In a recent survey of 570 C-suite and senior business leaders, almost half (49%) of corporate companies are planning for executive-level governance of emerging technology, but only 8% already have a well-established and active technology governance model. Instilling the right set of behaviors and balancing agility with control across the technology landscape is critical to enabling digital transformational initiatives.

The EY Technology Governance Model (TGM) provides a structure to design and apply an appropriate mode of decision-making to different elements of technology. The model allows for transparent decisioning that considers the right perspectives and is fit for purpose for different teams. The TGM described in this white paper pulls together three key decision-making elements – what, who and how – around technology domains to maintain strategic alignment, transparency and accountability.

Too often, technology leaders derive a false sense of confidence about their decision-making capabilities from formal IT governance structures. It is common for these boards and committees to lack business participation and relentlessly focus on process adherence rather than on delivery of business value. This creates two opposing forces between business and IT organizations: on one hand, business teams see the technology organization as a bottleneck that needs to be bypassed in making new technology investments; on the other hand, innovation is forcing IT organizations to become more agile and make technology decisions at an increasing pace, ignoring their own governance constructs. Both behaviors result in increased security risks and operational inefficiencies.

This white paper addresses key questions each organization should consider when establishing a fit-for-purpose governance model in each part of the business:

- What types of decisions should we account for?
- What enablers do we need to drive better and faster decision-making? How do we strike the right balance across control, flexibility and speed?
- How can we incorporate business perspectives in our decision-making?
- How do you segment technology by unique needs for decision-making?
- How can the effectiveness and success of the governance model be evaluated?

The first step toward effective decision-making is establishing a standard governance model that can be applied across the enterprise and adapted as required for all technology-related considerations.

An effective governance model views technology as a driver for better business outcomes aligned with the organizational strategy. Figure 1 below highlights the six main components of the Technology Governance Model (TGM).

The following sections delve into each component of TGM and provide leading practices to enable technology decisions that support better business outcomes.

Guiding principles articulate the ways of thinking that shape an adaptive governance model. Characteristics of effective guiding principles:

- Business-relevant — connect technology decisions with business strategy to advance business outcomes
- Actionable — business participation in technology governance can lead to expedited technology decisions aligned with the business strategy
- Long-lasting — organizationally appropriate governance structures can drive a significant and persistent interface between business and technology

Figure 1: Technology Governance Model (TGM)

Actionable principles steer, harmonize and accelerate efforts to focus on key priorities such as:

- Advance business and strategy alignment
- Accelerate decision-making
- Drive value from technology investments
- Enable effective risk management
- Advocate global technology standards
- Adapt quickly to a dynamic environment

Purpose kicks off the governance flow, as it is essential to understand when forming a governance capability. It defines the objectives for technology governance and helps us know if we are successful.

With the advent of digital in a hyperconnected world, technology has become a connective tissue that brings organizational capabilities together to deliver unique value propositions in the market. It is imperative to incorporate different perspectives while making technology decisions in an organization. The decision-making approach should be objective and strongly aligned with the business strategy of the organization.

Figure 2 shows how technology decisions should aim at achieving the right combination of:

- Market desirability — do our customers value the solution?
- Business viability — is it economically viable for the enterprise?
- Technology feasibility — do we have the technical capability to deliver the solution?
Domains highlight the key technology decision areas made within an IT organization and provide a baseline for balancing control and agility. While every IT organization is unique, the most common domains we have seen are:

- **Strategic alignment** — technology investments are aligned to organizational and business unit strategies
- **Funding and investment** — perform cost-benefit analysis and validate that technology investments deliver business outcomes
- **Value management** — assurance of technology contribution to business value
- **Risk, compliance and change** — adherence to enterprise risk posture
- **Resource management** — allocation of technology resources to realize business and IT outcomes
- **Operations and delivery** — confirm IT services have established service-level agreements and are delivered within acceptable ranges

Different domains may have varying governance requirements. Defining these appropriately for a given organization enables companies to strike a balance between global standardization and local optimization. Figure 3 illustrates the variable balance between agility and control across a few decision domains.

**Figure 3: Effective delegation across domains**

**Business strategy**
Strategic or high-risk decisions are made with more centralized authority, facilitating close alignment to business objectives.

**Investment and funding**
Investment authority can be delegated with defined targets, driving faster decisions and market speed.

**Agile development**
Product decisions may be fully distributed to product teams, allowing faster development and higher quality.

**Technology operations**
Day-to-day operational decisions can be distributed, and potentially automated, across the organization to enable fluid governance processes.

**Structure** outlines the framework and people whose perspectives should drive the decisions, their decision rights and the process model that reinforces decisions made. Governance is often associated with a centralized steering committee. However, there are five distinct governance structures that can enable effective decision-making. Figure 4 shows the five different modes that could be adapted to each of the decision domains.

**Figure 4: Different types of governance models**

- **1. Agile:** Product and services teams can operate with complete authority with documented exceptions for escalations.
- **2. Distributed:** Product and services teams control most decisions with some degree of coordination and organizational hierarchy.
- **3. Balanced:** Decisions are made centrally, but discretionary flexibility is permitted.
- **4. Federated:** Most decisions are made centrally with documented delegated authority.
- **5. Centralized:** Governance is completely centralized with little delegated responsibility.
Technology organizations must take care when selecting a governance model for the decision domain, as each comes with trade-offs. Models lower on the control dimension require management executives to trust their people and delegate decision-making to accelerate effective decisions. Technology leaders working with these models become coaches to their empowered teams. By relinquishing direct control, organizations will realize that they have increased business alignment and improved the quality of decisions being made.

Models lower on the agility dimension have a more concentrated structure wherein a core group of leaders exert a large amount of control and decision-making power. Decisions are propagated throughout the organization; though this model offers greater operational cohesiveness, it is considerably less fast-paced and adaptive.

Enablers are supporting processes, tools, templates and emerging practices that help accelerate adoption of a governance model.

Each decision domain has a set of key processes that must be adopted and adapted to the organizational context. Below are a sample set of processes by decision domain:

- Strategic alignment – portfolio management
- Funding and investment – demand management
- Value management – balanced scorecards, benefits realization
- Risk, compliance and change – risk assessment, risk monitoring
- Resource management – workforce planning, cost allocation
- Operations and delivery – architecture reviews, service performance management

An effective governance model aims at changing years of organizational memory in making technological decisions and instilling new behaviors in line with the updated decision-making structure. In order to successfully implement governance, the governance approach should be adapted to the organization’s unique situation and strategic focus.

**Performance** measures are critical to track progress and proactively course-correct the path to business value.

A successful governance model must be self-governing in order to adapt to changes in internal factors such as corporate strategy, business unit priorities and external factors such as political, economic, social, technological, legal and environmental situations.

A governance model that is performance-oriented can aid in the design of activity-based leading measures and outcome-based lagging measures to optimize the path to value. While each organization needs to design a set of measures based on the improvements targeted, leveraging collective wisdom in starting with a set of leading-practice measures will go a long way.

**Key learnings** from EY collective experience in designing effective technology governance models across industries and organizations highlight a few common points of failure that a successful organization would need to avoid:

- Fail to enable governance – governance structures must be supported by defined functions and processes to facilitate and track the performance of decisions made
- Overdesigning the model – complex structures and levels of governance slow down the decision-making process and can lead to immediate rejection of TGM design
- Forgetting performance management – continuous improvement is critical to TGM success and requires formal performance tracking processes and feedback loops to be implemented
- Failure to increase velocity – identify and refine slow or broken decision processes early in TGM design to capture quick wins and stakeholder buy-in
- Missing key perspectives – solicit input from outside IT to influence and inform non-technology decision-making, including legal, procurement, risk management, HR and others
- One-and-done design – understand that TGM is refined iteratively through socializing and testing the model with stakeholders across the organization
- Failure to drive change – identify key pain points/barriers that prevent implementation of a governance structure and proactively enable change management

Technology decisions for better business outcomes

**Better questions: what do we need to ask?**

Key questions each organization should consider when designing an effective Technology Governance Model

1. Purpose and design
   Governance facilitates decisions and should not be bureaucratic
   **Key questions:**
   ① Why do we need governance, and what is the desired outcome?
   ② Are we striking the right balance across control, flexibility and speed?

2. Domains and scope
   Major areas of decision-making should get coverage
   **Key questions:**
   ① How can we account for non-IT perspectives in our decision-making?
   ② Which decisions require a higher authority or escalation path?

3. Structure and authority
   Governing bodies should be lean and enable quick decision-making
   **Key questions:**
   ① Are governing bodies necessary to make decisions?
   ② Do we have the right representation (inclusions and exclusions) for making critical decisions?

4. Tools and enablement
   Speed up decision-making by maturing and automating processes
   **Key questions:**
   ① Which decisions require significant time or interaction from multiple parties?
   ② What tools can we implement to drive better and faster decision-making?

5. Performance measures
   Governing bodies are accountable for their decisions and should adapt
   **Key questions:**
   ① How can the effectiveness and success of the governance decisions be evaluated?
   ② How often should performance be reviewed?
Conclusion

Governance has been a caustic word often associated with bureaucracy and red tape. However, a technology governance model brings consistency, transparency and accountability to key technology decisions. It validates that those decisions are aligned to the overall corporate strategy/business unit priorities. A robust model requires standing up the right structure and designing feedback loops to adapt to changing conditions. As the technology landscape changes to include more digital and automation capabilities, the technology governance model must also flex to sustain appropriate oversight without inhibiting agility.

Ernst & Young LLP professionals can be your technology governance advisors; we offer Advisory solutions for technology transformation, including technology strategy, technology operations, enterprise infrastructure and resiliency, and architecture. Connect with us, we are here to help.