NAC Executive Insights

White Space Risks

Key Points

- White space risks are defined.
- White spaces are where Black Swans nest and breed (See NAC Executive Insight, "Black Swan Risk").
- White space risks can be categorized as organization, policy, process, or scope related.
- Related but different risks would be those associated with interdependencies (such as we see with coupled constraints).

Introduction

White space risks are those risks that fall in between well-defined organizational, policy, process, and scope elements (for example, discrete projects or tasks). They also are not otherwise reflected in risk assessment and management activities.

Vigilance is required to identify the issues that may lie within the white spaces between the various projects comprising a program. White space risks may arise as a result of inadequate flow charting of processes or by not challenging assumptions and known couplings that exist in the various white spaces of a project. In large complex programs, the functional organization is tailored to cover the white space between projects and provide coordination to harmonize the overall program.

Program management is not only the sum of all project management activities, but also includes management of the risks, opportunities, and activities that occur in the white space between projects. It requires heightened focus on the flows inside the project as well as those outside the project that have impact.

White space risks may be grouped into four major types:

1. Organization
2. Policy
3. Process
4. Scope

Examples of each type are presented below. Some white space risks fall into more than one type and are thus repeated for clarity.

Organization

- Lack of clear and consistent strategic business objectives (SB0s) due to weak communication of those strategic objectives.
- Organization charts where roles, responsibilities, and work processes are not well-defined.
- Intangible or amorphous risks not tying back to any clearly responsible entity.
- Risks created by managing by silos (versus managing by process).
- Enterprise risk, where an owner's organization is not aligned or ready for the project/program.
- Unpredictable intangible risks resulting from culture, society, biases, system's effects, and externalities.
- Unknown project resisters (the undiscovered stakeholder).
- Misalignment between key performance indicators (KPIs)/alerts, resulting in evolving situations not being quickly seen (artificial intelligence (AI) can address this).
- Risks that accumulate in the absence of continuous and effective communication along an end-to-end process (the project itself or major project processes).
- Lack of adequate engagement in management communication.
- Inadequate continuous improvement.

Policy

- Lack of clear and consistent SBOs due to weak communication of strategic objectives.
- Policy, processes, or procedures not consistently or adequately understood.
- Unpredictable technological and intangible risks resulting from culture, society, biases, system's effects, and externalities.
- New legislative mandates.
- Risks arising from non-linear tipping points (for example, climate change).
- Hidden financial costs.
- Risks associated with competing priorities or projects.
- Risks hidden by assumed completeness of the plan.
- Gaps between solutions or an incomplete overall solution.
- Intangible or amorphous risks not tying back to any clearly responsible entity.
- Risks uncovered by asking who else cares about an activity to be performed.
- Risks not predictable beforehand.
- Gaps in handoffs not identified in policy, process, or procedures.
- Lack of adequate engagement in management communication.

Process

Process risks may be further segregated into those related to execution planning, incomplete process, supply chain, and communication and awareness risks.

Execution Planning

- Unknown required activities that leave gaps in the program or project plan that are often uncovered by challenging assumptions.
- Risks hidden by assumed completeness of the plan.
- Gaps between solutions or an incomplete overall solution.
- Inadequate or incomplete modeling of an activity (e.g., startup of an activity results in lower productivity).
- Risks not predictable beforehand (e.g., early startup of another project limits availability of key resources).
- Unpredictable technological and intangible risks resulting from culture, society, biases, system's effects, and externalities.
- Unseen risks exacerbated by interconnectedness of processes.
- Risks between contracting parties are not adequately considered in project planning, budgeting, and schedule development.

Incomplete Process

- Arrows between tasks are no longer dimensionless and project flows can create risks.
- Horizontal or vertical gaps between or within processes.
- Gaps in handoffs not identified in policy, process, or procedures.
- Policy, processes, or procedures not consistently or adequately understood.
- Gaps in vertical processes from weak bi-directional communication and process.
- Inadequate continuous improvement.

Supply Chain

- Unseen risks created by cascading scope change throughout a complex supply chain.
- Arrows between tasks are no longer dimensionless and project flows can create risks.
- White space risks along the supply chain (e.g., customs or shipping delays for intermediate-stage project elements).

Communication and Awareness

- Misalignment between KPIs/alerts, resulting in evolving situations not being quickly seen (AI can address this).
- Risks that accumulate in the absence of continuous and effective communication along an end-to-end process (the project itself or major project processes).

Scope

- Gaps between solutions or an incomplete overall solution.
- Risks between contracting parties not adequately considered in project planning, budgeting, and schedule development.
- Required activities not identified in project plan.
- Undiscovered risks due to incomplete interface definition.
- Activities and deliverables normally provided that will not be provided.
- Tasks or activities not identified at the start of the project.
- Intangible or amorphous risks not tying back to any clearly responsible entity.
- Uncharacterized systems, structures, components, and conditions between the battery limits of discrete but related projects.
- Unseen risks exacerbated by interconnectedness.
- Misalignment between KPIs/alerts, resulting in evolving situations not being quickly seen (AI can address this).
- Risks in the broader mesh of externalities within which the project exists.
- Unpredictable technological and intangible risks resulting from culture, society, biases, system's effects, and externalities.
- Risks arising from non-linear tipping points (for example, climate change).

Related Risks

Related but different risks are those associated with interdependencies (such as coupled constraints when there is inadequate awareness of dependencies). This differs from more traditional risk dependencies and are in addition to execution risk (the probable risk that defined activities will not be completed) and integration risk (the likelihood that all the different initiatives will not form a cohesive outcome).

White spaces can be found where Black Swans nest and breed, but also can be home to impactful white space opportunities. White space risks that previously fell between tasks offer greater opportunities of appearing as those tasks are stretched, compressed, twisted, and reconfigured. Hidden constraints resulting from changes in the original work execution plan now offer greater opportunities for actions that were not originally planned.

As we consider the potential for white space risks, the question we must keep front and center is: "What we are not seeing?"

Summary

Many white space risks are identifiable if we undertake a more granular view of project processes and interfaces between intermediate tasks and activities. Discovery is also enhanced by mapping (and tracking) assumptions at this more granular level. Finally, looking at interfaces and transitions orthogonally can yield new white space risk insights.

About the Author

Bob Prieto was elected to the National Academy of Construction in 2011. He is a senior executive who is effective in shaping and executing business strategy and a recognized leader within the infrastructure, engineering, and construction industries.