Synchronizing Business & Systems with Business Objects

Pallab Saha, R. Srinivasan

Department of Management Studies, Indian Institute of Science, Bangalore

I. INTRODUCTION

More and more businesses are becoming highly dependent on their information systems (IS) to operate and manage themselves. This necessitates a formal methodology to express business concepts, business processes and events that both business managers and IS professionals can understand and communicate with. The result of this understanding can be quick correction of business systems and operations that are more efficient. This paper introduces the concepts and uses of business objects and outlines the Object Oriented Business Engineering, as first proposed by Open Engineering Inc. for modeling and designing business objects.

11. BUSINESS MODELING

Business modeling is the practice of abstracting and representing a business in a way that facilitates aspects of better understanding and communication.

111. BUSINESS OBJECTS & BUSINESS MODELING

Business Objects proposed by The Object Management Group (OMG) provide a powerful mechanism for dynamic business modeling and engineering. Business objects can be used to capture business policies, processes, events, data and descriptions. Business objects facilitate the sharing of data, policies, and interdependencies amongst business processes and events. It is a well-known fact that Business Reengineering is a very complex and an on – going endeavor. Once the complexities can be captured using business objects, it makes a business-reengineering program comparatively simpler to implement.

IV. WHAT IS AN OBJECT?

An object is a building block that represents a real – world concept. An object contains data, behavior and constraints. The data in an object are its attributes or variables. The behavior consists of operations the object performs and services that the object offers. The constraints are the rules that the object is bound to and policies that the object must adhere to. Data, Behavior and Constraints are together called the properties of the object.

An object's data is accessible only to the outside world, through its operations. An object is not required to expose its data and implementation of operations. This is called encapsulation. An object can interact with other objects in the system only through the operations and services.

The above characteristics make objects conducive to modularity that is extremely important for business analysis.

Thus, objects allow us to see both the business and its underlying IS in business terms.

V. BUSINESS MODELING WITH BUSINESS OBJECTS

Earlier approaches to business modeling and system design were static blueprints of business data and business function. However, business objects allow us to capture the dynamism and activities involved in any business environment. Business object is an approach to business modeling that focuses on "who" the actor (business entity objects), on the "what" (business event objects) and the "how" (business process objects) of a business concept.

Business objects facilitate the change in business procedure, redesign of database, physical data distribution and synchronization of multiple transactions. Much of the complexity of today's business environment is encapsulated within the business objects.

VI. BENEFITS OF BUSINESS OBJECTS

Today, more and more companies are adapting to business modeling using business objects. This is because of definitive and compelling benefits it offers, some of which are,

- *o* Facilitates faster business change and those to be represented in the systems
- *o* Shorter time to market to produce and deploy systems with new processes
- *o* Greater maintainability in delivered applications
- *o* Greater visibility & control in business processes
- Flexibility in incorporating business rules & constraints
- Facilitates easier design of information systems

VII. CONCLUSION

Business Objects are very effective to capture business concepts. Business objects ensure that the business systems built around them reflect the real life business concept. This necessitates a substantial change in the way the systems are developed. IS design with business objects involves understanding the business concept, capturing the business concept, and building a system that uses these concepts. The process of representation of business concepts into business objects that are converted into system business objects breaks down the major mismatches that used to occur earlier in Business Reengineering activities. Business Engineers can chalk out a model of the existing system using business objects and then transform these into newer processes, achieving a greater chance of business reengineering success.