Enterprise Need

Process Automation, Process Decisioning

Process Automation, Process Decisioning

Enterprises own and operate several discreet applications, each of them complex, non-modular and with its own dedicated resources. This is especially true of Back-office applications such as Fulfillment, Policy processing, Servicing, Claims management, Billing etc. Due to mergers and acquisitions or due to geographic or LOB driven silo'd application development, many of these applications have overlapping functionality. Enterprises have also developed "spaghetti" connections to allow Customer-facing and Front-office applications access the Back-office applications, thereby increasing the complexity of Enterprise applications. The overall result is that Enterprises find it difficult to make timely changes to applications and are spending scarce resource and IT dollars in maintaining redundant functionality. Rationalization of applications, architecture/data standardization and service enablement will allow Enterprises to gain resource synergies, and transform existing applications into an "Enterprise Shared Platform" with valuable assets that can be easily accessed and reused. Most importantly, establishing an Enterprise Shared Platform will ensure the availability of current and consistent information across applications and ready the Enterprise for achieving end-to-end business process automation.

Business Process Automation is the ability to, in real-time or in near real-time, make available the value provided by a participant (data or decisions) to other relevant participants and, whenever required, automatically trigger the next set of activities to be performed. Automating business processes will help Enterprises eliminate data double entry, reduce paper work, reduce manual work, establish straight-through-processing (STP), gain efficiencies, respond to Customers faster and reduce prospect-to-closure and other cycle times.

At the Enterprise level, there is one mega process that begins with a Customer and ends with the shareholder. This mega process is made up of Functional processes within each Function and also several processes that span across various Functional areas ("Cross-functional processes").

"Customer-order-fulfillment" is a good example of a Cross-functional process as, when a Customer places an order, it is fulfilled by activities performed, in a pre-defined sequence, by several functional areas such as Sales, Underwriting, Contracts /

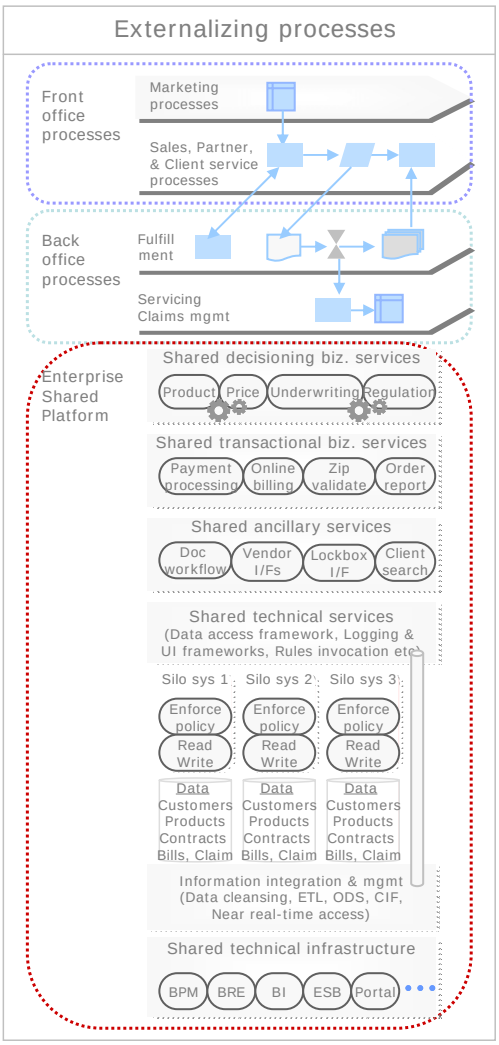
Agreements department, Finance etc. Processes within Sales, such as allocation of the Customer order to the appropriate Sales Person or Agent, are Functional processes.

Importance of access to "current and consistent" information in achieving process automation:

Every Function in an Enterprise today is served by many applications. Some of these applications still rely on job scheduling, batch processing and manual data look-ups. Unless information is current (i.e. access to data in real time or near-real time) and consistent across applications it is difficult to achieve high levels of Functional process automation.

As an example, look at sales force automation that requires that, whenever a new prospect is identified through an outbound calling effort the prospect needs to be allocated to relevant Sales Rep (by geography and specialization). Unless the call center application has access to current Sales Reps information and their areas of specialization it cannot allocate the prospect automatically to the relevant Sales Rep.

Even for Cross-functional process automation, access to current and consistent information is a must. Example: When a Customer order is received by the Sales Capture system, it should automatically check the inventory system and generate an expected delivery date email automatically.



Importance of process externalization in achieving process automation:

Another major stumbling block to achieving high levels of process automation is the fact that process logic, managing a given set of activities, is currently coded within

applications and is difficult to access. It is important to understand that, for various technical reasons such as referential integrity etc., a given set of activities should be accessed only via the process logic that is managing that set of activities and not directly. As process logic is buried within silo'd applications and difficult to access, it is also difficult to access the activities managed by that process logic.

For achieving a high level of business process automation (either Functional or Cross-functional), process logic coded within silo'd applications should be made more accessible so that the process being automated can trigger the activities relevant to it. Externalizing existing process logic from the silo'd systems and making them available in a separate (e.g., BPM) layer will make this possible.

In addition to allowing processes to be accessed by new applications, process externalization will also make it easier to define and/or change them. In the market today, there are many visual process modeling tools available that allow Business Users to visually define processes and make changes to them, without needing the assistance of programmers. Once process definition is captured, the modeling tools can translate them to standard BPM engines that execute the processes (or to a standard specification such as BPEL that can be understood by standard BPM engines).

Understanding STANDARD and DYNAMIC processes:

Initially all Enterprise processes and policies were applied uniformly to every Customer in every situation. Variations (exceptions), if any, were achieved through manual overrides. Today, Enterprises still need such uniform processes (E.g., reserve allocation, check processing, document processing, Customer account set-up etc) that are fairly standard across Customers and situations. However, Enterprises are realizing that they also need certain processes to adapt to the situation at hand or the Customer that is being

Realizing that the cost of inspection, adjudication etc itself is higher than the value of low-value claims, many Insurance Carriers are looking at deploying a "Fast Track" automated claims process to handle low-value claims rather than assigning them to Claims adjustors. Insurance carriers are wanting to:

- for Claims processing, define different processes for different types of Claims e.g., when a Claim is submitted, direct a low value Claim (< $500) to a Fast Track automated processing system and assign a high value Claim (>= $500) to the appropriate Claims adjudicator

- for each process, define different branches for different situations e.g., when a low value Claim is submitted within 60 days after the corresponding Policy has come into force, assign the Claim to the appropriate Claims adjudicator rather than sending it to the Fast Track automated processing system

serviced. At the time of the transaction, depending on the situation, the appropriate process needs to be followed.

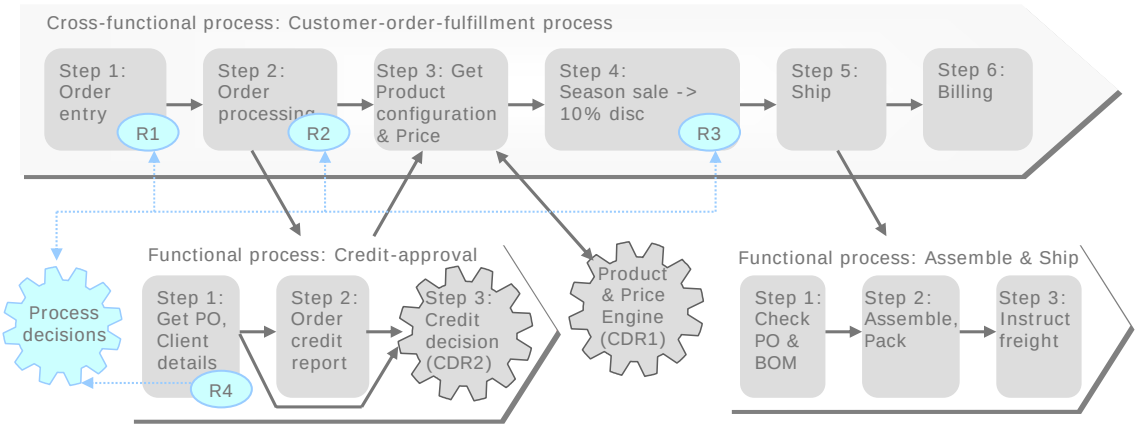
For example: When a Customer order is received, automatically check inventory and let the Customer know when to expect delivery. If the Customer is an important Customer, even if inventory levels are low, prioritize his order and commit shipment in a week. If the Customer is low value Customer, commit shipment in a month.

Such an ability to respond appropriately, based on who the Customer is or what the situation is, is required for true Functional and Cross-functional process automation. When processes have this capability they are referred to as Dynamic-processes. All processes need not be Dynamic. For example, "when a payment is not received by the payment date send a reminder letter" may be an Enterprise process that is applied uniformly to all Customers in all situations. Such a process is also referred to as a Standard-process. Even Standard-processes, to be automated, require that current and consistent information be available across all systems and should be able to automatically, and in real-time, perform a pre-defined set of activities.

Implementing Dynamic-processes requires that systems respond automatically, in real-time, and appropriately to the information they receive. At the time of the transaction, depending on the situation, the appropriate process needs to be followed. However, current Enterprise applications provide minimal, or no support for such Dynamic-processes.

To introduce the capability to determine, at the time of a transaction, which set of activities to be performed and in what sequence based on Customer type or Situation, Enterprises first need to externalize processes from applications into a separate BPM layer and then provide the ability to respond appropriately to Customer type, context or situation using business rules. That is, Enterprises need to establish rules driven, Dynamic-processes in the Enterprise.

Depicted below are one Cross-functional process (Customer-order-fulfillment) which, for its execution, accesses two functional processes (Credit-approval, Assemble & Ship)



The processes focus on execution flow, screens to be displayed and other processes to be triggered.

Rules (R1, R2, R3, R4) help understand who the Customer is, the situation and the context so that the Enterprise responds appropriately. Some rule examples are:

R1 rule: Are all requisite fields filled correctly? If not, prompt/alert the user. If yes, proceed to processing
R2 rule: If order value is higher than $1,000, credit approval is required. Else, proceed to check availability
R3 rule: If the order date is between Dec 1 and Dec 31, discount price by 10%
R4 rule: If credit report is already available, don't order report. Otherwise proceed to report ordering.

In addition to the rules (R1, R2, R3, R4) that are driving processes and making them context-sensitive (Dynamic), there are also other rules that have are purely focused on complex decision making and have a tremendous amount of knowledge embedded in them (CDR1, CDR2).

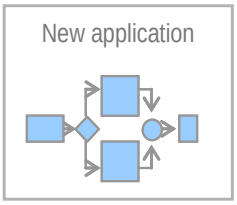
CDR1: Thousands of inter-related rules, constraints, tables & formulae, checking various options to determine whether the configuration of the product is appropriate and what the price is
CDR2: Thousands of inter-related rules, checking debt to income ratios, past history, etc to determine whether credit can be extended or not

With the advent of technologies such as Business Process Management (BPM), Business Rules Engines (BRE) and Web Services and approaches such as Service Oriented Architecture (SOA), many of the above needs can be fulfilled.

Once the Enterprise Shared Platform is established, existing Enterprise Applications have been evolved into a shared services structure (leveraging the SOA approach) and Business Process logic has been externalized into a separate process management layer (BPM), then new applications can be created faster and at a lower cost as they utilize the existing assets in the Enterprise.

At a high-level, two types of new applications can be created.

Possibility 1: The new application being created (or purchased) may be addressing a need that has never been addressed in the organization. For e.g., building or buying a campaign management system by an Enterprise that has never built or purchased such an application in the past. In such a scenario, the new application brings along with it campaign management specific UI screens, process definitions, business rules, calculation logic, database structure, entities, objects and other functionality that did not previously exist in the Enterprise.

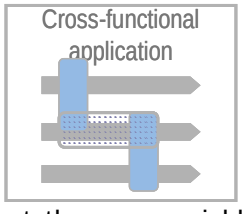


Invariably, business needs will require that the processes of the new application interact with existing Enterprise processes, business rules, data etc. Enterprises that have evolved their IT assets to a shared services structure (leveraging the SOA approach) will find that it is much easier to integrate this new application with the rest of the IT assets as they no longer have to develop multiple interfaces.

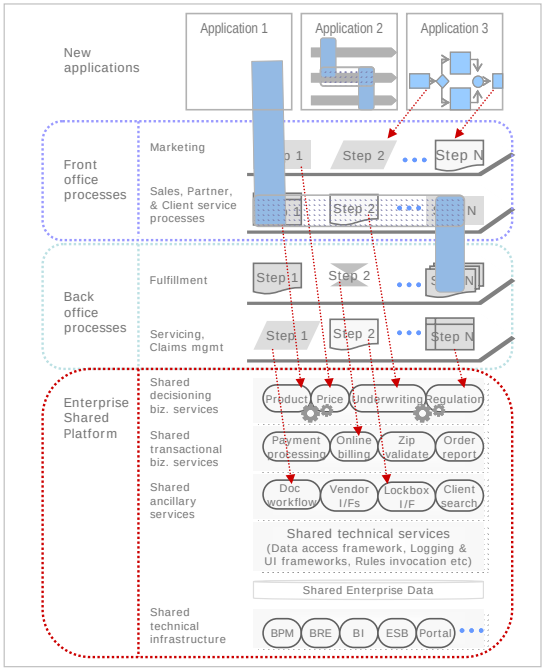
It is important to make sure that the new application (either being built in-house or being purchased) adheres to SOA. E.g., Process definitions should be external / separate from rest of application logic, implemented on a BPM platform (either package vendor's own BPM or on the Enterprise's standard BPM) and be re-usable by other applications. The same goes for business rules and any other reusable assets that the new application is bringing in. Enterprises should be careful in specifying what assets they want to be re-usable.

Possibility 2: The new application is being created so as to automate a cross functional business process.

The new cross-functional application being created will have the definition of a new cross-functional business process. However the activities and sub processes of such a process already exist in the Enterprise. Enterprises that have evolved their IT assets to a shared services structure (leveraging the SOA approach) will find that they can quickly assemble the cross-functional application together by using the existing assets.



The diagram given below provides a high level view of these two scenarios.



This white paper is part of a series of papers addressing the topic “Enterprise Needs – 2006-2010. To view other papers, please visit www.valuemomentum.com/WhitePapers/index.htm

About ValueMomentum

ValueMomentum is a global professional services firm assisting Insurance Carriers and Lending Firms by leveraging industry process experience with strong technology expertise, to achieve full potential through the implementation of Agile, Real-Time & Smart Value Chains.

Headquartered in South Plainfield, NJ, ValueMomentum has world class delivery centers in South Plainfield, NJ and Hyderabad, India. There are additional Client Services and Business Development offices in Chicago, IL, Sunnyvale, CA and Hyderabad, India.

Headquarters
3001 Hadley Road; Unit 8
South Plainfield, NJ 07080
Tel: 908-755-0048

1607 N. Aurora Road, Ste 204, Naperville, IL 60563
Tel: 630-983-6130

20200 Lucille Ave, Ste 12, Cupertino, CA 95014
Tel: 408-865-0275

Asia Pacific:
Plot No 1, Sagar Society, Road No. 2,
Banjara Hills
Hyderabad- 500034, India
Tel: +91 40 23556289