apr-24 | 30-Jun-24 | 0% | Pending | Incorporate sustainable practices for resiliency |
| | 31 | Systematically engage Eco-Partners to ensure supply chain resiliency | Supply Chain | Supply Chain Head | 15-Mar-24 | 30-Jun-24 | 50% | Progress | Strengthen eco-partners' support & solutioning |
| | 32 | CKO to benchmark, identify gaps, train & strengthen LoBs' core competency (house of capabilities) & validate annually to be industry's | Knowledge & Competency | CKO & LoB Heads | 30-Jun-24 | 30-Dec-24 | 0% | Pending | LoBs & support functions to assign a Competency Lead each to support CKO |
| | 33 | Scale Service Profit Chain Modelfor employee & customer centricity | Transformation | MD & LoB Heads | 30-Jun-24 | 30-Dec-24 | 0% | Pending | Refer to Module 1, L04, Section 8.17. |
| | 34 | Deploy OpenBlue Digital Platform & Smart Use Cases to (1) connect installed base to enhance productivity & (2) transform customers | Digitalisation | MD & LoB Heads | 2-Jan-23 | 30-Dec-24 | 50% | Progress | Position digital capability & solutions partnering LoBs as catalyst. |
| | 35 | Explore Gen AI trials where it value-add in ops productivity & value | Gen-AI Trial | LoB Heads | 1-Mar-24 | 1-Oct-24 | 20% | Progress | AI learning & experience before roll-out |
| | 36 | Promote Sustainability Solutions to customer base as extended offerings in performance based, green, smart, super-low energy & net zero | Sustainability | LoB Heads | 1-Oct-23 | 1-Oct-24 | 30% | Progress | Sustainability capability into LoBs' core competency |
| | 37 | Consult Vertical-based Smart Solutions to transform prioritized customer operational process, digital transformation of business model & | Verticalisation | LoB Heads | 2-Jan-23 | 30-Sep-24 | 30% | Progress | Leverage M&A of Vertical Domain Consultant to expedite speed of GTM. Review at end |

8.3.4. **Phase 4 - Optimise Performance**: focuses on strengthening leadership and culture for effective execution while continuously monitoring and striving for improvements. Thanks to the existing corporate excellence culture, many actions require only a realignment of existing initiatives and practices. This includes leadership development aligned with the Leadership Expectation Guide, which is progressing well. Following the milestone communications set for July 2024, execution is planned to commence.

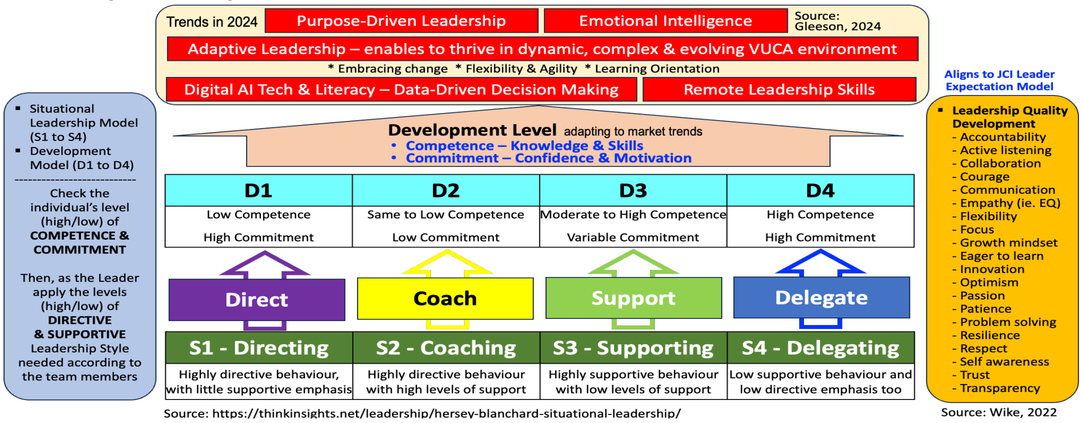
**Table 19: Phase 4: Optimise Performance: Step 7, 8 & 9 Actions**

| Step | Action | | Purpose | Accountability | Start-Date | End-Date | Action % | Status | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 7 | | **Leadership & Culture for Execution** | | | | | | | |
| | 38 | Office of Strategy Management (OSM) to lead LoBs in strategy execution | Transformation | OSM & LoB Heads | 2-May-24 | 30-Dec-24 | 0% | Pending | Refer to Module 3, Section 6.3 |
| | 39 | Leaders to drive organisation infrastructure to leverage intangible assets | Alignment | MD & LoB Heads | 1-Mar-24 | 30-Sep-24 | 20% | Progress | Refer to Module 3, Section 5.2. |
| | 40 | Leadership Style as per JCI Leadership Expectations Development Guide | Leadership | MD & LoB Heads | 1-Oct-23 | 30-Sep-24 | 50% | Progress | Refer to Module 2, L04, Section 9.3. |
| | 41 | Leaders to strengthen JCI Corporate Excellence & Digital Cultures | Culture | MD & LoB Heads | 1-Oct-23 | 30-Sep-24 | 50% | Progress | Refer to Module 2, L04, Section 9.4. |
| | 42 | Inculcate 4 Disciplines of Execution within JCI to ensure focus on wildly important, lead measures, keep compelling scoreboard & accountability | Culture | MD & LoB Heads | 1-Oct-23 | 30-Sep-24 | 30% | Progress | Enforce 4 Discipline of Execution as Corporate Excellence Culture requirement. |
| | 43 | Develop change adoption framework alignment, speed & adaptation | Alignment | MD & CKO | 1-May-24 | 30-Sep-24 | 0% | Pending | Position for agility & adaptability in execution |
| | 44 | Lead with data enabled decision making from knowledge infrastructure | Culture (Digital) | MD & LoB Heads | 1-Mar-24 | 30-Sep-24 | 50% | Progress | Refer to Module 1, L04, Section 5.7.2. |
| | 45 | Leaders to ensure proactive risk management with mitigation plan | Risk Management | MD & LoB Heads | 1-Oct-23 | 30-Sep-24 | 80% | Progress | Refer to Module 1, L04, |
| | | | | | | | | | |
| 8 | | **Execute, Monitor & Learn** | | | | | | | |
| | 46 | Implement Strategic Plan aligned with agile BSC, Strategy Map & JCI ISE | Strategy Execution | All LoBs | 1-Jul-24 | 30-Sep-24 | 0% | Pending | Align to above preparatory works to execute |
| | 47 | Institute Monthly Operational Reviews, incl. proactive risk mitigation | Monitor & Learn | MD & LoB Leaders | 1-Jul-24 | 30-Sep-24 | 0% | Pending | Reformat existing Monthly Ops Reviews to suit |
| | 48 | Institute Quarterly Strategy Reviews, incl. proactive strategy refinement | Monitor & Learn | MD & LoB Leaders | 1-Jul-24 | 30-Sep-24 | 0% | Pending | Reformat existing Strategy Reviews to suit |
| | 49 | Leverage BSC & also SAP Software with Scoreboard as Moment of Truth | Digitalisation | MD, CFO & CKO | 1-Jul-24 | 30-Sep-24 | 0% | Pending | Reformat existing SAP & new BSC software |
| | 50 | Leverage Gen AI for Data Analysis & proactive improvements. | Gen AI | CIO & LoB Leaders | 1-Mar-24 | 30-Sep-24 | 10% | Progress | Conducting trial of Gen AI in OpenBlue OBEM |
| | 51 | Document lessons learnt from strategy execution & operations experience | Enhance Strategy | MD & LoB Leaders | 1-Oct-24 | 30-Dec-24 | 0% | Pending | Review lessons learnt for sharing |
| | | | | | | | | | |
| 9 | | **Continuous Validation, & Adapt/Transform** | | | | | | | |
| | 52 | Conduct yearly strategic hypothesis review adapting to VUCA environment | Enhance Strategy | MD & LoB Leaders | 1-Oct-24 | 30-Oct-24 | 0% | Pending | For FY2024 strategy enhancement |
| | 53 | Incorporate lessons learnt into strategy synthesis for enhancement | Enhance Strategy | MD & LoB Leaders | 1-Nov-24 | 30-Nov-24 | 0% | Pending | Position as FY2024 strategy enhancement |
| | 54 | Develop emerging strategies for disruption & against strategic drifts. | Enhance Strategy | MD & LoB Leaders | 1-Nov-24 | 30-Nov-24 | 0% | Pending | Position as FY2024 strategy enhancement |
| | 55 | Proactive identify issues for resolutions by collaboration PS & DM | Proactive PS & DM | MD & LoB Leaders | 15-Mar-24 | 30-Sep-24 | 20% | Progress | Existing continuous improvement practices |
| | 56 | Embrace customer centric value co-creation to advance solutioning | Value Innovation | CKO & LoB Heads | 1-Oct-23 | 30-Sep-24 | 30% | Progress | CKO to lead this existing CI practice |
| | 57 | Drive sustainable innovations through continuous improvement initiatives | Value Innovation | CKO & LoB Heads | 1-Oct-23 | 30-Sep-24 | 50% | Progress | CKO to lead this existing CI practice |
| | 58 | Share lessons learnt, project experience, & key wins to rally teams. | Engage & Learn | CKO & LoB Heads | 1-Oct-23 | 30-Sep-24 | 20% | Progress | CKO to lead this existing CI practice |

## 9.0. Leadership & Corporate Excellence Culture as Catalyst

9.1. There is a need to highlight a few key success factors of the JCI ISEP, with leadership being a crucial catalyst for establishing a strong organizational infrastructure and fostering a corporate excellence culture (Module 2, L04, Section 9.4). In line with the requirement for agility and adaptiveness, JCI favours adopting the Situational Leadership style among the various available options (Indeed, 2023b). This approach trains JCI leaders to tailor their leadership style according to the situation, the specific needs, and the readiness of their team members (Sridharan, 2022). It involves rallying everyone to work toward a shared vision of the organization and continuously adapting to the evolving leadership landscape (Gleeson, 2024), as illustrated in the mindmap below.

**Figure 25: Situational Leadership Style, Quality & Development for Adapting to Changing Leadership Landscape**




9.2. Leadership is crucial in sustaining JCI's corporate excellence culture by fostering an environment where strategic goals are clear, resources are well-aligned, and employees are motivated and engaged in successful strategy execution. Below are the proposed actions that should be regularly reviewed to continuously strengthen this culture.

**Table 20: Proposed Actions for Enhancing JCI's Organisation Culture for Corporate Excellence**

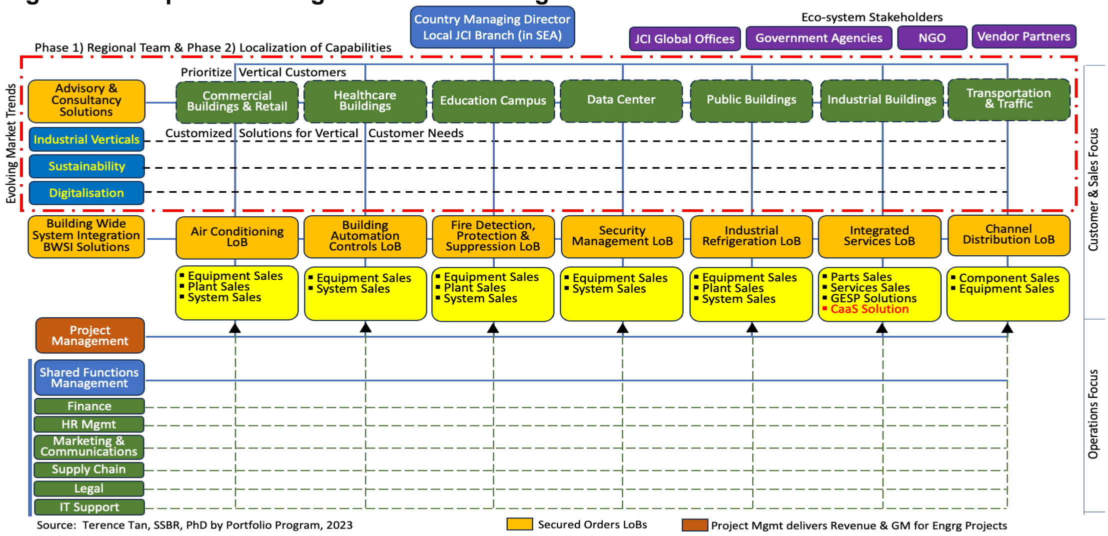
| Goal: achieve JCI's high performance organization culture of Corporate Excellence in Operations, Solutions Leadership & Customer Focus | | | |
|---|---|---|---|
| **Core Focus Areas in enabling high performance culture & corporate excellence** | **Task** | **Action Plan for Enhancing JCI's Organisation Culture** | **Remarks** |
| • Values and Beliefs | 1 | Define & Communicate Core Values & Mission | Communicate the JCI's values, mission, and vision throughout the organization regularly, using various channels such as meetings, internal communications, and training. |
| • Mission and Vision | 2 | Leadership Alignment | Ensure JCI's top leadership, including executives and senior managers, are aligned with and actively support the desired employee-focused culture. JCI's leaders must lead by example by embodying the values and behaviours. |
| • Behavioural Norms | 3 | Employee Involvement | Involve all JCI's employees in the process of defining and shaping the employee-focused culture. Conduct surveys, focus groups, and one-on-one discussions to gather their valuable input and feedback. |
| • Leadership Style | 4 | Cultural Training | Develop training programs that educate JCI's employees about the desired culture, core values, and expected behaviours. Include case studies and real-world examples to illustrate how the culture is applied in practice. |
| • Employee Engagement | 5 | Rewards & Recognition | Implement a system of rewards & recognition that reinforce desired behaviours and values. Recognize deserving employees who exemplify the culture through regular awards or recognition programs. |
| • Organizational Structure | 6 | Hiring and Onboarding | Integrate cultural fit into the recruitment and selection process for talents to support JCI's strategies including digitalisation, innovation. etc. Assess candidates not only for their skills but also their alignment with the company's culture. Design an onboarding process that introduces new JCI's employees to the desired culture and values. |
| • Cultural Artifacts | 7 | Continuous Feedback and Improvement | Establish regular feedback mechanisms to assess the culture's effectiveness and JCI's employee satisfaction. Use feedback to make continuous improvements to the culture and address any cultural issues or concerns. |
| • Employee Relations | 8 | Encourage Innovation and Risk-Taking | Create an environment that encourages JCI's employees to propose new ideas and take calculated risks. Celebrate innovation and learning from failure as part of the cultural journey. |
| • Adaptability | 9 | Open Communication | Foster open and transparent communication at all levels of the JCI's organization. Create channels for JCI's employees to share their thoughts, concerns, and ideas. |
| • Customer Focus | 10 | Employee Development | Invest in the development of JCI's employees by providing opportunities for skill-building, career advancement, and personal growth. This will not only strengthen the culture but also increase JCI's employee loyalty. |
| | 11 | Role Modelling | Identify cultural champions within the JCI's organization who can act as role models for others. Showcase their success stories and behaviours as examples of living the culture. |
| | 12 | Evaluate Progress | Regularly assess the impact of JCI's culture-building efforts. Use metrics such as employee engagement, retention rates, and customer satisfaction to measure progress. |
| | 13 | Adapt and Evolve | Be prepared to adapt and evolve the culture as needed to respond to changes in the business environment, industry trends, or customer demands. |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Actions for Enhancing JCI's Corporate Excellence Culture

## 10.0. Stakeholder Engagement and Communication Actions

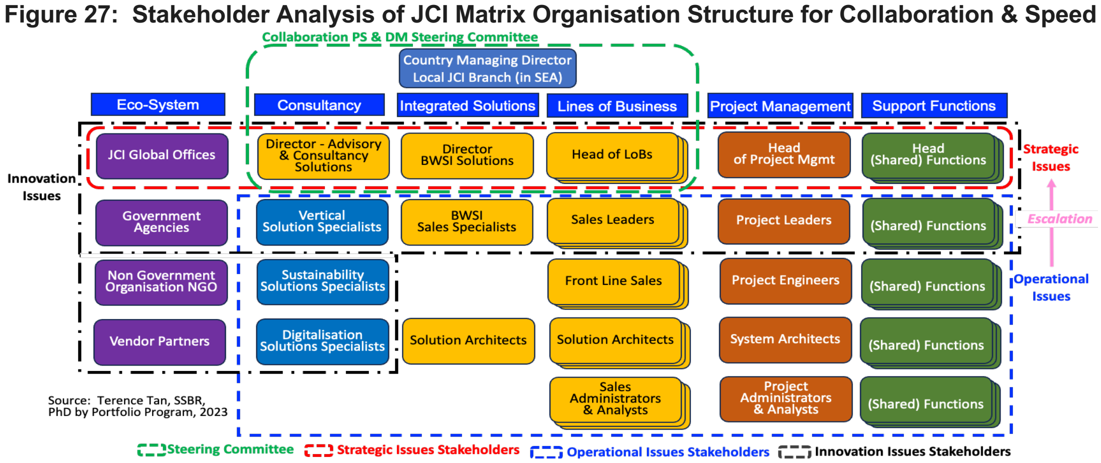
10.1. Stakeholder engagement and communication, crucial components of the organizational infrastructure, directly influence the viability, support, and overall success of the strategic plan execution under JCI ISEP. Special focus is required (under JCI ISEP Step 5, Action 26) to create a sustainable flywheel effect of continuous and reinforcing momentum for the innovative, transformative, and disruptive strategic plan and its execution. The objectives of engagement are to obtain buy-in, gather feedback, ensure transparency, and foster strong collaboration across JCI, all based on the proposed matrix organization structure (Module 2, L04, Section 7.3).

**Figure 26: Proposed Strategic Plan's Matrix Organisation Structure for JCI SEA's Offices**




10.2. From the Stakeholder Analysis in Module 2, L04, Section 8.0, it is evident that the target audiences, both internal and external, have varying needs and expectations that need to be addressed. While the strategic intent is to rally the stakeholders around cohesive business goals, it is crucial to understand how the strategic plan will impact these stakeholders and identify what they value most as mutually beneficial outcomes. This understanding will guide efforts to align interests and enhance collaborative success.

**Figure 27: Stakeholder Analysis of JCI Matrix Organisation Structure for Collaboration & Speed**



10.3. Multiple communication channels including JCI portal, mobile app, emailing, social media and group sharing, should be tailored to meet the diverse needs of different stakeholders, featuring relevant key messages and engaging activities that address their specific interests. Emphasis should be placed on the values of efficient strategic plan execution and the expected outcomes of collaboration, emphasizing the theme of "better together" and the goal to "win as a team." Below are the proposed actions for stakeholder engagement and communication, including accountability measures.

**Table 21: Proposed Actions for Stakeholder Engagement & Communications**

| Item | Actions | Purpose | Accountability | Proposed Schedule | Remarks |
|---|---|---|---|---|---|
| 1 | Strategy Kick-off Meeting: Strategy & Implementation Plan | Ensure alignment & focus on the Strategy & Goal (ie. the Why, How & What) | MD & LoB Heads | Quarterly Updates | First official communication session. Quarterly strategy update sessions with leaders & stakeholders. |
| 2 | Employees & Stakeholders Engagement | Drive accountability and ownership of the assigned initiatives | MD & LoB Heads | Monthly meetings | Monthly cross-functional stakeholder meetings. |
| 3 | Proactive Issue Resolution & Risk Mitigation | Identify and address potential obstacles early from stakeholder feedback. | LoB Heads | Bi-weekly issue assessment | Bi-weekly issue resolution meetings with relevant teams. |
| 4 | Resource Allocation & Utilisation | Efficient resources utilisation, ie. manpower, budget & technology, for execution. | LoB Heads | Quarterly resource planning sessions | Quarterly resource allocation reviews. |
| 5 | Progress Tracking and Feedback | Continuously assess progress and gather feedback from stakeholders | OSM & BSC Leads | Monthly progress reports | Monthly strategy progress review sessions with teams. |
| 6 | Challenge & Conflict Resolution | Proactively address challenges, conflicts and disagreements. | LoB Heads | As needed | Ad-hoc conflict resolution meetings when issues are escalated. |
| 7 | Enhance Decision-Making | Improve the decision-making through diverse input. | MD & LoB Heads | As needed for key decisions | Ad-hoc decision-making sessions for critical strategic choices. |
| 8 | Market Insights | Incorporate external insights on market, customers, industry, etc. into strategy. | Marcoms Head | Bi-annual market analysis | Bi-annual market insights sessions with marketing and sales teams. |
| 9 | Change Adaptation | Proactively respond to external changes. | LoB Heads | As needed in response to changes | Ad-hoc strategy adaptation sessions in response to significant external changes. |
| 10 | Sustaining Trust & Momentum | Build trust and maintain a positive momentum of strategy implementation. | MD & LoB Heads | Ongoing, continuous communication | Consistent communication through various channels (e.g., newsletters, social media). |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Actions for Stakeholder Engagement & Communications

## 11.0. Risk Management and Proactive Mitigation Actions

11.1. Reflecting on JCI senior management's concerns about the high failure rate of strategy execution of up to 90%, a final dedicated focus on Risk Management is essential, as proposed in the JCI ISEM under Section 5.7. Indeed, making strategy work is a formidable task with many potential areas of failure (Kraaijenbrink, 2019), as discussed in Module 1, L04, Section 11.0. Being critically aware and employing the right mitigation strategies and actions are crucial as the first line of defence.

**Table 22: Potential Areas of Strategy Execution Failures & Proposed Risks Mitigation**

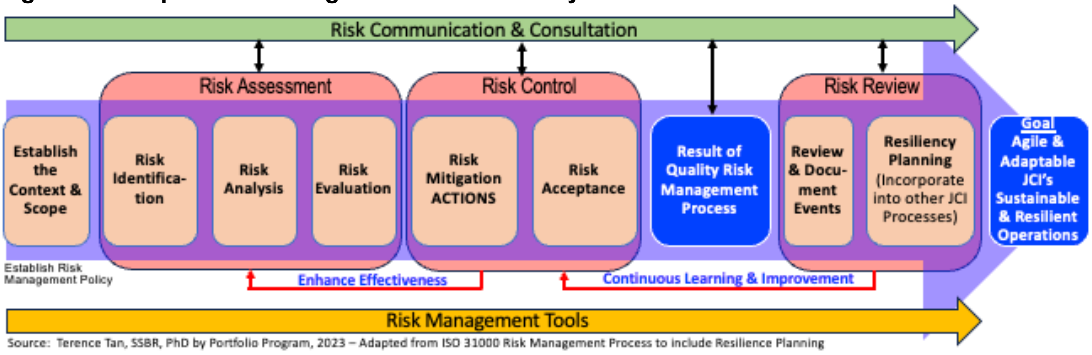
| Item | Strategy Execution Failure Risks | Propose Mitigation Actions |
|---|---|---|
| 1 | Unclear communication | Addressed under communication & stakeholder engagement actions. |
| 2 | No or insufficient communication | Addressed under communication & stakeholder engagement actions |
| 3 | Lack of commitment | Leadership's endorsement & approval of strategic plan with performance review |
| 4 | Insufficient or inadequate resources | Leadership alignment & focus of stakeholders & resource support. |
| 5 | Isolated and fragmented actions | Strategic plan include alignment of LoBs & stakeholders objectives actions. |
| 6 | Ambiguous or conflicting goals | BSC framework & Strategy Map support & align the strategic goals & outcomes. |
| 7 | No or unclear strategy | Strategic Plan outline strategy process, incl. PESTEL, SWOT, Issue Analysis, etc. |
| 8 | No clear priorities | Issue Analysis facilitated the prioritization of Strategic Options. |
| 9 | Ambiguous responsibilities | BSC software provides an integrated update of the responsibilities & actions update. |
| 10 | Lack of performance information | Using BSC software & weekly review cadence with integrated report. |
| 11 | Silo behaviour & sub-optimization | BSC software allows integrated visibility of the stakeholders' progress. |
| 12 | Wrong or ineffective culture | Leadership to walk the talk to drive OHI score with Employee Focus culture. |
| 13 | Resistance to change | Communication to emphasize importance of Why, How & What & WIIFM. |
| 14 | Over-complexity | BSC & Strategy Map simplify & facilitate the ability to describe, measure & manage, |
| 15 | Insufficient management capabilities | Invest in leadership training or acquiring Consultant to help drive the implementation. |
| 16 | Delay, plans are not met | Leadership sponsor, resource support & week review cadence to drive progress. |
| 17 | Budget is exceeded | Strategic Plan to provide budget requirement for leaders to make provision for. |
| 18 | Lack of middle management support | Leadership to set alignment & focus across organization with performance review. |
| 19 | Strategy is not adapted to changes | Implementation Plan allow reiteration of actions with improvements for relevancy. |
| 20 | Poor leadership | Assign competent leader as sponsor to lead & drive Strategic Plan Implementation |

Source: Source: Kraaijenbrink, J. (2019). *20 Reasons Why Strategy Execution Fails, Forbes*

11.2. JCI needs a structured risk management framework to avoid knee-jerk reactions. This framework will help JCI respond effectively to risks while preventing an overly cautious approach, ensuring a systematic and structured method to stay agile and adaptable. This is especially critical in a VUCA business environment. The framework promotes continuous learning and improvement, fostering a sustainable and resilient process. Additionally, it will enable JCI to develop a certifiable framework that can be adopted as a policy, becoming a crucial reference for collaborative PS & DM process.

11.3. Here is the proposed JCI Integrated Risk Resilience Framework (IRRF), aligned with the ISO 31000 Risk Management Framework (ISO, 2024). It includes 4 phases: Risk Context, Risk Assessment, Risk Control, and Risk Review. Additionally, the Resiliency Planning step is designed to enhance JCI's ability to anticipate, prepare for, respond to, and recover from disruptive risks during execution as it progresses toward achieving its strategic goals.

**Figure 28: Proposed JCI Integrated Risk Resiliency Framework**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Adapted from ISO 31000 Risk Management Process to include Resilience Planning

11.4. Addressing these risks demands proactive leadership, clear communication, robust planning, and a commitment to continuous monitoring and adaptation. By actively managing these factors through the OSM, JCI can mitigate the risk of losing momentum and maintain progress towards realizing its vision for agile, adaptable, sustainable, and resilient operations.

**Table 23: Proposed Actions for JCI Integrated Risk & Resiliency Framework & Process**

| Item | JCI IRRF Process | Key Actions | Remarks |
|---|---|---|---|
| 1 | **Establish Context & Scope** | ▪ Define the scope of the JCI's risk management process, including boundaries, objectives, & criteria.<br>▪ Establish the context by identifying internal & external factors that may affect the JCI's ability to achieve its objectives. | This will facilitate the subsequent steps for effective risk identification, analysis & mitigation. |
| 2 | **Risk Management Policy** | ▪ Develop a risk management policy that articulates JCI's commitment to managing risk effectively.<br>▪ Define roles, responsibilities, & authorities for risk management within the JCI organization. | Policy demonstrates JCI's commitment & forms an important reference to the proposed collaborative PS & DM process (Module 2). |
| 3 | **Risk Identification** | ▪ Identify risks that could affect the achievement of objectives at all levels of JCI organization.<br>▪ Consider both internal & external sources of risk, including strategic, operational, financial, & compliance-related risks. | Risk identification serves to identifying the right Problem Statement to enable right mitigation actions. |
| 4 | **Risk Analysis & Evaluation** | ▪ Analyse & assess identified risks to determine their likelihood & potential impact on objectives.<br>▪ Evaluate the significance of risks based on their potential consequences & the organization's risk tolerance or criteria. | This requires the use of appropriate risk management analytic tools (also Step 7) to identify the correct root cause. |
| 5 | **Risk Mitigation Actions** | ▪ Develop & select appropriate risk mitigation options to address identified risks.<br>▪ Prioritise risk mitigation measures based on their effectiveness, feasibility, & cost-benefit considerations. | Deploying the most cost effective & impactful mitigation actions is key. Ensure lessons learnt is document for continuous improvement. |
| 6 | **Risk Monitoring & Review** | ▪ Implement processes for monitoring & reviewing risks on an ongoing basis.<br>▪ Track changes in the risk environment, including new risks, emerging trends, & the effectiveness of risk treatment measures. | Close monitoring & tracking of the result & effectiveness of risk mitigation to enable prompt remedial measures if needed to be taken. |
| 7 | **Communication & Consultation (Leverage Risk Management Tools)** | ▪ Establish clear communication channels for sharing risk-related information within JCI organization.<br>▪ Consult with stakeholders to gather input on risk management decisions & ensure alignment with JCI objectives.<br>▪ Train employees on the use of effective Risk Management Tools. | Communication to ensure awareness & alignment within JCI organisation. Also, as part stakeholder engagement & support. |
| 8 | **Documentation & Recordkeeping** | ▪ Maintain documentation of the risk management process, including risk registers, assessment reports, & treatment plans.<br>▪ Keep records of risk management activities & decisions for accountability & audit purposes. | Documentation enables subsequent review of the events & also to facilitate sharing for cross learning. |
| 9 | **Continuous Improvement** | ▪ Continuously review & improve the effectiveness of the risk management process.<br>▪ Learn from past experiences & adjust risk management practices to enhance organizational agility & resiliency. | As part of resiliency planning, continuous improvement through proactive learning & risk mitigation provision is critical for success. |
| 10 | **Resiliency Planning (Integration with other JCI Processes)** | ▪ Integrate risk management into existing organizational processes & collaborative PS & DM decision-making framework.<br>▪ Ensure that risk management activities are aligned with other management systems & business processes. | This will enable that JCI strengthen its risk management process to enable a more sustainable & resilient operations. |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Adapted from ISO 31000 Risk Management Process to include Resilience Planning

## 12.0. Financial Projection and Economic Impact

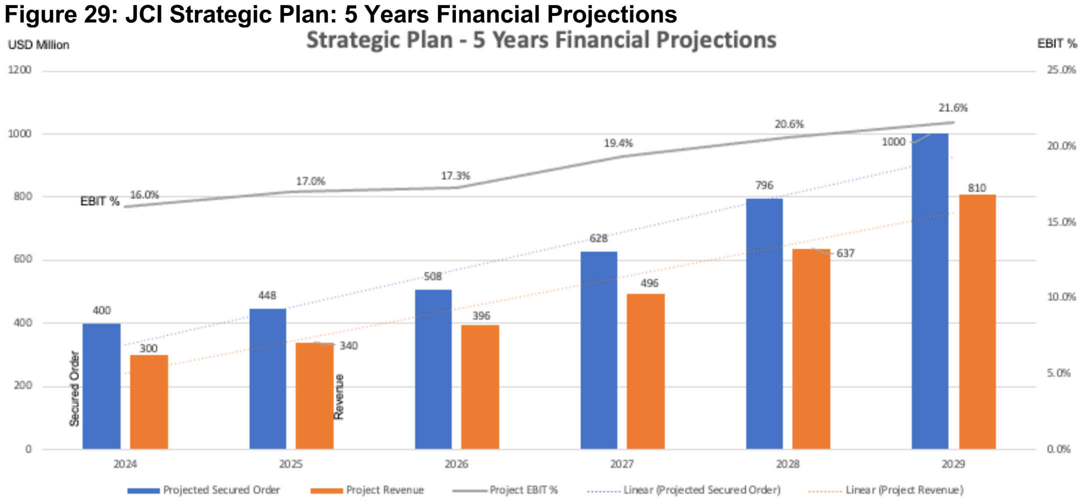
12.1. In line with JCI's focus on business sustainability and resiliency, and extending beyond ESG considerations, economic sustainability is equally crucial. With the strategic plan and its execution process already outlined, here is the financial projection aimed at doubling JCI SEA's business from 2024 to 2029 (refer to Section 4.3) and increasing profitability by 5%.

**Table 24: Financial Projection & Economic Impact of JCI Strategic Plan**

| | JCI SEA Business Goal: Doubling the Business in 5 years (from 2025-2029) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Financial Projections** | | | | | | | |
| | | Base Year | Projected | Projected | Projected | Projected | Projected | Goals |
| | **JCI SEA - USD million** | **2024** | **2025** | **2026** | **2027** | **2028** | **2029** | **> 2X Growth** |
| | **Base Year 2024** | 400 | 400 | 400 | 400 | 400 | 400 | |
| BAU = Biz as Usual | BAU Organic Growth 3% | - | 12.0 | 24.0 | 36.0 | 48.0 | 60.0 | |
| Strategic Theme 1 | Strengthen Core Capabilities | - | 12.0 | 28.0 | 48.0 | 72.0 | 100.0 | |
| Strategic Theme 2 | Digitalisation | - | 8.0 | 16.0 | 24.0 | 60.0 | 132.0 | |
| Strategic Theme 3 | Sustainability | - | 8.0 | 24.0 | 60.0 | 112.0 | 152.0 | |
| Strategic Theme 4 | Verticalisation | - | 8.0 | 16.0 | 60.0 | 104.0 | 156.0 | |
| | Projected Secured Orders | 400 | 448 | 508 | 628 | 796 | 1000 | 250% Increase |
| | Year-on-Year Growth | | 12.0% | 13.4% | 23.6% | 26.8% | 25.6% | |
| | | | | | | | | |
| | Projected Revenue | 300 | 340.5 | 396.2 | 496.1 | 636.8 | 810.0 | 270% Increase |
| | Projected EBIT | 48 | 58.0 | 68.6 | 96.1 | 131.3 | 175.1 | 365% Increase |
| | EBIT % | 16.0% | 17.0% | 17.3% | 19.4% | 20.6% | 21.62% | 5.6% Increase |

12.2. The chart below illustrates the projected growth of Secured Order and Revenue, expected to increase by at least 250% over the next five years. Additionally, the EBIT percentage is projected to grow by 5.6%, aligning with the target of a 5% profitability improvement by 2029.

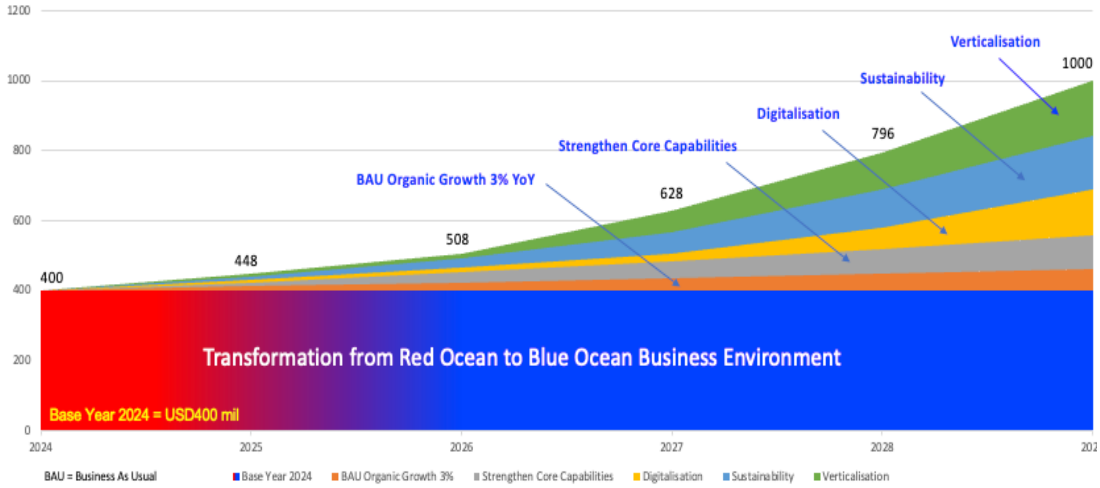
**Figure 29: JCI Strategic Plan: 5 Years Financial Projections**




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – 5 Years Financial Projections based on Module 1, 2 & 3 Forecasted Achievements

12.3. The chart below displays the economic impact of JCI's proposed innovative, transformative, and disruptive business model, which leverages 4 strategic pillars to uniquely position JCI for growth. It is projected that Verticalization, Sustainability, Digitalization, and Strengthening Core Capabilities will be the 4 major contributors to growth. These pillars are expected to significantly transform JCI's key business contributions, as illustrated in the chart.

**Figure 30: Innovation & Transformation of Key Financial Contributors from 2025 to 2029**




| Financial Year | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
|---|---|---|---|---|---|---|
| Base Year 2024 | 400 | 400 | 400 | 400 | 400 | 400 |
| BAU Organic Growth 3% | 0 | 12 | 24 | 36 | 48 | 60 |
| Strengthen Core Capabilities | 0 | 12 | 28 | 48 | 72 | 100 |
| Digitalisation | 0 | 8 | 16 | 24 | 60 | 132 |
| Sustainability | 0 | 8 | 24 | 60 | 112 | 152 |
| Verticalisation | 0 | 8 | 16 | 60 | 104 | 156 |
| Total | 400 | 448 | 508 | 628 | 796 | 1000 |

Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Innovation & Transformation from Red to Blue Ocean Business Environment & Key Financial Contributors

## 13.0. Conclusion & Recommendations

13.1 Project Dragon strives to deliver execution excellence of the proposed JCI Strategic Plan, double its business size and boost profitability over the next 5 years. The strategy highlights agility, adaptability, and sustainability, marking a shift from a competitive Red Ocean to a pioneering Blue Ocean market in a VUCA environment.

13.2. Here are the key findings from Module 3's research:

1. High failure rates in strategy execution: necessitate a robust execution model.
2. Effective leadership and corporate excellence culture: remains crucial for strategy success by fostering a positive and engaging environment.
3. Stakeholder engagement and communication: necessary to obtain buy-in, gather feedback, ensure transparency, and foster strong collaboration across JCI.
4. Dynamic risk management: important but requires a systematic and structured method to stay agile and adaptable in a VUCA environment.
5. Economic sustainability: as crucial as ESG factors for long-term viability.

13.3. These are the recommendations in response:

1. Adopt the Integrated Strategy Execution Process (ISEP): update traditional implementation model to boost agility, adaptability and efficiency.
2. Strengthen the organizational infrastructure: leverage the power of intangible assets to enhance the effectiveness and pragmatic tripartite impacts.
3. Enhance stakeholder communication: drive transparency and secure stakeholder engagement and buy-in through the leverage of OSM.
4. Implement continuous risk management: adopt real-time adjustments and proactive measures.
5. Monitor & adapt performance metrics: keep metrics in line with established goals and evolving market conditions.

13.4. Building on Modules 1 and 2 as scaffolds, Project Dragon in Module 3 serves to achieve these strategic outcomes:

1. Excellence in execution to forge an innovative, transformative, and disruptive business model. This model will shape the industry's future by utilizing JCI's enhanced capabilities, embracing the major market trends of digitalization and sustainability, and delivering uniquely tailored, value-focused solutions differentiated by verticals throughout their lifecycle,
2. Will achieve substantial growth (250%) and increase profitability (5.6%) by 2029,
3. Strengthen JCI's leadership in smart, healthy and sustainable buildings. This will position JCI to scale and capitalize on new strategic opportunities of smart cities, in line with the projected global population increase from 8 to 9.8 billion by 2050, and the anticipated significant rise in urban residency from 56% to 70%.

**Total Words: 6,528 Words**
Excluding Figures & Tables

## References

Abdullah, Z. (2024, March 8). *Infectious Diseases Act amended to deal with public health outbreaks of varying severity*. 1. https://www.straitstimes.com/singapore/politics/infectious-diseases-act-amended-to-deal-with-public-health-outbreaks-of-varying-severity

Alnagrat, A., Idrus, S. Z. S., Ismail, R. C., & Gopalan, V. (2022). *The Impact of Digitalisation Strategy in Higher Education: Technologies and New Opportunities. Volume 12, No 1, February 2022*.

BCA. (2024a). *Integrated Digital Delivery (IDD)*. BCA Corp. https://www1.bca.gov.sg/buildsg/digitalisation/integrated-digital-delivery-idd

Bennett, N., & Lemoine, G. J. (2014, January). *What VUCA Really Means For You*. Harvard Business Review. https://hbr.org/2014/01/what-vuca-really-means-for-you

Boehm, S. (2010). Thomas K. McCraw. Prophet of Innovation: Joseph Schumpeter and Creative Destruction. xi + 719 pp., illus., index. Cambridge, Mass./London: Belknap Press of Harvard University Press, 2007. $35 (cloth); $19.95 (paper). *Isis*, *101*(4), 902–903. https://doi.org/10.1086/659706

Bonnici, T. S. (2015). *Strategic Drift*. 1–4. https://doi.org/10.1002/9781118785317.weom120213

Brass For Brain. (2023a, December 23). *TOP AI incidents of 2023*. https://medium.com. https://medium.com/brass-for-brain/top-ai-incidents-of-2023-785da1364c8c

CNA. (2023b, December 2). *Singapore Sees Jump In COVID-19 Infections With Recent Doubling Of Cases*. CNA. https://www.channelnewsasia.com/singapore/singapore-covid-19-cases-rise-double-vaccination-respiratory-illness-moh-3961146

Cohen, E. (2024, January 29). *Green Economy Outlook: Sustainability Trends For 2024 | JPMorgan Chase*. Https://Www.Jpmorgan.Com/Insights/Esg/Sustainability/Green-Economy-Outlook-Sustainability-Trends-for-2024. https://www.jpmorgan.com/insights/esg/sustainability/green-economy-outlook-sustainability-trends-for-2024

companiesmarketcap. (2024b). *Revenue of Johnson Controls (JCI) 2023 TTM*. Www.Companiesmarketcap.Com. https://companiesmarketcap.com/johnson-controls/revenue/

Docherty, P. (2016, June 23). *How To Build A World Class Strategy Execution | Flevy.com/blog*. Https://Flevy.Com/Blog/. https://flevy.com/blog/how-to-build-a-world-class-strategy-execution/

Einstein, A. (1950). *Everything Should Be Made As Simple As Possible, But Not Simpler – Quote*. https://quoteinvestigator.com.

General, B., Karen, F., & Kuhla, K. (2018, May 15). *Understanding The Challenges Of A VUCA Environment*. ChiefExecutive.Net. https://chiefexecutive.net/understanding-vuca-environment/

Gleeson, B. (2024, January 2). *The Top 5 Leadership Trends That Will Drive Success In 2024*. https://www.forbes.com/sites/brentgleeson/2024/01/02/the-top-5-leadership-trends-that-will-drive-success-in-2024/?sh=c251de83da01

Gürel, E. (2017). SWOT Analysis: A Theoretical Review. *Jisr* , *10*(51), 994–1006. https://doi.org/10.17719/jisr.2017.1832

Hicks, R. (2023, March 22). *Competence Greenwashing: Are Questionable ESG Credentials Putting Climate Goals At Risk?* Eco-Business. https://www.eco-business.com/podcasts/competence-greenwashing-are-questionable-esg-credentials-putting-climate-goals-at-risk/

IEA. (2021, May 1). *Net Zero By 2050 – Analysis - IEA*. IEA. https://www.iea.org/reports/net-zero-by-2050

Indeed. (2023c). *8 Common Leadership Styles (Plus How To Find Your Own).* https://www.indeed.com/career-advice/career-development/10-common-leadership-styles.

*ISO 31000 — Risk Management*. (2024). ISO . https://www.iso.org/iso-31000-risk-management.html/

Jayaram, A. (2024, February 4). *Over 7 Million Covid-19 Deaths Recorded, But Actual Fatalities May Be Three Times Higher: WHO*. The Straits Times. https://www.straitstimes.com/world/over-7m-covid-19-deaths-recorded-but-actual-fatalities-may-be-three-times-higher-who

JCI. (2023d). *2023 Sustainability Report – Letter from George Oliver, Chairman and CEO, and Katie McGinty, Vice President and Chief Sustainability and External Relations Officer*. Https://Www.Johnsoncontrols.Com/Insights/2023/Feature-Story/2023-Sustainability-Report. https://www.johnsoncontrols.com/insights/2023/feature-story/2023-sustainability-report

JCI. (2024c). *OpenBlue Platform & Technology*. https://www.johnsoncontrols.com/OpenBlue/platform-and-technology

Jerab, D. A., & Mabrouk, T. (2023). Strategic Excellence: Achieving Competitive Advantage through Differentiation Strategies. *SSRN Journal*. https://doi.org/10.2139/ssrn.4575042

Kaplan, R. S. (1996). *The balanced scorecard*. Harvard Business Press.

Kaplan, R. S. (2008). *The Execution Premium*. Harvard Business Press.

Kaplan, R. S., & Norton, D. P. (2005, October). *The Office Of Strategy Management*. Harvard Business Review. https://hbr.org/2005/10/the-office-of-strategy-management

Kraaijenbrink, J. (2019, September 10). *20 Reasons Why Strategy Execution Fails*. Forbes. https://www.forbes.com/sites/jeroenkraaijenbrink/2019/09/10/20-reasons-why-strategy-execution-fails/?sh=4d1bf1a61ebe

Parameshwaran, S. (2023, July 11). *Why Increased Firm Competition Can Cause A Spiral Of Distress*. Knowledge At Wharton. https://knowledge.wharton.upenn.edu/article/changing-competitive-firm-behavior-could-cause-a-spiral-of-distress/

Perry, M. J. (2017). *Fortune 500 Firms 1955 V. 2017: Only 60 Remain, Thanks to the Creative Destruction That Fuels Economic Prosperity*. https://www.aei.org/about/

Powell, T., & Sammut-Bonnici, T. (2015). *Pareto analysis*. 1–2. https://doi.org/10.1002/9781118785317.weom120202

Reimann, M., Schilke, O., & Thomas, J. S. (2010). Toward an understanding of industry commoditization: Its nature and role in evolving marketing competition. *International Journal of Research in Marketing*, *27*(2), 188–197. https://doi.org/10.1016/j.ijresmar.2009.10.001

Soo, C. (2024, April 20). *Pandemic-ready, Tech-enabled: New Hospital Campus With 1,400 Beds To Open In The East By 2030*. The Straits Times. https://www.straitstimes.com/singapore/pandemic-ready-tech-enabled-new-hospital-campus-with-1400-beds-to-open-in-the-east-by-2030

Sridharan, M. (2022, July 9). *Situational Leadership Model*. Think Insights. https://thinkinsights.net/leadership/situational-leadership/

Treacy, M. (2007). *Discipline of Market Leaders*. Hachette UK.

Valenduc, G., & Vendramin, P. (2017). Digitalisation, between disruption and evolution. *Transfer: European Review of Labour and Research*, *23*(2), 121–134. https://doi.org/10.1177/1024258917701379

Volkov, D. L., & Garanina, T. (2007). *Intangible Assets: Importance in the Knowledge-Based Economy and the Role in Value Creation of a Company*. https://doi.org/ISSN 1479-4411

Walsh, T., & Sonenberg, L. (2021, October 27). *Major new report explains the risks and rewards of artificial intelligence*.

Weinstein, A. (2020). Creating Superior Customer Value in the Now Economy. *Journal of Creating Value*, *6*(1), 20–33. https://doi.org/10.1177/2394964319898962

WGBC. (2024d). *Advancing Net Zero - World Green Building Council*. World Green Building Council. https://worldgbc.org/advancing-net-zero/

## List of Figures

## List of Tables

**List of Abbreviations**

| | |
|---|---|
| AI | Artificial Intelligence |
| APAC | Asia Pacific |
| BCA | Building & Construction Authority |
| BSC | Balanced Score Card |
| ESG | Environmental, Social & Governance |
| Gen-AI | Generative Artificial Intelligence |
| JCI | Johnson Controls Incorporation |
| IEA | International Energy Agency |
| IRRF | Integrated Risk Resiliency Framework |
| ISEM | Integrated Strategy Execution Model |
| ISO | International Standard Organisation |
| ISEP | Integrated Strategy Execution Process |
| OSM | Office of Strategy Management |
| PS & DM | Problem-solving and decision-making |
| SEA | South East Area |
| SM | Strategy Map |
| SWOT | Strength, Weakness, Opportunity & Threat |
| VUCA | Volatile, Uncertain, Complex & Ambiguous |
| WGBC | World Green Building Council |
| XPP | Execution Premium Process |

## Evidence

## Appendix A: Summary of Module 1 – Proposed JCI Strategic Plan

Module 1, L04 Assignment Submitted is available here:
[https://www.dropbox.com/scl/fi/u2trieyiydpvs7gm4s4gz/M1-LO4-Develop-new-ideas-or-processes-at-the-forefront-of-work-12Oct23-Terence-Final.docx?rlkey=5tzn6gf6s548marjbj9f408qn&st=zhiom5sk&dl=0](https://www.dropbox.com/scl/fi/u2trieyiydpvs7gm4s4gz/M1-LO4-Develop-new-ideas-or-processes-at-the-forefront-of-work-12Oct23-Terence-Final.docx?rlkey=5tzn6gf6s548marjbj9f408qn&st=zhiom5sk&dl=0)

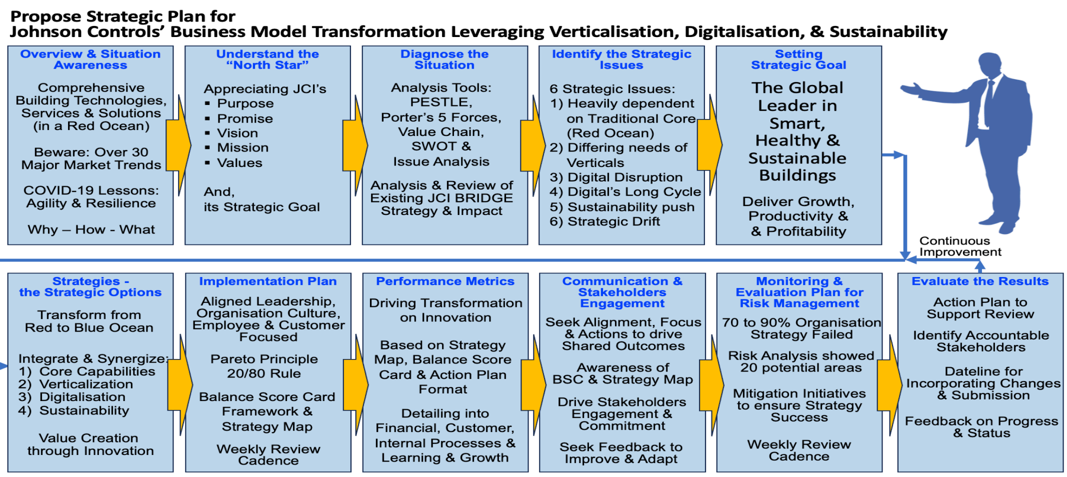
### 1.0. Module 1 - Executive Summary

1.1. The proposed strategic plan for Johnson Controls Inc. (JCI) encompasses innovative ideas and a detailed process that spans 12 key areas. It is aligned with its "North Star" and includes diagnostic process that employs several analytical tools, taking into account major global trends. 6 strategic issues were identified that could hinder JCI to achieve its strategic goal to become the global leader in smart, healthy, and sustainable buildings. JCI aims to double its business within 5 years, and improving productivity and profitability by increasing its gross margin by 5%.

1.2. To transform JCI from its current "Red Ocean" business environment to a "Blue Ocean," 4 strategic options are proposed. These revolve around value creation through innovation, strengthening JCI's core capabilities, and pursuing verticalization, digitalization, and sustainability. To achieve these goals in the Implementation Plan, fostering a high-performance organizational culture for corporate excellence is crucial, as reflected in past Organization Health Index results. It's evident that JCI must shift its leadership style to be more employee-centric, drawing inspiration from their positive experience with the Service Profit Chain model. This shift promises a more sustainable business.

1.3. The proposal recommends for JCI to adopt the Balanced Scorecard (BSC) framework and its Strategy Map. This adoption intends to enable JCI's leadership team to articulate, assess, and oversee the strategy, ultimately leading to success. It will be reinforced by a weekly review schedule to monitor and evaluate Performance Metrics, designed to drive innovation-led transformation. The success of the Strategic Plan's implementation relies on aligning and engaging organizational stakeholders. Therefore, the Communication Plan outlines strategies for effective communication and stakeholder engagement to mitigate potential risks.

1.4. Furthermore, it is important to note that the proposed Strategic Plan has undergone a review by JCI's business partner. This review is designed to validate its context and ensure it meets the necessary requirements.



## Appendix B: Summary of Module 2 – Proposed Collaborative Problem Solving & Decision Making Framework & Process

Module 2, L04 Assignment Submitted is available here:
https://www.dropbox.com/scl/fi/fbrfsudrqjgps4dn1xdeb/M2-L04-Develop-New-Ideas-or-Processes-10Feb24-Terence-Final.docx?rlkey=27yuhlrgn257jvi3w7r1gtjs6&st=h770lukn&dl=0

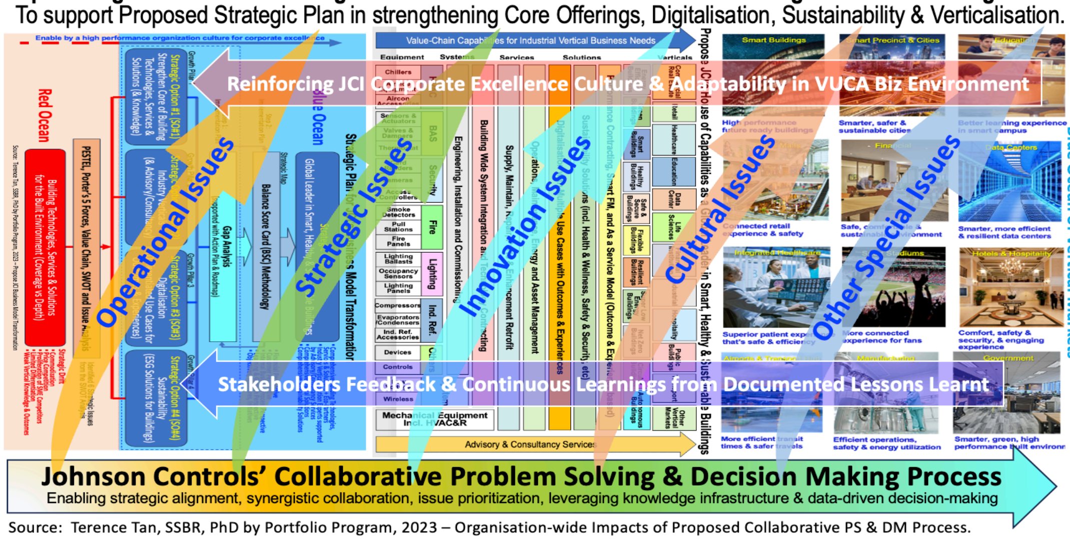
### 1.0. **Module 2 - Executive Summary**

1.1. JCI's strategic mission is to become the global leader in smart, healthy, and sustainable buildings. Having comprehensive building technologies, services, and solutions, JCI aims to mitigate the threat of commoditization in today's volatile business landscape while capitalising on new opportunity realms. To navigate the challenge, JCI pursues a strategic transformation from a Red Ocean to a Blue Ocean through strengthening its core offerings, embracing verticalization, promoting sustainability, and prioritizing digitalization as proposed in the strategic plan.

1.2. JCI SEA sets its sights on doubling its business within 5 years, while also enhancing productivity and profitability. Recognizing this journey's complexity, diverse issues across strategic, operational, and innovation domains can emerge. Addressing these requires specialized domain knowledge, robust cross-business collaboration, and continuous learnings which are vital for achieving its mission and business goals. Establishing a fast, effective, and agile collaborative problem-solving and decision-making (PS & DM) process is crucial in facilitating JCI's transformative efforts and discovery-driven growth journey.

1.3. The proposed collaborative PS & DM process enables strategic alignment, synergistic collaboration, issue prioritization, leverages knowledge infrastructure, and enables data-driven decision-making. As leadership is paramount, the process is designed to optimize leaders' time on crucial issues. It supports strategic planning, operational efficiency, and innovation which are validated through hypothesis testing. The implementation plan will guide its deployment, supported by performance metrics, analytical techniques and evaluation forms to achieve the targeted results.

**Empowering Cross Domains & Organisation-Wide Collaborative Problem Solving & Decision Making Process**
To support Proposed Strategic Plan in strengthening Core Offerings, Digitalisation, Sustainability & Verticalisation.




Source: Terence Tan, SSBR, PhD by Portfolio Program, 2023 – Organisation-wide Impacts of Proposed Collaborative PS & DM Process.

# Appendix C: 50 Analysis Conducted to Derive at JCI's Strategic Plan & PS+DM Process

| Module, Assignment, Section | Description of Analysis Conducted | Remarks |
|---|---|---|
| Module 1, L02, 2.1.7. | Illustration of how integrated building systems & digital's Impact on Building Outcomes | The synergy of systems & their concerted impact on buildings |
| Module 1, L02, 2.1.12.<br>Module 3, 3.1 & 3.6 | Analysis of Major Global Trends | 3 key thrust identified:<br>Digitalisation, Sustainability<br>Mass Customisation |
| Module 1, L02, 2.1.13. | JCI's Digitalisation Strategy Plan Analysis | Overview of JCI Digital Strategy |
| Module 1, L02, 2.2. | PESTLE Analysis of JCI in SEA markets | Good environmental insights |
| Module 1, L02, 2.3.7. | Evaluation of different Industry Verticals | 20 Verticals identified |
| Module 1, L02, 2.3.9. | Value Chain Analysis to support differentiation in Verticalisation | Increasing complexity level required of resources & capabilities |
| Module 1, L02, 2.4.10. | McKinsey's Organisation Health Index Analysis of JCI's Culture | Identified areas of improvements. |
| Module 1, L03, 3.1.8. | Sales Process-flow Analysis of JCI | Comparing traditional vs digital sales |
| Module 1, L03, 3.1.12. | Analysis of Customer Delivery Framework | Insights to digital project delivery |
| Module 1, L03, 3.2.9 & 10 | Analysis of Leadership Styles | Aware of different leadership styles |
| Module 1, L03, 3.3. | Analysis of JCI's Digital Platform & Use Cases | Insights to JCI digitalisation strengths |
| Module 1, L04, 4.3. | Porter's 5 Forces Analysis for JCI SEA | Insights to JCI's Industry Rivalry |
| Module 1, L04, 4.4. | JCI's Business Value Chain Analysis | Insights to JCI's business value-delivery |
| Module 1, L04, 4.5. | Perceptual Mapping of JCI vs Competitors | Insights to relative JCI's positioning |
| Module 1, L04, 4.6. | Strengthen, Weakness, Opportunity & Threat SWOT Analysis of JCI SEA | Insights to the internal & external factors of JCI business |
| Module 1, L04, 4.7. | Issues Analysis of JCI SEA (incl. Strategic Drift) | Insights to hinderances of JCI's growth. |
| Module 1, L04, 7.0. | Evaluation of JCI's Strategic Options | Identified JCI's 4 Growth Pillars |
| Module 1, L04, 7.2. | Analysis of JCI APAC's BRIDGE Strategy | For internal JCI strategic alignment |
| Module 1, L04, 7.6. | Analysis of how to double JCI's business in 5 years | Insights to JCI's strategies for growth |
| Module 1, L04, 7.7. | Analysis of the Differentiation Strategy for JCI | Identified "Total Customer Solutions" |
| Module 1, L04, 7.8. | Analysis of strategic factors required for Blue Ocean Transformation | Identified the impetus for JCI's innovative transformation. |
| Module 1, L04, 7.12.2. | Evaluation of JCI's holistic Sustainability Solutions to augment its offerings to support customers | Insights to JCI's Sustainability Offerings |
| Module 1, L04, 7.12.3. | Analysis of the synergy between Digitalisation & Sustainability. | Insights to the interplay between Digitalisation & Sustainability |
| Module 1, L04, 7.12.5 | Analysis of JCI's House of Capabilities | Insights to area of enhancements |
| Module 1, L04, 8.15. | Analysis of JCI's Balanced Score Card Strategy Mapping | Identified area for prioritisation |
| Module 1, L04, 8.17.<br>Module 2, L04, 7.3 & 7.4 | Analysis of JCI's Organisation Matrix Structure | Identified structural enhancements |
| Module 1, L04, 8.21.<br>Module 2, L04, 9.2 | Analysis of Value-Chain of Intangible Assets in Contributing towards Superior Shareholder Value. | Identified how intangible assets' value creation. |
| Module 1, L04, 8.23. | Analysis & Validation of JCI Strategic Plan to achieve its Business & Strategic Goals. | Enabling the transformation of Red-to-Blue Ocean to achieve JCI's Goals. |
| Module 1, L04, 11.2. | Analysis of Potential Failure Risks in Strategy Execution | Identified proactive mitigation actions |
| Module 2, L01, 1.4. | Analysis of JCI's Comprehensive Framework for Problem Solving & Decision Making (PS & DM) | Identified JCI's Protocol for PS & DM. |
| Module 2, L01, 2.12.<br>Module 2, L01, 5.6. | Analysis of Existing JCI's PS & DM Framework/Process | Identified areas of PS & DM process improvements |
| Module 2, L01, 5.4. | SWOT Analysis of JCI's PS & DM Framework/Process | Insights to the internal & external factors of JCI in PS & DM. |
| Module 2, L01, 5.5. | Issues Analysis of JCI's PS & DM Framework/Process | Insights to areas of improvements. |
| Module 2, L01, 5.7. | Field Force Analysis of JCI's PS & DM Framework/ Process | Insights to areas of improvements. |
| Module 2, L01, 5.8. | Consolidated Issues Analysis on JCI's PS & DM Process | Insights to recommend improvements |
| Module 2, L01, 5.10. | Analysis of Competing Value Framework of Organisation Culture on JCI's PS & DM | Insights to potential conflicts from different JCI's business departments. |
| Module 2, L02, 1.4. | Analysis of the Different Strategic, Tactical, Operations, & Innovation related Issues faced by JCI | Insights to different issues faced by JCI |
| Module 2, L02, 2.9. | Analysis of Different Tools & Techniques for PS & DM Process available to JCI | Insights to different tools for applicable to different issue types. |
| Module 2, L03, 2.1.6. | Analysis of JCI's Response to Evolution of Chiller Plant Markets | Insights to 5 Phases of JCI's evolvement in Chiller Plant Business |
| Module 2, L03, 2.1.7. | Analysis of the Evolution of JCI's Capabilities to support JCI's Chiller Plant business | Insights to how to progress towards Cooling as a Service business |
| Module 2, L03, 2.2.5 | Analysis of how Professional Integrity is demonstrated in PS & DM in line with JCI's Values. | Insights to how JCI's Values are complied in Chiller Plant business |
| Module 2, L03, 2.3.2. | Analysis of the Sources of Data from Different Stakeholders | Insights to the Stakeholders involvement of JCI |
| Module 2, L03, 3.2.2. | Analysis of the Financial Justification for Chiller Plant to Drive Engagement | Insights to strong financial justification for Chiller Plant business |
| Module 2, L03, 8.0. | Analysis of Stakeholders & the impact to Collaborative PS & DM | Insights to JCI Matrix Organisation Structure to enable Speed in PS & DM |
| Module 2, L04, 9.0. | Analysis of Why, How & What of Leadership, Organisational Culture, Stakeholders Engagement, and Resources & Capabilities | Insights to the Purpose, Process & Outcomes in these areas. |
| Module 2, L04, 10.0 | Validation Analysis of proposed JCI PS & DM Framework & Process | Insights to the applicability of the proposed collaborative process. |

## Appendix D: 27 Strategy Execution Models Evaluated as Benchmarks

| Item | Various Strategy Execution Models | Remarks |
|---|---|---|
| 1 | **Balanced Scorecard (BSC) & Strategy Map (SM)**<br>Developed by Robert Kaplan and David Norton, it's a strategic planning and management system that uses financial and non-financial measures to monitor performance against strategic goals. SM visually represents an organization's objectives and the causal relationships between them.<br>Source: https://online.hbs.edu/blog/post/balanced-scorecard | Adopted Module 1, L04 With BSC & SM |
| 2 | **Hoshin Kanri (Policy Deployment)**:<br>Step-by-step planning, implementation, and review process for managed change. It's particularly known for its catch-ball process, which ensures buy-in across the organization.<br>Source: https://asana.com/resources/hoshin-kanri | Aligned with XPP Item 5 |
| 3 | **Objectives and Key Results (OKRs)**:<br>Adopted by companies like Intel and Google, OKRs are a goal-setting framework used to set ambitious goals with measurable results.<br>Source: https://www.clearpointstrategy.com/blog/okrs-a-comprehensive-guide | Subset of agile BSC & SM |
| 4 | **OGSM (Objectives, Goals, Strategies, and Measures)**:<br>A strategic planning tool that helps translate complex strategies into clear, actionable plans to facilitate strategy execution.<br>Source: https://www.cascade.app/blog/ogsm-model-guide | Subset of agile BSC & SM |
| 5 | **Execution Premium Process (XPP)**:<br>This process, also developed by Kaplan and Norton, integrates strategy formulation, planning, and execution into an agile, adaptive and continuous loop of activities.<br>Source: https://strategsys.com/xpp | Selected. Congruent with agile BSC & SM |
| 6 | **The 4 Disciplines of Execution (4DX)**:<br>A simple, repeatable, and proven formula for executing on your most important strategic priorities in the midst of the whirlwind of the daily workload through managing leading versus lagging indicators.<br>Source: https://www.franklincovey.com/the-4-disciplines/ | Adopt as subset of agile BSC & SM. |
| 7 | **Agile Strategy Execution**:<br>Incorporates the principles of Agile project management to help organizations quickly adapt their strategies in response to changes in their environments.<br>Source: https://www.agilestrategymanager.com/strategy-framework | Similar to XXP Item 5 |
| 8 | **Viable System Model (VSM)**:<br>A model of the organizational structure of any autonomous system capable of producing itself. It offers a way of looking at an organization from the perspective of regulation and adaptation.<br>Source: https://www.thevsmtest.org/VSM-Guide/ | Relevant reference as subset of agile BSC & SM |
| 9 | **McKinsey's 7 S Model**:<br>Focuses on 7 interdependent factors (strategy, structure, systems, shared values, skills, style, and staff) to align for effective strategy execution.<br>Source: https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/enduring-ideas-the-7-s-framework | Factored into JCI's strategy |
| 10 | **Kotter's 8-Step Change Model**:<br>Provides a step-by-step approach to implementing change, starting with creating a sense of urgency and ending with anchoring the new approaches in the culture.<br>Source: https://www.kotterinc.com/methodology/8-steps/ | Relevant as subset of agile BSC & SM |
| 11 | **Scaled Agile Framework (SAFe):**<br>A set of organization and workflow patterns for implementing agile practices at enterprise scale.<br>Source: https://scaledagileframework.com | Relevant reference as subset of agile BSC & SM |
| 12 | **Lean Management:**<br>Focuses on creating value for the customer with fewer resources, based on principles of lean manufacturing.<br>Source: https://www.mckinsey.com/capabilities/operations/our-insights/the-organization-that-renews-itself-lasting-value-from-lean-management | Factored into JCI's strategy |
| 13 | **Kaplan's Five-Phase Strategic Execution Framework:**<br>Guides companies through a series of phases from developing strategy and planning to executing and monitoring it.<br>Source: https://hbr.org/2008/01/mastering-the-management-system | Similar to XXP Item 5 |

| | | |
|---|---|---|
| 14 | **Mintzberg's 5 Ps of Strategy:**<br>Defines strategy in five different ways: Plan, Ploy, Pattern, Position, and Perspective, each offering a different path to strategy development and execution.<br>Source: https://www.mindtools.com/a1snnzo/mintzbergs-5-ps-of-strategy | Factored into JCI's strategy |
| 15 | **Six Sigma DMAIC** (Define, Measure, Analyse, Improve, Control):<br>A data-driven quality strategy used to improve processes.<br>Source: https://asq.org/quality-resources/dmaic | Factored into JCI's strategy |
| 16 | **Bridges Transition Model:**<br>Focuses on the transition rather than change itself, emphasizing the emotional and psychological transitions people go through in accepting new situations.<br>Source: https://wmbridges.com/about/what-is-transition/ | Subset of agile BSC & SM |
| 17 | **Total Quality Management (TQM):**<br>A management approach centred on quality, based on the participation of all members of an organization in improving processes, products, services, and the culture.<br>Source: https://www.isixsigma.com/dictionary/total-quality-management-tqm/ | Factored into JCI's strategy |
| 18 | **Cascading Strategy Model:**<br>Ensures that the strategic plan cascades down through all levels of the organization, translating into actionable components at every tier.<br>Source: https://www.cascade.app/blog/introducing-strategy-models | Factored into JCI's strategy |
| 19 | **Strategic Realization Model (SRM):**<br>Focuses on ensuring that strategic initiatives are fully realized through proper planning, execution, and benefits realization.<br>Source: https://www.ipmcinc.com/services/program-and-project-management/strategy-realization/ | Subset of agile BSC & SM |
| 20 | **Strategic Momentum Model:**<br>Addresses the need to maintain momentum throughout the execution phase to overcome obstacles and sustain strategic efforts.<br>Source: https://www.researchgate.net/publication/4869023_Strategic_momentum_the_immediate_outcome_of_an_effective_strategy_formation_process | Subset of agile BSC & SM |
| 21 | **Integrated Strategy Execution (ISE):**<br>Combines the formulation and implementation of strategy into a single, ongoing process with a strong emphasis on stakeholder engagement.<br>Source: https://www.processexcellencenetwork.com/business-transformation/whitepapers/executive-briefing-how-to-build-a-world-class-stra | Relevant: Strategy Execution Maturity Model |
| 22 | **Strategic Leadership Model:**<br>Places strategic leadership at the core of execution, focusing on how leaders can mobilize, guide, and sustain organizational change efforts.<br>Source: https://hbr.org/2013/01/strategic-leadership-the-esssential-skills | Subset of agile BSC & SM |
| 23 | **Strategic Governance Model:**<br>Provides a framework for governance mechanisms to ensure that strategies are executed as intended, with regular oversight and adjustment.<br>Source: https://www.diligent.com/resources/blog/how-to-build-a-strong-governance-model | Subset of agile BSC & SM |
| 24 | **Innovation Ambidexterity Model:**<br>Balances the exploitation of existing business competencies with the exploration of innovative opportunities, maintaining execution proficiency while fostering innovation.<br>Source: https://www.mdpi.com/2071-1050/15/5/3994 | Relevant for harnessing Eco-system capabilities |
| 25 | **Change Capability Framework:**<br>Focuses on building organizational capabilities to adapt and thrive through continuous change, which is crucial for long-term strategy execution.<br>Source: https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/the-four-building-blocks--of-change | Important as subset of agile BSC & SM |
| 26 | **Strategic Execution Framework (SEF):**<br>Developed by Stanford Advanced Project Management program, it identifies strategy execution gaps and proposes a method to close them.<br>Source: https://web.stanford.edu/~robertk3/APM/HO%2000236%20(SEF%202010).pdf | Aligned with agile BSC & SM |
| 27 | **Rummler-Brache Process Improvement Methodology:**<br>A method for process improvement that integrates with strategic objectives, focusing on optimizing business processes for better execution.<br>Source: https://www.rummlerbrache.com/rummler-brache-process-improvement-and-management-methodology | Aligned with XXP Item 5 & agile BSC. |

## Appendix E:

### List of Software that Can Support Agile Balanced Score Card (BSC), Strategy Map (SM) & JCI ISEP Adoption Ease

Note: those marked in yellow are the preferred software and must be evaluated by CIO of JCI for the selection decision based on most impactful, ease of use & cost effectiveness.

| Item | Software for Agile BSC, SM & ISEP | Remarks |
|---|---|---|
| 1 | **QuickScore Balanced Scorecard** | Ideal for organizations that want a straightforward and focused Balanced Scorecard solution with strong visualization capabilities.<br>Weblink: https://www.softwaresuggest.com/quickscore-balanced-scorecard |
| 2 | **ClearPoint Strategy** | Suitable for organizations looking for comprehensive reporting & performance management with a user-friendly interface.<br>Weblink: https://www.clearpointstrategy.com |
| 3 | **Corporater** | Best for companies that need a highly customizable framework that can adapt to a wide range of performance management models<br>Weblink: https://corporater.com |
| 4 | **i-nexus** | Good for larger enterprises that need robust strategy execution software with workflow automation & strategy realization features.<br>Weblink: https://i-nexus.com |
| 5 | **BSC Designer** | Suitable for businesses looking for flexible software with strong KPI management tools & the ability to create interactive strategy maps.<br>Weblink: https://bscdesigner.com |
| 6 | **Sisense** | Enables even the most non-technical users to access data and build interactive dashboards & business intelligence reports.<br>Weblink: https://www.sisense.com |
| 7 | **Spider Strategies** | Flexible cloud-based strategy and KPI management tool that allows any organizations & government agencies to user their own strategic model<br>Weblink: https://www.spiderstrategies.com |
| 8 | **StrategyBlocks** | Ideal for organizations that emphasize visual strategic planning & want a software solution that offers a high degree of visual customization<br>Weblink: https://www.strategyblocks.com |
| 9 | **Cascade** | Do more strategy execution with less. Using Cascade and the features that support it, you can quickly align inputs to outcomes for real results.<br>Weblink: https://www.cascade.app |
| 10 | **PeopleSoft Scorecard (Oracle)** | Enables organization to align corporate strategy with tactical execution. Help define strategies, communicate critical success factors to everyone.<br>Weblink: https://www.oracle.com/us/solutions/064738.html |

**Appendix F:**

**SSBR**
**PhD by Portfolio Module 3 – Capstone Project**
**Student Task Completion Checklist**

**Project Dragon: Capitalizing Blue Ocean Strategy**
**for Sustainable & Digitalised Excellence of Verticals at Johnson Controls**

---

**Learning Outcome 1 (LO1)**
Demonstrate knowledge of the most advanced frontiers of a field of work.
In what way(s) does your work fulfil this learning outcome? Give a full explanation in the space below.

I have demonstrated through the Project Dragon a profound grasp of business strategy, including leadership and culture, digitization, sustainability, and targeted customization. It aligns with the latest research and practical advancements, ensuring strategic initiatives are both ground-breaking and transformative, satisfying the Learning outcome 1. Here are the key aspects:

1. **Strategic Framework Innovation**: Utilizing frameworks like the Blue Ocean Strategy, it positions JCI to redefine market boundaries through innovation and transformation, and also disruption with advanced capabilities and vertical focused.

2. **Sustainability and Digitization Synergy**: Project Dragon fuses the most recent trends in sustainability and digitization as central to Johnson Controls' strategy. This enhances the company's capability for bespoke customer solutions and value creation.

3. **Agility in Execution**: The project advocates for a cutting-edge, flexible JCI ISEM execution model, integrating best practice elements like the BSC, SM, XPP and others designed for VUCA environments.

4. **Leadership and Excellence Culture**: Leadership underpins the robust organization infrastructure, promoting a culture of excellence. It ensures clarity in strategic goals, resource alignment, and employee engagement, collectively fostering customer centricity and increasing shareholder value.

5. **Stakeholder Engagement & Risk Management**: Developed advanced strategies for stakeholder engagement and communications alongside comprehensive integrated risk resiliency model (IRRF) to proactively respond to potential execution barriers.

**Learning Outcome 2 (LO2)**
Demonstrate the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical business problems and to extend or redefine professional practice.
In what way(s) does your work fulfil this learning outcome? Give a full explanation in the space below.

I have demonstrated the application of strategic principles in addressing JCI's critical business issues and redefined professional practice that achieved the Learning Outcome 2. Here are the key highlights that illustrated the strategic expertise, blending problem-solving capabilities with the foresight to navigate and influence the future of built environment.

1. **Synthesizing Complex Data**: The project integrates information from various aspects, such as market analysis, competitive intelligence, organisational structures, stakeholder analysis and performance metrics. It crafts a forward-looking strategy that proactively addresses present conditions and future shifts.

2. **Applying Specialized Strategic Tools**: Various tools like SWOT, Porter's Five Forces, value chain analysis and the Blue Ocean Strategy Canvas are employed to scrutinize the competitive landscape and unearth opportunities for distinct market positioning.

3. **Innovating in Strategy Execution**: An agile model for strategy implementation, integrating the Balanced Scorecard and Strategy Maps with XPP and ISEP, showcases proficiency in executing strategy. It permits ongoing adjustment of strategic objectives to match the dynamism of the market.

4. **Managing and Mitigating Risks**: The project details an elaborate risk management framework encompassing identification, evaluation, and mitigation, ensuring strategic aims are realistic, sustainable and resilient.

5. **Engaging Stakeholders with Proactive Communication**: A detailed stakeholder engagement strategy with proposed actions is tailored to address diverse interests, fostering involvement and consensus in the strategic journey.

6. **Continuous Evaluation for Improvement**: It incorporates real-time evaluation and leverages advanced analytics to gauge and refine strategic actions, positioning the organization at the forefront of built environment's innovation and transformation.

**Learning Outcome 3 (LO3)**
Demonstrate substantial authority, innovation, autonomy and professional integrity.
In what way(s) does your work fulfil this learning outcome? Give a full explanation in the space below.

Similarly, I have demonstrated exemplary authority, ingenuity, self-reliance while driving partnership with JCI's leaders, and ethical rigor in crafting the business strategy and its strategic deployment. Here are the highlights as proof that it accomplished the Learning Outcome 3 and underscored the leader's ability to steer, innovate, and maintain high standards in a dynamic business setting:

1. **Authority**:
   a) Strategic Expertise: The project leader has shown profound expertise in strategic management by developing and driving a multifaceted strategic initiative in tune with JCI's aspirations. This expert application of concepts and frameworks with examples like Blue Ocean Strategy, ISEM and IRRF, manifests authoritative knowledge.
   b) Leadership in Execution: The leader has directed teams, effectively managing resources to adhere to timelines and objectives, exhibiting strong leadership and authoritative project execution and management.
2. **Innovation**:
   a) Leverage Intangible Assets: Research revealed that only 6% to 30% of a company's total worth is tangible assets. By redirecting focus on a company's intangible assets, it helps to optimise JCI's company's overall value.
   b) Strategic Execution Model: The leader has crafted an original, flexible strategy execution model that adapts to business shifts, incorporating cutting-edge technology and trends, thus redefining industry benchmarks for strategic execution.
   c) Customised Solutions and Digitalization: The project has introduced bespoke sustainability and verticalised solutions, merging digital technology to enhance operations and customer values, a testament to innovative process enhancements.
3. **Autonomy**:
   a) Strategic Decision-Making: With comprehensive analysis, the leaders identified insights of opportunities and challenges, allowing making strategic choices independently, signifying substantial decision-making autonomy.
   b) Proactive Approach: The leaders can consistently addressed obstacles, adapting strategies based on stakeholders' feedback and evolving scenarios, showcasing a notable degree of self-governance in leading strategic initiatives.
4. **Professional Integrity**:
   a) Ethical Conduct and Openness: The project demonstrates ethical conduct while ensuring transparent decision-making and communication, thereby upholds trust and integrity amongst stakeholders.
   b) Sustainable Commitment: Beyond economic consideration, the initiative has emphasized sustainable and ethical practices, underlining a commitment to corporate responsibility and enduring value.

**Learning Outcome 4 (LO4)**
Develop new ideas or processes at the forefront of work.
In what way(s) does your work fulfil this learning outcome? Give a full explanation in the space below.

This work is considered a pioneer in charting new territory in strategic management and operational excellence at JCI. It realised the Learning Outcome 4 through introducing innovative concepts and methodologies. Here are the key highlights of the advancements:

1. **Business Model Innovation**:
   a) Blue Ocean Strategy: Steering JCI into uncharted waters, the Blue Ocean Strategy has been applied to transition from fiercely competitive markets to untapped ones, redefining the company's competitive edge in value add/creation for customers.
   b) Customisation and Vertical Integration: Tailoring solutions to meet the specific needs of various vertical market has enhanced customer value, symbolizing a novel approach in solution and service delivery over the entire lifecycle of built environment.
2. **Digital Transformation**:
   a) Smart Technology Integration: Incorporating IoT and AI, the project has led to ground breaking management methods that predict maintenance needs, enhance efficiency, and sharpen operational insights.
   b) Agile Planning Tools: Modernizing BSC and SM, the project ensures agility and responsiveness to immediate data and market shifts, placing it at the forefront of strategic thought.
3. **Sustainability and Adaptability**:
   a) Alignment with UN SDGs and ESG Reporting: Committing to sustainability, the initiatives align with global standards, positioning JCI as a leader in sustainable industry practices.
   b) Resilient Strategy Execution: Integrating resilience into the execution model ensures robustness against disruptions, reflecting best practices in risk management and business continuity.
4. **Stakeholder Engagement and Communication**:
   a) Engagement Platform, Mobile app and Social Media: Developing these digital engagement means can revolutionized stakeholder interactions, fostering transparent communication and participative decision-making.

## Appendix G: Project Dragon - Presentation Poster