- 4.1 Develop project charter
  - Justifies Project
    Gives PM authority
    Planning Project to a high level
  - Select PM
  - EEF
  - OPA
  - Divide large P into phases
  - Understand the business case
    - Sound BC is needed to to select project
      Captures business needs
      Explains how P fits into strategic goal of orga
    - Project Selection
      - Benefits measurement method (comparative approach)
        - Murder board
        - Peer review
        - Scoring models
        - Economic models
          - Present Value PV
            - Value of today of future cash flows
          - Net Present Value NPV
            - Present value of total benefits - costs
            - Project with the greatest NPV is selected
          - Internal Rate of Return IRR
            - The higher the better
          - Payback period
          - Cost Benefit analysis
            - Compaires expected costs to potential benefits
            - Greater 1 = Benefits are higher than costs
              Smaller 1 = Costs are higher than benefits
          - Terms
            - EVA **[not earned value analysis]**
              - Economic value added
                If P returns more value than initiative costs
            - Opportunity costs
            - Sunk costs
            - Working capital
            - Depreciation
              - Straight line depreciation
              - Accelerated depreciation
                - Double Declining balance
                - Sum of the Years digits
      - Constrained optimizations methods (mathematical approach)
        - Linear programming
        - Integer programming
        - Dynamic programming
        - Multi-Objective programming
  - Uncover initial requirements, assumptions and risks
  - Assess project & product feasibility within constraints
  - Create measurable objectives
  - Develop project charter
    - Content
      - Project Purpose
      - Measurable Project Objectives
      - High-Lvl Requirements
      - High-Lvl Project description [Product charact.]
      - Summary Milestone Schedule
      - Summary Budget
      - Project Approval Requirements [what constitutes success / who decides it / who signs off]
      - PM [Responsibility & Authority]
      - High level risks
      - Names & Responsibilities off persons authorizing Project Charter
  - Input
    - Project Statement of Work [SoW]
      - Created by customer/sponsor
      - Describes needs and project scope
      - May not be complete when received.
        Is refined in project scope statement
    - Business Case
    - Contract
    - OPA
    - EEF
  - Output
    - Project Charter