

Enterprise Risk Management (ERM): A Primer

**Baumhart Center for Social Enterprise
Quinlan School of Business
Loyola University Chicago**

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Abol Jalilvand

Professor of Finance and Ralph Marotta Chair in Free Enterprise

**Founding Director: Quinlan Series on the Future of Business
Education <http://luc.edu/quinlan/faculty/aboljalilvand.shtml>**

Learning Goals

- Global Risk Landscape Survey: World Economic Outlook (WEO)
- Enterprise Risk Management (ERM): Definition & Function
- Risk Management Maturity and its Systemic Benefits
- ERM Five-Step Process
- Resources and Information on ERM
- ERM at Global Educational System (GES): A True Event Case Study

WORLD
ECONOMIC
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The Global Risks Report 2021

16th Edition

INSIGHT REPORT

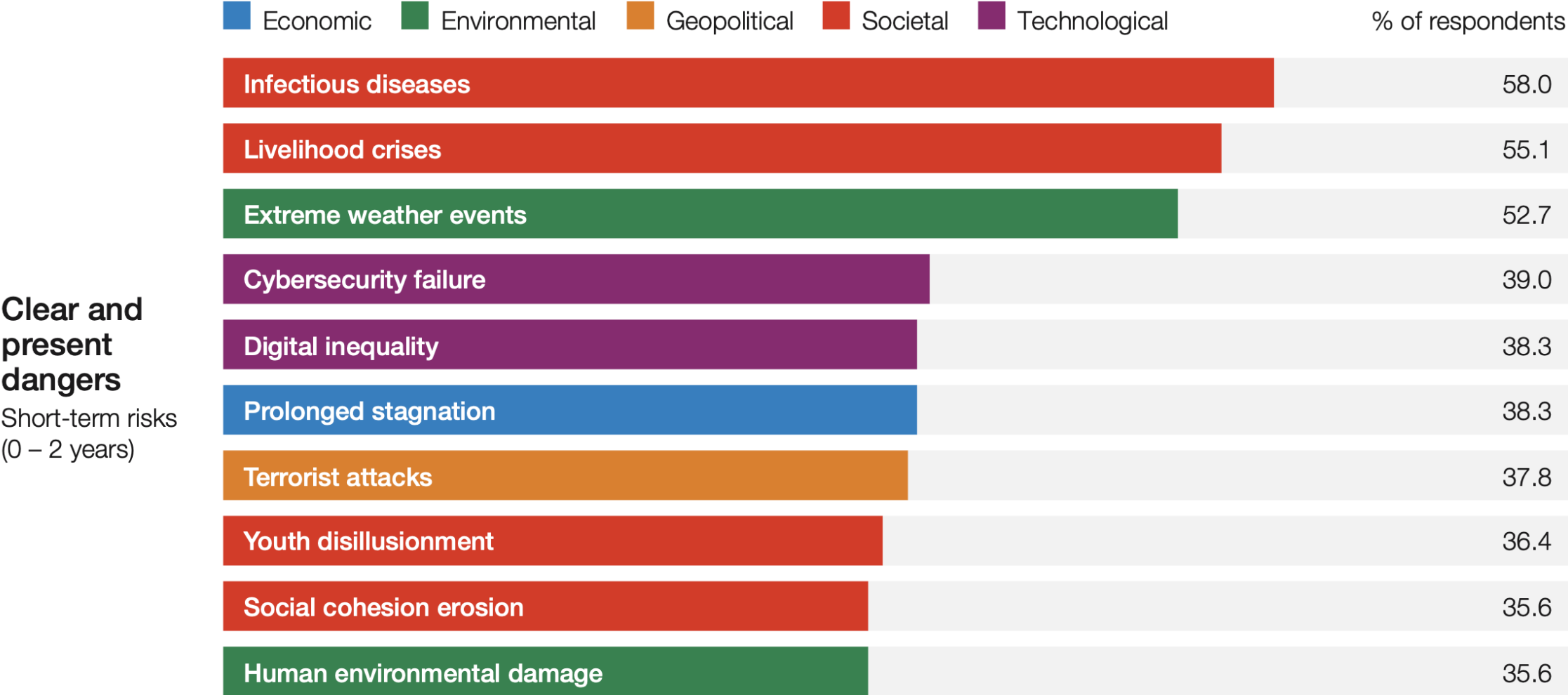


World Economic Forum(WEF): Global Risk Perception Survey: 2021 and Beyond

- The Global Risks Perception Survey (GRPS) is the World Economic Forum's source of original risks data.
- Survey responses were collected from 8th September to 23rd October 2020.
- Respondents: multistakeholder communities including the professional networks of WEF's Advisory Board, and members of the Institute of Risk Management.

Global Risks Horizon

When do respondents forecast risks will become a critical threat to the world?



Critical Short-term Risks: 2021-2023

- Managing future infectious diseases
- Employment and livelihood crises
- Cyber security attacks
- Economic stagnation
- Human-made environmental damage
- Erosion of societal cohesion
- Terrorist attacks

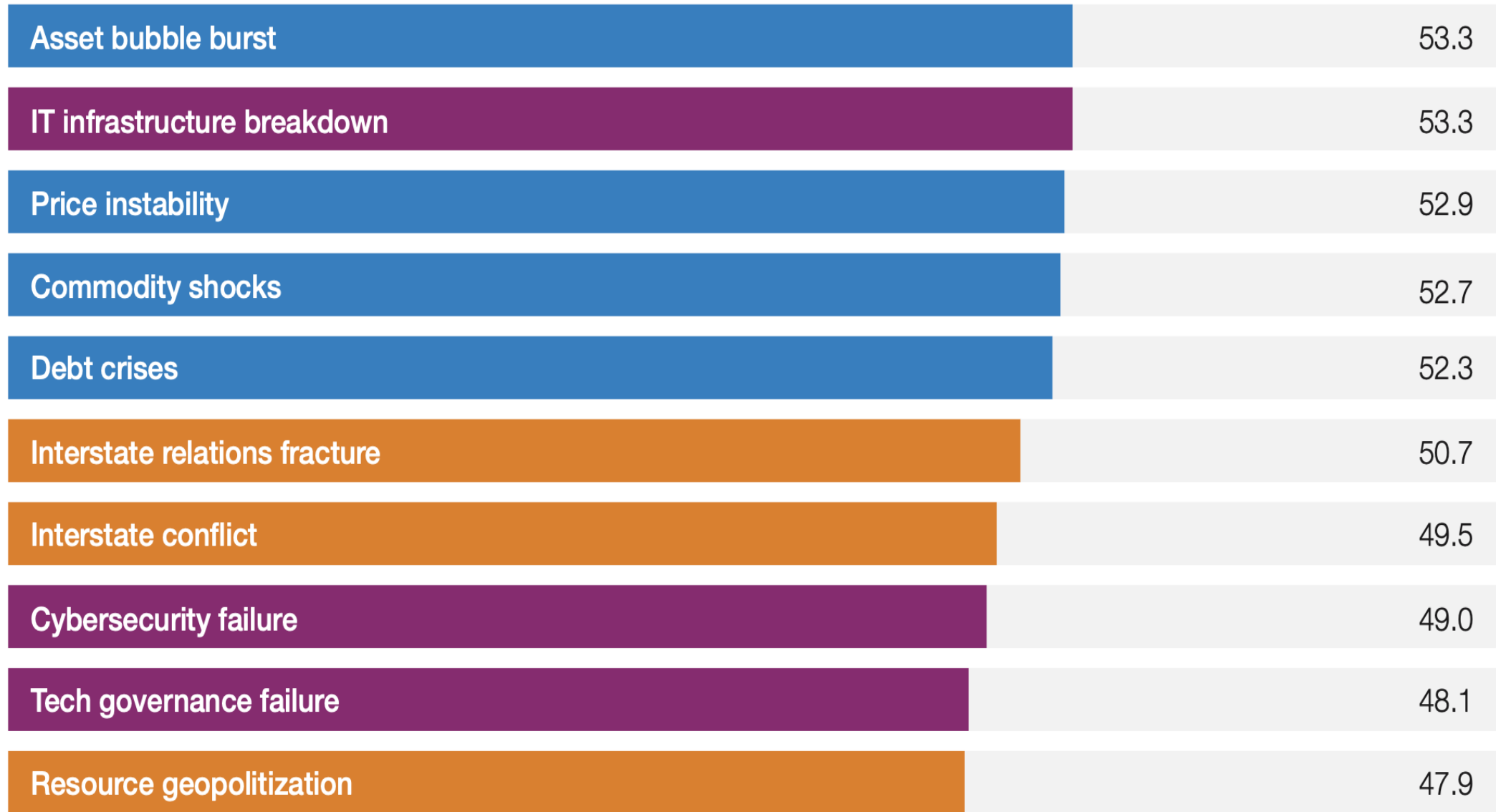
Global Risk

■ Economic ■ Environmental ■ Geopolitical ■ Societal ■ Technological

% of respondents

Knock-on effects

Medium-term risks (3 – 5 years)



Critical Medium-term Risks: 2021-2026

- Economic risks: including asset bubbles, price instability, commodity shocks, and debt crises
- Geopolitical risks, including interstate relations and conflict, and resource geo-politization
- Environmental risks including biodiversity loss (functionality of the ecosystem), natural resource crises and climate action failure
- Weapons of mass destruction, adverse effects of technology, and collapse of states or multilateral institutions.

Global Risks Landscape

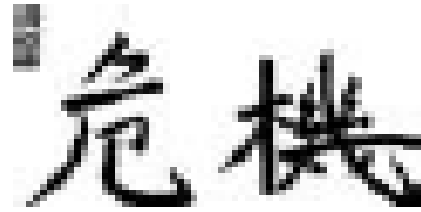
How do respondents perceive the impact ↑ and likelihood → of global risks?

- Economic
- Environmental
- Geopolitical
- Societal
- Technological



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Enterprise Risk Management (ERM)



The Chinese symbols for risk, shown above, captures a key aspect of risk management. The first symbol represents “*danger*” and the second “*opportunity*.”

ERM is about establishing strategies and processes in for-profit and non-profit organizations to assess and address risks from all sources both to mitigate threats using key risk management techniques and exploiting opportunities to realize competitive advantages.

Crises and ERM

Following the financial crisis of 2007-2009, lack of an effective risk management system was widely believed to have contributed to the destruction of trillions of dollars of wealth and collapse of some venerable companies in different industries.

- Oil and gas (British Petroleum),
- Electricity (Tokyo Electric),
- Financial (Lehman Brothers, Bear Stearns, Merrill Lynch, Wells Fargo),
- Technology (Boeing),
- Higher education (Corinthian Colleges, ITT Education Services), etc.
- Covid-19, significantly slowed down the pace of economic and social activity around the world. In response, an unprecedented level of fiscal and monetary interventions were introduced to protect the global economy from a total collapse

Anatomy of ERM

- ERM is everyone's responsibility, and not the exclusive domain of the boards of directors.
- Boards, however, need to have a structured understanding of key risks, while risk owners continue to manage risk within their scope using a coordinated approach.
- The effectiveness of risk management ultimately depends on people, and the culture of risk management, not frameworks.
 - There are individual biases.
 - Same ERM framework could lead to different implementation and use of risk management.
 - During the financial crisis of 2007-2009, many Wall Street firms had established risk management systems, but some of these firms failed while others survived quite well.

Benefits of ERM Maturity

- Create resilience to deal with unanticipated losses
- Creates adaptability to pursue innovation
- Enhances competitive position.
- Improves credit rating
- Lowers cost of capital, improves profitability, and enhances liquidity
- Reduces customer attrition
- Improves HR function
- Improves public image
- Complement strategic planning and budgeting

Five-Step ERM Process

1. Risk Identification
2. Risk Assessment
3. Selection of Risk Management Techniques
4. Implementation
5. Review

Global Educational System: A U.S. Nonprofit

- Global Educational System (GES), a U.S. multi-national non-profit firm, develops and delivers customized educational and training program in over 60 countries around the world.
- \$500 million in revenues in 2017
- Revenue Sources: government and non-government grants, tuition, and program administration fees, fundraising, and investment income.

Overall Risk Exposure at GES

- GES is exposed to a portfolio of strategic risks and opportunities:
 - Reduced funding in government grants.
 - Stringent regulatory changes in the U.S., central Asia, the Middle East, and North Africa, key operational regions for the firm.
 - Political instability and visa restrictions threatening the viability of existing and future programs and student exchanges.
 - Breach of data and technology platforms.
 - Stronger competition both in the U.S. and in other countries worldwide.

Consolidated Statement of Revenues and Expenses at GES: 2015-2017

	2017	2016	2015	2015-2017
Total Revenues	441.3000	472.5000	500.0000	-11.74%
Total Expenses	428.600	458.050	483.000	-11.26%
Net Surplus (Deficit)	12.7000	14.4500	17.0000	-25.29%

ERM at Global Educational Systems: Plan of Action

- Identify a representative and diverse sample of key functional risk owners (managers/executives with major P/L responsibilities), senior executives, board members, etc.
- Develop an educational program for the group on the dynamics of ERM to create a level-playing field for the group members.
- Develop a focused questionnaire covering areas including Risk Culture, Risk Recognition, Risk Organization, Risk Governance, Risk Control, and Risk Assessment.
- Develop metrics and statistical approaches to interpret the results.
- Develop mitigation strategies for the top risks and benchmark with companies with similar economic, market, and organizational characteristics.
- Review and assess, on an ongoing basis, the effectiveness of the proposed risk management system, particularly during the pandemic.

Risk Profile at GES

- Existing risk management system at GES was ad hoc and uncoordinated.
- Significant barriers in risk communication and reporting existed within the organization.
- The organizational structure at GES was rigid represented by a relatively low level of risk appetite.
- Lack of a risk-adjusted project selection had stalled financial performance at GES.
- Strategies identified in the existing strategic plan were not directly prioritized based on their inherent or residual risks and returns.
- There were limitations and gaps in the governance of risk management.
- The board did not have a stand-alone risk committee and was not directly informed of the portfolio of risks at GES.

Top 10 Risks at GES

Risk Category	Key Sources of Risk
Strategic Risk	<ul style="list-style-type: none">▪ Poor articulation and communication of goals/strategies,▪ Misalignment of strategic plan and corporate governance,▪ Uninformed board, lack of established and effective review processes.
Innovation Risk	<ul style="list-style-type: none">▪ Inertia in identifying and implementing new products and services in local and foreign markets.
Information and Security Risk	<ul style="list-style-type: none">▪ Cyber security attacks and hacking,▪ Technology obsolescence,▪ Communication system failure.
Geopolitical Risk	<ul style="list-style-type: none">▪ Political changes, sanctions, travel bans, economic and political retaliation, nationalization of foreign assets and establishments.
Financial Risk	<ul style="list-style-type: none">▪ Shortfall in revenues and/or cost escalation,▪ Diminished liquidity and credit rating,▪ Audit problems,▪ Portfolio losses and poor hedging against market volatility (interest rates, exchange rates, stock prices).

Top 10 Risks at GES, Cont'd.

Risk Category	
Regulatory and Legal Risk	<ul style="list-style-type: none">▪ Lawsuits and unpredictable changes in the local and global regulatory environment, noncompliance to statutory, and accreditation rules.
Operational Risk	<ul style="list-style-type: none">▪ Failed procedures, systems, processes, or policies.▪ Employee errors, business interruptions, fraud,▪ Equipment failure, logistical bottleneck, third-party liability, employee safety, timeliness and accuracy.
Credit and Product Risk	<ul style="list-style-type: none">▪ Competition, economic slowdown/slow recovery, supply chain disruption, embargoes, customer attrition, changes in customers' financial capacity.
Human Resources Risk	<ul style="list-style-type: none">▪ Employee recruitment and retention, low labor productivity, and sub-optimal compensation system.
Reputation Risk	<ul style="list-style-type: none">▪ Decline or lack of brand and image, loss of customers' trust, negative publicity, recruitment challenges, fundraising problems.

Mitigation Strategies

Top Risk Categories	Mitigation Strategies
Strategic	<ul style="list-style-type: none">a) Develop a new 5-year, 2017-2022, strategic plan aligning the firm's operational, financial, risk management, and marketing/communication goals.b) Create a stand-alone risk committee as a sub-committee of the board.c) Produce quarterly global economic and environmental scans to review the plan's goals and strategies, recommending possible changes.
Innovation	<ul style="list-style-type: none">a) Allocate financial and human resources strategically to enhance growth.b) Promote a more effective dialogue between staff, senior executives, and the board on new initiatives.c) Incentivize staff to experiment with new ideas.
Informational and Security	<ul style="list-style-type: none">a) Hire a Chief Informational Officer (CIO).b) Synchronize and consolidate email platforms, launching software and hardware for document management, establishing effective patches to detect and defuse cyber-attacks.c) Align information technology policies with strategic planning.

Mitigation Strategies Cont'd.

Geopolitical	<ul style="list-style-type: none">a) Provide country risk information from the International Monetary Fund (IMF) and the World Bank (WB) to assess geographic risks and their implications for ongoing and new initiatives.b) Establish quarterly country-based reports from foreign field offices.c) Secure a global insurance contract against losses occurring from travel bans, visa restrictions, kidnapping, and nationalizations.
Financial	<ul style="list-style-type: none">a) Shift revenue sources from non-governmental projects to 30% from its existing level of 5% of annual revenues in 5 years.b) Increase liquidity ratios by 30% over 5 years.c) Establish quarterly revenue scenario exercises to stress test the financial health of the firm.d) Implement an optimal currency model to manage the FX risk of foreign revenues.e) Develop and implement risk-adjusted valuation approaches related to R&D investments.
Regulatory	<ul style="list-style-type: none">a) Report and regularly update U.S. Federal/State and country specific compliance measures.b) Establish quarterly country-based regulatory reports from foreign field offices.c) Secure a global insurance contracts for covering the losses of third-party liability.

Pandemic Risk Management

As a multinational firm strongly focused on emerging economies, the pandemic seriously affected the operations of field offices at GES, threatening the viability and continuity of its upcoming contracts and existing programs as well as the health and safety of its participants and employees around the world.

- ❑ **The progress in addressing informational and security and financial risks played a major role in minimizing the adverse impact of the pandemic at GES.**
- ❑ **Centralizing international communication network and providing regular technology training were instrumental in maintaining operational continuity remotely at a global level.**
- ❑ **Establishment of higher liquidity requirements and acquisition of profitable non-governmental projects had boosted cash reserves at GES making it possible to provide short term funding for some of its field offices and absorbing revenue losses from delayed programs.**
- ❑ **The financial flexibility together with timely assessment of geopolitical information further helped GES to successfully repatriate its program participants and employees.**

Resources

- Risk and Insurance Management Society (RIMS) is a global not-for-profit committed to advancing the practice of risk management throughout the world. For more detail on RIMS RMM, visit <https://www.riskmaturitymodel.org/rims-risk-maturity-model-rmm-for-erm/>.
- World Economic Forum: <https://www.weforum.org>
- World Economic Report, IMF: <https://www.imf.org/en/Publications/WEO>

Thank You!