

InSource Playbook

ITAM Program Implementation

Asset Rationalization

Application Packaging

Version 2.0

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Introduction

InSource has been an Elite ServiceNow partner since 2012. In 2019, Mark Buscaglia and team brought a proven ITAM consulting model and toolset to Insource with the intent to leverage our collective professional services experience into a market leading ITAM Solutions delivery model which includes:

- StandardizedPro- StandardizedPro is the only platform based (ServiceNow) asset rationalization engine which creates visibility and actionable workflow
- ITAM Advisory Consulting- We offer a program which is born from 20 plus years of practical ITAM program solutions consulting.

Both our subscription, and Advisory model were born out of firsthand infrastructure implementation, management standards and client experience. Thus, we have developed a mature solution model for organizations looking to resolve business IT challenges like IT Asset Management (security risk/ vulnerability, procurement, and provisioning lifecycle management, etc.). To effectively do so, InSource has replatformed a proprietary toolset, StandardizedPro, onto the ServiceNow platform.

Over time, StandardizedPro has continually evolved, enabling us to effectively take on a broader range of technology business challenges like: Asset Rationalization, O/S Migration, Audit Compliance, Technology Migration (cloud licensing, server consolidation, etc.), Merger Acquisition, IT Asset Management (ITAM) Program Enablement: SAM Compliance/ Audit and Risk, Operational Business Intelligence Analysis, etc.

In addition to the StandardizedPro ServiceNow subscription, Insource continues to offer additional ITAM solutions and ServiceNow Implementation Services.

Solutions Catalog

InSource has a mature solution- consulting portfolio with a primary focus on ITAM Program architecture and implementation. This includes IT Asset Rationalization, Platform Transformation, Architecture, and Infrastructure Consultation, etc.

For this document, we have compiled a detailed approach to ITAM Program and Asset Rationalization delivery.

Rationalization – Software and Hardware Asset Rationalization

On the ServiceNow platform, StandardizedPro enables ongoing rationalization capability for both Software and Hardware assets. We enable the ongoing process of visualizing, consuming, and reconciling non-rationalized IT Asset data which exists in most organizations. We start with raw discovered data and transform it into consumable, actionable information which aligns with your organization's business goals.

The result is a Standardized IT Asset library (containing only the items your business requires) and a complete contextual understanding of the assets and standards which support ongoing provisioning and procurement lifecycle.

In addition to StandardizedPro, InSource continues to offer ITAM Advisory Solutions and Managed Services engagements.

ITAM Program Advisory Solutions-Consulting

Our ITAM Program Level Solutions are designed to provide individuals with varying degrees of expertise and experience, which creates financial and operational flexibility for our client's business support and operational

objectives. When it comes to client ITAM Program Solutions, our industry and ServiceNow experience demonstrates the right team, and the right tools enables success.

Additionally, InSource offers a well-defined ITAM Managed Service model to further mature and optimize our clients ITAM program.

How We Do it-Software and Hardware Rationalization

Goal of Asset Rationalization

StandardizedPro enables Software and Hardware Rationalization, on the ServiceNow platform, reducing a client's IT asset footprint and lowering ongoing risk, increasing asset portfolio value, and optimizing ongoing asset management. We do so by creating enterprise level asst visibility and enabling the InSource "Commons". The InSource Commons enable ongoing enterprise wide procurement and provisioning lifecycle. In doing so, StandardizedPro becomes the hub to which discovered data can be made contextual and actionable.

- Common Language- Assembling comprehensive discovered data and enriching it for actionable, objective workflow
- Common Purpose- Enabling ongoing business objectives by aligning Common Language with known business goals
- Common Understanding- Aligning Common Language with Common Purpose, making information actionable through contextual platform function (ServiceNow SAM/ HAM, ITBM, HR, etc.)

The result is a standardized IT Asset library (containing only the items your business requires) which is aligned with enterprise business goals

In addition to employing StandardizedPro, InSource recommends ITAM Program visibility and road mapping consulting engagements to further align business goals and platform capability. Understanding the long-term value to our clients helps to establish the foundation for the greater program.

To best share collective experience, we have put together a series of delivery documents which supports some of the most common ITAM solutions consulting engagements:

- Traditional Asset Rationalization Project Planning
- Application Software Packaging Standards

What does a Rationalization Project Look like? Project Planning- Kick- Off

The purpose of the Planning phase is to initiate the ramp up activities needed to kick off the project and begin collection of materials that will assist in the knowledge transfer area of the project. The Planning phase involves the following activities:

- Scope Review- Finalize the team breakdown, responsibilities, deliverables, etc.
- Conduct a project kickoff meeting including representative management from all parties
 - The intent of this meeting is to have all the key personnel present to review and have a common understanding of SOW components:
 - Project goals and objectives
 - Project organization, including clearly defined roles and responsibilities
 - Project work effort for the packaging effort
 - Project Methodology to be used, including Risk Management and Issue Management

- Project Configuration Management considerations
- Project plan including all major milestones.
- Obtain all relevant media, applications, data, documentation, etc.
 - Obtain/confirm client Standards and Procedures, including all development/Packaging guidelines (if they exist)

InSource breaks down a typical project into the three distinct phases listed below:

- 1. Discovery
- 2. Asset Rationalization
- 3. ITAM Program Implementation

1. Discovery Workflow

The project plan listed below contains the high-level task descriptions, roles, and duration of a typical InSource asset discovery project. Projects are conducted over a 3-4-week period fixed price engagement. The deliverable for a discovery POC is a comprehensive Findings document which outlines, the current client asset disposition with focused analysis on:

- Discovery Mechanism Gap: Example- SCCM vs. Altiris Data Extraction Operational Check Summary
- Risk
 - Technical Vulnerability: Published product end of life per manufacturer and/or publisher
 - Government CBE/ CVE database for known software vulnerabilities and hack attempts
 - End of Life Vulnerability: Software product title support end of life
- Functional Redundancy
 - Concentration of unique products found with like functional capability (example: media playerswe find 34 media player products in a client environment; are they all business tools, what stays and what can be retired, etc.)
 - Normalized Vs. Un-Normalized view of clients approved for provisioning and procurement asset catalog

| Description | Lead Role | Participants | Duration |
|-----------------------------------------------------|---------------------|--------------|----------|
| | | | |
| Implementation of Phase 1 Asset Discovery and | | | 33 days |
| Normalization | | | |
| | | | |
| Data Collection | | | 1 day |
| Collect List of Hardware and Software (COTS and In- | Client PM- InSource | | 1 day |
| House) | Lead | | |
| Collect User Profile Information | Client PM | | 1 day |
| SCCM- IT Asset read only report | Client PM | | 1 day |
| Active Directory - HR (Line of Business, People) | Client PM | | 1 day |
| Current Approved List of Hardware and | Client PM | | 1 day |
| Applications | | | |
| | | Total | 11 Days |

| Data Discovery- Read Only data extract | | | 2 day |
|------------------------------------------------|-----------------------------|-------|-----------|
| | | Total | 2 days |
| Normalization | | | |
| Prepare Data | InSource Senior Engineer | | 3 days |
| Upload to Standardize | InSource Senior Engineer | | 3 days |
| Rationalize Data | InSource Senior Engineer | | 7.5 days |
| Findings Review | InSource Senior Analyst | | 2 days |
| Client Data Findings Review | InSource Senior Analyst | | 3 days |
| Customize Reports | InSource Senior Analyst | | |
| | , | Total | 9 days |
| Deliverables/ Reporting | | | 3 days |
| Software License Risk and Compliance Review | InSource Senior Analyst | | 3 days |
| A Technical Impact Analysis | InSource Senior Analyst | | 3 days |
| Software/ Hardware Flat File Reports | InSource Senior Analyst | | 0.5 days |
| Provide cost recovery strategy | InSource Senior Analyst | | 3 days |
| Prepare Executive Presentation | InSource Senior Analyst | | 1 day |
| **some tasks represented able are concurrent** | , | Total | 13.5 days |

2. Rationalization Project Workflow

InSource works with the client to review the information to identify which applications are needed by each line of business, and which are not. The approved list of applications is packaged (i.e., prepared per standard, structured software installations) and deployed to a test environment for testing. In parallel, a profile is established for each user within a line of business to identify which of the approved applications will be deployed to him or her. Once user profiles are established, the applications are deployed to a pilot group for additional testing, and then to the broader line of business.

To do so, we follow a project plan like the example listed below:

| Description | Lead Role | Participants |
|------------------------------------------------------|--------------------------|--------------|
| | | |
| Program: Asset Rationalization | Client PM- InSource Lead | |
| Define Communication Plan | Client PM- InSource Lead | |
| Define Roles & Responsibilities | Client PM- InSource Lead | |
| Define Rationalization Goals | Client PM- InSource Lead | |
| Establish Meeting Cadence | Client PM- InSource Lead | |
| ID baseline metrics | Client PM- InSource Lead | |
| S/W Application Rationalization | ITAM Rationalization SME | |
| Define Rationalization Goals | ITAM Rationalization SME | |
| Software Rationalization | ITAM Rationalization SME | |
| Conduct Rationalization Data Labs | ITAM Rationalization SME | |
| Core | ITAM Rationalization SME | |
| LOB | ITAM Rationalization SME | |
| Enterprise | ITAM Rationalization SME | |
| Software Packaging Preparation | ITAM Rationalization SME | |
| ID software to Package | ITAM Rationalization SME | |
| Prioritize Software to package | ITAM Rationalization SME | |
| Establish Software Certification Policy | ITAM Rationalization SME | |
| ID existing policies | ITAM Rationalization SME | |
| Gap analysis | ITAM Rationalization SME | |
| Draft updated policy | ITAM Rationalization SME | |
| Review policy | ITAM Rationalization SME | |
| Policy Sign-off | ITAM Rationalization SME | |
| Software Approval Process | ITAM Rationalization SME | |
| Review current process | ITAM Rationalization SME | |
| Review best practices process | ITAM Rationalization SME | |
| Identify gaps with current process | ITAM Rationalization SME | |
| Agree on updated process | ITAM Rationalization SME | |
| Define process workflow requirements | ITAM Rationalization SME | |
| Define updated process roles & responsibilities | ITAM Rationalization SME | |
| Define software approval process implementation plan | ITAM Rationalization SME | |
| Create Software approval process training materials | ITAM Rationalization SME | |
| Deliver software approval process training | Client | |
| Release Software approval process | Client | |
| | | |

| Software License & Contracts | ITAM Rationalization SME |
|------------------------------------------------------|--------------------------|
| Review and refine software entitlement criteria for | ITAM Rationalization SME |
| contract renewal and license true-up | |
| Prioritization of software vendors (start with top 5 | ITAM Rationalization SME |
| or 10) | |
| License & contract data collection | Client |
| Build Software license reports | ITAM Rationalization SME |
| | |
| Software Compliance | ITAM Rationalization SME |
| Analysis | ITAM Rationalization SME |
| Risk review | ITAM Rationalization SME |
| identify actions to take on compliance (uninstall, | ITAM Rationalization SME |
| budget/purchase) | |
| | |
| Hardware Rationalization | ITAM Rationalization SME |
| Hardware Rationalization | ITAM Rationalization SME |
| Conduct Hardware Rationalization Data labs | ITAM Rationalization SME |
| Analyze hardware data | ITAM Rationalization SME |
| Agree on updated hardware standards | ITAM Rationalization SME |
| Update or create hardware refresh plans | ITAM Rationalization SME |
| Establish Hardware Certification Policy | ITAM Rationalization SME |
| ID existing policies | ITAM Rationalization SME |
| Gap analysis | ITAM Rationalization SME |
| Draft updated policy | ITAM Rationalization SME |
| Review policy | ITAM Rationalization SME |
| Policy Sign-off | ITAM Rationalization SME |
| Hardware Approval Process | ITAM Rationalization SME |
| Review current process | ITAM Rationalization SME |
| Review best practices process | ITAM Rationalization SME |
| Identify gaps with current process | ITAM Rationalization SME |
| Agree on updated process | ITAM Rationalization SME |
| Define process workflow requirements | ITAM Rationalization SME |
| Define updated process roles & responsibilities | ITAM Rationalization SME |
| Define process implementation plan | ITAM Rationalization SME |
| Create Hardware approval process training materials | ITAM Rationalization SME |
| Deliver hardware approval process training | ITAM Rationalization SME |
| Release Hardware approval process | ITAM Rationalization SME |
| Policy implementation | Client |
| Reporting requirements defined | ITAM Rationalization SME |
| Hardware contract reviews and prioritization | ITAM Rationalization SME |

3. ITAM Project Workflow

The implementation of an ITAM program, allows for organizations to have more robust actionable data which serves as a key information provider to the following critical operational areas:

- Project Management Alignment: ITAM will be embedded in the Project Management Office, to manage the risk associated with implementing projects and avoid significant risk.
- Change Management: ITAM will be entrenched in the Change Management process to ensure proper licensing and lifecycle changes.
- Procurement: Will integrate with all software and hardware request process thus allowing, choice, selection, management approval tracking and deployment while referencing ITAM checks and balances along the way.
- Proactive Reclaim: Periodically assessing all Assets in the business will allow lifecycle tracking when assets are not in use.
- Security: The implementation of an ITAM program increases security by providing policies and process around assets visibility, functionality and usage to reduce vulnerabilities.
- Service Alignment: The ITAM program will closely aligned to Service Management teams by being embedded in the day-to-day workflows to ensure inputs and outputs to ensure that is being captured and assets maximized.

To deliver an enterprise level ITAM Program, we follow a project plan like the example listed below:

| Description | Lead Role | Participants |
|-------------------------------------------|----------------------|--------------|
| | | |
| IT Asset Management Program Stand-up | ITAM Architect | |
| ServiceNow Configuration | ServiceNow Architect | |
| Technical Requirements Definition | ServiceNow Architect | |
| ServiceNow - Asset, Discovery, CMDB | ServiceNow Architect | |
| Contract Management | ServiceNow Architect | |
| Vendor Performance | ServiceNow Architect | |
| ITAM Process Definition | ITAM Architect | |
| Onboarding | ITAM Architect | |
| Offboarding | ITAM Architect | |
| Equipment Changes | ITAM Architect | |
| Lease returns | ITAM Architect | |
| Vendor Mgt New contract requirements | ITAM Architect | |
| Vendor Mgt Maintenance contract renewals | ITAM Architect | |
| Contract & Entitlement Recording | ITAM Architect | |
| Audit Process | ITAM Architect | |
| License & Contract Data Collection | ITAM Architect | |
| ITAM Process Operationalization | ITAM Architect | |
| Service Now Request Item Workflow updates | ServiceNow Architect | |

| Onboarding | ServiceNow Architect |
|----------------------------------------------------------|----------------------|
| S/W Procurement | ServiceNow Architect |
| H/W Procurement | ServiceNow Architect |
| | |
| ServiceNow Asset/Discovery/CMDB refinements | ServiceNow Architect |
| ServiceNow Vendor & Contract App | ServiceNow Architect |
| ITAM Process Documentation | ITAM Architect |
| ITAM Policy Updates | ITAM Architect |
| ITAM Process Roles & Responsibilities | ITAM Architect |
| ITAM Process Dashboards / Performance Analytics | ServiceNow Architect |
| ITAM Process Training Creation | ITAM Architect |
| ITAM Process Training Delivery | Client |
| ITAM Program Technical Documentation | ITAM Architect |
| Desktop Application packaging & image Management process | Packaging Architect |
| Define OS, Core, Department & User applications | Packaging Architect |
| Assess existing process | Packaging Architect |
| Gap assessment | Packaging Architect |
| Define updated process | Packaging Architect |
| Assess SCCM Architecture | Packaging Architect |
| Develop SCCM topology Diagram | Packaging Architect |
| Develop Universal Standard Image | Packaging Architect |
| Develop Application Packaging process | Packaging Architect |
| Develop Process Documentation and Training | Packaging Architect |
| Deliver training | Packaging Architect |
| Rerelease Process | Client |
| | |
| Establish / Refine Client Application Library | Client |
| Software Packaging | Client |
| Gather software media for packaging | Client |
| Gather Configuration details for applications | Client |
| Create packages | Client |
| MSI Packages | Client |
| Virtual application Packages | Client |
| Application library | Client |
| Testing of configuration and Source install files | Client |
| Unit Testing | Client |

| Package sign off | Client |
|-----------------------------------------------------|--------|
| | |
| Compliance Implementation | Client |
| Refresh of viable hardware per prioritized plan | Client |
| Replace EOL workstations per prioritized plan | Client |
| Reclamation of unused hardware per prioritized plan | Client |
| | |
| Contract Renewal & Renegotiations | Client |
| Contract Prioritization | Client |
| Contract #RN | Client |
| Contract renewal preparation | Client |
| Contract negotiations | Client |
| Contract renewal | Client |
| Contract licensing & data collection update | Client |
| Contract #N | Client |
| Contract renewal preparation | Client |
| Contract negotiations | Client |
| Contract renewal | Client |
| Contract licensing & data collection update | Client |

Process

A typical Rationalization Phase is approximately 60-90 business days. To accomplish this, we take a Line of Business approach toward Rationalization.

To support assets Rationalization, we have developed InSource StandardizedPro. The toolset is designed to automate client interview decision making and workflow through asset Rationalization, packaging, deployment, etc.

To establish consumable data views within the tool we go through a series of automated data mashing. Once the data has been through this cycle it is ready for our business analysts to prioritize and schedule clients for asset Rationalization. The following automated processes take place, with StandardizedPro, prior to client Rationalization interviews:

Customer Responsibilities

Providing the following information

- Access to or resources for Infrastructure data collection.
- Key Technical contacts for quick application interview(s) meetings.

Data Discovery

• Application Information

- A list or access to the data source of current approved applications (CAL List)
- A list of current in-house developed applications or access to data source.
- A list of current web-based applications or access to data source.
- List of or access to data source where InSource can obtain
- User Information
 - User ID
 - Department / Business Unit / Manager
 - Location(s)
 - Data upload location (SharePoint/FTP/External Drive etc.) for deliverables
 - List of Administrative users (desktop)

Application Rationalization

This is the identification of all applications in an enterprise by individual machine, merged with Human Resource information about the owner of the machine (e.g., user name, line of business) as well as market data (e.g., actual application name, end of life, licensing), culminating in a clean, consumable list of applications broken out by line of business.

InSource will use this information to conduct an end-to-end analysis of the application portfolios in each line of business to determine overlapping functionalities, licensing, multiple versions, and unused applications in systems.

In addition, source and configuration files will be gathered and finalized during this phase to ensure that the client application packaging requirements are met.

The steps to creating visibility during Rationalization

Filtering

- Filter input data as "Relevant" or "Irrelevant" with an associated reason Driver, Hotfix, Patch, Update, Help file, Installer
- Develop the relevant data and map it to the corresponding market information
- Identify and distinguish a stand-alone product from a component of a suite
- The result is a true list of applications in the environment and not the other items listed above that can show up as applications when the data is first gathered.

Functionality

- The ability to know when two products with different names the same product for purposes of software license are audit or are different about an infrastructure consolidation project.
- Create and maintain a comprehensive picture of software inventory.

Risk

• The ability to know when a product is end of life or functionally at risk due to known vulnerabilities, etc.

Enrichment

- Bring external product history and market data into the decision-making process.
- Determine software that it is obsolete/out of support with the lifecycle information.

- Understand which applications are candidates for virtualization.
- Develop a profile application usage by job to reduce the number of deployed redundant applications.

This process establishes consumable views for our analysts to conduct client asset Rationalization efforts.

Communications

InSource takes a phased approach toward asset Rationalization communication. Through a series of top down communications, we can inform and guide the client through the Rationalization process.

The lead business analyst works with the client project manager to following the communication plan listed below. InSource does have templated emails for the client project manager to distribute or use to craft their own internal communications.

Recommended overall project communication:

Communication 1: To be sent by Project Sponsor/CIO informing enterprise user population of project scope and benefits

Communication 2: To be sent by Client PM or Project Sponsor to Client Line of Business VP/Director Level to communicate expected Application Admin/Owners and Departmental Partner participation

Communication 3: To be sent by client PM or Project Sponsor to Department Partner (assigned by VP/Director because of prior email) (See Department Partner Communication)

Communication 4: To be sent to Pilot Group participants by client PM or Project Sponsor

Communication 5: Series of Deployment emails to be distributed to initial Production group



Business Subject Matter Experts (BSM) Communications

Initial Communication: To be sent by InSource requesting a time to meet to review application gathering process (This is usually a workshop with various BSM's)

Communication 2: e-Mail from InSource to notify BSM of One on One interview time to prioritize applications for his/her department

Communication 3: Follow up notification to BSM regarding status of applications

Communication 4 (if applicable): To be sent to Pilot Group participants by BSM for testing of their applications

Application Technical SME Communication Process (if needed)

Initial Communication: To be sent by client to BSM stating that he/she has been identified as the application SME for the Application Data gathering process

Communication 2: If a response is not received within 1 day of the agreed upon SLA by client Project Committee, InSource will follow up with an e-mail to make SME aware that information is not on hand

Communication 3: Notification to SME that time has expired for receiving the information, with a copy to client SME, followed by meeting request to SME to discuss the status of his/her applications

Communication 4: Meeting request to SME to review application Configuration Process

Asset Rationalization Interview Process: Client Subject Matter Experts Decision making Guidelines

The goal of subject matter application interviews is to Identify opportunities for application consolidation. Through data rationalization we will be able to identify opportunities to simplify the client's applications portfolio through elimination or reduction of functional redundancies, risk mitigation. We will also look at supporting process and systems which facilitate workflow for on-boarding, off-boarding and change with the goal to improve effectiveness, and save on long term support costs?

Keeping this in mind, an analysis of each application will focus on improving both provisioning and procurement process, systems which enabled the application to appear in its current state. InSource's StandardizedPro is utilized as the process flow and data storage facility for the discovered environment, enriched consumable information, the decision-making process, the decision (with support analysis) and the baseline/end state of the standardized environment.

An analysis is performed to justify and track any decision made to change the status of an application within a client environment.

Application Interview Business Drivers

The applications will be grouped by the business functions (line of business, enterprise, core, development, etc.). To help guide the client subject matter expert, consider the following components and can offer insight on any number of these scenarios.

The Functional decision-making process will cover the following:

- Is it in use today, is there a definitive business use?
- Are there alternatives?
- What is the business purpose?
- Is it used on a regular basis?
- How well is each application meeting the business needs for a business process?
- Redundancy are there any other applications that serve the same purpose? How might these be used instead?

Other Procurement Considerations

- Is it licensable?
- What is the license arrangement?

Other Provisioning Considerations

- Is there a maintenance requirement? Is it needed to maintain old versions of information, reports, and other business needs?
- Current User base who has it? does each person with the application need the application?
- Can a business cost be derived? If so, associate it to the business function that the application supports.
- Is it on the Approved Client List?

Risk analysis

- Security is it at or approaching end of life?
- Version control? Is any version required? Why?
- Is there a legal requirement driving its need?

Technology Procurement Support Drivers

What is the true cost of the application? Determine costs for: Infrastructure and operations (internal IT costs or external services)

- Licenses
- Licensed software support / maintenance
- Direct application support (internal IT employees or external staff)
- Applications break/fix support
- Enhancements and smaller changes.

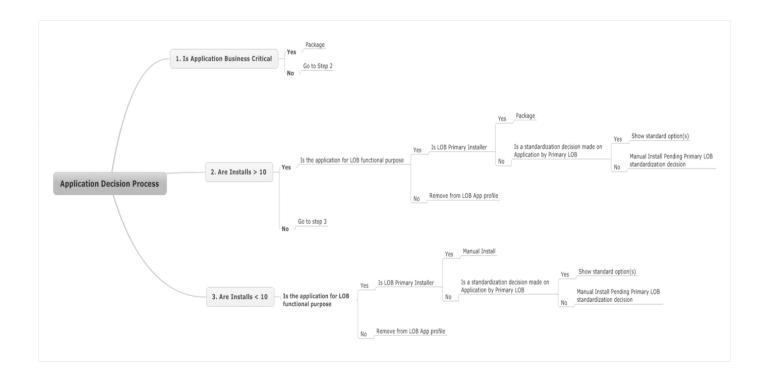
Determine how well each application meets expectations for technical standards and practices such as reliability, scalability, interface complexity, data integrity, and support risk.

Decision Points

The decision is up to the client. To help them determine the "business value of an application" use the above-mentioned scenarios and support the dialogue with the rationalized views in StandardizedPro.

Based on the business value, determine the outcome for each application and plan. This will include:

- Retire remove the application from the environment
- Retain/ Package determine final state (distributed or virtual) and prepare to have the application "Production Ready"
- Upgrade upgrade to a different version and retire
- Retain / Manual the application remains in the environment, but is not package for systems management tool processing



Result

By rationalizing a software application and/ or hardware environment, enterprises can reduce their total number of applications as well as the total inventory of infrastructure and management resources used to support them. They will gain a clear, unbiased understanding of their total applications inventory, applications related costs, and the business value of their applications. This leads to a more agile, information-driven enterprise that can stay ahead of the ever-changing business landscape.

Application Packaging

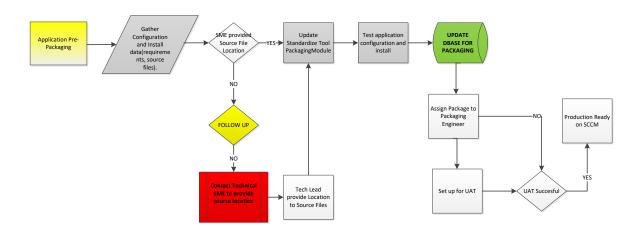
Application Packaging Workflow

The following sections provide a detailed account of the application packaging process, tools and methodologies designed to deliver a packaged application library.

Application Packaging

InSource will work closely with the client team to review the application preparation roadmap and refine the entire application packaging process as needed to meet industry best practices; all established quality guidelines and standards (see packaging process below).

The following overview represents the scope of work as it relates to InSource's Application Packaging Process for distribution to the client systems management toolset.



Pre- Packaging Components

Confirm source data

- Acquire the completed and approved application requirement documentation.
- Download the media source for the application from the client application source library.
- Determine if the application is a candidate to be virtualized for Virtual. If so, Microsoft Virtual sequencer will be used to virtualize the application.
- If application is not a virtual candidate, then Flexera Admin studio will be used to create an MSI for distribution.
- If application needs a SHIM (fix) to properly work, it will be attempted before an application level remediation is recommended.

Testing of configuration and source install files

Pre- installation and configuration of requirements to ensure that source files and configuration instructions work.

- Compatibility
- Dependencies

**This will include any customizing of application installs to meet different provided requirements.

Application Packaging Approach- Overview

InSource leverages the data and workflow capability of its own StandardizedPro workflow application to make the approval, packaging, and testing phase of an application lifecycle transparent to all project stakeholders. Additionally, InSource utilizes its own Best Practice Packaging Standards and provide the following Application packaging services:

- Project Management InSource will assign a project owner to be ultimately responsible for all project deliverables and completing key milestones on time and within budget.
- Packaging Lab Environment InSource will provide a development work environment at our facility to perform all design and development or we will operate at the client site as well.
- Packaging team InSource will provide all necessary technical expertise to manage, develop and support the proposed solution.
- Quality Assurance and Unit Testing InSource will be responsible for packaged application Unit testing prior to delivering the application to the client for final user testing. The client is responsible for User Acceptance Testing (UAT).

The following definitions are relevant to the establishment and usage for a client Application Library:

MSI Packages

An MSI Package is defined as a software installation that is broken down and reassembled into a single package which can be installed on any workstation. MSI's can protect themselves by "self-healing" if suddenly altered or damaged. Both types of packages are fully automated eliminating any prompts that are normally required during the setup process (license agreement, shortcuts, configuration settings, etc.).

Virtual Application Packages

If the client has a need for virtual packaging the client must specify all Virtual Applications be packaged in a recommended/ compatible format. Application Virtualization Platforms enable the delivery of applications that are never installed on the desktop but are available to the user in any location.

Application Library

The client begins its application library definition by establishing a technical application standard among internal corporate departments that will produce benefits, production, maintenance, or operating efficiencies / costs. The establishment of enterprise-wide standard applications can be viewed as a mechanism for optimizing technological resources such as support and service resources.

The process of continuing to build upon the client's existing standard application definitions will strengthen the Core Application Groupings within the application library. Core Application Groupings help to establish "levels" or "layers" of applications, which are in production, within the client environment. The act of implementing or categorizing applications into pre-defined groups will further enable them to maintain a "Packaging Standard" (regardless of format- MSI or Virtual) to which the existing (or newly established) application certification process can be enforced. The continued enforcement of these core definitions will act as a mechanism for maximizing use of technologic resources yielding a measurable reduction in ongoing application management and deployment costs.

Application Packaging- Approach Details

Application Packaging will be set-up and executed both on-site and off-site. InSource will employ a known approach to application packaging delivery which will consist of the following phases.

Phase 1- Application Packaging Initiation

The purpose of the initiation is to commence the ramp up activities needed to kick off the application packaging portion of the project and to begin to collect materials to assist in the knowledge transfer area of the project. This involves:

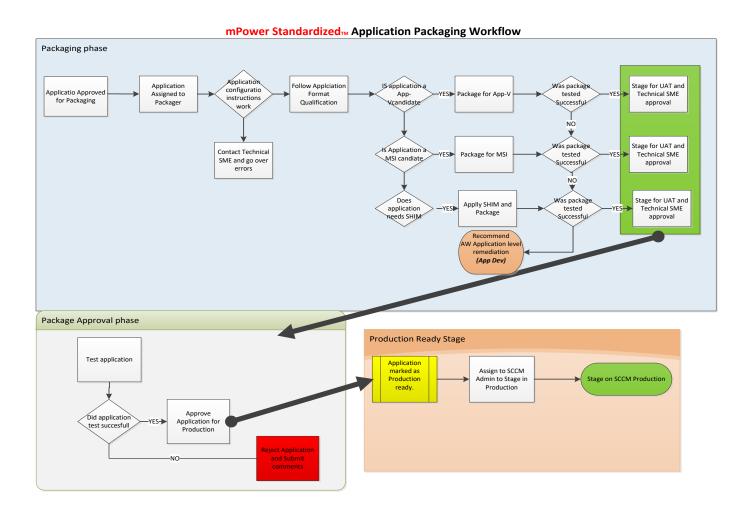
- Finalize the AmeriHealth Mercy/InSource team breakdown and responsibilities.
- Complete the Rationalization of all relevant the client applications, data and documentation
- Obtain/ Confirm The client Standards and Procedures, including all development/Packaging guidelines if they exist
- A project kickoff meeting will be held with the client and InSource teams and representative management from each.

This is a review meeting, with all key personnel present, with the intent to review (and establish) a common understanding of:

- The Project goals and objectives
- The project organization, including clearly defined roles and responsibilities
- The project work effort for the packaging effort
- The Project Methodology to be used, including Risk Management and Issue Management
- Project Configuration Management considerations
- The Project plan including all major milestones
- Will also include an open discussion on issues, concerns and challenges

Finalize Packaging Plan

The Packaging Plan specifics will be finalized during this phase. The team will agree on project documentation requirements, status reporting schedules, team status meeting schedules, and the communication process with the client team.



Requirements Definition and Analysis

This is the key phase of the project. It is critical that the InSource team gains a comprehensive understanding of the client Packaging Requirements for the project. The Application Packaging requirements definition, Process Analysis and Knowledge Transfer will be executed during this phase.

The major deliverable from this phase is a completed/finalized application packaging requirements specification. It is vitally important that the InSource resources understand the packaging requirements the client has assembled. To demonstrate this understanding, walkthroughs and signoffs of the requirement/documents will take place to ensure completeness.

For each application to be packaged, the following information will be gathered:

- Tracking Identifier
- Application Name
- Source files
- Install procedures
- Configuration specifics
- Test scripts

- Technical dependencies (i.e. License keys / registration information)
- Application Owner information

The information will be staged and available for reporting in InSource's StandardizedPro. This will provide both parties with an opportunity to address questions that arise, analyze comments, and evaluate suggestions and improvements that may be identified to ensure the proposed packaging approach achieves the business objectives.

To ensure the final product meets the client packaging requirements, InSource will include a test strategy and define test scenarios that are traceable to requirements. Test Procedures will also be developed to ensure conflicts do not exist.

Stakeholders/ SME's will meet and have dedicated sessions with the client for finalizing the application packaging requirements and documenting the specification. The session schedule will be determined at the beginning of this phase and tracked in the project plan. All meeting outcomes will be documented and shared with the team for feedback. Adjustments will be made and then the subject matter will be finalized at the final walkthrough.

It is assumed that there will be involvement of The client Subject Matter Experts (The client Resources time which include IT Resources, Business Resources (application owners) and required Management). This will equate to roughly half the allocated duration for this phase. Details on schedules, the actual resources (SME's) will be confirmed/ finalized during the first week of the project. A select group of The client resources will be involved in walkthroughs and deliverable sign-offs.

InSource will have a lead for the project onsite for this phase as well as select application packagers to ensure a complete knowledge transfer of the packaging requirements.

Also during this phase, InSource will finalize the Packaging Lab / Development environment at either the client site or an InSource location. This will include server setup, workstation setup, finalizing software installations, security access and communications access to the client environment.

The lab/development environment will consist of:

- A Central Windows server for the following:
- Database storage
- File storage for all software installation sources
- File storage for all packaged software
- File storage for machine images or virtual machines
- Central repository for the integrated packaging environment
- Packager Workstations to be used for package preparation and development
- Testing workstations to emulate the client environment
- Virtual machine technology that can be used to replace the test and packaging workstations
- A machine imaging tool for restoring workstations (USMT)
- Backup to protect your packaging data

For the Application Packaging Requirements Development and Analysis, the following tasks will be undertaken, and the results documented:

- Review/Analyze the existing packages / processes / data
- Develop and Finalize the "To Be" packaging process flow
- Develop and finalize the packaging requirements for each application to be packaged. It is very likely
 that the requirements definition for all the applications to be packaged will not be completed in total
 during this phase. This will be an ongoing iterative process that will have a completion date
 (sometime during the packaging development phase), but it is expected that this will not be during
 this phase.
- Identify any system constraints
- Identify Acceptance Criteria for verifying the requirements
- Identify all Development Assumptions
- Continue the Risk Management and Issue Management procedures

Deliverables for this Phase (These will require sign off from The client)

- Application Packaging Requirements Specification (first cut, this document will be added to during the duration of the project)
- Project Plan.
- Resource Plan.
- Prelim Acceptance Plan.
- Prelim Implementation Plan.

Assumptions for this phase

The client will establish an onsite working environment. This will include handling all the logistics required to get someone started and would include:

- Obtaining User Ids and Security Ids (as required)
- Acquiring and finalizing the space required for the onsite team (during the first piece of this phase)
- Development Environment setup application Library (for application media source and the packaged deliverables)
- The client will be responsible for establishing the inventory of applications to be packaged as well as prioritizing the order for packaging
- The client will assign SME's to each application who will have the authority to make decisions regarding the packaging requirements per application during UAT testing

Packaging Development

InSource's Application Packaging team will now begin the application packaging process for the applications defined in the requirements specification. Each work effort undertaken will be conducted under InSource quality guidelines and in accordance will all The client standards. All activities and their duration will be outlined in detail in the project plan.

The Packaging Process

Process the applications based on the prioritization established. For each application:

- Confirm if Weiss MSI packaging and which Virtualization Standard will be used
- Acquire the completed approved application requirement documentation

- Download the media source for the application from the client application source Library. Load this source into the InSource Application library on the server.
- Package the application per the installation requirements, configuration requirements and packaging tool to be used. This will include any Customizing of application installs to meet different business unit requirements.
- Communicate with The client should any issues arise. This may be with the designated The client project lead or with the application owner directly.
- Store the package deliverable on the application deliverable folder on the server.
- All the packages will go through a quality process to ensure the package is reliable and deploys with no issues on the determine The client configuration.
- Document the package as required by The client and identify any known issues with the package. Track the package history as well.
- Load the completed package and documentation in the completed deliverables folder on our server. These items will then be uploaded back to The client for Acceptance testing.

Unit testing is conducted by the packagers to ensure that package is complete and working as designed. Each package tested independently. At the end of unit testing the application package will run without abnormal termination. The activities that occur in this phase include:

- Packaging of the prioritized applications (location, number of users, etc.)
- Unit testing of the packages
- Package documentation

Deliverables for this Phase

- Completed packages and documentation
- Completed unit test results

It is assumed that there will be limited involvement of The client Subject Matter Experts. Details on schedules, the actual resources will be finalized during the first week of the project. A select group of The client resources will be involved in walkthroughs, application profile reviews and deliverable sign-offs as required.

Client UAT

This phase will involve testing of the returned packages on-site at the client. Once an application has been successfully packaged, tested and documented in our environment, the completed package will be uploaded to a designated server in the client environment.

The client resources will then execute an acceptance test. The client acceptance testing is conducted by The client to ensure that the packages meet all requirements, reliability, and performance expectations in a production-like environment. Tests will mimic typical or anticipated usage patterns.

Any issues that may arise will be handled through the issue management process and tracked through resolution. The activities that occur in this phase include:

- Package Deliverables returned to The client
- Acceptance Test Preparations
- Acceptance Test

Continue with the Risk Management and Issue Management Procedures

Deliverables for this phase

- Packages
- Documentation

Transfer to Client Production

The Implementation phase involves the staging of completed application packages into the client SYSTEMS MANAGEMENT TOOL production (and exported supporting documentation from StandardizedPro).

InSource will assist in the implementation. InSource will also assist in the Communications Plan, Support Plan, Roll Out initiatives as needed. Additionally, a project closure meeting will take place that will identify things that worked well and those that did not. The team will determine adjustment plans for those items that did not work. InSource warrants its packaging work for 30 days after acceptance.

If additional work efforts are agreed to, finalize the planning aspects for the next phase/project. InSource will continue to utilize the existing teams in place as needed.

Deliverables for this phase

- Complete turnover
- Production readiness

Project Reporting

InSource does provide project status reporting for al Rationalization and packaging efforts. Additionally, we do offer ad hock reporting capability within scope. Project and asset reporting can be produced from two sources:

- 1. InSource StandardizedPro has general, exportable reporting (excel, pdf) for application, hardware, user reporting, etc.
- 2. Business Data Lab team can produce custom or ad hock reports for specific business need which are not found in InSource StandardizedPro.

We typically offer status reporting to project and program managers during Rationalization projects. Most clients will ask for ad hock reports as well. We can accommodate these requests but manage the process through the client project manager so we can monitor and determine scope creep.

Deliverables

Application Library

Once the packaging effort is complete, the client will have a comprehensive repository (initial scope will be determined during Rationalization Phase) of its business applications in both Virtual and MSI format. The repository will contain documents with the functional criteria (or configuration profile) for each packaged application, which was used during the initial packaging effort.

Application Rationalization Deliverables:

- Standardized Application Library
 - Documentation and media transferred to client share location

Implementing an ITAM Program

InSource Managed Services offers a mature solution- consulting approach toward implementing client ITAM programs. As part of that approach we enlist known standards and terms to establish a mutually agreed upon program support framework to establish our client's success.

Our teams are built to provide low impact architectural design and implementation of program level ITAM solutions. We leverage StandardizedPro to provide accurate and actionable data analytics for recommended architecture and process automation within ITSM toolsets.

Our approach is designed to provide individuals with varying degrees of solutions- consulting expertise and experience to establish a well-rounded architectural solution. We take four primary disciplines into account when we apply our data driven analytical approach:

- 1. ITAM Expertise
- 2. Technology Architecture Expertise
- 3. Procurement Expertise
- 4. Provisioning Expertise

This creates a well-balanced approach toward analytics, architecture and ongoing operational flexibility for our client's ITAM business support and operational objectives.

We focus our efforts on the process integration of disparate systems data (examples listed above). By doing so, we simplify the conversion of raw technical and business data into intelligent information to establish a desired outcome for;

- Senior Managers
- Technical Staff
- Program Platform Shifts
- Key Decision Makers
- Risk Mitigation
- Financial Compliance
- Identity and Access Management

We then produce meaningful, actionable, easily understood reports and blueprints for business and technical consumers.

We do so by combining multiple data sources (in our business data lab); including business operational systems (HR, Systems Management, Systems Hierarchy, Procurement, etc.) enabling us to establish and maintain a consistent reporting and design architecture framework.

We then establish blueprint and report criteria, audience/ consumer and frequency needed to support, an ongoing ITAM program.

Our approach is to create a systematic and on-going process of collecting, interpreting, and acting on incongruent data. We convert that data into consumable, actionable blueprint information relating to the goals and desired outcomes for ongoing ITAM process automation. We then translate the blueprint functionality into the client ITSM toolset for integration and automation.

As an example: Consumable information allows our clients to answer questions like:

- What type of software do we own?
- How well are procuring or provisioning our assets?
- Are we at risk; out of compliance with license entitlements, vulnerable to threats?
- How can we improve our technology platform; move to the cloud, consolidate infrastructure, shift platforms?

Our ITAM solution- consulting model enables the client to see their desired outcome and act on integration and automation to support an ongoing state. We use this approach to establish a foundation which desired results can be measurable and scalable.

We do this by establishing three primary informational components:

- Assessment method (ITAM data converted to actionable information)
- Desired outcome
- Establish criteria for success

Goal

Our goal is to help our clients to know their enterprise assets and move them into a managed, actionable ITAM Program. We use our Rationalization solution- consulting model as a springboard to integrate client software and hardware data into enterprise management tools like ServiceNow, HP OpenView, BMC, etc. Knowing our clients make big investments into enterprise toolsets but are struggling to identify gaps and integration points has helped to focus the value of our solutions model.

By leveraging rationalized data sets and providing expertise and tools we can help our clients identify the gaps and opportunities of a fully integrated ITAM program.

Communications

During an ITAM solutions- consulting engagement we use traditional project management communications channels. We set-up meetings with client SME's and queue owners to understand, document and automate workflow. We normally work with the following groups to deliver automated workflow process:

- IT Services- Group who works with and administers the client ITSM, directory services, group policy, systems management, end user support- provisioning, networking, server support
- Human Resources- Group or individual who understands the current toolset and workflow for onboarding, offboarding and change process in human resources. We also engage with individuals who understand corporate policy for onboarding and offboarding of personnel
- Legal- We work with individuals in Legal to understand corporate governance and policy so we may capture administrative level approval for compliance, etc.
- Procurement- Group who works with and administers the client purchasing and systems and process.
 We look at current workflow for request and provisioning of new inventory so we may capture and include critical attributes for centralization in ITSM database
- Finance- Group who work with and administers the client financial systems- AP, AR, etc. We work with this group to understand reporting impact and approval in purchasing and licensing renewal.
- Office of CIO- We work with this group or individuals to capture approval thresholds, reporting needs, etc.

We take all client interviews and knowledge capture and translate it into a working Findings Blueprint. We use our blueprint formats to translate workflow automation to the ITSM toolset administrator for development.

Once the workflow is automated, we schedule UAT workflow testing session with client SME's and stakeholders to test the new process automation for sign off and a move into production.

Infrastructure

During asset Rationalization and ITAM implementation, we always have an eye toward our client's infrastructure. We do so for two primary reasons:

- Their current install base is telling us where they can improve. Example: When we see high concentrations of functional redundancy this tells us (a) there is something broken with their provisioning cycles (b) there is something broken with their policy enforcement (c) there is something broken with their change process (d) there is something broken with their assets reporting.
- Any of these symptoms tell us we will need to look deeper into process (on-boarding, off-boarding, change, etc.) and the systems which they are run (HR, systems managements, incident/ change/request, purchasing, etc.)

When we look at the client's systems/ infrastructure we use the data confirm what we are seeing and to help make recommendations for improvement. This typically leads us to longer term ITAM conversations and architectural planning to support an ongoing standardized state.

The team is designed to provide our onsite analysts with a data support team which can create quick views to help educate and support further recommendations beyond asset Rationalization.

Process

InSource's senior consultants use the StandardizedPro Business Data Lab to quickly bring all the data together and gain contextual depth on client analysis. The analysis is focused on understanding the client's immediate asset disposition regarding risk or out of compliance, redundancy, vulnerability, etc. We can then focus immediate Rationalization efforts on curing the current state.

To maintain a standardized state, we then focus our efforts on establishing a mature ITAM solution. Part of the solution is the alignment on policy, process and infrastructure. Too many times we see clients with mature infrastructure and segregated process but no alignment or integration between them both. This results in disparate asset estates (risk, vulnerability, redundancy, etc.) and policy which is unmeasurable, unreportable and unenforceable.

To mitigate this scenario, InSource takes a matrixed approach toward process and systems infrastructure integration. We use StandardizedPro and the business data lab to begin integrating and automating three primary workflows which have the highest impact on provisioning and procurement lifecycles.

On-boarding (New Hire)

- Off- boarding (Termination)
- Change

We focus our efforts on the systems, process and policy which contributes to the above-mentioned life cycles. We use data analytics to help us identify break points for comparison with procurement and provisioning cycles. This provides a "matrixed view" of the asset as it flows through request, incident, procurement, provisioning and ends in its current state. We can then see how its current disposition matches risk, vulnerability, functional comparison, etc. and how that relates to policy, ongoing management and impact to new initiatives (platform shift, migrations, upgrades, etc.).

We show the client a rational view of their asset ecosystem, current asset disposition samples and a "blueprint" to integrate systems and process to uphold policy, mitigate risk and manage an ongoing ITAM state.

With this approach, we can then have "use case" level discussions which establish work streams to solve:

- Enforcement of Policy, Governance, Process
- Formalize Committee Structure (Software Review Board, ITAM Review Board- Operations, Security, HR, Procurement, Leadership Sponsor)
- Mitigate Software Risk/ Vulnerability
- Enable License Audit/ Compliance
- Reduce Bloated Software/ Hardware Profiles
- Enable Procurement and Provisioning Lifecycles
- Security/ IDM Programs
- Risk Compliance Programs
- Internal/ External Audit Programs
- Provide Business Intelligence through Frequency Based Reporting

With an eye, toward process integration and a focus on procurement and provisioning process/ gap we focus our approach on systems currently facilitating these life cycles. We focus our efforts on identifying current systems like:

- Systems Management
- ITSM Products
- Directory Services
- Human Resources
- Financial Systems (AP, AR, Purchasing, etc.)

We look to automate the process lifecycles which impact the procurement and provisioning requests normally maintained within a traditional ITSM mechanism like ServiceNow, HP OpenView, etc. We find requests (onboarding, offboarding, change, etc.) begin with end users and impact any one of the above-mentioned enterprise toolsets but almost never leave a centrally reported event.

By understanding the systems and process which initiate requests we can align and automate request lifecycles in the ITSM system. This establishes a central record and enables the ITSM system to add attributes to the centrally stored asset record.

We do so with procurement and provisioning lifecycles in mind as they become the most frequently impacted through ongoing request process. They are also at the center of audit, compliance and reporting request as those systems are represented by systems management, directory services, HR, and financial business systems.

Procurement Alignment

As mentioned above, we put a strong emphasis on systems integration through process automation. We do so with the intent of establishing a centralized book of record for enriched asset information. To do so, we focus on feeding a centralized database within the clients ITSM system. Additionally, we begin to focus on process automation for the three primary work streams and begin adding additional request/ incident/ change work streams under the primary streams. This approach simplifies the end user request lifecycle and ongoing request queue management.

At the same time, we use the business data lab to help identify process gaps which impact procurement request/ change. Knowing most requests start or impact a procurement initiative and a work stream outside of the request mechanism (ITSM systems) we look to centralized and automate the request lifecycle within the ITSM system. We add attribute to the procurement workflow to capture key data points which otherwise reside in purchasing and financial systems.

- PO numbers
- Accounts Receivable
- Accounts Payable
- Inventory Control

Through process automation and the inclusion of key data attributes we can begin to centrally report on an enriched asset disposition. This is the first (and a big step) toward understanding and operating a centralized ITAM database (CMDB) which is fed by ongoing workflow like request/ change/ incident.

The concept of integrating systems has proven to be expensive and unproductive but the concept of aligning key data attributes to asset and organizational data is a self-sustaining solution. The more attributes (procurement, incident Cl's, data normalization attributes, organizational attributes, etc.) you can attach to an asset the more we know about the asset: i.e.- vulnerability, risk, aging location, redundancy, license, usage, etc.

These become the foundational components which support a health ITAM ecosystem.

Provisioning Alignment

As we align procurement process, we do so with an eye toward provisioning systems integration through process automation. We do so with the intent of establishing a centralized book of record for enriched asset information. To do so, we focus on feeding a centralized database within the clients ITSM system. Additionally, we begin to focus on provisioning work cycles which spawn from the three primary request work streams (mentioned above) and begin adding additional request/ incident/ change work streams accordingly. This approach simplifies the end user request lifecycle and ongoing request queue management and begins to align procurement and provisioning related attributes.

At the same time, we use the business data lab to help identify process gaps which impact provisioning request/ change. Knowing most requests start or impact a provisioning initiative and a work stream outside

of the request mechanism (ITSM systems) we look to centralized and automate the request lifecycle within the ITSM system. We add attributes to the provisioning workflow to capture key data points which otherwise reside in systems management and directory service systems.

Roles

When we engage with clients to Standardize assets and establish a ITAM Programs we work with stake holders and influencers across the enterprise. In a typical engagement, we work direct with IT personnel to integrate systems, data, automate process but we work with business stake holders to gather requirements which define the systems automation and integration necessary to provide business strategic information to support an enterprise level ITAM program.

The following personnel represent the key stakeholders necessary to define and implement an asset management practice and IT asset Rationalization project.

| Project role, assigned to: | Responsibilities | Estimated time commitment during project |
|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Executive Champion | Approve project concept; identify areas of concern or risk Approve funding requirements Present project documents to sponsor for approval Approve use of resources and personnel for short-term launch and long-term maintenance of ITAM program and Rationalization Communications | 5- 8 hours per month for project approvals & launch Oversight, reporting as required |
| Project Sponsor | Confirm scheduling Ensure project is on track Ensure appropriate internal resources are identified to vendor | 60 hours (5 hours per month) |
| Business Stakeholders | Provide Requirements and cooperate with policy and processes reviews | As Needed throughout project |
| Operations/ Infrastructure Team Members IT Service Desk Team Member Verizon Business Analysts | Provide support call data Unit Testing Packaging Media support Cooperate/Assist with process reviews | 120- 180 hours (10-18 hours per month) BA's- Full-time dedicated (if Verizon opts for internal employee option) |
| IT Finance | Provide software entitlement budget support | As Needed |
| Procurement | Cooperate/Assist with process reviews, contract reviews Purchase process for ITAM tool, Rationalization | 120 hours (10 hours per month) |
| Legal | Cooperate/Assist with process reviews Provide contracts for review Renegotiate terms of contracts if required Assist with new contracts after compliance check | As needed |

Our Senior Analysts leverage data, from the Business Data lab, to help guide and educate the abovementioned stake holders as we move them from strategic decision making to requirements, design and implementation lifecycles.

It is required out analysts understand our clients line of site, objectives and goals so they can guide our business data lab team to produce strategic views which support requirements, design and implementation life cycles. The ability to quickly and accurately present objective data so our clients can make strategic decisions is critical and required of our service delivery model.

Objectivity, accuracy, speed to market and the strong ability to translate strategic views into actionable, traceable project workflow are foundational to our solutions consulting model. All aspects of the business data lab, senior solutions consultants (onsite and offsite) are focused on delivering these values to our clients as part of general operating procedure.

Deliverables

Projects are completed when the client goals have been met. Our deliverables and work product support two basic concepts:

- 1. Asset Rationalization
- 2. ITAM Program Implementation

All deliverables (work product) fall under the two categories listed above. As an example, we have listed sample deliverables which make up tangible milestones and task deliverables in a typical engagement.

- 1. Asset Rationalization Deliverable Examples
 - a. Centralized Software Asset Repository
 - i. Software packages, tested, staged and able to be provisioned via systems management toolsets (SCCM, LANDesk, etc.)
 - ii. Centralized software attributes: package instructions, license entitlements, etc.
 - b. Named list of software assets which the client wants to procure and provision as part of their ongoing ITAM program
 - c. List of Policy and Governance which supports ongoing Rationalization efforts in an ITAM Program
 - d. Baseline recommendations (InSource Playbook) for transitioning into an enterprise level ITAM Program
- 2. ITAM Program Implementation
 - a. Systems Architecture and Integration Design and Implementation
 - i. Discovery- Agent and Agentless
 - ii. Data Normalization (BDNA, Eracent, etc.)
 - iii. ITSM System (ServiceNow, HP OpenView, etc.)
 - 1. CMDB
 - 2. Process Automation
 - 3. Systems Integration: Systems Management, Active Directory

- 4. Secondary Systems/ Process Integration: Purchasing, Procurement, Finance, Legal, etc.
- b. Process Automation
 - i. Request, Incident, Change
 - 1. On-boarding
 - 2. Off-boarding
 - 3. Change
 - ii. Secondary Policy and Governance Process Request
 - 1. Software Approval Process
 - 2. Systems Access (IDM) Request
 - 3. Business Rules, Regulations, Requirements Requests
 - a. Example: Audit supported requirements for compliance with internal and external client services (secure customer information, bank regulation, etc.)
- c. Governance and Policy Process/ Audit / Reporting
- d. Future Architecture (ITSM toolset expansion)
 - i. Governance/ Risk
 - ii. Project Management
 - iii. Financial and Procurement Systems Integration

Appendix

Company X IT Asset Management

| IT ASSET MANAGEI | MENT PROCESS | | |
|---------------------------|-----------------------|------------|----------------------------------------|
| FUNCTION AREA: A | SSET PROCUREMENT P | ROCESS NAM | ME: PURCHASING |
| | | | |
| Process Number: [I | INSERT IF APPLICABLE] | | |
| Related Documen | tation: | | |
| Comments: | | | |
| | | | |
| Document Revision History | | | |
| Date | Author | Version | Description |
| 12/13/2013 | Ruben D. Rodriguez | 1.0 | Company X IS Asset Procurement Process |
| | | | |
| | | | |

Background

This Information Technology Asset Management (ITAM) process defines the structured sequence of work

steps, tasks and activities, defined inputs and outputs for the procurement of Company X IS Assets. The process includes embedded procedures as well as reference to external procedures.

All functional groups as defined in the Roles and Responsibility matrix of this process are responsible to execute their activities as best suited to its requirements. Together with the overarching process workflow and any common procedures, process results will be measure to also successfully achieve corporate asset management compliance requirements.

PROCESS CHECKLIST

- Asset Request
- Approval of Request
- Inventory Availability
- Pricing of Asset
- Corporate Sourcing Request Process
- Purchase Order Execution
- Asset Delivery (Vendor to Warehouse or Alternate Destination)
- Asset System Registration
- Asset Deployment
- Request Closure

GOVERNANCE

The following standards, guidelines and frameworks are applicable to this process.

| Organization | Description | Reference | Comments |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------|
| IS | IS Asset Management Policy | XXXXx | |
| Corporate | Company X Asset Management Policy | xxx | |
| Supply Change Management (Purchasing) | All PeopleSoft Request for IS Assets should follow the Corporate Sourcing procedures, terms and conditions. The Policy, procedure and Job Aids can be found at | http://home.kmhp.com/de pts/hr_effective/resources/ job_aids/peoplesoft/upk/d ata/toc.html | |
| Supply Change Management (Receiving) | All Receipts of Assets are required to follow the corporate Receiving Policy | Company X Policy #104.03.006 | |

System Scope

System scope defines the systems within the scope of this process. Data scope refers to the data boundaries of the process, in the form of a high-level business object model or data mode. Technology scope describes the

components of technology (software, hardware, architectures, networks and communications) that are to be considered within the scope of (that is, available to) this process.

Process Overview

The scope of this process includes the inputs, outputs and activities related to the procurement process of Company X's IT assets.

The described process is supported and enabled by multiple systems, processes (offline) and individual actors. The following functional systems support the current environment.

| System Scope | Description |
|----------------------|-------------|
| Front Range | |
| PeopleSoft Financial | |
| PeopleSoft Inventory | |

An input represents a tangible or intangible entity that is required to carry out the process. The following inputs are required for the process:

| Tool | Function |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| ITSM | Service Management Request Application |
| FSOP's Form | Form utilized for the request of Assets |
| ACF Form | Form utilized for the request of Assets |
| PeopleSoft Request | Enterprise application utilized for the submittal of assets, purchase orders and receivable of assets. |
| | Profile submitted to the ITAM repository for the proper management of the IS assets. |
| | Repository that holds a collection of Configuration Items (CI's) descriptive relationships within the Information Technology environment. |

| Input | Description of Input |
|-------|------------------------------------------------------------------------------------------------|
| · | User/Organization initiated request requiring the need for an IS tangible or intangible asset. |
| Quote | An estimated cost of the IS Asset as submitted by the Vendor(s) |

| PeopleSoft Request | Formal corporate request for the acquisition of an IS asset. |
|----------------------|-----------------------------------------------------------------------------------------------------|
| Asset Tagging | Import or Scan of Pre-defined asset data for inventory management of the IT Asset. |
| CI Creation | Configuration Item profile that it's created for assets that are defined as manageable by the CMDB. |
| CI Group Association | Association of acquired asset to a CMDB Group CI. |

An output is a measurable, tangible, verifiable product or service that is produced because of the process. The following outputs are produced because of the process:

| Output | Description of Output |
|------------|-------------------------------------------------------------------------------------|
| | Generated authorization for vendor to deliver goods, with payment to be made later. |
| · | Proper receipt of purchased asset by warehouse or alternate delivery location. |
| Asset Tag | Asset Identification for Inventory control. |
| Deployment | Deliverable of asset to requester. |

Risks

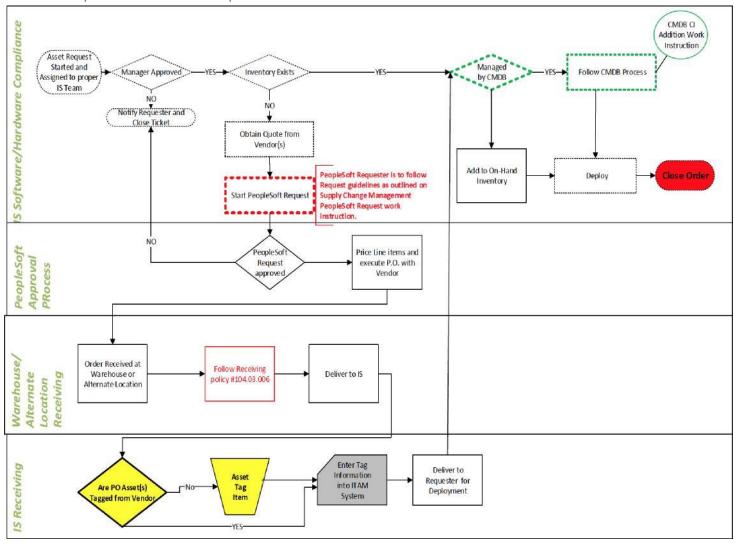
The following risks must be understood and mitigated to ensure the success of this process because they may adversely impact process events, outputs, etc. The risk probability rating includes a probability of the risk occurring and the severity of the impact of the risk to the process should it occur. (H=High – certain or already observed, substantial or severe impact; M=Medium – 50/50 chance of occurring, moderate impact; L=Low – less likely to occur, small or insignificant impact).

| Risk Description | Impact Prob | | Sev HML | Risk Mitigation Strategy | | |
|---------------------------------------------|------------------|-----|---------|----------------------------------------------------------------------------------------------------------------------------|--|--|
| | | HML | | | | |
| Incorrect Information on PeopleSoft form | Request/Delivery | M | M | Limit PeopleSoft request to users certified on filling our request form. Return request form if information is incorrect. | | |
| Improper Receiving of Asset | Accounts Payable | L | Н | Asset Manager must confirm assets receipt by Requester before closing ITSM request ticket. | | |
| No Asset Tag | Asset Tracking | M | М | All assets need to be scanned | | |

A dependency is something that the process relies on or is controlled by

| Dependency | Description of Dependency |
|------------|------------------------------------------------------------------------------------|
| | The process its dependent of the proper execution of the PeopleSoft approval flow. |
| ITAM Tool | Asset once received needs to properly enter ITAM environment. |

Asset Request Process Map: SAMPLE



Process & Activities

Processes are divided into discrete activities; each activity is divided into one or more tasks, with numbers. Procedures required to execute this process may be detailed or a reference provided.

| | Action | Instructions |
|--------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Request Initiation | | |
| 1 | Request for new asset initiated | User/Department Requests need of Asset |
| 2 | ITSM request generated | Asset Request is entered into ITSM |
| 3 | ITSM request is routed to responsible IS Department | Asset Request is assigned via ITSM to Information Technology Team. If team is Not responsible for asset assigns request back to Service Desk for proper routing. |
| 4 | Approval | If approved proceed to next step. If NOT requester notified and request closed |
| Asset Availability | | |
| 5 | On Hand Inventory Check | Assigned Team checks for asset on current inventory. |

| 6 | Availability check A | If asset is available on current inventory proceed to Step 8 If NOT proceed to step 7. | | | |
|---------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 7 | Step C | If not available, the IT assigned team generates a quote to start People Soft Request | | | |
| CMDB Check | | | | | |
| 8 | Check if Asset is to be managed by CMDB | If YES Start CMDB Process (Document location). If NOT go to Step 15 | | | |
| PeopleSoft | | | | | |
| 9 | PeopleSoft Request Initiation | Once assigned team obtains quote, proceeds to enter request into PeopleSoft Assignee must follow PeopleSoft Request Work Instructions (<i>Doc location</i>). | | | |
| 10 | PeopleSoft Request approval | If PeopleSoft order is approved Purchasing Prices the line items, generates PO and sends it to Vendor for execution. If NOT approved the request is canceled and User notified. | | | |
| WAREHOUSE / ALTERNATE LOG | CATION RECEIVING | | | | |
| 11 | Receiving Asset at Company X Warehouse | Order is Received from Vendor following the Receiving process (Follow Policy # 104.03.006) for official order receipt in PeopleSoft and internal Delivery. | | | |
| 11.1 | Process for Receiving Goods - within 5 days of the delivery | Determine Purchase Order that the goods are affiliated with | | | |

| 11.1.1 | Review Packing Slip or shipping label |
|--------|-----------------------------------------------------------------------------|
| 11.1.2 | Contact requisitioned, Corporate Sourcing or PMO for assistance if required |

| 11.1.3 | Purchaser will assist Warehouse to confirm goods can be received as requested |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11.2 | Sign the bill of lading/packing slip/ copy of the shipping label to confirm the items ordered are correct and at the physical location |
| 11.3 | Enter Purchase order into PeopleSoft and receive the lines that correspond to the goods. Include Serial Numbers for capital purchases (6400). Purchase Orders can be received in part. See attachment 1, PeopleSoft receiving process. |
| 11.4 | Attach packing slip/shipping label to the purchase order. See attaching receipts to a Purchase Order Job aid. |

| 12 | Receiving at Alternate Location | Order is Received from Vendor following the Receiving process (Follow Policy # 104.03.006) for official order receipt in PeopleSoft and internal Delivery. | | | |
|--------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 12.1 | Process for Receiving Goods - within 5 days of the delivery | Determine Purchase Order that the goods are affiliated with | | | |
| 12.1.1 | | Review Packing Slip or shipping label | | | |
| 12.1.2 | | Contact requisitioned, Corporate Sourcing or PMO for assistance if required | | | |
| 12.1.3 | | Purchaser will assist Warehouse to confirm goods can be received as requested | | | |
| 12.2 | | Sign the bill of lading/packing slip/ copy of the shipping label to confirm the items ordered are correct and at the physical location | | | |
| 12.3 | | Enter Purchase order into PeopleSoft and receive the lines that correspond to the goods. Include Serial Numbers for capital purchases (6400). Purchase Orders can be received in part. See attachment 1, PeopleSoft receiving process. | | | |

| | 12.4 | | Attach packing slip/shipping label to the purchase order. See attaching |
|-------------------|------|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| | | | receipts to a Purchase Order Job aid. |
| | 12.5 | | Deliver to IS Receiving. |
| IT/ IS Group | | | |
| | 13 | Asset Tag Verification by IS Receiving | Verify if Asset has been asset tagged by Vendor. If Tagged by vendors add the received tag information to the ITAM system. |
| | | | If NOT proceeds to Tag asset. (Consumable assets not need to be |
| Inventory | | | |
| | 14 | Inventory Control | If item is Consumable move asset(s) to IS inventory. If NOT proceed to Step 8 before deployment. |
| Deployment | | | |
| | 15 | Deployment | Deploy Asset to Requester and Notify ITAM Manager of Asset deployment. |
| ITAM Verification | | | |
| | 16 | ITAM Verification | ITAM manager verifies delivery. |
| | | ITAM System Update | Updates ITAM System fields as necessary |

Roles and Responsibilities

The Roles and Responsibilities Matrix for this process follows.

| Role/ Function | Current Resource | Description of Role/Function | Main Activities | | |
|--------------------|------------------|------------------------------|----------------------------------------------------------------------------------------------------------|--|--|
| Requester | Varies | Originates Request | Originates a request for the acquisition of asset(s). | | |
| Requester Manager | Varies | Approver | Approves request for the acquisition of asset(s). | | |
| IS Associate | Margaret Canty | Facilitator | Line quotes asset and initiates supply change management request. Facilitates deployment of asset to | | |
| Warehouse Receiver | Varies | Receive | Receives asset from Vendor when delivered to Company X Warehouse | | |
| Assignee Receiver | Varies | Receive | Receives asset from Vendor when delivered to Company X Alternate location | | |
| ITAM Manager | Margaret Canty | IT Asset Control | Ensures assets meet ITAM policy standards and procedures. Responsible for lifecycle management of the IT | | |

RASCI Chart

The following RACI (Responsible-Accountable/Approve-Consult-Support-Inform) chart defines participant roles and responsibilities in the process.

| Activity | Requester | Requester Manager | IS Associate | Receiver (Warehouse or Assignee) | ITAM Manager |
|--------------------|-----------|-------------------|--------------|-------------------------------------|--------------|
| Request Initiation | R | А | S | | I |
| Asset availability | I | I | R | | С |
| CMDB check | | | R | | С |
| PeopleSoft Request | I | A | S | I | С |
| Asset Receipt | | | I | R | А |
| Inventory | l | [| S | R | A |
| Deployment | I | I | R | С | S |
| ITAM Verification | | | S | С | R |

RACSI: R = Responsible A = Accountable/Approve C = Consult S = Support I = Inform

Process Compliance

Compliance to the defined process by all stakeholders is required to guarantee the effectiveness and efficiency of this process. It is the responsibility of the process owner to ensure that the implemented process detailed herein is followed.

Process Maintenance and Control

Maintenance and control over processes is needed to ensure the effectiveness and efficiencies planned into the process. The applicability of the process considering a changing business, the scope of the process considering changing technology and requirements, the assumptions inherent in the process and process steps considering a changing organization must be reviewed on at least an annual basis to ensure that process goals are intact and that process quality is maintained. It is the responsibility of the process owner to control the process and to maintain the process.

APPROVALS:

Process Owner

The Process Owner role is responsible for ensuring that a process is fit for purpose. The Process Owner's

| Nick Pietropolo | IS Manager | |
|-----------------|------------|--|
| | | |
| | | |

responsibilities

include sponsorship, design, process changes, managing organizational compliance and continual improvement of the process and its metrics. The Process Owner represents and champions the process throughout the process service lifecycle.

Process Sponsor(s)

The Process Sponsor is the person(s) or group that has the authority to commit the organization to conform to this Process. He/she indicates his/her agreement by providing his/her Signature and the approval Date.

| Name | Role | Signature | Date |
|------|------|-----------|------|
| | | | |

Process Manager

The Process Manager role is responsible for operational management of this process. The Process Manager's responsibilities include planning and coordination of all activities required to carry out, monitor and report on the process. There may be several process managers for one process. The Process Manager role may be assigned to the individual who carries out the Process Owner role.

| | Role | Signature | Date |
|------|-----------------------------|-----------|------|
| Name | Role | Signature | Date |
| | SW/HW Compliance Manager | | |
| | | | |

Application Packaging Requirements

Application Certification Form

(Insert application name here)

This form will be used as the primary source of application related information throughout the application packaging lifecycle. Please rename a copy of this form to match the application package name and save it in the application's folder.

There are 3 sections below:

- 1. <u>Application Profile:</u> This section contains all pertinent administrative and technical information needed to package the application.
- 2. <u>Packager test of packaged application:</u> Packager will use this section to document test of packaged application. The PACKAGER ONLY will fill this section out.
- 3. <u>Client/ End User test of packaged application:</u> End user will use this section to document/ confirm application functionality and sign off.

Application Profile

Request Author: {ENTER NAME AND CONTACT NUMBER}

Creation Date: {ENTER DATE}

Version: {ENTER APPLICATION VERSION}

Last Modified: {ENTER LAST DATE THIS APPLICATION WAS MODIFIED- IF APPLICABLE}

Vendor Information

- 1. Application Vendor:
- 2. Application Version:
- 3. Description of the Applications use:
- 4. Is this application supported on Win 10?
- 5. Is the application certified Win 10 compliant?
- 6. If not, does the vendor offer a supported version?
- 7. What is the latest version available?
- 8. Is the application version currently integrated with any other applications?

Internal Contact Information

1. Application owner:

- 2. Application owner phone number:
- 3. Application owner location:
- 4. Department the application is being installed:

Application Environment

- 1. Manual install approved for which O/S's
- 2. Packaged install approved for which O/S's
- 3. Is the software browser based?
- 4. Does the application currently have Push/ Pull install?

Hardware Pre-requisites

- 1. Processor required
- 2. List special hardware requirements/ peripherals
- 3. RAM required
- 4. Video resolution
- 5. Server disk space requirements
- 6. Workstation disk space requirements

Software Pre-requisites

- 1. List additional software/ utility and/ or permissions to run
- 2. Is a site license required?
- 3. If yes, how many users are included per license?
- 4. List any compatibility with other requested applications
- 5. List any previous installations/ versions in production

Configuration Pre-requisites

- 1. List TCPIP requirements
- 2. DNS
- 3. DSN (database connectivity)
- 4. List application interfaces
- 5. List 3rd gateway requirements
- 6. Is the application accessed through standard desktops?
- 7. Is this application used by laptops?
- 8. Is the application available on Terminal Server?

Identify setup requirements:

This section represents the results gathered by running the User Test procedure.

| Date | Step Performed: |
|------|-------------------------------------------------------------|
| | Set up Software and Environment: |
| | Verify that basic functions work: Column 1 Basic Functions: |
| | Create a software installation package: |
| | Verify that basic functions work: Column 2 Basic Functions: |

Basic Functions: As identified by user or vendor:

| Initial setup | Packaged Setup | Function to be checked | Expected Result |
|------------------|-------------------|------------------------|-----------------|
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| evelopment Notes (custom actions, scripts, etc.) | |
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| Exception/Failure Notes | | |
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| | | |

1. Packager test of packaged installation (Unit Test)

2. Record test procedure. Be specific enough to allow a user of the application to duplicate the test.

| Step | Description | Expected Result |
|------|-------------|-----------------|
| 1. | | • |
| 2. | | • |
| 3. | | • |

3. Record any failures you encounter

| Exception/Failure Notes |
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| 4. Benediction and attacked a constant National and the first of the constant |
| Record any product notes you encounter. Notes are comments about quirky, annoying, erroneous, or otherwise concerning behaviors exhibited by the product. Notes are not failures. |
| Notes |
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| |
| 5. End User Test/ Sign-off (User Acceptance Testing- UAT) |
| |
| Test Procedure |
| Description: |
| Goals: |

| ternai ii | iputs: | |
|----------------|-------------------------------------|--------------------------------------------------------------------------------------------------------|
| cternal C | Outputs: | |
| ssumption | ons: | |
| UAT R test. | ecord test procedure. Be specific e | enough to allow a user of the application to duplicate the |
| Step | Description | Expected Result |
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| | | r. Notes are comments about quirky, annoying, erroneous, pited by the product. Notes are not failures. |
| Notes | | , |

Acceptance and Authorization

| Client | InSource Managed Services, LLC |
|--------|--------------------------------|
| By: | By: |
| Name: | Name: |
| Title: | Title: |
| Date: | Date: |