Playing Nice Together: Developing IT Governance in a Large, Biomedical Institution

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Objectives for Today

1. Understand what IT Governance Structure is and how it should work;

2. Understand the role and importance of an IT Governance Structure in aligning IT investment decisions with an organization's overall strategic objectives;

3. Understand how an organization's strategic direction can shape its IT Governance Structure.

4. Understand how an IT Governance Structure shapes the roles and responsibilities of executive management and the CIO, and how it impacts related IT strategic planning processes.

What is an IT Governance Structure?

- An IT Governance Structure specifies "the decision rights and accountability framework to encourage desirable behavior in the use of IT";

- Behaviors, not strategies, create value;

- Governance describes both who **makes** the decisions and who has **input** into the decision making process;

- A governance structure must address:
  - **What** decisions must be made to ensure effective management and use of IT?
  - **Who** should make these decisions?
  - **How** will these decisions be made (i.e., the process question) and monitored (i.e., the accountability question)?

- Every organization has some type of governance structure (even if it's by default) . . . but clearly some are more effective than others.

Weil, Peter and Jeanne W. Ross, IT Governance

Political archetypes can describe various types of IT governance structure.

Archetype	Who has decision or input rights?
1. Business Monarchy	Led primarily by top business executives
2. IT Monarchy	Led primarily by top IT executives
3. Feudal	Each business unit makes independent decisions
4. Federal	Combination of corporate executives and business units with or without IT involvement
5. Duopoly	IT Executives one-on-one with another group
6. Anarchy	Isolated individual or small group decision-making

5 Key Decisions constitute the IT Governance process.

1. IT Principles	**High level statements about how IT is used in the business**
2. IT Architecture	**Organizing logic for data, applications, and infrastructure captured in a set of policies, relationships, and technical choices to achieve desired business and technical standardization and integration**
3. IT Infrastructure	**Centrally coordinated, shared IT services that provide the foundation for the enterprise's IT capability**
4. Business Application Needs	**Specifying the business need for purchased or internally developed IT applications**
5. IT Investment and Prioritization	**How much and where to invest in IT, including project approvals and justification techniques**

Governance Model for Government/Not for Profit, Professional Services & Healthcare Enterprises

	Principles		Infrastructure		Architecture		Business Applications		Investment and Prioritization	
	Input	Decision	Input	Decision	Input	Decision	Input	Decision	Input	Decision
1. Business Monarchy										36%
2. IT Monarchy				58%		67%				
4. Federal	86%		66%		49%		82%	43%	95%	24%
5. Duopoly		37%			42%					31%

Weil, Peter and Jeanne W. Ross, IT Governance
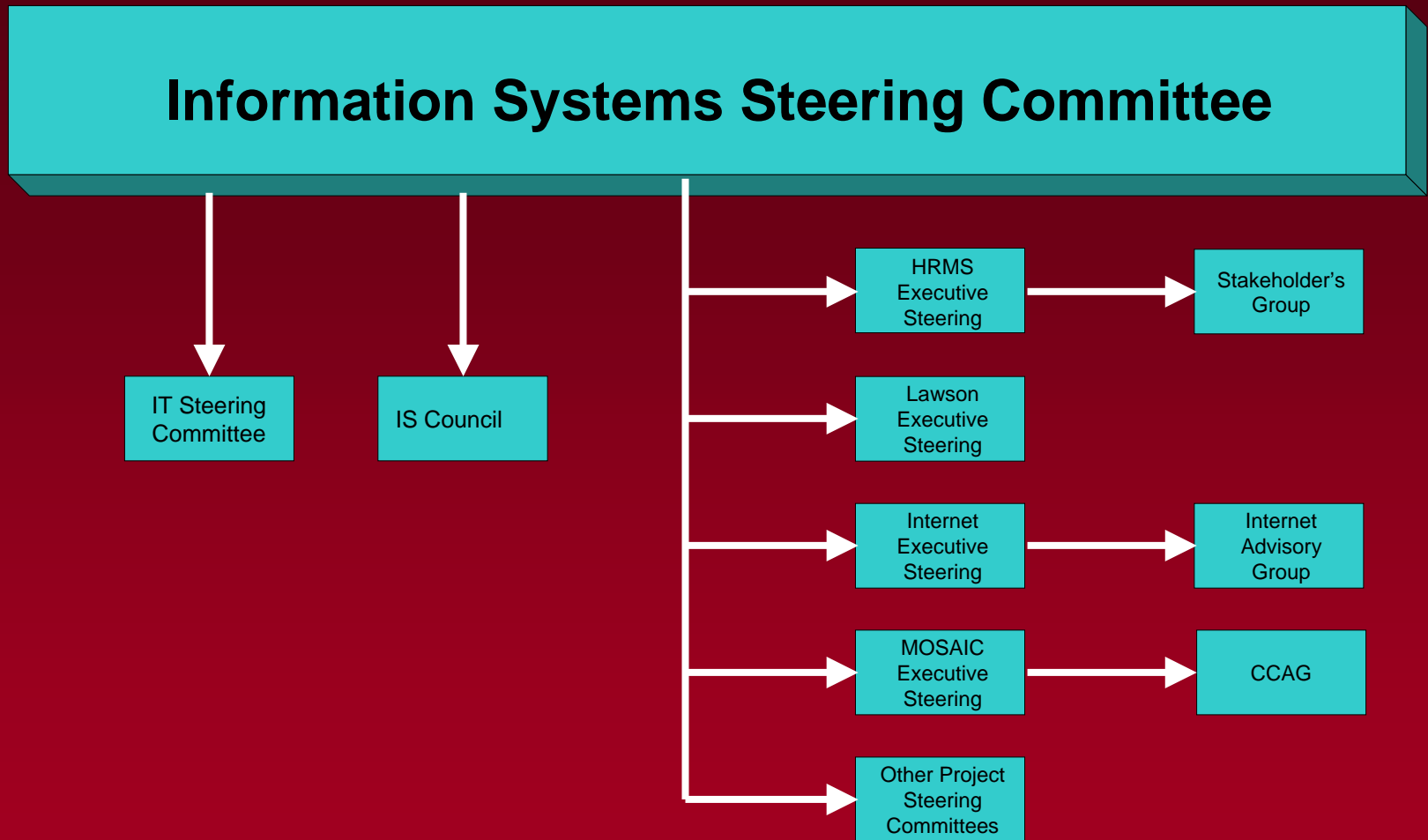
There are 3 major mechanisms for implementing IT Governance.

1. **<u>Decision-making structures</u>** – responsible for making IT decisions (committees, executive teams, and business/IT relationship managers.

2. **<u>Alignment processes</u>** – formal processes for ensuring daily behaviors are consistent with IT policies (investment proposal and evaluation, architecture exception processes, service-level agreements, chargeback and metrics).

3. **<u>Communication approaches</u>** – announcements, advocates, channels and education that disseminate the governance principles, policies and outcomes of the decision-making processes.

Concerns of M. D. Anderson's Executive Management

1. Effective IS governance structure

2. Clear and credible institutional IS strategy

3. Well-coordinated IS projects

4. Substantial realized value through major projects

5. Relationship between central and distributed IS organizations

Historical IT Governance Structure at MDACC

Information Systems Steering Committee

- IT Steering Committee
- IS Council
- HRMS Executive Steering → Stakeholder's Group
- Lawson Executive Steering
- Internet Executive Steering → Internet Advisory Group
- MOSAIC Executive Steering → CCAG
- Other Project Steering Committees

Initial Steps to Address Concerns . . . and Enhance Value

- Establish the Information Systems Executive Team (ISET):

  - Leon Leach, Executive VP (Chair)
  - Margaret Kripke, Ph.D., Executive VP & Chief Academic Officer
  - Tom Burke, M.D., Senior VP & Chief Operating Officer
  - Ben Melson, Senior VP & Chief Financial Officer
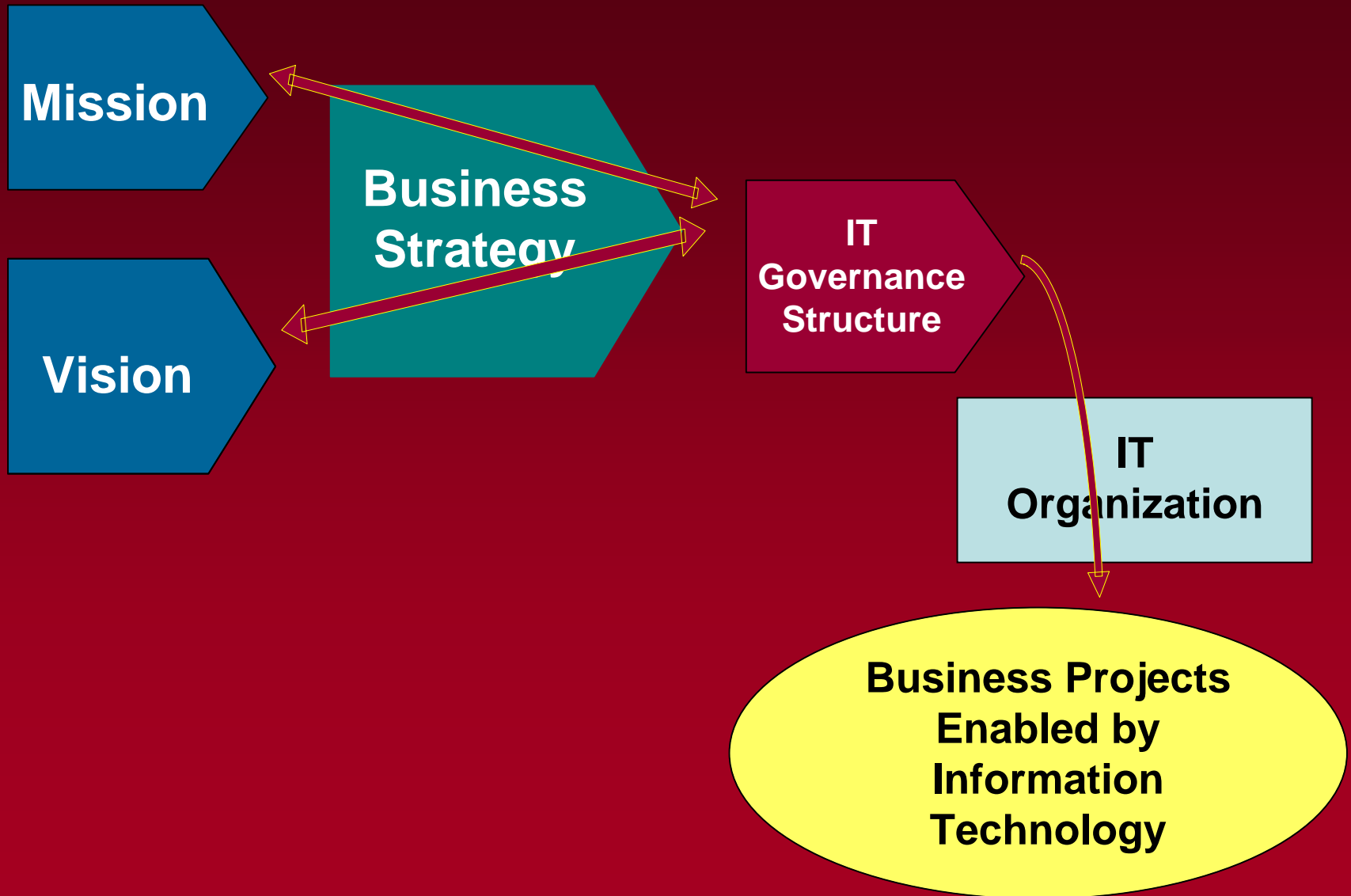 - Lynn Vogel, Ph.D., Chief Information Officer

Charter for the New Information Systems Executive Team (ISET)

- ISET's charge is to review:

    - IS Governance Structure
    - IS Strategic Planning Processes
    - Current Electronic Medical Record Strategies
    - Relationship of Central IS to distributed IS organizations

Criteria for selection of IT governance structures and mechanisms

- Is it simple?
- Are the right people involved?
- Are the structures empowered to act?
- Is it widely understood?
- Is it providing the desired behaviors?
- Does Accountability clearly follow Authority?
- Is there an appropriate "exception" process?

The "value" of IT investments is measured by the "strategic alignment test".

Mission

Vision

Business Strategy

IT Governance Structure

IT Organization

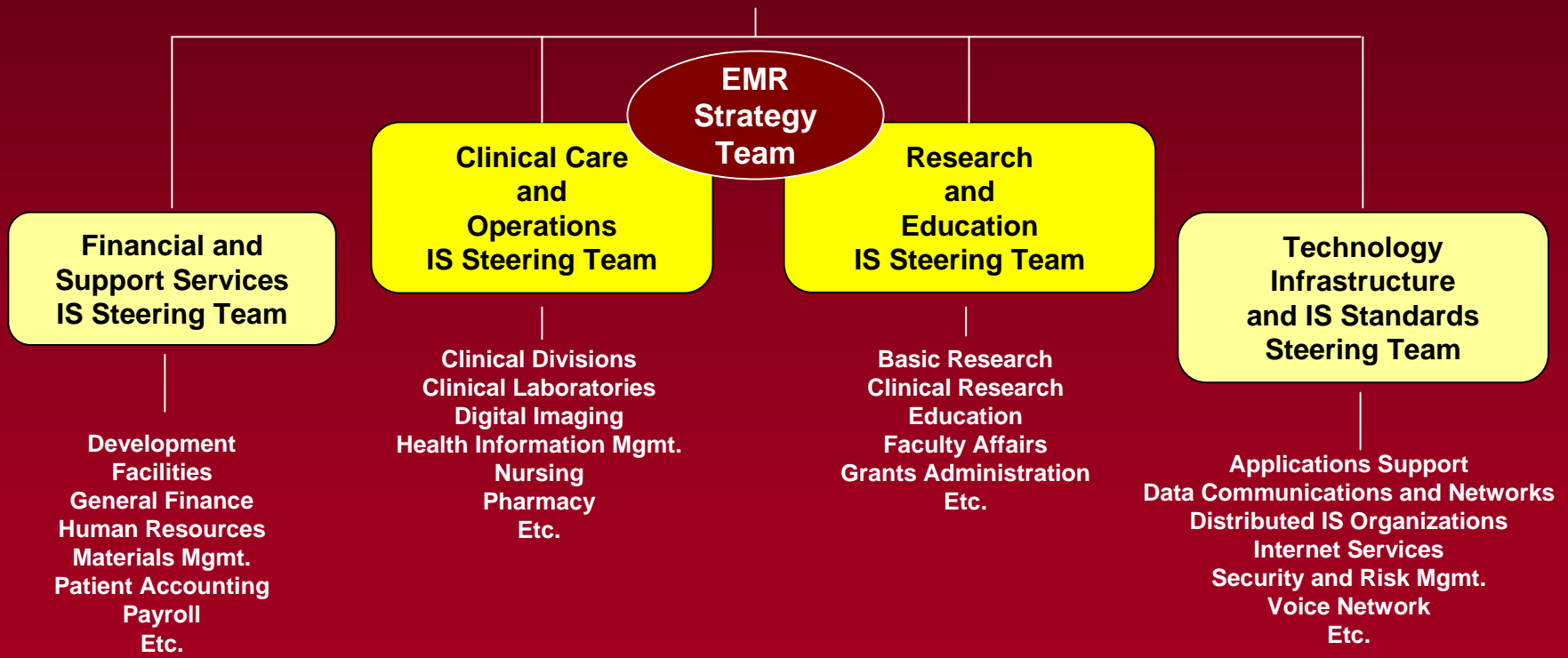Business Projects Enabled by Information Technology

Assumptions for New IS Direction

- IS investments are central to both research and clinical care;

- Organizational strategies drive IS strategies;

- A strong, disciplined approach is essential for the successful management of, and accountability for, IS investments;

- Significant integration is needed across areas and for enterprise-wide and departmental IS priorities, with a focus on decisions made close to constituent areas;

- The development of IS standards, policies and procedures needs to be both participatory and institution-wide.

Current IS Governance Structure

Information Systems Executive Team (ISET)
Leon Leach, EVP, Chief Administrative Officer, Chair
Dr. Tom Burke, Physician in Chief – Dr. Margaret Kripke, Chief Academic Officer
Ben Melson, CFO – Dr. Lynn Vogel, CIO

EMR Strategy Team

Financial and Support Services IS Steering Team

Clinical Care and Operations IS Steering Team

Research and Education IS Steering Team

Technology Infrastructure and IS Standards Steering Team

Development
Facilities
General Finance
Human Resources
Materials Mgmt.
Patient Accounting
Payroll
Etc.

Clinical Divisions
Clinical Laboratories
Digital Imaging
Health Information Mgmt.
Nursing
Pharmacy
Etc.

Basic Research
Clinical Research
Education
Faculty Affairs
Grants Administration
Etc.

Applications Support
Data Communications and Networks
Distributed IS Organizations
Internet Services
Security and Risk Mgmt.
Voice Network
Etc.

Changes to
IS Project Funding and Priorities

- **ISET:**
  - Reviews previous project funding and results attained
  - Approves funding allocations for steering teams
  - Provides guidance on institutional priorities

- **Area Steering Teams:**
  - Participate in an ISET-defined strategic planning process
  - Prioritize projects in their area, and:
    - Receive funding allocations from the ISET
    - Oversee all IT initiatives
    - Evaluate results and success of projects

Guidelines for Team Membership

Participation

- **Ideal team size is 7-9**
- **No delegates or ex-officio members**
- **Sub-teams as needed**

Team Member Characteristics

- **High credibility**
- **"Thought" and "opinion" leaders**
- **Institutional and constituent view**

Cross-Representation

Each steering team will have representation from each of the other teams

Responsibility/Accountability for Team Participation

- **<u>Representation</u>** – represents the views of the institution, their constituents' and their own

- **<u>Communication</u>** – communicates clearly and consistently back to their departments

- **<u>Cooperation</u>** – participates in team decision making, and actively supports those decisions

- **<u>Stewardship</u>** – ensures the best use of people and financial resources

New Role to Support
the New Governance Process

- Each steering team will be supported by an **Area Information Systems Director**, who will:
  - ➤ Act as staff member for the team
  - ➤ Develop a deep understanding of the area's overall needs, strategy, etc.
  - ➤ Serve as initial point of contact for ideas and suggestions for IS projects within the area

- The Director will work with project executive sponsors to identify IS needs, appropriate resources, and synergies or overlaps with other projects

Standardized IS Planning Across Area Teams

- Initial focus on IS capital projects:
  - What are they?
  - How much is being spent?
  - Are they meeting their financial targets and program goals?

- Operational projects are more challenging:
  - Define "project"!
  - Proposed as "service requests"
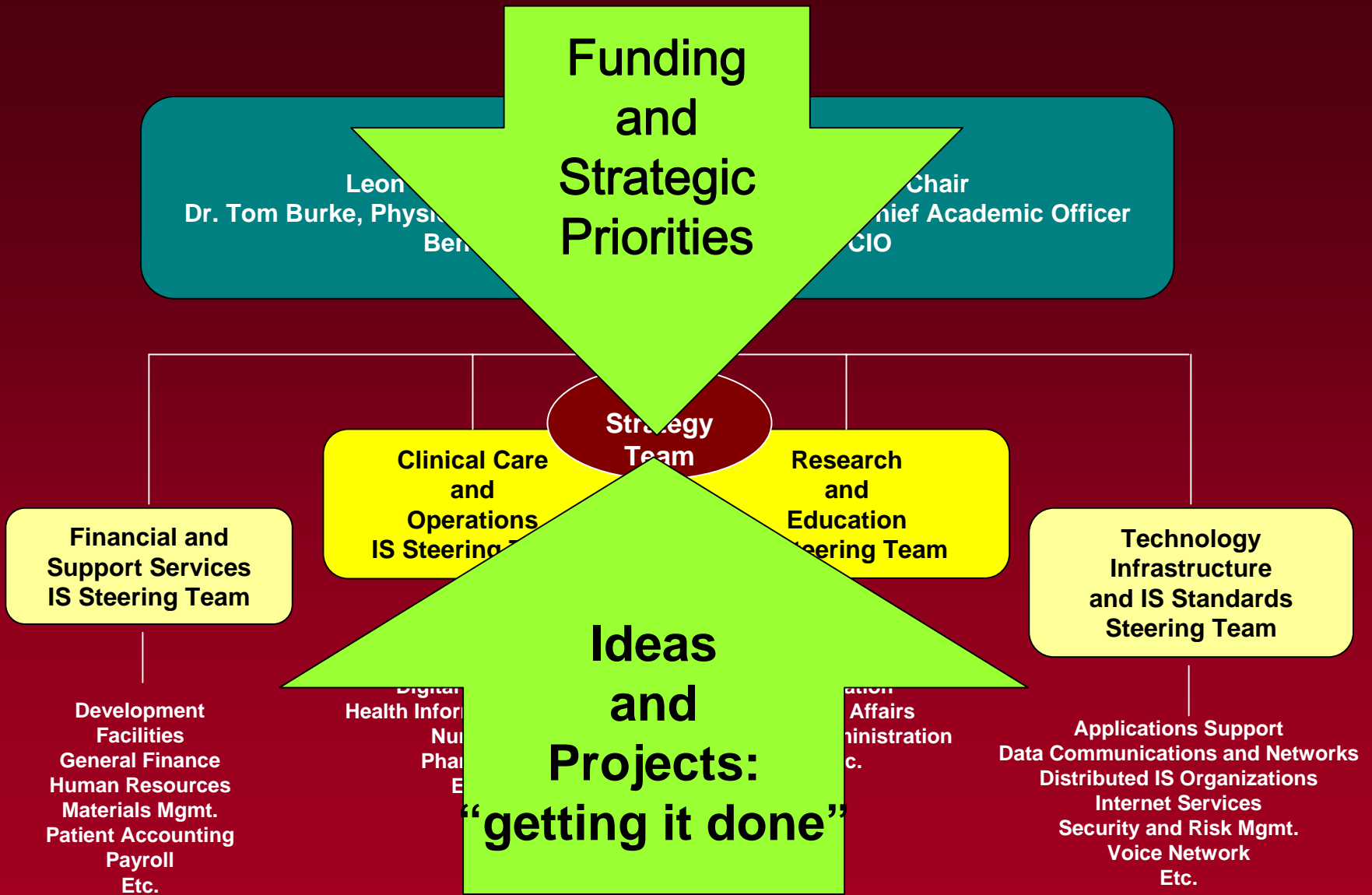 - Over time, can consume as many resources as capital projects

- IS capital equipment planning is included within purview of Area Teams

Project Support and Coordination Office

- Located within central IS, reporting directly to the CIO;

- Initial focus on project management, shifted to project support and tracking;

- Focuses primarily on two areas:
  - Assists in turning ideas into formal project proposals for review
  - Produces periodic, standardized financial reports on all IS projects for Area Teams and ISET.

Area Team Focus:
# Developing Project Priorities

- Area Teams and work groups prioritize projects;

- Prioritized project list presented to ISET;

- ISET approves/declines funding;

- Expenditures reviewed quarterly;

- IS planning consistent with institutional rolling eight-quarter budget management process.

Funding and Strategic Priorities

Leon
Dr. Tom Burke, Physi... ...Chair
Ber... ...Chief Academic Officer
...CIO

Strategy Team

Clinical Care and Operations IS Steering...

Research and Education Steering Team

Financial and Support Services IS Steering Team

Technology Infrastructure and IS Standards Steering Team

Ideas and Projects: "getting it done"

Development
Facilities
General Finance
Human Resources
Materials Mgmt.
Patient Accounting
Payroll
Etc.

Digital
Health Infor...
Nur...
Pha...
E...
...ation
...Affairs
...ministration
...c.

Applications Support
Data Communications and Networks
Distributed IS Organizations
Internet Services
Security and Risk Mgmt.
Voice Network
Etc.

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Outcomes of Changes in IT Governance: Increased Participation in IT Investment Decisions

	Previous	Current	Change
IT Staff	11	38	2.5 X
Non-IT Staff	17	144	7.5 X
	28	182	

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Outcomes of Changes in IT Governance: Fiscal Responsibility

%

Approved IS Capital Budget

Actual Expenditure
Projected

25
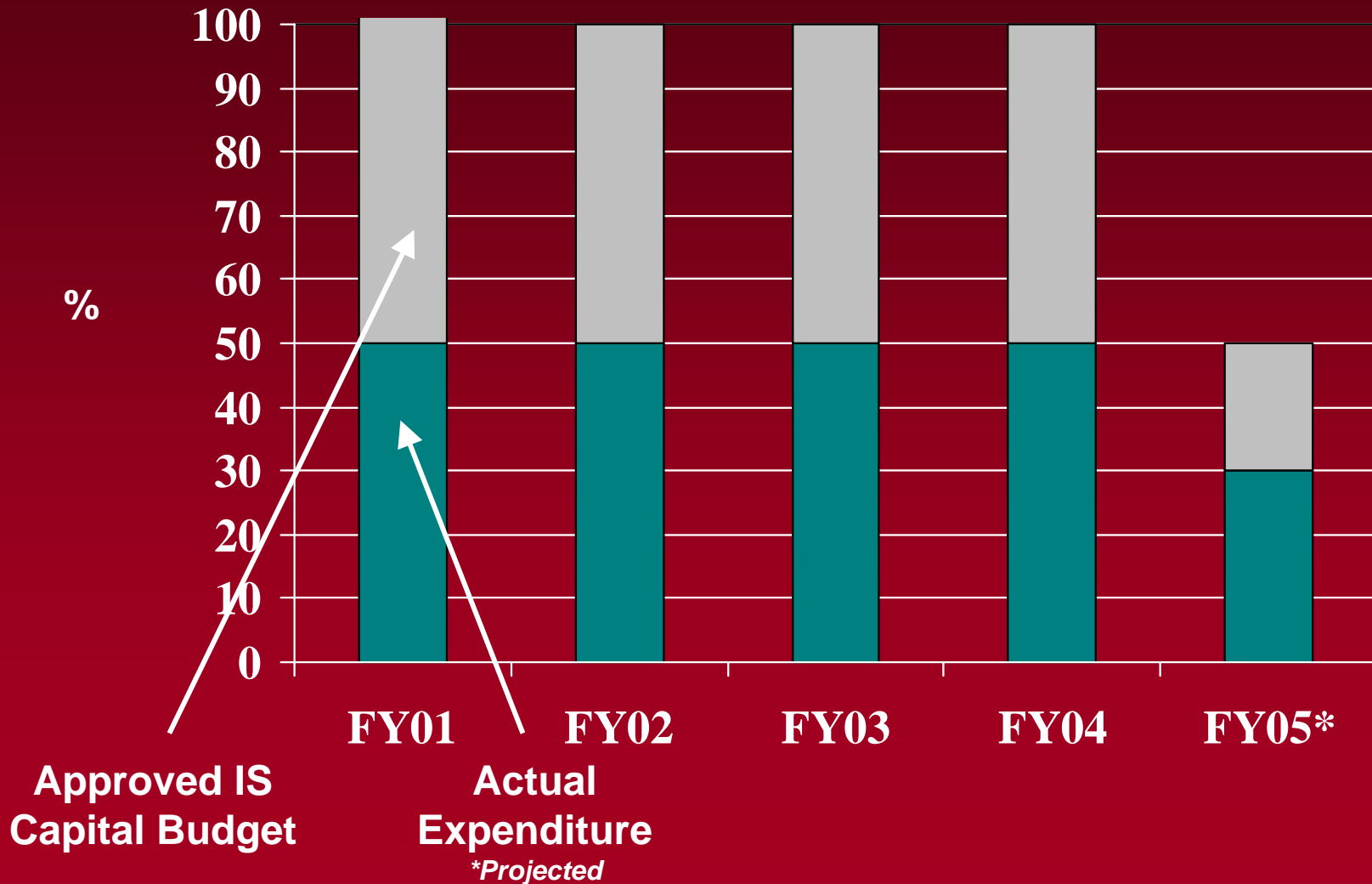
Important Lessons Learned and Keys to Success

- Developing policies and procedures is the easy part!

- Changing behavior is the hard part!

- Participation and leadership by senior executives, IS staff and users is essential;

- Physicians, researchers and ancillary staff must <u>all</u> be involved in the <u>entire</u> process

- Full implementation of a new IS Governance Structure is likely a 2-3 year process.
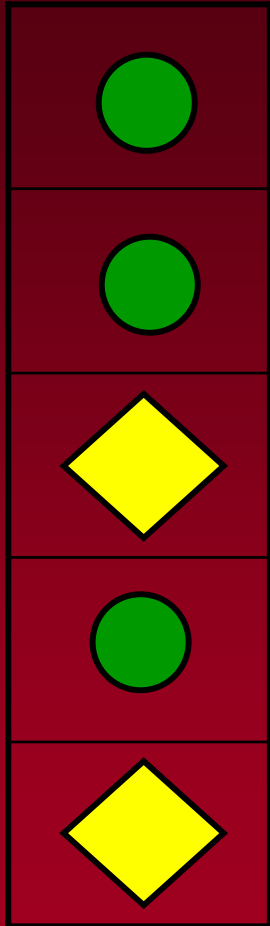
Scorecard for New Governance Structure
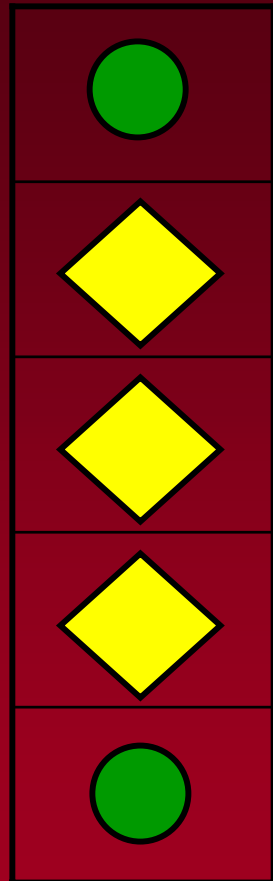
1. Effective IS governance structure

2. Clear and credible institutional IS strategy

3. Well-coordinated IS projects

4. Provide substantial value through major projects

5. Relationship between central and distributed IS organizations

● = successful   ◆ = proceeding cautiously

Scorecard for New Governance Structure

1. Central role of IS in research and clinical care;

2. Organizational strategies drive IS strategies;

3. A strong, disciplined approach to management of, and accountability for, IS investments;

4. Decisions about IS priorities empowered close to constituent areas, with significant integration across areas

5. An institution-wide, participatory approach to the development of IS standards, policies and procedures

● = successful   ◆ = proceeding cautiously

Thank You!

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