

Presented by the San Francisco & Southern CA Sections of AACE International March 21-24, 2019 | Harrah's Lake Tahoe

UAT and SIT Crucial Elements for Successful PMIS Adoption

Narges Jahani Senior Associates PMA Consultants, Los Angeles, CA March 23, 2019



Need to know...

The following presentation is intended to discuss the importance of UAT and SIT in systems implementations and share some tips & tricks for successfully implementing them during the Adoption phase.

The configuration and release of any PMIS system is generally tailored to organizations needs, timing, and business requirements.

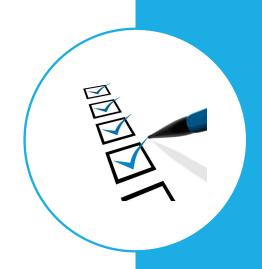
Before we start ... a quick show of hands

- Who is using some sort of a PMIS?
- Who is in the stages of considering implementing a PMIS system?
- Who has been part of a system configuration and deployment process?



What should you expect?

- Some general description on PMIS and the benefits they provide
- A brief overview of project management system implementation phases
- Explanation on Why UAT and SIT are important?
- Tips & Tricks for your use
- Time for a discussion and Q&A



But first, what is a PMIS and what does it do?

- Simplifies Project Management & Delivery Process
 - Infused with customizable workflow processes
 - Has a comprehensive cost and fund management features
- Streamlines Organization & Project Reports
 - Integrates and centralizes data
 - Streamlines data entry and access
- Expands your data driven stories through dashboards & analytics
 - Turns data into useful information

What about the Platform: Secure Cloud?? SaaS?? Hybrid Cloud??

SaaS, Cloud, Hybrid Cloud?

- Software as a service (SaaS) is a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted. It is sometimes referred to as "ondemand software". For example "GoToMeeting" is a SaaS system.
- Cloud computing is the practice of using a network of remote servers hosted on the Internet to store, manage, and process data, rather than a local server or a personal computer.
- Hybrid cloud is a cloud computing environment that uses a mix of on-premises, private cloud and third-party, public cloud services with orchestration between the three platforms.



System Implementation Stages

Positioning & Project Readiness

Discovery

Design & Configuration

System Adoption

Go-Live & Support

1

Licensing & Limitations
Project Logistics:

- Sever Hosting
- Environments Setups
- Staff Assignments
- Establish Roadmap
- Implementation Support Tools
- Risk Register & Reporting

. . .

2

- Validate Scope
- Assess Client's Existing Systems
- Identify Client Requirements, Guideline, & Standards
- Gap Analysis

Focus on Client Value (users story)

3

- Keep Design Simple
- Streamline Processes
- Leverage Out of the Box Features
- Think Scalability
- Think Best Practices
- Think Integration
- Think Minimum User Input
- Validate Business Requirements
- Document Solutions
- Obtain Client Approval

 Involve Users Early to Ease Adoption

4

- Examine best Method to Introduce Changes
- Plan & Conduct SIT
- Plan & conduct UAT
- Build Adoption & Training Plan for Active & Casual User Group
- Conduct Regression Testing
- Conduct & Track
 Client-Owned
 Testing

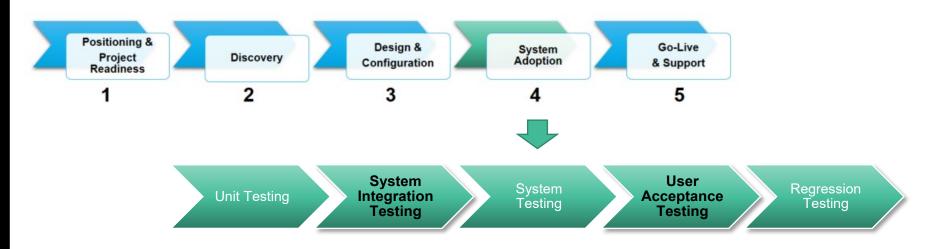
5

- Create Detail Plan
- Verify Plan with Impacted Group & IT Divisions
- · Go Live Resources:
 - Identify Client Staff
 - Identify PMIS Implementation Team
- Create Plans for Transfer of Knowledge

Systems Integration Testing (SIT) & User Acceptance Testing (UAT)

System Integration & User Acceptance Testing!

System Integration Testing (SIT) and User Acceptance Testing (UAT) are two of the most common and traditional testing types. They are conducted at different times & by different people during software testing life cycle.





What is SIT and why is it important?

WHAT? SIT is needed when PMIS will be integrated with other systems to achieve business needs.

WHY? Although, PMIS may be working perfectly alone - it might not when it's connected to other systems via by-directional integration processes.

PMIS could be Integrated with:

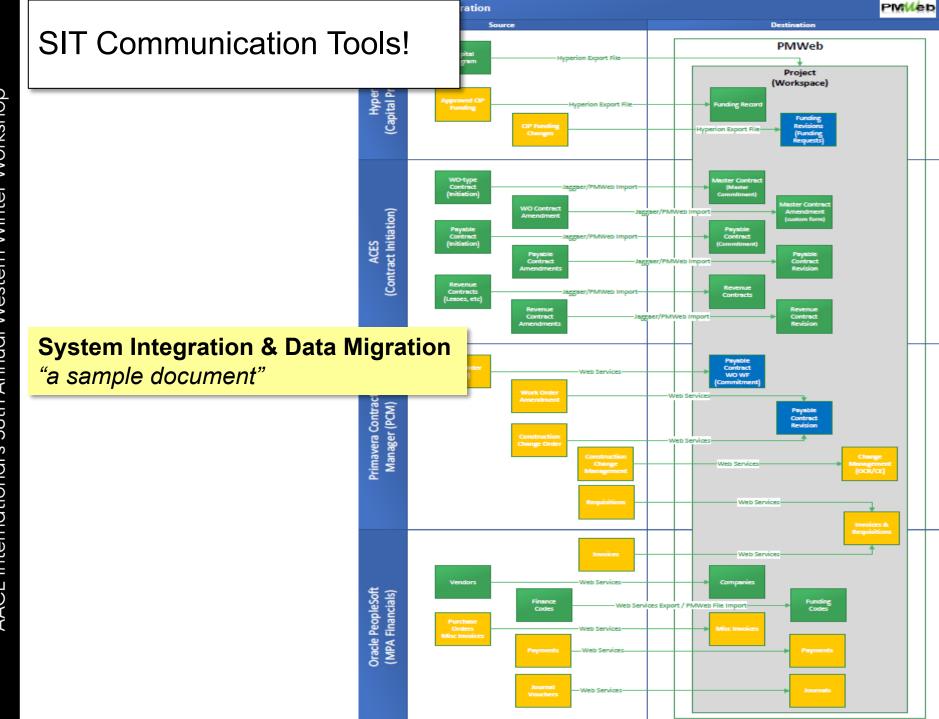
- Schedule data (baseline and progress data points)
- Financial data (actual cost transfer)
- Timesheet data (in-house labor)
- Existing legacy systems

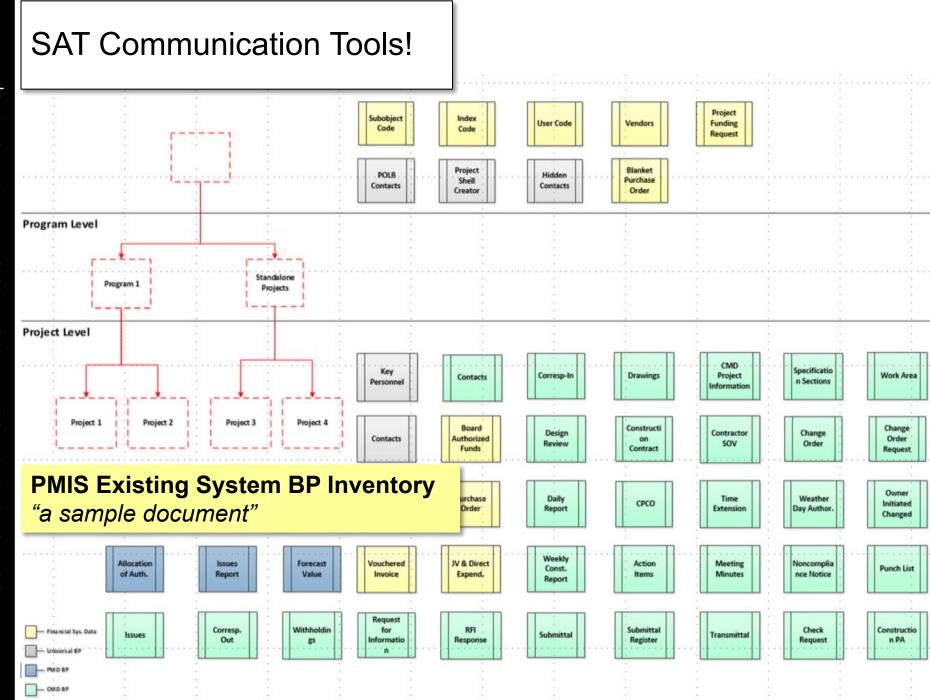


SIT Plan "Tips & Tricks"

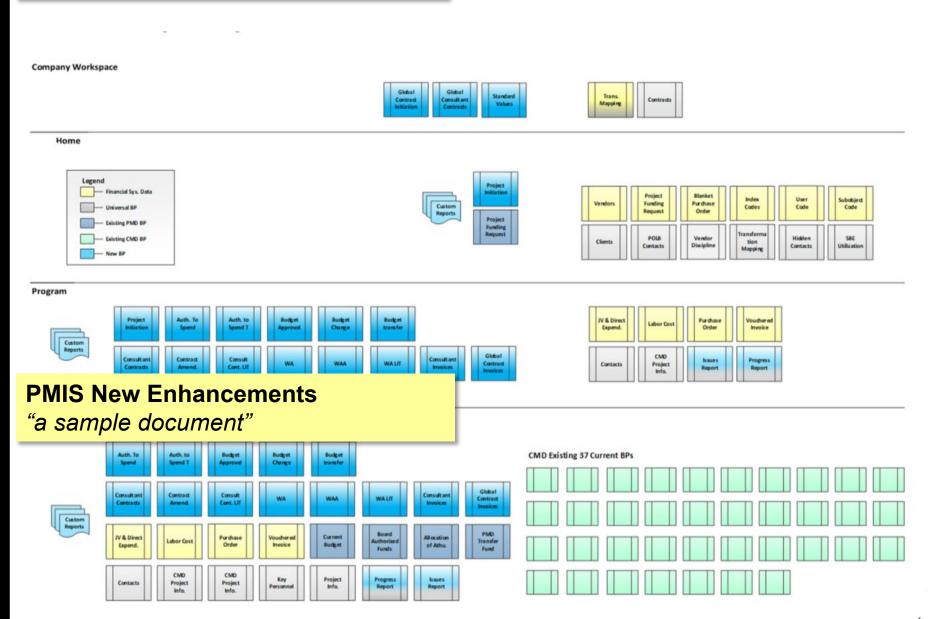
- Create integration plan
- Create artifacts to communicate with business group
- Select pilot projects
- Create field mapping tables
- Verify integrated systems versions
- Create diverse exception reports (generally excel pivot tables)
- Run manual integration testing on different scenarios
- Conduct a structured QA & spot checks for integrated pilot projects
- Prioritize SIT results by impact to <u>schedule</u>, <u>scope</u>, <u>& cost</u>
- Prepare sign-off checklist(s)

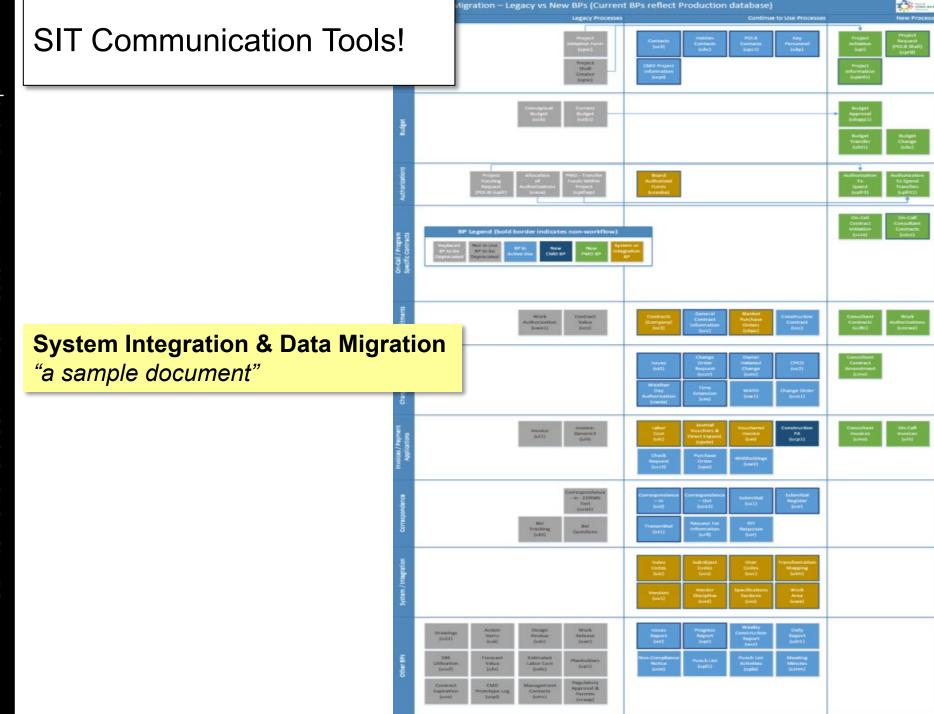




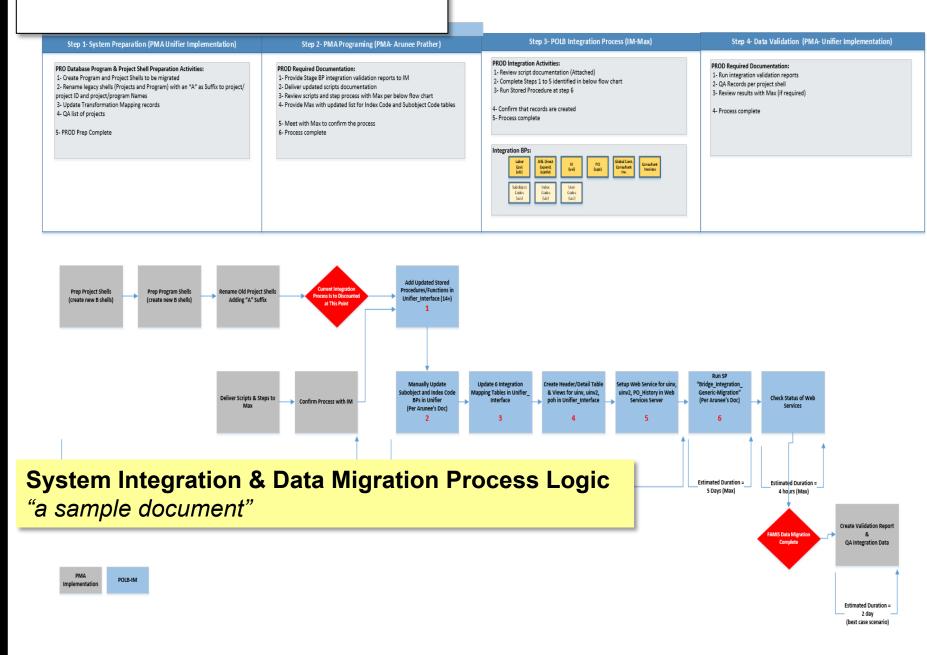


SIT Communication Tools!





SIT Communication Tools!



SIT "Pitfalls"

- Poor participation by systems administrators and key users
- Incorrect testing environments
- Unclear or ambiguity in the requirements
- Ever changing data migration logic by client
- Lack of communication between the between the technical, functional teams

Unit Testing

System Integration Testing

System Testing

System Acceptance Testing

Regression Testing

What is UAT and why is it important?

User Acceptance Testing (UAT) is the process of verifying that a created solution within the system works for "the user". This might sound easy but, in practice, it isn't.

- Keeps ongoing maintenance cost as low as possible
- Provides best opportunities to identify and repair broken features and usability issues
- Provide an end-user vision



UAT Plan "Tips & Tricks"

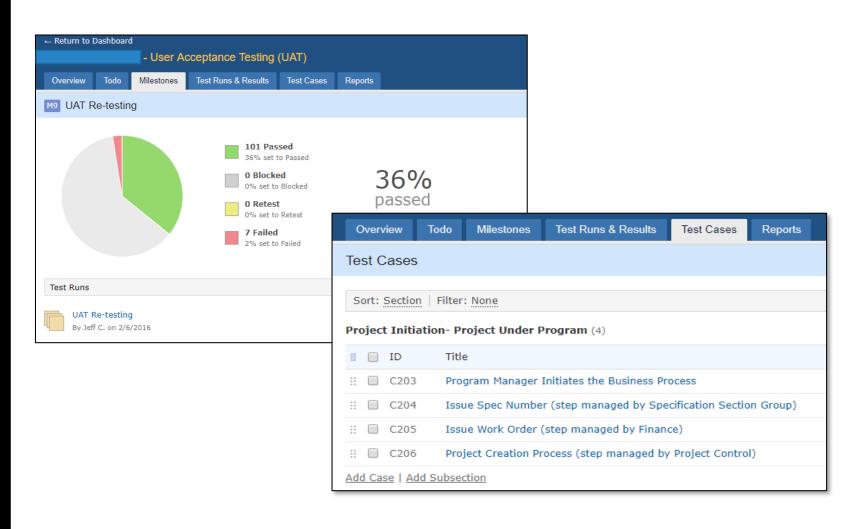
- Identify your UAT group from different level in the organization
- Confirm Client staff availability and work with their schedule
- Setup PMIS testing environment
- Verify PMIS versions
- Identify, write, & test clear & distinct scenarios
- Use collaborative and tools to increase efficiency



UAT Collaborative Tools

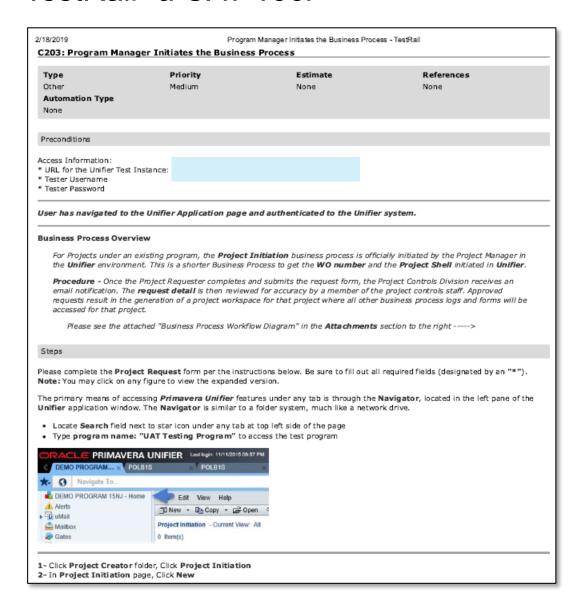
TestRail "a UAT Tool"

Cloud base, provides real-time reports, save time, save cost ...



UAT Collaborative Tools?

TestRail "a UAT Tool"



UAT "Pitfalls"

- Poor participation in UAT, users reluctance to show up or perform UAT
- Application which is being tested is not the latest version
- The testers are not properly trained
- Unclear or ambiguity in the requirements
- Lack of communication between the technical team, UAT team & testing team if they are present at different locations
- The business team tries to put down the development and testing team. It is very rare and happens only if there are some politics going on the organization. It can be avoided by building positive relation with the teams (chocolate always works!).

Unit Testing

System Integration Testing

System Testing

System Acceptance Testing

Regression Testing

Finally, a Few Tips & Tricks

Implementation Tips

