NETL's Strategic Structural Model

The Strategic Structural Model shows how an organization operates. NETL accomplishes its mission through Design, Measurement, Business Cycle, and Support. Design is where organization's plans are created and relationships built. Measurement is where the results are tracked and verified. The Business Cycle is where the organization's external results are produced. Support is the foundation that sustains the other three.
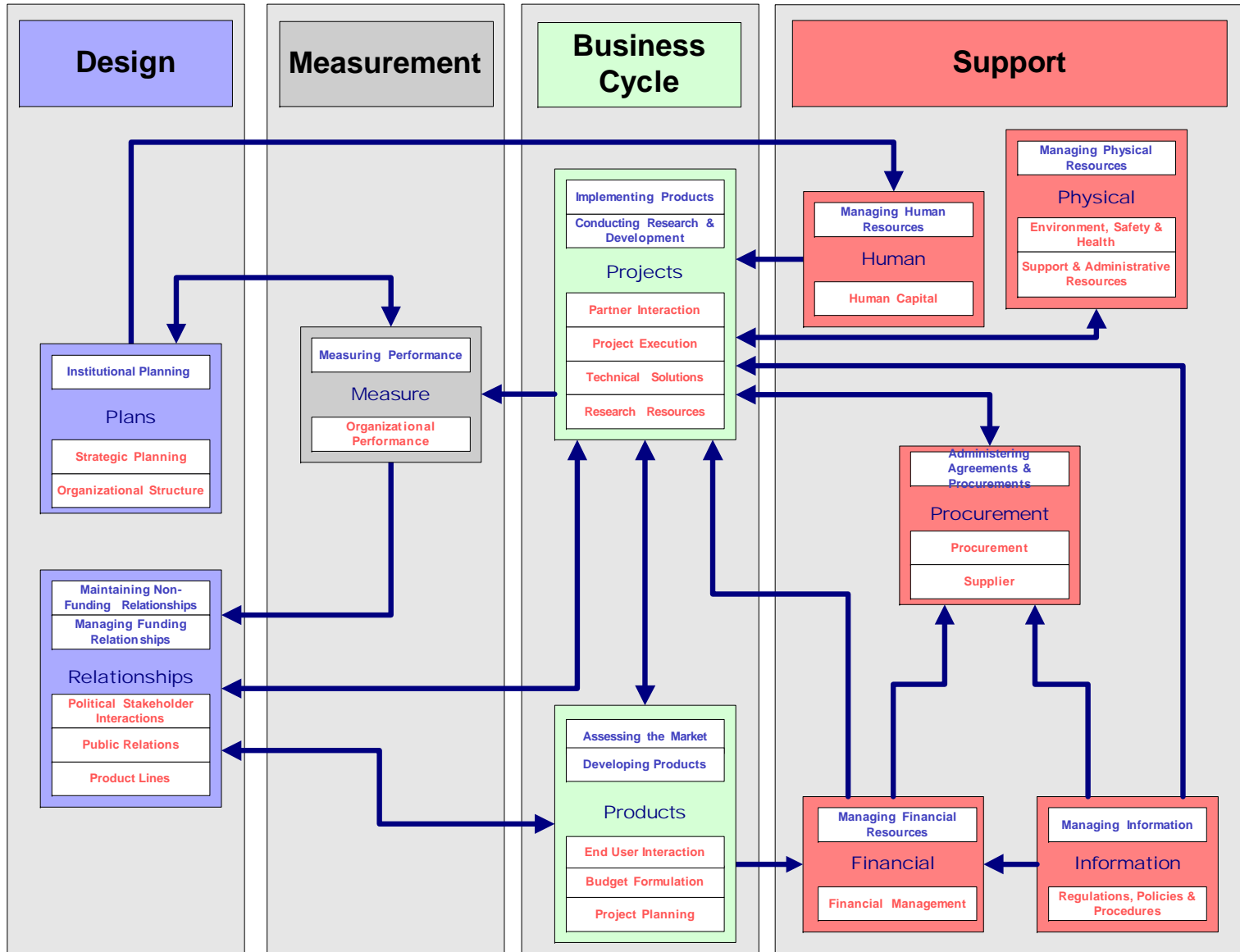
Hubs are created by the intersection of functions and information categories. The function(s) within an individual hub are the major creators of the information categories related to the hub.

The lines between hubs indicate the primary information flow. Specifically, a function located in one hub is using information generated in another hub. Most information categories are also used within the hub in which the information is created. The arrowheads indicate where the information was created and where the information is used.

The functions necessary to perform various organizational processes and the information created and used by those processes can be traced through the organization by analyzing the structural model.

The structural model also serves as the highest level framework under which more detailed functional activities and information elements can be defined.

Enterprise Architecture
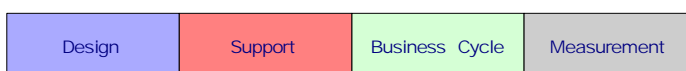# Strategic Structural Model

NETL

Design	Measurement	Business Cycle	Support

Support

Managing Physical Resources

Physical

Environment, Safety & Health

Support & Administrative Resources

Implementing Products

Conducting Research & Development

Projects

Partner Interaction

Project Execution

Technical Solutions

Research Resources

Managing Human Resources

Human

Human Capital

Institutional Planning

Plans

Strategic Planning

Organizational Structure

Measuring Performance

Measure

Organizational Performance

Administering Agreements & Procurements

Procurement

Procurement

Supplier

Maintaining Non-Funding Relationships

Managing Funding Relationships

Relationships

Political Stakeholder Interactions

Public Relations

Product Lines

Assessing the Market

Developing Products

Products

End User Interaction

Budget Formulation

Project Planning

Managing Financial Resources

Financial

Financial Management

Managing Information

Information

Regulations, Policies & Procedures

Design	**Support**	**Functions**
		Information Categories
Business Cycle	**Measurement**	Primary Information Flow

Operating Component View
Updated July 27, 2005

Enterprise Architecture – NETL Functions

Functions	Deliverable
Institutional Planning: The function by which NETL sets organizational goals and objectives to meet identified external and internal drivers and constraints.	Vision, Goals & Objectives for NETL
Maintaining Non-Funding Relationships: The function by which NETL engages in dialogue with the administration, our employees and on-site contractors, and the national, regional, and local citizenry.	Goodwill and understanding of general concerns and the political, social-economic environment
Managing Funding Relationships: The function by which NETL maintains relationships with current and potential funding providers.	Funding, positive corporate image and an understanding of funding provider needs
Assessing the Market: The function by which NETL determines demand for the laboratory's current and potential products and services.	Funding provider and end user needs which define funding opportunities
Developing Products: The function by which NETL designs the products and services of the laboratory.	Strategic plans for technology information, policy support activities and technical services to meet the needs of both funding providers and end users.
Implementing Projects: The function by which NETL implements, oversees and delivers products and services.	Tactical plans, implementation of those plans, and resulting documentation.
Conducting Research and Development: The function by which NETL conducts both internal and external computer simulation, laboratory, bench-scale, and pilot project research and development.	Technology information, prototypes, computer models, equipment and test facilities.
Managing Physical Resources: The function by which NETL manages its physical resources and infrastructure to enable the performance of the NETL mission.	Physical resources and infrastructure such as, office equipment, information technology infrastructure, test equipment, security systems, utilities, land, buildings and facilities.
Administering Agreements and Procurements: The function by which NETL enters into agreements or procurements with external parties which define expected action and/or outcome.	Contracts, financial assistance awards, CRADAs, funds-in agreements, MOUs, MOAs, interagency agreements, goods, services and technology information.
Managing Financial Resources: The function by which NETL manages financial resources through budget formulation, budget execution, and accounting.	Budget forecasting, tracking movement of funds, providing funds status and distribution
Managing Human Resources: The function by which NETL manages its human resources, such as hiring, developing, promoting, supervising and establishing roles and, responsibilities.	Competent and engaged work force sufficient to accomplish the mission.
Managing Information: The function by which NETL moves information to enable decision making and information sharing both within and beyond organizational boundaries.	Information Architecture including models of information flows and artifacts of business events.
Measuring Performance: The function by which NETL monitors, measures, and improves its performance.	High level metrics, office level metrics, other organizational measures leading to the effectiveness and efficiency of processes

Design	Support	Business Cycle	Measurement

Updated July 1, 2005

Enterprise Architecture – NETL Information Categories

Information Categories	Information Examples
Strategic Planning: Information resulting from the development of NETL's vision, mission, goals and objectives	Strengths, weaknesses, opportunities, and threats (SWOT) analysis, market analysis and trends, new major thrusts, core capabilities, organizational goals and success measures, resource targets and mix, mission/vision, and integration of product plans and business sectors
Organizational Structure: Information detailing the configuration of NETL, including how NETL shares information and develops internal relationships	Formal lines of authority (Organizational chart), roles and responsibilities, teams and work groups, organizational process definitions, information architecture, description of informal or formal internal communication relationships; information system strategies and requirements as captured in operations plans, individual work goals,
Political Stakeholder Interactions: Information describing the political and social-economic environment	List of political entities that have an interest in the Laboratory's activities. Political Stakeholder's needs, wants, perception, and satisfaction with NETL
Public Relations: Information NETL provides to the public and information the public provides to NETL	Press releases and other publications, Freedom of Information responses, community involvement information and communication from the public
Product Lines: Information detailing and relating to products and services offered by NETL	Marketing strategy, product plans, list of projects supporting the product, budget forecasts
End User Interactions: Information regarding relationships and interactions with the users of NETL's products and services	List of end users, end users' needs, wants, perception, and satisfaction with NETL, NETL's response to end users' inquiry and number of contacts with end users
Budget Formulation: Information required in developing the NETL budget	Congressional budget input, product manager input, management input, budget projection, OMB guidance
Project Planning: Information created in the project development process	Individual project plans, new project concepts, project background, scope of work, statement or work, expected cost, schedule and deliverables
Partner Interactions: Information defining the roles and responsibilities and communicating the status of the partnership	MOUs, MOAs, and CRADAS. Status of relationship and projects, including issues and actions
Project Execution: Information generated during the performance of a project	Actual cost, schedule and deliverables; project management decisions; project status
Technical Solutions: Technical information resulting from both in-house and contractor research and development activities	Partial or full technical solutions, technical knowledge, research results, intellectual property

Design	Support	Business Cycle	Measurement

Information Categories	Information Examples
Research Resources: Information about government owned physical assets used in the conduct of research and development	Listing of buildings, equipment and lab specifications and capabilities, inventories, values, locations
Support and Administrative Resources: Information about on-site government owned physical assets not used in the conduct of research and development	Listing of buildings, construction and maintenance plan, preventative and corrective maintenance schedules, site work plans, site and personnel security plans, geophysical data, computer equipment
Environment Safety and Health (ES&H): Information created to ensure the compliance with federal, state, and site ES&H regulations and policies	NEPA data, SARS review results, OSHA worker exposure records, chemical and material manifests, corrective actions, audit results, emergency preparedness response; occupational, safety and health examination data
Procurement: Information generated through obtaining products and services from external entities.	Definition of requirement(s), solicitation information, proposal reviews, contract negotiation discussion documentation, binding contract or financial assistance agreement, status of agreement, and contractor performance information
Supplier: Information generated as the result of the commodity buyer/supplier relationship	List of suppliers, list of products, past performance statistics, specifications and commodity descriptions
Financial Management : Information generated during the administration and tracking of the funding, beginning with allotment and ending with payment	Actual expenditure by cost element, payments, obligations, funds transfers, identification of responsibility or ownership of funds, account balances
Human Capital : Information related to hiring, developing, placing, retaining, and compensating employees	Recruitment and staffing, pay, benefits and leave data; performance and incentive awards, labor relations, training and employee development, discipline and position management
Regulations, Policies & Procedures: Information originating in regulations, policies and procedural requirements of NETL	Laws and regulations, Congressional guidance, Presidential Executive Orders, Industry standards, DOE orders and NETL directives, and other mandates and guidance. Includes approved delivery mechanisms and direction for which to use, such as, MOU, CRADA, contracts, internal procedures, and correspondence.
Organizational Performance: Information generated as a result of institutional performance measurements	External and internal performance assessment information as delivered though as Joule information, Program Assessment Rating Tool (PART) information, Gallup survey results, high level metrics, peer review data, and site-support contract performance measures

Design	Support	Business Cycle	Measurement

Updated July 1, 2005