



Bringing the Voice of Research Front & Center

IT Investment Decisions – Governance & Decision Making

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**U.S. DEPARTMENT OF
ENERGY**



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Guidance Questions

- How do you know what your research customers think of the services you provide?
- Do you know which of your services they find the most useful and the least useful?
- How do you solicit ideas for IT investments for your institution?
- Who makes the final investment decisions and what information do they use to make the decisions?
- Do you have different levels of investment with different scrutiny, such as M&O/New Projects/Lab Initiatives, and how engaged are you with the decisions at each of these levels?

Understanding Mission Needs

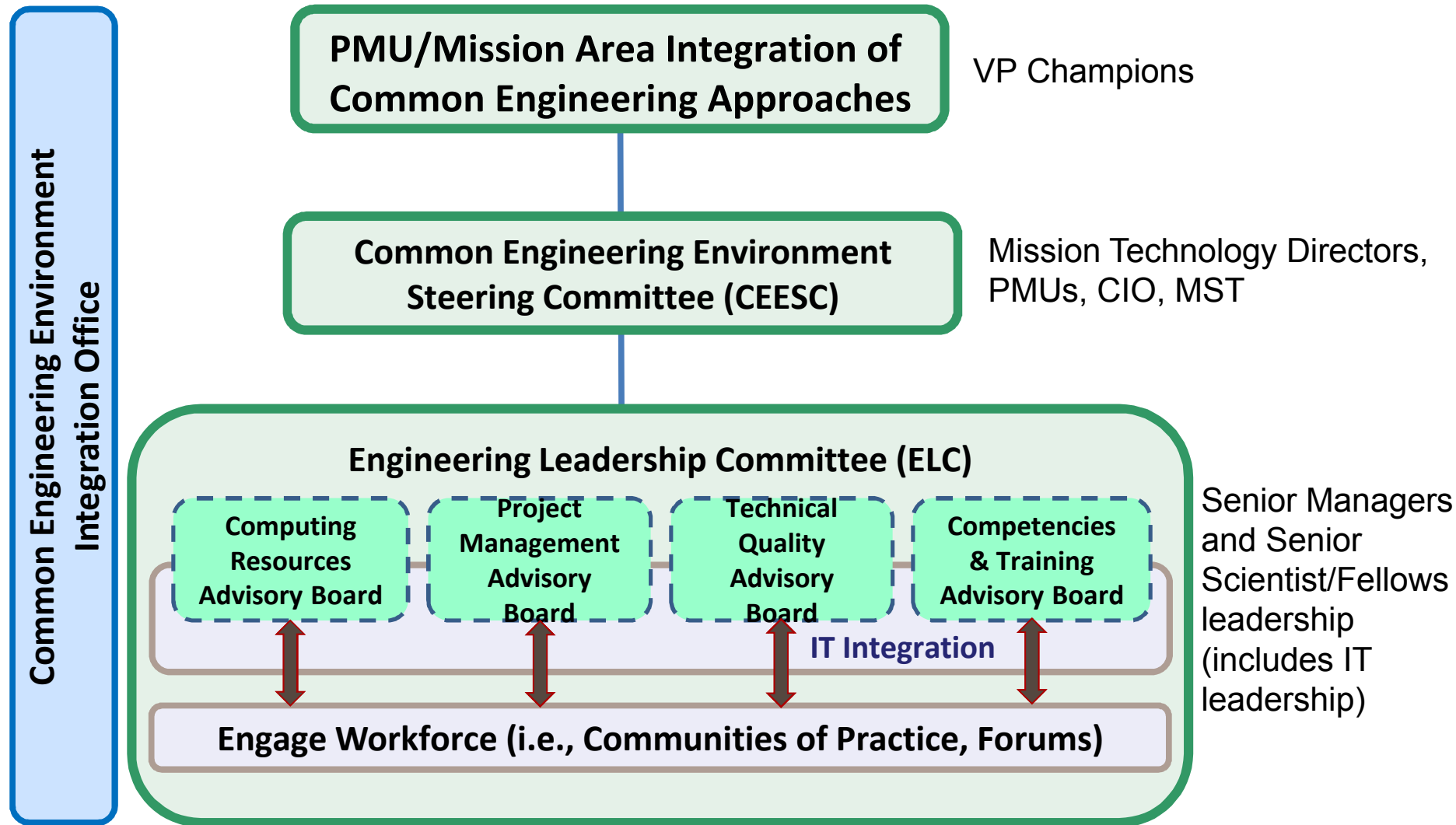
CIO Program Council

- New CIO – developing

Common Engineering Environment Initiative

- Corporate Strategic Objective
- Formalized sustainment

Structure for Common Engineering Environment Sustainment





CEE Common Engineering Environment

[Computing Resources](#)[Project Management](#)[Engineering Quality](#)[Competencies & Training](#)

Access computing resources

Are you trying to decide what software to use for your scientific or engineering project, or wondering how to get access to collaboration project space, remote graphics workstations, or [HPC](#) clusters?

[Find software or hardware by category](#)
(e.g., modeling & simulation) »

Ensure quality work

Are you doing everything you should do to produce quality work? View the recommended tools, training, procedures, and best practices to ensure the highest quality in every phase of your product lifecycle.

[Browse engineering quality resources »](#)

Manage your projects

View the recommended software tools, processes, training, and corporate resources for engineers who manage projects.

[Find PM software for configuration, requirements, and risk management; cost estimation; and more »](#)

Keep your skills up-to-date

Sandia has identified competencies (knowledge, skills, and abilities) for various engineering roles. Learn what competencies and training you need to succeed in your job.

[Browse competencies and related training in a program area or job role »](#)

and software, support services, best practices, processes, and training for all engineers and scientists. Connect with other Sandia engineers through communities of practice, and tap into MySites to perform a skill search to find colleagues with a particular skill or subject matter expertise.

CEE is brought to you by the [Common Engineering Environment Steering Committee](#)—the governing body that standardizes Sandia's engineering resources to enable lab-wide efficiencies, a disciplined approach to engineering, and an integrated engineering environment with easy access to tools and capabilities.

Download the [CEE Briefing](#) presentation and [An Intro to CEE](#) handout to learn more about the what and why behind CEE.

[Connect with other Sandia engineers](#)[Sandia External News Releases](#)

Future Indicators of Efficiencies

CEE KPIs

- Ease of access and individual customer demand
- Customer usage and total demand
- Completeness of the suite of tools available versus others that may be needed
- Centralization versus staff owned/supported

Resultant Metrics

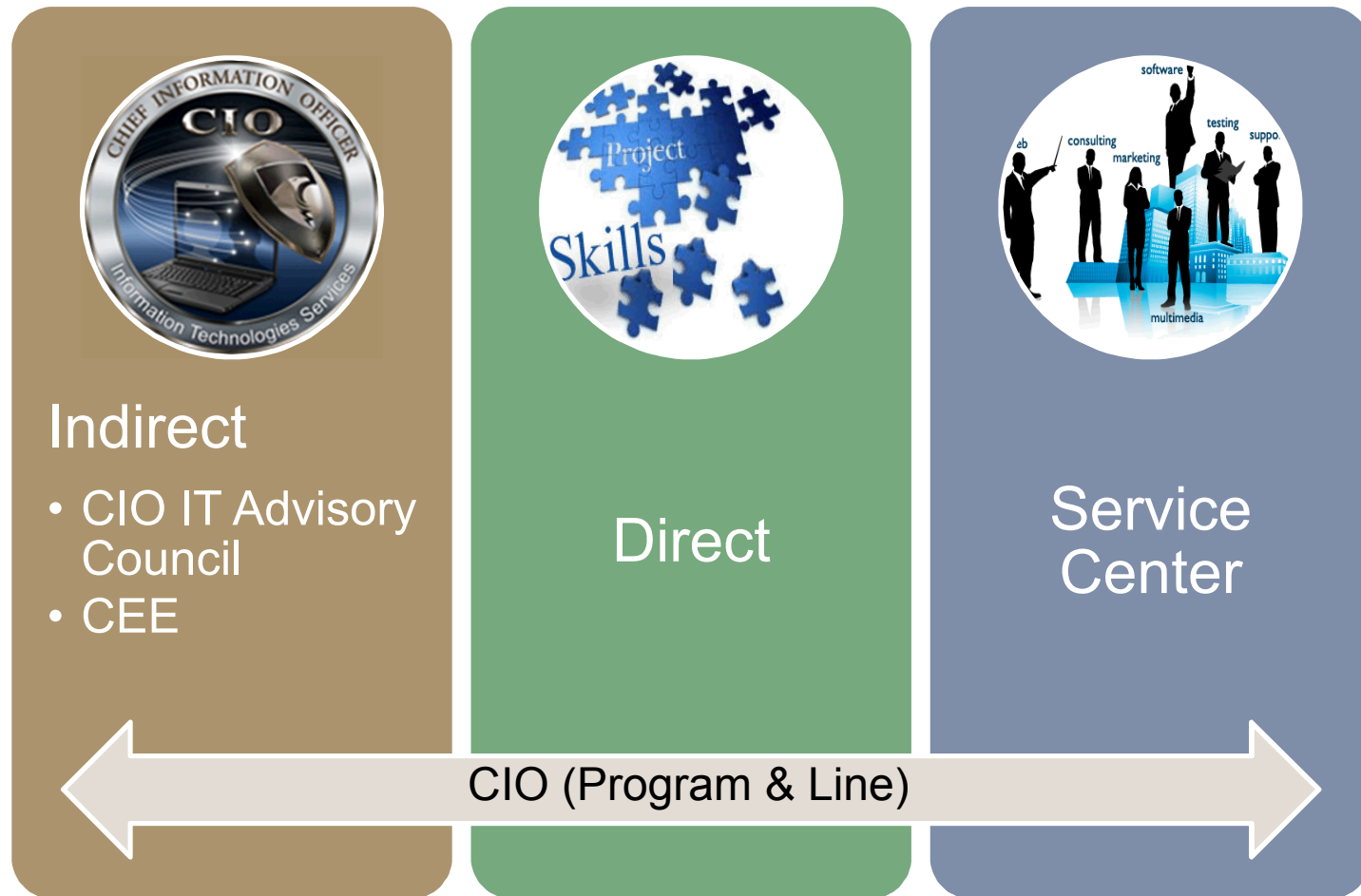
- Number of CEE downloads
- Number of shared licenses
- Trend of non-CEE licenses purchased through SAMS
- Cost avoidance estimate

Causal Metrics

- What's available and what is being used that is available:
 - Preferred engineering best practices
 - Processes
 - Training Courses
 - CEE Tools
 - CEE software tools
 - Support services

Decision Time

New IT Investments



Decision Principles

- Does it directly manage or reduce corporate risk associated with critical business needs and/or mandated external requirements?
- Does it implement a decision made by Mission Support or Lab Leadership, and does this directly support Lab strategic objectives?
- Does it have broad organizational impact (e.g., does it reduce work burden on organizational managers)?
- Does it move from data to information to support decision making?
- Does it integrate various functions and policy areas, creating greater mission value and enabling an integrated system solution?

Investment Selection Criteria based on CIO Objectives

PROPOSAL STRATEGIC ALIGNMENT	
MISSION VALUE	
Is this project required or mandated?	[Explain]
Does this project support SNL's strategic objectives or have broad organizational impact?	[Explain]
Is this an urgent need for the Corporation?	[Explain]
Is there a positive return on investment?	[Explain]
TECHNOLOGY INNOVATION	
Will it create or advance a relevant, differentiating IT capability for Sandia?	[Explain]
What is the impact of the proposed technology?	[Explain]
How are business rules and/or processes impacted?	[Explain]
REDUCE RISK	
Is the project well-defined and sponsored?	[Explain]
What is the impact to the cyber security posture?	[Explain]
What is the technology maturity, complexity, and the SNL's experience with it?	[Explain]

Next Steps

- Develop Principles and Selection Criteria for Non-Indirect work
- Front Door to IT Services
 - Service Catalog
- ITERATE!