# Network Engineering and Implementation Methodology



#### Initiation

- Review or create project charter on new initiatives
- Examine client requirements by performing needs' analysis
- Develop needs analysis workflow diagram to meet earned value requirements of organization
- Validate with client by reviewing workflow diagram for accuracy
- Document peripheral infrastructure requirements (i.e. physical plant, power strategy, distribution closets)
- Create checklist for requirements' deliverables
- Develop network diagram for references

### **Planning**

- Review needs analysis with best fit to infrastructure, vendor capabilities, and in-house capabilities and document any gaps
- Identify resources with creation of roles and responsibilities matrix for vendor and in-house team for sign off from client executives
- Review project business goals with team and partners prior to executive sign-off
- Build budget including hardware, software, internal and external resources, and peripheral infrastructure costs
- Develop project plan including budget, list of materials, resources, and earned value for project tracking mechanisms
- Based on prior implementation expertise, establish project plan with milestones that support business requirements and internal processes and procedures
- Define success criteria, communication plans, and final deliverables that will be reviewed at project closeout
- Create project schedule with milestones, communications plan, and deliverables for project signoff

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#### **Kickoff and Implementation**

- Manage procurement of all hardware, software, and infrastructure materials ensuring they meet milestone deadlines developed by the project team
- Manage team for quality assurance during project implementation to meet overall goals of the project
- Develop training and configuration documentation for lessons learned and archiving to meet existing client data repository requirements or develop new procedures
- Provide management and installation of equipment or development of software
- Record asset information in tracking database for executive review
- Establish weekly meetings and status reporting
- Develop timeline & issues tracking database with agreed upon escalation procedures
- Create a formal Change Control process for issues that affect time, quality, or budget
- Quality assurance and Network management assurance testing is required once equipment is added to production landscape

#### Closeout

- Review project deliverables with sponsors ensuring project met business objectives
- Review actual project budget and time vs. planned
- Final testing results and review
- Final training and review and sign off
- Provide knowledge transfer and all documentation with client' internal support team
- Post mortem meeting with team and management
- Release of the team
- Acquire signoff on final milestone(s) and deliverables