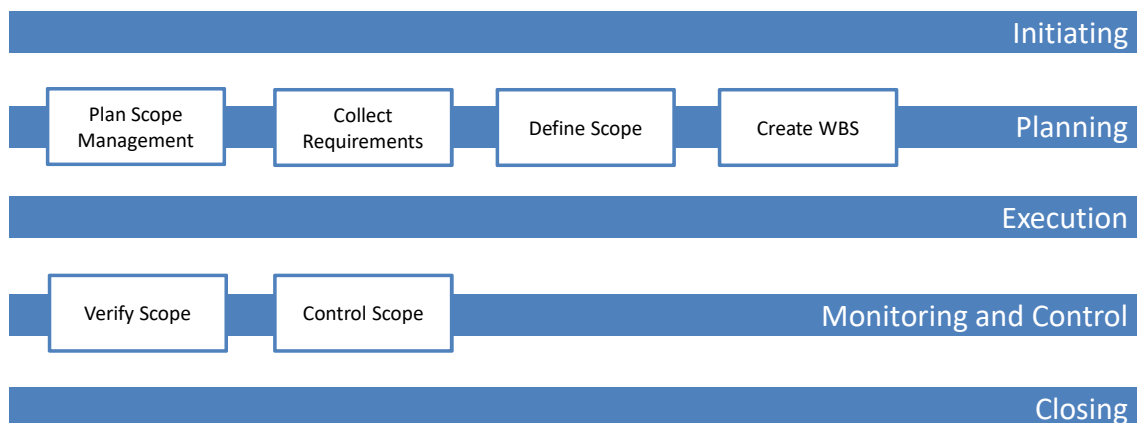# Scope Management

- Understand Requirements
- Define, Break Down & Control the Scope
- Always be in Control of the Scope
- "Gold Plating" increases Risk and Uncertainty

3

Scope Management

				Initiating
Plan Scope Management	Collect Requirements	Define Scope	Create WBS	Planning
				Execution
Verify Scope	Control Scope			Monitoring and Control
				Closing

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Scope Management

Integration Management Process	Key Outputs
Plan Scope Management	Scope Management Plan Requirements Management Plan
Collect Requirements	Requirement Documentation Requirement Management Plan Requirement Traceability Matrix
Define Scope	Project Scope Statement
Create WBS	Work Breakdown Structure WBS Dictionary
Verify Scope	Accepted Deliverables
Control Scope	(Scope) Change Requests

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Plan Scope Management

- Create Scope Management Plan
- How scope (project + product) will be
  - Defined
  - Developed
  - Monitored
  - Validated
  - Controlled

6

Plan Scope Management - Inputs

- Project Charter
- Project Management Plan
    - Quality Management Plan
    - Project Life Cycle Description
    - Development approach
- Enterprise Environm. Factors
- Organizational Process Assets

7

Plan Scope Management - Tools

- Expert Judgment
- Data Analysis
- Meetings

8

Plan Scope Management – Outputs

- Scope Management Plan
- Requirements Management Plan

9

Collect Requirements

- Understanding what is needed to satisfy the stakeholders
- Document that reflects that understanding
- For both
  - Project
  - Product

10

Collect Requirements - Inputs

- Project Charter
- Project Management Plan
- Project Documents
- Business Documents
- Agreements
- Enterprise Environm. Factors
- Organizational Process Assets

11

Collect Requirements - Tools

- Expert Judgment
- Data Gathering
- Data Analysis
- Decision Making
- Data Representation

- Interpersonal & Team Skills
- Context Diagram
- Prototypes

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Collect Requirements – Outputs

- Requirement Documentation
- Requirements Traceability Matrix

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Define Scope

- What is the Scope of the Project?
- Drives the Execution of the Project
- Importance depends on the Requirements

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Define Scope - Inputs

- Project Charter
- Project Management Plan
- Project Documents
- Enterprise Environmental Factors
- Organizational Process Assets

15

Define Scope - Tools

- Expert Judgment
- Interpersonal & Team Skills
- Data Analysis
- Decision Making
- Product Analysis

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Define Scope – Product Analysis

- Product breakdown
- Systems analysis
- Systems engineering
- Requirement analysis
- Value engineering
- Value analysis

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Lateral Thinking

- Introduced by Edward de Bono in 1967
- Solve problems indirectly and creatively
- Thinking „out of the box"
- Stimulate creativity

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Lateral Thinking – Puzzle

A man walks into a bar, and asks the bartender for a drink of water. The bartender pulls out a gun, points it at the man, and cocks it. The man pauses, before saying "Thank you" and leaving. What happened?

Source: http://en.wikipedia.org/wiki/Situation_puzzle

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Lateral Thinking – Puzzle

A man is lying dead in a field. Next to him there is an unopened package. There is no other creature in the field. How did he die?

Source: http://www.eslprintables.com/forum/topic.asp?id=25577

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Lateral Thinking – Puzzle

Anthony and Cleopatra are lying dead on the floor of a villa in Egypt. Nearby is a broken bowl. There is no mark on either of their bodies and they were not poisoned. How did they die?

Source: http://www.eslprintables.com/forum/topic.asp?id=25577

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Define Scope – Outputs
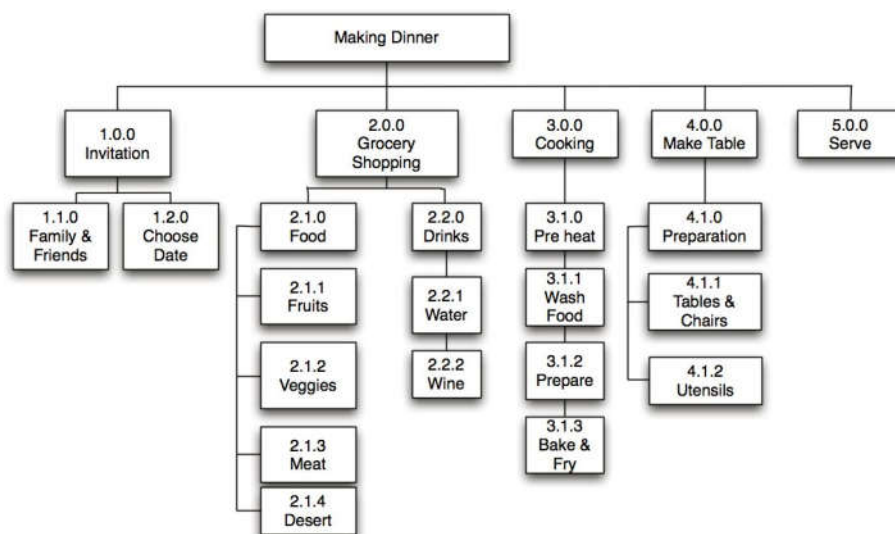
- Project Scope Statement
- Project Documents Updates

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Create WBS

- Hub of information for the project
- Most important component of the project plan (PMI®)
- Everything else ties back to WBS
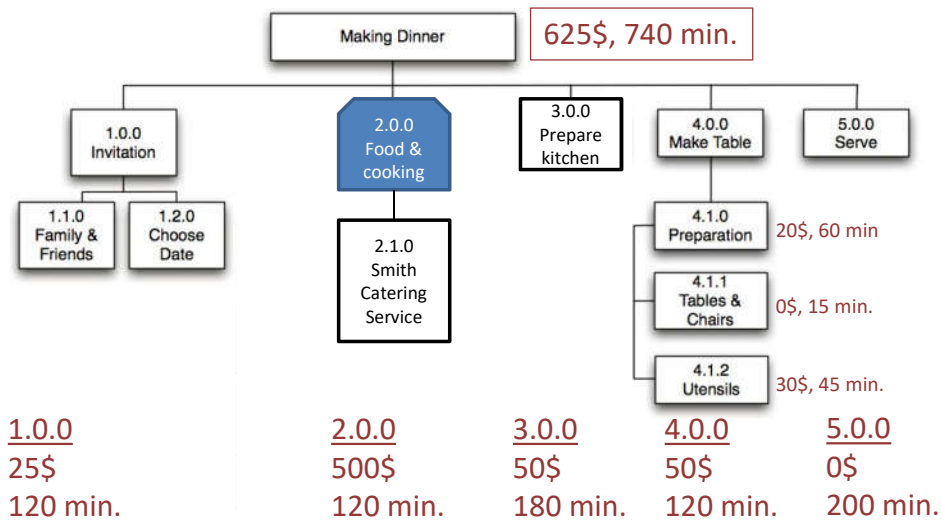- Primary Tool for verifying and controlling the project's scope

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Work Breakdown Structure

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WBS – Control Accounts

Making Dinner		625$, 740 min.		

```
                        Making Dinner          625$, 740 min.

   1.0.0              2.0.0          3.0.0        4.0.0          5.0.0
   Invitation         Food &         Prepare      Make Table     Serve
                      cooking        kitchen

  1.1.0    1.2.0      2.1.0                       4.1.0        20$, 60 min
  Family & Choose     Smith                       Preparation
  Friends  Date       Catering
                      Service                     4.1.1        0$, 15 min.
                                                  Tables &
                                                  Chairs

                                                  4.1.2        30$, 45 min.
                                                  Utensils
```

1.0.0	2.0.0	3.0.0	4.0.0	5.0.0
25$	500$	50$	50$	0$
120 min.	120 min.	180 min.	120 min.	200 min.

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Work Breakdown Structure

- Based upon deliverables
- Hierarchical structure of the work
  - Phases
  - Deliverables
  - Sub-Projects
- 100% rule

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Work Breakdown Structure

- Control Accounts

- Unique identifier

- Work package criteria:
  - Small enough to estimate effort & cost
  - Assigned to one person

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Create WBS - Inputs

- Project Management Plan

- Project Documents

- Enterprise Environmental Factors
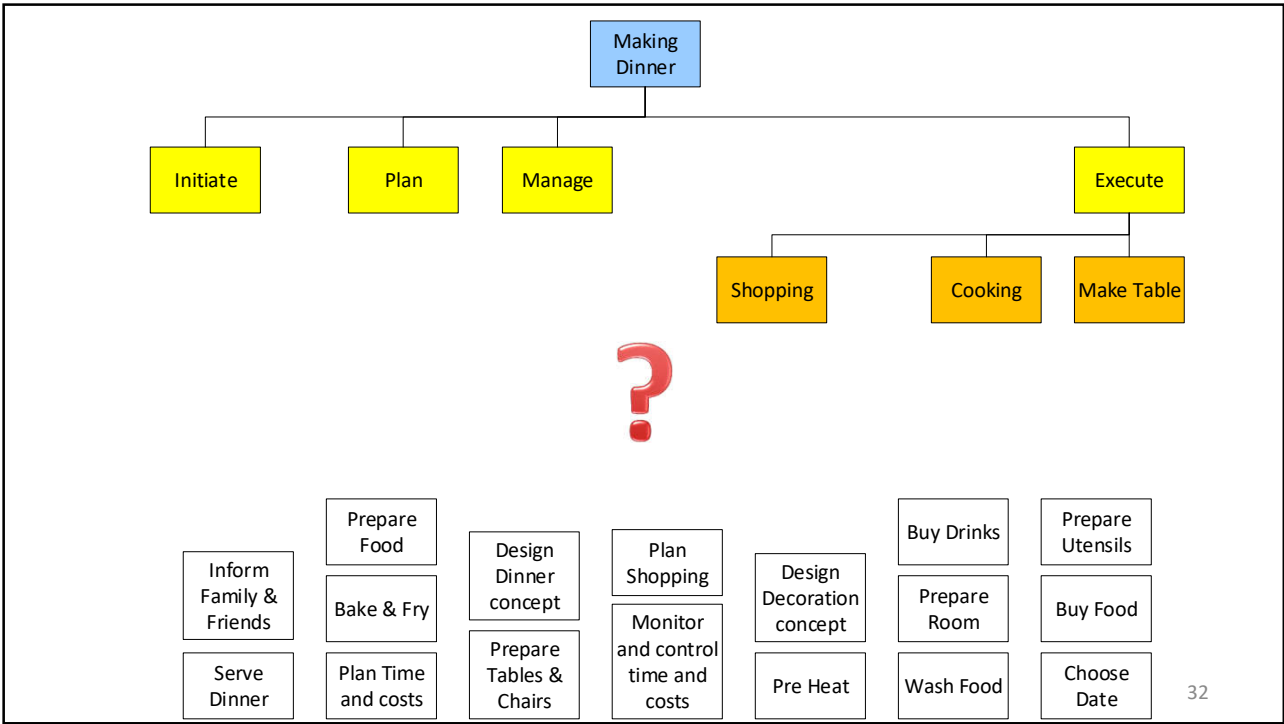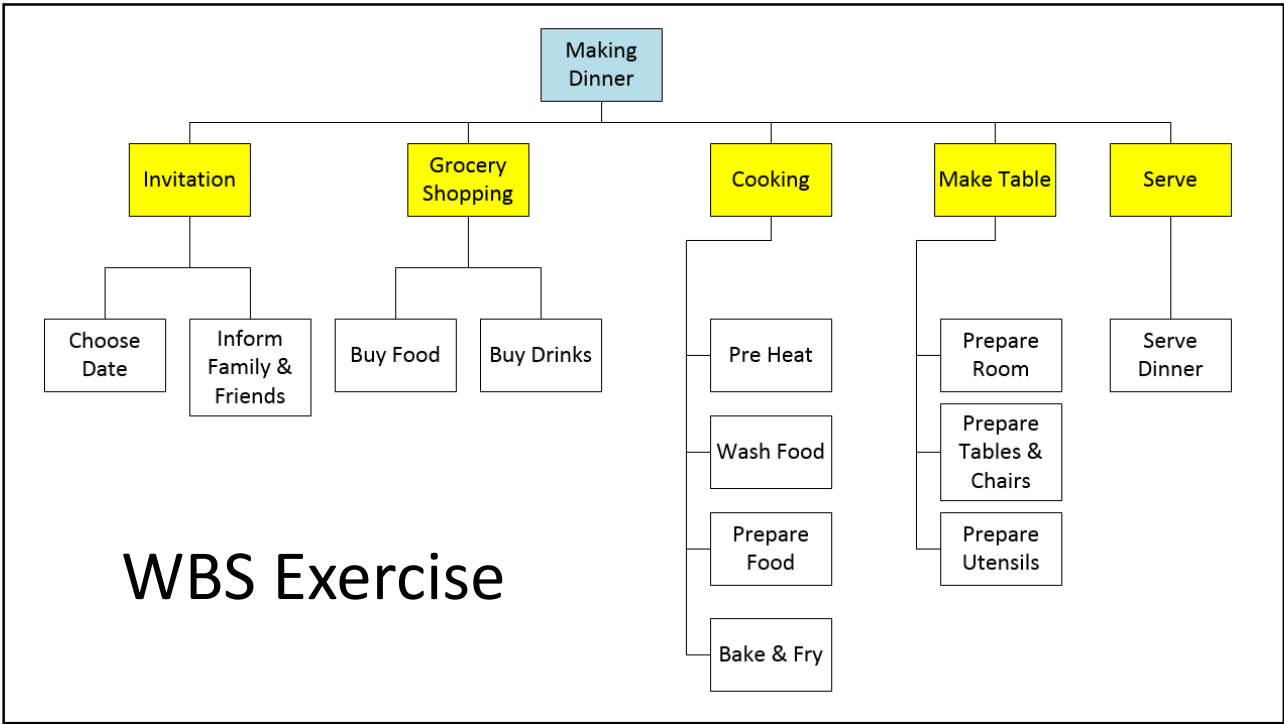
- Organizational Process Assets

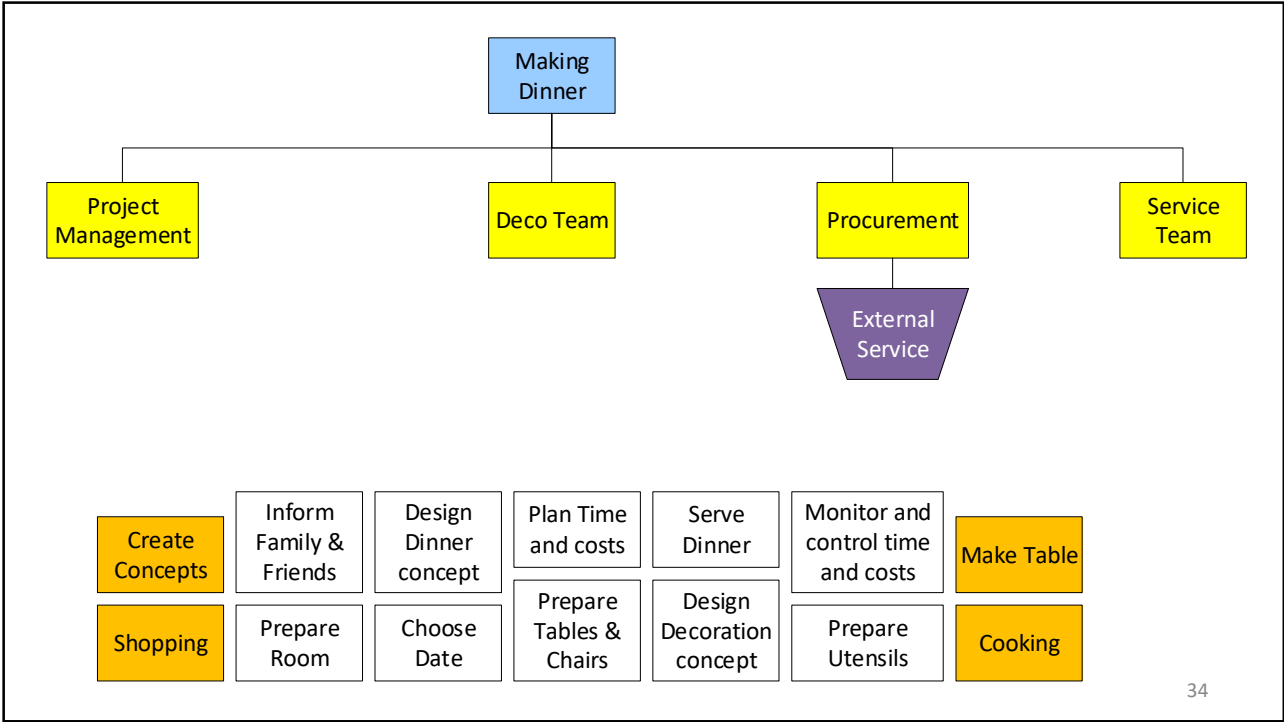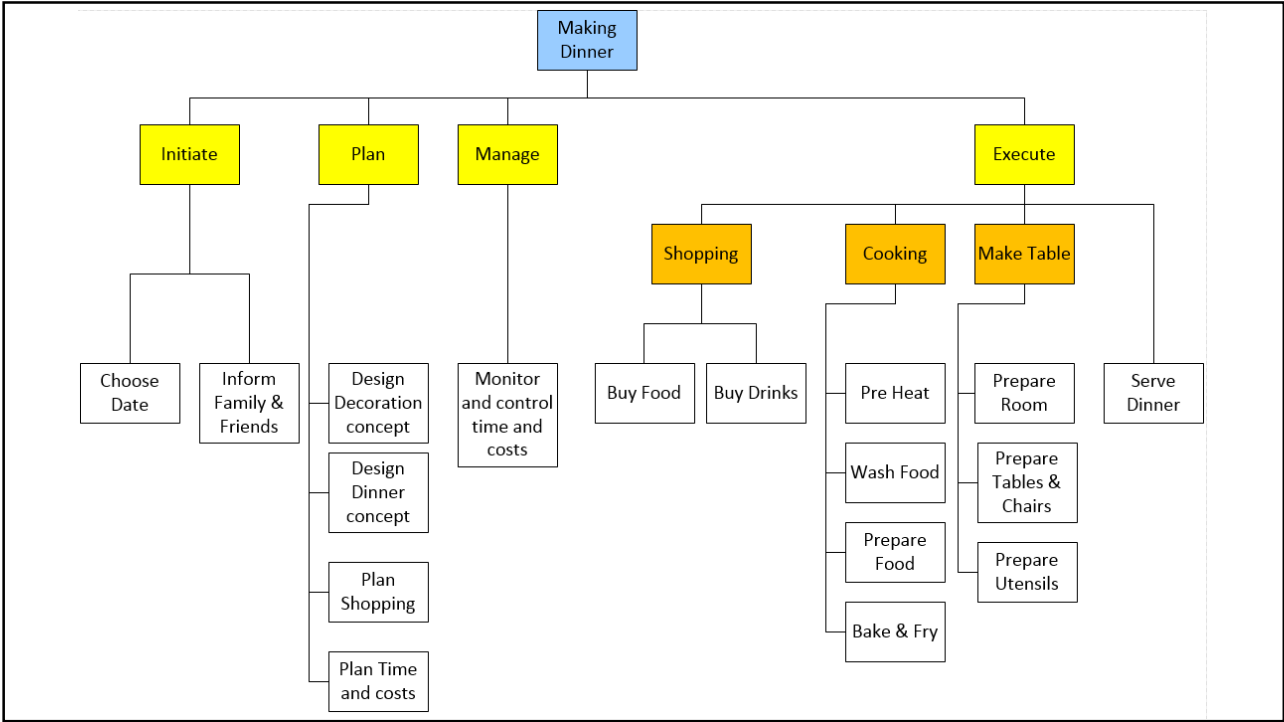28

Create WBS - Tools
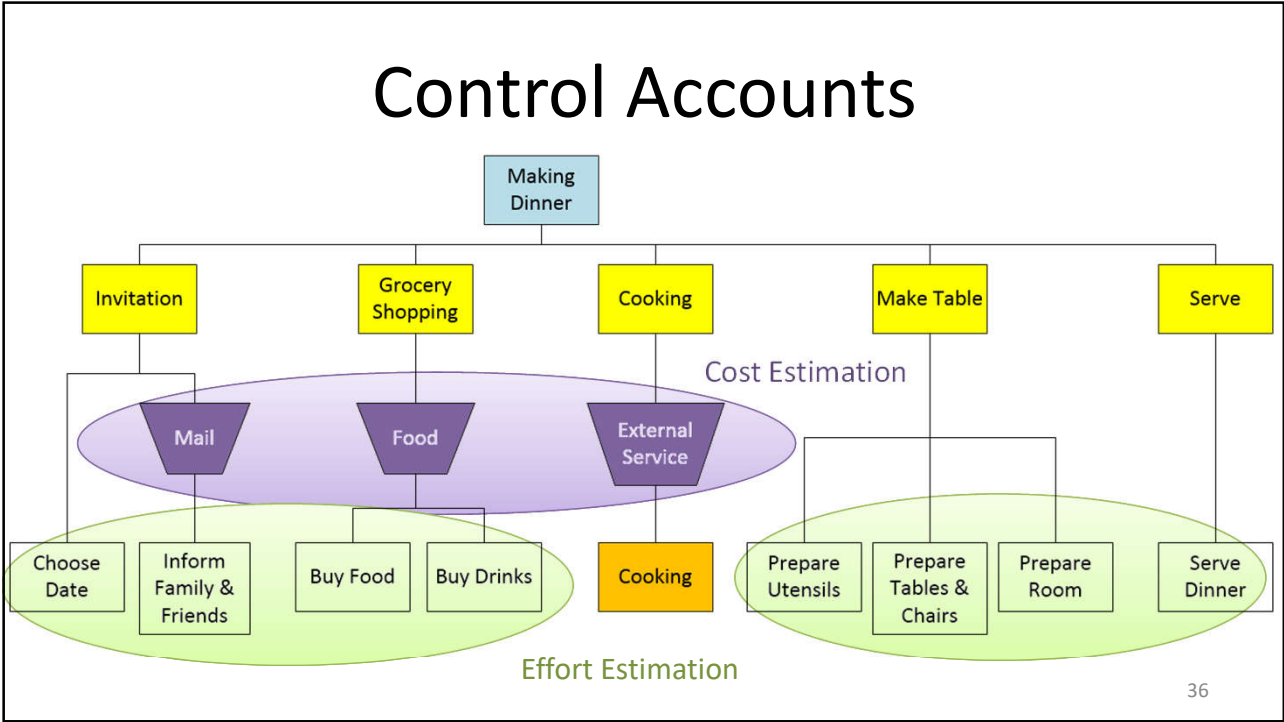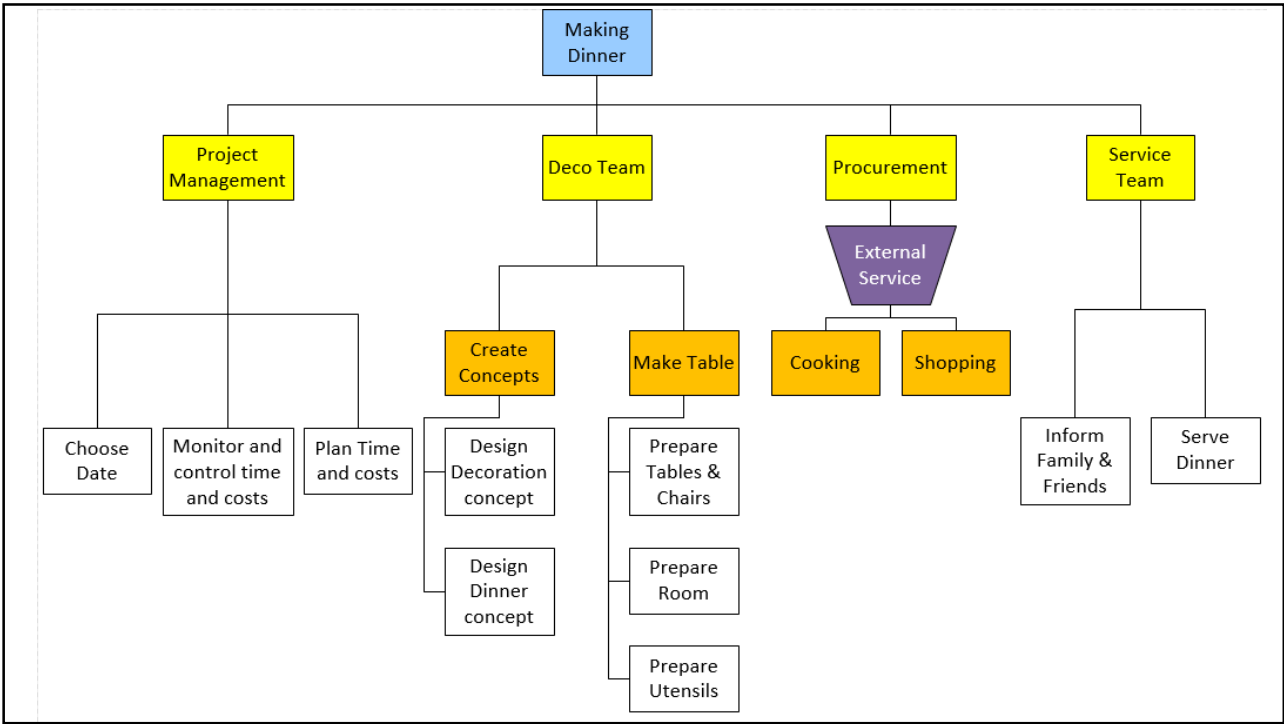
- Expert Judgment
- Decomposition

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Create WBS – Outputs

- Scope Baseline
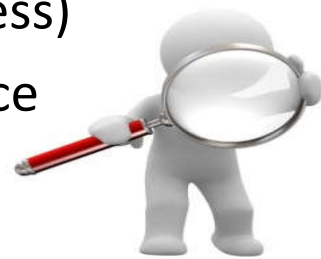- Project Documents Updates

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WBS Exercise

Control Accounts

Validate Scope

- Verifying that the product, service, or result of a project matches to the documented scope
- Checks the completeness (whereas Perform Quality Control checks correctness)
- Necessary for product acceptance

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Validate Scope - Inputs

- Project Management Plan
- Project Documents
- Validated Deliverables
- Work Performance Data

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Validate Scope - Tools

- Inspection
- Decision Making

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Validate Scope – Outputs

- Accepted Deliverables
- Work Performance Information
- Change Requests
- Project Documents Updates

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Control Scope

- Preventing scope change requests from overwhelming the project

- Making certain that scope change requests are properly handled

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Control Scope - Inputs

- Project Management Plan

- Project Documents

- Work Performance Data

- Organizational Process Assets

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Control Scope - Tools

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- Data Analysis

43

Control Scope – Outputs

- Work Performance Measurements

- Change Requests

- Project Management Plan Updates

- Project Documents Updates

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