SEI_CMU_1Line_CMYK

**ABOUT THE SMART MATERIALS**

Thank you for your interest in the **SOA Migration, Adoption and Reuse Technique (SMART)** materials, developed by the SEI to help organizations make better decisions on their paths to SOA adoption.

Service Oriented Architecture (SOA) offers significant potential for your organization to leverage its investments in legacy systems. The service-oriented approach to systems development provides a modern interface to existing capabilities by promoting

* the assembly of applications from existing services
* platform and language independence
* reuse of services through loose coupling
* incremental service modernization due to separation of service interface from implementation

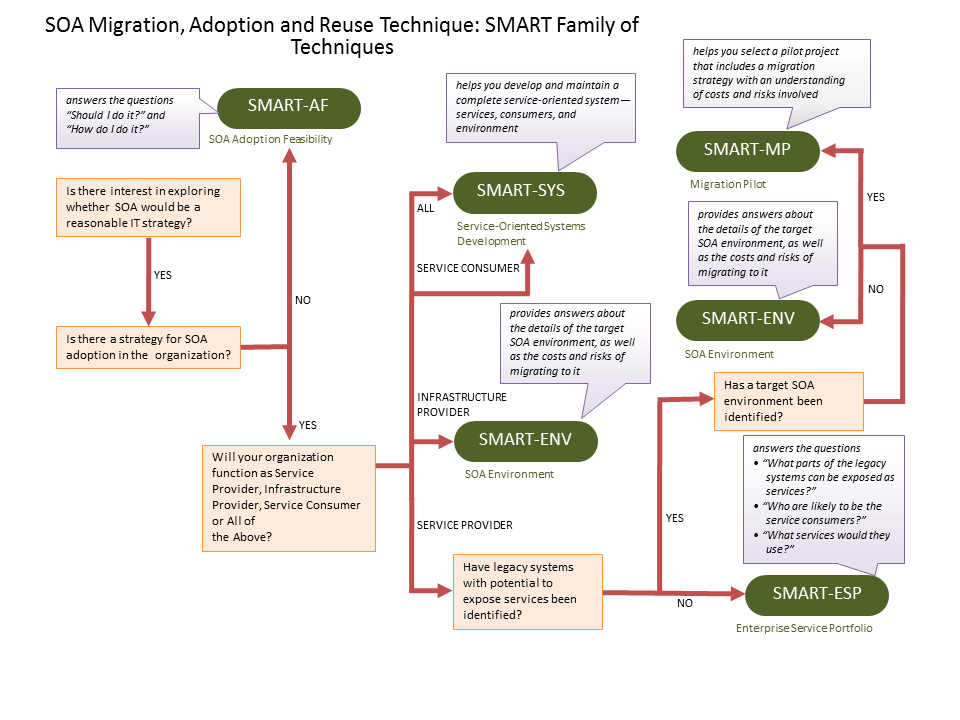
SOA migration can present several challenges. The accompanying files provide you with the SMART materials that can guide your organization through the migration process. Reading through this introduction will help you to determine which techniques best apply to your organization’s needs.

**YOUR ORGANIZATIONAL NEEDS**

SMART is a collection of techniques, each suited for different organizational needs:

* SMART Migration Pilot (SMART-MP)
* SMART Adoption Feasibility (SMART-AF)
* SMART Enterprise Service Portfolio (SMART-ESP)
* SMART SOA Environment (SMART-ENV)
* SMART Service-Oriented Systems Development (SMART-SYS)

Our experiences in applying SMART have led us to identify variations on the SMART process to help organizations that are dealing with different sets of issues. The different variations of SMART have been built as part of a SMART Family, as shown in the following figure.



For each SMART family technique, you will be able to link to the documents that guide you through its execution. Each member involves a process, an interview guide, and artifacts for use in the process. The process for each member has three steps:

1. Establish context
2. Gather information about assets
3. Analyze and report

What varies among them is

* the information gathered during the process stage
* the endpoints—the outcomes are varied

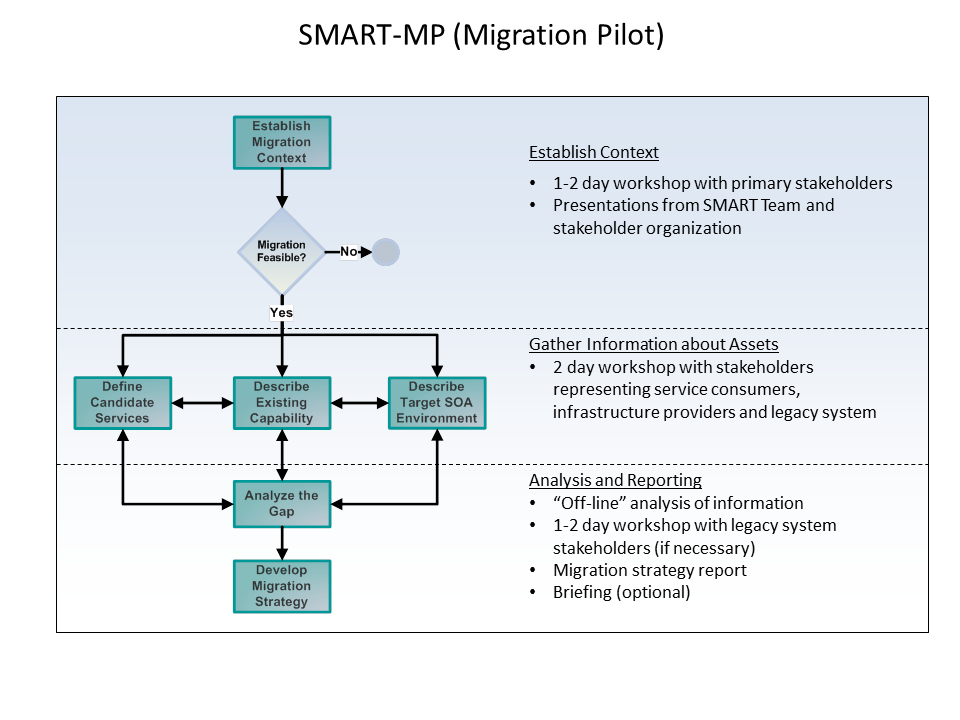
For each family member you’ll find three folders

1. Preparation for Engagement
2. Engagement Materials
3. Final Report Materials

There is much commonality among the members. While SMART-MP is the most elaborately developed, the SMART Workshop slide presentation and SMART Interview Guide (SMIG) for each family member explains the proper process. You’ll find these materials in the Engagement Materials folders. The members of the SMART Family all follow the same basic process but the emphasis is on certain activities in the process where the SMIG has been enhanced to go into more detail in specific areas.

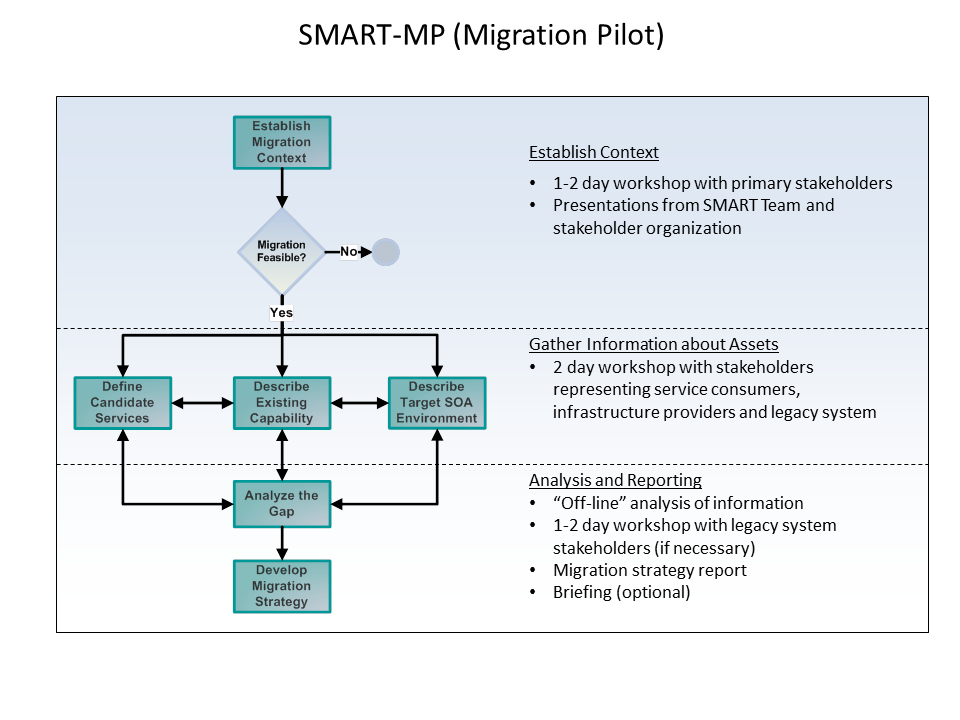
**SMART MIGRATION PILOT (SMART MP)**

SMART-MP analyzes the viability of reusing legacy systems in SOA environments. The goal of SMART-MP is to identify a pilot project that will help shape a migration strategy for an organization, along with an understanding of cost and risk involved.

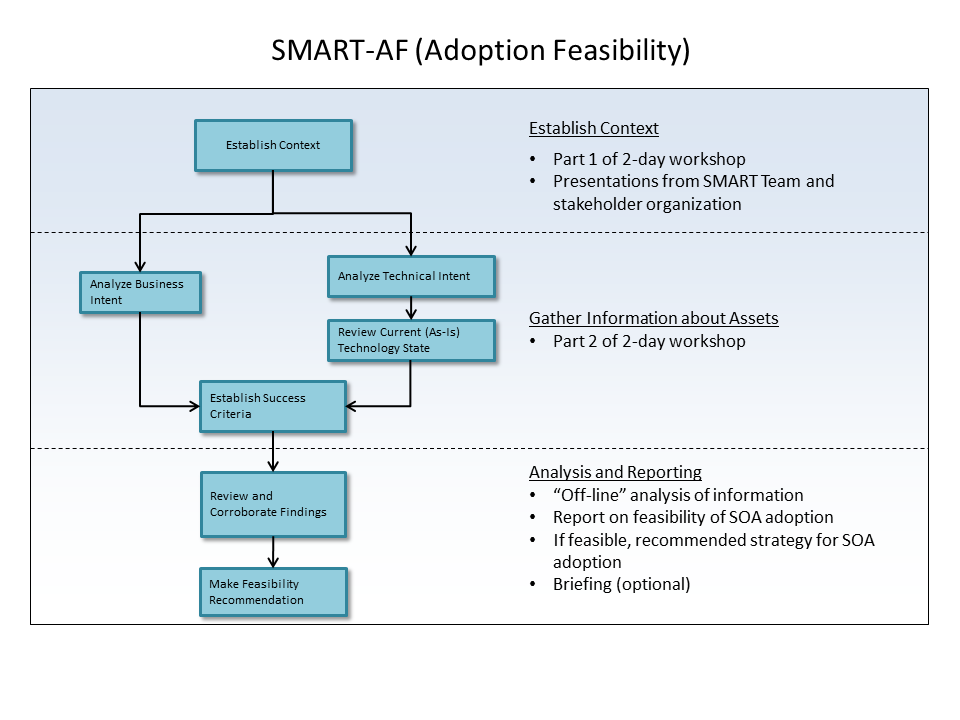


After you download the SMART-MP materials, begin by viewing the SMART-MP workshop slides. These will provide an overview of the process and tell you how to use the other materials.

**SMART ADOPTION FEASIBILITY (SMART AF)**



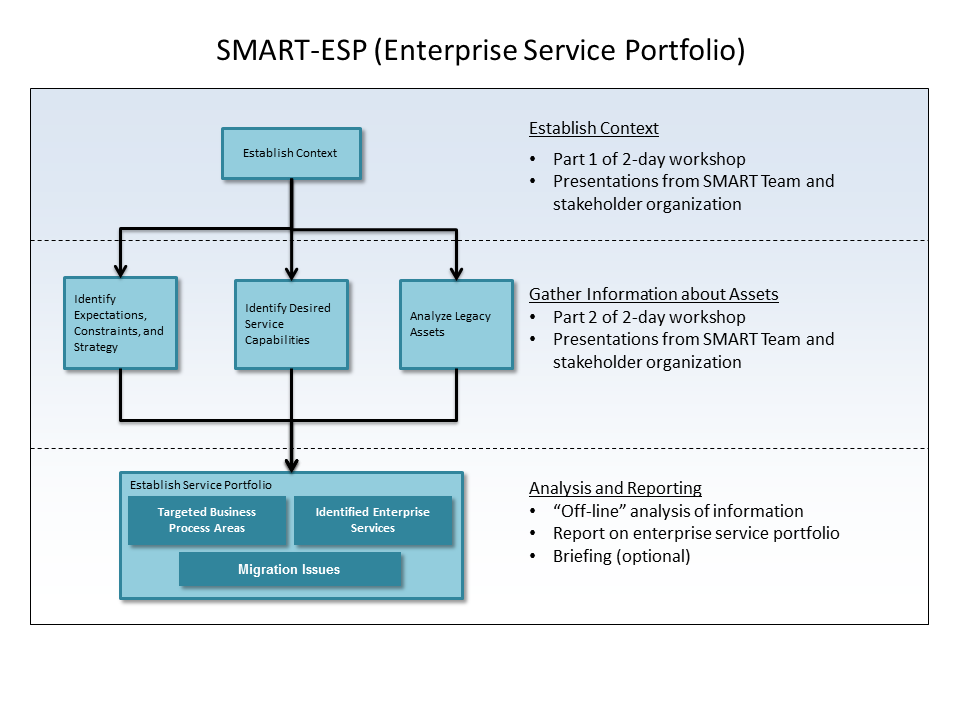
SMART-AF is tailored for organizations that are new to SOA and are probably not ready for a pilot project. The goal of SMART-AF is to determine if it makes sense for an organization to adopt SOA, to understand its migration options, and to start putting together a migration strategy that may include the use of other members of the SMART Family.



After you download the SMART-AF materials, begin by viewing the SMART-AF workshop slides. These will provide an overview of the process and tell you how to use the other materials.

**SMART ENTERPRISE SERVICE PORTFOLIO (SMART ESP)**

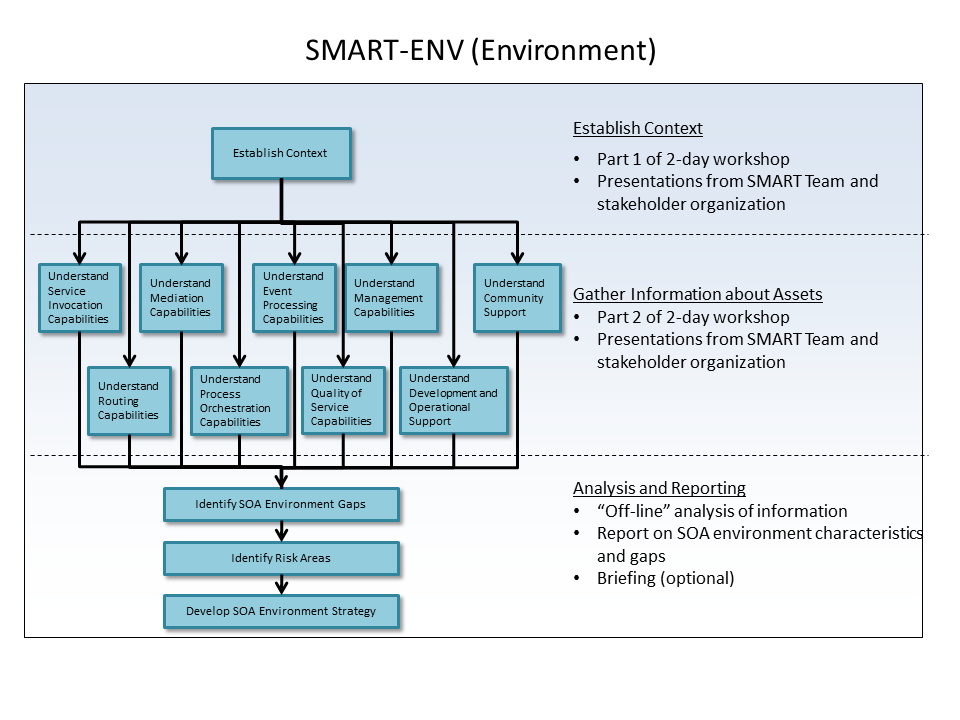
SMART-ESP enables organizations to scan across all of their legacy systems to identify potential services. The goal of SMART-ESP is the creation of an enterprise service portfolio and the mapping of these services to legacy systems.



After you download the SMART-ESP materials, begin by viewing the SMART-ESP workshop slides. These will provide an overview of the process and tell you how to use the other materials.

**SMART SOA ENVIRONMENT (SMART-ENV)**

SMART-ENV (SOA Environment) is aimed at organizations that have identified a target SOA environment (or have been mandated to use a particular SOA environment) but do not understand the implications of migrating to this environment. The goal for SMART-ENV is the characterization of the target SOA environment, including preliminary costs and risks of migrating to that environment.

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After you download the SMART-ENV materials, begin by viewing the SMART-ENV workshop slides. These will provide an overview of the process and tell you how to use the other materials.

**SMART SERVICE-ORIENTED SYSTEMS DEVELOPMENT (SMART-SYS)**

SMART-SYS is targeted at organizations tasked with the development of a complete service-oriented system that potentially includes the identification and creation of services, the development or acquisition of an SOA infrastructure, and the development of service. The goal in SMART-SYS is a superset of those of the previous SMART Family members and requires completing the activities in all the other SMART family members.