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CACS

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# USING THE SOLUTION NEEDS ACQUISITION PROCESS TO DEFINE REQUIREMENTS

A White Paper

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# Data Mining Concepts White Paper

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## Introduction

The Solutions Needs Acquisition Process (SNAP) was developed out of necessity to deal with fixed-price, fixed-timeline software development projects. History has shown how “creep”, and the inevitable cost over-runs related to it, would result in diminished margins and occasional losses to companies developing on some type of fixed basis. Quite often the problem could be traced to issues such as inadequate collection of information related to business processes, difficulty in getting key stakeholders to focus the required attention and poor project scoping. A SNAP engagement provides a methodology for correctly scoping a solution project and beginning the endeavor in the best possible manner.

## SNAP Overview

The SNAP process is an intense and rapid requirements collection regimen in which all stakeholders, decision- makers, and subject matter experts are brought together in a retreat- like atmosphere. The SNAP ground rules (e.g. no phones or pagers), isolated environment, and templated methods eliminate external distractions and facilitate the swift accumulation of pertinent information, action items and critical decisions. The length of a SNAP is predicated on the scope of the project and can be anywhere from 1 to 5 days in duration. While some may complain about the length, removing key personnel from their everyday environment, insulating them from the immediacy of the office and its “emergencies”, and getting decision- makers in one place is the first enabler of rapid progress and a successful SNAP.

The SNAP process is relatively simple in concept. It includes a main session group in which all attendees participate and a series of breakout sessions in which the group is divided based on subject- matter expertise. Therefore, the main session group deals with higher order issues and the breakout groups deal with more specific, detailed issues. There are several checkpoints throughout the process in which a review process takes place. At the end of each breakout session all attendees regroup and a volunteer presents the main points derived from the session he/she attended. The entire day’s events are recapped at the end of the day in order to refresh memories and level-set information. Throughout the SNAP designated recorders electronically collect all the information so that it can be distributed. The recorders use projectors to display the collected results at each of the designated checkpoints for the ease of the presenter and attendees. The SNAP rules are akin to “All I Really Need to Know I Learned in

Kindergarten". It's about simple respect for people and their time. Generally, it helps to make a game of it by assessing a fine of around \$1-\$2 for each infraction (and there will be a fair amount of them) and then using the money to spring for some type of treat for the group. The following list of rules is a place to start and you can develop them as you gain experience with the process and people's behaviors:

- Be punctual at all times
- No pagers, cell phones or other electronic devices that can distract you or disrupt the session. This includes laptops and PDA's. There are people there to record everything, you don't need to. Breaks are provided for everyone to check voice, e-mail, etc.
- No secondary or side conversations are allowed. If you have something to say, you should share it with the entire group.
- Don't interrupt. Give everyone an opportunity to say what they need to.
- Don't hog the conversation. Allow others to participate and even try to encourage the quiet ones by throwing some questions their way.
- Treat everyone with respect; there's no need to be belligerent. Personal attacks are not acceptable and counterproductive. **WORK THE PROBLEM.**
- Stick to the subject. Do not use up time with tangential subjects. Keep it for the appropriate session, or suggest that a new session be created to accommodate something important that was missed in the agenda.

## Preparation

Prior to the engagement the project manager (PM) will have worked with the customer's project sponsor to generate an appropriate agenda. This process is key to including all the necessary subjects and attendees in the process. A strong project manager and project sponsor team is vital. The PM should encourage the sponsor to include his team in the preliminary subject-matter assessment process to ensure inclusion of all pertinent requirements. The pre-SNAP leg work is fairly straightforward and consists of the following steps at minimum:

- Identify the project scope
- Identify the SNAP subject-matter content
- Main Sessions
- Breakout Sessions
- Identify the required attendees
- Create the agenda
- Distribute the agenda for comment
- Revise the agenda
- Publish the agenda

The following is an example agenda for the first of a three-day SNAP:

Back Office Requirements Workshop Agenda (Day 1 of 3)

Date July 20, 2002

Location San Diego, Conference Room #1

Time From 8:00 AM to 6:20 PM

Participants

BU1: Dwain Bettcher, Bill Keller BU2: Mark Saad, Jennat Allen

BU3: Greg Flores, David Schiller BU4: Marie Bocek, Betty Wang;

BU5: Monica Haas, Mike Shaffer; BU6: Katrina Blevins, Jason Yeh;

BU7: Joan Jones, Mark Bruning, Sue Dawson, Craig Gentes, Jean Uyeda,

Roy McManus, Ray Sumida, Barbara Klawunder, Lee Krevat, Greg Smith, Van

Ingle, Debbie Yates,

Exemplar: Phil Porreca, Ben Kandu, Venkat Prasad, Naren Deshpande, Ho

Nguyen, Joe Dunkerton, Hagen Ruff, Dawn Welch, Julie Scull, Sandy

Thomson, Steve Yevchak

Time	Item	Description	Duration	Location
8:00 AM	Breakfast	Smell the coffee!!	30 min	Library
8:30 AM	Meeting objectives	Overview of the mission and scope of the meeting	15 min	CR 1
8:45 AM	Introduction & Overview of the SNAP	Introduction of the SNAP process and team.	45 min	CR 1
9:30 AM	Business Unit Overview	Introduction into each of the company's major lines of business, customers, partners, and suppliers	45 min	CR 1
10:15 AM	Break	Phone calls, facilities, etc	5 min	
10:20 AM	SAP Overview	Provide a basic overview of SAP's Enterprise Resource Planning (ERP)	60 min	CR1

		system		
11:20 AM	Break	Phone calls, facilities, etc	5 min	
11:25 AM	Sempra Energy Tier 1	Details on current state of SAP install at customer location	60 min	CR1
12:25 PM	Lunch	Sandwiches provided	40 min	Library
1:05 PM	Pulse Check	Update on the day's progress	10 min	CR1
1:15 PM	Breakout #1	a) Basic Procurement	60 min	DC
		b) Organization & Basic Financial Systems		CR1
2:15 PM	Break	Phone calls, facilities, etc	15 min	
2:30 PM	Checkpoint	Review breakout results	40 min	CR1
3:10 PM	Pulse Check	Update on the day's progress	5 min	CR1
3:15 PM	Breakout #2	a) Warehousing	60 min	DC
		b) Asset Accounting & Treasury		CR1
4:15 PM	Break	Phone calls, facilities, etc	15 min	
4:30 PM	Checkpoint	Review breakout results	40 min	CR1
5:10 PM	Daily Feedback	Review & assign issues raised during workshop	10 min	CR1
5:20 PM	Contingency	Allocated Budget: 11%	60 min	
6:20 PM	Finished			

## Roles

There are several roles that need to be identified and filled by qualified personnel in preparation for a successful engagement.

## Facilitator

The Facilitator, as the name implies, is responsible for facilitating the conversation in a session. This is the most challenging and dynamic role in the SNAP structure. It requires someone who is able to capture the essence of the conversation and steer it while maintaining a positive atmosphere. The Facilitator enforces the SNAP rules (everyone will begin to help with this rather quickly!) and keeps the conversation on track by minimizing tangential conversation. The Facilitator captures all information that needs to be recorded on the white boards. This serves two purposes: to allow the Attendees to see and digest the information; to allow the Recorders time to input the data. Facilitators need to be identified for all sessions and, if possible, rotated in order to keep their energy level at an adequate level. It is very difficult for someone to facilitate for five straight days!

## Presenter

A presenter either volunteers or is elected by the members of the breakout session to present the main points of the session to the entire group of attendees. The Presenter will go over the content with the session's Recorder to be prepared for the recap.

## **Recorders**

There are generally two recorders in each main session and one in a breakout. The responsibility of the Recorder is to electronically collect all information expressed in the sessions. In the main session one recorder will man the tracking database which houses all action items and outstanding issues, who they are assigned to and what date they have committed to respond.

## **Time Keeper**

Since it is vital to stay on schedule, someone must be designated as the Time Keeper. This person will warn the Facilitator as time is drawing near. Over time you should find the right starting point and increments that suit your experience. It is important for Facilitators and Sponsors to understand what information is vital and be sure to cover those subjects as early as possible in a session to ensure appropriate coverage.

## **Required Equipment**

An important aspect of a successful SNAP is to find the requisite facility in which to host the sessions. The first factor in this decision is obviously dependent upon the maximum number of attendees that will be in the main session, while the second factor is the size and number of simultaneous breakout sessions that will be scheduled. If you're are looking for or building a SNAP facility, the smaller breakout rooms should be adjacent or very close to the main room for the convenience of the attendees and preservation of the schedule.

All session rooms will require plenty of white board space for the Facilitators to use in capturing all pertinent information. A minimum of one computer in the breakout rooms and two in the main room for the electronic collection of the information is required. A minimum of one overhead projector in each room and preferably two in the main room are needed to display the results during the recap presentations. Figure 1 depicts the layout of a room specifically built for SNAPs. It included ceiling-mounted projectors and retractable projection screens that were controlled from a panel near the Recorders' stations. The Recorders' stations were furnished with laptops and universal jacks that made connectivity available to the network and the overhead projectors.

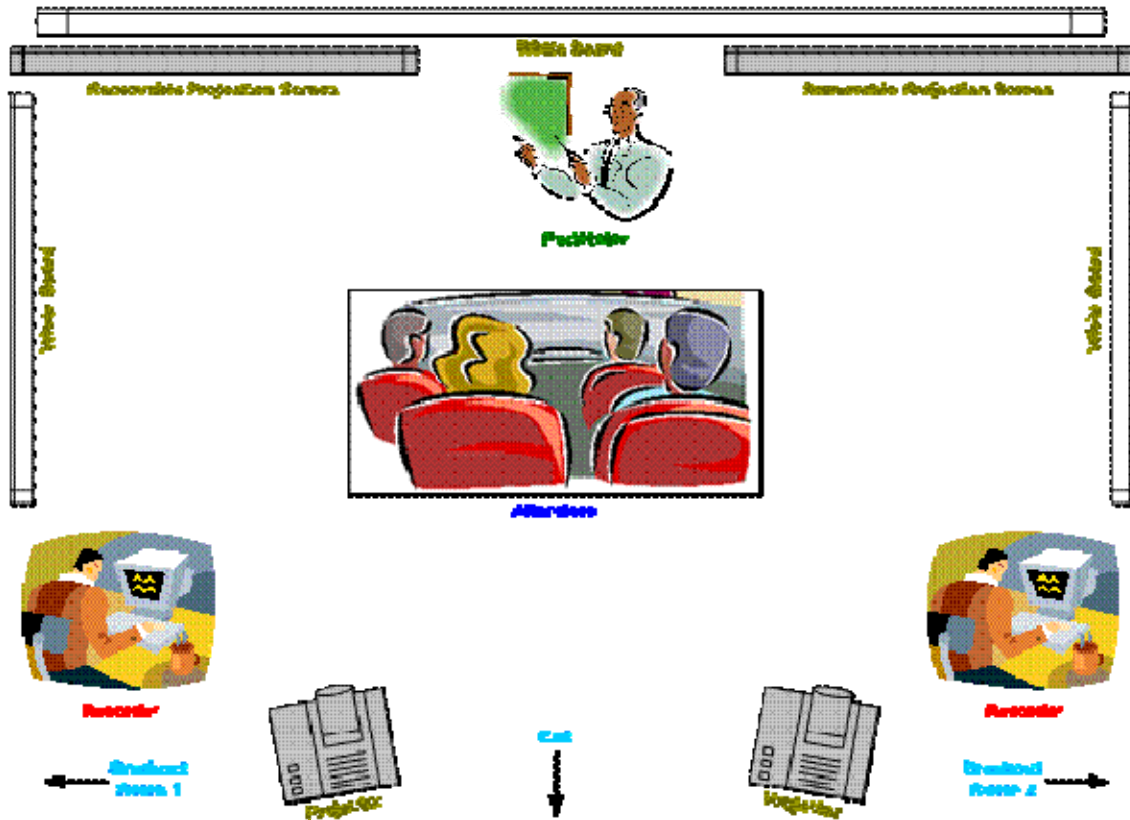


Fig.1 – SNAP Room Layout

## Information Collection

A SNAP engagement requires a series of templates to facilitate the electronic collection aspects of the process. These templates come in a multitude of formats such as Word, Access and Excel; they can be converted for use in more “enterprise- friendly” systems such as a RDBMS or document management system. At minimum the templates should be stored in a shared network location so that they may be accessed by any of the

## Recorders

The attendees will receive all output from the engagement, as it was collected using the templates. Some examples of the various templates and their higher- level content are listed in the following sections.

## Preparatory Templates

- Project Scoping
- SNAP Agenda Worksheet

- SNAP Agenda
- Participant Assignments

### **Engagement Templates**

- Introductory Presentation
- Agenda
- Introductions
- Project Status
- What is a SNAP?
- Why are we doing the SNAP
- “Project” SNAP Topics
- Expectations
- Groundrules
- Questions/Feedback
- Session Plan Template
- Title
- Purpose
- Objectives
- Process
- Tools
- Outcomes
- Artifacts
- Time
- Roles & Responsibilities
- Inputs
- Key Prompts
- Facilitator Tips
- Recorder Tips
- Session Overview Template
- Recorder Template
- Breakout Session Topic Template
- SNAP Issues Database
- Capture Events
- Assign/Update Events
- Enter Resources
- Enter Activity Definitions
- Enter Task Priorities
- Feedback Form

- Previous Day's Review

### **Post-Engagement Templates**

- SNAP Summary
- Next Steps
- Reports from Issues Database

### **SNAP Example**

A five day engagement was held to support the design of an online Energy Service Provider billing solution for Energy America (for more information regarding the solution see: Energy America: A Case Study for Interoperability). Energy America LLC is the largest unregulated energy wholesaler in North America. During the five day period, close to 100 documents were generated containing the requisite information to begin development of the solution and go live within the 12 week window that was allotted for the project. The information collected in the Energy America SNAP pertained to or included:

1. Project Scoping
2. Enrollment
3. Billing Rate Design
4. Billing and Collections
5. Termination and Account Maintenance
6. Commodity Acquisition and Settlement
7. Payment Processing
8. Call Center Processing and Operations
9. Consolidated Financials
10. Bulk Processing Requirements
11. B2B Requirements
12. A2A Requirements
13. Workflows for all Business Processes
14. Key Milestones
15. Rollout Plan

## Conclusion

The SNAP process can enable organizations to adequately collect the requisite information to successfully initiate a solution development project of any size. The process is ideal for fixed-price, fixed-timeline software development projects that usually become moving targets. The SNAP process helps to eliminate many issues related to the

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