Starting Over
Planning For A New Child Support Enforcement System
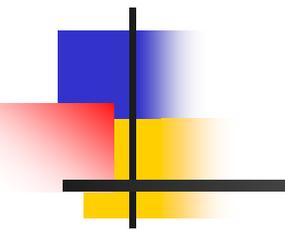
A Description and Discussion

Today's Panelists

Eileen Coughlin,
New Jersey's Office of Child Support and Paternity

Nancy Starling Ross,
PSI Technologies, Inc

Joe Bodmer,
Federal OCSE
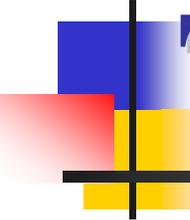
The Planning Phase

The Planning APD
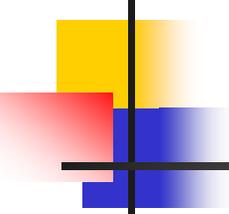
Purpose of a Planning APD

First: a planning APD provides the federal government with the initial start-up data necessary to fund a state's planning activities for a new automation project

Second: an APD provides the state and federal agencies with the kind of high level data generally used to monitor a project's progress
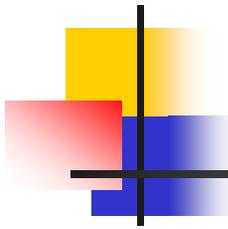
Types of APD's

Two Major Types of APD Submissions

Planning APD

Used to seek reimbursement for planning costs

Implementation APD

Used to seek reimbursement for costs of designing, developing, and implementing a system
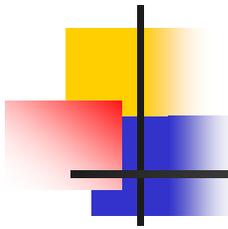
Planning APD

Generally used in support of major system development projects, as opposed to less complex computer acquisitions like hardware and software buys

This is a brief document of usually not more than 15-30 pages

Elements of a Planning APD
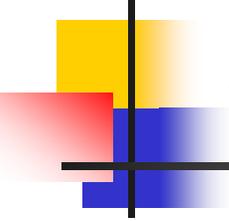
Problem Statement

Project Management Plan (PMP)

Planning Budget

Total Project Cost Estimate

Elements of a Planning APD
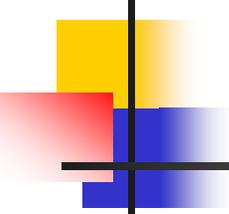
The Problem Statement

1-3 pages of general discussion of the problem(s) faced by the agency and of the need to seek a remedy

Cites examples of issues and problems being faced

Elements of a Planning APD
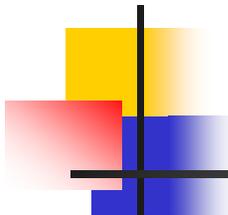
The Project Management Plan (PMP)

- Provides a list of key personnel

- Provides an organization chart for the planning effort

- Provides a task-oriented list of planning activities to be conducted including project schedule information

A Project Schedule Example

ID	Task Name	1999				2000				2001
		Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1
1	**Task 1**									
2	General Design									
3	General Design Review	1/15								
4	Detailed Design									
5	Detailed Design Review	3/8								
6	Code									
7	Code Inspection	4/19								
8	Unit Test									
9	Unit Integration T t									
10	**Task 2**									
11	General design									
12	General Design review	3/1								
13	Detailed Design									
14	Detailed Design Review	4/30								
15	Code									
16	Code Inspection	6/17								
17	Unit Test									
18	Unit Integration T t									
19	**Task 3**									
20	Integration Test									
21	Test Readiness Review	1/5								
22	**Task 4**									
23	Pilot Test									
24	**Task 5**									
25	Project Management									
26	IV&V									
27	Quality Assurance									
28	System Administration									

Elements of a Planning APD

The Project Management Plan (PMP)

The task-oriented list of activities to be conducted must include *commitments to conduct* a:

Needs Assessment

Feasibility Study

Alternatives Analysis

Cost Benefit Analysis

Elements of a Planning APD
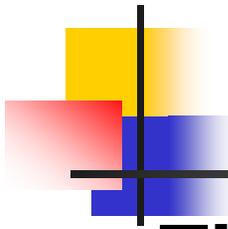
The Project Management Plan (PMP)

Other task-oriented activities that a PMP might include are:

Developing RFP's / ITB's

Conducting procurements for:

Quality Assurance and IV&V

Software development

Project management support

Hardware and Software purchasing

Implementation APD development, etc.

Elements of a Planning APD

Planning Budget

Provide a budget spreadsheet showing costs broken-down by Federal Fiscal Quarter (FFQ) and summed to the Federal Fiscal Year (FFY).

Best presentation is to have one page per FFY.

Have last column of each budget spreadsheet show state and Federal shares for each FFY

Elements of a Planning APD
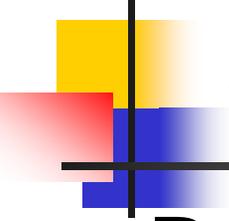
Budget Categories Include:

State staff,

contractors (listed by contract), hardware and software,

training,

miscellaneous/supplies,

travel,

data center (listing both operations and development separately).

The Implementation APD
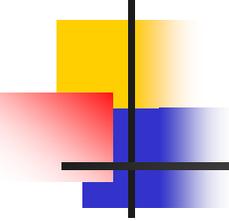
Executive Summary

Statement of Needs and Objectives

Feasibility Study *(Includes a summary of the study and the Analysis of Alternatives)*

Project Management Plan

Interface Requirements

Security

Budget *(Including cost allocation, if needed)*

Cost Benefit Analysis

FEASIBILITY, ALTERNATIVES AND COST BENEFIT ANALYSIS
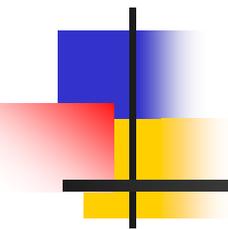
A Description and Discussion

FEASIBILITY STUDIES
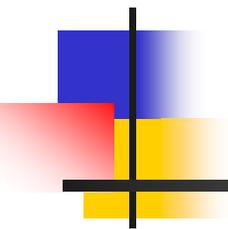
IN COMPLEX, LARGE SCALE APPLICATION DEVELOPMENT PROJECTS
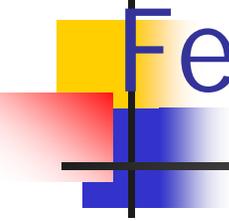
Feasibility Studies: Purpose

The Preliminary Study That Determines Whether a Proposed Systems Project is Technically, Financially, and Operationally Viable

The Foundation for Approval of the Project's IAPD
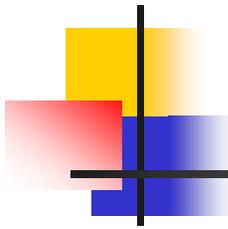
Feasibility Studies

Include an Alternatives Analysis, Identifying Viable Options for System Design and Development. Together, They Provide:

Analysis of the System Objectives, Functional Requirements, and System Design Concepts

Feasibility of Applying Automation To Economically Improve Program Operations

Evaluation of Each of the Alternatives and Selection of an Optimal Solution
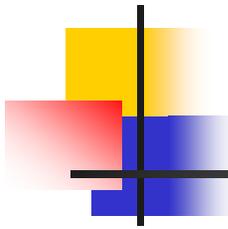
Feasibility Study Process

Describe the Status Quo

Define the Problem

Define System Objectives

Identify System Constraints and Assumptions

Develop Initial Requirements

Assess Project Feasibility
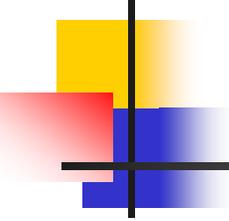
Describe the Status Quo

Understanding of How the Current System Works

- Work Flow Analysis
- Technical Architecture of Hardware
- Software Components
- Manual Components
- Interfaces
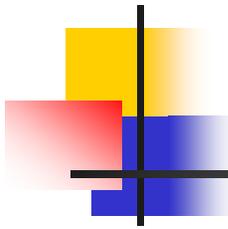
Define the Problem

What Functionality is Missing or in Need of Automation From the Current System

What Functionality is in Need of Improvement or Modification in the Current System

Obsolescence of Technological Platforms and Architectures
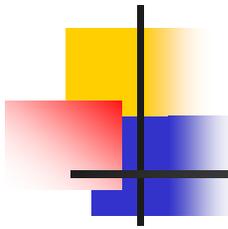
Define System Objectives

Functionality for the New System

- Added
- Automated
- Improved

Define Technical and Organizational Objectives

Define Ranking Criteria to Evaluate Alternatives
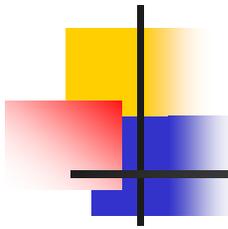
Identify System Constraints

Law and Regulations

Technological

Socio-political

Financial

Operational

Functional
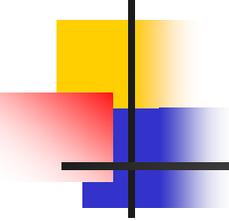
Identify Assumptions

Cost and Budget

Resources

Functional and Programmatic

Technical

Organizational

System Life
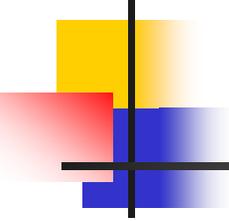
Identify Assumptions

Include All Assumptions That Will Affect the Analysis

Document the Logic Underlying the Assumptions
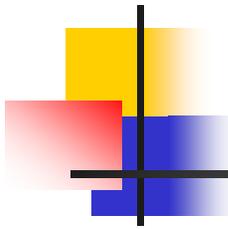
Initial Requirements

Reorganize All of the Previous Work Into a List of Requirements the System Must Fulfill

Ensure Requirements Definitions for the Current System Were Considered

Identify the Universe of Existing and Theoretical Options
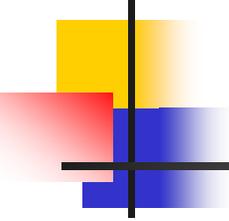
Assess Project Feasibility

Assess Project Feasibility Against the Universe of Options:

- Technical
- Political
- Impact on Users
- Cost
- Resources
- Risk
- Organizational
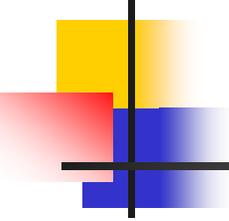
Results

Ability to Reduce the Universe of Potential Options to 2-4 Realistic Possibilities

These Now Undergo Detailed Evaluation as Part of the "Analysis of Alternatives"

ALTERNATIVES ANALYSIS
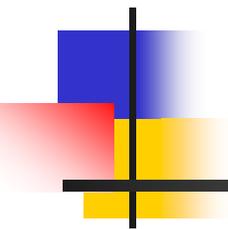
IN COMPLEX, LARGE SCALE APPLICATION DEVELOPMENT PROJECTS
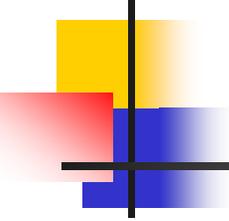
Alternatives Analysis

An Analysis Which Considers the Alternatives Available for Automation.
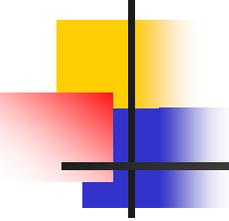
Development Alternatives

Status Quo

Enhance Existing System

New Development

Transfer

Hybrid
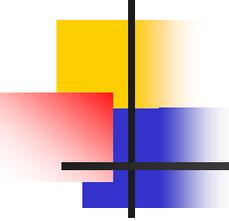
Technical Alternatives

Client Server vs. Main Frame

Thin Client vs. Thick Client

Web Technology vs Closed System

Distributed vs. Centralized

Custom vs. COTS
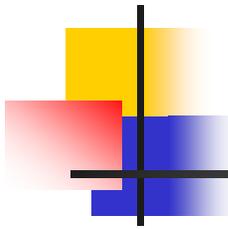
Alternatives Analysis

Map Requirements to Hardware, Software, Processes and Personnel.

Determine Risks and Effects

Rank Alternatives

Delete Non-viable Alternatives
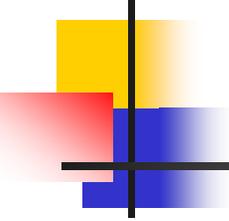
Determine Risks and Effects

Program Impact

Equipment Impact

Software Impact

Information Impact

Organizational Impact

Operational Impact

Developmental Impact

Cost Benefit Analysis
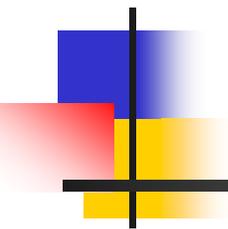
In Complex, Large Scale Application Development Projects
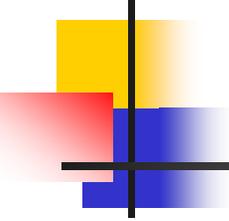
Cost Benefit Analysis

Detailed Evaluation of the Costs and Benefits of Each Alternative Identified During the Alternatives Analysis Is Critical ...

... Pass or Fail Critical !
From a Federal Standpoint !
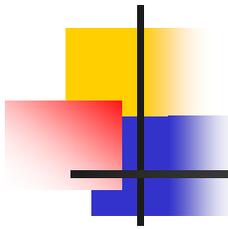
Costs

Cost the Status Quo

Cost Alternatives to Status Quo

Identify and Characterize All Costs

Determine Whether to Use Constant or Current Dollars

Build Each Cost Profile Year by Year
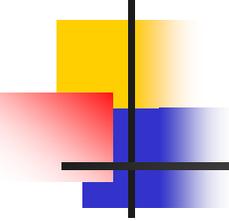
Cost the Status Quo

Cost of Maintaining Current System With No Enhancements.

Used As Control Group to Evaluate Other Alternatives.

Cost Alternatives to Status Quo
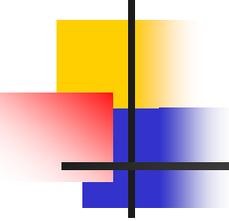
Recurring Costs

Non-Recurring Costs
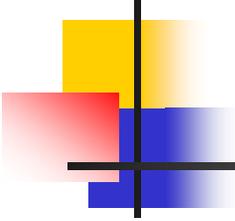
Identify and Characterize Costs

Hardware

Software

Training

Personnel

Database Conversion

Other (examples in Guide)

Determine Constant or Current $
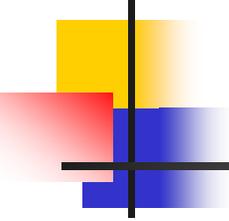
Project Constant Dollar Cost and Benefits

Convert Constant Dollars to Current Dollars

Convert Future Dollars to Today's Dollars
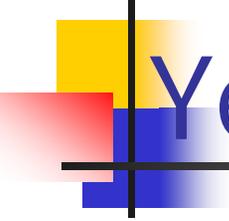
Build Each Cost Profile Year by Year

Estimate Effort Based on Metrics

 COCOMO

 Price-S

 Function Points

Compare to Similar Systems

Run Experiments

Measure Actuals
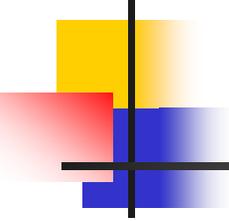
Benefits

Identify and Characterize All Benefits

Tangible Benefits

Intangible Benefits
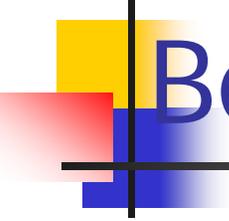
Identify and Characterize All Benefits

Increased Collections

Reduced Error Rates

Reduced Costs

Reduced Staffing

Improved Security

Improved Access

Improved Interface
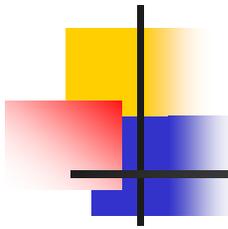
Tangible Benefits

Derive Cost Saving From Benefit

Document Assumptions Used in Derivation
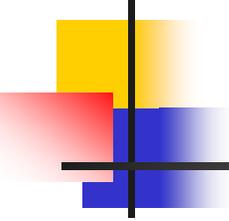
Intangible Benefits

List and Rate

Examples

- Worker Satisfaction
- System Downtime
- User Friendliness
- Useful Life of System
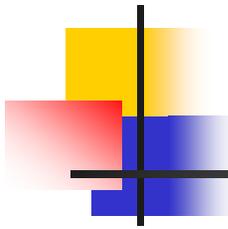
Cost Benefit Analysis

Convert Costs and Benefits to Current Dollars

Compare Quantitative Factors

    Net Benefit (Cost)

    Benefit/Cost Ratio Based on the Full System Life Cycle

    Breakeven or Payback
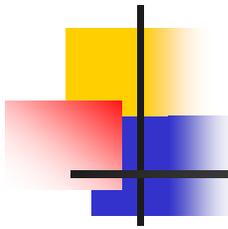
Cost Benefit Analysis: Issues

Apply Assumptions, Costs, and Benefits Evenly Across All Alternatives

Costs Are Not Always Known but May Be Estimated in a Range or With a Given Probability.

Decide Evaluation Criteria Up-front

Intangible Benefits May Matter

COST BENEFIT ANALYSIS
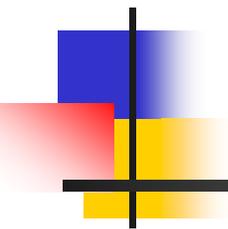
Evaluation Criteria
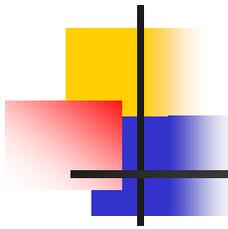
Evaluation Criteria

Are Results Credible

Are Assumptions and Estimates Reasonable

Are Results Reproducible

Are Assumptions Applied Evenly Across All Alternatives
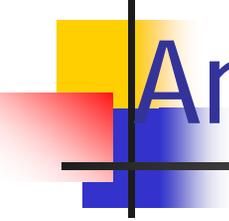
Analysis Guide Evaluation Criteria

That a Status Quo is Thoroughly Described

That All Reasonable Alternatives Were Considered

That a Full Cost Benefit Analysis to at Least Two (2) Alternatives is Accomplished

That Alternatives Were Evaluated on System Life Cycle Basis

That Present Value Analysis Was Used
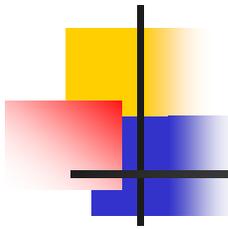
Analysis Evaluation Criteria (cont'd)

That Cost and Benefit Projections Appear Reasonable

That Net Benefits or Ratios Were Calculated for All Alternatives

That the Study Resulted in a Clear Cost and Benefit Plan

Results Are Summarized for Selection Justification in the IAPD

OVERVIEW
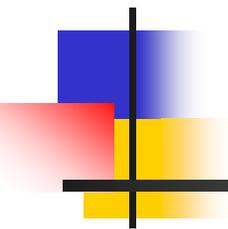
OCSE'S TYPICAL REVIEW PROCESS BASED UPON PAST EXPERIENCE
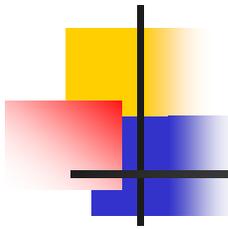
OCSE Typical FS Review

OCSE Review Process Is Approximately Eight (8) Weeks

Uses OCSE Staff and Contractors to Conduct the Review

Review Initiated Upon State Submittal of a Feasibility Study and Cost/Benefit Analysis

Some Prior Review and TA of Preliminary Data (E.G. Evaluation Criteria)
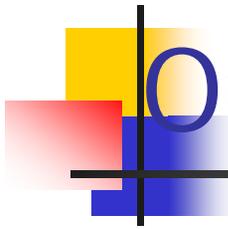
OCSE FS Review: WEEK 1

Assemble Team - OCSE Lead, OCSE Contractor Staff

Start-Up Meeting to Discuss Overall Scope Collect Documentation - FS, CBA, Status Quo Document, Historical Data
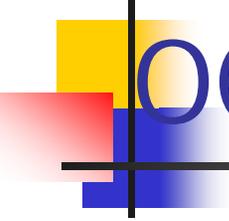
OCSE FS Review: WEEK 2

Initial Contractor Staff Review of Documentation

Develop Initial Set of Comments

Develop List of Questions for State Staff

Develop Agenda for On-Site Review with the State
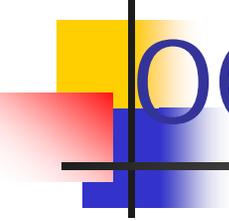
OCSE FS Review: WEEK 3

On-Site Review With State Staff

Provide Initial Comments to the State

Ask Questions Developed During Initial Review

Interview State and Their Contractors On the Processes Used to Develop the FS

Collect Additional Documentation
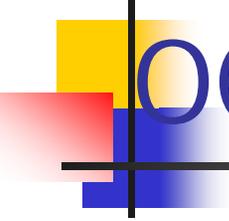
OCSE FS Review: WEEKS 4-6

Detailed Review of FS, CBA, and Other Documentation

Follow-Up Conference Calls With State Staff, As Required

Draft Report Developed by OCSE Contractor and Submitted to OCSE Lead
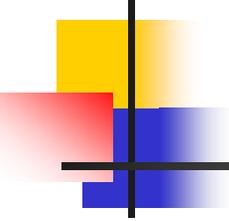
OCSE FS Review: WEEKS 7-8

OCSE Lead Review of the Draft Report

Additional Follow-Up Calls With the State As Required

Incorporate OCSE Lead Comments Into Report

Release Final Report
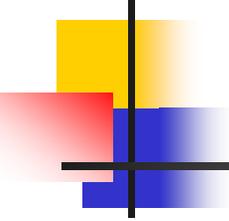
OCSE FS Review: Documentation

- Final FS, CBA, and Status Quo Document
- Interim Versions of Documents
- White Papers
- Review Correspondence (Review Comments and Responses)
- Requirements Analysis Documentation
- Gap Analysis
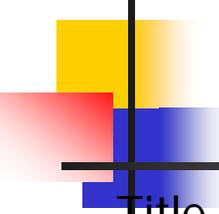
References

Title 45 Public Welfare and Human Services Code of Federal Regulations (CFR), Part 307--Computerized Support Enforcement Systems

Title 45 Public Welfare and Human Services Code of Federal Regulations (CFR), Part 95--General Administration-Grant Programs (Public Assistance and Medical Assistance)

Title 45 Public Welfare and Human Services Code of Federal Regulations (CFR), Part 74 - Uniform Administrative Requirements for Awards and Subawards to Institutions of Higher Education, Hospitals, Other Nonprofit Organizations, and Commercial Organizations; and Certain Grants and Agreements with States, Local Governments and Indian Tribal Governments
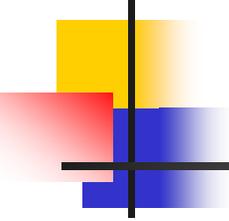
References

U.S. Department of Health and Human Services, Administration for Children and Families and Health Care Finance Administration – State Systems APD Guide, September 1996

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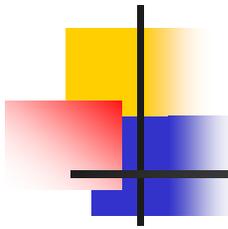
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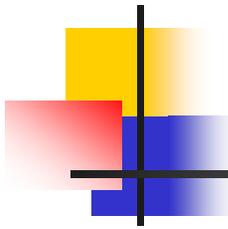
Closing

Questions

&

Answers

http://www.acf.hhs.gov/programs/cse/stsys/!cse.htm
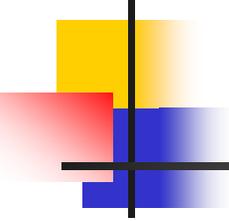
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