IT Governance: Managing Emerging Risks with Generative AI

IT Governance is a critical subset of corporate governance, focusing on managing IT resources and risks. This presentation explores the specific governance areas within IT governance, the risks associated with uncontrolled use of Generative AI (GenAI), and strategies for mitigating these risks using frameworks like COBIT and operational measures.

JY **by Jarell Yvans**

What is Corporate Governance?

1 **Definition and Purpose**

Corporate governance is a set of rules, practices, and processes for directing and controlling an organization. It ensures alignment of business strategy with stakeholder interests.

2 **Core Principles**

The core principles of corporate governance include transparency, accountability, fairness, and responsibility.

CORPORATE GOVERNANCE STRUCTURE AND FRAMEWORK

3 **Key Areas of Focus**

Corporate governance involves oversight of management, financial performance, risk management, and compliance.

What is IT Governance?

Definition

IT Governance is a subset of corporate governance focused on managing IT resources and risks. It aligns IT strategies with business goals to deliver value.

Key Functions

IT Governance ensures efficient and secure IT operations, manages IT risks, compliance, and resource allocation.

Accountability

It provides accountability and transparency in IT-related decisions.

How IT Governance Relates to Corporate Governance

The 5 domains of IT Governance

Strategic Alignment

Value Delivery

IT Governance

Performance Management

Risk Management

Resource Management

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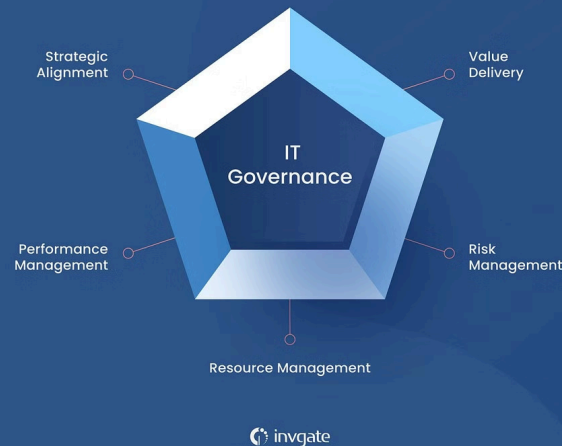
1 **Strategic Alignment**

IT governance ensures that IT initiatives support broader business objectives.

2 **Risk Management**

Manages risks that arise from the use of technology in the organization.

3 **Performance Enhancement**

IT governance enables strategic use of technology to enhance business performance.

4 **Support for Corporate Principles**

Supports corporate governance principles like accountability, compliance, and risk management.

Made with Gamma

Specific Governance Areas within IT Governance

IT Risk Governance

Identifies and mitigates IT-related risks.

Data Governance

Ensures data security, privacy, and compliance with regulations.

Information Security Governance

Protects the confidentiality, integrity, and availability of information.

## IT Resource Governance

Optimizes management of IT assets and personnel.

Frameworks That Facilitate IT Governance

| Framework	Focus	Key Areas
COBIT	Aligning IT with business goals and managing IT risks	Strategic alignment, risk management, performance measurement
ITIL	IT Service Management	Efficient, reliable IT service delivery, incident management, change management, service-level agreements
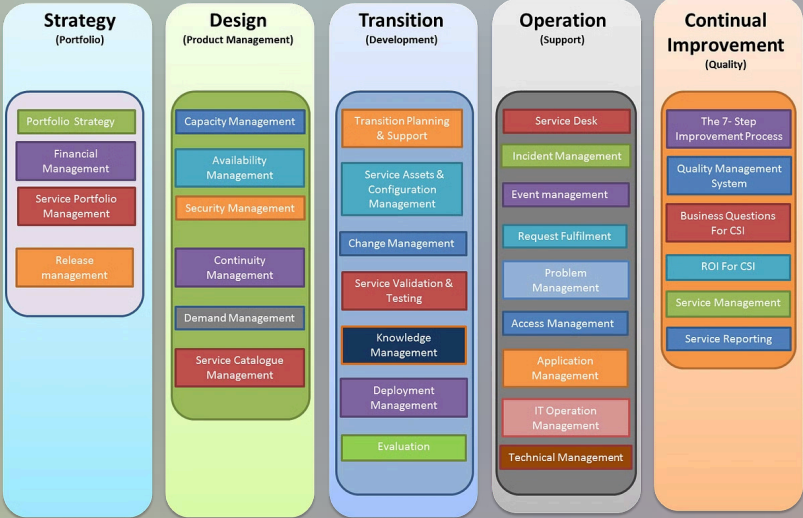
Uncontrolled Use of GenAI as a Specific IT Governance Risk

Online Models

Risks of data privacy, security breaches, and compliance violations. Dependency on third-party vendors. Limited control over model behavior and updates.

Local Models

Vulnerabilities include model exploitation, bias in outputs, and resource strains. Risks of data poisoning, model theft, or misuse by authorized personnel.

INTELLIGENT RISK MANAGEMENT FRAMEWORK
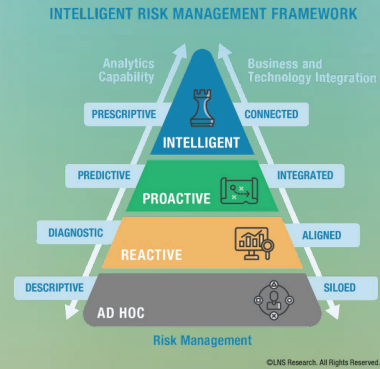
Operational Measures to Manage Risks of GenAI

1 **Data Governance**

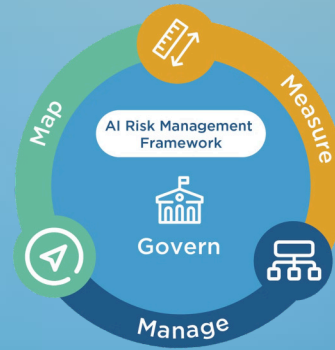Enforce data anonymization and privacy policies.

2 **Access Controls**

Limit access to GenAI tools and models to authorized personnel.

3 **Model Monitoring**

Continuously monitor GenAI performance and bias.

4 **Compliance Checks**

Ensure AI usage complies with data privacy laws and regulations.

AI Risk Management Framework

Map

Measure

Govern

Manage

How COBIT Monitors Risks Associated with GenAI

1

Risk Identification and Assessment

COBIT guides the identification of risks like data breaches and model bias. Risk prioritization based on severity and business impact.
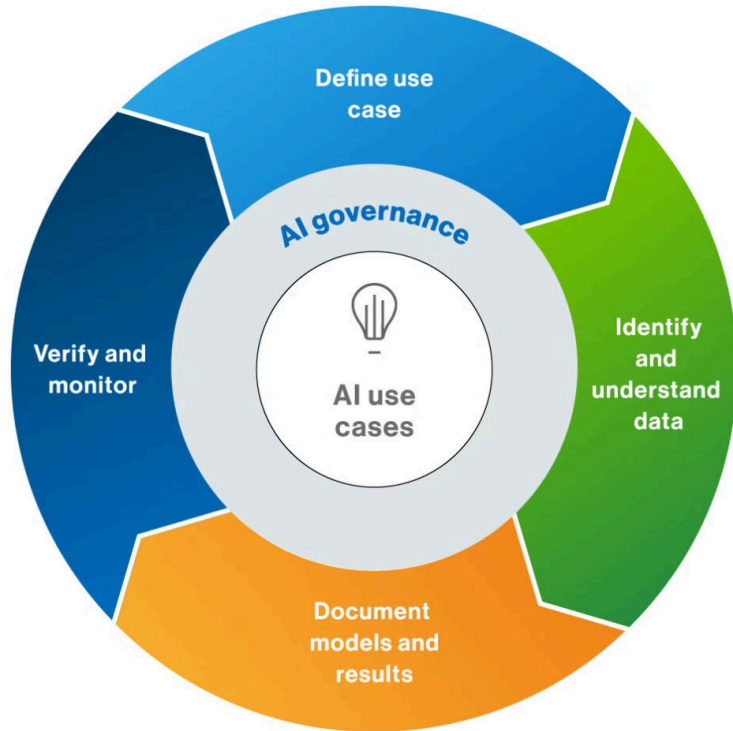
2

Risk Mitigation

COBIT recommends implementing controls such as encryption, access management, and monitoring tools.

3

Performance Monitoring with KPIs

Key metrics: Data breach incidents, model bias detection rates, compliance audit success rates. Regular audits and continuous improvement cycles.

Conclusion

IT Governance Importance

IT governance is essential for aligning IT initiatives with corporate governance goals.

GenAI Risks

GenAI introduces specific risks that require careful management.

Framework Utilization

Frameworks like COBIT provide structure for monitoring, assessing, and mitigating IT risks.

Operational Measures

Operational measures like data governance, access control, and compliance monitoring are key to managing GenAI risks.