# [1. PRE-PROJECT PLANNING TOOLS: PROJECT DEFINITION RATING INDEX AND ALIGNMENT (RS113-1)](https://www.construction-institute.org/pre-project-planning-tools-pdri-and-alignment)

**Report Summary:** This study produced the first project definition rating index (PDRI) for industrial projects. This study also developed the Alignment Thermometer that analyzes the impact of the alignment of business, project management, and operations personnel of owner companies as well as the alignment between owners and contractors. Alignment is the process of incorporating distinct priorities and requirements into a uniform set of project objectives that meet the business needs for the proposed facility. The Alignment Thermometer includes ten critical alignment factors during pre-project planning that show a positive correlation with project success.

**Key Takeaways:**

## (1) Ten critical alignment factors (in order of importance)

## (Project Phase: Concept through Turnover)

1. Stakeholders are appropriately represented on the project team.
2. Project leadership is defined, effective, and accountable.
3. The priority among the cost, schedule, and required project features is clear.
4. Communication within the team and with stakeholders is open and effective.
5. Team meetings are timely and productive.
6. The team culture fosters trust, honesty, and shared values.
7. The pre-project planning process includes sufficient funding, schedule, and scope to meet objectives.
8. The reward and recognition system promotes meeting project objectives.
9. Teamwork and team building programs are effective.
10. Planning tools (e.g., checklists, simulations, and work flow diagrams) are effectively used.

## (2) Five categories to achieve and maintain alignment

## (Project Phase: Concept through Turnover)

1. Execution processes: Project systems, processes, and procedures.
2. Company culture: Attitudes, values, behavior, and environment of the company and team.
3. Information: Data elements, including project objectives, used to define the scope of the project.
4. Barriers: Obstacles to creating and maintaining alignment.
5. Tools: Software programs, checklists, and aide-memoirs that are typically used to develop and manage projects.

## (3) Achieving and maintaining alignment are critical to project success.

## (Project Phase: Concept through Turnover)

* Clearly define project objectives that meet the business requirements and overall corporate strategy.
* Ensure that stakeholders are appropriately represented on the pre-project planning team.
* Establish clear priorities among the cost, schedule, and required project features.
* Foster open and effective communication within the team and with stakeholders.
* Appoint defined, effective, and accountable project leadership to drive alignment.

## [(4) Tool: Alignment During Pre-Project Planning: A Key to Project Success, Version 2.1 (IR 113-3)](https://www.construction-institute.org/alignment-during-pre-project-planning-a-key-to-project-success-version-2-1)

## (Project Phase: Concept through Turnover)

This tool does the following:

* Highlights the importance of alignment: Emphasizes alignment in pre-project planning as critical to project success, particularly in complex, multiple stakeholder projects.
* Identifies key areas for improvement: Outlines five categories that impact alignment, i.e., culture, execution processes, information, tools, and barriers.
* Introduces the Alignment Thermometer: Provides a diagnostic tool to measure and maintain team alignment throughout the pre-project planning phase.
* Stresses effective leadership and communication: Underscores the role of clear leadership and open communication in building a cooperative team environment.
* Suggests best practices: Recommends practices such as stakeholder inclusion, structured processes, and appropriate reward systems to foster alignment and reduce project risks.

## (5) Refer to the following Best Practices for other takeaways in this report that are relevant to pre-project planning: 7. Front-end Planning and 16. Team Building.

## (Project Phase: Concept through Turnover)