ENTERPRISE INTEGRATION

- Over the years, organizations have invested heavily in IT, and therefore, accumulated large portfolios of IT systems comprising of almost thousands of separate IT applications.
- As business needs evolved, it became necessary for individual IT applications to be integrated in order to support new business requirements. (Ex. The need for customer details to be automatically transferred from the sales system to the billing system.)
- While such integration raised organizational efficiency through increased automation, it was tactical rather than strategic in nature.
- Individual IT applications were integrated only as the need arose. Creating custom interfaces between individual IT applications was both expensive and time-consuming.

What is Enterprise Integration?

- Enterprise integration is the strategic consideration of the process, methods, tools, and technologies associated with achieving interoperability between IT applications both within and external to the enterprise to enable a collaborative business process.
- Enterprise integration is not purely about technology integration. It also includes a consideration of business processes that cut across various IT applications, and so provides the planned basis for technology integration.
- Enterprise integration is therefore an activity that:
  - is business-driven rather than technology-driven
  - coordinates business process with and across different parts of the enterprise
  - involves multiple stakeholders
  - adopts a strategic rather than tactical or localized view
- Enterprise integration is not some new technology fad that will come and go, but an essential feature of how IT solutions need to be designed to address today's business requirements.
- Some of the generic kinds of business problems that enterprise integration can be solved include the following:
  - **Information aggregation –** aggregating, organizing, and presenting information from multiple IT sources in one single view
  - **Single point of data entry –** replacing the need for manual and duplicate data entry into multiple IT applications with data entry into a single IT application
  - **Web channel integration –** enabling Web-based customers and partners direct access to the services provided by existing business systems
  - **Supplier integration and supply chain optimization –** enabling a supplier to integrate with a larger company's business process or an electronic marketplace

Assessing the Need for Enterprise Integration

- To quickly assess whether enterprise integration is worth investigating further, organizations should ask the following questions:
  - Is there a requirement to collate information from several IT systems in real-time to meet specific business objectives?
  - Does the organization have many IT systems that need to communicate with each other?
  - Is there a need to key in and update the same details in separate IT systems?
  - Is it difficult and time-consuming to extract information from one IT system to another?
  - Is the same information duplicated across many IT systems?
  - Is there an issue with data inconsistency between IT systems?
- If the answer is "yes" to several of the above questions, then it may well be worthwhile for the organization to look further into enterprise integration.

Integration Strategies

- **Enterprise Application Integration (EAI) –** concerned with integrating the IT applications that reside within the organization. An example is the integration of the customer accounts IT system with the order-management IT system.
- **Business-to-Business Integration (B2Bi) –** concerned with integrating an organization's IT system with those of its business partners or suppliers such as in an extended supply chain
- **Web Integration –** concerned with integrating an organization's IT application with a Web application to provide a Web channel

	EAI	B2Bi	Web Integration
Scope of Integration	Intra-organization	Inter-organization	Intra-organization
Typical Project Drivers	Operational efficiency, customer relationship management, business process automation	Supply chain management, B2B commerce	E-business, Web-channel services
Key Challenges	Business process management workflow	Document and data exchange standards	Online security, transaction management

Table 1. Comparisons of integration strategies

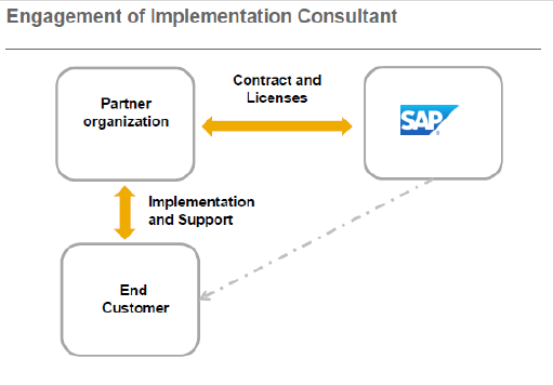
Levels of Integration

- **Presentation Integration –** the aggregation of data from multiple IT systems within a single view. An example is a Web portal that aggregates and displays a customer's stock portfolio taken from one IT system and bank account balance from another IT system.
- **Data Integration –** the synchronization of data held in different databases. For example, if two (2) different databases hold the same customer's address details, a change of address in one database should also be synchronized in the other database.
- **Application Integration –** where applications make some of the functionality directly accessible to other applications. (Ex. SAP and PeopleSoft often expose their functionality through well-defined application program interfaces (APIs).
- **Service Integration –** a common set of reusable services that are made available to other applications.
- **Process Integration –** the definition of business-process or workflow models from which reusable services are called

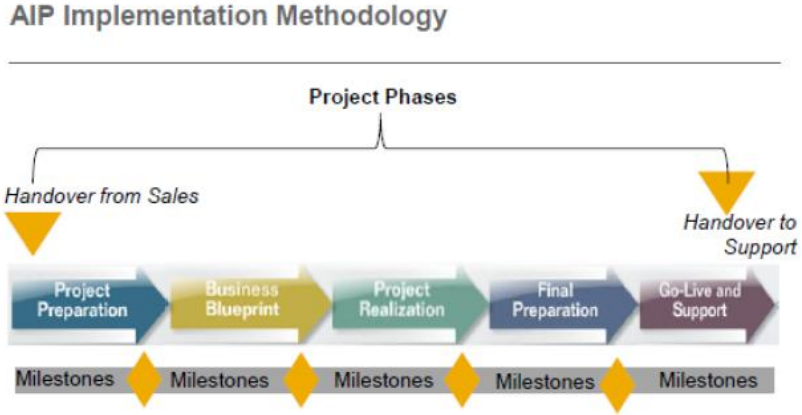
SAP Partner Implementation and Resources

You are working in a consulting company, who is reselling SAP – offering world class yet affordable solutions to SME's based on the proven technology of SAP. Your company's sales team purchases the required SAP Business One user licenses on behalf of the customer. Thus, from a contractual standpoint, there is no direct relationship between SAP and the end customer. Your company (otherwise known as the "Partner") is responsible for the implementation and support of Appliance Hub Corporation (otherwise known as the "End Customer")

SAP is responsible for defects in the SAP Business One software. You are one of the functional consultants assigned for Appliance Hub Corporation. You will work in a group, with other functional consultants, composed of IT and Accounting professionals. As an implementation consultant, you are usually engaged at the end of the sales cycle, after the partner sales team signs a contract with SAP.



Accelerated Implementation Program (AIP)



- Successful implementation partners follow a structured phased process for implementation. The SAP Accelerated Implementation Program (AIP) is specifically designed for SAP Business One implementation.
- The AIP methodology divides implementation into five (5) phases. These phases cover the period starting with the handover from the sales team to right before the handover to the support organization.
- The methodology provides a milestone for each phase. Each milestone marks the completion of a discreet activity in the project: software installation, system configuration, testing, and so on. The milestone has been selected by SAP and partners as crucial checkpoints in your project plan.
- Since all the methodology materials are published as a template, partners have the opportunity to adapt the methodology to their own practices.

Project Preparation

- The first phase is the implementation, during which the customer transitions from the sales cycle to implementation mode.
- For implementation partner, the key activities are to:
  - Conduct a project handover with the sales team.

- Create a project plan for the implementation.
- Conduct an official kick-off meeting with the customer team.
- Deliver and install the SAP Business One software and demo database at the customer site.

- Note that the customer project manager and other key team members should have been appointed during the sales cycle. The sample templates provided in the AIP methodology can be used for a pre-sales business analysis of the customer, handover from sales meeting, project plan, and kick-off meeting.

Project Preparation Milestone

- To keep the project focused and on track, four milestones in this first phase should be completed.
  - First, all aspects of the sales process, including the customer background, business processes, any risk or constraints, and any special or unusual requirements must be clearly understood. This information is needed before meeting the customer.
  - Second is the kick-off meeting. This meeting marks the official start of the project. Ideally, this meeting gives the opportunity to create a relationship with the customer team and to set correct expectations for the implementation.
  - Third is the installation of the software which is important in every contract. The software, including add-ons, must be fully installed. The implementation consultant should install the demo database for use later in the project.
  - The last milestone is the checkpoint. A big advantage of the AIP methodology is as a control mechanism for keeping the project on track. To achieve this, the customer project manager is asked to acknowledge the completion of the phase with a signature. The financial checkpoint gives the opportunity to ascertain that the customer is happy with the project and does not have unrealistic expectations before the project moves on.

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