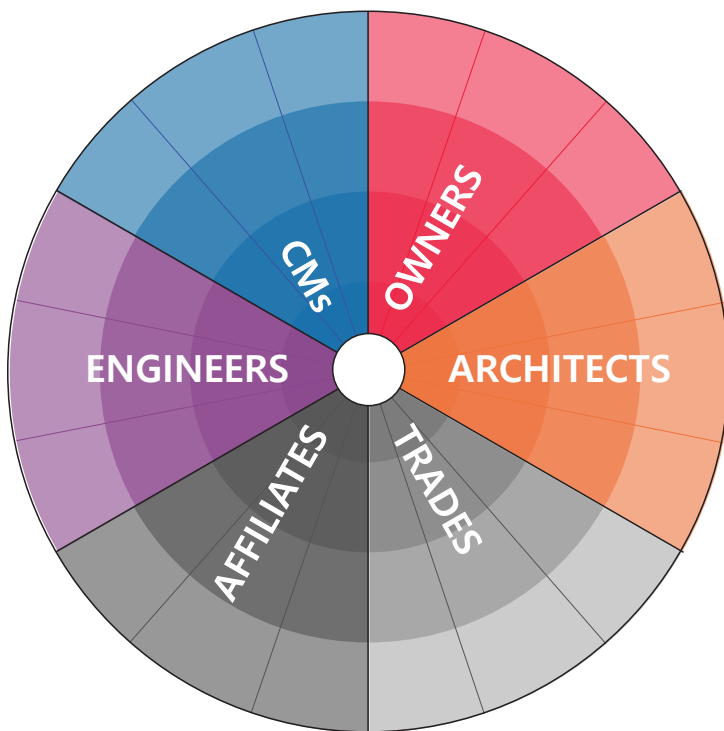


6 DEGREES OF DESIGN & CONSTRUCTION RISK

How may one AVOID the GREATEST RISKS faced by EVERY design & construction project?

Approximately one year ago, the COGENCE Alliance asked a select group of owners, architects, engineers, construction trades, and insurance/banking/legal affiliates a fundamental questions: *What are the GREATEST RISKS faced by EVERY design & construction project?*



THE 6 DEGREES OF RISK: We all benefit when we collaboratively reduce risk.

Over the next 5 months, COGENCE answered that question from our collective stakeholders by way of an [Aggregated "Top 10" list](#), as well as from each separate stakeholder group's perspective:

1. [OWNERS](#)
2. [AFFILIATES](#)
3. [CMS](#)
4. [TRADES](#)
5. [ENGINEERS](#)
6. [ARCHITECTS](#)

The risks have been identified, ranked, and evaluated. If you haven't yet reviewed all of the risk summaries, now is the perfect time to binge-review the links above.

Now the more important question can be asked and answered:

How may one AVOID the GREATEST RISKS faced by EVERY design and construction project?

The answer is as complicated as the human condition, but it can be boiled down to a couple key takeaways, among them being:

1. Empathy and
2. Communication.

EMPATHY

Empathy is the ability to understand and share the feelings or perspectives of another. If we understand not only the risks to every project, but the separate and distinct perspectives that different industry segments have of project risks, we set the tone for less confrontational and more cooperative relationships. Better relationships => better projects.

RISK RANKING

ARCHITECT	OWNERS	CM'S	TRADES	ENGINEERS	AFFILIATES	FINAL RANKED RESULTS
COMMUNICATION	BUDGET	TEAM MEMBERS	TEAM MEMBERS	COMMUNICATION	COMMUNICATION	COMMUNICATION
BUDGET	COMMUNICATION	CONTRACTS	SCHEDULE	CHANGES	LEADERSHIP	CONTRACTS
CONTRACTS	LEADERSHIP	BUDGET	COMMUNICATION	CONTRACTS	CONTRACTS	LEADERSHIP
SCHEDULE	FINANCIAL	COMMUNICATION	LEADERSHIP	SCHEDULE	DUE DILIGENCE	SCHEDULE
LEADERSHIP	QUALITY	SCHEDULE	CONTRACTS	BUDGET	SCHEDULE	BUDGET
FINANCIAL	SCHEDULE	LEADERSHIP	CHANGES	QUALITY	CHANGES	TEAM MEMBERS
TEAM MEMBERS	CONTRACTS	QUALITY	FINANCIAL	LEADERSHIP	TEAM MEMBERS	CHANGES
QUALITY	TEAM MEMBERS	FINANCIAL	QUALITY	DUE DILIGENCE	QUALITY	FINANCIAL
CHANGES	CHANGES	CHANGES	BUDGET	TEAM MEMBERS	FINANCIAL	QUALITY
DUE DILIGENCE	DUE DILIGENCE	DUE DILIGENCE	DUE DILIGENCE	FINANCIAL	BUDGET	DUE DILIGENCE



THE 6 DEGREES OF RISK: COGENCE Risk Ranking by Central Ohio Partners

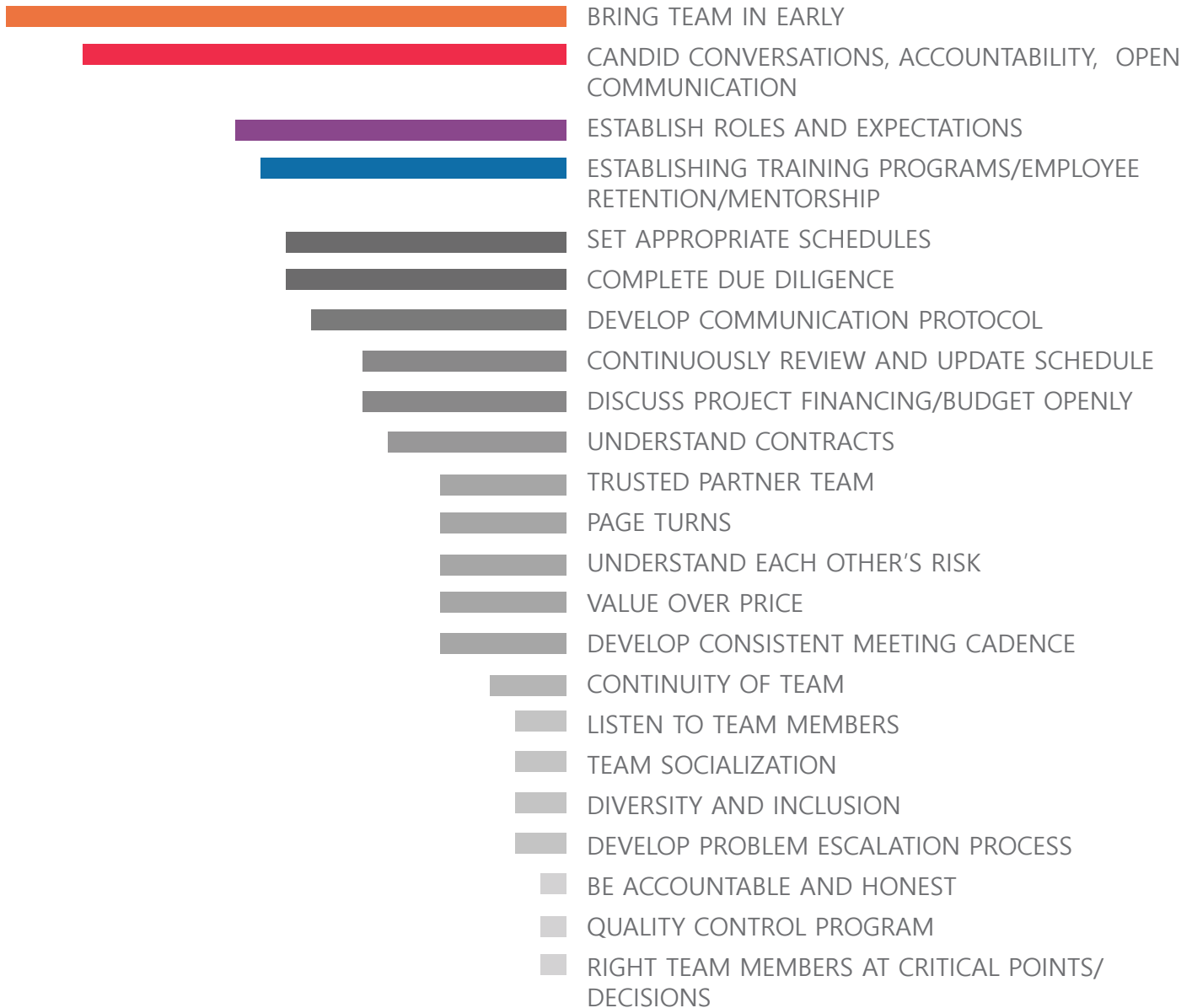
COMMUNICATION

Communication is the undisputed, undefeated heavyweight champion of risk and reward. The #1 overall risk, and the #1 risk for 3 of the 6 industry segments, communication is far and away the most important factor in a project's success – or its downfall. "Early and often" is the communication mantra, as the COGENCE Alliance members repetitively encourage starting every project with a kick off meeting that includes all team members, to outline owner expectations, review the contracts, and discuss risks from all parties' perspectives. Establishing a communication protocol and a structured cadence for future meetings is a formula for success.



SOLUTIONS

By evaluating this rich dataset, the COGENCE Alliance was able to identify and rank-order a variety of solutions to help avoid the greatest risks, as follows:



SOLUTIONS: Aggregating the types of solutions listed in each Partner's response to Risk provided a telling narrative about what makes a successful project.

Bringing the team together early and fostering open and candid conversations dominate the list. The next tier solutions include establishing the team's roles and expectations -- not surprisingly, this is often a natural consequence of adopting the first two solutions. Following closely behind is a bit

of a dark horse, but one that deeply resonates with team members of all ages and experience levels: establishing employee training, retention, and mentorship programs. Although the importance of setting schedules is not likely to shock anybody, some eyebrows rose when due diligence was found to be of equal significance – perhaps because it is among the most readily controllable and easily achievable solutions.

Solutions falling lower on the scale are still critically important. Perhaps, the industry is already accommodating these, or that the ones listed highest are the most critical to start attaining now. The rest of the solutions seem rather self-explanatory, and beg the question:

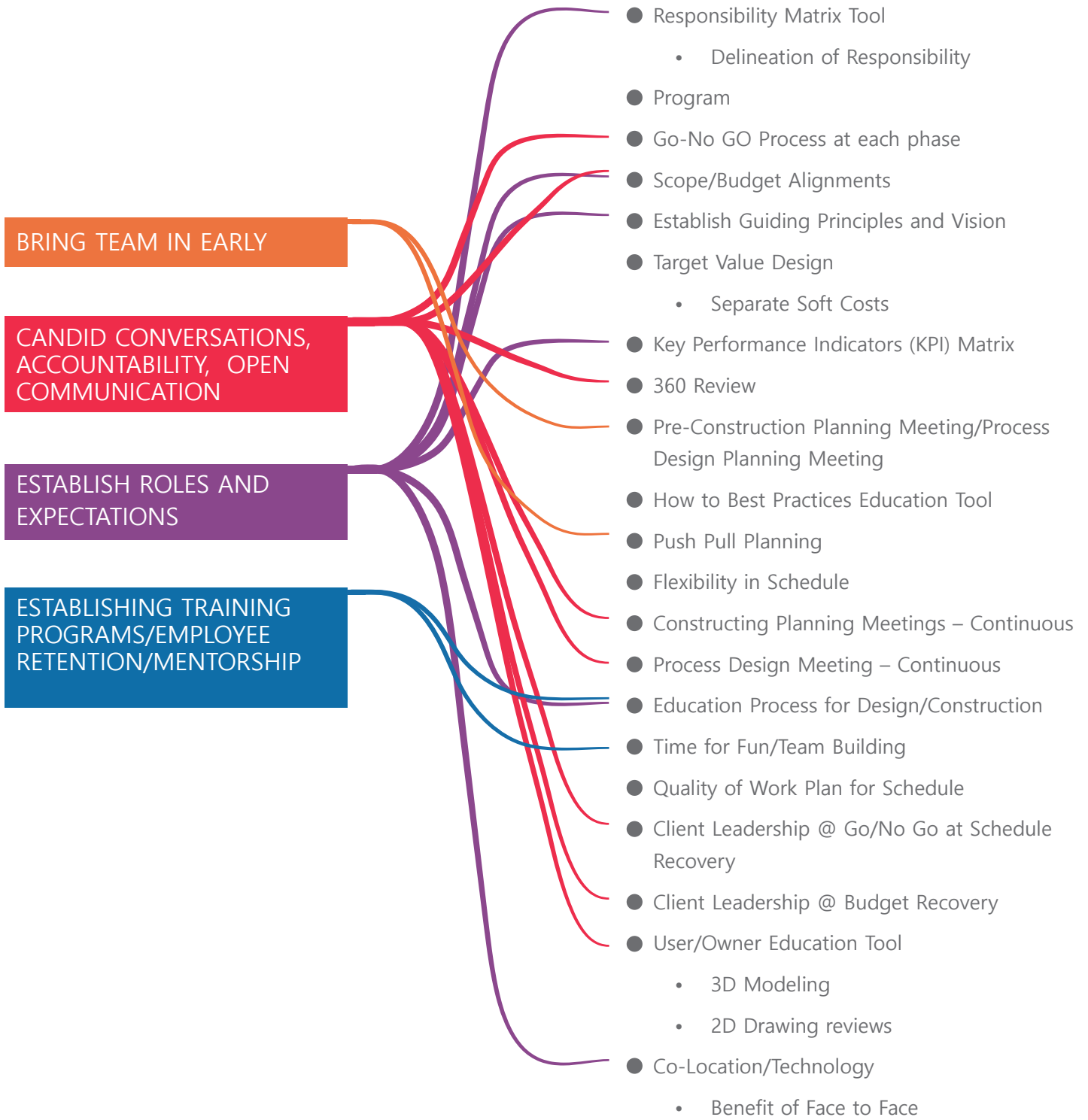
Why doesn't everybody **ALREADY** do these things, and perhaps more importantly, how do we make them **STICK**?

HOW TO MAKE IT STICK

Strategies for making the solutions stick for every project (big or small) and reducing risk over the long haul, include establishing guiding principles and vision at the onset of every project. Develop a key performance indicator matrix; communicate openly and candidly about the need to align scope and budget; make time for fun and team-building; implement a 360 review and a go/no go process. Additional ideas are described below:

- Responsibility Matrix Tool
- Delineation of Responsibility
- Program
- Go-No GO Process at each phase
- Scope/Budget Alignments
- Establish Guiding Principles and Vision
- Target Value Design
 - Separate Soft Costs
- Key Performance Indicators (KPI) Matrix
- 360 Review
- Pre-Construction Planning Meeting/Process Design Planning Meeting
- How to Best Practices Education Tool
- Push Pull Planning
- Flexibility in Schedule
- Constructing Planning Meetings – Continuous
- Process Design Meeting – Continuous
- Education Process for Design/Construction
- Time for Fun/Team Building
- Quality of Work Plan for Schedule
- Client Leadership @ Go/No Go at Schedule Recovery
- Client Leadership @ Budget Recovery
- User/Owner Education Tool
 - 3D Modeling
 - 2D Drawing reviews
- Co-Location/Technology
 - Benefit of Face to Face

MAKING THE TOP SOLUTIONS STICK



MAKING IT STICK: Although solutions like "communication" can seem vague, utilizing the different strategies like these may offer practical guidance and help reduce risk.

So now that we've identified the risks, explained how to avoid them, and determined how to make the solutions stick, the entire construction industry has been transformed and the COGENCE mission is complete, right? Not so much.



THE 6 DEGREES OF RISK: We all benefit when we collaboratively reduce risk.

Coming soon from the COGENCE Alliance will be a suite of practical tools to help make every project better, including owner education strategies, responsibility matrices, co-location, push-pull planning, and effective use of KPI's. So the fun has truly just begun, and we look forward to continuing our journey.

If you're interested in joining the COGENCE Alliance and working with us to transform the design and construction industry to be more collaborative, with reduced risk and improved outcomes for all projects, go to cogence.org.

Join the conversation - join the movement - join the [COGENCE Alliance](http://cogence.org).

The COGENCE Alliance exists to transform the design and construction industry to be more collaborative, with reduced risk and improved outcomes for all projects. www.cogence.org