

RESEARCH PMO BROWN BAG LUNCH

WEDNESDAY, DECEMBER 16, 2020

**“PROJECT MANAGEMENT CASE
STUDY/WALKTHROUGH SESSION 2 OF 3” –
DEVELOPMENT & VALIDATION**

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

Shareen Hinson, MBA, CSM - Sr. Project Manager

Margeya Patel, BS - Project Business Analyst

AGENDA

- Housekeeping Items
- Introductions
- Case Study/Walkthrough Approach
- Re-Cap of Phases 1 and 2
- Project Deliverable, Overview and Approach
- RIS Overview
- Project Phases and Phase Deliverables
- Project Development Phase
- Project Validation Phase
- Questions/Survey

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

INTRODUCTIONS

- PMO
 - Team intros; Margeya, Shareen, and Anne
 - Special Guest: Dave Schlich
- 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?

CASE STUDY / WALKTHROUGH APPROACH

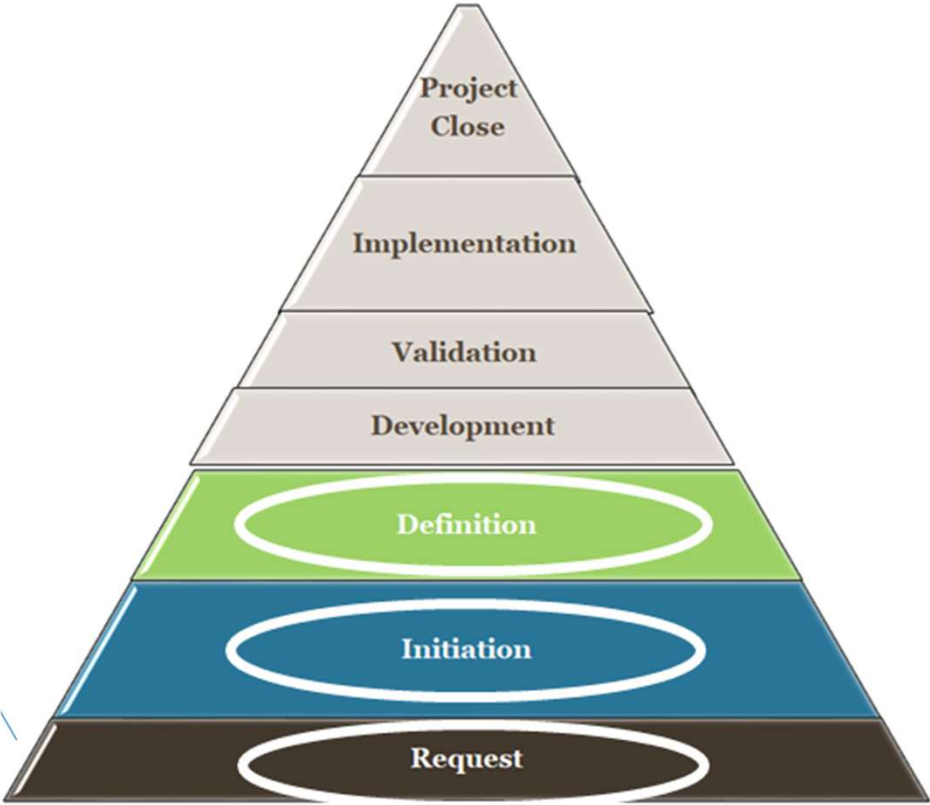
During each session, the Research PMO will take a combined approach of evaluating this project, as would be done in a Case Study. We will use a detailed examination to show what worked well, why and identify opportunities for improvement for this particular case. At other times, we will use the project to show generic examples that can be applied across all types of projects.

RE-CAP OF PHASES 1 AND 2

PHASE II - DEFINITION:
System Design; Configuration,
Development and Integration
Test Strategy
Final Project Plan
Final Budget
Finalizing Outstanding Contracts
Governance Approval to Move Project
forward

PHASE I – Initiation
Project Charter
Assign Resources
Project Plan
Evaluate prior projects Lessons Learned
Financial Assessment Worksheet
(Contracting)
Business Requirements Document (BRD)
(Requirements & peer recommendations)
Risk & Communications
Project Dashboard

REQUEST PHASE
Formal Request
Initial Hours Estimate



LAB ARCHIVES PROJECT ROLES

- CHOP Resources
 - Executive Sponsors
 - Project Manager
 - Business Analyst
 - Project Owner
 - Research Information Systems Manager
 - Research Application Technical Resources
 - Enterprise Technical Resources
 - Research Web Resources
 - Supply Chain Resource
- Lab Archive Resources
 - Lab Archive Rep
 - Lab Archives PM
 - Lab Archives Technical Resources

PROJECT DELIVERABLE

LABARCHIVES

The Children's Hospital of Philadelphia Research Institute provides the LabArchives Electronic Research Notebook (ERN) service for our researchers. The ERN, provided at no additional cost to our researchers, encourages digital storage, sharing of data, and collaboration around most research endeavors. It's easy to get started with LabArchives in your laboratory.

GET STARTED



<https://labarchives.research.chop.edu/>

LAB ARCHIVES PROJECT OVERVIEW AND APPROACH

- Within the CHOP Research Institute, a need was identified to enable our investigators access to a collaborative tool that is specifically designed for the storage, organization, sharing, collaboration, and publishing of scientific research.
- Penn Hospital and University is currently utilizing Lab Archives, a cloud based, highly secure solution that provides a simple tool to be used by the institution's investigators to manage their data and to protect the intellectual property rights of the institution.
- The RIS department will performed an evaluation of the Lab Archives tool to confirm that our investigators at CHOPs Research Institute can utilize this same tool. If so, a detailed project plan will be developed to support an early adopters program and eventually, a full implementation.

RESEARCH INFORMATION SERVICES

- Department Structure
 - Application Services:
 - 3rd party application consultation, custom web and mobile apps
 - Web Services:
 - Web content and online Research brand management (Research.CHOP.edu)
 - Infrastructure Services:
 - Storage, file transfers, servers, CHOP managed cloud services
 - Data Analysis Services:
 - Data Analysis, Reporting/dashboards
 - End User Devices (EUD)
 - Desktops, laptops, tablets

RESEARCH INFORMATION SERVICES

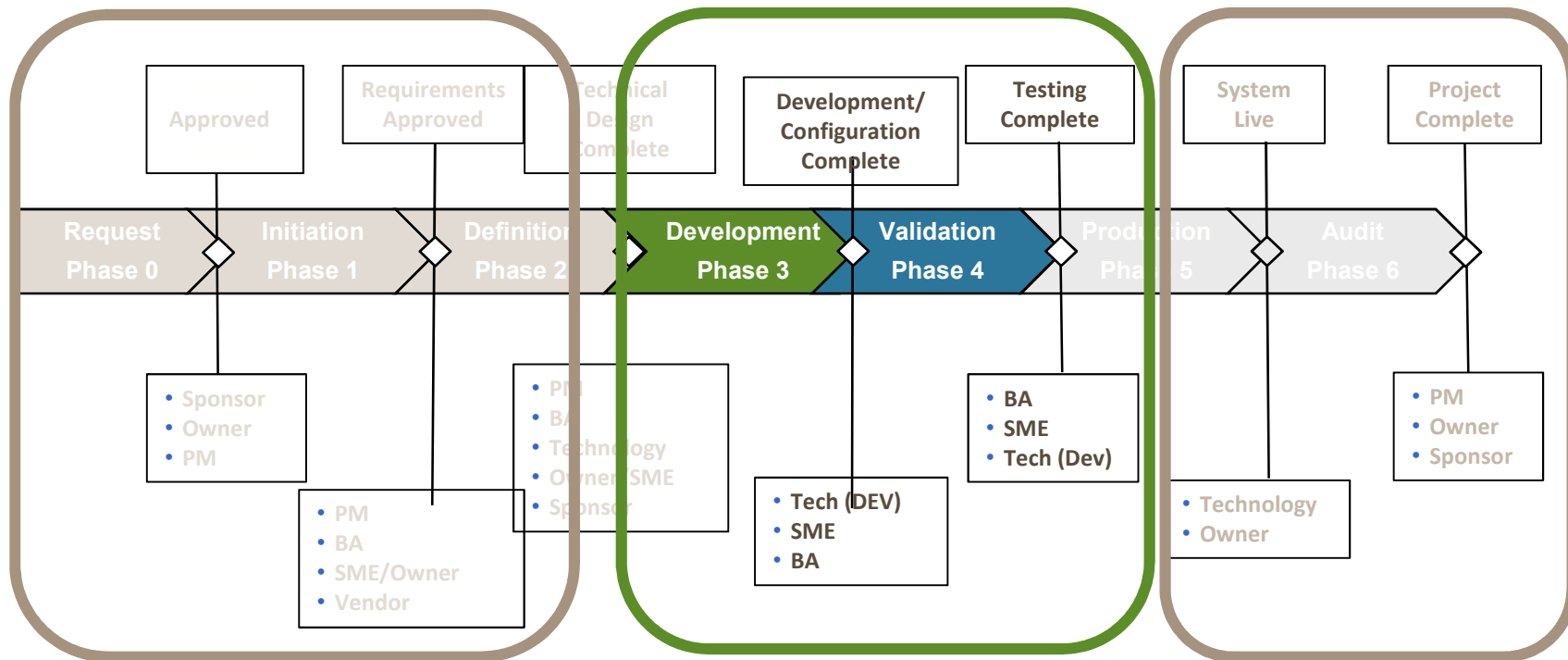
- RIS – PMO Collaboration
 - Collaborating through implementation and request for pricing and proposal activities
 - Project Implementation Examples
 - LabArchives
 - Compliance Quest
 - Xybion
 - Link2Care
 - NCURA

RESEARCH INFORMATION SERVICES

- Contacting RIS
 - ResearchIS@CHOP.edu
 - ServiceNow
 - Jira: www.Research.CHOP.edu
 - To submit a new web request or inquiry, visit: <https://riswebservices.research.chop.edu>
 - To submit a new business analytics request, visit: <https://www.research.chop.edu/ris-business-analytics-services>
 - To submit a new application support request, visit: <https://www.research.chop.edu/ris-application-services>

CASE STUDY / PROJECT PHASE OVERVIEW

Key Phase Deliverables & Resource Expectations



✓ STUDY/WALKTHROUGH SESSION 1 OF 3, INITIATE AND DESIGN

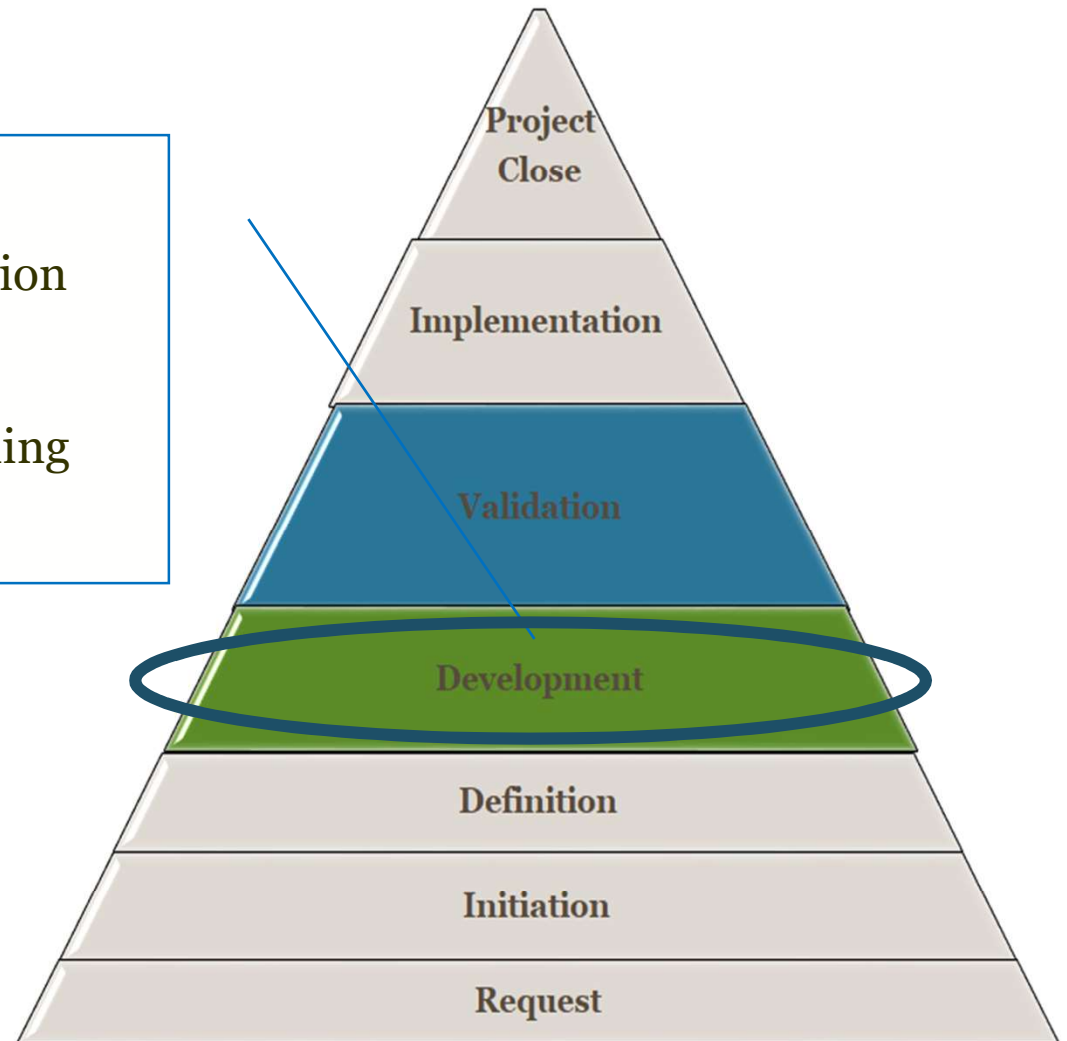
STUDY/WALKTHROUGH SESSION 2 OF 3, DEVELOPMENT AND VALIDATION

STUDY/WALKTHROUGH SESSION 3 OF 3, PRODUCTION AND PROJECT CLOSE


PROJECT DEVELOPMENT PHASE 3

PROJECT DEVELOPMENT PHASE

Test Scripts and Test Cases
Development and/or Configuration
Testing
Training
Roll-Out/Implementation Planning
End User Documentation



FINALIZED PROJECT PLAN



☆ Copy of Lab Archives Project Plan

WBS	Task Name	Prede...	Duration	Actual Start Date	Actual End Date	% Complete	Work	Status
0	Project Request		1.042d	10/08/18	10/09/18	100%	33.6h	Complete
1	Phase 1 - Project Initiation		118.917d	10/11/18	03/29/19	100%	217.6110312	In Progress
2	Phase 2 - Design/Definition Phase		94.284d	01/10/19	05/23/19	100%	201.45h	Complete
3	Phase 3 - Development/Configuration/Test Planning		60.5d	04/25/19	07/23/19	100%	70.40086467	Complete
3.1	Test Script Development (Functional & Technical)		6d	05/01/19	05/09/19	100%	6.000864677	Complete
3.2	Development/Configuration		53.125d	04/25/19	07/11/19	100%	60.2h	Complete
3.2.1	Chop RI Internal Website		33.375d	05/23/19	07/11/19	100%	33.0h	Complete
3.2.2	BOX Integration		2d	04/25/19	04/29/19	100%	16.0h	Complete
3.2.3	Configure LabArchives Settings for CHOP		2d	05/23/19	05/28/19	100%	11.2h	Complete
	SSO Customization work	71FS +'	15d	05/22/19	06/13/19	100%		Complete
3.2.4	All Development/ Config complete	97, 102,	7.375d	07/12/19	07/23/19	100%	0.0h	Complete
4	Phase 4 - Validation (Training and Webinar Planning)		84.374d	04/09/19	08/07/19	100%	231.0h	Complete
4.1	Early Adopter Training		17.625d	04/09/19	05/03/19	100%	40.6h	Complete
4.2	LabArchives - Early Adopter Program/Testing		30.75d	05/03/19	06/17/19	100%	48.0h	Complete
4.3	Chop RI Internal Website - Testing		9.999d	07/12/19	07/25/19	100%	43.2h	Complete
4.4	Finalize Roll-Out Planning		46.374d	05/21/19	07/26/19	100%	6.4h	Complete
4.5	Promotion of LabArchives		2d	07/26/19	07/30/19	100%	35.2h	Complete
4.6	Webinar Promotion		1d	07/30/19	07/31/19	100%	16.0h	Complete
4.7	Introductory Special Invitation Webinars		1d	07/31/19	08/01/19	100%	16.0h	Complete
4.8	ELN Site		1d	08/01/19	08/02/19	100%	16.0h	Complete
4.9	User Guides and Tips		0	08/02/19	08/02/19	100%	0.0h	Complete
4.10	Project Control		3d	08/02/19	08/07/19	100%	9.6h	Complete
5	Phase 5 - Production (Roll Out & Webinars)		73.125d	04/29/19	08/12/19	0%	145.6h	Not Started
6	Phase 6 - Audit - TBD		7d	08/13/19	08/21/19	0%	0.0h	Not Started

[Link to Lab Archives Project Plan](#)

TESTING LAYOUT AND STRATEGY

- RIS and Research Administration formed a LabArchives Administration Team responsible for testing and associated communications with the Vendor and the Research community
- Testing Scope
- Participation
- Testing Coordination and Communication
- Risk Mitigation

FUNCTIONAL REQUIREMENTS FOR TESTING

Requirement ID	Critical/Must Have = 3 Want to Have = 2 Nice to Have = 1	Requirement Deliverable (Yes/No)	Requirement Description	Requirement Type: Core Feature, Functional, Compliance, Integration, Deployment, Feature Request	Requirement Enabler (Additional work required)	Owner
R001	3	Yes	Enable CHOP SSO / Redirect	Integration	CHOP IDM AD integration with Lab Arc using SAML	IS, RIS App, LA
R002	2	Yes	Enable integration with a Research managed Web Portal	Integration		RIS Web
R003	3	Yes	Large file uploads accommodated	Integration	Box integration allows files over	IS, RIS App, LA
R004	2	Yes	Mobile devices feature parity with desktop version	Core Feature	Not 100% feature parity, but close.	RIS App

PREPARING TEST CASES AND SCRIPTS



CHOP LabArchives Application Test Cases & Scripts

Test Cases based on Requirements

Req ID R001
Req Enable CHOP SSO / Redirect
Test Steps
TEST
Go to LabArchives home page [labarchives.com] and log in with CHOP AD credentials using desktop and mobile browsers.
Expected Results:
TEST
Go to CHOP's vanity URL [labarchives.chop.edu] and log in with CHOP AD credentials using desktop and mobile browsers.
Expected Results:
Pass/Fail:

Req ID R002
Req Enable integration with a Research managed Web Portal
Test Steps
TEST
Go to the portal [https://research.chop.edu/labarchives] in a web browser.
Click the link to labarchives.chop.edu
Expected Results:
Pass/Fail:

Req ID R003
Req Large file uploads accommodated
Test Steps
TEST
Go to a test notebook and upload a pdf file under 250 MB. File should appear with a thumbnail and preview and be indexed. Next, upload an ISO file well over 250 MB. It should appear having a Box icon. It will not be indexed or previewed.
Expected Results:
Pass/Fail:

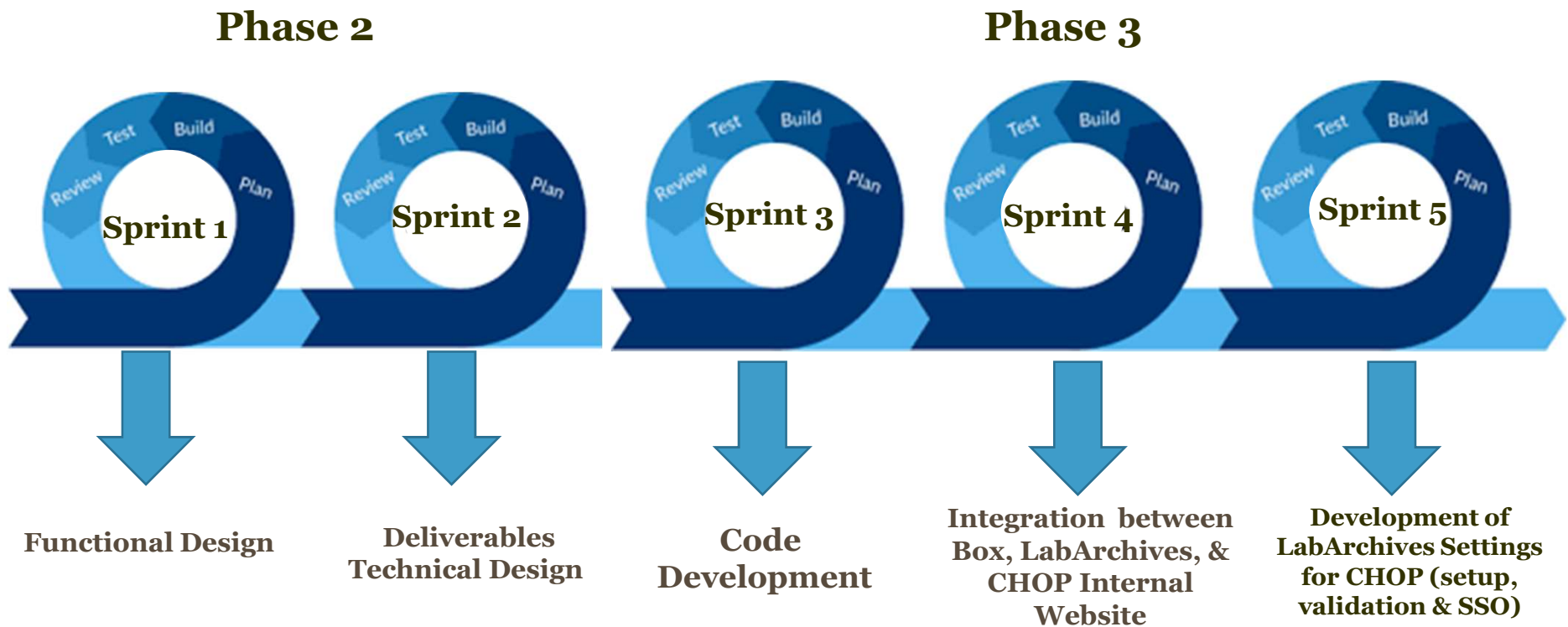
Req ID R004
Req Mobile devices feature parity with desktop version
Test Steps
TEST
Expected Results:
Pass/Fail:

DEVELOPMENT AND CONFIGURATION

- Chop RI Internal Website
- BOX Integration
- Configure LabArchives Settings for CHOP
- SSO Customization work

CHOPRI INTERNAL WEBSITE

The development of the Internal Website was managed by Creative Services and RIS team using an Agile Methodology. Agile is different approach to project management which takes an iterative approach to releasing system functionality



BOX INTEGRATION

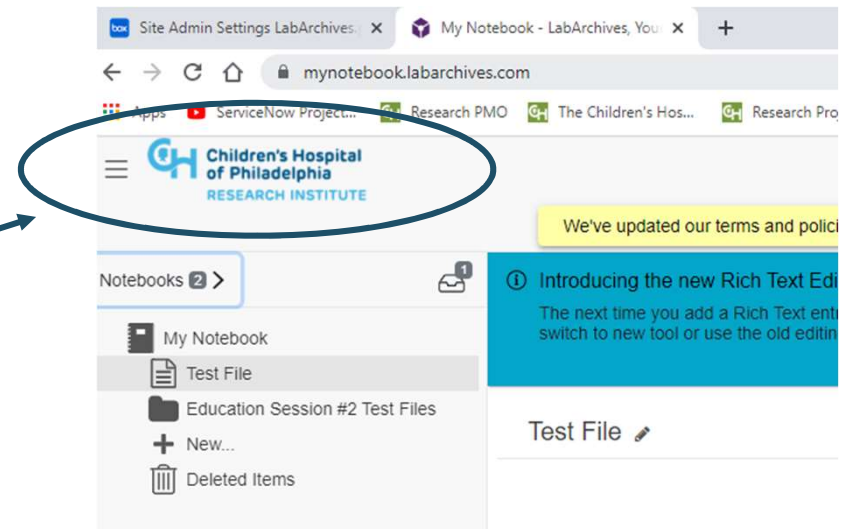
- **Allows large data files (+250MB) to be stored and accessed through the Lab Notebook**
- **Lab Archives is fully integrated with BOX**
- **Seamless transfer for the user**
- **Secured document storage**



Image of File in LabArchives,
but stored in box

LABARCHIVES SETTINGS FOR CHOP

- **CHOP has access to ALL content**
- **Some settings dependent on CHOP policy**
- **Copying content to another notebook**
- **Transfer of ownership**
- **Retention policies**
- **Notebook deletion - disabled**
- **Email to inbox**
- **Public Sharing**
- **Company Logo**



SSO CUSTOMIZATION

- Allows access to a Lab Notebook through our CHOP RI web site
- While SSO is standard, this technology was our biggest challenge
- Unknown technical challenges will impact the timeline

Login Setup happens the first time a user accesses LabArchives

labarchives
Institutional Authentication (Shibboleth)

Children's Hospital of Philadelphia Login Setup

You will need to associate your LabArchives account with your institution's login credentials. You can specify your LabArchives account below by either creating a new LabArchives account or specifying an existing one. Then, the next time you login to LabArchives through your institution's login site, you will be taken directly to your LabArchives account.

STUDENTS: If you received an email informing you that a LabArchives course notebook has been created for you and that you have to activate your account, choose the option "I do not have a LabArchives account and need to create or activate one."

If an email address is already entered in the form below, verify that it is the address at which you received the "activate" email, and correct if necessary, before proceeding.

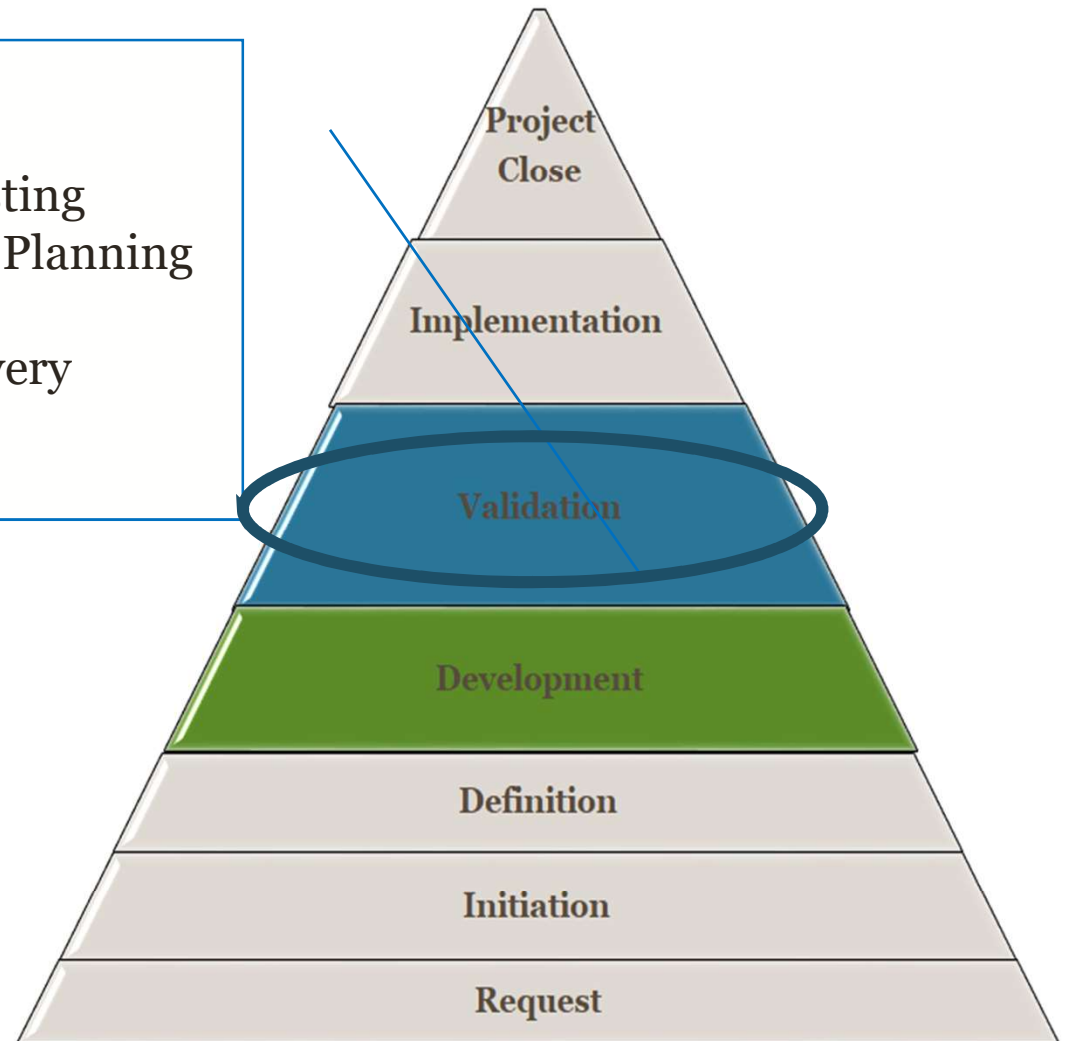
I have an existing LabArchives account already.

I do not have a LabArchives account and need to create or activate one.

PROJECT VALIDATION PHASE 4

PROJECT VALIDATION PHASE

Early Adopter Training
Early Adopter Testing
Chop RI Internal Website - Testing
Finalize Roll-Out / Implementation Planning
Promotion of Lab Archives
Webinar Promotion and Delivery
ELN Site Set-Up
User Guides and Tips



EARLY ADOPTER PROGRAM

WHO PARTICIPATED?

- Included in requirements phase
- Using competitor ELN platforms
- Requested access to an ELN

TRAINING PLAN

- Early Adopters Sessions were delivered during the week of Apr 29 – May 3, 2019
- Sessions were held in large conference rooms and smaller sessions conducted in-labs
- Research Administration Leaders were in attendance for the orientation

EARLY ADOPTER PROGRAM TESTING

Getting Started in LabArchives

How do I access LabArchives from a CHOP location?

You may either visit www.LabArchives.com, or follow the Login link provided on LabArchives.Research.CHOP.edu. Once at the LabArchives login, follow the steps below.

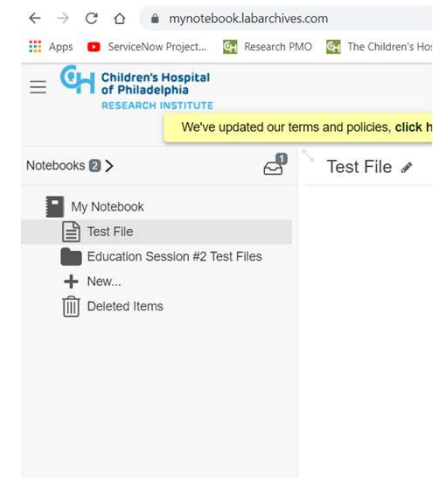
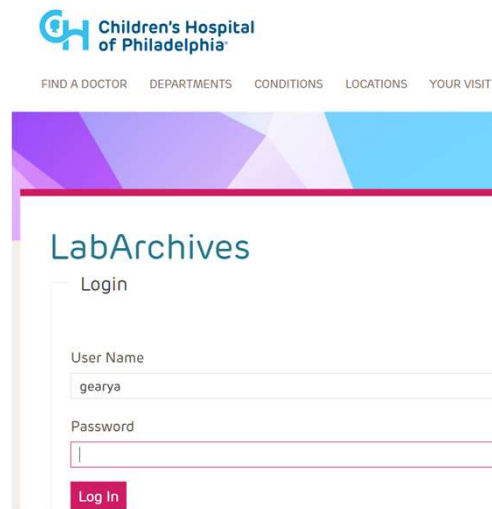
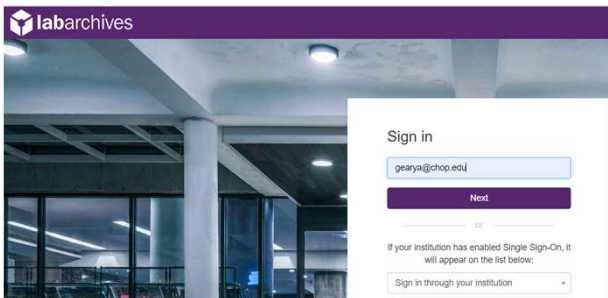
- 1) Ensure "Children's Hospital of Philadelphia" is the selected institution. If it is not, select "Children's Hospital of Philadelphia" from the drop down. Click "Go to your Institution's Login"

- 2) You will be taken to the CHOP secure login page for LabArchives. Enter your credentials and click "Log in"

If you have already created your CHOP LabArchives account, you will go directly into LabArchives.

TESTING COMPLETE, 1 OF 2

- Req ID: R001
- Req: Enable CHOP SSO / Redirect
- **Test Steps :** Go to LabArchives home page [labarchives.com] and log in with CHOP AD credentials using desktop and mobile browsers.
Expected Results: Redirect to CHOPs LA sign-in page
- **TEST Steps:** Go to CHOP's vanity URL [labarchives.chop.edu] and log in with CHOP AD credentials using desktop and mobile browsers.
- Expected Results: Logging in to CHOP with CHOP AD Credentials and redirected to LabArchives. User will provide screenshot with Pass or Fail Results
- **Pass/Fail: Pass**



TESTING COMPLETE, 2 OF 2

Req ID: R002

Req: Enable integration with a Research managed Web Portal

Test Steps: Go to the portal [<https://labarchives.research.chop.edu/>] in a web browser. click the link to labarchives.chop.edu

Expected Results: Able to access sign in link via the CHOP Web Portal

Pass/Fail: Pass



CHOPRI INTERNAL WEBSITE: TEST SCRIPT EXECUTION & DESIGN CONFIRMATION

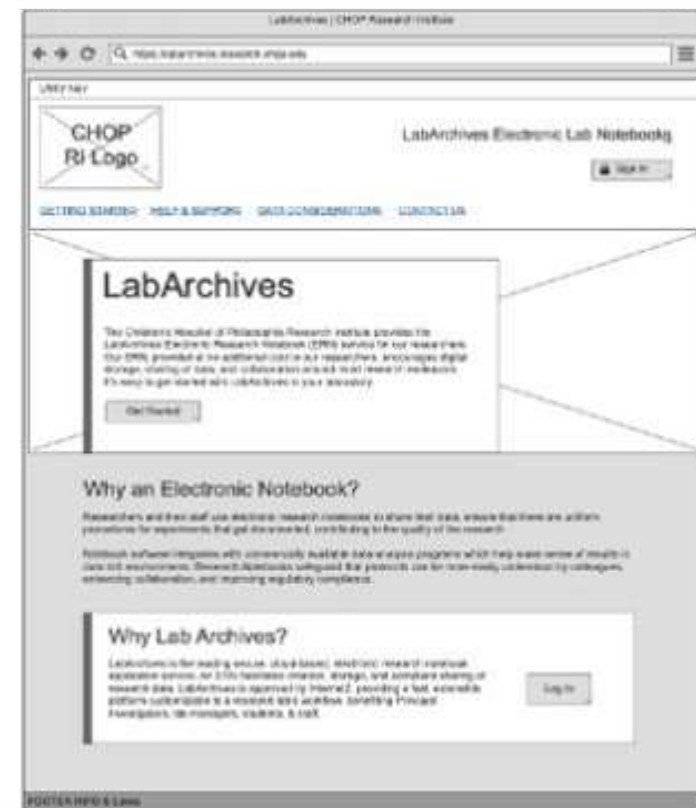
Finalizing testing for CHOP's internal website ensures all integration points and functionality are working as expected.

Test Script Execution

Req ID: R006
 Req: Review designs elements based on wireframes
 Test Steps:
 TEST
 Navigate to <https://labarchives.research.chop.edu/>
 Ensure the CHOP Logo is located in the top left corner of the page
 Review
 Expected Results:
 Pass/Fail

Req ID: R007
 Req: Review designs elements based on wireframes
 Test Steps:
 TEST
 Navigate to <https://labarchives.research.chop.edu/>
 Ensure the LabArchives description matches the wireframes and that it is located in the middle of the page
 Expected Results:
 Pass/Fail

Design Confirmation



PROMOTION OF LABARCHIVES

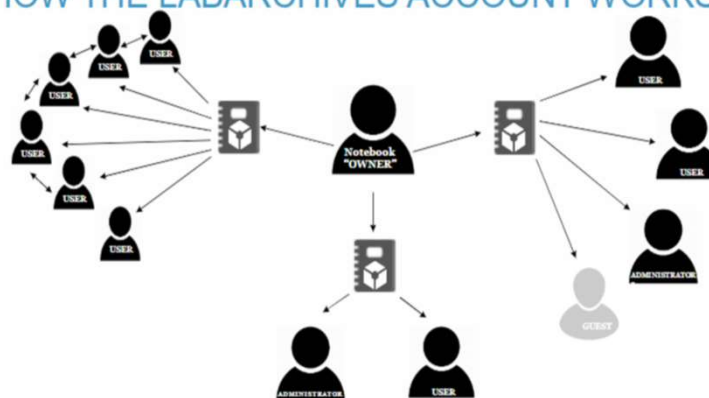
Email Blasts

- Socialize to targeted audience (PI's, Lab Manager, & Other Research Personnel)
- Highlight key technical advantages
- Communicate the ease of use
- Emphasize the *free* tool and its ability to support research

Training & Webinars

- Site Admin
- Stakeholders
- Train the Trainer
- Advanced Features
- Widget Consultation

HOW THE LABARCHIVES ACCOUNT WORKS



ONGOING PROMOTIONS

Suggested Activities for Research Staff During the COVID-19 Assignment to Remote Work

** Amendments to the original version of this document dated April 14, 2020.*

PROJECT-SPECIFIC ACTIVITIES

(These activities may be completed and the effort expended can continue to be charged to the project grant or contract:)

I. Internal and External Virtual Training Opportunities

- [CHOP ATOP Basic/Translational Research Community Forums*](#)
- [CHOP Research Events & Symposiums](#)
- [CHOP ARCUS Data Education](#)



Events

[Discover How LabArchives Can Help You Make Breakthroughs](#)

CSO Connection



Research Insider

Discovery Day

Promoted throughout the Research community with demo's, marketing pamphlets, and live Q&A

PROJECT CONTROLS: STATUS REPORTING EXAMPLE

- Status reports provide stakeholders a quick snapshot of the project progress, identified risks and/or issues
- Status reports are usually distributed by the PM on a weekly basis or a smartsheet [dashboard](#) may be shared to provide the project status

Weekly Status		Project Manager	Anne E. Geary		Updated on	: 07/03/2019	
LabArchives Implementation		Project Overview					
		Within the CHOP Research Institute, a need was identified to enable our investigators access to a collaborative tool that UPenn currently uses and is specifically designed for the storage, organization, sharing, collaboration, and publishing of scientific research. The RIS department will perform an evaluation of the LabArchives tool to confirm our investigators at CHOPs Research Institute can utilize this tool and develop a project plan for implementation.					
		Initiation Phase 1		Definition Phase 2		Development Phase 3	
		Validation Phase 4		Production Phase 5		Audit Phase 6	
Milestones - DRAFT X							
Schedule	Status, % Complete	Planned	Actual/ Revised				
1 - Initiation	100%	03/27/19	4/10/19				
2 - Definition	100%	05/03/19					
3 - Build/Configure	100%	05/08/19					
4 - Test/Validation	100%	07/1/19					
Go-Live (Full Implementation)	0%	07/18/19					
5 - Production	25%	07/31/19					
6 - Audit	0%	08/09/19					
Risks & Issues (New) <i>complete list will be available.</i> X							
Issues (unresolved for early adopters)							
<ul style="list-style-type: none"> SSO testing and LabArchives access to test account 							
Risks							
<ul style="list-style-type: none"> Users with Penn & CHOP affiliations Policy changes/implementations 							
Key Updates							
Current Phase Accomplishments (To-Date/Since last update)							
<ul style="list-style-type: none"> Team Meeting Confirm timing for BOX integration in prod, prior to Early adopters Training was delivered 							
Next Steps/Actions							
<ul style="list-style-type: none"> SSO issues remain, need to confirm follow-up plan - TBD <ul style="list-style-type: none"> Need to have Norm and IDM team to confirm the solution is acceptable and they test functionality Marie will coordinate review with LA and ChOP. CHOP internal website, functional content – 5/7 Michael Test Strategy & Approval for Internal Website integration, BOX & Early Adopters testing Migration of Penn Notebooks, Compliance impact and SOP's – add to plan and ID deadlines for work Transition planning and communication - team will use Smartsheet for planning, communication, reporting and dashboards 							
Planned Meetings							
<ul style="list-style-type: none"> Team Meeting - 							
Forecast & Actual Hours – N/A X							
Total Forecast Hours:				Total Actual Hours (+current week):			
Total Forecast Dollars:				Total Actual Dollars (+current month):			
Comments:							

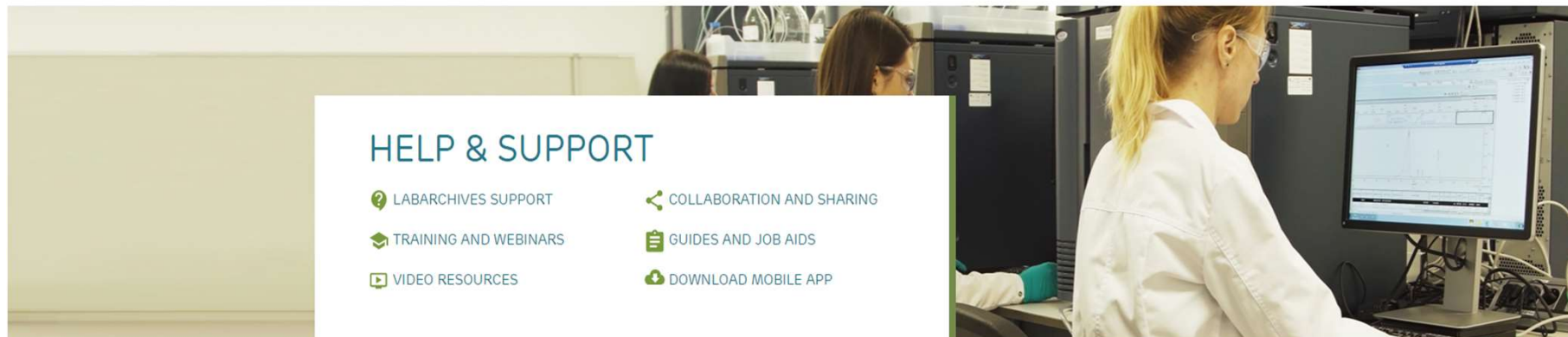
Milestones from Project Plan

New Risks/Issues Identified







Key Updates

Next Steps

ELN USER GUIDES AND TIPS



HELP & SUPPORT

-  LABARCHIVES SUPPORT
-  COLLABORATION AND SHARING
-  TRAINING AND WEBINARS
-  GUIDES AND JOB AIDS
-  VIDEO RESOURCES
-  DOWNLOAD MOBILE APP

Guides

- [CHOP RI Getting Started Guide](#)
- [LabArchives Quick Start Guide](#)

Windows plug-ins

- [LabArchives Folder Monitor for Windows](#)
- [Microsoft Office Plugin for Windows](#)

macOS plug-ins

- [LabArchives Folder Monitor for Mac](#)
- [Microsoft Office Plugin for Mac](#)

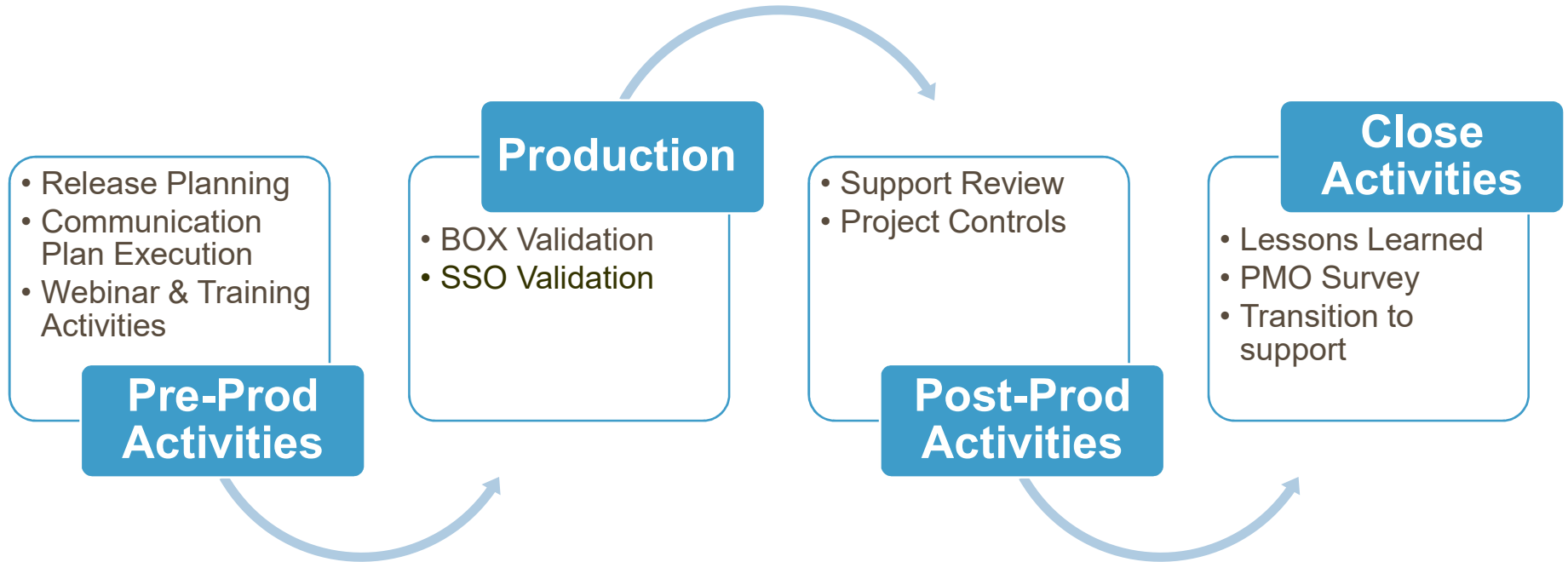
Webinars

Short Description - Webinars are routinely offered by LabArchives presenters. Please schedule an online webinar for your team. Consider also coordinating a LabArchives welcome interview if your team is particularly large or may have special needs.

[UPCOMING WEBINARS](#)

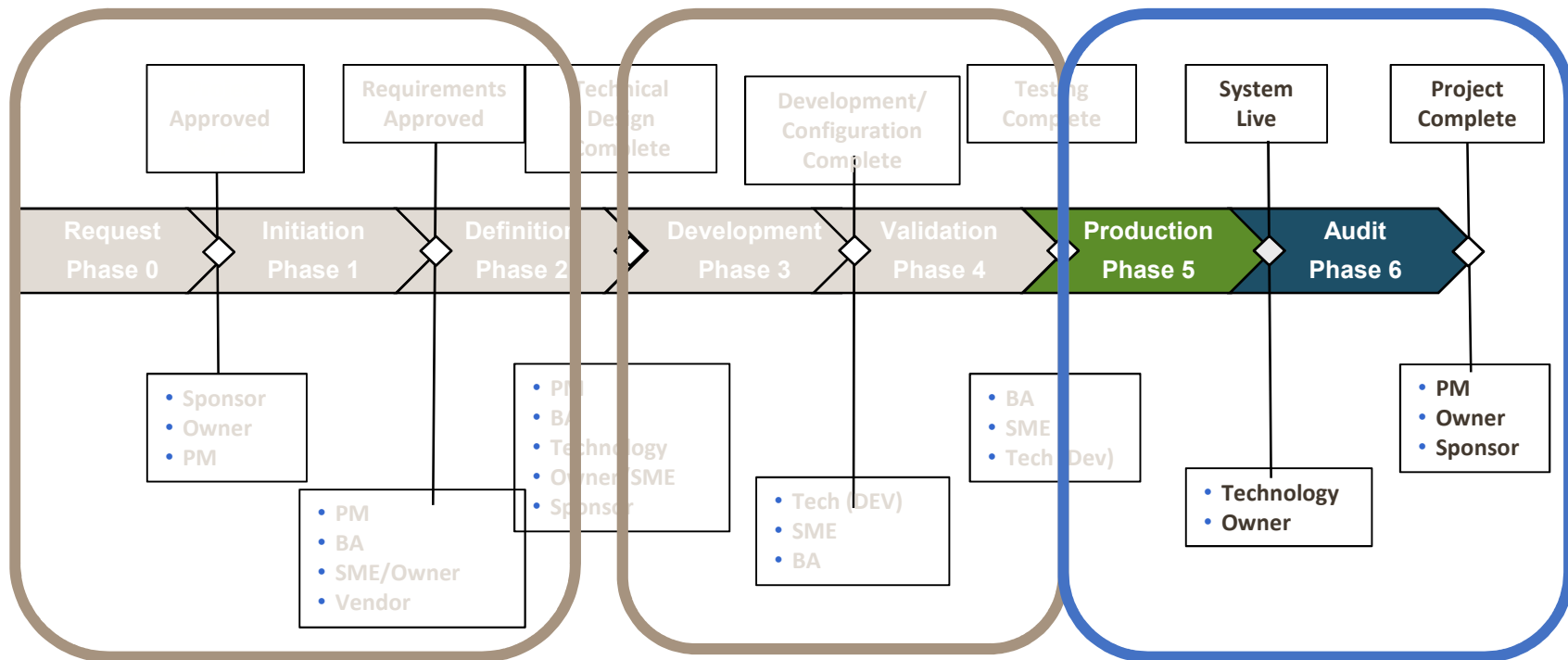
[LabArchives Help and Support](#)

PROJECT PLAN UPDATE



SESSION 3: PRODUCTION AND PROJECT CLOSE

Key Phase Deliverables & Resource Expectations



✓ STUDY/WALKTHROUGH
SESSION 1 OF 3,
INITIATE AND DESIGN

STUDY/WALKTHROUGH
SESSION 2 OF 3,
DEVELOPMENT
AND VALIDATION

STUDY/WALKTHROUGH
SESSION 3 OF 3,
PRODUCTION AND
PROJECT CLOSE

ADDITIONAL RESOURCES

- Take a class at CHOP:
 - Project Management
 - Applying Improvement Methods (AIM)
 - Leading Improvement Course (LIC)
 - MS Office
 - DISC with your team
 - CLI: Presenting with Impact: Presentations Skills Workshop
 - Virtual Meeting Technology Coaching Session
 - **RIS Discovery Day (TBD, 10/2021)**

Questions?

**Don't Forget to Complete your
Survey**

**Don't Forget to Register for
Session 3 of 3; Production and Project Close**

March 18, 2021 ~ 11:30am - 1pm

APPENDIX

PRIMARY TOOLS FOR THE RESEARCH PMO

- MS Office 365 Suite; Word, Excel, Visio, Skype, SharePoint (TBD), Outlook, Power Point, Teams, One Note and Project
- Smartsheet; sheets, forms, reports, dashboards and calendars
- Box and/or Google
- [Research PMO Website:](#)
 - Submit a question to us
 - Register for our next Brown Bag in FY21 Q2
 - Request Project or Process Improvement Support
- [Research PMO Portfolio;](#) Program and project visibility
- Coming Soon Research PMO Key Deliverables

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>

GENERAL PROJECT ROLES AND DESCRIPTIONS

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

*Reference #1 & Appendix A

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

KEY PROJECT TERMINOLOGY & ACRONYMS

- Statement Of Work – SOW
- Project Charter
- Project Scope
- Strengths, Weaknesses, Opportunities and Threats - SWOT
- Work Breakdown Structure - WBS
- Change Control Board - CCB
- Organizational Breakdown Structure - OBS
- Responsible, Accountable, Consult and Inform - RACI
- Time and Material - T&M
- Business Requirements
- Request For Proposal/Pricing - RFP
- Flowchart
- Gantt Chart
- Requirements Traceability Matrix

*Reference #1 & Appendix B

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

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

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