

Cogence Alliance Risk Exercise Summary

In June of 2018, Cogence hosted an exercise involving five groups (Engineers, Owners, Trade Contractors, Construction Managers, and Architects), each representing an assembly of contributors towards a project lifespan. The groups were given a chart with each phase of a project labeled on the bottom and the level of risk on the side. Given seven categories (Quality, Financial, Contract Issues, Communication, Leadership, Failed Expectations, and Project Management), the groups were tasked with deciding at what level of risk they would place such categories at each, specific project phase. The intention of which was to examine and understand the group's sensitivity and importance each put upon those risks throughout the development and completion of the project lifecycle.

Findings: Engineers

For the Engineers, it appears that the two, highest levels of risk are Communication and Leadership. It is important to note, however, that while Quality and Communication were the highest levels during the Design Development and Construction Documents phases of the project lifespan, it is apparent that there is a significant amount of risk in every aspect of the project from the engineer's perspective. The risk levels tended to fluctuate greatly between each project stage, indicating that Engineers consider all phases of a project to have risk in every category.

Findings: Owners

The Owner's chart shows the most consistency in every phase of the project. While the Financial risks were placed fairly high throughout the project lifespan (particularly high

during Design Development), Leadership and Communication had the highest risk levels to the Owners across the entire chart.

Findings: Trade Contractors

The Trade Contractors, once again, placed Communication at the highest risk category throughout the project cycle. What makes the Contractors stand out from the others, however, is how their second highest risk category was Project Management; this category peaking during the Construction to Activation phases. The Trade Contractor's lowest risk category across the chart was Quality.

Findings: Construction Managers

Construction Managers, somewhat similar to the Trade Contractors, tended to find low risk in several categories throughout the project. The difference between the two, conversely, being that while Quality received low risk ratings with the Trade Contractors, the Construction Managers rated Quality at a level five in some areas. It would seem that what might have no risk at certain phases, have very high risk during others from their perspective. Throughout the project cycle, though, the highest risk categories were Leadership and Failed Expectations.

Findings: Architects

For Architects, the group most similar to the Engineers, they have a habit of finding risk at different levels all the way through the project duration. What appeared to be the highest risk at the beginning phases of the project is Failed Expectations, while Leadership was the highest risk across the chart. The lowest risk for Architects was Financial, until the project reaches the Bidding phase, at which the risk level raised significantly.

Conclusions: Combined Contributors

Because this exercise was intended to better understand each contributor’s concerns and what they deem most important during the project cycle, it seemed advantageous to combine all five of the risk charts into one bar graph, representing the average risk level of each group. On average, the highest risk categories from the groups throughout the project lifespan are Communication with Leadership in a close second. What seems to be the lowest risk throughout each group is Quality, with Contract Issues following behind. This can all be viewed in the bar graph below. Obviously, the average of the groups doesn’t necessarily reflect them individually, but it certainly gives an overview of the importance of each group’s opinions and concerns for future projects.

