



Governance Framework

OVPUE IT
MAY 2016

OVPUE IT GOVERNANCE FRAMEWORK

Over the next two years the IT department in the Office of the Vice Provost for Undergraduate Education (OVPUE) will implement an IT Governance Framework (OITGF1) to:

1. advance IT accountability and strategic alignment;
2. optimize efficiencies, controls, and risk management;
3. guarantee quality of products and services;
4. and enhance value delivery

Measures articulated in OITGF1 are geared towards ensuring that OVPUE IT works on the right things, the right way, does them well, and gets the intended benefits.

GP1: ACCOUNTABILITY AND STRATEGIC ALIGNMENT

Aligning investment in IT with organizational *strategic objectives* reinforces IT's accountability to the goals of the organization and ensures that the institution derives optimum value out of its investment in information technology. IT resources and activities are channeled towards efforts that the institution identifies as priorities, answering the question '*is IT working on the right things?*'.

Strategic objectives in this context include goals established at Institutional, Campus, Responsibility Center (RC) and Program/Unit level. Examples include objectives presented in the Bicentennial Strategic Plan for Indiana University (IU), and IU Bloomington's implementation of it; the goals of the Office of the Vice Provost for Undergraduate Education (OVPUE); Program Unit strategic objectives, and the IU Strategic Plan for Information Technology (ITSP2/Empowering People).

GP1.1: PROMOTING STRATEGIC ALIGNMENT

To promote strategic alignment, projects in IT will follow a structured process that includes completion of project proposals stating the intended goals of the projects, and in what ways the proposed projects align with strategic objectives.

A sample Project Proposal Form for use in documenting proposed projects is shown in [Appendix A](#).

Project alignment with strategic objectives, alongside other listed factors, will facilitate the process of prioritizing projects. Strategic alignment will also provide validation for why IT investment should be made in the projects.

GP1.1.1: ROLE OF OVPUE LEADERSHIP

OVPUE leadership will appoint or endorse members of an IT Projects Prioritization Steering Committee (PSC). The Prioritization Steering Committee will comprise of representatives from units in OVPUE, that will serve for terms of stipulated lengths. Their task will be to assign priorities to OVPUE project-requests, for IT projects requiring significant development work.

The participation of the PSC will promote transparency in how IT projects are prioritized, and underscore OVPUE IT's accountability to the OVPUE and its units.

GP1.1.2: ROLE OF PRIORITIZATION STEERING COMMITTEE (PSC)

The PSC will meet with the Director and Associate Director of IT quarterly to: 1) obtain feedback on IT project-work conducted during the prior quarter, 2) receive updates on progress of projects underway in the current quarter, and 3) establish priorities on projects for the next quarter.

Project alignment with strategic objectives will be a significant factor to prioritization. A sample rubric for how this alignment will be determined is appended in [Appendix A](#). Information on proposed projects will be submitted to the PSC, organized in the rubric format. During the PSC quarterly meetings, metrics will be assigned for project prioritizations.

GP1.1.3: ROLE OF OVPUE IT

OVPUE IT will work with units in the project proposal compilation phase, to understand their needs and to provide support in completing the project proposals. IT will also propose possible solutions as options, give estimates of time and resources required, and provide assessments of the feasibility of proposals.

In meetings with the PSC, the Director of IT and Associate Director of IT will assist in bringing clarity to what proposed projects would entail, as well as highlight other extenuating factors that may not be captured explicitly in the project proposal documents under review.

GP1.2: PROMOTING ACCOUNTABILITY

In addition to promoting IT accountability through aligning investment in IT with strategic objectives, OITGF1 emphasizes accountability through transparency and clarity on decision-making in IT.

GP1.2.1: TRANSPARENCY

To establish program leadership that are informed on how OVPUE is leveraging and deriving value out of IT, the IT department will issue quarterly communications to unit heads highlighting its work during the preceding 3 months. The communications will outline how the work aligns with strategic initiatives and goals, as well as what the projected work for the ensuing 3 months will be.

IT will also maintain a publicly accessible website with up-to-date information on development, data, and support-related projects.

GP1.2.2: DECISION MAKING

OITGF1 includes an established structure for making IT-related decisions. The matrix of what roles make each type of decision is shown in [Appendix B](#), alongside the definition of what each role and decision domain entails.

GP2: EFFICIENCY, CONTROLS AND RISK MANAGEMENT

To answer the question *'is IT doing things the right way?'* OITGF1 mandates the use of industry recognized standards, frameworks and methodologies where applicable - for formulation of processes used across portfolios in OVPUE IT. OITGF1 is itself framed after the COBIT and ValIT governance frameworks, with defined mechanisms for monitoring and evaluating the effectiveness of the governance process.

GP2.1: MANAGING THE GOVERNANCE PROCESS

Following the COBIT framework, the IT governance process will itself be managed and maintained as follows under OITGF1:

G2.1.1: ESTABLISH EFFECTIVE GOVERNANCE MONITORING

The Value Governance Maturity Model ([Appendix C](#)) and the Investment Management Maturity Model ([Appendix D](#)) will be used to identify the level at which practices in OVPUE align with value governance. The findings of this monitoring process will establish a basis upon which

corrective action can be applied to the governance process itself, to buttress areas requiring attention.

GP2.1.2: CONTINUOUSLY IMPROVE GOVERNANCE PRACTICES

The Value Governance Maturity Model and the Investment Management Maturity Model will also be used to set subsequent goals for value management, based on the findings of governance monitoring activities and recommended action steps. The ValIT matrix referenced in [Appendix E](#) will serve as a resource for determining and formulating action steps for improving the governance practices.

GP2.1.3: ALIGN AND INTEGRATE GOVERNANCE WITH FINANCIAL PLANNING

The value delivery of IT services and products, as a factor of the financial investment made in IT, will remain a core tenet of the governance process. This necessitates structuring of IT activities in evaluable ways to facilitate detailed analyses of the time spent, and expenses incurred, in supporting different units and software, and in developing products. *'Doing things the right way'* enlists, as a component, an accounting of IT operations in fiscal terms. OITGF1 mandates the evaluation of IT activities in monetary terms.

GP2.2: MANAGING PORTFOLIOS IN OVPUE IT

[Appendix F](#) shows OVPUE IT's org chart. It is structured to provide services through four distinct portfolios, each representing areas that require specialized measures and governance controls.

The IT portfolios are as follows:

GP2.2.1: Web Communications

The Web Communications portfolio has oversight of websites, multimedia, and social networking support for OVPUE units.

'Doing things the right way' for Web Communications includes conducting projects in a structured way, where collaboration with stakeholders is valued. It factors in use of website frameworks, for efficiencies in production; coding and web standards; use of established visual design elements and principles, and best practices for information architecture.

GP2.2.2: Support Services

The Support Services portfolio assumes direct support of OVPUE end-users; vended and OVPUE-developed software; hardware, server and infrastructure support; and management of OVPUE-wide tools, plus the enforcement of policies.

'Doing things the right way' for Support Services includes use of an industry standards-based IT security framework for risk mitigation, the OVPUE IT Security Framework (OITSF1) - based on NIST standards and the UITS IT Security Framework. It also includes a structured change management process, for scheduling and documenting changes to servers and systems; a workflow for ticketing, processing and escalating requests; procedures for access granting and revocation; inventorying of software and hardware; and a documented and regularly revised disaster recovery plan (DRP), maintained in the designated IU Ready system.

GP2.2.3: Application Services

The Application Services portfolio enlists all OVPUE-owned software projects, including those inherited, purchased, or hosted on OVPUE servers.

'Doing things the right way' for Application Services includes use of agile methodology for software development, use of coding and accessibility standards, building-in adequate software testing into the development process, and using industry recommended DevOps practices.

GP2.2.4: Data Services

The Data Services portfolio includes services for data reporting; decision support; data integrations; and extract, transform, load (ETL) transactions in support of all OVPUE units.

'Doing things the right way' for Data Services includes conducting the necessary checks to verify the accuracy of results.

GP3: QUALITY OF PRODUCTS AND SERVICES

To ensure quality of products and services, and in response to the question *'is IT doing things well?'*, OITGF1 establishes metrics and processes for evaluation of products and services. [Appendix G](#) shows a list of metrics applicable for use during such evaluations.

Periodic surveys will be administered for overall quality baselines, and a culture of welcoming feedback from OVPUE units will be nurtured.

Specific measures for each portfolio will include the following:

GP3.1: QUALITY OF WEB COMMUNICATION SERVICES

The ongoing quality and value metrics for this portfolio include unit satisfaction with development and support projects; metrics of outreach and multimedia campaigns; usability ratings and mobile-readiness ratings for websites; unit satisfaction with ongoing support of information architecture and design for websites in maintenance, and focus group feedback on the quality and usability of websites.

GP3.2: QUALITY OF SUPPORT SERVICES

The ongoing quality and value metrics for this portfolio include unit and staff satisfaction with software and hardware support; help-ticket time to completion and time invested in completion; server availability and performance metrics, and reporting from OVPUE-wide surveys.

GP3.3: QUALITY OF APPLICATION SERVICES

The ongoing quality and value metrics for this portfolio include unit and staff satisfaction with development and support projects; metrics of added efficiencies (in time or expense) from software and software improvements; reporting on added efficiencies from reusable code, software, and data; and focus group feedback on the quality and usability of public-facing applications.

GP3.4: QUALITY OF DATA SERVICES

The ongoing quality and value metrics for this portfolio include unit and staff satisfaction with data projects; help-ticket time to completion and time invested in completion, and reports on the availability of data required for business processes.

GP4: VALUE DELIVERY

Post product implementation and service delivery evaluations will be conducted to assess whether intended outcomes for IT projects and initiatives were met. Key to this assessment is the gathering of intended goals for projects during the project-proposal phases of undertakings. Establishing how well intended outcomes were met forms a basis for evaluating the value delivery of IT to the organization.

APPENDIX

APPENDIX A – PROJECT PROPOSAL RUBRIC

Project Details

Department

What are the goals of the project? How will students, faculty, and staff benefit from it? How can we measure success at achieving these goals?

Strategic Alignment

How does the project align with the IU Bicentennial Plan Priorities?

How does the project align with the IU Bloomington Bicentennial Objectives?

How does the project align with OVPUE strategic objectives?

How does the project align with Unit objectives?

Other Factors (Y/N)

Innovative Idea (staying ahead of industry)?

Innovative Idea (keeping up with industry)?

Time Savings?

Cost Savings?

Customer Experience Improvement?

Reputation Improvement?

Proposal Specifics

Project Name and Version Number:

Department:

Project Manager:

Meetings Will Include:

Optimal Release Date:

Acceptable Release Dates:

Project Type:(New Development Project, Modification to Existing Development Project, New Version of Existing Development Project, Decommission Project, Implementation of Licensed Software/Application Project

Documentation/Establishing Metrics on Existing Project)

OVPUE IT Details

Development Time Estimate: (in person-weeks)

Development Cost Estimate: (person-weeks * \$1.7k + additional costs)

Maintenance Estimates

Data Classification

APPENDIX B – IT GOVERNANCE MATRIX

GOVERNANCE ARCHETYPE	IT DECISION DOMIAN					
	Principles	Architecture	Infrastructure Strategies	Business Application Needs	Investment	Operations
OVPUE Leadership						
IT Leadership						
OVPUE Units						
IT Leadership AND OVPUE Units						
IT Professionals						

IT DECISION DOMAINS

PRINCIPLES:

What the role of IT in the organization is; How the IT operation will be funded

ARCHITECTURE:

Underlying models/designs for facilitating a consistent and coherent approach to delivery of IT capabilities in support of business processes across the organization. This references IT architecture and not the systems architecture of particular systems and applications.

INFRASTRUCTURE STRATEGIES:

Strategies for what infrastructure to leverage across the organization to implement and support the articulated IT architecture

BUSINESS APPLICATION NEEDS: Specifications for applications required for business processes that standard/available applications fail to meet

INVESTMENT: How investment in IT portfolios and in initiatives across the organization is distributed

OPERATIONS: Execution/implementation-level decision making

GOVERNANCE ARCHTYPE

OVPUE LEADERSHIP: Business Monarchy - The leadership of the Office of the Vice Provost for Undergraduate Education

IT LEADERSHIP: IT Monarchy- IT leadership in the Office of the Vice Provost for Undergraduate Education

OVPUE UNITS: Federal- The academic/business units of the Office of the Vice Provost for Undergraduate Education

IT LEADERSHIP AND OVPUE UNITS: IT Duopoly- IT leadership in collaboration with academic/business units

IT PROFESSIONALS : Feudal- IT professionals responsible for carrying out IT operation

APPENDIX C – VALUE GOVERNANCE MATURITY MODEL

Page 26 - Resource: <https://www.isaca.org/Knowledge-Center/Val-IT-IT-Value-Delivery-/Documents/Val-IT-Getting-Started-Jul-2008.pdf>

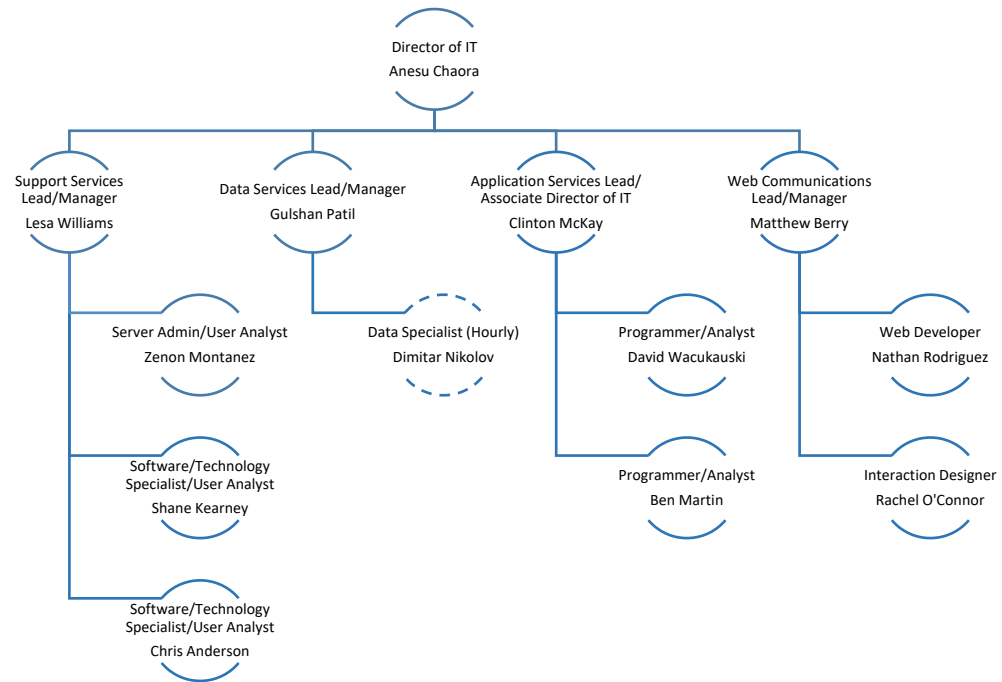
APPENDIX D – INVESTMENT MANAGEMENT MATURITY MODEL

Page 28 - Resource: <https://www.isaca.org/Knowledge-Center/Val-IT-IT-Value-Delivery-/Documents/Val-IT-Getting-Started-Jul-2008.pdf>

APPENDIX E – APPROACHES FOR ADDRESSING GOVERNANCE DEFICITS

Page 20 – Resource: <https://www.isaca.org/Knowledge-Center/Val-IT-IT-Value-Delivery-/Documents/Val-IT-Getting-Started-Jul-2008.pdf>

APPENDIX F – OVPUE IT ORG-CHART



APPENDIX G – PROJECT EVALUATION

1. Match between app and the real world
2. Aesthetic
3. Minimalist design
4. Pleasurable interaction
5. Respectful interaction
6. Consistency
7. Safety
8. Utility
9. Task migratability
10. Task conformance
11. Effectiveness, efficiency
12. Effort
13. Ease of learning (the user)
14. Task efficiency
15. Ease of remembering
16. Understandability
17. Subjective satisfaction
18. Robustness
19. Learnability (of the app, not the user!)
20. Generalizability
21. Simplicity
22. Feedback
23. Responsiveness
24. Recoverability
25. Others! Discuss.