Risk Assessment Analysis

The Northwest Seaport Alliance

December 11, 2017



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Summary of Process

- RSM initially interviewed and discussed risks specific to The Northwest Seaport Alliance (NWSA) with the following individuals:
 - Chief Financial Officer
 - Director, Accounting & Port Auditor
 - Chief Human Resources Officer
 - Director, Strategic Operations and Risk Management
 - Director, Container Business Development
 - Assistant Director, Equipment Maintenance
 - Director, Systems and Business Process
 - Chief Facilities Development Officer
 - Chief Commercial Officer Container and Real Estate
 - Chief Operations Officer
 - Chief Commercial Officer Non-Container and Commercial Strategy
 - Senior Director, Security & Labor Relations
 - Deputy CEO
 - Director, Intermodal Business Development

- Leveraging these interviews, combined with industry insight from our internal public sector industry subject-matter experts, RSM prepared an initial risk universe consisting of the major risks facing NWSA. The risk universe was categorized into the following risk categories:
 - Accounting & Reporting Information required by operations, regulatory agencies, attorney's, or other management and oversight bodies, has the potential to be inaccurate, incomplete or untimely.
 - **Brand Erosion** Erosion of the brand over time may threaten the demand for the organization's products or services and possibly impair its ability to grow future revenue streams.
 - **Catastrophe/Business Continuity** A major disaster, natural or created, can threaten the organization's ability to sustain operations, provide essential services, manufacture products or recover costs of operation.
 - **Regulatory Compliance** Non-compliance with customer requirements, prescribed organizational policies and procedures or laws and regulations may impact the business.
 - **Conflict of Interest** Failure to align business process objectives and performance measures with enterprise-wide and/or operating unit objectives and strategies may result in conflicting, uncoordinated activities throughout the organization. Business, personal or other relationships may hinder an individual or group to act in a manner consistent with the best interest of all stakeholders.
 - **Marketplace Dynamics External Factors** External agents could cause either direct or residual impact to an organization's business model, objectives or related strategies.

(Risks continued)

- **Governance** Corporate governance function may not operate as intended, meaning it may not provide leadership and employees with guidance in the areas of ethical business practices and compliance with critical policies and procedures.
- **Human Resources and Personnel** Lack of requisite knowledge, skills and experiences among the organization's key personnel may threaten the execution of its business model and achievement of critical business objectives.
- **Information Technology** Information technologies used in the organization may not be operating as intended, which could compromise the integrity and reliability of data and information, and expose significant assets to potential loss or misuse.
- **Operational Execution** Operations could be ineffective, inefficient or otherwise suboptimal in supporting the realization of the organization's objectives and strategies and fulfilling customer and stakeholder expectations.
- **Public Relations/Crisis Management** Potential damage to the organization's reputation exposes it to loss of customers, profits and the ability to compete.
- **Strategic** Inability to effectively understand, prioritize and deploy resources could result in the organization not being able to meet its strategic objectives or adequately respond to risk.
- **Third-Parties** Inefficient or ineffective third party, joint venture, affiliate and other external relationships could affect the organization's capability to compete.



- During the initial interview RSM worked with NWSA management to configure a rating scale to quantify risks in terms of:
 - Impact—the largest reasonable effect it would have on the entity
 - Likelihood—the probability the risk may occurring within the next 12 months

Impact, Measured by Effect on Company	Likelihood, Measured against the Stated Time Horizon	
3: High	3: High	
2: Medium	2: Medium	
1: Low	<i>1:</i> Low	
0: Not Applicable	0: Not Applicable	



- RSM then reviewed and refined the initial risk universe with NWSA management and the final result, consisting of 105 specific risks, became the basis for the facilitated session.
- In September 2017, RSM conducted a facilitated voting session, using anonymous keypad voting technology, which included representatives from key operational departments to quantify risks in terms of impact and likelihood.
- We analyzed the resulting data using various analytic filters and presented in December to the NWSA CFO and Director of Accounting plus their counterparts at the Port of Seattle.

Final results and analysis follow



Overall Observations

Key Risk themes by category and individual risks

Risk Categories

- Marketplace Dynamics External is the top risk category by a significant margin
 - To a large degree, these risks are difficult to mitigate because of external influences that are not easily managed
- Conflict of Interest is another category that contained risks that were considered significant by NWSA stakeholders
 - Misalignment between the goals of NWSA and the home ports were a major risk identified by stakeholders
- Operational Execution, Governance, and Accounting & Reporting categories ranked lower indicating that operational activities and the overall monitoring and tone at the top are of less concern

Risks

- The ability to attract and retain employees either because of external employer wages or because of home port culture of 'staying lean' was deemed a significant risk
- Technology risk, specifically related to strategy and infrastructure meeting long term needs, was identified by NWSA stakeholders
- Conflicts of interest between the home ports and NWSA result in poor decision making.
- Misalignment between maritime operations and other home port activities.
- Goals of elected commissioners are not aligned to NWSA goals.

Overall Observations

Key Take-Aways

Based on the risk assessment procedures which included reviewing NWSA documentation, interviewing key stakeholders, and conducting a facilitated risk rating voting session, we identified the following:

- Risk appetites and levels of insurance differ between the two home ports. This is one example of the cultural differences that the NWSA should address to drive operational effectiveness and achieve its objectives.
- Carrier consolidation within the industry along with changes in shipping technology are increasing the risk that NWSA will be able to stay nimble while upgrading infrastructure.
- West coast Canadian ports pose significant competitive risk because of their size and the subsidized Canadian rail system that provides a competitive advantage.
- Port equipment is older but there are new investments being made by NWSA, especially with regards to cranes; there is concern that the pace of NWSA's investment may not be swift enough to maintain an adequate ability to compete in the marketplace.
- Workload has increased for a number of employees who perform additional duties with the formation of the NWSA; The risk is that employees will leave because they feel overwhelmed or overworked.



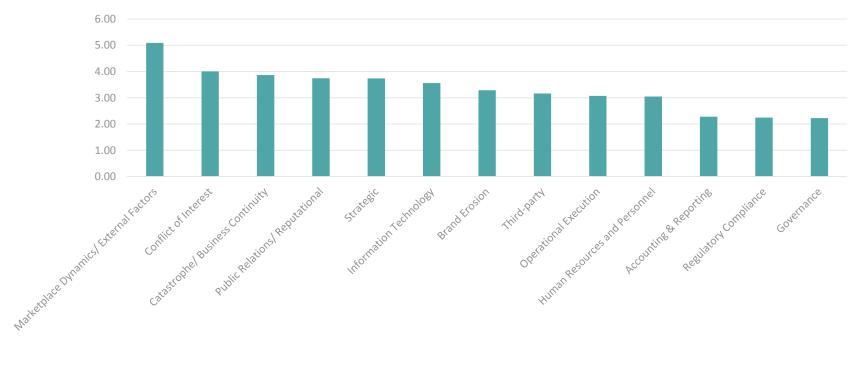
Overall Observations – Risk Category Ratings

Top Risk Categories sorted by average impact x likelihood

#	Risk Category	Average of Impact x Likelihood	Average of Impact - Mean	Average of Likelihood - Mean
1	Marketplace Dynamics - External Factors	5.09	2.40	2.13
2	Conflict of Interest	4.00	2.14	1.87
3	Catastrophe/ Business Continuity	3.87	2.28	1.70
4	Public Relations / Reputational	3.75	2.07	1.81
5	Strategic	3.74	2.11	1.77
6	Information Technology	3.56	2.15	1.65
7	Brand Erosion	3.29	2.02	1.63
8	Third-party	3.17	2.06	1.53
9	Operational Execution	3.07	2.02	1.52
10	Human Resources and Personnel	3.05	1.89	1.61
11	Accounting and Reporting	2.28	1.84	1.24
12	Regulatory Compliance	2.25	1.70	1.33
13	Governance	2.23	1.68	1.33

Overall Observations – Risk Category Ratings

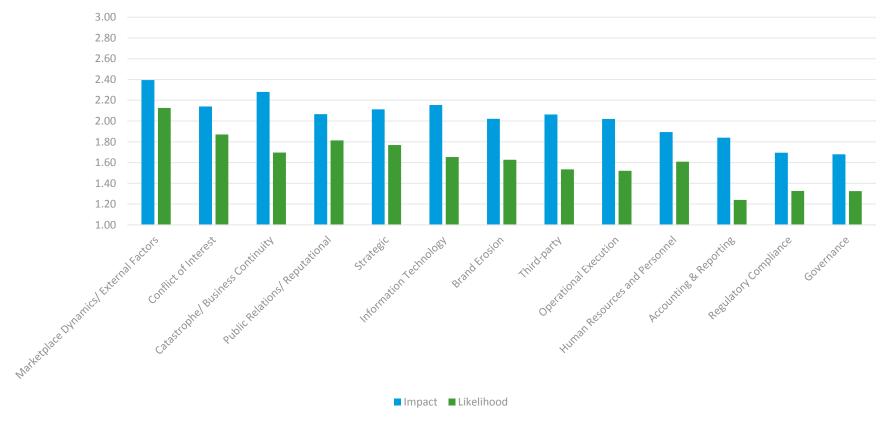
Risk Category Averages



Total Score



Overall Observations – Risk Category Ratings

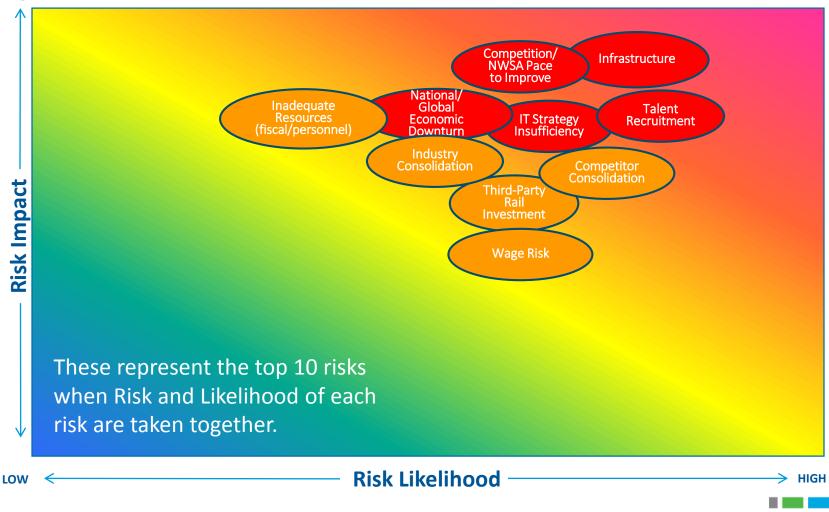


Risk Category Input Averages



Heat Map – Top 10 Risks – Impact x Likelihood





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Overall Observations

Key Audit Ideas

Based on the risk assessment procedures which included reviewing NWSA documentation, interviewing key stakeholders, and conducting a facilitated risk rating voting session, we identified a list of potential internal audits that may help to identify ways of managing the most significant areas of risk in the near term:

- Review of NWSA's strategic business plan to assess progress against stated objectives and help identify a prioritized roadmap to success.
- Conduct a road and rail Infrastructure capacity planning audit to help ensure processes are in place to address projected infrastructure gaps.
- Review of operations and administration against The Northwest Seaport Alliance Charter to determine compliance.
- Assessment of technology current state to evaluate future infrastructure needs and assess the process for setting strategic vision to ensure organizational needs are met.
- Leverage current cyber security assessment and roadmap to ensure adequate controls are in place to reduce the potential of a data breach.
- Conduct a human resource strategic assessment to evaluate the current resource constraints and the process for budgeting and setting hiring goals.
- Conduct an assessment of the Operations Service Center to determine progress against stated objectives.



Next Steps

We have appreciated NWSA's engagement throughout the Risk Assessment process. To continue to realize benefits from the process, we would recommend that management consider the following Next Steps:

- Summarize current work activities that may mitigate risks.
- Identify, assess, and document ongoing risk mitigation efforts, and develop concurrent monitoring and reporting.
- Identify gaps where current mitigation/control efforts may not adequately address stated risks.
- Design action plans, assign owners, and formalize a long-term project plan around further gap remediation efforts, as needed.



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