ENTERPRISE RISK MANAGEMENT

The world faces multifaceted, evolving challenges as we navigate through an era marked by unprecedented uncertainties across various dimensions, such as geopolitics, emerging country blocs, technological advancements, and climate change. 2024, often called "The Year of Elections," will witness over half the world's population casting votes across more than 60 countries, including India. This widespread electoral activity is anticipated to bring significant policy uncertainties and potential disruptions in the business environment due to varying governmental ideologies.

Indian Economic Outlook

Amidst the global upheaval, the Indian economy has not only weathered the storm but also emerged as a beacon of hope. It has showcased remarkable resilience in the post-COVID-19 era, positioning itself as one of the fastest-growing economies on the worldwide stage in the mid-term, as affirmed by leading global economists. This economic stability, coupled with the upswing in government capital expenditures and a steady policy environment, has paved the way for a plethora of opportunities for businesses to not just survive, but to truly flourish.

Complexity and Risk

As opportunities increase, so does complexity, which in turn escalates the associated risks. It is crucial to align these opportunities with organisational strategies and risk appetite to ensure sustainable long-term growth. From a risk management perspective, our focus is on building organisational resilience to mitigate the impacts of internal and external events, while also seizing the opportunities these events present.

Enterprise Risk Management (ERM) Framework

Tata Consulting Engineers has not just crafted, but meticulously honed a robust Enterprise Risk Management (ERM) framework. This framework stands as a testament to our unwavering commitment to addressing potential risks and their impact on the company's performance.

It is intricately woven into our business value chain and draws upon best practices from esteemed standards such as ISO 31000 and the COSO framework. Our risk management procedures are meticulously designed to capture and evaluate risks at every project lifecycle stage, from the bid stage to project closure, ensuring that we are always one step ahead.

The ERM framework supports risk reviews, mitigation, monitoring, and reporting through comprehensive dashboards and reports, tracking key parameters such as risk scores, high-risk bids and projects, and mitigation plans.

The central Risk Function is led by the Chief Risk Officer (CRO), with guidance from the Managing Director, Audit & Risk Management Committee (ARMC) and Board. The Corporate Risk team and Business unit-level Risk Officers (BUROs) support the CRO in integrating and deploying risk frameworks across various BUs.

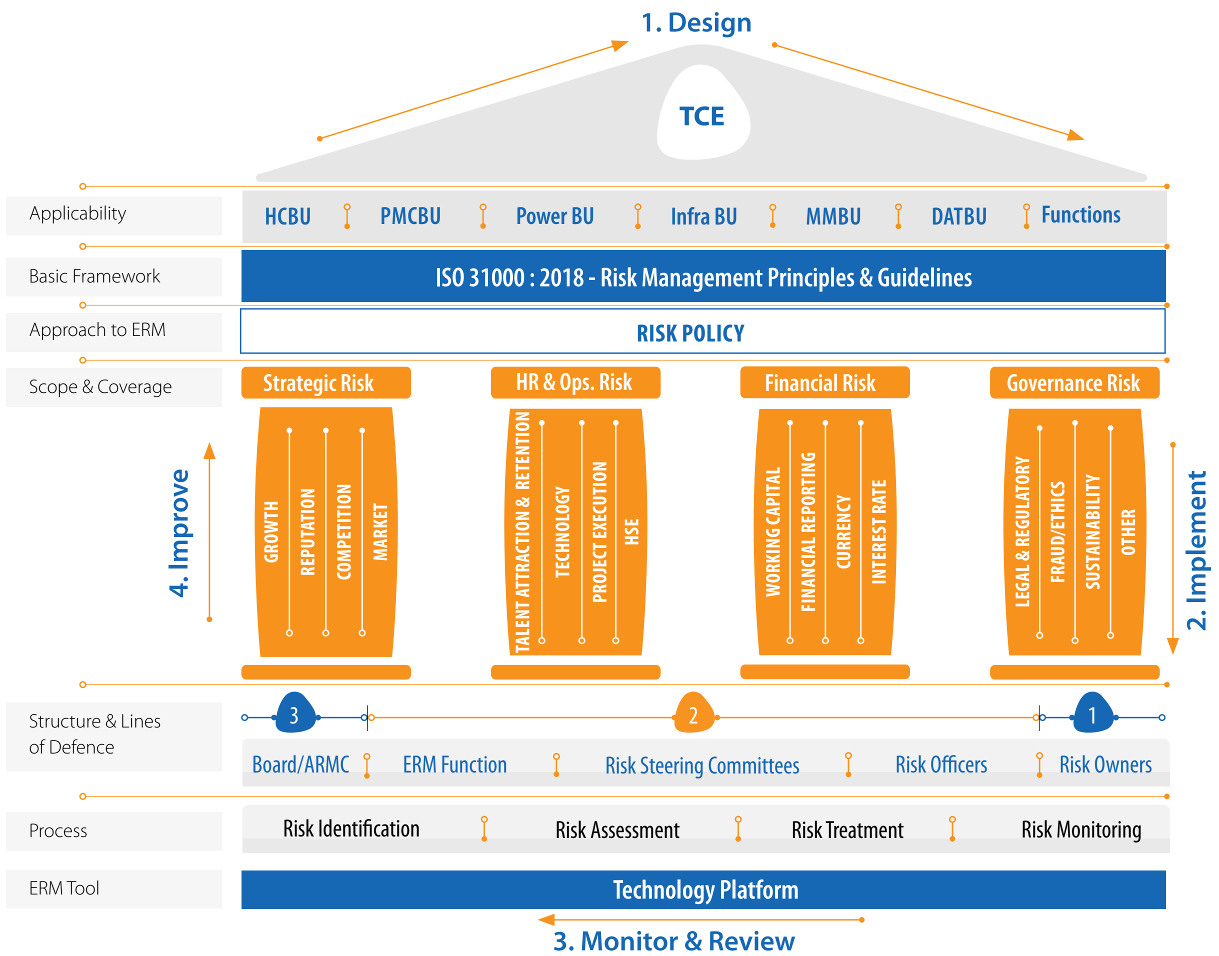
Key Initiatives and Measures

- **Detailed Bid Reviews:** Conduct thorough bid risk analysis based on threshold values
- **Monthly Risk Reviews:** Conduct regular project reviews of key projects from each BU.
- **Strategic Risk Inputs:** Provide risk inputs to the strategy, covering business and sector-wise updates in terms of risks and opportunities.
- **Annual Business Plan (ABP) Risk Challenge:** Evaluate potential risks that may impact the ABP, considering optimistic, pessimistic, and base scenarios.
- **Portfolio Analysis:** Analyse projects within a specific sector to understand the risk-return potential.
- **Revision of Risk Registers:** Update BU and Function risk registers regularly.
- **Country Profiles:** Prepare and share profiles covering risks and opportunities to aid informed decision-making.
- **JV Partnership Risk Management:** Develop framework to identify and mitigate partnership related risks throughout the lifecycle of the project.
- **Strengthening Risk Culture:** Train key stakeholders, including BU Risk Officers, Business Development, and Project Management Teams.
- **Customised Training Modules:** Develop and deliver new training modules that are tailor-made from TCE perspective for JV risk assessment, Business Development and Delivery teams.
- **External Risk Management Services:** Offer risk management services to external clients.

Governance and Reporting

The ERM team periodically presents risk assessments and mitigation procedures to the Corporate Management Committee (CMC) and the Audit & Risk Management Committee (ARCM) of the Board, enhancing the effectiveness of company's risk management process and feedback or new suggestions from ARMC are suitability factored in the process/framework of the company.

TCE Enterprise Risk Management Framework



Risk Management Organisation

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Key Risk Areas and Mitigation Strategies

Risk Category	Key Risk Areas	Areas Impacted	Mitigation Strategies
Economic Risk	• Demand for the company's services is mainly capex-based. Economic downturns may impact sectors in which the company's clients operate, reductions in government or private spending, and political & economic uncertainty. • Uncertainties presented by rise in inflation, geopolitical aspects like Israel-Iran/Hamas tensions, Russia-Ukraine conflict, supply chain issues, rise in freight costs, oil price hike, etc., may impact project viability, which may delay owner's capex plans, or it may hit their ability to make timely payments in existing projects	• Ability to generate new business and revenue targets, generate revenue out of existing business, make collections for current and past dues, project delays leading to cost increase, etc.	• TCE has multiple Business Units (BU) across sectors, making it less dependent on any single industry and enabling us to capture new opportunities. • Proper due diligence of clients, ensuring project viability, funding tie-up, etc., are in place
Business Acquisition & Revenue Flow	• External factors such as geopolitical issues, economic trends, wars, and politics-inflicted issues like government change, policy changes, market conditions, pandemics, etc., may impact the business acquisition. • Delays or reductions in new orders may affect the targeted revenues. • Revenue generation could also be negatively impacted due to internal issues like the inability to deploy the right workforce, inadequate planning	• Reduced jobs in hand/ order book • Revenues, cashflows and profits	• Identify sectors/geographies/ business models for growth. • Develop new key accounts/ customers & enter new areas through partnerships, etc. • Deepen customer connect

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Loss of Confidential Information / Data Violation/Breach	• Processes are being followed to correctly identify confidential information of the company & other stakeholders and prevent leakage. However, there remains a risk of loss of confidential information.	• Loss of sensitive information • Negative impact on reputation and brand value • Loss of business	• Training and sensitisation of employees • Obtaining specific NDAs / Confidentiality agreements from employees/partners • Tightening of IT security measures
Human Resources	• Shortfall of key resources in case of high attrition in select BUs • Competition and the company's ability to attract talent in current market conditions may be challenging. • Unexpected incidents and risks like war, pandemic, and climate risks may impact the company's ability to deploy workforce at sites worldwide.	• Delay in deliverables/ projects • Reduction in revenue and profits • Increased workforce costs in case of any immediate hiring required for a key position	• Enhancing employee engagement practices • Developing specific learning and re-skilling programs by providing adequate training • Proactive strategies to attract suitable talent from various sources. • Focus on providing a safe environment and ensuring employee's well-being
Locked Working Capital and Cash Flow	• Many of the company's contracts have milestone-based payment terms, due to which significant costs may be incurred before actual billing and collection	• Impact on working capital & higher cost of financing • Negative cashflow	• Enhanced focus on contract & claims management to ensure project delivery with profitability • Due diligence and factoring in locked capital or cash flow impact in the bid pricing. • Negotiating contracts with better payment terms, especially with private clients or tenders where deviations are allowed
Concentration Risk	• Dependency on specific key clients, types of business models, geographies or sectors may hurt revenues. • Despite good relationships and performance by TCE, such client(s) may have to reduce, delay, or cancel their contracts due to changed business scenario	• Volatility or fluctuations in business performance • Inability to achieve acquisition, revenue, anticipated profitability / operational targets in case over-dependent aspect gets impacted/ faces any issues	• Conscious efforts to reduce dependence or concentration on any single client, geography, or sector. • Develop newer key or large accounts. • Strengthening of business relationships with clients at all levels

Risk Category	Key Risk Areas	Areas Impacted	Mitigation Strategies
Liabilities	• Company's project execution activities may result in liability as per Contract conditions • Force Majeure conditions being activated • The company could be exposed to monetary damages, claims or reputation risks due to deficiencies in service, any catastrophic event at the company's project sites, etc.	• Unexpected costs to correct deficiencies may lead to an increase in overall cost • Negative impact on profitability • Increased litigations / legal disputes	• Adequate professional liability insurance at the organisation level • Proper due diligence at bid time to avoid taking up significant liabilities, adhering to contract requirements and professional best practices to avoid imposing penalties or liabilities. • Project-specific insurance wherever there are specific requirements.
Safety Risk	• The company may be exposed to safety issues if the quality is not adhered to or / the process is not followed while formulating the design and review of safety mechanisms during the project's construction phase as per contractual terms. • Safety issues for employees deployed/ in-transit for official purposes at difficult locations due to geography-specific or geopolitical concerns like wars, unsafe environments, etc	• Reputational impact • Injuries/loss of life	• Stringent internal process checks by an independent team to ensure desired quality parameters are met • Training on safety aspects/ processes to concerned employees to ensure safety. • Before entering a new geography, Country profiles are prepared to cover aspects like the economy, politics, security, legal aspects, relations with India, etc., apart from risks and opportunities, to ensure that jobs are chosen at international locations that are safe and in line with the organisation's strategy.
Joint Ventures (JVs) / Partnerships	• TCE works on specific contracts as a member of JV, in partnership, and similar arrangements. There is a risk that the company's partners may be unable to fulfil their contractual obligations to the company or clients. • The company would have limited ability to control the actions of the JV partners, including non-performance, default, bankruptcy, or legal compliance	• Impact on time and quality of project deliverables. • Loss of revenue and profit. • Increased litigations and hence loss of reputation	• Proper due diligence of JV partner during pre-bid/bid stage, esp. on financial ability, experience, and track record • Strong back-to-back contractual arrangement to pass on liabilities and penalties to JV commensurate with their share in the partnership • The JV/Partnership risk assessment framework has been prepared, and staff is being trained to ensure JV partnership-related risks are managed efficiently throughout the lifecycle of the project

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Cost Overrun	• Costs may increase in projects due to various reasons like: » Higher quantum of resources required » Schedule delays » Resources being unoccupied while being deployed on the project	• Lower profitability • Disputes with client	• Ensuring vital bid-stage contractual review and study of primary/ secondary data to identify issues/ risks, quantify them, and factor them into the prices. • Strengthening claims preparation and submission process. • Follow project and contract management best practices to avoid cost overruns
Intellectual Property (IP)	• Although the company protects its intellectual property through contractual arrangements, registration, licensing, NDAs, etc, it may not be able to prevent infringement of IPs completely • Company's employees could inadvertently or purposely cause infringement of client's or third party's IP rights. • Litigation to determine the scope of IP rights, even if ultimately successful, could prove to be costly	• Unexpected and huge costs • Consumption of a significant amount of senior management's attention and time. • Negative impact on reputation and brand value	• Strengthen processes, contracts & other mechanisms to safeguard the company's IP, confidential information & trade secrets • Provide training to employees on the importance of respecting the IPs of the company and those of other stakeholders and the high price that the company might become liable to pay in case of IP infringements
International Operations	• The company's international operations are exposed to additional risks and uncertainties, including unfavourable political developments and weak economies. For example, unexpected changes in government or its policies, geopolitical issues, potential non-compliance with regulations and evolving industry standards, renegotiation or nullification of existing contracts, social, political, and economic instability, currency fluctuations, etc.	• Loss of business • Safety and security risk of personnel • Impact on revenue and profits • Impact on the global footprints of the company	• Perform and maintain country risk analysis on an ongoing basis for clearly identifying new geographies as Go / No-go • Proper due diligence regarding country or location risk during bid time. Avoid excessively risky, unsafe, economically unstable, or weak countries or geographies. • Establish systems and processes to ensure compliance with all key regulatory, government, and contractual compliances, standards, laws, etc.

By proactively addressing these risks and embedding resilience within our organisational structure, TCE is committed to "Designing the Future." Our strategic approach to risk management protects our interests and empowers us to seize new opportunities, ensuring sustainable growth and success in an ever-evolving global landscape.