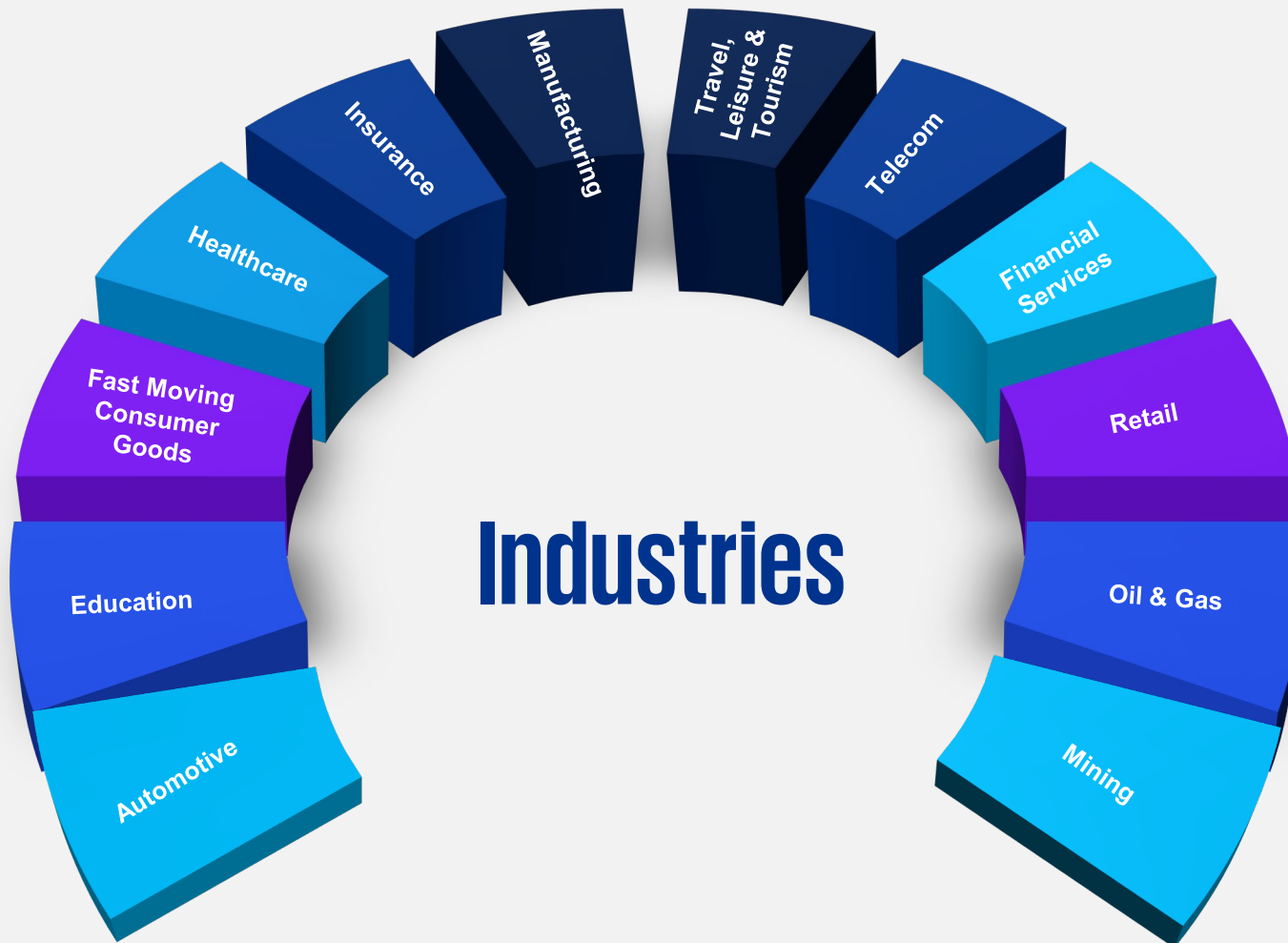




Industry Risk Cards 2023



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Introduction

As the world slowly returned to normal after the events of the COVID 19 pandemic, we have faced more disruption due to the war between Russia and Ukraine. This has created a new set of risks, mainly in the food and energy industry, of which are likely to be relevant for decades to come. The pandemic's economic and health effects have quickly exploded into a series of interconnected crises. As the global economy recovered from the pandemic, carbon emissions increased. The war in Ukraine has turned food and energy into weapons, driving inflation to levels not seen in decades and igniting a cost-of-living crisis on a global scale. Public unrest, inflation, cost-of-living crises, trade disputes, capital flight from emerging economies, protracted social upheaval, geopolitical conflict, and the threat of nuclear war have all returned in 2023.

Source: World Economic Forum – The Global Risks Report 18th edition

These risk cards provide our view of existing and emerging global risks by value driver. The information contained in these risk cards can assist organisations to better align their risk profiles with those of similar organisations within their sector and promote the assessment and management of risks relevant to them.



Top Risks of 2023

The graphic below reflects the most prominent risks for 2023 across a number of industries identified through our research.





Mining Risks 2023

Organisations use enterprise risk management (ERM) to identify, assess, monitor and prioritise the most important risks to their strategy and profitability. Many of these top risks could potentially materialise and result in devastating consequences for such organisations, its people and stakeholders. In addition to identifying, monitoring and managing these risks, organisations should be able to take a forward looking view into the future to find emerging trends that are worth watching closely.

KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Mining sector.

Global
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Risk Consulting





- Shortage of water and space resulting in an increase use of dry stacking tailing mining (Switching to Sustainable mining)
- Labour shortages - 50% employees not returning to the job due to poor mental wellbeing
- License to operate due to anti mining sentiment
- Increased cost of decarbonising operations
- Trade dislocations due to sanctions
- Constrained export value chain
- Higher input costs
- Contractual breaches by commercial counterparties
- Labour unrest, violence, activism and civil and religious strife

- Retaining and attracting qualified and competent employees.
- Significant reliance on contractors
- Disruption to production facilities in conflict zone
- Burdened with high debt loads and rising price/earnings multiples
- Lower utilization of capacity during periods of weak demand
- Escalating costs to determine Geological assumptions and proven mineral reserves
- Feasibility of mining projects and commitments change over time due to market volatility
- Ageing infrastructure at operations
- Ineffective project management
- Unreliable external power supply

- Regulatory risk associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation
- Intellectual property infringement
- Changes in compliance to regulation and policies which aim to standardize and regulate climate change risk
- Changes in compliance to new ESG related policies and criteria.
- Legal disputes and proceedings including historic class action

- Technological integration acceleration
- Dependence on biofuels
- Increase demand for skills
- Global supply chain constraints (logistics)

- Inclination towards low-carbon emissions
- Communicable diseases and pandemics
- Environmental and industry risk- pollution, deforestation and industrial accidents
- New environmental laws related to increasing ESG trends
- Water scarcity
- Climate change

- Selecting emerging technology.
- Cost of automation of mining (through AI intelligence)
- Increasing cyberattacks and security breaches
- Upskilling employees for new emerging technologies (lack of data capabilities to add real time value)
- Adoption of emerging technologies - Use block chain technology to validate operations
- Attracting and retaining digital talent

- Changing portfolio driven by energy transition – acquisitions and divestments
- Change biodiversity as a business risk
- Increased investment in ESG due to shareholder activism covering operations, people (gender and diversity)

- Changing consumer preferences in respect to buying from ESG compliant suppliers

- Slow response to regulatory changes.
- Governance breaches
- Fraud, bribery and corruption

- Fluctuations in commodity prices leading to cost inflation
- Heightened tax burden
- Energy shortages leading to higher costs
- Higher interest rates
- Fluctuations in exchange rates.
- Significant liquidity and cash flow deterioration
- ESG ratings impacting available Capital
- Decrease in prices of base metals
- Adoption Carbon import levies

- Decline in demand of fossil fuels
- Exposure to natural disasters
- Difficulty to attract and retain qualified personnel
- Changing human capital needs (Employee mental health considerations and legislation)
- Technological advances drive substitution and resource demands
- Geopolitical and trade tension
- Employee diversity (gender/LGBT)
- Lack of political stability/ threats of nationalisation
- Increase resource nationalism risk





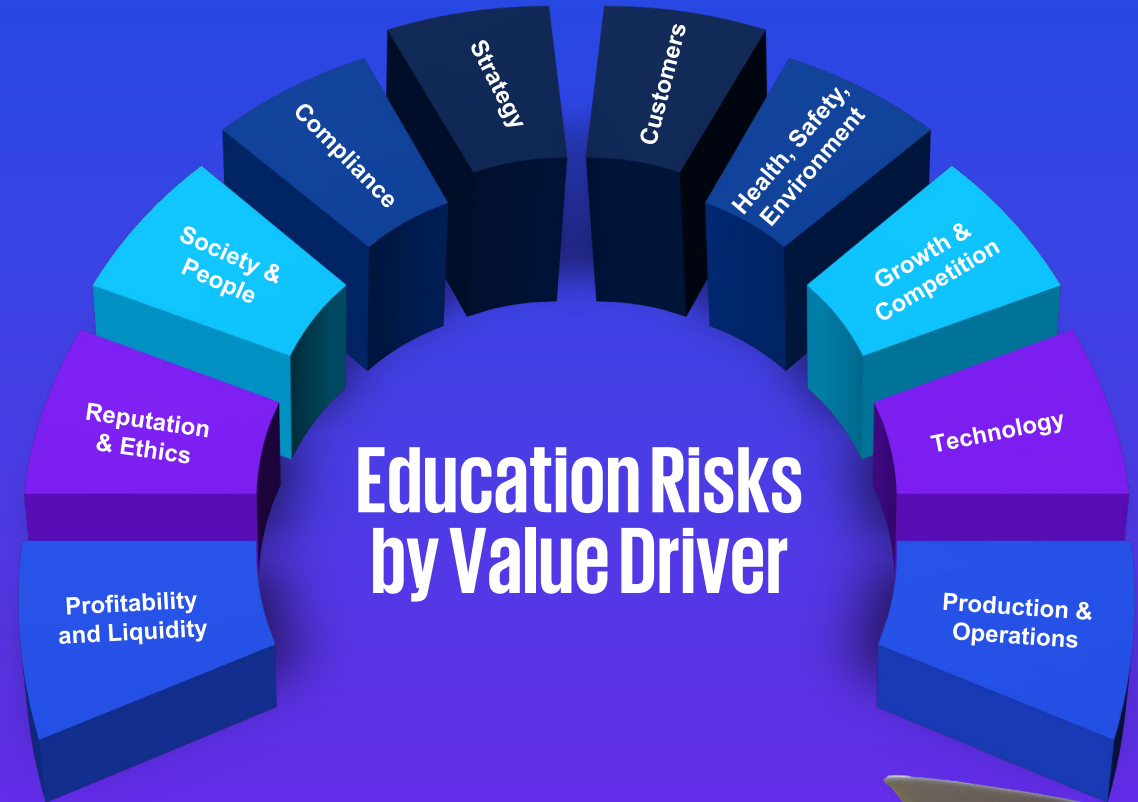
Education Risks 2023

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KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Education sector.

Global

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Risk Consulting





- Government policies, uncertain political landscape and social conditions
- Changing immigration rules, political upheavals and any economic downturn
- Intellectual property infringement
- **Regulators have incorporated elements of ESG into mandatory reporting requirements**
- **Regulatory pressures for faculty and curriculum diversity**

- Inability to maintain, grow and diversify income streams.
- Failure to deliver strategically high profile development projects
- Adaptability of institutions to provide learning solutions (online vs. classroom teaching) post the Covid-19 outbreak
- **Increased pressure for the development of a digital strategy to drive digital transformation in higher education institutions**
- **Increasing focus on internationalism as part of strategic plans**
- **Moving towards skills over degree model**
- **Inability to utilise data**

- Communicable diseases and pandemics risks.
- Colleges and universities can face serious consequences if they do not have contingency plans.
- Increasing global risks around terror related incidents.

- Decreased student performance
- Research fraud by faculties
- Failure on academic excellence, academic freedom, alumni relations, constitutional challenges, free speech and expression.
- Adequate safety and security for students
- **Unanticipated litigation or negative developments in pending litigation**
- **Weakened controls making education institutions more susceptible to fraud risks.**

- Societal issues.
- Communication with students during lockdown
- Ageing profile of academics/ lack of succession planning.
- **Student recruitment challenges**
- **Difficulty to attract and retain qualified personnel, especially at a senior level**

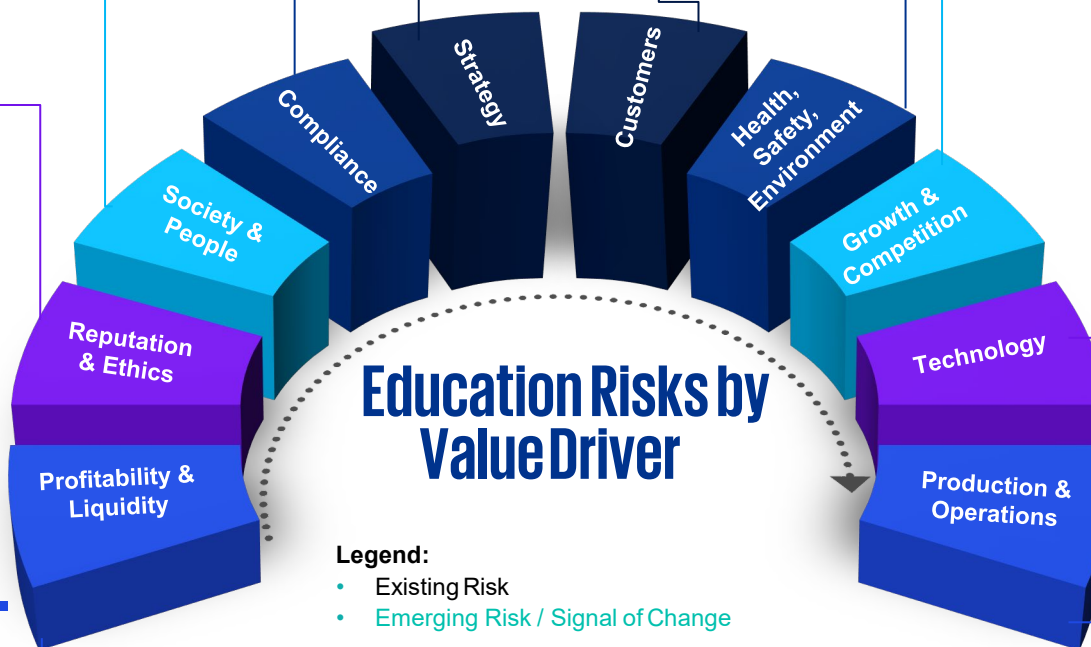
- Poor student experience.
- Student well-being-Increased need for mental health supports
- Evolving needs and expectations of the "student-consumer"

- Lack of high quality teaching and research.
- Ensuring adequate staffing capacity and staff retention.
- **Universities are using crowd sourcing as a tool to improve educational standards and drive education**
- **Competition among institutions and alternative institutions for students**
- **Changes in needs and expectations from various industries**
- **Lack of competitive advantage due to outdated approach to student services**

- Rising cost of tertiary education and increasing student loan debt
- Private funding for higher learning institutions is decreasing
- Increasing shortage of academic staff and teachers
- Increasing annual cash operating in higher education institutions
- Decline of government funding
- The inability to win profitable contracts
- Underperformance of schools
- Labour unrest, violence, activism and civil and religious strife

- Increasing trend of Bring Your Own Device
- Big data is increasing the risk of cyber-attacks
- Increasing deployment of cloud technology
- Social media/social networks could lead to inadvertent disclosure of educational records or personally identifiable information
- Balancing and rightsizing IT priorities and budget
- Ineffective risk mitigating university activities.
- **Inability to analyse big data about student behaviour accurately resulting in poor decision making**
- **Emerging technologies such as virtual reality, drone technology and blockchain technologies**

- Shortage of teachers and staff





Automotive Risks 2023

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KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Financial Services sector.

Global
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Risk Consulting





- Stricter regulations to reduce vehicle emissions and fuel consumption.
- Uncertainty in the micro environment.
- Increased cost of manufacturing and R&D regarding Corporate Average Fuel Economy (CAFE) standard requirements
- Intellectual property infringement
- Regulatory risk associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation
- Digitisation of operational processes to foresee compliance gap and better align to ESG requirement to avoid Greenwashing'

- Pension plans could affect company's obligation and cash requirement
- Talent attraction and retention
- Economic slow down and increased unemployment influencing consumer spending
- Banking and financial crisis in China resulting in global repercussions
- The lack of market acceptance for electric vehicles can lead to risks within other operations and production cycles
- Lack of new vehicles on the market resulting in average life of used vehicles increasing

- Quality and reputation of brands.

- High energy and raw material costs
- Costs associated with downgrade in credit ratings
- Increased competition in automobile financing
- High Capex demand for expansion
- Increasing freight costs
- High inflation resulting in higher refinancing costs
- Higher credit risk due to customer insolvency
- Discontinuation of government subsidiaries for electric vehicles lead to negative pricing and profit margins
- Potential impairments on trade receivables as well PPE and inventories
- Cost of cancelled contracts and outstanding customer contracts

- Huge capital required growing demand in alternative fuel market and electric vehicles.
- Automotive industry is evolving into a transportation service
- Shortage of charging station major risk for growth of electric vehicles
- Inability to manage, complete and integrate current or future M&A, joint ventures, divestures.
- Product testing risk
- New approach must be take in manufacturing to ensure efficiency as a result of raw materials shortages
- Increase investment and research in electric vehicle technology-charging infrastructure and improving battery
- Large investment in accelerated EV parity – making EV costing the same as internal combustion engines vehicles

- Increased payment arrears and credit defaults due to sanctions and weaker economic environment
- Increasing costs of living resulting in higher demand for smaller car segment
- Data risk of customer information
- Customer are priced out of the automotive industry due to increasing prices of vehicles
- Fluctuations in customer demand
- Loss of dealerships and importers can lead to unserved demand and lower unit sales.

- Communicable diseases and pandemics
- Consideration for alternative energy introduced increased safety requirements and compliance requirements
- Increased demand for Hydrogen vehicles and the associated safety risks

- Competition from non-traditional players in automobile industry is increasing
- Competitive and price pressure due to aggressive policies and poor effective pricing
- Ban on ICE vehicle in 2030 resulting in second hand car market volume not being maintained (insufficient reliable 2nd hand cars)

- Private ownership of self driving cars might not be possible, leading to lower sales of self driving cars
- The transfer, storage and analysis and accuracy of big data
- Rapid technology change
- Increasing cyber attacks and security threats.
- Increase use of robotics and automation - driven by Artificial intelligence and Visual intelligence

- Shortage of raw materials and transportation
- Maintenance and servicing costs
- Interruption in production at key plants due to natural or other disasters, labour unrest and plant failure
- Valuation of an associated company, joint venture or joint operation
- Increase in recall activity to address performance, compliance or safety issues.
- Limited scope of improvement in operational efficiency
- Reliance on single suppliers
- Potential increased tariffs resulting in increased costs of raw materials
- Shortage of semiconductors and other important industrial precursors (micro chips)
- Talent attraction and retention
- Energy shortage





Financial Services Risks 2023

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KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Financial Services sector.

Global

Risk Consulting





- Regulatory risk associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation.
- Changes in accounting standards may effect the operating results and financial condition of companies
- Financial Crime risk (risks including money laundering, fraud, and bribery and corruption)
- Growing ESG regulation and guidance leading to tougher disclosure and reporting rules
- Anticipated changes in tax legislation
- Downgrade in credit ratings.
- Macroeconomic uncertainty in key emerging markets.
- Increased potential of economic losses due to operational risk.
- Acquisition challenges/Take-overs.
- The risk of implementing a model based on incorrect model output data that results in adverse consequences

- Climate and ESG-related risks are a source of financial risk that need to be addressed to ensure the future stability and resilience of the financial system
- Communicable diseases and pandemics risks
- Discontinuation of Interbank Offered Rate (LIBOR) - This is a significant development as LIBOR is the most widely used benchmark
- Intellectual property rights and protection risk
- Risk of natural disasters could disrupt business operations and the physical infrastructure
- Credit and Capital Risks due to the impact of climate change

- Competition arising from new financial technology (Fintech)
- Increase in competition from shadow banking practices to provide pressure on the net interest margin of the banks
- Competition arising from open banking initiatives
- Competition arising from the increased use of digital initiatives to enhance customer and employee experience

- Risk of adverse revaluation of any financial instrument as a consequence of changes in market prices or rates
- In banking business, hedging risk may arise
- Risk of reputation and brand damage due to not Treating Customers Fairly
- Increased incidents of fraud in financial institutions' call centres

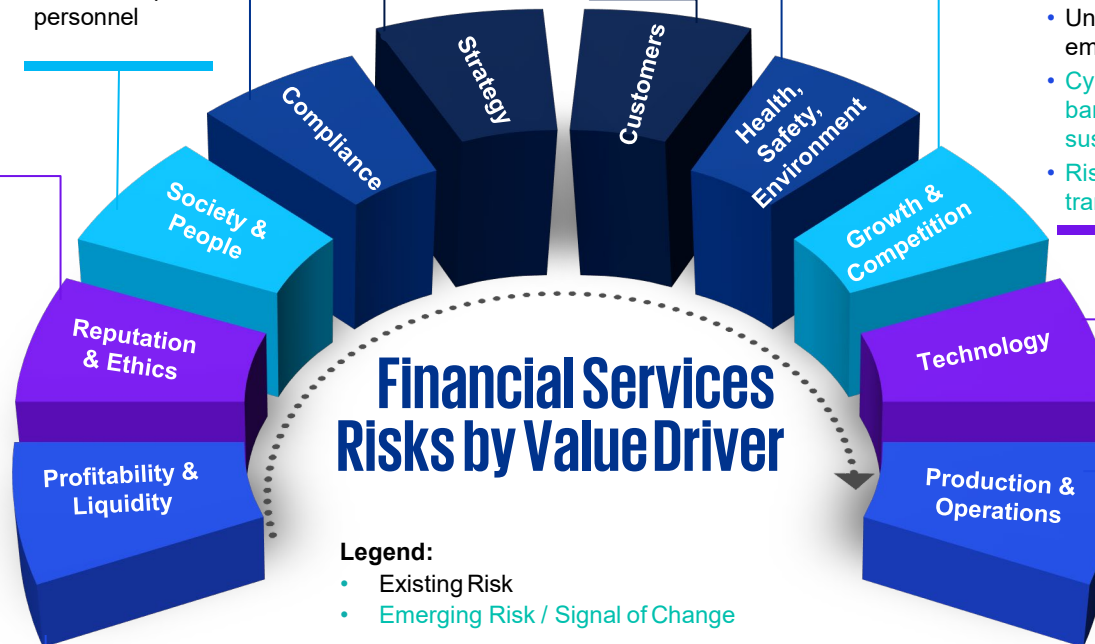
- Difficulty to attract and retain qualified personnel

- Mis-selling of financial products.
- Customer experiences due to poor services provided
- Evolving customer expectations

- Market development risks: adverse movements in interest rates, exchange rates, stock prices and commodity prices
- Transfer Pricing
- Reinvestment Risk
- Increased credit risks, namely, risk of loss associated with a borrower
- Central banks are under pressure to deliver stimulus packages in order to offset a larger, systemic liquidity crunch
- Risks associated with Buy Now and Pay Later
- Escalating cost pressures increase the risk that additional taxes will be imposed on banks

- Potential for loss from a breach of confidentiality, integrity and availability of information
- Risks to data integrity from outdated data governance frameworks
- Increasing cyber attacks and security threats..
- Risk of accidental or intentional unauthorised use, access, modification, disclosure, dissemination or destruction of information resources, which may compromise the confidentiality
- Risk related to Information, Communication and Technology (ICT) remain a key challenge.
- Unauthorized access, accidental disclosure, employee negligence, etc.
- Cyber security risks associated with digital-only banks. Digital banking makes these banks susceptible to risks and financial fraudsters
- Risks associated with cloud migration due to digital transformation

- Turbulence or disruption in the capital or financial markets
- Third party risk – reliance on service providers and data sources
- Increase in long-term remote working providing new challenges
- Failure or breakdown of operational systems which could disrupt business operations



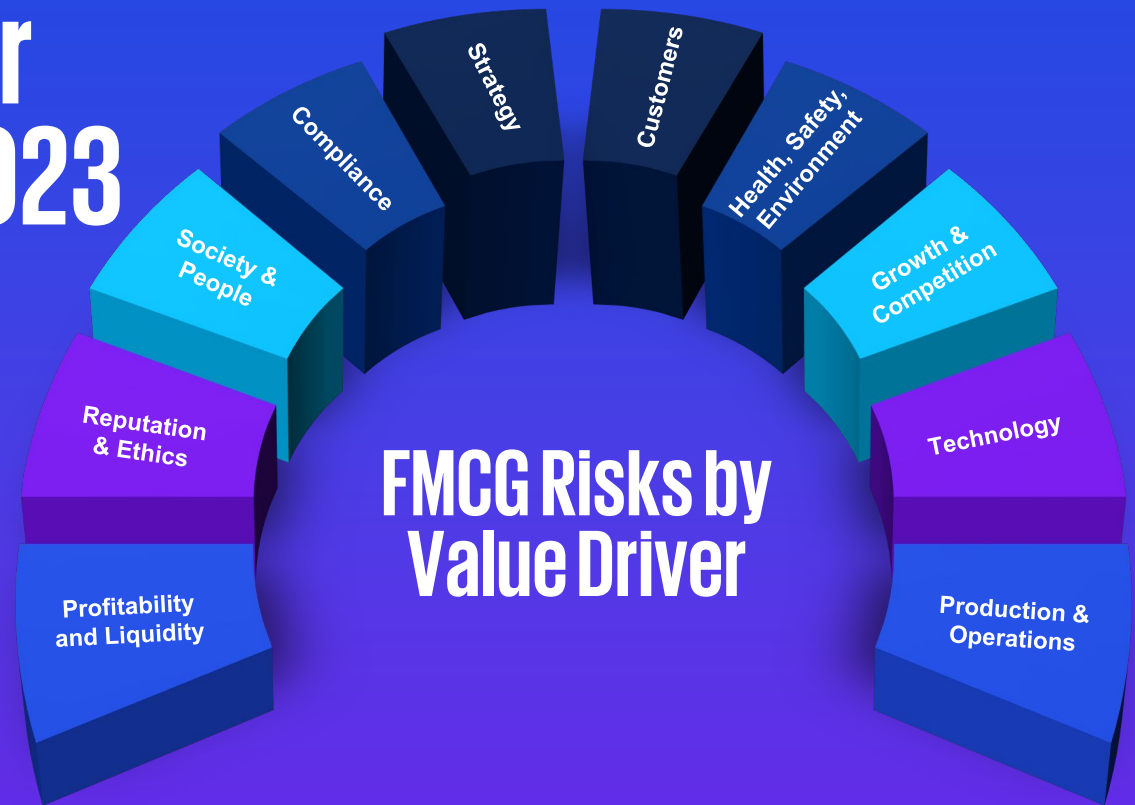


Fast Moving Consumer Goods (FMCG) Risks 2023

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KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Fast Moving Consumer Goods sector.

Global
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Risk Consulting





- Macro-economic factors causing consumers to shift to non-branded items
- Change in demand due to evolving consumer preferences
- Negative publicity on evolving social media platforms
- Uncertain global economic conditions.
- Food Safety considerations
- Lack of a properly documented and communicated ESG strategy

- Decreased agricultural productivity as a result of changing weather patterns
- Communicable diseases and pandemics risks.(Still existing)
- Raw materials are accidentally or maliciously contaminated.
- **Natural disasters could result in increased direct costs from supply chain disruptions**

- Regulatory risk associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation.
- Increased product safety and quality concerns
- Anti-competition and business disputes
- Intellectual property infringement
- **Increased need for supply chain data to meet sustainability reporting, regulatory and safety objectives**
- **Non-compliance with evolving data privacy regulations that could result in penalties and damage to the company's reputation**

- Public resistance to the use of plastics
- Geopolitical tensions
- Sustainability of products driving consumer preferences
- Social inequality, high unemployment rate and strikes
- The right talent to identify key growth opportunities which would be profitable
- **Changes in consumer behaviour**

- Reputational risk.
- Third party labour relations can escalate due to corporate campaigns supported by labour organizations

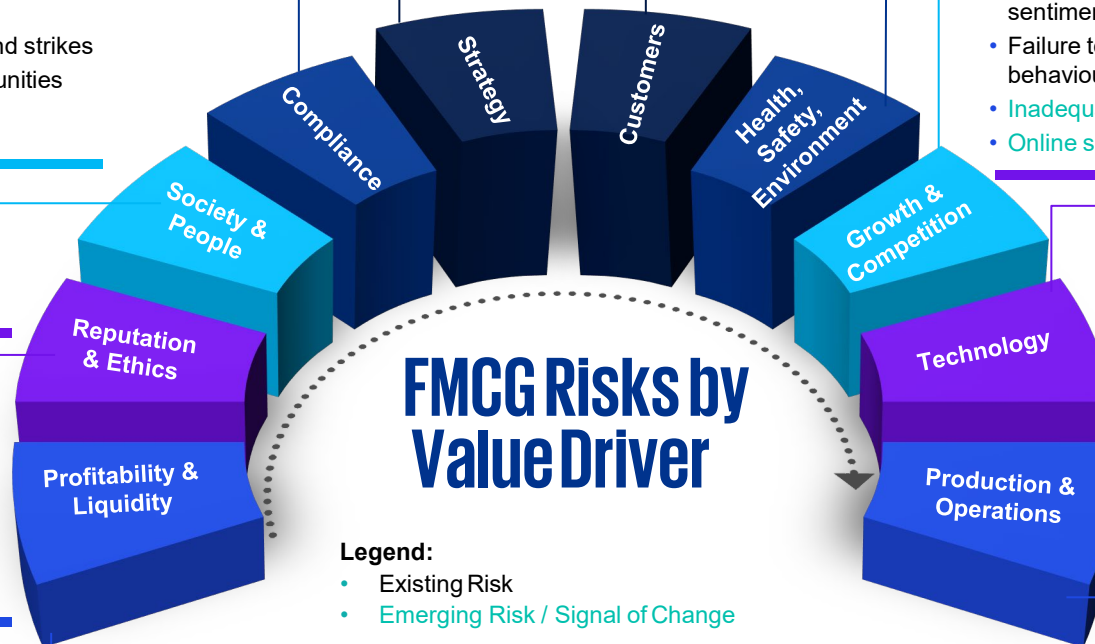
- Interest rate and inflationary risks
- Introduction of new taxes
- Credit and Liquidity risk
- Fraud and corruption
- International markets, including foreign currency fluctuations, currency exchange
- **Recessionary risks**

- Customers are shifting from one brand to another
- Correctly anticipate consumer acceptance and trends
- Counterfeit products in the loyalty market may impact on customer
- Pressure to introduce healthier products and ingredients
- Ensuring products range and offering remain relevant to different age groups
- New entrants to the markets
- **Companies are experiencing more pressure to provide customers with more ethical, sustainable and eco-friendly goods**

- Inability to respond to market changes in a timely manner
- Strengthen the capabilities in marketing and innovation
- e-Commerce and alternative market channels
- Uncertainty related to strategic acquisitions or divestitures
- **The "internet of packaging" will become a competitive advantage**
- **New category entrants in local and global markets and increased rivalry**
- **Continuous need to strengthen supply chain data capabilities**

- Increasing cyber attacks and security threats.
- Failure of one or more key information or operations technology systems, networks, hardware, processes, and/or associated sites
- Impact of Artificial Intelligence
- Increased role and importance of social media influencers, sentiments and complain mechanism
- Failure to analyse and extract existing big data on consumer behaviour to drive sales and product development
- **Inadequate supply chain data capabilities**
- **Online selling platforms**

- Third parties ability to deliver on contractual requirements or termination of these relationships would have an adverse effect on the supply chain
- Procurement risk as a result of volatility in material and other costs which will negatively effect profitability and production.
- Supply chain disruptions
- Breakdown of critical equipment
- **Production and distribution disruptions which lead to increase in food prices**
- **Changing geopolitical environment may have an impact on production and operations**



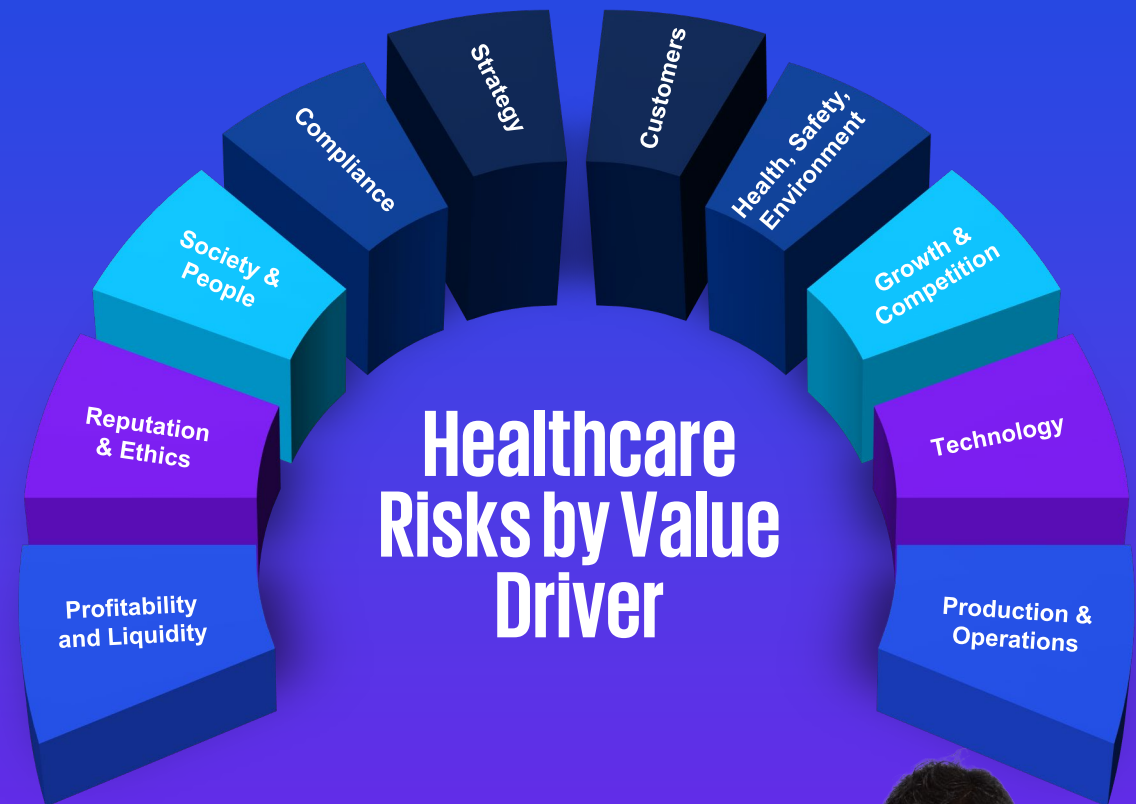


Healthcare Risks 2023

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KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Healthcare sector.

Global
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Risk Consulting





- Regulatory risk associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation.
- Intellectual property infringement
- Increased public scrutiny of the behaviour of pharmaceutical companies, namely, drug pricing
- **Inadequate compliance with participation conditions in relation to patient admission, discharge planning and transaction of care practices**
- **Non-approval of new drugs by regulatory agencies**
- **Regulations on the use of certain chemicals and materials**

- Shifting model towards value based care
- Integration of acquisitions.
- Unpredictable Future trends.
- **Inaccurate strategic planning resulting in shortages in medical supplies/medicine**
- **Lack of a properly documented and communicated ESG strategy**

- Risk of spreading communicable diseases and pandemics.
- Increased safety risk profiles or manufacturing and supply issues
- Misconduct and non-compliance with safety requirements.
- Lack of patient safety including environment of care, infection control, equipment sterilisation and safe handling and movement of patients
- Increased social and health problems causing increased patient numbers without adequate number of health care workers
- **Climate change and natural disasters leading to supply chain disruptions**

- A highly competitive global environment.
- R&D may not be successful in developing clinically differentiated healthcare solutions
- Competition from non traditional players
- **Highly competitive environment with strong competition for healthcare workers with in-demand skills**

- Lack of equal public access to COVID-19 vaccine
- Counterfeit drugs produced
- Regulatory proceedings and litigations.
- Product recalls, personal injury or safety issues
- Pharmaceutical fraud
- **Risk of lawsuits related to product liability, antitrust issues and intellectual property**

- Increasing consumerism.
- Demographic shifts and societal changes
- Increasing urbanization.
- Difficulty to attract and retain qualified personnel.
- Lack of equitable access to healthcare

- The shift to value-based reimbursement programs
- **Evolving customer patient preferences and expectations**

- Increasing adoption of medical bionic implant/artificial organs.
- Use of 3D Printing
- Increasing cyber attacks and security threats.
- Use of robotics and artificial intelligence.
- Healthcare data privacy and security concerns.
- Retail pharmacies are subject to payment- related risks
- Growing number of healthcare facilities using telemedicine, remote surgery, virtual hospital ward
- Healthcare data breach is increasing
- Increasing pressure for digital transformation
- **The expansion of the "Internet of Medical Things"**
- **Market conditions imposed by and in response to COVID-19, including shifts in consumer behaviour to digital channels..**

- The Pharmacy Benefit Management (PBM) industry has been experiencing margin pressure as a result of COVID-19.
- Changes in the healthcare industries' or pharmaceutical suppliers' pricing, selling, inventory, distribution or supply policies and practices
- Fluctuations in exchange rates
- All losses or liabilities might not be covered by insurance
- Volatility and disruption in the global capital and credit markets.
- Failure to estimate, price for, and manage medical costs
- Contracts with foreign and domestic government entities and their agencies.
- **Increase in labour costs which impacts the ability of healthcare executives to achieve their profitability targets**

- Supply Chain disruptions
- Failure to renew distribution agreements
- Business continuity hazards
- Limited number of suppliers
- Operational disruptions due to Industrial actions-Health care workers striking/protesting
- **Failure to manage 3rd party physicians/nurses to ensure compliance with clinical and regulatory processes**
- **Supply chain restructuring to mitigate API production challenges**
- **Changes in political climate in different countries can lead to disruptions operations and affect access to markets**





Insurance Risks 2023

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KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Insurance sector.

Global
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Risk Consulting





- Changes in accounting standards may affect the operating results and financial condition of the companies.
- Regulatory challenges associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation
- Intellectual property infringement
- Increased regulatory requirements from new laws and/or new precedents informed by court cases
- Challenges relating to the implementation of IFRS 17
- Compliance issues due to changes in international and domestic laws.

- Transition from traditional models to emerging customer-centric business models
- Changing trends in automobile sector
- Credit risk
- Risks arising from uncertain events.
- The need to digitise all aspects of the Insurance lifecycle to remain relevant and competitive
- Outsourcing risk/ reliance on 3rd parties.
- Adjusting to/ predicting the “new normal” and remote working
- Counterparty default

- Spreading communicable diseases and pandemics
- Climate change and natural disasters

- Threat from start-ups in the insurance industry who are gaining competitive advantage.
- Competition because of the high degree of price sensitivity
- Volatility of Inflation Risk

- Difficulty to attract and retain qualified personnel.

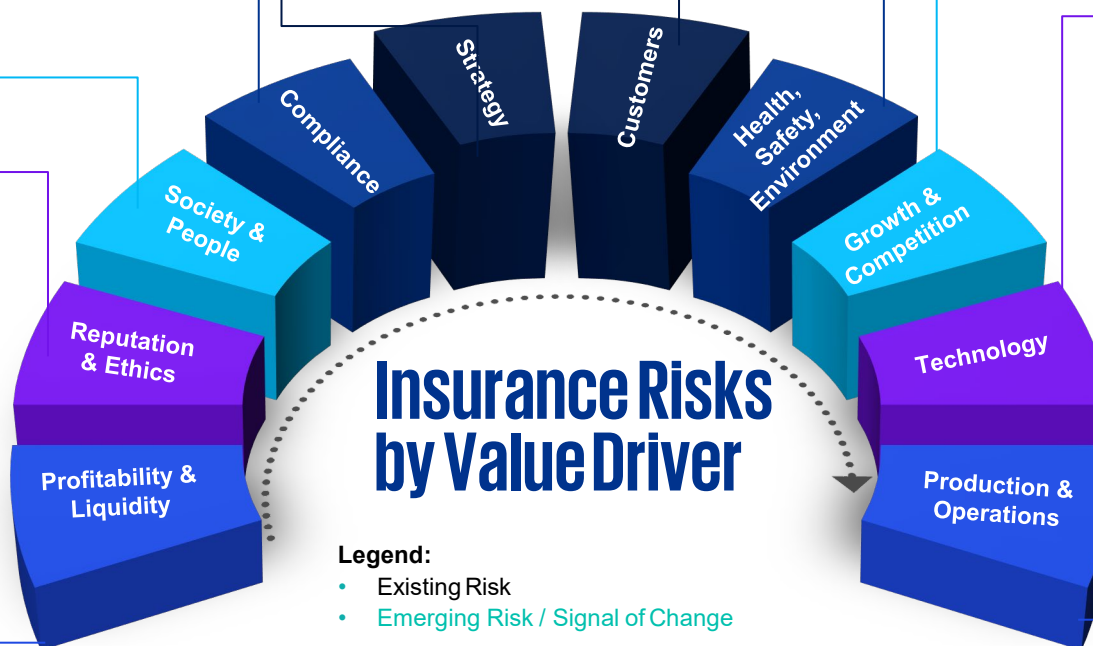
- Quality and reputation of brands.

- Loss from fluctuations in the value of invested assets
- Exposure to financial loss from transacting insurance and/or annuity business
- New technologies, changes in society and environment
- Currency variability of currency exchange rates for foreign denominated investment
- Equity investment risk
- Volatility of Interest rate fluctuations
- Inability to cater for climate change events fast enough

- Understanding evolving customer needs
- Expansion of investments and financing with emphasis on ESG
- Intense competition

- New technology initiatives
- Introducing blockchain technology (Crypto Currency Risks).
- Increasing cyber attacks and security threats.
- Technology infrastructure
- Inability to analyse big data in useful and meaningful manner

- Political and geopolitical risks and events
- Shift to low-carbon emissions.
- Underwriting
- Expanding international operations.
- Cost of compliance due to changes in international and domestic laws
- Differences between actual claims and reserving assumptions
- Technology infrastructure.
- Shortages of water and electricity supply



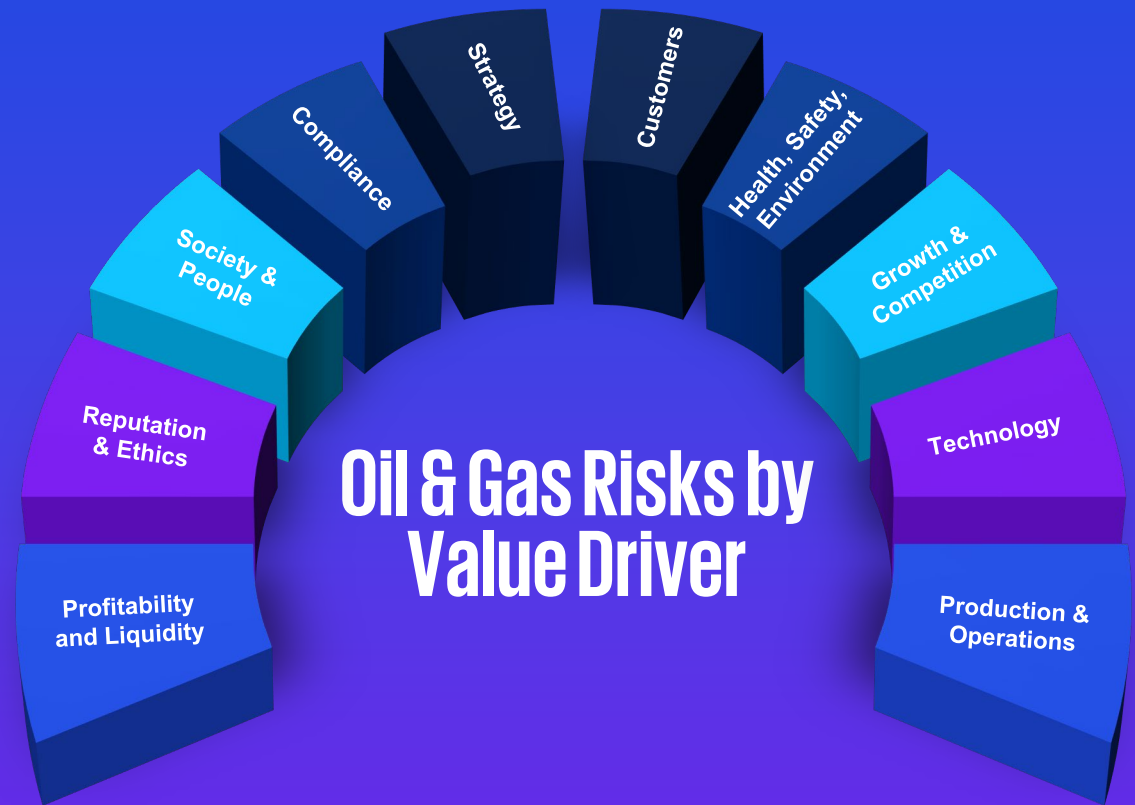


Oil & Gas Risks 2023

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Global
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Risk Consulting





- Regulatory challenges associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation.
- Economic sanctions.
- Intellectual property infringement.
- Growing concerns and regulations to apply pressure for green initiatives
- Risks related to litigation, including international trade litigation, disputes or agreement
- Global Investments in natural gas
- Inaccuracies/ changes in estimation of reserves influence commercial. decisions and long-term strategy
- Major operations being conducted in joint arrangements
- Diversifying asset and investment
- Large investment in green energy (alternative energy sources)
- Communicable diseases and pandemics risks.
- Increasing Greenhouse gas (GHG) regulations.
- Health, Safety, Security and Environment (HSSE) regulatory requirements becoming more stringent.
- Renewable energy technologies and Electric vehicles
- Workplace safety (operational hazard)
- Environmental and industry risk- Explosion, fire, loose electrical wires and industrial accidents
- Hazardous waste - greenhouse gases, oil spills and solids
- Climate change concerns and related impacts on the global demand for hydrocarbons and hydrocarbon-based products

- Competitors offering superior terms
- More consolidation across segments of sector
- Diversifying energy sources.
- Competition for alternative energy sources

- Threat of inflammation, explosion or natural disasters.
- Climate change emergence as a societal issue.
- Talent attraction and retention
- Terrorism and armed conflict, political and social instability and unrest

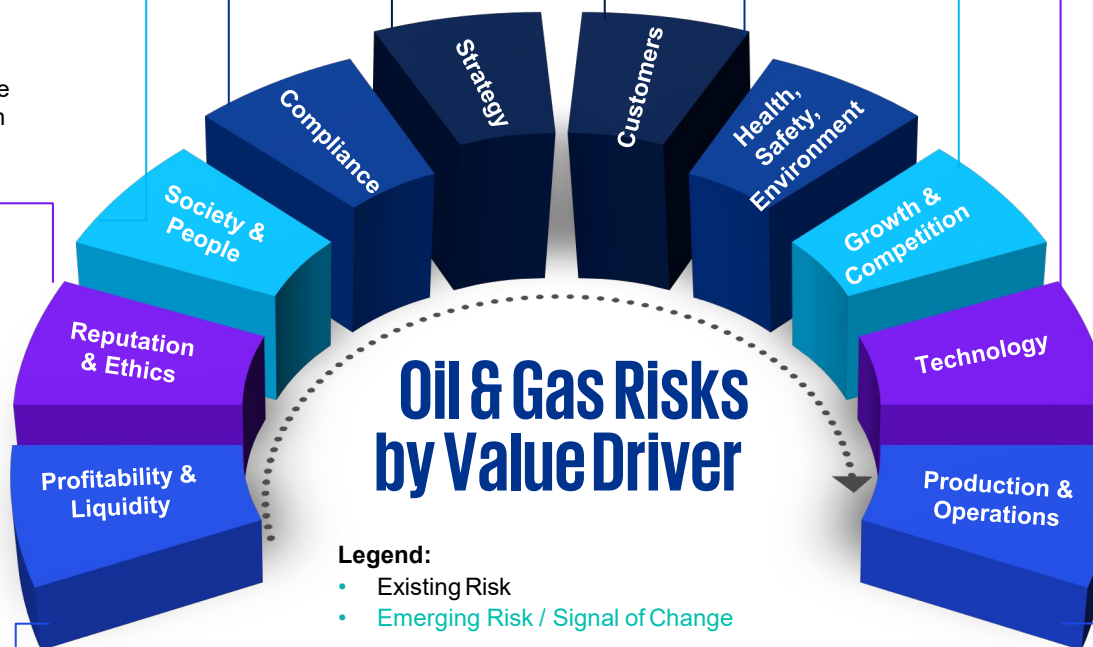
- Changes in customer preferences to transition to a low carbon economy.
- Increasing fuel prices
- Refiners/Customer shift in energy demand (transition)

- Increased use of emerging technologies
- Increasing cyber threats and security breaches
- More companies going for real-time information.
- Adoption of emerging technology - application of nano technology, Internet of things, AI etc
- Legacy/outdated network infrastructure

- Violations of antitrust and competition laws.
- An erosion of business reputation could have a material adverse effect on brand, ability to secure new resources or access capital markets, and on licence to operate

- Temporary rise in commercial stocks due to downturn in global demand
- Production decline in existing oil fields.
- Increased usage of hydrogen fuels
- Trade protectionism and barriers from certain countries
- Recession or negative economic growth.
- Uncertainties related to obtaining additional oil and gas resources
- Volatility of crude oil and commodity prices
- Supply disruptions and energy shortages
- Lack of equipment to service hydrocarbon production facilities - due to sanctions imposed on Russia
- Equipment failure- such OSHA's Oil and Gas Well Drilling and Servicing eTool.
- Post event pandemic challenges affecting industry operations and the relating social impact
- Talent attraction and retention
- Geopolitical tension- halting production/ cuts of suppliers

- Global growth forecasts adjusted downward due to plummeting global oil demand, social and economic factors
- High inflation, high interest rate and the fluctuating foreign exchange rates
- Supply, demand and price fluctuations with respect to oil and gas
- Global markets and economic volatility and uncertainty
- Cargo in transit theft or collisions
- Taxation of oil-derived products as a means of controlling demand to address environmental challenges





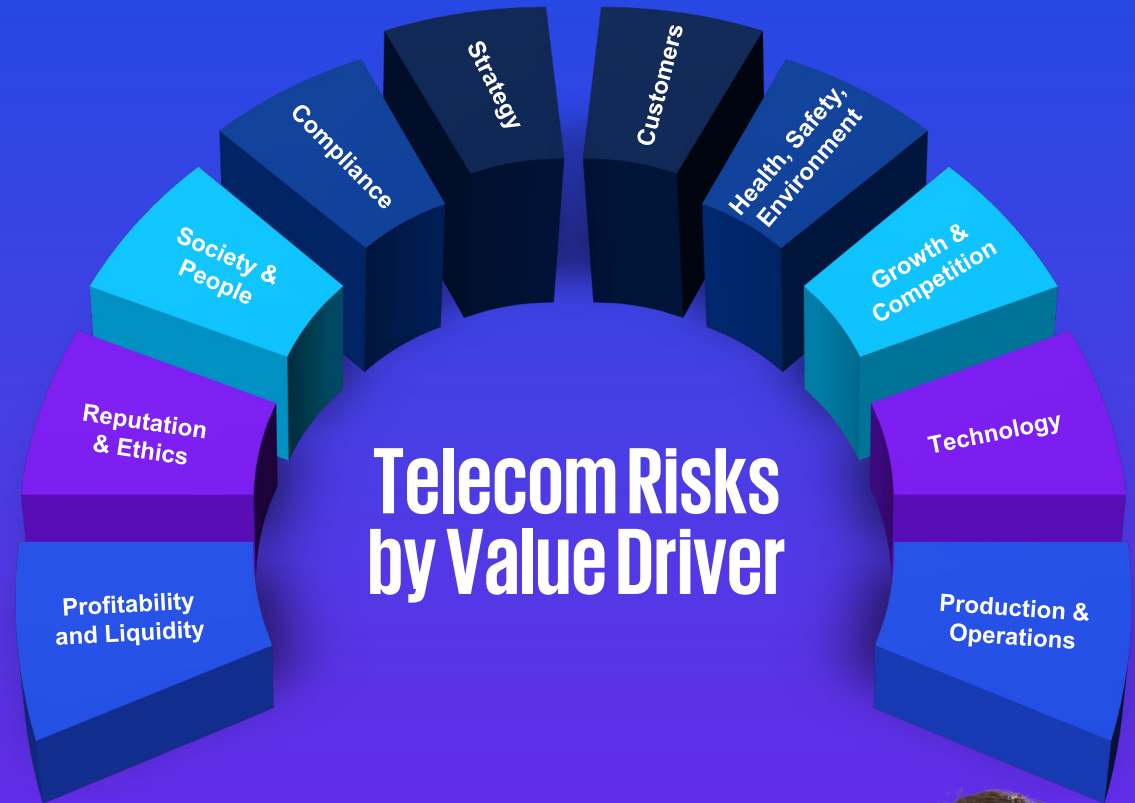
Telecom Risks 2023

Organisations use enterprise risk management (ERM) to identify, assess, monitor and prioritise the most important risks to their strategy and profitability. Many of these top risks could potentially materialise and result in devastating consequences for such organisations, its people and stakeholders. In addition to identifying, monitoring and managing these risks, organisations should be able to take a forward looking view into the future to find emerging trends that are worth watching closely.

KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Telecommunication sector.

Global

Risk Consulting





- Dynamic international regulatory landscape
- The possibility of imposing more regulations pertaining to 5G
- Regulatory challenges associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation
- Intellectual property infringement
- **Data breaches due to the adoption of digital supply chain solutions**

- Labour unions
- Inadequate training programs
- Difficulty to attract and retain qualified personnel

- Pending litigations and lawsuits.
- Quality and reputation of brands.
- Third party misalignments
- **Environmental, Social, and Governance (ESG) factors could damage stakeholder relationships**

- Adverse conditions in global financial market
- Failure to capitalize on new business opportunities
- Currency fluctuations and other market risks
- Growing mergers and acquisitions.
- Revenue streams from 5G services will highly be affected due to their unavailability
- Sector companies bearing the costs of the free services

- Bundled service offerings to deliver new technologies through multiple channels
- Strategic transformation as companies are engaged in a continuous process
- Network infrastructure investment re-planning
- **Failure to maximize the value of infrastructure assets**

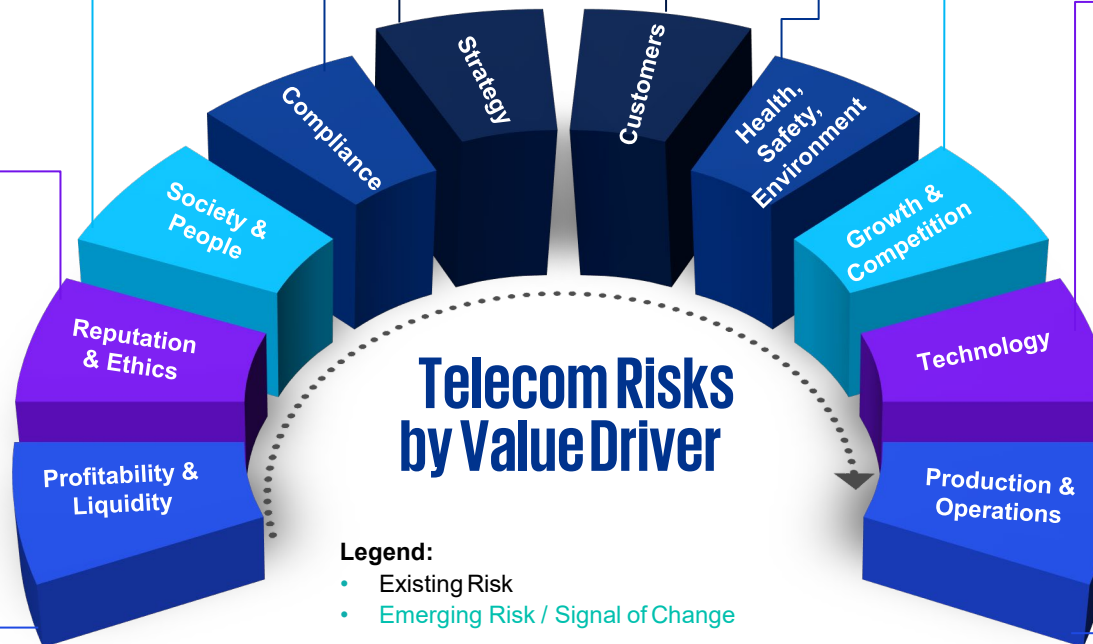
- Breach in customer privacy.
- Increasing over-the-top and value-added services
- **Digital transformation to transform customer experience**

- Communicable diseases and pandemics risks

- Threat of new entrants/OTT players
- Continuous spectrum wars
- Increasing competition
- **Threat of OTT players collaborating with Operators**

- Network rollouts, especially 5G and fiber rollouts are likely to face delays
- Initiation of Embedded SIMs (e-SIM)
- Changing technological landscape.
- Growing operational inefficiencies
- Regulatory concerns of VSAT
- Increasing cyber attacks and security threats
- Ineffective use of "Big data"
- Data loss and GDPR.
- Cloud expansion
- Cyber threats related to 5G
- Lack of expertise for some players in IoT solutions

- Complexity of Passive and Active infrastructure sharing.
- Virtual distribution
- Continuous need for capital.
- Over dependence on key suppliers
- Threat of natural disasters.
- Increasing operational complexity and costs
- Communication infrastructure, and information technology outages





Retail Risks 2023

Organisations use enterprise risk management (ERM) to identify, assess, monitor and prioritise the most important risks to their strategy and profitability. Many of these top risks could potentially materialise and result in devastating consequences for such organisations, its people and stakeholders. In addition to identifying, monitoring and managing these risks, organisations should be able to take a forward looking view into the future to find emerging trends that are worth watching closely.

KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Retail sector.

Global
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Risk Consulting





- Highly regulated market with legal and regulatory challenges associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation
- Restrictions on sales and distribution and political conditions of the country (strain of expansion)
- Global changes – new trading relationships
- Adopting new business models
- Better in-store experience make it difficult for other stores to provide these experiences
- Risks of expanding international operations
- Possible outage due to issues noted in Supply Chain and Logistics
- Lowest prices or best bargains - lower cash flows for the retailers
- Retailers do not realize the full potential of their transformation efforts
- e-retailing and conversions of discount stores impact the traditional outlook of retailers
- Big players like Amazon are investing in robots involving a lot of cost
- Financial depending on procurement and export strategies
- Increasing pressures to meet unpredictable customer demand and trends
- Intense globalized competition and the diversification of service offerings
- Currency and seasonable fluctuations and other market risks
- Failure to satisfy a range of personal preferences
- New entrepreneurial entrance focusing on diversification of offerings and more effective distribution channels

- Not meeting corporate social responsibilities
- Talent retention and attraction
- Risks relating to the labour and human resources (training and safety)
- The success of the organization depends on the continuing efforts of key employees.
- **Staff Health & Mental Wellbeing**

- Risks associated with maintaining high levels of product and service quality. This could lead to consumer claims
- Reputation risks have increased due to social media and the internet
- Failure to protect the personal information of consumers and other stakeholders

- Retail stores using e-commerce sites to sell their products at discounted prices
- Failure of business performance to deliver cash as expected
- Debt and foreign exchange risk
- Retailers require financing to fulfil their technology and expansion needs
- **DTCs continue to struggle with profitability**

- Product return rates – on-line returns are higher than walk-in stores
- The decline in consumer spending (i.e. losing market share)
- Retailers are forced to produce branded products to meet customer's expectations
- **Environmentally conscious retail gears up**

- Pressure to meet safety standard
- Communicable diseases and pandemics risks
- Climate change and natural disasters

- Increasing cyber attacks and security threats.
- Payment processing and customer demand is increasing the on-demand, or prepaid (online) options
- Companies relying on a single vendor for all their technological needs might face more downtime
- Failure to maintain/ improve the technology infrastructure and to innovate
- Retail industry continues to rapidly evolve as consumers increasingly embrace digital shopping
- **The growing metaverse**

- Competitive edge through automation and adoption of emerging technologies
- Disruption by labour unions, strikes, work stoppage
- Product quality and safety and inventory risks
- Disruptions in merchandise distribution or processing and other facilities
- Organisations are dependent on the operation of other branches and location for production
- Responsible sourcing and supply chain
- **Violence and street crimes**





Travel, Leisure and Tourism Risks 2023

Organisations use enterprise risk management (ERM) to identify, assess, monitor and prioritise the most important risks to their strategy and profitability. Many of these top risks could potentially materialise and result in devastating consequences for such organisations, its people and stakeholders. In addition to identifying, monitoring and managing these risks, organisations should be able to take a forward looking view into the future to find emerging trends that are worth watching closely.

KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Travel, Leisure and Tourism sector.

Global

Risk Consulting





- Failure to comply with data privacy protection laws.
- Liability of exposure to fraudulent transactions
- Regulatory challenges associated with non-compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation
- Non-compliance with anti-corruption laws or trade sanctions.
- Labour regulation and the negotiation of new or existing collective bargaining agreements

- Environmental laws and focus on climate change
- Accidents or incidents
- If the suppliers do not uphold the corporate and social responsibility standards and companies fail to influence destinations to manage tourism more sustainably
- Communicable diseases and pandemics risks

- Strategic concerns such as migrating local brand to global brands, maintaining existing relationships with third-parties and strategic acquisitions
- The pandemic has also resulted in market-leading technology being a key differentiator for future viability
- **Sustainability as a major decision factor**

- Competitive edge through automation and adoption of emerging technologies
- Increase in production costs in operating costs
- **Risks related to geopolitics**
- Entering into new markets as a part of the global expansion

- Difficulty to attract and retain qualified personnel
- **Upskilling of new hires**

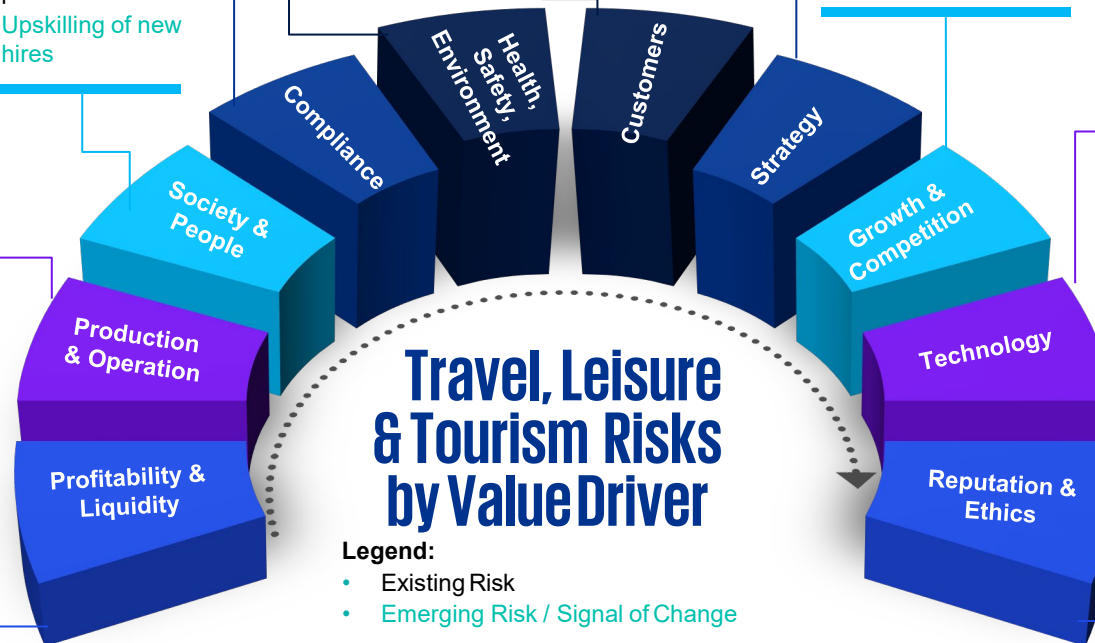
- Inappropriate or of data (big data). non-optimal usage
- Threat of climate change/natural disasters
- Airlines increasing prices to recover Covid-19 losses
- Rising inflation and cost of living making consumers more spending conscious
- **Consumers tend to spend money based on experiences**

- Emerging competition from search engines and large online portals
- Industry is highly competitive and is dependent on customer's repetitive experience
- Concept of low cost and high-value travel

- Top leading organisations have been subject to new technological innovations
- Increasing cyber attacks and security threats
- Increased dependence on third-party internet services.
- Adoption of the game-changing digital technologies
- Higher costs and taxes charged are passed to consumer or result in reduced customer experience
- The industry was hit hard by the COVID-19 pandemic than most economic sectors. Now that the are minor restrictions the competition has become tougher in terms of price wars
- **Risks related to protecting the integrity and security of company, associate and guest data**

- Construction delays or cost overruns.
- Exchange rate fluctuations and foreign exchange hedging.
- Weakness in the capital markets.
- The COVID-19 pandemic has had, and is to continue having a material adverse impact on the industry's financial agility.
- Post event pandemic challenges (COVID 19) affecting profits

- Over the past years, social media has been emerging as a source of shaping consumers decisions. In the current time of remote living lifestyles social media has increasingly become a major source of information
- Quality and reputation of brands
- Dependence on third parties to deliver products and services to customers
- Reputation of the celebrities who are the brand ambassadors for specific brands
- Estimated fair values of brands or reporting units could change





Manufacturing Risks 2023

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KPMG presents our view of the emerging and existing risks by value driver, faced by corporates in the Manufacturing sector.

Global

Risk Consulting





- Substantial pension and other post-retirement benefit obligations.
- Difficulty to attract and retain qualified personnel. Adoption of 'greener' manufacturing processes..
- Social inequality, high unemployment rate and strikes
- **Lack of incentive to relocate- only local talent recruited**
- **Ageing manufacturing workforce- leaving gaps in skills**

- Intellectual property infringement
- Regulatory challenges associated with non- compliance with laws, rules, regulations, prescribed practices or ethical standards within jurisdiction of operation
- Legal dispute and proceedings including historic class actions
- Risks relating to tax rate changes.
- Compliance to ESG requirements

- Customer demand for improved products and technologies
- Increased demand for sustainable and socially responsible manufacturing
- Loss of sales due to reduced customer spending
- New entrants to the markets

- Industrial and environmental risks
- Communicable diseases and pandemics risks
- Increasing carbon footprint.
- Environmental and climate change risk
- Workplace safety (operational hazards)

- Automation in manufacturing sector requires multiple stakeholders
- Adoption of cloud computing in the manufacturing sector can lead to various legal risks
- Integrating Internet-of-Things technologies increases the possible risks of product malfunctions
- "Connected" equipment will increase instances of redundant systems.
- Cyber attacks and security breaches
- Increase use of robotics expose them to the possibilities of product defects.
- Improper resources to analyse and make use of data collected through automation
- Improper marketing and use of online presence to provide digital experience and brand representation
- Upskill staff and training for new technology
- **Insurance implication due to rapid changing operating technology and property damage**

- Quality and reputation of brands.
- Reputational damages due to defective products, contaminated products and product recalls.

- Entering into new markets as a part of the global expansion
- Breakdown of critical equipment and requirement for appropriate maintenance contracts with OEM's
- Tight product launch schedule (window) leaves manufacturers susceptible to mistakes
- Rise in the energy costs and shortage of raw material.
- Post pandemic return and the need to scale up production increasing maintenance costs and the need to ensure safety is considered
- Equipment failure and supply chain disruptions
- Volatility in energy and commodity markets
- Labour shortage can't recruit enough staff to operate at full capacity
- Talent retention & attraction
- Fluctuating in raw material prices
- Post event pandemic challenges affecting industry operations and the relating social impact
- Increase globalization resulting in pressure from third party vendors

- Nationalism and protectionism leads to trade barriers and market access issues
- Increased demand for sustainable practice in the industry .
- DEI strategy-diversity, equity, and inclusion (DEI) to attract more women and racially and ethnically diverse

- Deterioration in global economic conditions
- Investments in new business.
- Increasing pressures to develop, upgrade and successfully launch and market new products
- Global supply chain constraints (logistics)





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