Abstract

Business transformation initiatives are undertaken by enterprises to reduce the risk of misalignment and to build agility and adaptability to market changes. The predictability of desired outcomes needs to be managed by mitigating interdependent risks associated with changes in processes, systems, operating procedures, employee and customer base, etc. This proposed approach details a comprehensive approach to measure enterprise risk management maturity by measuring its ability to identify risk, measure impact and define mitigation strategy. The model is further enhanced by provisioning for feedback to measure the effectiveness of mitigation and to ensure that outcomes are within desired limits. The intended audience of the paper is senior executives, business partners, program managers, project/track leads working with program organization groups, project management organizations (PMOs) and steering committees.
1. Transformation Challenge

Transformation programs are driven by a strong business imperative that includes: a) an attractive business case with benefits outweighing costs; b) calculated risks to be successful in current market conditions; and c) strategic goals related to company vision and values.

Transformation initiatives are associated with high risks due to the following challenges:

- Market environment is unpredictable: While many companies are filing for bankruptcy, other companies are closely reviewing their business models and operations for survival in current economically challenged conditions.
- Need for innovation: Increasing need to accelerate go-to market strategies comes with constant need to innovate and change the business model.
- Aligning to industry: Due to aging workforce and industry dominated by mergers and acquisitions, there is a growing need to align with industry to allow greater efficiencies in workforce, processes and other costs.
- Evolving technology: Technology provides greater scope for adopting standard best practices with constant challenge to improvise new practices.
- Resistance to change: Transformation initiatives need strong change management for successfully achieving the needed business imperative.

A strong risk management approach is needed for minimizing the unpredictability associated with transformation-related initiatives.
2. Factors Influencing the Risks

The following factors result in unpredictability in transformation programs and need to be managed. Factors can influence the outcome in a positive way or negative way.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Negative Impact to Desired Outcome</th>
<th>Positive Impact to Desired Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business case</td>
<td>Tendency to be driven by pre-conceived business solution and retrofitting cost benefit analysis.</td>
<td>Comprehensive what-if analysis to cover best and worst scenarios in a business case</td>
</tr>
<tr>
<td></td>
<td>Neglecting cost of opportunity</td>
<td></td>
</tr>
<tr>
<td>Communication management and governance</td>
<td>Unclear roles and responsibilities; Undefined accountability</td>
<td>Knowledge enabled organization having communication plan with feedback loop</td>
</tr>
<tr>
<td></td>
<td>Unplanned communications</td>
<td></td>
</tr>
<tr>
<td>Executive sponsorship</td>
<td>Commitment of sponsors</td>
<td>Providing strategic direction based on analytical data points</td>
</tr>
<tr>
<td></td>
<td>Inability to handle conflict of interest situations in impartial manner</td>
<td></td>
</tr>
<tr>
<td>Policies</td>
<td>Policies resulting in reduced innovation</td>
<td>Policies developed to resolve operational conflicts</td>
</tr>
<tr>
<td>Motivation</td>
<td>Driving toward strategic goal with negative factors like job security, new technology enabled process, etc.</td>
<td>Highly motivated group with a common group goal with minimal consideration of personal benefits</td>
</tr>
<tr>
<td>Stakeholder management</td>
<td>Neglecting key stakeholders in decision making processes or information flow</td>
<td>All stakeholders needs identified and managed</td>
</tr>
<tr>
<td>Organization change management</td>
<td>Managing change by force</td>
<td>Change management from ideation through implementation</td>
</tr>
<tr>
<td></td>
<td>Benefits of change not demonstrated to stakeholders</td>
<td></td>
</tr>
<tr>
<td>Performance management</td>
<td>Neglecting mechanisms to measure activities against business goals</td>
<td>Periodic measurement of performance with ability to improve</td>
</tr>
<tr>
<td></td>
<td>Not realizing benefits and values as per the charter</td>
<td></td>
</tr>
<tr>
<td>Data &amp; information</td>
<td>Not leveraging data points from process and other feedbacks to correct the outcome deviations</td>
<td>Leveraging data points to drive the decisions and avoid risk occurrences</td>
</tr>
<tr>
<td>Enabling technology</td>
<td>Allowing technology capabilities to drive the strategic/business goals</td>
<td>Leveraging technology to drive innovation for business</td>
</tr>
<tr>
<td>Political dynamics</td>
<td>Inability to address hidden agenda within the organization system</td>
<td>Decisions with consensus from the stakeholders</td>
</tr>
<tr>
<td>Methodology</td>
<td>Inadequate methodology to produce high quality and cost optimized solution to business problem</td>
<td>Proven methodology along with correct implementation leveraged</td>
</tr>
<tr>
<td>Social consciousness</td>
<td>Goal neglecting environment and other negative implications</td>
<td>Minimizing social, environmental and other negative impacts with ability to provide alternate solutions</td>
</tr>
<tr>
<td>Force majeure</td>
<td>Inadequate disaster recovery planning</td>
<td>Pilot tested disaster recovery plan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Business transformation involves establishing business imperative, defining vision and targets, realizing the targets and refining for future needs. During each of these phases, the risk management framework closely integrates with the transformation phases for achieving the desired outcomes.

The risk management life cycle includes the following:

**Define and Plan Risks:** Understanding the business imperative, market conditions and other socioeconomic factors are inputs to the process of planning the risks. The process includes identifying the impact thresholds, severity and importance to prioritize the mitigations. The output includes the risk plan along with mitigation actions and possible trigger points.

**Align and Execute Mitigations:** Mitigation plan, resources (people, process, tools) and change management plan form inputs to the process of execution. The process includes performing the mitigation actions and reducing the impact of the risk to the outcome. The output includes realignment of risks with noise factor to the target.

**Measure and Analyze:** Mitigation actions and program metrics data are input to this process. The process includes defining control points and measuring the risk impacts to the outcomes. The output includes risk feedback, change management plan and simulation models.

**Review and Refine Risks:** The risk management plan and feedback are input to the process of reviewing the risks. This is an ongoing process to determine change in risks and also to identify new opportunities resulting in change in business imperative or methodology. The risk tolerance level in different phases of the transformation program is also taken into account.

**Exploit Opportunities:** In the entire process, additional opportunities are uncovered to positively modify business imperative, vision, target or realization values.
4. Multi-dimensional Risk Management

Business transformation programs need a multidimensional approach for risk management. All the risks need to be effectively analyzed on each of the dimensions to determine the appropriate mitigation strategy.

**Business Dimension:** Business decisions are influenced by various factors like company financial performance, market share, competition strategy, socioeconomic conditions and other legal regulations. The handling of business-related risks is of utmost importance for a transformation program due to the impact that can result.

**Management Dimension:** Strategic initiatives need direction from management as well as proven implementation methodology. Sound program management practices supported with data-based metrics and a controlled process are needed to manage the risks.

**Resources Dimension:** Support from adequate resources working towards common objectives can help in minimizing the risks. Effective performance and utilization of all the resources are needed for the goals.

**Technology Dimension:** Technology-based innovation can help in minimizing the risks by providing higher predictable outcomes.

All the above dimensions have to be coherently managed to avoid the following effects on the risks:

a) **Bubble effect:** Impact of one risk on another risk resulting in larger risk and higher impact. Managing risks as standalone risks may result in ineffective mitigations.

b) **Wave effect:** Managing varying impacts at different points of time and different phases of the program. All risks have to be analyzed and mitigated on a continuous basis to keep the outcomes in the right direction.

c) **Cloud effect:** Inherent assumptions are taken, resulting in unmanaged risks. Unforeseen risks lead to surprises as they are not mitigated.

d) **Star effect:** Mitigated risks can reoccur at different points of time.
5. Define and Plan Risks

In business transformation programs, a risk identification process can be critical for ensuring that all possible noises in the program are trapped for achieving the objectives. The following techniques help to identify the risks:

**Business Case Analysis:** Analysis of the business case and detailed inspection of anticipated benefits and costs help to identify risks. Strength, weakness, opportunity and threat (SWOT) analysis for successfully implementing the transformation program also provides the framework for inspecting the risks.

**Benchmarking:** Comparing the business objective and implementation approach with similar initiatives within or outside the company helps to identify additional risks based on lessons learned from other initiatives.

**Decision and Assumption Inspection:** Every assumption taken in the planning can potentially pose as a risk and hence needs a detailed inspection. Analysis of issues raised and decisions taken along with reasoning of the decisions can also provide inputs.

**Knowledge Base:** Detailed interviews or brainstorming sessions with experts and capturing their inputs based out of the experience help to identify risks. Comparison of skills needed for the program with the actual skills available in the program can also provide inputs to defining the risks.

**Tools:** Industry standard tools like simulation models, risk questionnaires and data analysis tools can be deployed to measure outcome deviations and identify risks.

**Project Plan Review:** Detailed analysis of work breakdown structure, critical path, dependencies, timelines, effort and resource allocation can help in identifying risks.

**Influence Analysis:** Detailed analysis of stakeholder needs and their influences along with the enabled governance structure and communication plan helps to identify additional risks.

**Risk Mitigation Measurement:** Effectiveness of the risk mitigation plan with its measurement framework provides feedback to define additional risks.
6. Align and Execute Mitigations

As there are many sources for risks in business transformation programs, it is critical to align the risk and plan the mitigation actions. Risks needs to be prioritized based on the following:

- **Likelihood**: probability of risk materializing in relation to the timeframe of the program
- **Business impact**: impact of the risk on the business and program objectives
- **Frequency**: frequency of occurrence of the risk
- **Risk tolerance**: risk tolerance limits set by executive governance structure
- **Critical path impact**: addressing the risks that are impacting critical path activities
- **Agility in risk response**: agility of organization to address the in-process risks
- **Mitigation strategy**: effort to mitigate the risk and determine the strategy for mitigation like avoidance, transfer, reduction, contingency or acceptance of the risk.

The diagram below demonstrates the following:

a) Risk patterns may not be directly proportional to transformation life cycle. High risk zones are present during the initiation phase as many critical decisions are taken and towards the end of the realization phase when user acceptance is critical for success of the initiative.

b) Risk impacts and also probability of occurrence can vary over a range depending on mitigation strategy.

c) Risks can reoccur at different points of time and the mitigation strategy may need to be re-implemented.

d) Each risk cannot be assessed on a standalone basis and needs to be mitigated with assessment on overall impact.
7. Measure and Analyze Risks

Risk impact and the effectiveness of mitigation strategy need to be measured to reduce the deviations in the plan. Root cause analysis can be performed for any anomalies identified during this process.

Risk measurement need to meet the following objectives:

a) Ensuring that all risks are mitigated based on the impact to the goals
b) Ensuring effectiveness of mitigation strategy
c) Risks are classified and addressed at right level of governance.

Measuring Exposure

All the risk impacts are measured in relation to each other. Risk impacts are measured by assessing the impacts to the overall goal of the transformation program. Simulation of various mitigation options is performed to identify and finalize the mitigation action. Risk exposure is the area covered by mitigation plot in the chart. Any risks that are beyond the tolerance limits are resolved as an issue than using risk management framework.

Measuring Correlation

Risks may be correlated to each other and hence can be addressed by a common mitigation strategy. It is important to identify the correlation coefficients amongst various risks to allow for an effective and common mitigation strategy.

Measuring Probability

The probability of occurrence can be defined using experiences from similar program along with additional monitoring cues to identify the risks before they occur. As risks occur, probability can be assessed along with severity. Depending on the risk appetite of the program needs, these risks can be addressed at different levels in the organization. Enabling a risk-scoring framework allows escalation of high risks to the program steering committee for further action.
8. Review and Identify Opportunities

The final stage of the risk management framework is to review risks and identify opportunities. Identifying opportunity requires the creation of an organization-wide mind-set by stimulating new ideas to counter the risks. Additionally, transformation programs need heavy investments and carry opportunity costs.

The following components enable the risk review process:

a) Lessons-learned sessions: Lessons learned at the end of each life cycle provide data points needed for risk reviews.

b) Financial results: Financial result analysis like cash flow analysis, profitability, volatility and other ratio analysis allows measuring of effectiveness of risk mitigations.

c) Audits: Internal and external audits ensure the need of strengthening the risk management process and ensure the minimization of exposure.

d) Independent estimates: Independent estimates of schedule, cost and quality can provide comparison data points for the planned deviation for the transformation program.

e) Executive commitment: Commitment from executives is an important aspect of the review process.
9. Conclusion

A risk management framework for business transformation programs enables a systematic approach to identify, assess, prioritize and mitigate risks. The framework provides techniques for defining the risks and provides the foundation for the mitigation plan. Assessment methodology in relation to the business transformation life cycle provides the ability to prioritize risks and mitigate actions. The measurement of effective mitigation strategy provides a quantitative approach to minimize the deviations in the program. The risk review process that helps to identify opportunity and provides feedback to correct the mitigations allows for a self-learning method for the execution of risks.

Sandeep Vallabhji Savla is a program manager with Infosys Technologies with specialization in the field of business transformation programs for utility companies. He can be reached at sandeepvsavla@infosys.com. For more contact details, refer to http://www.linkedin.com/in/ssavla.