RESEARCH PMO BROWN BAG LUNCH

THURSDAY, MARCH 5, 2019

"THE IMPORTANCE OF SCOPE."

Anne E. Geary, MBA, PMP – Sr. Program Manager

Shareen Hinson, MBA, CSM - Sr. Project Manager

Margeya Patel, BS - Project Business Analyst

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AGENDA

- Housekeeping items
  - Sign-in sheet
  - Interactive training
  - Mandatory Survey – Week of March 9th, 2020
  - Introductions

- Scope Terminology

- Roles and Descriptions

- Scope Approach, Agile v. Waterfall

- Primary Tools for the Research PMO

- Additional Resources

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INTRODUCTIONS

- PMO
  - Team intros; Anne, Margeya and Shareen
- Participants
  - Name, Functional Team
  - Your experience working on/leading a project team?
  - Why you signed up for this event, what you hope to learn?

THE KEY TO SUCCESS & THE TRIPLE CONSTRAINT
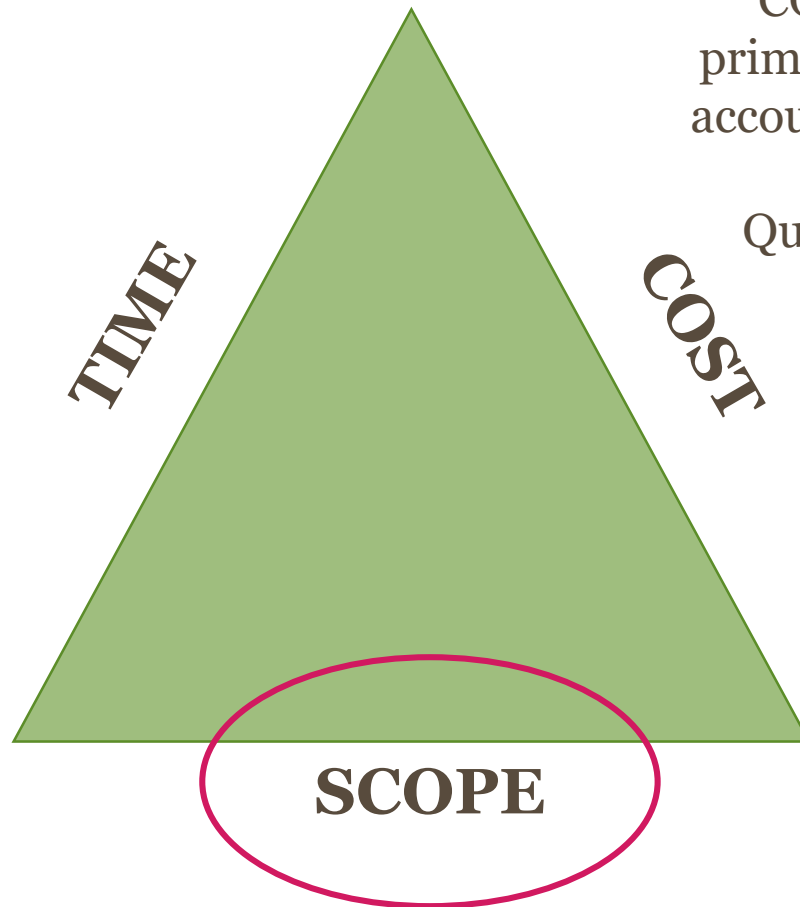
COST - TIME – SCOPE are the three primary impacts that ALL projects have to account for. If there is a change to one, the other two will also be impacted.
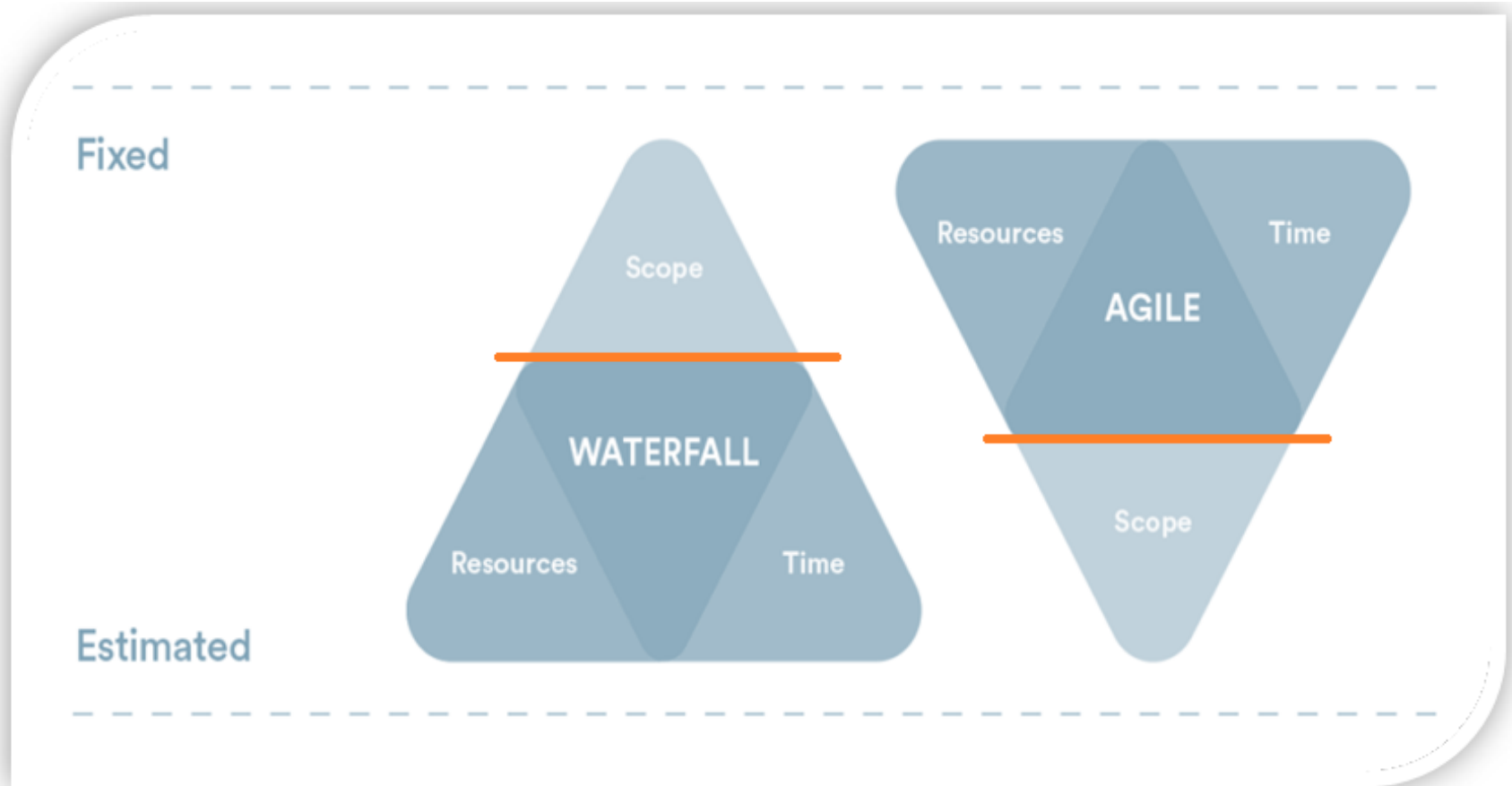Quality also plays a large part in this…

TIME

COST

SCOPE

Quality Impacts:
- Resource skills & Experience
- Knowledge & Training
- Communication & Change Mgmt.

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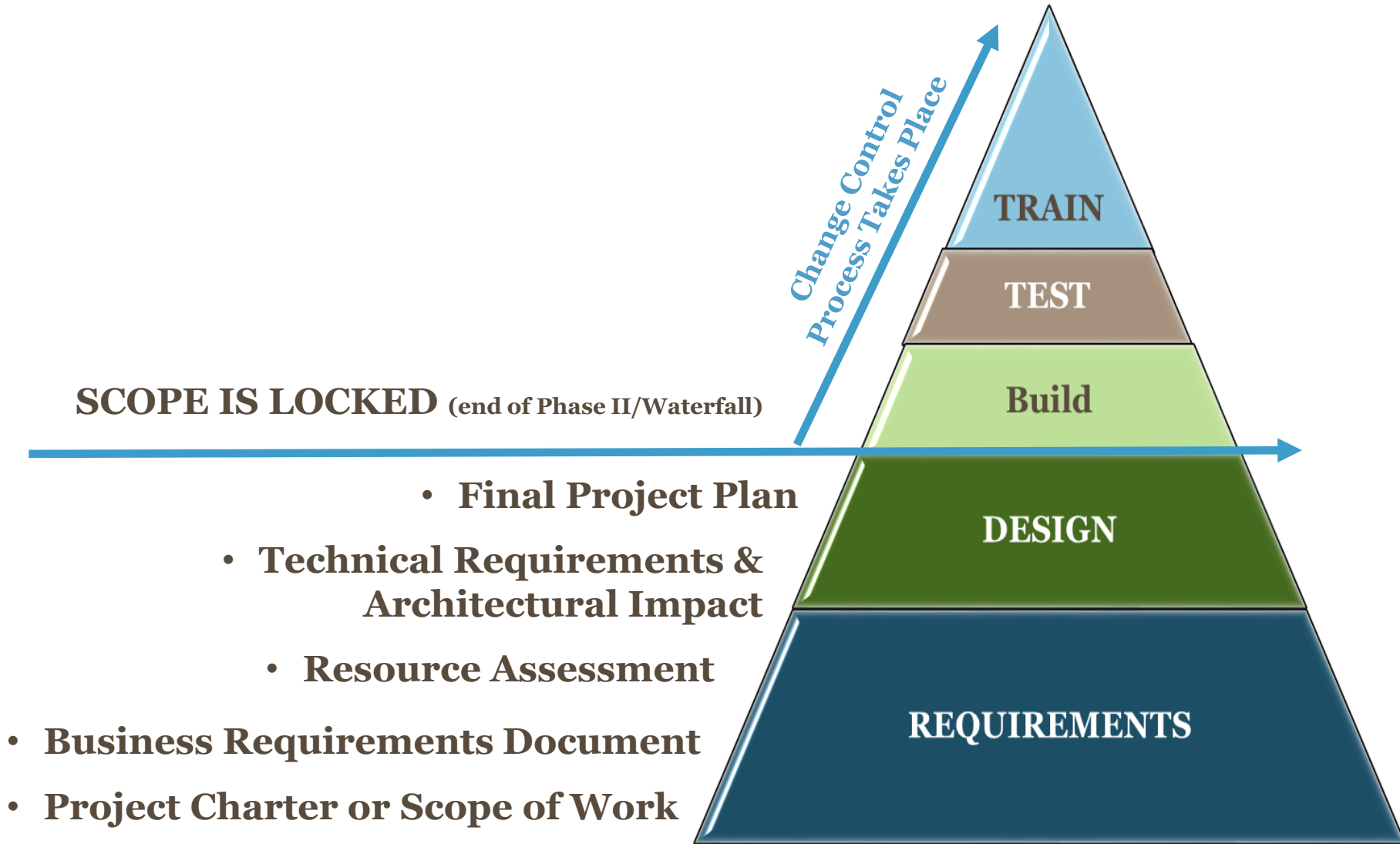
THE IMPORTANCE OF SCOPE

- Scope provides the foundation for a project through its influence on project deliverables and supporting documentation

- Successful projects require a clear scope of work, in writing and agreed upon by Sponsors, Owners and Stakeholders

- Building an accurate and complete SCOPE will require several discovery meetings and updates to documentation

- Scope collection can start as early as the selection of the solution (RFP Process)

- Clear scope definition will prevent project delays when additional needs are identified by the project team during design, testing or training

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SCOPE FOR AGILE VS WATERFALL

*Reference #3

BUILDING AND MANAGING SCOPE

SCOPE IS LOCKED (end of Phase II/Waterfall)

Change Control Process Takes Place

TRAIN

TEST

Build

DESIGN

REQUIREMENTS

- **Final Project Plan**
- **Technical Requirements & Architectural Impact**
- **Resource Assessment**
- **Business Requirements Document**
- **Project Charter or Scope of Work**

SCOPE MANAGEMENT ROLES AND DESCRIPTIONS

- Project Manager (PM)/Scrum Master (SM)
- Business Analyst (BA)
- Subject Matter Expert (SME)
- Project Owner / Product Owner
- Executive Sponsor
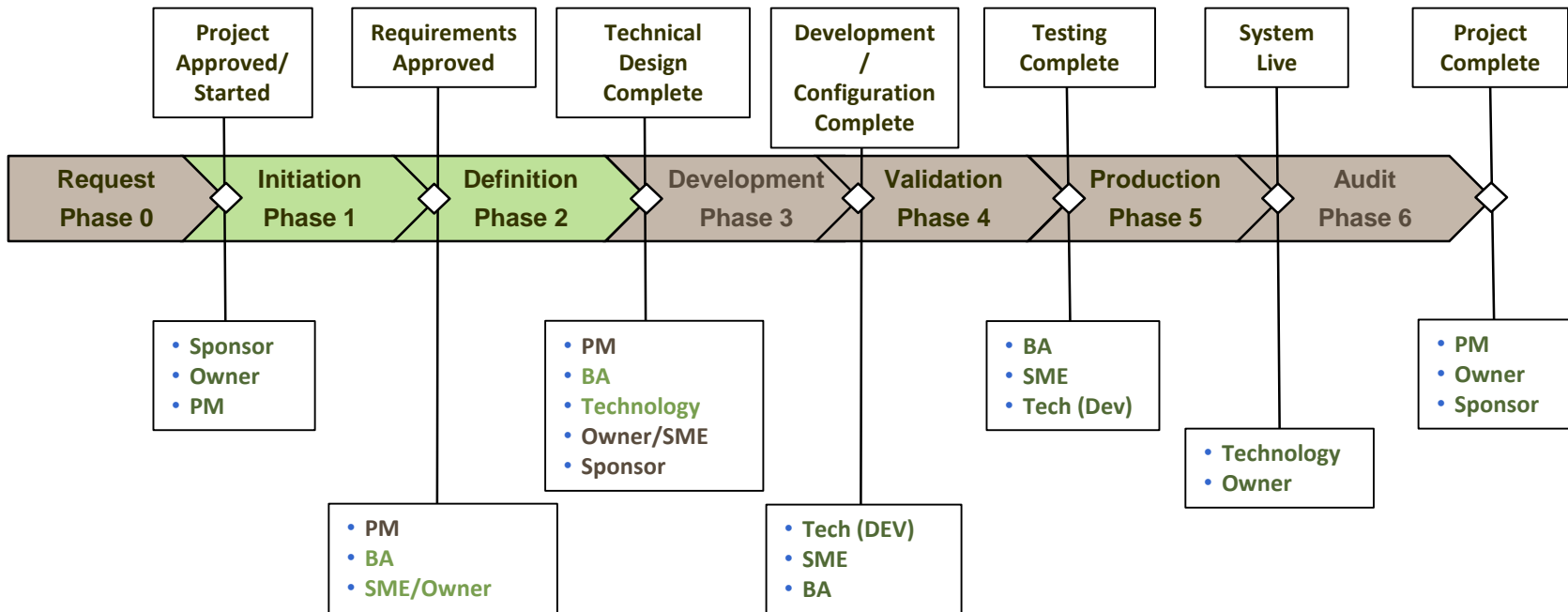- Stakeholder
- Technology / Scrum Team

What roles have you filled on previous projects?

*Reference #1 & Appendix A

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CRITICAL PHASES FOR SCOPE -
WATERFALL PROJECT APPROACH

Key Phase Deliverables & Resource Expectations

Milestone	Phase
Project Approved/Started	
Requirements Approved	
Technical Design Complete	
Development / Configuration Complete	
Testing Complete	
System Live	
Project Complete	

Phases (left to right):
- Request — Phase 0
- Initiation — Phase 1
- Definition — Phase 2
- Development — Phase 3
- Validation — Phase 4
- Production — Phase 5
- Audit — Phase 6

Project Approved/Started
- Sponsor
- Owner
- PM

Requirements Approved
- PM
- BA
- SME/Owner

Technical Design Complete
- PM
- BA
- Technology
- Owner/SME
- Sponsor

Development / Configuration Complete
- Tech (DEV)
- SME
- BA

Testing Complete
- BA
- SME
- Tech (Dev)

System Live
- Technology
- Owner

Project Complete
- PM
- Owner
- Sponsor

Scope is defined during the Initiation and Definition/Design Phases

KEY SCOPE DOCUMENTATION

Phase 0: Request
Statement Of Work (from vendor)
Request sent to Research PMO
Request Evaluated and Dispositioned
Gate Sign-Off

Phase 1: Project Initiation
Project Charter
Financial Assessment Worksheet (DRAFT)
Requirements Definition
Requirements Approval
Gate Sign-Off

Phase 2: Definition
Test Strategy Definition
Test Strategy Approval
Risk Management Plan
Contract Management/Supply Chain Process, as applicable
Communications Plan
Training Needs Assessment
Technical Design (Customization or Configuration)
Architecture/System Impact Assessment
Project Plan
Gate Sign-Off

Phase 3: Development
Development
IT Unit Test
Test Design (Test Case/Test Script Creation)
Test Design Review & Approval
Training Plan
Training Materials
Production Support Plan
Implementation Plan
Gate Sign-Off

Phase 4: Validation
System Test/System Integration Test, as applicable
User Acceptance Test (UAT) / Go Live Approval
Regression Test, as applicable
Performance Test, as applicable
End User Training
Gate Sign-Off

Phase 5: Production
Customer Go-Live Notice
Production Verification
Warranty Period
Gate Sign-Off

Phase 6: Audit
Production Support Plan Implemented
Sponsor Satisfaction Survey
Post Project Review
Gate Sign-Off

SCOPE MANAGEMENT KEY TERMINOLOGY

- Statement Of Work – SOW

- Project Charter

- Project Scope

- Product Scope

- Work Breakdown Structure - WBS

- Change Control Board - CCB

- Time and Material vs Fixed (Vendor related)

- Business Requirements

- Requirements Traceability Matrix

What looks familiar? What do you want to learn more about?

*Reference #1 & Appendix B

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SCOPE APPROACH - AGILE

- Product Owner determines high level scope with customers, then communicates scope to the team

- If priorities shift for the customer then scope shifts
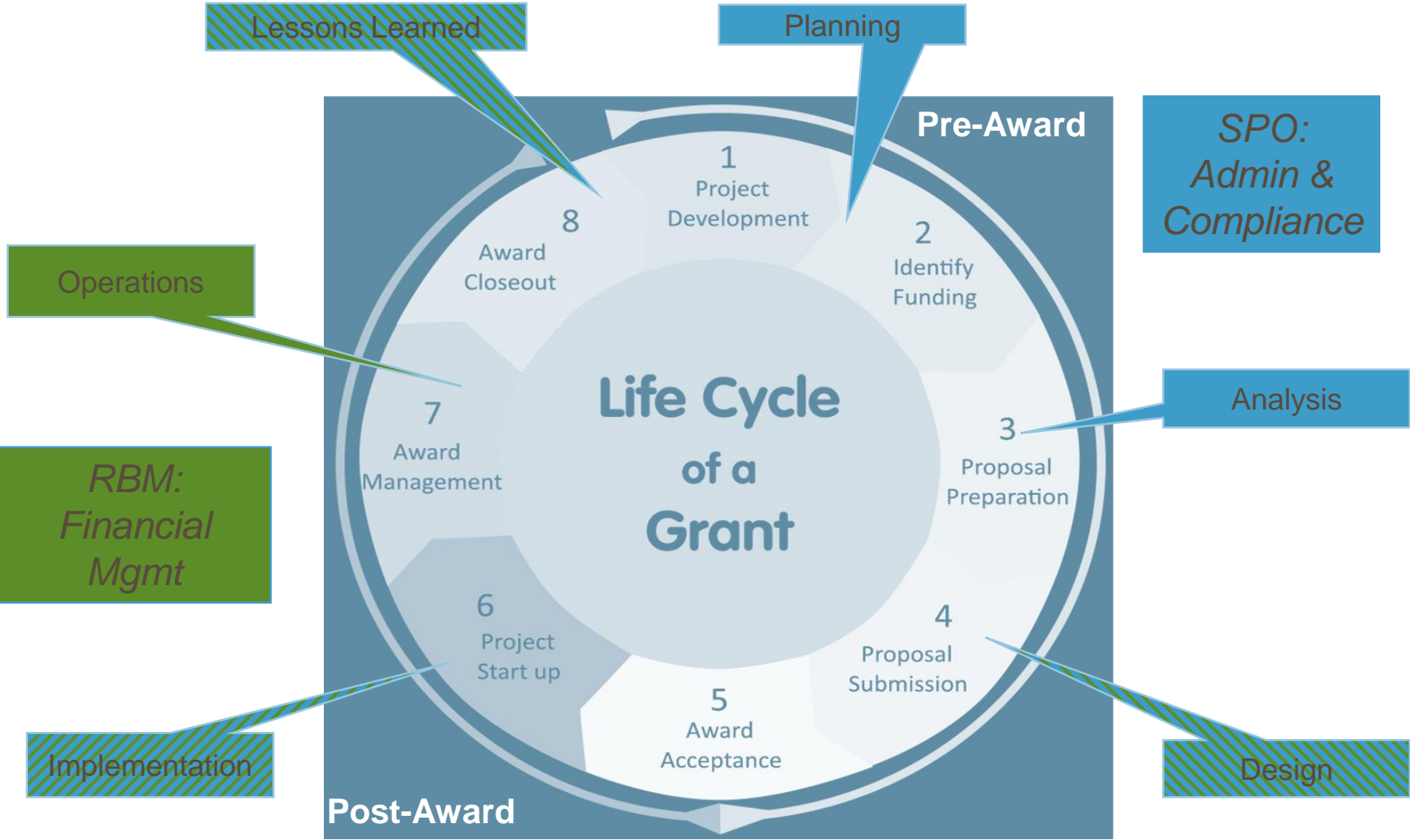- Team reprioritizes

Adaptable Team Work Business Value

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SCOPE APPROACH – AGILE USER STORY

- Focus on the "What" rather than the "How"

- Completed by Product Owner

- Story reviewed and updated based on feedback during sprint review meeting

- Definition of Done agreed on by team and Product Owner and pulled into an iteration (or sprint)

- Team estimates the hours needed to complete story

Title:	Customer Inter Account Transfer
Value Statement:	As a bank customer, I want to transfer funds between my linked accounts, So that I can fund my credit card.
Acceptance Criteria:	*Acceptance Criterion 1:* Given that the account is has sufficient funds When the customer requests an inter account transfer Then ensure the source account is debited 　　AND the target account is credited. *Acceptance Criterion 2:* Given that the account is overdrawn, When the customer requests an inter account transfer Then ensure the rejection message is displayed 　　And ensure the money is not transferred.
Definition of Done:	• Unit Tests Passed • Acceptance Criteria Met • Code Reviewed • Functional Tests Passed • Non-Functional Requirements Met • Product Owner Accepts User Story
Owner:	MR I Owner
Iteration:	Unscheduled
Estimate:	5 Points

AGILE & WATERFALL PHASES APPLIED TO THE GRANT LIFECYCLE

Lessons Learned

Planning

Pre-Award

SPO: Admin & Compliance

Operations

RBM: Financial Mgmt

Analysis

Implementation

Design

Post-Award

Life Cycle of a Grant

1 Project Development
2 Identify Funding
3 Proposal Preparation
4 Proposal Submission
5 Award Acceptance
6 Project Start up
7 Award Management
8 Award Closeout

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DISTINGUISHING ROLES BETWEEN RESEARCH PROJECTS VS ADMINISTRATION PROJECTS

Research Role	Administration Role	Details
PI	Executive Sponsor	
SPO/RBM/GCS	PM/PO	• Financial Management • Compliance • Admin Support
Lab Staff	Project Team	Works with PI and SPO/RBM to ensure work is completed on time, on budget, and within scope

PRIMARY TOOLS FOR THE RESEARCH PMO

- MS Office 365 Suite; Word, Excel, Visio, Skype, SharePoint, Outlook, Power Point, One Note and Project

- Smartsheet; sheets, forms, reports, dashboards and calendars

- Research PMO Portfolio; Program and project visibility

What tools are you using?

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ADDITIONAL RESOURCES

- Research PMO Web Site
  - Submit a question to us
  - Register for our next Brown Bag in FY20 Q4
  - Request audit & governance support
- Take a class at CHOP:
  - Project Management
  - Process Improvement
  - MS Office
  - DISC with your team
  - CLI: Presenting with Impact: Presentations Skills Workshop

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Questions?

REFERENCES

1. PMBOK Guide, A Guide to the Project Management Body Of Knowledge, 2018, Sixth Edition, Project Management Institute

2. Hoek, Jasper.(2018) *Pursuing a Full Agile Software Development Life Cycle*. Retrieved from https://www.mendix.com/blog/pursuing-a-full-agile-software-lifecycle/

3. Brandall, B. (2018) Waterfall vs Agile: Which Methodology Is Right For You? Retrieved from https://www.process.st/waterfall-vs-agile/

APPENDIX A - PROJECT ROLES AND DESCRIPTION

- **Project Manager (PM)/Scrum Master (SM) –** The person authorized by the performing organization to lead the team that is responsible for achieving the project objectives

- **Business Analyst (BA) –** The person who serves as the liaison between the business community and the technical solution providers throughout the project life cycle

- **Subject Matter Expert (SME) –** Typically a member of the business team, or an external consultant, assigned to the project to support requirements, testing and training activities.

- **Project Owner / Product Owner –** An individual, or two, that has decision authority over the scope and deliverables for a project. They are typically a member of the project team.

- **Executive Sponsor –** An individual or a group that provides resources and support for the project, program, or portfolio, and is accountable for enabling success

- **Stakeholder –** An individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project, program, or portfolio

- **Technology / Scrum Team –** Includes, but is not limited to, development, infrastructure, application or architecture support roles.

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APPENDIX B - KEY TERMINOLOGY & ACRONYMS

Statement of Work (SOW). A narrative description of products, services, or results to be delivered by the project.

SWOT Analysis. Analysis of strengths, weaknesses, opportunities, and threats of an organization, project, or option.

Work Breakdown Structure (WBS). A hierarchical decomposition of the total scope of work to be carried out by the project team to accomplish the project objectives and create the required deliverables.

Change Control Board (CCB). A formally chartered group responsible for reviewing, evaluating, approving, delaying, or rejecting changes to the project, and for recording and communicating such decisions.

Organizational Breakdown Structure (OBS). A hierarchical representation of the project organization, which illustrates the relationship between project activities and the organizational units that will perform those activities.

RACI Chart. A common type of responsibility assignment matrix that uses responsible, accountable, consult, and inform statuses to define the involvement of stakeholders in project activities.

Time and Material Contract (T&M). A type of contract that is a hybrid contractual arrangement containing aspects of both cost-reimbursable and fixed-price contracts.

Request for Proposal (RFP). A type of procurement document used to request proposals from prospective sellers of products or services. In some application areas, it may have a narrower or more specific meaning.

Flowchart. The depiction in a diagram format of the inputs, process actions, and outputs of one or more processes within a system.

Gantt Chart. A bar chart of schedule information where activities are listed on the vertical axis, dates are shown on the horizontal axis, and activity durations are shown as horizontal bars placed according to start and finish dates.

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APPENDIX B CONTD. - KEY TERMINOLOGY & ACRONYMS

- **Product Scope** – The features and functions that characterize a product, service, or result.

- **Project Scope** – The work performed to deliver a product, service, or result with the specified features and functions. The term "project scope" is sometimes viewed as including the product scope.

- **Project Charter** – The project charter is the document issued by the project initiator or sponsor that formally authorizes the existence of a project and provides the project manager with the authority to apply organizational resources to project activities. It documents the high-level information on the project and on the product, service, or result the project is intended to satisfy.

- **Business requirements** – These describe the higher-level needs of the organization as a whole, such as the business issues or opportunities, and reasons why a project has been undertaken.

- **Requirements Traceability Matrix** – The requirements traceability matrix is a grid that links product requirements from their origin to the deliverables that satisfy them. The implementation of a requirements traceability matrix helps ensure that each requirement adds business value by linking it to the business and project objectives.

*Reference #1

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APPENDIX C - AGILE

Planning Phase: Understanding the customers need and determining the requirements

Analysis Phase: The Analysis Phase is where you break down the deliverables in the high-level Project Charter into the more detailed business requirements

Design Phase: Depending on the subject of the project, the products of the design phase can include dioramas, sketches, flow charts, site trees, HTML screen designs, prototypes, photo impressions and UML schemas

Implementation Phase: The project takes shape during the implementation phase. This phase involves the construction of the actual project results

Testing Phase: During the testing phase, developers find out whether their code and programming work according to customer requirements. And while it's not possible to solve all the failures you might find during the testing phase, it is possible to use the results from this phase to reduce the number of errors within the software program

Maintenance Phase: The maintenance phase of the SDLC occurs after the product is in full operation. Maintenance of software can include software upgrades, repairs, and fixes of the software if it breaks. Software applications often need to be upgraded or integrated with new systems the customer deploys

*Reference #2

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