

SAP Business Integration / White Paper

Seamless electronic business Integration with partners, such as, customer, suppliers and financial institutions is very challenging and important task that businesses can't afford to neglect. In today's world, industries and their applications are tightly integrated in areas of logistics, especially, supply chain and finances to work in sync. Any disruption in information exchange not only impact the business as a whole but also requires considerable efforts to put it back on track.

SAP business suite is the widely used Enterprise Resources Planning (ERP) software among large and medium size enterprises in different industries across continents, such as, automotive, retail, aerospace, etc. It addresses finance, treasury, controlling, sales and distribution, material management aspects, to name a few. Additionally, SAP offers industry specific solutions to enable industry related processes. To integrate business processes across entity landscape, companies on horizontal and vertical space uses Electronic Data Interchange in different industry standards, commonly known as EDI. Though it's the data exchange but it drives the key business processes within each of the tightly integrated entities. It is a misnomer to explain EDI as "Data in Data out". It leaves out the true purpose of integration – business processes. It will come to light as we explore more.

Before diving into implementation projects or tactical projects, let's explore the systems, components and processes involved. Within an ERP landscape, figure 1, SAP ERP Applications, SAP IDOC interface, IDOC error process, and EDI subsystem connects to Value Added Network (VAN) to send and receive data. VAN provides data routing services for different EDI formats. EDI subsystem translates inbound data from EDI format to SAP format and outbound data from SAP format to EDI format. In case of simple order to

cash process, inbound purchase order is translated and sent to SAP ERP to create sales order. Subsequent business processes, such as, delivery, billing, AR, clearing, etc., references sales order and data content to execute corresponding business functions. It's important to realize that proper mapping of data, subsequent process design in SAP ERP are crucial as it drives all your processes. For outbound data, same applies to your trading partner as well. Your ratings will be impacted for poor data transmission, Advanced Ship Notice (ASN), for example. As a result, almost all enterprises with business integration capabilities have implantation guidelines for process synergies, formats, message relationships and data requirements.

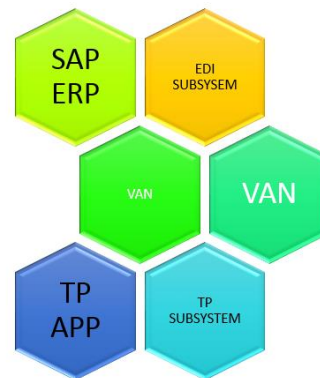


Figure 1 Systems in business integration

SAP implementation projects, whether it is a greenfield project or a rollouts, are engineered, in most cases, to focus solely on launching best practice business processes with adjustments as required by the enterprises. Project effort and resourcing are categorized into two major tracks based on efforts and schedules; 1) SAP ERP, and 2) Data Migration. Business integration usually kept as a sub-group of SAP ERP and not prioritized or detailed in the business blueprint phase. It's treated as data input and output, similar to print, without consideration of different trading partners and their business integration synergies.

If you have worked on a project team, you might have seen “EDI” as the same line item as “Print” in the Design documents. For light business Integration, it’s okay but for high volume and highly integrated industry, such as, automotive and retail it’s a flag for future disaster.

Launch of new trading partners, except suppliers, such as, customers, banks, warehouses, etc. are managed as tactical projects because of their unique processes and implementation guidelines. Whereas, launch of new suppliers, are managed under on-going business integration operations as suppliers don’t dictate business process in most cases. Tactical projects are launched on the same systems designed based on initial integration business blueprint requirements. If it was not done holistically, these new trading partner will require additional system changes, processes and developments thus costing more in launch and sustain.

Whether it’s a new implementation or tactical projects, it’s of utmost importance to realize the value of trading partner integration. You can have the best system in the world but if it can’t process the inputs and generate proper outputs to drive your and your partner’s business processes, it’s of little use. It’s important to realize that proper mapping of data, subsequent process design in SAP ERP are crucial for business integration for efficient launch and sustain as it drives all your processes.

These are not luxuries or nice to have but derived from numerous SAP business integration implementation projects and tactical projects. These will eliminate waste, save you a lot of headaches and surprises in subsequent phases.

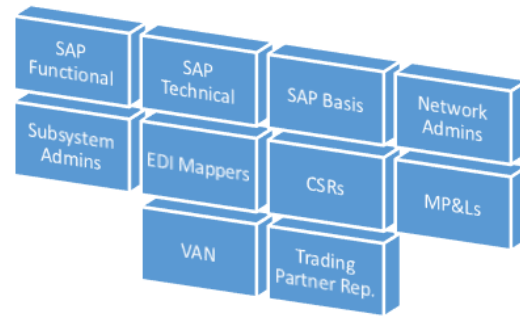


Figure 2: Areas in business integration

Below are key guidelines for optimized integration.

- Think and prioritize business integration as a strategy
- Know what you want - train and educate management
- Holistic approach in project inception, separate work stream and deliverables in project blueprint
- Demand separate business partner integration strategy from implementation partner
- Mandate value stream design and signoff with business integration.
- Pull ahead business partner integration design to Application business blueprint
- Mandate participation of existing business integration operation and enablement team in business blueprint. Document integration superset and application processes
- Mandate application EDI error process design for process stability
- Mandate separate business integration team led by integration architect with reporting matrices
- Mandate complete end user application training in business integration area