# 2. [MEASURING ORGANIZATIONAL IMPLEMENTATION STATUS: DEVELOPMENT OF THE CII KNOWLEDGE IMPLEMENTATION INDEX (RS166-1)](https://www.construction-institute.org/measuring-organizational-implementation-status-development-of-the-cii-knowledge-implementation-inde)

**Report Summary:** This research effort developed the CII Knowledge Implementation Index (CKII) as a method to quantify the level of organizational implementation status. The study found a significant and positive relationship between the CKII values and project performance as measured based on various performance variables. Among the conclusions drawn, implementation generally has significant management support and corporate commitment, but the resources, self-auditing processes, and measurement of business results are lacking. In general, CII organizations are implementing many CII Best Practices, but there is room for improvement. Policy implications of the study are discussed, including a path forward to better organizational implementation.

**Key Takeaways:**

## (1) Recognize: Organizational implementation of project knowledge varies widely among the Construction Industry Institute (CII) organizations, which indicates room for improvement in terms of consistency.

## (Project Phase: Prefeasibility through Operate Facility)

* Provide resources for the implementation effort, including time, money, focus, and incentives.
* Develop better documentation of processes and provision of results of implementation efforts.
* Use benchmarking and metrics extensively to understand opportunities for improvement.
* Employ self-auditing programs to ensure that processes are being used and continuously improved.

## (2) Cultivate: Organizations with better implementation practices perform better on capital projects.

## (Project Phase: Prefeasibility through Operate Facility)

* Develop a comprehensive project management plan that incorporates best practices and expert knowledge to ensure successful execution of capital projects.
* Implement proven processes and procedures for managing capital projects, including regular monitoring and control mechanisms to identify potential issues early.
* Foster open communication channels with stakeholders, including contractors, suppliers, and team members, to facilitate collaboration and address concerns promptly.
* Leverage expertise from industry organizations such as the CII to access valuable resources, best practices, and research findings that can improve project outcomes.
* Regularly monitor project performance using key metrics and indicators to identify areas for improvement and make data-driven decisions accordingly.

## (3) Leverage: Organizations should use the CII Implementation model to order their implementation efforts and the CII Knowledge Structure model to identify best practices that can provide benefits.

## (Project Phase: Prefeasibility through Operate Facility)

* Utilize the CII Implementation model as a roadmap to guide the organization's implementation of best practices, thereby ensuring a structured approach to improvement.
* Leverage the CII Knowledge Structure model to identify relevant best practices and catalog them for future reference, thereby enabling informed decision-making and process improvements.
* Prioritize key areas for improvement by analyzing the relationships between organizational implementation and company success, focusing on initiatives with high potential impact.
* Implement proven processes and procedures from identified best practices into the organization's workflow, thereby ensuring consistent application of best practices across projects.
* Regularly monitor progress using key metrics and indicators to measure the effectiveness of implemented changes and to make data-driven decisions for future improvements.

## [(4) Tool: Implementation Model + Knowledge Structure Guide (IR166-2)](https://www.construction-institute.org/implementation-model-knowledge-structure-guide)

## (Project Phase: Prefeasibility through Operate Facility)

* Establish a systematic approach for implementing CII best practices using the CII Implementation model.
* Address barriers to implementation, such as low familiarity and commitment, through structured corporate support.
* Organize CII’s research and tools within the CII Knowledge Structure model, which consists of 13 Knowledge Areas and 47 Focus Areas.
* Promote key best practices, such as pre-project planning and zero accidents techniques, to enhance project performance.
* Regularly update the Knowledge Structure model to support the efficient adoption of best practices and improve industry-wide knowledge sharing.

## [(5) Tool: CII Best Practices Guide: Improving Project Performance, Version 5.0 (IR166-3)](https://www.construction-institute.org/cii-best-practices-guide-improving-project-performance-version-5-0)

## (Project Phase: Prefeasibility through Operate Facility)

* Promote project success: Emphasize early planning, clear scope definition, and risk management to enhance project success, cost-effectiveness, and schedule predictability.
* Implement CII Best Practices: Utilize CII Best Practices, such as advanced work packaging and front-end planning, to improve efficiency and safety.
* Benchmark and measure performance: Regularly benchmark project metrics to assess performance, compare against industry standards, and drive continuous improvement.
* Address change and disputes: Establish a structured process for managing change and resolving disputes early to avoid costly delays and escalations.
* Leverage constructability and safety practices: Integrate constructability and zero-accident techniques to reduce rework, enhance quality, and ensure a safe project environment.

## [(6) Tool: CII Best Practices Handbook (SP166-4)](https://www.construction-institute.org/cii-best-practices-handbook)

## (Project Phase: Prefeasibility through Operate Facility)

* Define best practices: Establish processes to improve project cost, schedule, and safety by using proven best practices in areas such as planning, risk assessment, and quality management​.
* Implement advanced work packaging: Enhance project efficiency and predictability by structuring planning from the early stages and aligning engineering and construction efforts.
* Ensure effective front-end planning: Improve project success through comprehensive early-phase planning, addressing risks, and aligning with strategic goals.
* Leverage change management: Proactively manage project changes to minimize disruptions, maintain schedule, and control costs, especially by engaging in the early project phases​.
* Adopt constructability and partnering efforts: Optimize design and construction integration and strengthen project relationships to improve overall project outcomes.