

IT Governance Framework Proposal

The University of the District of Columbia
Office of Information Services and Management

Prepared by:
Information Services and Management
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Revision History

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I. Executive Summary

In today's economic landscape Universities are consistently facing cost cutting measures and virtually all spending is being scrutinized by every level of University leadership. Each dollar invested must be done so with the knowledge that the outcome of the expenditure must play a role in helping the University move closer toward the realization of its strategic vision. Because of this need to improve the efficiency of University operations, no longer can departments and colleges establish silos which operate independent of the rest of the University. Collaboration, cooperation and the efficient use of shared services are the new operational paradigms in higher education. To facilitate this, organizations are working to define clear, precise, and repeatable operations within their business units, particularly information technology. Since 2010 every Big Ten University as well as countless others across the nation has engaged in the process of establishing or reviewing their governance models. The creation of an effective governance model will ensure that the University is working towards their goals and objectives. To this end, as it relates to Information Technology, IT Governance is regarded as the single most important factor in generating value from IT, and is inherently critical to the success of every institution.

The need to improve the value proposition of each department is paramount; as such, Universities across the nation are eliminating distributed operational models in favor of more centralized structures, particularly in areas where common services are used throughout the entire institution. Every unit leader or department head must clearly demonstrate how their budget resources are being utilized to help achieve long term and wide spread objectives which contribute to the success of various core functions across the enterprise. In the case of information technology the method by which this is achieved is through the development and implementation of a comprehensive governance framework.

At UDC governance will help to accomplish three primary goals; the first is to provide clear guidance on how decisions regarding technology and projects are made. With a standard methodology to weigh options and make informed choices about how technology can best support the University enterprise, this proposed governance framework will help ensure that IT choices are closely aligned with the strategic objectives of the University. Second, through careful and thoughtful decision making, UDCs limited pool of shared IT resources can be judiciously distributed across the user community, based on need and priority, ensuring that preferential treatment and operational bias do not exist. Finally, the deployment of an IT governance framework will provide transparency into the decision making process at UDC. This transparency will allow users across all areas to become active participants in executing the University's priorities. Active and participating membership will be the hallmark for engaging the students, faculty and staff in the success of the proposed governance model and will allow each user to become an active participant in the decisions that will define our future IT infrastructure.

Because spending must not be done in a vacuum and should be coordinated with ongoing initiatives across the institution, the IT Governance Committee must effectively reach out to all business units and colleges to ensure each voice and opinion is heard. The cross departmental approach will result in improved efficiencies by verifying that each dollar invested in IT will work in concert with the spending plans of every department, University wide. This coordination will help to eliminate duplicative

information technology measures including staffing levels as well as computing resources such as applications, hardware, and storage.

Objectives

This proposal seeks to establish an IT governance model which will improve consistency in how IT decisions are made while fostering an improved level of collaboration, communication, and transparency. The proposed framework shall promote an increased level of efficiency as well as operational effectiveness, desperately needed at UDC. Like most operational methodologies, this structure is expected to change over time as the process approach becomes more mature; therefore the basic structure of the governance body and the approach they use to make decisions must remain agile.

It is noteworthy to mention that this framework will focus strictly on decision making and prioritization of projects and will not impose direction on the Office of Information Services and Management regarding the implementation process.

The COBIT and VAL IT framework states that the “purpose of IT governance is to direct IT endeavors, to ensure that It’s performance meets the following objectives:

1. Alignment of IT with the enterprise and realization of the promised benefit
2. Use of IT to enable the enterprise by exploiting opportunities and maximizing benefits
3. Responsible use of IT resources
4. Appropriate management of IT-related risks” (IT Governance Institute, p. 3)

Given the current financial status of UDC and the fiscal environment which we face, competing priorities across the University must be adequately prioritized to leverage the limited IT resources available to service business needs.

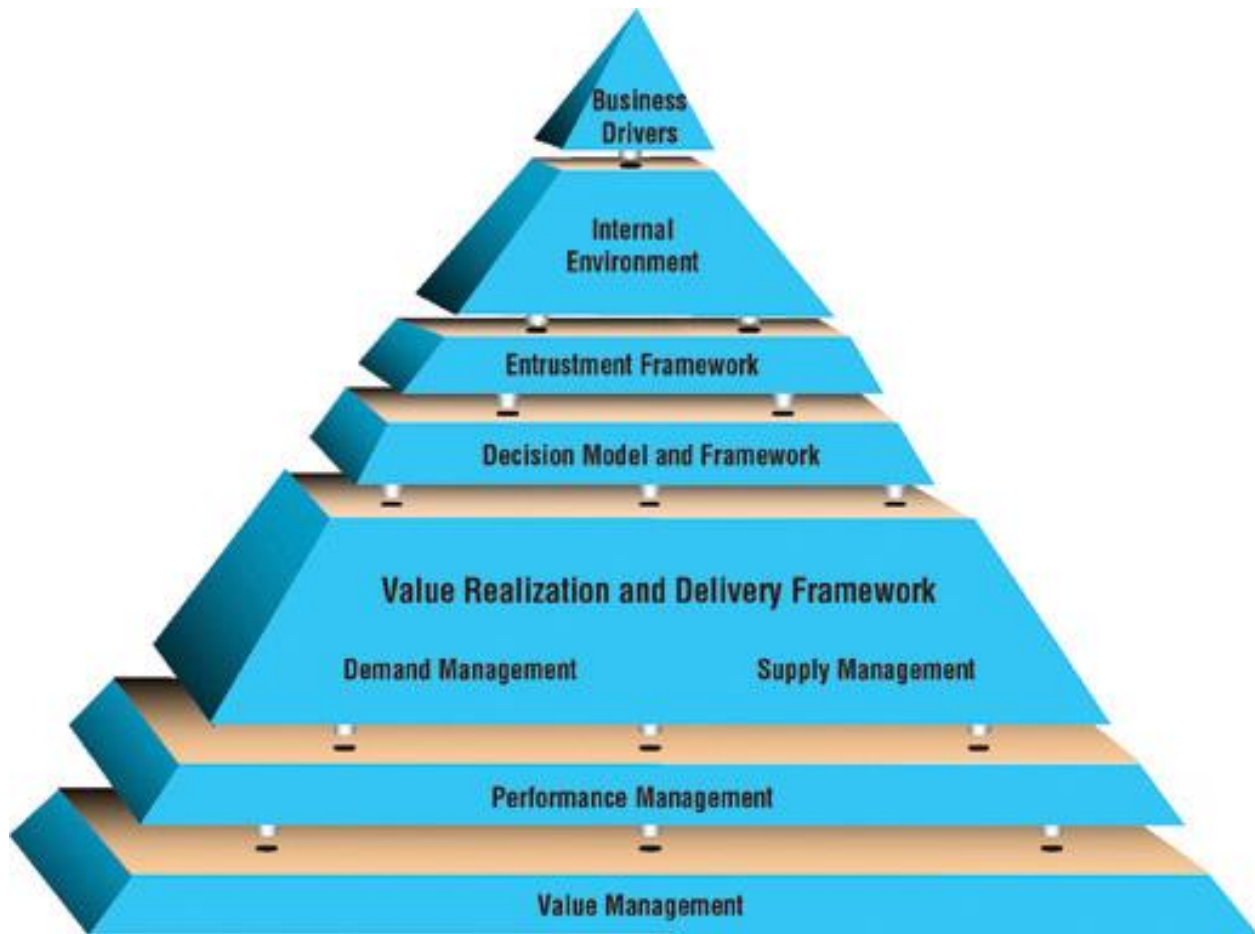
Currently most users in the UDC system have no insight into the overall operations of the Office of Information Services and Management. Most users see ISM as an on demand service which primarily consists of a Customer Service Desk and a Project Management Office which executes the on demand installation of hardware and software throughout the campus. Often times ISM is excluded from the various planning stages of project development and is then provided with unrealistic milestone dates which constrain their technical ability to offer integrated solutions that can provide cost saving efficiencies such as software licensing or hardware acquisition to the University. The proposed operational framework hopes to positively impact this paradigm by achieving the following:

1. Providing transparency into the decision making process for project prioritization
2. Involve ISM in the earliest phases of project development
3. The establishment of a common set of project artifacts which define the scope, scale and milestones for all projects which require the use of ISM resources
4. Capacity planning for the reasonable establishment of project delivery milestones based on the capacity of ISM resources, to include (but not necessarily limited to) server capacity, storage capacity, network bandwidth and availability, and human capital capacity

II. Framework Model

The IT Governance Reference Model: The starting point

The core tenets of IT governance can be abstracted into a multistrata reference model (**figure 1**) as demonstrated below:



Note that the layers of the model split broadly into the following categories:

- **Internal environment**—it is essential to establish a cultural and operating climate that is conducive to, and promotes, effective IT governance. Culture consists of exhibiting leadership and is represented in value statements, mission statements and guiding principles. Value statements are the core beliefs and philosophies that shape the organization’s vision and mission. Guiding principles are durable statements that encapsulate the role ISM will play and how decisions will be driven in both the business and ISM organizations, and at each abstraction level of the enterprise, i.e., strategic, tactical or operational. Guiding principles are enacted by controls in the form of policies, standards and procedures.
- **Entrustment framework**—central to IT governance is the notion of accountability and authority. An accountability framework ensures clarity of, and accountability for, desired outcomes and should be defined with clear assignment of roles and responsibilities. Decision authorities are individuals or bodies, e.g., committees and boards that are empowered to make and ratify

decisions regarding the use of ISM resources. The framework should also include organizational structures, constructs, and functional interrelationships.

- **Decision model and framework**—a common decision framework enables prudent, sound and informed decision making. It involves the clear assignment of decision rights and defines sequences of actions and decision paths in the decision processes. The goal should be to make decisions based on a more manageable set of possibilities by eliminating choices that are in conflict or inconsistent with the guiding principles and policies. A decision-making model helps ensure that IT decisions are coherent and consistent with the University direction and aligned with the overall institutional strategies. Decision factors need to be defined that weigh the importance of trade-off decisions. These factors might include cost-benefit analysis, risk identification, scope definition, and financial impact, time to delivery, and efficiency and effectiveness of delivery. The design of the model should be geared to the number and type of decisions that need to be rendered.
- **Value management**—this aspect of IT governance is concerned with the delivery of business value from IT investments. The objective of value management is to ensure that organizations maximize value by optimizing the benefits of investments throughout their economic life cycle within defined risk tolerance thresholds. IT value management involves the continuous awareness of value for the University, establishing measures or estimates of value then monitoring and controlling them.
- **Value realization and delivery framework**—value realization has two dimensions, demand management and supply management.

Demand management includes the activities involved with generating demand for the products and services offered by the University. This translates into the need to ensure the overall strategy and IT strategy align and that the University demonstrates effective portfolio management and prudent investment management.

Supply management consists of the activities that are directly involved with provisioning and supplying the products and services offered by the institution.

The IT Governance Institute (ITGI) has distilled value demand and delivery into five core disciplines. These focus areas, as depicted in **figure 2**, are: create value (through strategic alignment), deliver value, risk management, resource management and performance measurement.



IT governance encompasses the decision framework, rights, responsibilities and accountability to ensure desired behavior in support of the University’s business goals.

The IT Governance Reference Model: Proposed Frameworks

Specifically IT governance comprises a set of formal and informal rules and practices that determine how empowerment is exercised, how IT decisions are made and how IT decision makers are held accountable for serving the institutional interest.

Establishing an IT governance program can be characterized as a blend of systematic process analysis coupled with aspects of behavioral science. Unlike projects of limited scale or those localized to a specific University function, IT governance permeates the organization at all levels of management and across functional boundaries. Every institution has a unique personality that reflects their cultural ecosystem and operating style. For this reason, implementing IT governance does not follow a one-size-fits-all mold. For IT governance to be effective, it needs to reflect the prevailing culture and be interwoven into the operational fabric of the organization.

As advised by many, it is likely too early in the governance process to stick too closely with a specific platforms as it deflects from approaching governance in a more holistic manner however, while subject

to change as the operational component of UDC's governance model matures, this proposal is predicated on the implementation of a hybrid model of two (2) separate and complimentary framework structures:

1. COBIT 5
2. Val IT 2.0

COBIT 5 provides five high-level principles that are essential for the effective management and governance of enterprise IT:

1. Principle 1: Meeting Stakeholder Needs
2. Principle 2: Covering the Enterprise End-to-End
3. Principle 3: Applying a Single Integrated Framework
4. Principle 4: Enabling a Holistic Approach
5. Principle 5: Separating Governance from Management

These five principles enable an organization to build a holistic framework for the governance and management of IT that is built on seven enablers'. The enablers are:

1. People, Policies and Frameworks
2. Processes
3. Organizational Structures
4. Culture, Ethics and Behavior
5. Information
6. Services, Infrastructure and Applications
7. People, Skills and Competencies

Together, the principles and enablers allow an institution to align its IT investments with its objectives to realize the value of those investments.

Val IT is layered on top of COBIT 5 and is focused as an enterprise governance solution which will help the ISM department and UDC, as a whole, develop a common language and operational best practices within the COBIT framework.

Tailoring the Style of IT Governance to Mesh with the University Environment

The implementation of IT governance, even when the leading practice frameworks are adopted, is typically challenging given its somewhat amorphous form. The unique nature of every organization means that cultivating an environment conducive to desirable behavior in the use of technology will vary from organization to organization. In spite of the obstacles, gaining an understanding of three influencing factors will provide reasonable assurance that the deployed IT governance practices and processes are aligned with the cultural and operational nuances of the University.

Three primary influencing factors within an organization's profile are:

1. **The business model**—articulates how the organization will create and sustain value for its customer(s)
2. **The operational mode**—defines the role ISM performs in providing value to the organization
3. **The personality profile**—the manner in which an institution characterizes itself. It is the University's identity and unique characteristics.

Another important consideration when customizing IT governance is the change driver. This is the catalyst, event or proposition that provides the impetus to focus on IT governance. Change drivers surface in many forms but are typically rooted in three themes: the need for operational excellence, risk management, and regulatory compliance. The desire to achieve operational excellence is driven by the goal of deriving optimal business value from ISM assets by emphasizing efficiency and effectiveness. For example, value can be realized by pursuing a shared services strategy, by defining a service-oriented architecture (SOA) or by establishing an enterprise technical architecture. By contrast, if the driver's source is risk management or regulatory compliance, it is typically a response to external requirements such as the introduction of a new law or regulatory mandate.

Principles

There shall only be one IT Governance Board for both academic as well as administrative processes

1. The President shall sanction and endorse the establishment of an IT governance board to ensure ISMs success and effectiveness
2. The governance board must represent a cross section of all University areas and shall address all projects and matters which affect the University systems
3. Aggregate funding across academic and business units may be required to realize objectives and efficiencies as defined by the governance board

In order to be vetted and prioritized by the governance board, technology related requests should meet one or more of the following criteria:

1. The proposed project requires a minimum of 10 hours of dedicated ISM support which may include planning and design considerations
2. It impacts the University in a significant manner through a directional, policy, service, systems, security, financial processing, interface, operational or strategic perspective
3. It integrates with one or more existing systems (this includes the deployment of additional modules or interfaces for existing systems)

The following circumstances are exceptions to the aforementioned criteria:

1. Patching and upgrades of the existing systems are a function of the ongoing operations and maintenance (O & M) of the University and do not require governance board approval
2. ISM initiatives which are a part of a capital project must be disclosed and adequately accounted for by the governance board, but do not require additional approvals

The transparency of the governance board is of paramount importance to the success of its establishment and ongoing operation, to this end the board must assign a secretary to record notes and/or meeting minutes. These minutes must be published in a reasonable timeframe following each board meeting in a publically accessible location such as the IT Governance webpage. Furthermore, each meeting of the governance board must be announced in advance to allow interested parties sufficient time to have items reviewed/discussed during the meeting.

All governance board meetings must be open to all members of the University community, should they wish to attend.

Proposals to the board should be required to meet a standard format with predetermined pieces of information available. These should include (but not be limited to) estimated cost, estimated level of effort, associated risk, impact, correlation to the strategic goals of the University.

III. Organizational Structure

The proposed structure of the IT Governance Committee will consist of three separate sub-committees or working groups. Each sub-committee will be focused on reviewing and championing project proposals which fall within their specific areas of operation. The proposed sub-committees are:

- Operations
- Academic Technology
- Student Services

Sub-committees will be charged with the responsibility of assisting a project stakeholder in the development of a detailed blueprint for all projects which have been approved for further investigation by the committee as a whole. Sub-committees will be expected to appoint an acting chairperson and will meet as needed to address project proposals submitted to them by the Executive Director. All projects will be expected to follow a standard format for blueprint submissions and the sub-committee will ensure each submission meets this standard.

IV. Process Flow

The following steps outline the process by which requests and proposals enter into, and travel through the IT governance framework.

1. Requests from the University community for technology-related improvements are injected into the IT governance process by submitting a brief project overview form to the Office of Information Services and Management.

The project overview form will be a standard document and must include the following:

- Project Name
- Stakeholder Name and Department

- Estimated Project Cost
- Estimated Level of Effort
- Requested Delivery Timeline
- Brief description of the Project and its benefits to the University

ISM, which serves as a single point of contact, acts as a clearinghouse to ensure that requests flow through the governance process from start to finish. ISM also ensures that the request meets the criteria delineated in this proposal and that the same request is not being submitted by multiple parties. ISM tracks requests and ensures that all required information is codified in the proper format. **All project requests must be submitted no later than 2 weeks prior to the monthly governance meeting to be considered for voting. Any project requests submitted after the 2 weeks will be presented at the following month's governance meeting. This is to allow ISM sufficient time to review the project, gather requirements, and provide estimated timelines to the committee.**

2. ISM submits the completed proposal to the members of the governance board.
3. The governance board distributes copies of the proposal to technical, security, risk, liability, legal, ethical, regulatory, policy, procedural, and other accountability reviewers. These reviewers are asked only to consider potential risks and issues with the proposal. Their comments will become part of the proposal as it moves forward through the process.
4. Each of the reviewers submits a form to the governance board indicating whether there are any issues or concerns with the proposal. As noted above, concerns may be related to IT security, capacity, support, or legal/regulatory issues.
5. The IT governance board considers proposals and decides which ones to recommend for action. Each recommended project proposal is submitted to the appropriate sub-committee for follow up action.
6. Sub-committees work with project stakeholders to develop a detailed blueprint which includes a thorough estimate of cost, level of effort, functional requirements, risk analysis, cost benefit analysis and delivery recommendation date.

Advisory members of the governance committee are expected to work with each sub-committee as needed to ensure technical, regulatory and risk base factors have been considered in the final project blueprint.

7. In the event of new product implementations or wide scale product modifications, project blueprints are submitted to ISM where functional analysis will be performed against the business defined requirements. This requirement analysis will be used to evaluate the market and determine the best product to meet the business needs. Project blueprints will be updated with technical recommendations and submitted back to the appropriate sub-committee.
8. Sub-committees will distribute the project blueprint to all committee members for review and analysis.

9. The IT governance board considers proposed project blueprints and decides which ones to recommend for action. The board ranks those projects based on specified criteria, including impact, importance, risk, and funding models.
10. The governance board formally submits the rank ordered list of proposals to the Executive Director of ISM for implementation planning.
11. The Executive Director of ISM becomes responsible for the implementation of the submitted projects and communicates scheduling and timelines to the submitter. Once agreed upon, the Executive Director communicates these decisions to the governance board and the decisions are published in the minutes for transparency.
12. Technical project teams are formed according to the proposed schedule and monthly reporting of budgets and milestone are presented to the governance board by the Executive Director.

V. Membership

The Executive Director of ISM shall serve on the IT governance board as the board chair. Legal counsel and the Budget Director should also serve on the Council in an ex officio capacity. The remainder of the IT governance board shall be made up of business unit heads, academic Deans and representatives from the faculty senate. This board should meet monthly to assess the ongoing requests for technology related projects needed at the University.

A proposed list of initial committee members is detailed in Appendix A.

Proxy in Absence

Should a committee member be unavailable to attend any session of the IT governance board they may, with prior notice, send a proxy representative. The proxy member must have a thorough understanding of the operation, function and processes of the governance committee, ensuring there is no need to bring the proxy member “up to speed” during the meeting.

Any vote cast by a proxy member will be considered a valid and accurate representation of the member in absence and may not be reversed after the fact.

VI. Governance Ownership

It is recommended that the owner of the IT governance is the Executive Director of Information Services and Management. Furthermore it is recommended that, as the process owner, he chairs the governance board and is the individual who makes the final decision regarding how proposals shall be implemented.

As a University, we should use governance as an opportunity to change cultural aspects that lead to institutional improvement. The role of the Executive Director of ISM in this governance process must be clear and well defined. Otherwise, governance becomes a question of who is responsible for making technological decisions regarding the University’s strategic plan.

VII. Bibliography

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Appendix A:

The UDC IT governance committee shall be composed of three separate positions of responsibility. These positions are:

- Oversight
- Key Player
- Advisory

Each position offers a specific function to the committee, overall.

The **Oversight** role provides assurances that the committee is acting on the best interest of the University and in compliance with legal and regulatory requirements.

The **Advisory** role is primarily technical, but in all instances these individuals provide subject matter expertise to assist the committee in making project decisions. These members may be called upon to provide estimated levels of effort, feasibility analyses, or impact assessments for various projects proposed to the committee.

The **Key Player** is the voting member of the committee. Each has equally weighted voting rights and serves to empower the committee to make priority related decisions for ISM projects across the University.

Proposed governance committee members:

Advisory members

Stakeholder Name	Stakeholder Role	Position
Ronald Mason	President	Oversight
Shaina Cooper	CFO	Oversight
David Franklin	Deputy Chief Operating Officer	Oversight
Karen Hardwick	General Council	Oversight
Alfred Cavanaugh	ISM - Compliance	Oversight
Krishna Saraiya	Internal Auditor	Oversight

Voting Members:

Stakeholder Name	Stakeholder Role	Position
Dr. William Latham	Chief - SDS	Advisory
Patricia Johnson	VP – Talent Management	Advisory
Erik Thompson	VP - CARES	Advisory
Dwight Sanchez	AVP - Enrollment Management	Advisory
Brandon Russell	ISM - Engineering	Advisory
Leslie Pinyan	ISM - Applications	Advisory
Aloysius Regis	ISM - Telecommunication	Advisory
Shawn McCann	ISM - Software Development	Advisory
Troy Stovall	Chief Operating Officer	Key Player
Dr. Tony Summers	Chief Community College Officer	Key Player
Dr. April Massey	Dean- CAS	Key Player
Dr. Sabine O'Hara	Dean - CAUSES	Key Player
Dr. Devdas Shetty	Dean - SEAS	Key Player
Dr. Mohamad Sepehri	Dean - SBPA	Key Player
Shelley Broderick	Dean - Law School	Key Player
Dr. Tony Johnson	Dean – WWDL	Key Player
Dr. Marilyn Hamilton	Dean – Academic Affairs	Key Player
Dr. Hermina Peters	Dean – Student Achievement	Key Player
Maria Byrd	OPIE – Executive Director	Key Player
Mike Rogers	ISM – Executive Director	Key Player
Arlene King-Berry	Faculty Senate	Key Player