

## Risk Management Case Study 1



# Focus on risk culture, structure and process to achieve accountability

**Singtel, one of the region's largest telecommunications provider, seeks to promote a risk-centric culture, create a strong corporate governance structure, and establish proactive risk management processes.**

By

**TAY KIM LEE**

Head Group Risk Management, Singtel

Risks can come to light in many ways and forms and impact a company's ability in achieving its objectives. Risk also has the potential to impact the reputation, regulatory, operational, human resources and financial performance of a company.

At Singtel, we have a risk philosophy (see figure 1) and risk management approach that are underpinned by three key principles: Culture, Structure and Process.

Based on these principles, the Group has put in place a risk management framework that provides oversight and accountability at the board and management levels.

The risk management framework outlines the risk governance process, as well as systematic process of responding to risks, i.e. identifying, assessing, monitoring, managing and reporting of risks. The framework also outlines the risk appetite and provides guidance on the risk

tolerance levels across strategic, operational, financial and reputational aspects for the Group.

With the enhanced risk governance structure (see figure 2), board-level reporting and communications, there is emphasis on transparency, accountability and visibility of risk management within the Group.

The Group's risk management is aligned with the ISO 31000:2009 Risk Management framework. The identification and management of risks are delegated to management, who assumes ownership and day-to-day management of these risks. Management is responsible for the effective implementation of risk management strategies, policies and processes to facilitate the achievement of business plans and goals within the risk tolerance levels established by the board.

The key business risks are proactively identified, addressed and reviewed on an ongoing basis.

**Figure 1: Risk Philosophy**

### Risk Centric Culture

- Set the appropriate tone at the top
- Promote awareness, ownership and proactive management of key risks
- Promote accountability

### Strong Corporate Governance Structure

- Promote good corporate governance
- Provide proper segregation of duties
- Clearly define risk-taking responsibility and authority
- Promote ownership and accountability for risk taking

### Proactive Risk Management Process

- Robust processes and systems to identify, quantify, monitor, mitigate and manage risks
- Benchmark against global best practices

**Figure 2: Risk Governing Structure****The Board**

- Instills culture and approach for risk governance
- Provides oversight of risk management systems and internal controls
- Reviews key risk and mitigation plans
- Determines risk appetite and tolerance
- Monitors exposure

**Audit Committee**

- Reviews adequacy and effectiveness of the Group's internal control framework
- Oversees financial reporting risk for the Group
- Oversees internal and external audit processes

**Risk Committee**

- Reviews and recommends risk strategy and policies
- Oversees design, implementation and monitoring of internal controls
- Reviews adequacy and effectiveness of the Group's risk framework
- Monitors the implementation of risk mitigation plans

**Management Committee**

- Implements risk management practices within all business units and functions

**Risk Management Committee**

- Supports the Board and Risk Committee in terms of risk governance and oversight
- Sets the direction and strategies to align corporate risk management with the Group's risk appetite and risk tolerance
- Reviews the risk assessments carried out by the Business Units
- Reviews and assesses risk management systems and tools
- Reviews efficiency and effectiveness of mitigations and coverage of risk exposures

The principal risk categories identified are:

- Economic Risks
- Political Risks
- Regulatory and Litigation Risks
- Competitive Risks
- Regional Expansion Risks
- Project Risks
- New Business Risks
- Technology Risks
- Vendor Risks
- Information Technology Risks
- Breach of Privacy Risks
- Financial Risks
- Electromagnetic Energy Risks
- Network Failure and Catastrophic Risks
- Talent Management Risks

These risks are mitigated by the Group by continuously updating our organisational structure, talent management and development,

reviewing our policies and processes, and investing in new technologies to meet changing needs. Close monitoring and control processes, including the establishment of appropriate key risk indicators and key performance indicators, are also put in place to ensure that risk profiles are managed effectively.

As the Group is also transforming and venturing into new growth areas, such as premium video, cybersecurity, digital marketing and advanced analytics to create new revenue streams, the risks associated with these new businesses are closely studied so that appropriate counter measures can be put in place.

Overall, the Group aims to continually improve the understanding and management of risks amid the evolving and dynamic environment we operate in. ■

## Risk Management Case Study 2



# Banking on risk management

**As a leading financial services group in Asia, DBS considers risk management a core part of its business, which is now established across 18 markets.**

By  
**ELBERT PATTIJN**  
Chief Risk Officer,  
DBS

At DBS, we manage risks on behalf of our clients who want to make deposits, payments or hedge their exposures. On the other hand, we take risk on clients that borrow from or hedge with us. In addition, we run market risk, liquidity risk, operational risk and other business risks.

Given that risk management is so much at the heart of our business, DBS has an elaborate framework for identification, assessment, measurement, control and reporting of risks. We also emphasise that every employee is responsible for and has a role to play in risk management.

We divide these responsibilities into three lines of defence, namely, the business, the control units and, lastly, the internal auditors. This becomes part of our Risk Culture, enshrining the practice that every employee of the bank is accountable for these risks in their domain, irrespective of whether they are in the front line or support and control units. The assessment of how individuals in the bank manages these risk forms an important part of their key performance indicators, appraisal, promotion and remuneration.

In order to ensure we give consideration only to risks we actively seek, DBS has in place a clear strategy that details in which markets we want to be active and with what type of clients and products. This strategy is augmented by Target

Market and Risk Acceptance Criteria for each country and industry. These documents articulate the industries and geographic areas we want to be active in and under what criteria we want to engage the business, so that we have a clear, documented and shared understanding of the nature of the risks we are prepared to consider.

This understanding is further quantified by our Risk Appetite Statement. This Board-approved statement details how much risk we can take and what an acceptable risk mix is, for example, client vs. proprietary and retail vs. wholesale.

The Risk Appetite Statement considers items like our capital, rating, liquidity and profitability requirements that get translated to limits and other control measures for our credit, market, liquidity and operational risk activities. The bank's senior management is responsible for cascading these limits and control measures to the business unit to ensure adherence and report resulting exposures to the Board.

For example, we have maximum amounts we can lend in certain countries, industries, down to maximum allowable exposures to any given client. Similarly, we have an overall Value-At-Risk (VAR) limit for our market risk taking activities. We also set granular limits for currencies, interest rates, commodities and equities and these get even more granular when it comes to individual traders. Further, when managing liquidity risk,



we apply strict standards for the amount and constitution of liquid assets we need to hold to buffer potential cash outflows out of the bank.

All these risk measures are governed by a set of individual or committee authorities, policies, IT-systems and reports to ensure total risk appetite as well as the more granular limits are adhered to.

Invariably there is a growing requirement for models to be able to quantify these limits and exposures in isolation as well as in combination with one another. Prior to using these models and submitting them for approval to the regulatory authorities, we have a prudent process of developing, validating and auditing these models – all to ensure sufficient and effective challenge of the models so that business is robust enough to operate regardless of conditions.

As part of our ongoing portfolio monitoring, we observe macro or micro economic trends and constantly apply diverse scenario analyses

(such as low oil prices, higher interest rates and so on) to relevant parts of the portfolio. On top of that, we apply full stress tests to the whole portfolio. All these allow us to gauge the impact of events that are outside the range of expectation and to ensure that the bank can withstand very severe headwinds.

DBS has a detailed and documented Recovery Plan that outlines the steps to be taken to recover from a stress situation. We even run “reverse stress tests” that are designed to “break the bank” so we are able to identify what catastrophic events could give rise to such an occurrence.

Outside of looking at the traditional risks, we proactively identify and monitor top and emerging risks which, should they materialise, may have a significant impact on our business activities, financial results and reputation and affect our ability to deliver against our strategic priorities. ■



## Risk Management Case Study 3

# **Driving strategic alignment through a risk appetite framework**

**As the shared IT service provider to public healthcare in Singapore, IHIS manages IT investments and resources strategically in accordance with the risk appetite of its key stakeholders.**

By

**CHONG YOKE SIN**

Chief Executive Officer,  
Integrated Health Information Systems

Information technology (IT) plays a critical role in the delivery of healthcare services for our Public Healthcare Institutions (PHIs). IT provides the foundation for the integrity and privacy of healthcare records that are critical for the right decisions for the patient to be made.

As part of the healthcare family, Integrated Health Information System (IHIS) creates value by collaborating with PHIs to transform care through strategic IT planning, cost effective implementation of IT systems, efficient IT operations, and leadership in innovative IT solutions.

IT investments and resources must be directed strategically to deliver the right outcomes and in accordance to the risk appetite of the healthcare landscape. This does not in any way curtail innovation. Rather, a risk appetite approach to strategic planning and execution enables our organisation to realise its strategy with a practical approach that ensures success.

The IHIS risk appetite framework provides a useful tool in communicating the rationale for the strategy and execution path for the board, PHI stakeholders and staff. It articulates what the bets are for the organisation, why these decisions were taken and how we intend to get

to the destination while considering the risks and mitigating strategies along the trajectory.

The risk appetite approach is a living one where the level of risk is continuously adjusted based on the state of the foundation and landscape achieved. This approach in communicating strategies with staff engenders trust and commitment within the organisation, necessary for success in any execution.

IHIS established a risk appetite framework that divides its acceptable and undesirable risks into strategic, financial and operational parameters within which the company's business model is executed.

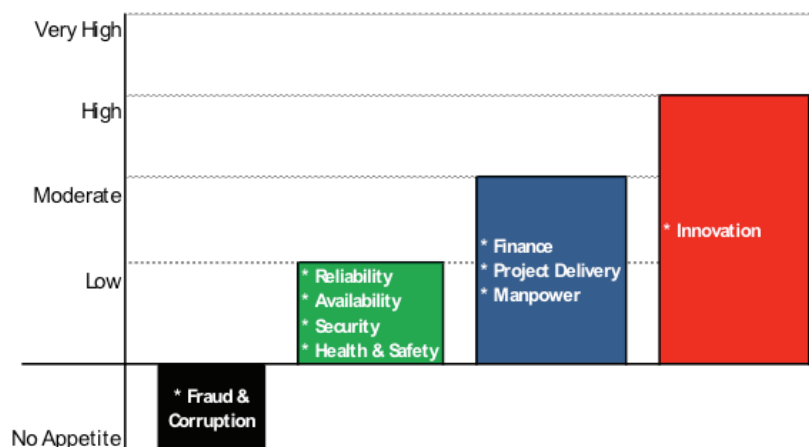
A corresponding risk appetite definition process draws implied risk appetite statements from historical risk-taking decisions (e.g. investments in technology), incidences (e.g. cyber incidences, frauds), strategic objectives (e.g. innovations to develop enterprise architecture components), risk profiles (i.e. current risks that are being managed), and organisational limits (e.g. financial authorisation limits).

Using the implied risk appetite, IHIS formulated its risk appetite statement (see box) around business drivers to communicate the tone and expectations from its leadership to its stakeholders expressing what and how much risk it is willing to take.

## IHiS Risk Appetite Statement

### Systems Reliability, Availability and Security

We recognise PHI's ever growing reliance on IT and the increasing security issues due to cyber threats. As the reputation of public healthcare is tethered to the reliability, availability and security of the IT systems we manage, our risk appetite is very low. For the same consideration on integrity, we have zero tolerance against corruption and fraud perpetrated by our staff, vendors and other stakeholders.



### Project Delivery Services and Manpower

We take a moderate risk appetite to project delivery services and manpower as we deliver a wide of range of IT systems of varying size, criticality and complexity that require careful balancing of time, limited resources and risks. IHiS recognises that our staff could be exposed to health hazards when they discharge their duties in the healthcare environment. Thus we have a low risk appetite for health and safety risks, and will take robust measures to protect our staff, consistent with the health and safety policies of the healthcare institutions we serve.

### Financials

Our risk appetite for financial outcomes is moderate to support the risk appetite in project delivery services,

manpower and innovation, for as long as we are operating with a healthy operating cash flow. This posture to finance will enable us to support the growth in healthcare IT and keep us in line with public healthcare concerns to contain and keep its costs manageable.

### IT Innovation

Our risk posture in innovation is high, in order to provide leadership in the adoption of technologies for the pursuit of excellence in healthcare. We will lead in the exploration of IT technologies, validate its efficacy and set the pace for adoption in order to minimise the IT risk exposure to the PHIs, but we will maintain congruence with risk appetites related to reliability, availability, security, manpower and financials.

IHiS risk appetite statement reflects its risk management philosophy to develop a culture which manages risks holistically across the organisation that is aligned to strategy and consistent with the public healthcare stakeholders it serves. It is, however, not cast in stone and changes

in accordance to the dynamic and ever growing public healthcare environment. The framework and definition process enables future risk appetite dialogues with stakeholders so that IHiS can better weather the changes while supporting the fulfilment of the Singapore Healthcare 2020 vision. ■