



## White Papers



A business process is the complete and dynamically coordinated set of collaborative and transactional activities that deliver value to customers. A business process is characteristically...

BUSINESS  
PROCESS  
AUTOMATION  
A revolution in the making

Large and complex, involving the end-to-end flow of materials, information and business commitments.

Dynamic, responding to demands from customers and to changing market conditions.

Widely distributed and customized across boundaries within and between businesses, often spanning multiple applications on disparate technology platforms.

Long-running; a single instance of a process such as "order to cash" or "develop product" may run for months or even years.

Automated: Routine or mundane activities are performed by computers, whenever possible, for the sake of speed and reliability. Both business and technical in nature, IT processes are a subset of business processes and provide support to larger processes involving both people and machines. End-to-end business processes depend on distributed computing systems that are both transactional and collaborative. Process models may therefore comprise network models, object models, control flows, message flows, business rules, metrics, exceptions, transformations and assignments.

Dependent on and supportive of the intelligence and judgment of humans. People perform tasks that are too unstructured to delegate to a computer or that require personal interaction with customers. People also interpret and evaluate the stream of information flowing through the value chain, solving problems before they irritate customers and devising strategies to take advantage of new market opportunities.

Difficult to make visible. In many companies, the business processes are neither cognitive nor explicit. They are undocumented, embedded, ingrained and implicit within the communal history of the organization, or if they are documented, the documentation or definition is maintained independently of the systems that support them.

The three most fundamental characteristics of a business process have little to do with the obvious inputs and outputs of individual work tasks. These characteristics are coordination, coordination, and coordination. If an activity is the collection of individual tasks, it is the synchronization and coordination of these activities and tasks that turn them into a business process.

From the perspective of the business side, business process management streamlines internal and external business processes, eliminates redundancies, and increases automation, thereby providing end-to-end process visibility, control and accountability. Corporations utilizing third-wave business process management architecture gain a new agility that is a significant competitive advantage.

Business Process Automation affects all aspects of an organization. It applies to the critical business processes of the extended enterprise; the organization, trading partners, business suppliers, and service providers. Key elements for all solutions are scalability, automation, manageability, support for heterogeneous environments, and integration.

Through automation, business processes can now be easily extended outside of an organization to encompass suppliers and business partners. In the e-business world, the operative word is real-time, a function of tightly integrated systems. Using the Internet as a mechanism for information updates, business units, both internal and external, can be notified immediately of new work and can respond likewise, in real-time, with schedule information and completion dates. The key benefits of business process automation are:

**Improved efficiency:** Automating business processes results in the elimination of unnecessary step.

**Better process control:** Improved management of business processes by the standardization of working methods and the availability of audit trails.

**Improved customer service:** Consistency in the processes results in greater predictability for the levels of response to customers.

**Flexibility:** Software control over processes enables their re-design to reflect the changing business needs.

**Business process improvement:** Focusing on business processes leads to streamlining and simplification.

**Improved procedures:** Procedures are formally documented and require exact execution, ensuring performance as planned by management and meeting business and regulatory requirements.

**Improved assignments:** Cases can be assigned on a priority basis and delegated to the best person (or machine). Users will not need to use valuable time deciding which item to work on, or perhaps procrastinating on important but difficult cases.

The efficiency of the business process automation, BPA, is measured in these steps:

- ▶ Insulated efficiency gain
- ▶ Collaborative efficiency gain
- ▶ Universal efficiency gain

The focus of business process automation is the first and second steps. While the first step is related to efficiency gain through streamlining internal processes, the second step is primarily related to the external processes. Currently, most of these gains are achieved through enterprise applications managed by the enterprises themselves. The scope of collaboration incorporating extended enterprises such as suppliers, customers, and partners is getting larger every day. Given the increase in scope and efficiency gains of self-managed process automation, a critical mass evolves beyond which efficiency can only be gained through a spin-off BPA industry. A typical BPA enterprise operates similar to a utility or service corporation that distributes goods by rail and roads, delivers water through ducts and tubes, gas through pipes, or power through cables. Business process automation becomes inevitable as the demand from small and medium-sized enterprises, constituting almost 98% of the world's total enterprise, starts to gain momentum. This is the beginning of the universal efficiency gain—a true revolution in the making.