RESEARCH PMO BROWN BAG LUNCH

THURSDAY, 11:30A 11/11/21

BUILDING THE PROJECT FOUNDATION

Anne E. Geary, MBA, PMP – Assistant Director

Dale Jacobs, BFA, CSM - Project Manager

Margeya Patel, BS - Project Manager

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

AGENDA

- Housekeeping Items
- Introductions
- Session Overview
- Project Charter and Statement of Work
- Requirements Gathering
- Project Plan / Schedule
- Takeaways/Resources / Tools
- Final Questions / Survey

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

HOUSEKEEPING

- How to approach the material
- Interactive training and opportunities with virtual education
  - Indicate you have a Question in Chat
  - Ask a Question through Raise Hand
- Survey information

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

INTRODUCTIONS

- PMO
  - Team intros: Dale, Margeya and Anne

- Participants
  - Name, Functional Team
  - Your experience working on a project team and any specific issues or questions that you encounter while working on a project
  - Why you signed up for this event, what you hope to learn?

Children's Hospital
of Philadelphia
RESEARCH INSTITUTE

SESSION OVERVIEW

In this session we will focus on the process of HOW to address the fundamentals for building a successful project and will cover the following:

- How to approach the start of a project
- What questions to ask to determine what is in and out of scope
- Scheduling do's and don'ts
- The importance of communication preparedness and how best to approach sponsors, project leaders and team members,
- When documentation that is necessary vs. nice to have
- Why having committed resources is key to success

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

THE PATH OF INFORMATION
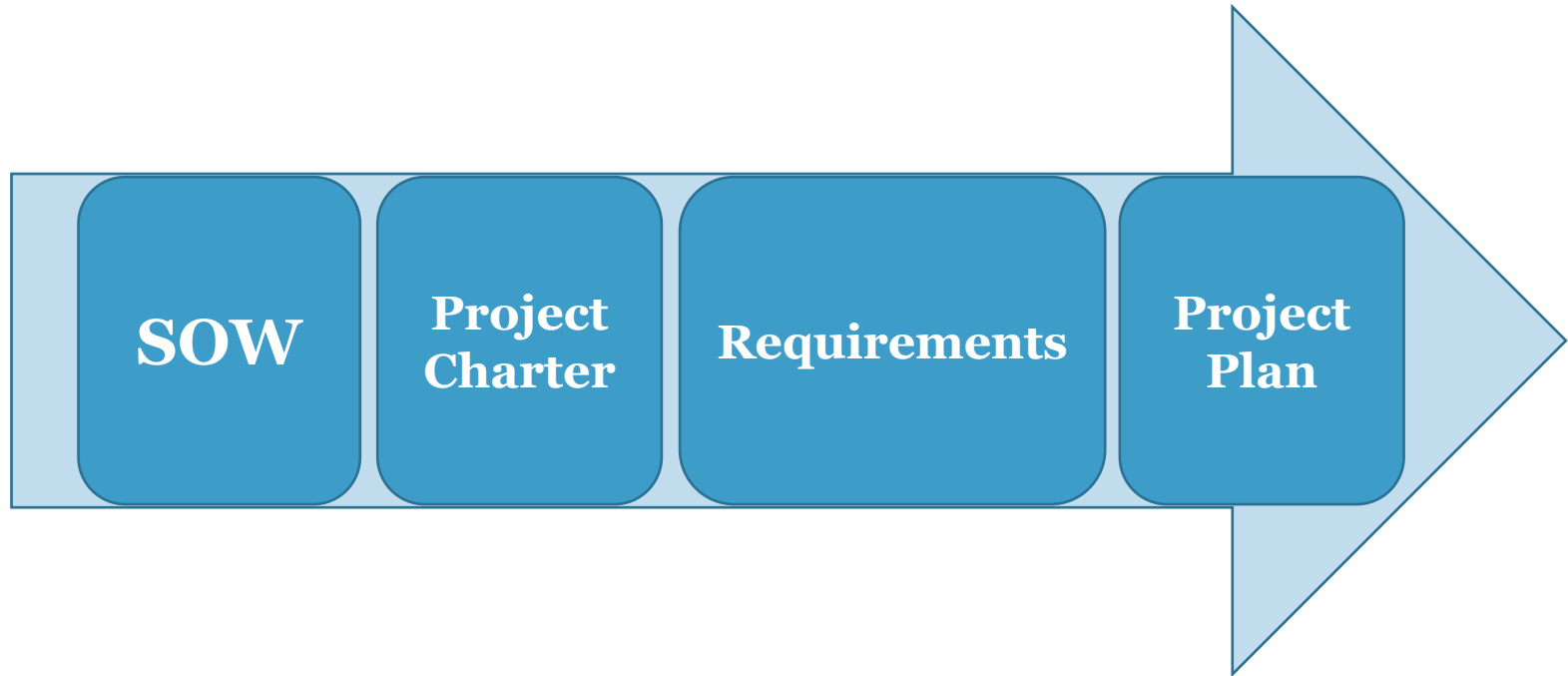
THE PROJECT CHARTER AND STATEMENT OF WORK (SOW)

CREATING THE SOW AND PROJECT CHARTER AGENDA

- What's the difference: [Project Charter vs Statement Of Work](#)
- Why are they important
- Putting it all together: who helps you build the Project Charter
- Content: key information to include
- How much is too much: When do I stop collecting content material
- What's On Deck: what does the SOW/Project Charter transition to

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

WHAT'S THE DIFFERENCE: SOW VS PROJECT CHARTER

- Project Charter is…
  - Key information about a project and why it is happening
  - Enables all levels of support; executive, core and general team members to be on the same page about the project goals
  - Identifies deliverables, what is in AND out of scope, who is assigned to the project and in what capacity
  - Documents high level risks, issues and milestones for the work to be completed

- Project Charter is not…
  - A substitute for a project plan
  - A substitute for a complete list of requirements/deliverables for the project

- Where does the Statement Of Work (SOW) fit in?
  - Typically, this is utilized by an external provider of services or equipment, i.e. vendor
  - Despite a SOW the vendor will still need to perform a deep dive into requirements and deliverables for a complete understanding of the work that is needed

- When to use one over the other
  - The Charter should be used for a complete understanding of the project, especially if the sponsor knows that they have resources; people and budget, to work on the project
  - A SOW could be performed to give the sponsor a quick understanding of the work this could entail and help them decide if they should pursue the project. If yes, then a more detailed charter should be provided.

WHY ARE THESE DOCUMENTS IMPORTANT

- Both the Charter and SOW help to begin the definition of the change that is needed

- It is essential…
  - the project team has a clear understanding of what the project sponsor wants/needs from the project
  - the project sponsor understands what the project team can deliver

- When these documents are not produced, or are incomplete, the project it at risk for the following:
  - Work is started without a clear direction
  - Time/money can be wasted on the wrong activities
  - Necessary resources are not available when they need to be
  - Sponsor can feel disappointed because their needs were not meet by the work that was done
  - Work will take longer to complete due to an unclear path
  - The project is not successful
  - Organization is at risk of having the wrong solution provided

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

PUTTING IT ALL TOGETHER

- Who helps you build the Project Charter?
  - To build a well-documented project charter, the project manager will need to speak with project resources, or their managers, to confirm availability
  - The principal roles that help a project manager build this document:
    - Sponsor/Project Owner
    - Business Analyst
    - Functional Resource Manager
    - Technical Resource Manager

- What voices are the most important?
  - Your sponsor is the most important voice in the room!
  - Secondary voices will include; functional owners who are impacted by the project, executive technology owners who need to advise/steer the direction of what technology can be considered and third-party vendors that are providing services or solutions.

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

CONTENT

- Key information to include in the **Project Charter or *SOW**
  - Project Charter Purpose
  - Project Overview*
  - Deliverables
  - Project Scope*
  - Project Approach
  - Timeframe/Duration*
  - Budget Estimates*
  - Expected Benefits
  - Major Milestones
  - Steering Committee
  - Project Team
  - Team Process
  - High Level Issues, Constraints and Risks
  - List of Abbreviations (optional)

- Do I really need EVERYTHING?
  - Yes, you should have all information complete, along with formal acceptance from the project sponsor

- **If you only had time for the essentials…**
  - Project Overview
  - Scope
  - Milestones
  - Steering Committee and Project Team
  - Risks/Issues

If it's not in writing it didn't happen!

Children's Hospital of Philadelphia RESEARCH INSTITUTE

HOW MUCH IS TOO MUCH

- **When do I stop collecting content material**
  - Set a timeline for collecting the key attributes of a project; what's in scope, not in scope, who needs to support the work, is there a technology impact, is there a compliance impact and any hard deliverable dates
  - Based on your timeline for completing this assessment you schedule meetings to collect the key information
  - STOP! It's now time to move forward with the information that you have at this time.
    - If more information presents itself at a later date, which can easily happen, the team will evaluate if this "change to scope" will fit into the current project, or is considered after this project is finished

- **Who/what informs what is included**
  - The project lead, on behalf of the sponsor, will provide direction and approve all functional impacts
  - If there is a technology component a technology resource, or third-party vendor will need to provide direction and approve as well

WHAT'S ON DECK

- What does the SOW/Project Charter transition to requirements gathering
  - Once the Charter/SOW are approved a detailed dive into the requirements/scope of the project is necessary

- How is that best transitioned
  - The Project Manager will work closely with the Business Analyst, or perform the work themselves, to understand the project deliverables and provide a foundation for documenting the details found in a Business Requirements Document

REQUIREMENTS GATHERING / CONFIRMING SCOPE

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

REQUIREMENTS GATHERING

- What are Requirements?
- Sources of Requirements
- Requirements Elicitation
- Elicitation Techniques
- Requirements Prioritization
- Requirements Traceability
- Business Requirements Document (BRD)

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

WHAT ARE REQUIREMENTS?

- A condition or capability needed by a stakeholder to solve a problem or achieve an objective

- A condition or capability that must be met or possessed by a solution or solution component to satisfy a contract, standard, specification, or other formally imposed documents

- Questions to Ask: Remember the 5 W's
    - Who?
    - What?
    - When?
   - Where?
    - Why?

*Reference #1

SOURCES OF REQUIREMENTS

- Stakeholders
- Existing documents and systems
- Business process documents
- Templates
- Policies/procedures
- Guidelines
- Historical data and information
- Compliance and Regulations – Clinical Trials Related
- Security and Systems

REQUIREMENTS ELICITATION

- Prepare for Elicitation
- Conduct Elicitation
- Document Elicitation Results
- Confirm Elicitation Results
- Remember the 5 W's

How stakeholders think requirement gathering works.
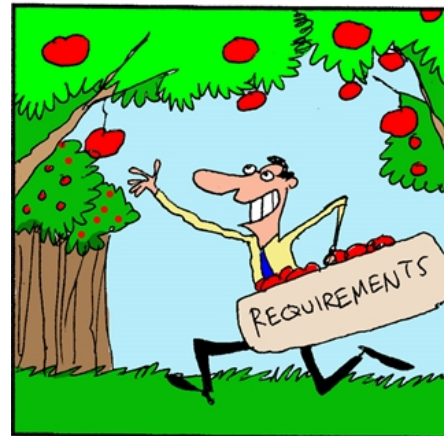
How requirement gathering really works.

*Reference #4

ELICITATION TECHNIQUES

- Brainstorming
- Document Review & Analysis (existing documents and systems analysis if applicable)
- Focus Groups
- Interviews
- Observation (job shadowing)
- Requirements Workshops (elicitation and facilitated workshops)
- Survey / Questionnaire

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

CHALLENGES OF REQUIREMENTS GATHERING

- Stakeholders change their mind frequently
- Stakeholders insist on a particular solution
- Conflicting requirements
- Conflicting priorities
- Poor Communication (talk too much or too little)
- Stakeholders change in the middle of the project

REQUIREMENTS PRIORITIZATION

- Based on their relative value, risk, difficulty of implementation, or on other criteria (determined by project team and stakeholders)

Priority Level	Description	When Needed
Must Have / High	Essential and non-negotiable	Right now
Should Have / Medium	Useful, negotiable, or slightly deferrable	A little later
Nice to Have / Low	Desirable. Not meeting it results in some capability or ease of use being degraded	Someday

*Reference #1

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

REQUIREMENTS TRACEABILITY

- Goal of tracing is to ensure that requirements are linked back to a business objective

- Mapping between requirements, test cases and scripts related to corresponding requirements

- Usually in table form

- Identifies and documents the origin of each requirement

- Used to detect missing requirements or if a functionality is not supported by a requirement

- Forward traceability (ensures that we are building the right requirements)

- Backward traceability (ensures that we are building the requirements right)

Children's Hospital of Philadelphia RESEARCH INSTITUTE

REQUIREMENTS TRACEABILITY EXAMPLE

Requirements Traceability Matrix								
Project Name:								
Cost Center:								
Project Description:								
ID	Associate ID	Requirements Description	Business Needs, Opportunities, Goals, Objectives	Project Objectives	WBS Deliverables	Product Design	Product Development	Test Cases
001	1.0							
	1.1							
	1.2							
	1.2.1							
002	2.0							
	2.1							
	2.1.1							
003	3.0							
	3.1							
	3.2							
004	4.0							
005	5.0							

*Reference #1

Children's Hospital of Philadelphia RESEARCH INSTITUTE

BUSINESS REQUIREMENTS DOCUMENT (BRD) CONTENT

- Key information to include in the **BRD**
  - Background and Current Situation
  - Project Objective
  - Requirements Scope
  - Assumptions, Constraints, Dependencies and Risks
  - Business Requirements
  - Security Requirements
  - Implementation Requirements
  - Testing
  - Training
  - Support Requirements
  - Referenced Documents

- Do I really need EVERYTHING?
  - Yes, you should have all information complete, along with formal acceptance from the project sponsor

- **If you only had time for the essentials…**
  - Project Objective
  - Requirements Scope
  - Assumptions, Constraints, Dependencies and Risks
  - Requirements

Proper Documentation is Key!

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

BUSINESS REQUIREMENTS DOCUMENT (BRD)

Project Information:

Project Name: Click here to enter text.
Project Sponsor/Approvers: Click here to enter text.
Project Owners: Click here to enter text.
Project Manager: Click here to enter text.
Business Analyst: Click here to enter text.

Stakeholders

[List names and titles of individuals required to provide input to the Business Requirements Document (BRD) as per the Role as a Stakeholder.]

Name	Title/Role

Revision History

[A new version should be specified using this 1.0, 1.1, 1.2…1.9, 2.0…format every time the BRD content is being changed or updated. A final approval version can be stated as "Final"]

Version	Date	Author	Revision Description
1.0	*mm/dd/yyyy*	*Analyst Name*	Initial Draft of Document
1.1			
1.2			
2.0			Approved Requirements

Business Requirements Document (BRD)

BUILDING THE PROJECT PLAN AND SCHEDULE

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

HOW TO CREATE A PROJECT PLAN / SCHEDULE AGENDA

- Determining Resources
- Timeline
- Quality Time and Cost
- Plan Examples
- Planning Challenges
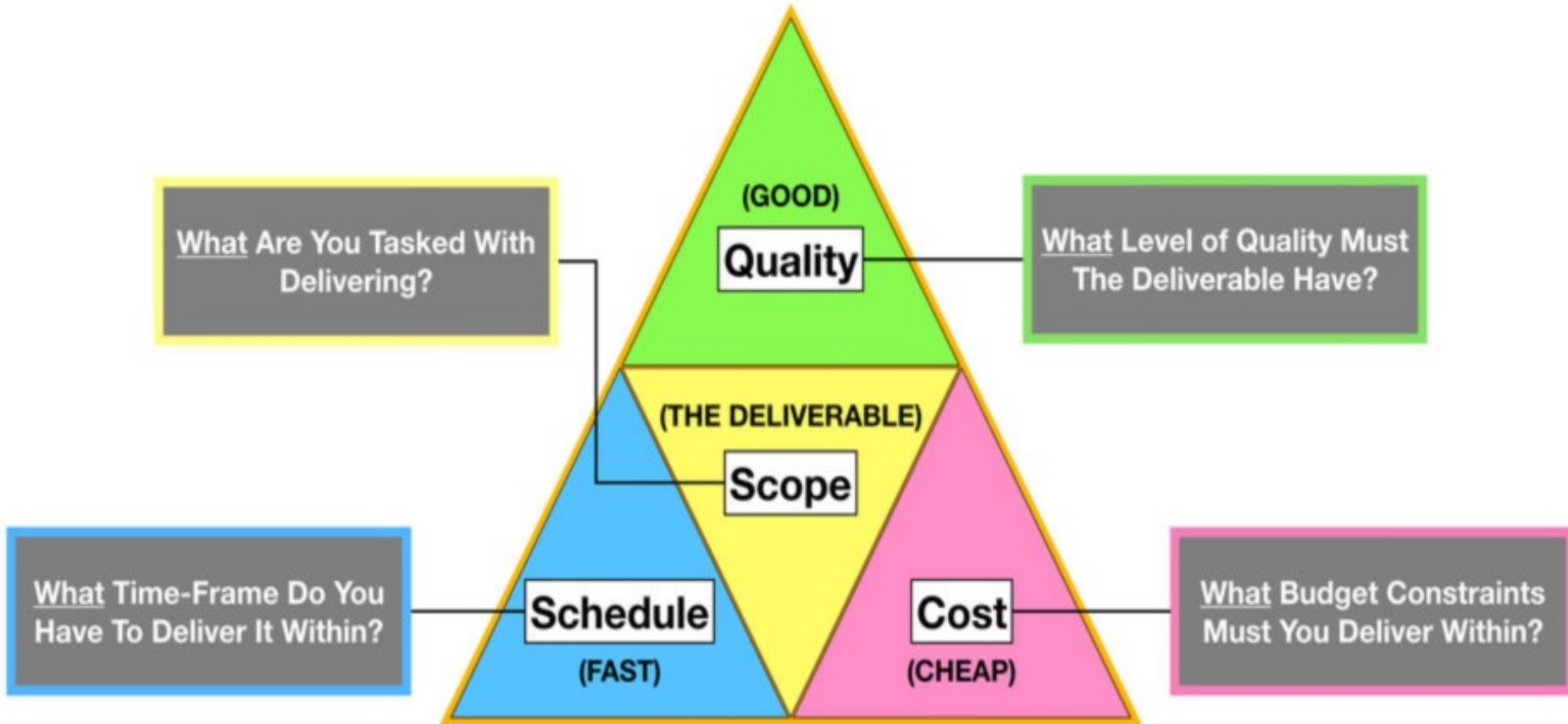- Milestones

DETERMINING RESOURCES

- **Define Resources Available and Pertinent to the Project**
  - **Staff**
  - **Software**
  - **Hardware**
  - **Location / Space to be Utilized**

- **Discuss Skill Level, Availability and Amount of Effort**
  - **Hours and Percentage**
  - **Schedule with Calendar or Gantt Chart**

- **RACI: Responsible Accountable Consulted Informed**
  - **Organization**
  - **Hierarchy**

  Research Institute RACI Matrix

**Children's Hospital
of Philadelphia
RESEARCH INSTITUTE**

TIMELINE

- **Hold a Kick-Off Meeting and Establish the Timeline**
  - **Approvals**
  - **Goals**
  - **When do you Reach the Desired State?**

- **Determine Quality, Time and Cost; How do These Relate?**
  - **Measuring Quality requires an honest discussion about the acceptable standard of quality**
  - **Time, what is being requested, what is required vs. what is realistic**
  - **What is the Cost of the project and how does this constrain the project**

- **Progress, Predecessors and Dependencies**
  - **Measure progress toward each milestone as well as the big picture**
  - **What does the task depend on**

**Children's Hospital
of Philadelphia
RESEARCH INSTITUTE**

QUALITY, TIME AND COST*

*Reference #3

Children's Hospital
of Philadelphia
RESEARCH INSTITUTE

EXAMPLE OF A PROJECT PLAN

Waterfall Project Plan

To be used for a plan that can be estimated with detail or is more complex

Analysis Project Plan

Template for a simpler plan that may require more flexibility or to track process improvement initiatives

PROJECT PLAN & SCHEDULE: CHALLENGES*

- **Overallocation –** Overloading or the mishandling of schedules, misunderstanding the skillset, value or experience of resources can lead to decreased production.

  - Can be addressed by scheduling and a workload that considers work-life balance while diversifying skills and tasks between resources

- **Dependency –** Tasks, decisions or issues that need to be handled before another task can be performed.

  - Can be addressed by identifying and understanding the dependencies, creating contingency plans and mitigating risks

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

"A MILESTONE ANTICIPATES WHAT THE PROJECT IS SUPPOSED TO ACHIEVE AT A PRE-SET DATE. IT SHOULD DESCRIBE A DESIRED STATE OF AFFAIRS, A DESIRED FUTURE SITUATION."
- PROJECT MANAGEMENT INSTITUTE*

Building Toward a Desired State!

*Reference #5
IMG – Reference #6

MILESTONES

- ## What is the Desired State
  - Come to an agreement with stakeholders on the desired environment, using the requirements gathered and Charter / SOW
  - Prioritize, establish dates and end state

- ## Identify the Milestones and Highlight Key Deliverables
  - Decide the work required to reach each building block
  - Meet with team leaders and come to an agreement on workload, timing and strategy

- ## Measure Progress and Identify Predecessors
  - Agree upon how to measure progress
  - Plan for the predecessors that the milestones may rely on, risk and contingency

TAKEAWAYS

- The amount of documentation you collect can be flexible based on your project needs

- Communication with your sponsor(s) and team members is key to creating solid project documentation

- Importance of having key resources involved, and committed, throughout all project activities

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

ADDITIONAL RESOURCES

- Take a class at CHOP:
  - Project Management
  - Applying Improvement Methods (AIM)
  - Leading Improvement Course (LIC)
  - MS Office
  - DISC I & II with your team
  - CLI: Presenting with Impact: Presentations Skills Workshop
  - Virtual Meeting Technology Coaching Session

PRIMARY TOOLS FOR THE RESEARCH PMO

- MS Office 365 Suite; Word, Excel, Visio, Skype, SharePoint (TBD), Outlook, Power Point, Teams, One Note, OneDrive and Project

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

- [Research PMO Website:](#)
  - Submit a question to us
  - Request Project or Process Improvement Support

- [Research PMO Portfolio;](#) Program and project visibility

- [Research PMO Key Deliverables](#)

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

Final Questions?

Don't Forget to Complete your [Survey](#)

Check out new Agile example on pg. 46 - Appendix C

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

REFERENCES

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

2. Pisuwalar, Ubaid, 2019, A Comprehensive Guide on Agile Methods for Modern Software Development. Retrieved from https://www.peerbits.com/blog/agile-software-development.html

3. Mark H. Warner, The Project Management Blueprint, Scope and the Triple Constraints of Quality-Time-Cost, "The Project Management Golden Triangle". Retrieved from https://www.theprojectmanagementblueprint.com/blog/project-overview/scope-and-the-triple-contraints-of-quality-time-cost

4. https://requirements.com/Content/On-the-Lighter-Side/humor-how-requirements-gathering-really-works

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

REFERENCES

5. Andersen, E. S. (2006). Milestone planning—a different planning approach. Paper presented at PMI® Global Congress 2006—Asia Pacific, Bangkok, Thailand. Newtown Square, PA: Project Management Institute. Retrieved from https://www.pmi.org/learning/library/milestone-different-planning-approach-7635

6. Retrieved from https://ppm.express/wp-content/uploads/2019/11/PMBOK-TOP-10-TAKEAWAYS-FOR-A-PROJECT-MANAGER-1024x576.jpg

7. Retrieved from https://www.projectmanager.com/blog/quick-guide-resource-management

APPENDIX

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

- **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.

- **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.

- **Quality Assurance** – An individual or a group that implements the processes of auditing the quality requirements and the results from quality control measurements to ensure appropriate quality standards and operational definitions are used.

- **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

*Reference #1

APPENDIX B - KEY TERMINOLOGY & ACRONYMS

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

- **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.

- **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.

- **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

*Reference #1

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

APPENDIX B CONTD. - KEY TERMINOLOGY & ACRONYMS

- **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 accordingly to start and finish dates

- **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

Children's Hospital of Philadelphia
RESEARCH INSTITUTE

APPENDIX C – AGILE / SCRUM

- **Kanban Board–** "Kanban" is the Japanese word for "visual signal." A kanban board helps make your work visible so you can easily monitor and keep everyone on the same page. Kanban boards use cards and columns to help technology and service teams commit to the right amount of work.

- **Sprint** – A short, consistent, time-boxed period when a team works to complete a set amount of work. A product or service is provided in a series of iterations that break down big, complex projects into bite-sized pieces. Approximately two weeks in length.
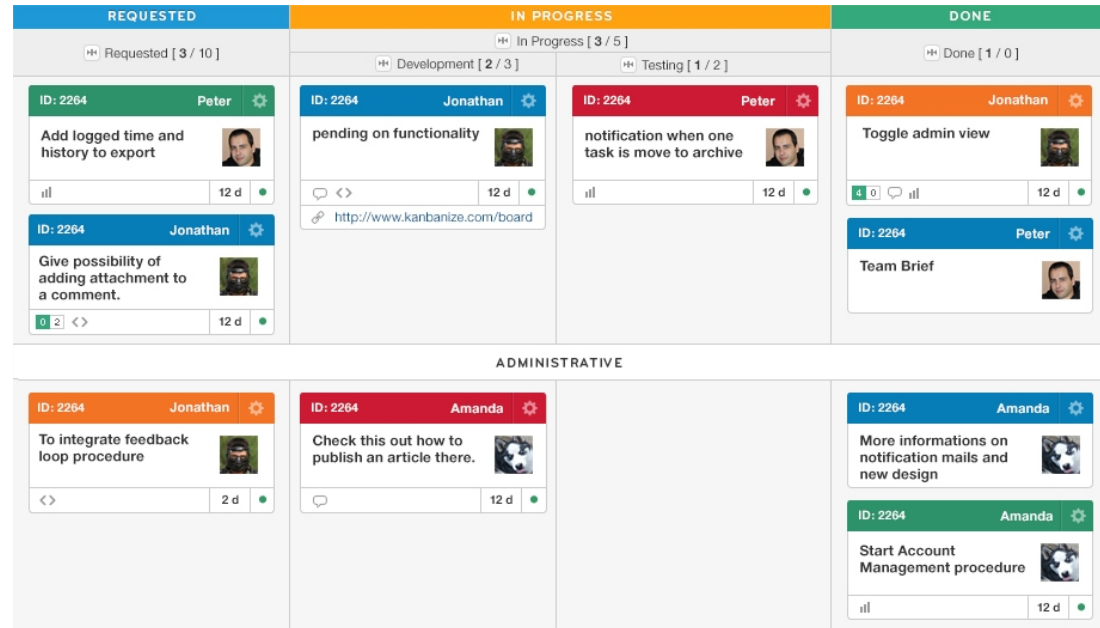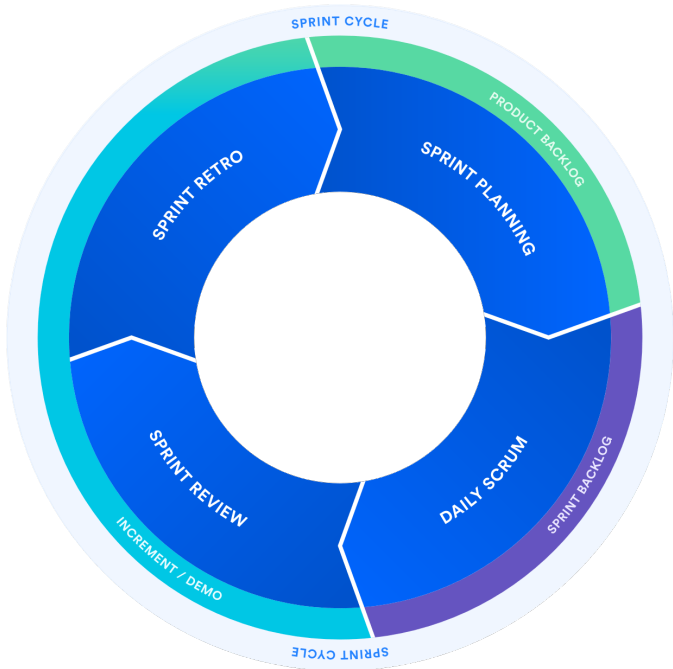
APPENDIX D - AGILE

- **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

Children's Hospital of Philadelphia
RESEARCH INSTITUTE