Review version: explain it

**Estimating Project Costs**

* **Methods**:
  + Pre-determined
  + Expert judgement
  + Analogous
  + Group decision making
  + Unit rates
  + Published commercial data
  + Vendor bid
  + Reserve
  + 3-point estimation

**Estimating Accuracy**

* Accuracy in estimation is crucial for project success.

**Completing a Resource Matrix**

* **Resource Matrix Example**:
  + Task assignments, costs per day, and performance history for resources (e.g., Mary, Ian, Greg, Julie).

**Assigning Project Resources**

* Task assignments with durations and resource names.
* Cost tracking over time.

**Leveling Project Resources**

* **Resource Leveling**: Ensures optimal resource allocation to avoid overallocation and underutilization.

**Approaches to Budgeting**

* **Types of Budgets**:
  + Traditional: Based on previous performance.
  + Zero-based: Justifies every activity and outlay from zero.
  + Program: Groups activities by programs for cost projection.
  + Top-down: Estimates from senior managers, broken down further.
  + Bottom-up: Detailed estimates from those responsible for tasks.

**Budget Perspectives**

* **Advantages**:
  + Improves decision-making.
  + Effective cost control.
  + Reliable profit determination.
  + Identifies and diagnoses problems.
  + Useful for long-term objectives.
* **Disadvantages**:
  + Difficult top-to-bottom support.
  + Time-consuming planning.
  + Inflexible and restrictive.
  + Ignores cyclical fluctuations.
  + Based on unreliable estimates.

**Sample Project Budget Inclusions**

* **Components**:
  + Budget cost, estimation technique, actual cost, variance, confidence level, assumptions, constraints, contingency, work completion, actual cost percentage, variance percentage, tolerance, corrective actions, remaining budget.

**Controlling Project Costs**

* Traditional budget analysis vs. earned value analysis.
* Full project cost picture requires comprehensive analysis beyond traditional methods.

**The ROI of Sustainability**

* **Aberdeen Group Research**:
  + **Sustainability Metrics**:
    - Paper, facilities, energy, waste/disposal, packaging, transport/logistics costs.
  + **Driving Factors**:
    - Environmental/social stewardship, brand reputation, competitive advantage, stakeholder expectations, rising energy costs, regulatory compliance.
  + **Challenges**:
    - Budget constraints, demonstrating ROI, fear of disrupting processes.