

White Paper



Methods of Fit Gap Analysis in SAP ERP Projects

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Introduction

ASAP implementation approach for SAP ERP implementation has five major phases as shown in below picture. Fit and Gap Analysis (FGA) is very critical part of the second phase of project blueprinting where all design options are explored and detailed blueprinting is done. This paper tries to bring together most widely used and popular methods of system Fit Gap Analysis.

Figure 1: ASAP implementation phases



Definition

Fit Gap Analysis: Fit Gap Analysis is methodology by which enterprise processes and system functions are compared, evaluated and listed down to arrive at match (fits) and mismatch (gaps). The objective of this analysis is not to provide system solution or design.

Fit Gap Analysis during system implementation is used for below purpose.

1. To adapt local processes to the industry best practices
2. To assess statutory and/or legal requirements
3. To identify local and global practices not covered in test or pilot implementation

Methods of Fit Gap Analysis

Following four different methods are widely used to conduct Fit Gap Analysis:

1. Simulation based
2. Brainstorming Discussion based
3. Questionnaire based
4. Hybrid Type

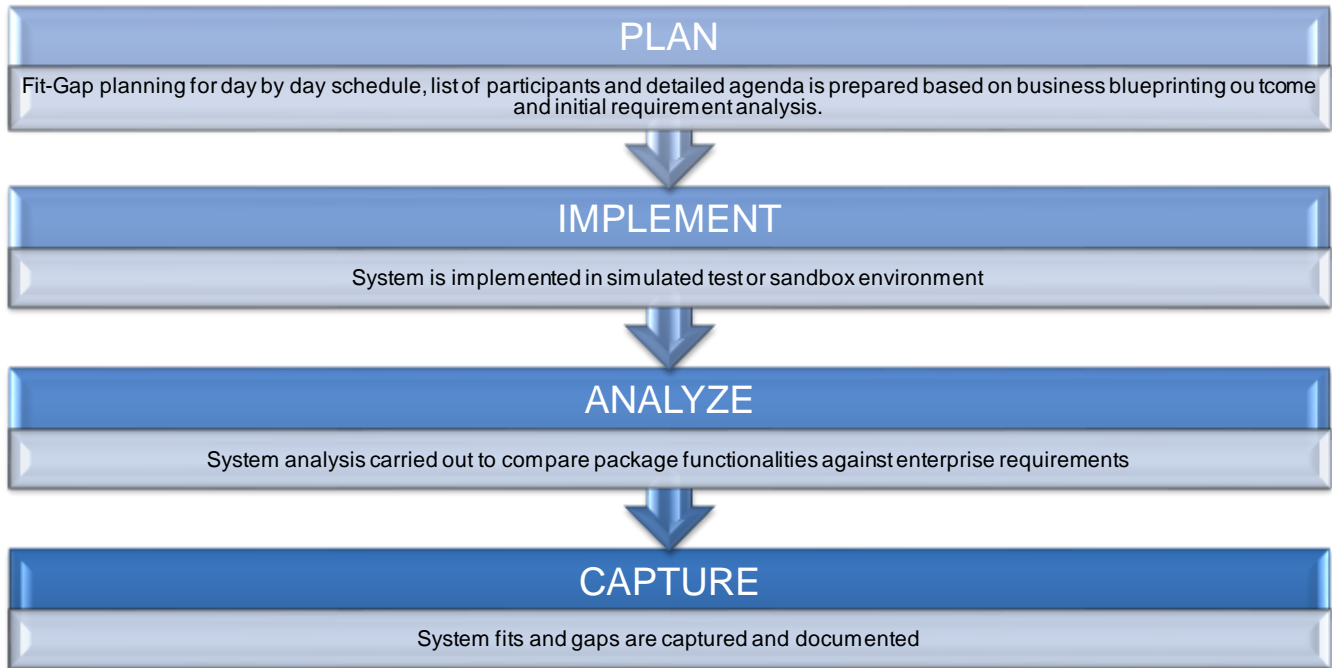
Simulation based Fit Gap Analysis

In this method, SAP ERP package is installed in a simulated development OR pilot implementation system OR sandbox test system. All the stakeholders come together at common place in the form of workshop to understand and to compare the offered functionalities with the already identified system and enterprise requirements.

The requirements which are not getting met are identified and captured. All possible system changes are listed down. It may happen that system analysis carried out during this phase might be revisited again during detailed design phase in order to capture required functionalities.

Primary participants in this phase are the core implementation team and enterprise stakeholders as team members.

Figure 2: Phases in Simulation based Fit Gap Analysis



Brainstorming Discussion based Fit Gap Analysis

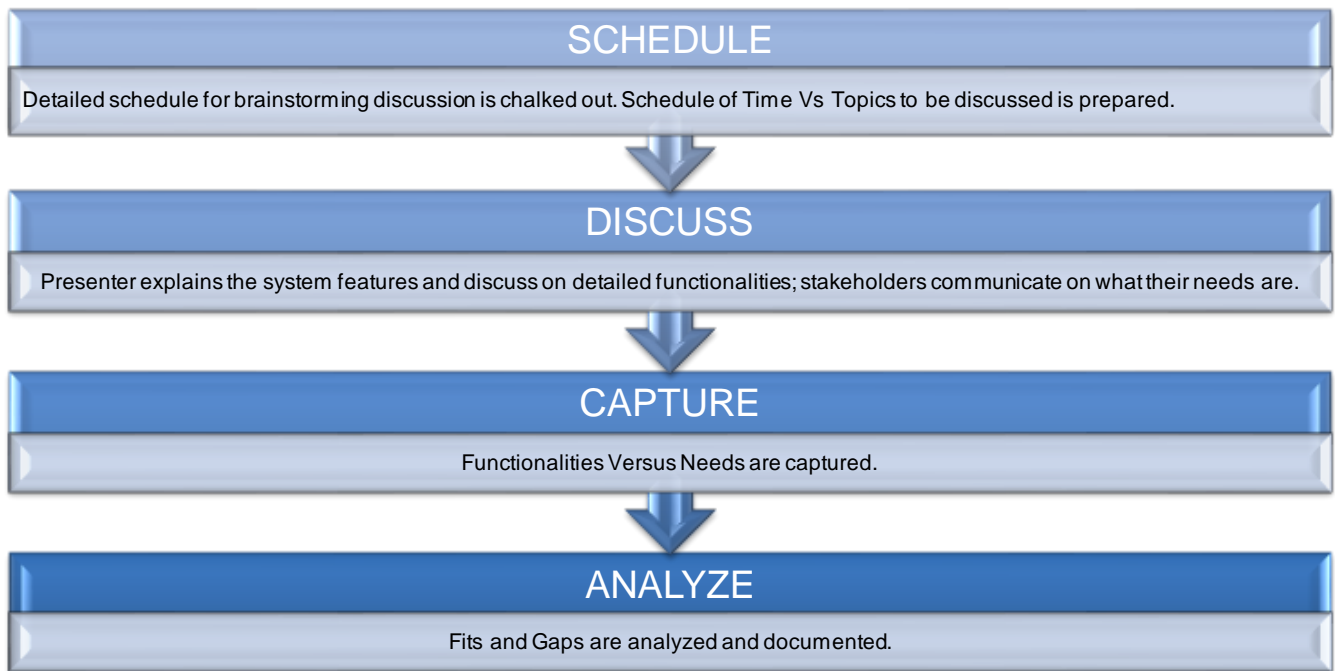
In this method, brainstorming over what system can deliver vis-à-vis what are the business requirements from SAP ERP package is discussed and compared.

Highly skilled and knowledgeable system consultants who can present and discuss the minute level of system functionalities and detailed features participate along with enterprise stakeholders.

Entire brainstorming session revolves around the topics shortlisted for discussion. Each day and agenda is filled with topics to discuss. System Consultants and presenters come up with presentation slides to make communication more effective.

Usually system consultants presents system features and then make forum open for discussion. Business stakeholders often state their need against what is presented and during the discussion; notes are captured to arrive at the list of fits and gaps.

Figure 3: Phases in Brainstorming based Fit Gap Analysis



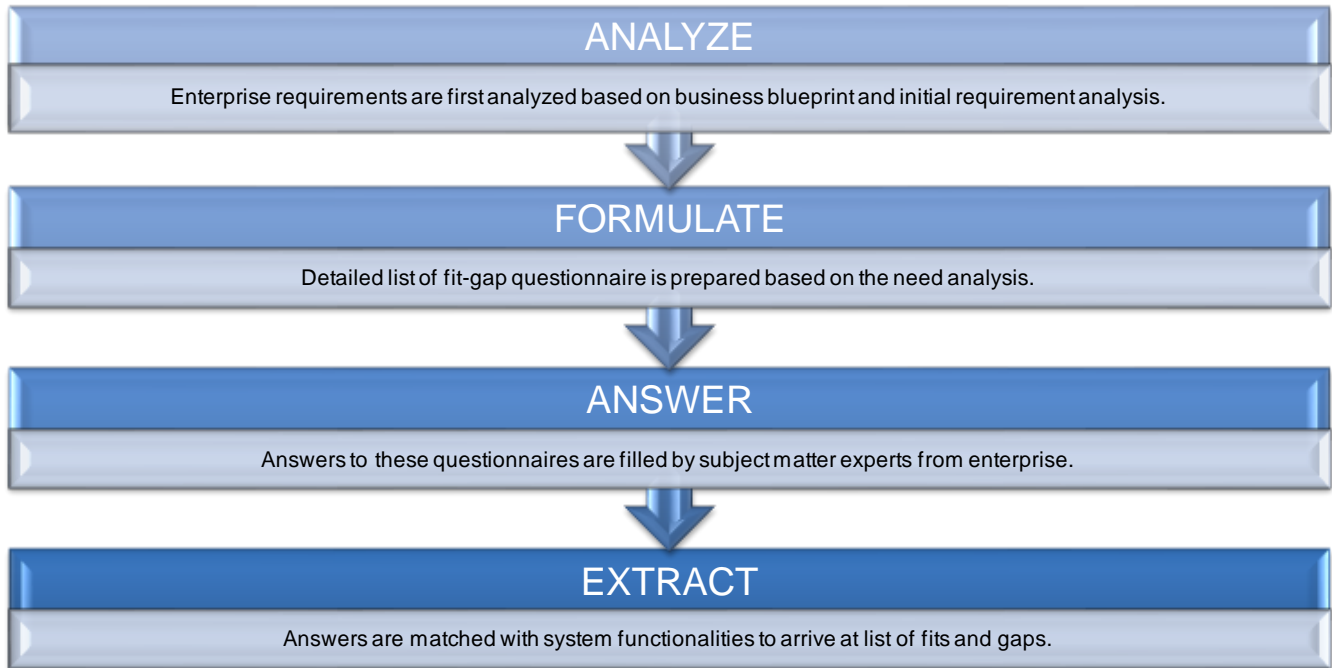
Questionnaire based Fit Gap Analysis

In this method, the fit and gap analysis is mainly driven by simple process wherein the input is questionnaire and the output is, answers provided to this questionnaire. In turn, these answers are matched and compared with system functionalities and features in order to arrive with system fits and gaps.

The questionnaire used for probing of requirements is usually prepared by highly experienced system consultants with meticulous attention and tries to cover minute areas of enterprise functions. This questionnaire is normally structured around the enterprise needs and system capability both.

The answers are provided by the knowledgeable subject matter experts. Sometimes to substantiate and explain answers and questions, live examples and data is provided as an addendum to the answers. It may be required that system consultants would need short clarification discussion with experts before and after the questionnaire is filled.

Figure 4: Phases in Questionnaire based Fit Gap Analysis



Hybrid Type Fit Gap Analysis

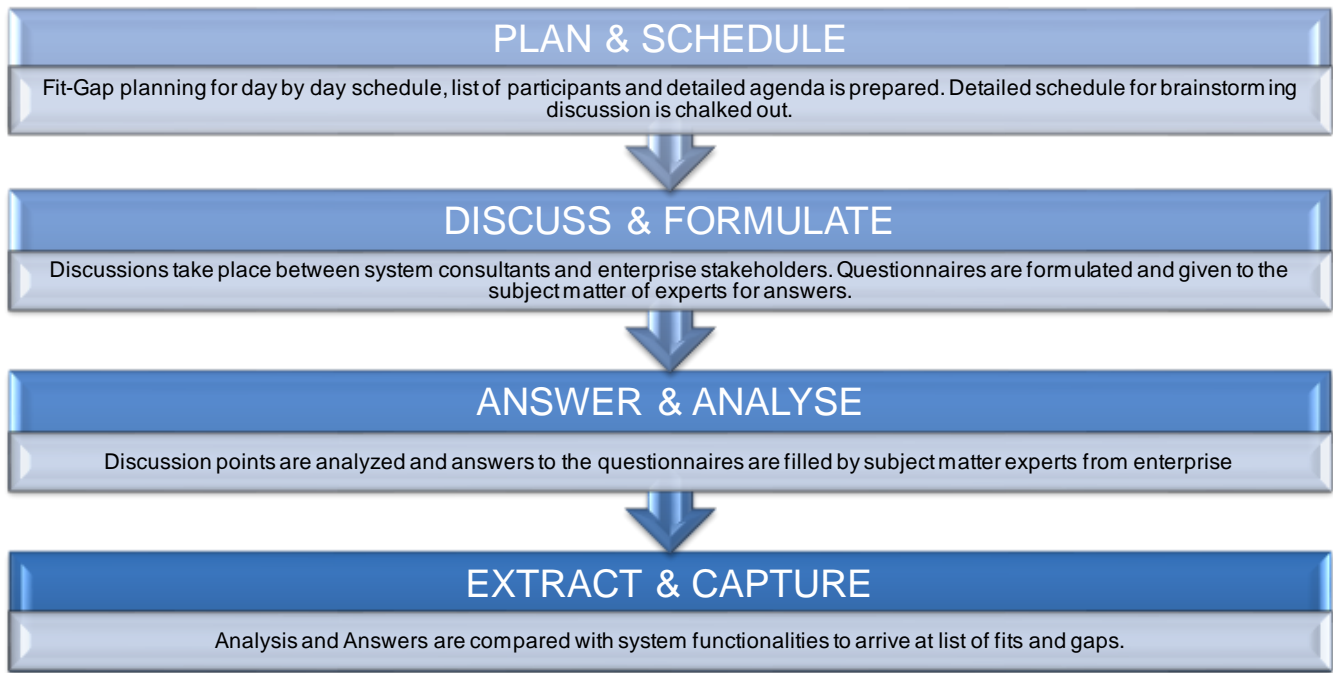
In the hybrid method, all three forms of Fit Gap Analysis methods are utilized. It often starts with brainstorming workshop sessions during which both the system simulations as well as the questionnaire method is applied.

First the detailed workshop agenda is prepared in the form of brainstorming sessions. System consultants and enterprise stakeholders both are very active during these sessions.

System consultants with the help of presentation media covers system features and simultaneously gives demonstration of the actual system features in test or sandbox environment. Session discussions points are captured by session leader (who is usually system consultant) to map with system requirements.

Enterprise stakeholders are asked to fill the questionnaire at the end of sessions capture detailed level of requirements. Thus, the output of each session discussion and answers given to the questionnaire helps in arriving at complete list of fits and gaps.

Figure 5: Phases in Hybrid Type Fit Gap Analysis



Comparative Evaluation of methods of Fit Gap Analysis

During the execution of Fit Gap Analysis, enterprise stakeholders and system consultants have to make sure that communication is most effective and seamless to tap all the fit and miss-fits. This will facilitate the output of communication to be instrumental in the success of further phases of solution design and realization.

The table matrix below gives the comparative evaluation of all four methods discussed so far. 5Cs of technical communication used here to compare each of these methods against each other.

These methods are rated low, medium to high against each of these 5Cs parameters. For example, Brainstorming Fit Gap Analysis method is high in context setting but low on conciseness and concreteness.

Figure 6: Comparative Evaluation Matrix of Fit Gap Analysis methods

Methods Versus 5Cs of Communication	Clarity	Conciseness	Concreteness	Coherence	Context
Simulation	High	Medium	Medium	Medium	High
Brainstorming	Medium	Low	Low	Medium	High
Questionnaire	Medium	High	Medium	High	Medium
Hybrid	High	Medium	High	High	High

ERP projects fitment with Fit Gap Analysis methods

Although these fit gap methods can be deployed in different types of project depending on the need and available resources in an enterprise; but it is recommended to use best-fit method.

The table below gives the framework in which the two best fit methods for each of the six different kinds of ERP projects are marked based on suitability factors. For example in an Upgrade project, normally Test system environment is upgraded to check the system response due to upgrade OR the questions are asked to experts to arrive at the impact prior to upgrade.

Figure 7: ERP projects fitment with Fit Gap Analysis methods

Sr. No.	Project	Project Definition	Simulation	Brainstorming	Questionnaire	Hybrid
1	Implementation	Project used to implement business processes in an SAP landscape	X			X
2	Template	Project using template with its assigned objects available to other projects			X	X
3	Upgrade	Project to upgrade existing systems.	X		X	
4	Optimization	Project to optimize the flow of business processes		X	X	
5	Safeguarding	Project to resolve a critical situation in the implementation or use of an SAP solution	X	X		
6	Maintenance project	Project contains all maintenance activities and urgent corrections of a solution	X		X	

Merits and Demerits of Different methods of Fit Gap Analysis

Figure 8: Merits and Demerits of different methods of Fit Gap Analysis

Methods of Fit Gap Analysis	Major Merit	Major Demerit
Simulation based FGA	Enterprise stakeholders get full view of system functions and capability.	It may restrict the analysis only to the comparison with test implementation and might filter out important aspects and process optimization scope.
Brainstorming Discussion based FGA	Helps in getting 360 degree view of enterprise requirements by using probing skills and methods.	Discussions if not well organized and structured may lead to open ended discussion and may not capture the essence completely.
Questionnaire based FGA	Faster method to execute as compared to any other ones.	Risk of not getting the full information captured, if the questionnaire responses are not of good quality.
Hybrid Type FGA	Best in terms of achieving the most desired output of Fit Gap Analysis as it deploys mixed and best of all other methods.	Investment and effort demanding and time consuming.

Case Study of a SAP template rollout for Auto Major

Back ground of SAP Template for Auto Major:

SAP template was implemented by SAP Auto Major in Asia and Africa for the retail and wholesale business. The SAP template had Global (template) processes and Local (market specific) processes. The rollout approach encountered with abnormally higher rate of change request than expected. This was despite of the fact that the template had matured enough over the years. Hence, the global SAP roll out program for this Auto Major was a cause of worry.

Fit GAP Analysis being the fundamental phase for all further processes in rollout and implementation, it was targeted for the improvement at first place. After much deliberation, the **hybrid** process was identified as best suited method for conducting the Fit Gap Analysis of future template roll outs.

The case study below shows that when Hybrid Fit Gap analysis method was chosen, the cost incurred due to number change request has come down as desired.

Following are the important phases of hybrid method used by Auto Major.

- Phase-1* Brainstorming on business processes
- Phase-2* Simulation of business processes in SAP
- Phase-3* System Demo and detailed process discussion (Question & Answer sessions)

Identification of the key business process is very important phase for the ERP rollout and implementation projects. Before the start of Fit Gap analysis, Auto Major conducted the Business Processes Mapping (BPM) exercise to document these business processes. This was performed with the help of brain storming sessions where the business subject matter experts have participated. These business process documents were used as input to the Fit Gap analysis phase.

Phase-1: Brainstorming on Business Processes

The brainstorming discussion also called as the process confirmation session was primarily used to identify the process gaps. The process gaps helped to understand the potential misfits with SAP ERP process. The lead in this discussion was taken by business process owners. The time frame of this phase was between 2 weeks to 3 weeks, depending on various other factors like resource availability and content discussed.

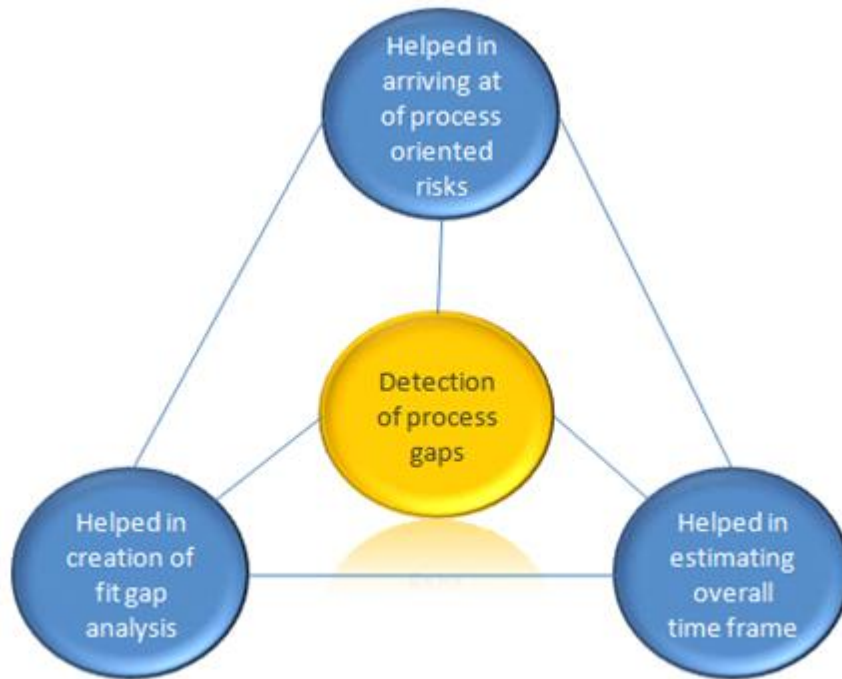
Below pictures shows typical frame work under which the process gaps were captured during the brain storming session.

Figure 9: Typical framework used to capture the process gaps

Name of Project: SAP ERP Roll out Wave 1 Document Name: Wave 1 Fit and Gaps Version: V 1.0 Author: Mr. XYZ Date: 15-Jan-2011						
Track	Level 1 process	Level 2 process	Level 3 process	Discussion points captured	Type of Gap (Legal/Local business process/Language)	Priority P1: Must to have P2: Nice to have
Materials Management	Procurement to Pay	Purchase Order	Purchase Order Creation	1. At the footer of PO, it is required to print tax registration number of ordering party	Legal	P1

Below pictures shows that if the focus during brain storming is kept on the identification of process gaps then it helps in achieving desired output.

Figure 10: Benefits of focused brainstorming discussion

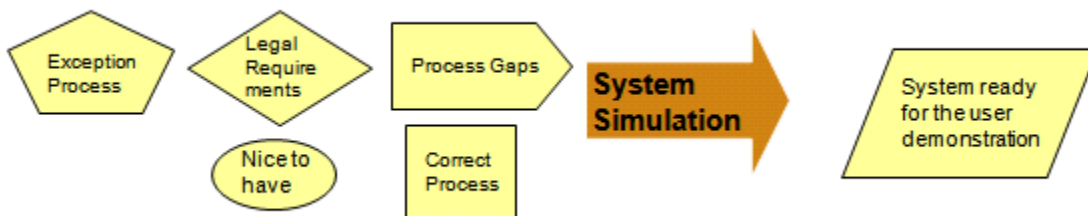


Phase-2: Simulation of Business Processes in SAP

After the identification of process gaps through brainstorming sessions, system consultants performed simulation in SAP. This process helped consultants to internally analyze and come out with best possible solution for the given gaps.

The time taken to execute this phase was around 1 week. During this period, system processes were configured in the sand box system.

Figure 11: Benefits of focused brainstorming discussion



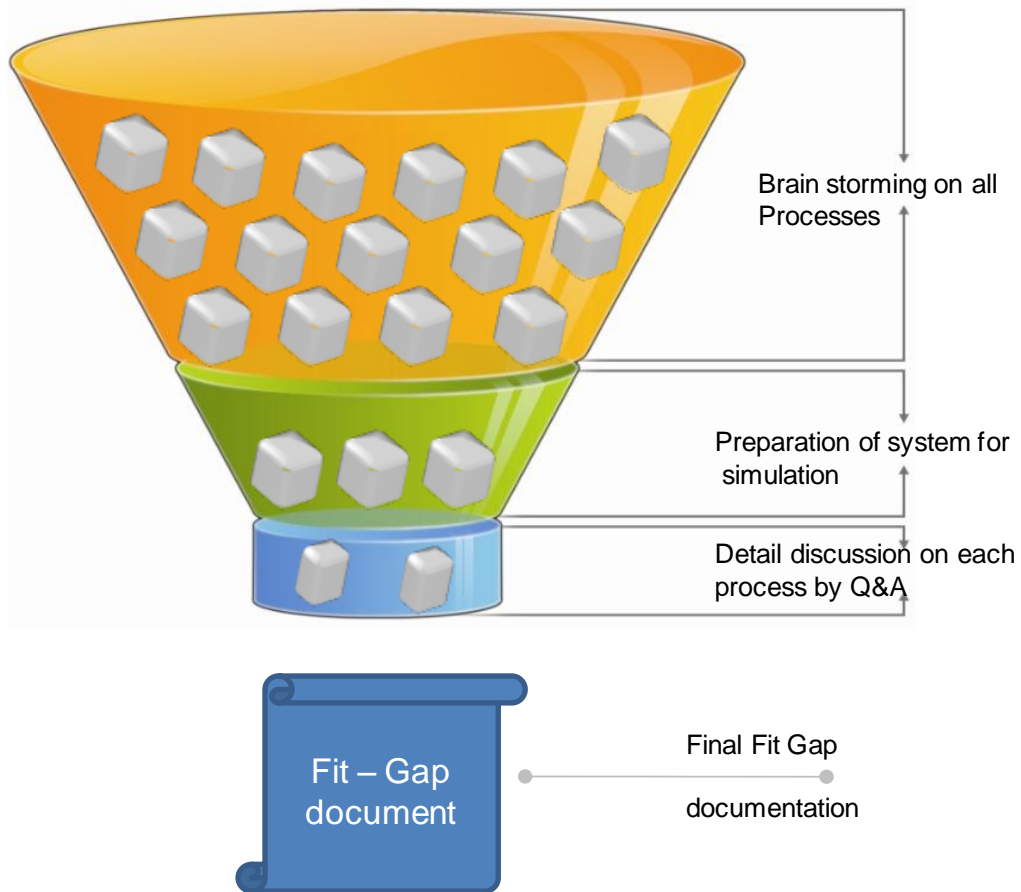
Phase-3: Question and Answer Sessions Aided with System Demo

Subsequent to the system simulation, the demo was given to business users to arrive at an agreement for the future implementation road map.

During the system demo, sessions were divided by processes represented key business users. The leads in these discussions were taken by system consultants and discussion took place around the underlying business processes.

Micro level analysis at system fields and sub processes level took place in the form of question and answer. Based on the answers given by the key business user and final fit gap documented was prepared.

Figure 12: Fit Gap document funnel process diagram



5.1 Outcome of Case Study

The realized benefits were evaluated against actual support cost incurred by Auto Major, post the go-live of roll out that used hybrid method during fit gap analysis. The total support cost per vehicle sold was compared from go-live till steady state support when the hybrid method was not implemented versus when hybrid method of fit gap analysis is used.

Figure 13: Realized benefits pre and post hybrid method selection

Hybrid Method of Fit Gap Analysis Applied	Support cost / vehicle sold for Auto Major
NO	1.4 man days/vehicle
YES	0.93 man days/vehicle

Percentage reduction in support cost is estimated at 33 %

Note: There may have been other extraneous factors which could have also contributed to this cost reduction but authors feel that selection of right fit gap analysis method (hybrid method in this particular case) has played major role in the reduction of support cost.

Summary

During SAP ERP Implementation, various different techniques and methods are deployed by customer in to execute critical project phases and sub phases that will suit best of their enterprise needs.

Fit Gap Analysis is one of such sub phase of business blueprint which demands greater care and execution in order to realize the full potential of ERP investment. Four methods discussed in this paper, strive to provide clarity in terms of what is the core technique applied while execution of each of these methods of Fit Gap Analysis and then the comparative evaluation against 5Cs of communication is developed.

Each of these methods has its own characteristics, merits and demerits; enterprise planning to implement ERP, has to take informed decision based on own priorities and resources to arrive at best method suited to them.

Case study underlines the key process and cost benefits derived by Auto Major when selected the hybrid method for fit gap analysis in the ERP template roll out project.

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SAP library: SAP Solution Manager

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