

# Organization, Data Quality and BSM are key pit stops on the road to BAM

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## **Introduction**

During the late 90's till today, we have seen the prevalence of the letter *e*. *e* was being added to everything. *e*Business, *e*Care, Siebel Systems even hosted *e*Dinners. In my mind *e* related to technology, and this was indicative of the time; we were dragging everything down to a technical, technology level. More recently, we have seen increased initiatives and activities in the areas of;

- Business Activity Monitoring (**BAM**)
- Business Service Management (**BSM**)
- Business Process Management (**BPM**)
- Business Intelligence (**BI**)

**B** is back! **B** means Business! Finally we are dragging enterprise issues back up to the level it belongs, the Business level.

This article will continue to define one of the most interesting of these initiatives, Business Activity Monitoring (BAM) and will define and expand on three key inhibitors to the success of any BAM initiative.

## **Defining BAM**

Business activity monitoring (BAM) is a philosophy referring to the real-time monitoring of business metrics and to the notification and corrective action processes that are initiated when problems arise. The BAM concept is one of the core philosophies that can be adopted by Enterprises who have the aim to become real-time, or, more fashionably, "zero-latency".

The latency that is being referred to here is the time gap between when data is registered in IT Systems via Business Processes, and when decisions can be made based on that data. Zero-Latency Enterprises (ZLE) can expect that once data is recorded in one of its business systems, it is immediately available for decision making. Such facilities can help an organization make better, more timely decisions and can help change a reactive organization into a pro-active organization.

It has been stated that BAM is the next level in Business Process Management (BPM), it encompasses Performance Management, real-time Data Warehousing/Business Intelligence, Business Process Re-engineering at the touch of a button; all of these are admirable aims however for some organizations this is a dream that cannot be achieved before 'their house is in order'.

In order to monitor a Business Process, it must be automated to be monitored effectively. Each Business Process must be modelled in terms of the Business Activities and Events that make up the Business Process. These activities and events must be related to some sort of Key Performance indicators (KPIs); such KPIs will be decision criteria.

A stack of technology is required to proceed with a BAM initiative, and in most BAM publications, the following technology stack is suggested;

- **Process Modelling/Workflow Management** Technology that defines the flow of Business Activities and Events that makes up a Business Process.
- **Rules Engines** that define and apply business rules when identified Business Events are fired.
- **Extract, Transform and Load (ETL)** technology to gather the required data from multiple sources and transform and consolidate such data
- **Messaging Services** that communicate Event Response
- **Presentation Services** that consume Event Responses and publish to decision makers, or to systems who can react to the event

In my opinion however there are two elements missing;

1. Events can be seen as Business Events or IT events, BAM publications typically address Business Events, however fail to realise that a Business Event relies on an IT System, if that system is down, performs badly or has an issue of any kind, the Business Event may not fire, therefore in a BAM world, an IT event can be as important as a Business Event.
2. Technology must exist to create, manage and maintain the mapping between the Business Processes and the IT Systems that facilitate the processes. This technology can be used to understand the meaning of an IT event at the Business Level. Therefore there is an additional requirement in our BAM Technology stack;  
**BSM Tools.**

There are many White Papers, articles and books available on BAM, together with the usual Analyst Reports, so it is not the purpose of this article to discuss BAM in detail, instead we will continue to discuss three key elements of any BAM initiative that if not addressed well, can quickly turn into road-blocks to success.

Business/IT Organization, Data Quality Improvement Strategies and Business Service Management (BSM) are three areas that must be considered prior to any discussions relating to the start of a BAM initiative. If these three area's are not addressed they can quickly become significant inhibitors to any BAM initiative.

### **Key BAM inhibitors**

Today, with complex organizational structures merged with the inherent complexity in today's distributed IT this is a challenge! If an organization then suffers from **Data Quality** problems, the task is not a challenge, it is impossible.

### **Organizational Inhibitors**

One of the most challenging of BAM inhibitors is that of Enterprise Organization. Any BAM initiative or project will require the following to succeed.

- Excellent communication between the Business and IT. Often within organizations, Business and IT talk but do not communicate. In addition, realignment of the silos that exist within the Business and within IT may be necessary when addressing Business Processes that span multiple IT Systems which are owned by separate IT Departments.
- Alignment of Business Objectives and Strategies with IT Objectives and Strategies aligned with appropriate priorities.
- Empowerment of key resources to resolve the inevitable road-blocks and conflicts.

So rather than having an organization that makes communication a challenge, never mind the challenge of actually refining/defining the Business Processes and Business Services. We need to build an organization that can truly work as a consolidated team to achieve real results.

There is no single right answer to this problem. The right answer depends on the culture and structure of your own organization together with your own goals and aspirations. However one thing is sure, these changes will not happen overnight – Organizational changes never do.

### **Data Quality**

Gartner stated that “Real-time analysis of bad information can lead to bad decisions. Enterprises need to trade off speed for accuracy when developing business activity monitoring solutions.” In their paper “Data Quality Problems Inhibit BAM Initiatives”. Today, organizations have Data Warehouses and Business Intelligence (BI) Systems to support their business, however, due to the complexity of the interfaces around these systems, and the computing power available to such interfaces, the data is sometimes too late or too old to make decisions on. In a Zero-Latency Enterprise (ZLE), by definition, this information is continually available, and is thus more likely to be used to drive day to day decisions. Therefore in the ZLE poor data quality will lead to many more poor decisions.

Enterprises that are planning to embark on BAM initiatives must ensure that they have a complete, up-to-date understanding of their Data Quality issues. Based on this understanding BAM initiatives must be organized to initially address areas where Data Quality is not a serious issue. If areas of Data Quality are poor, strategies to improve the quality must be implemented prior to any BAM initiative addressing such data.

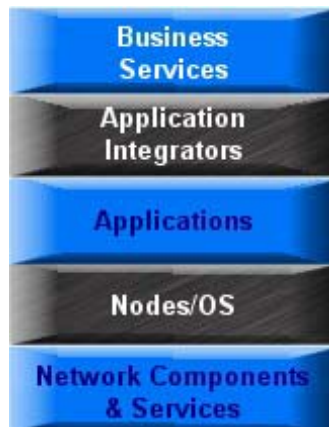
In short, Data Quality must be a key decision criterion when considering a BAM initiative in any area of your organization.

## Business Service Management (BSM)

Business Process Management (implemented via Process Automation/Workflow Management) invariably brings IT Systems closer to the Business Process. We start to collect data not only about our customers, but also about the execution of the Business Process itself. This Business Process Metadata can then be used to optimize an Enterprises processes. This assumes however that the IT Systems that facilitate the Business Processes are aligned with IT Systems; the IT Systems perform well and are stable. In order to be successful with BAM we must implement BSM to ensure the alignment of IT Systems and Business Processes, additionally, and more importantly, we need to understand the effect of an IT event at a Business Level.

What is a Business Service? A Business Service is simply one or more Business Processes that are tightly coupled or dependant on similar Business Events. Business Service Management is the philosophy that enforces the monitoring of Business Services (Processes) along-side the monitoring of IT assets such as Databases, Servers, Web Servers, Networks, and Clients etc. It can be said that BSM is end-to-end performance management, where the monitoring and management activities occur at the Business Service level, rather than the level of IT assets.

The Alp-BSM interpretation of the BSM philosophy centres on the definition and maintenance of the Business Service Stack. An abstract Business Service stack is illustrated in Figure 1.



**Figure 1 - Business Service Stack**

- At the very bottom layer, we have Network Components and Services. This would include the network infrastructure (LAN & WAN) and network Services such as LDAP, SMTP, and SNMP etc.
- At the Node/OS layer we have Server Nodes, Storage Arrays, Operating Systems, s/w Load Balancers etc.
- At the Applications Layer we have our Applications e.g. CRM, ERP, J2EE App Servers, Websphere App Servers, bespoke developments etc.
- At the Application Integrators Layer we have Siebel UAN, System Interfaces, Middleware etc
- Finally at the Business Service layer we have the Services that we provide to the Business in the form of one or more Business Processes.

All of these layers are interrelated. A Business Service will utilize all of the layers below it. No objects can exist in the bottom four layers unless it is linked to a specific Business Service. Because of this fact if we define our Service Levels, monitor and manage our Infrastructure at the Business Service Layer, and we understand the interrelationships between the layers, we can work out what the components in the lower levels have to be able to do in order to achieve the Service Levels defined for each Business Service. Also if a component fails, or does not perform, we can understand immediately.

Without BSM, BAM is a risky initiative. BAM will increase an enterprises reliance on IT Systems and the data that IT systems process. If IT fails, Business Fails. The BSM philosophy ensures Business and IT Alignment, Event Management from a Business and IT perspective and overall helps ensure business availability.

## ***BSM/Systems Management Tools***

Gartner stated that “Enterprises can extend IT operations tool investments into the realm of business activity monitoring. Network and systems management tools can speed deployment and lower implementation costs for early adopters.” In my opinion this is true if such tools maintain a correlation between the IT assets they address and the Business Services that the IT Assets Support, few Systems Management tool vendors are able to achieve this. One vendor, BMC Software, is in an ideal position to support the BSM Philosophy with its extensive portfolio of end-to-end systems management and performance assurance tools coupled with its Service Impact Manager and Service Level Reporting tools.

## ***Key BAM inhibitors – Wrap-up***

The BAM inhibitors that we have discussed in this article are three of many, however they seem to be the three issues that most BAM early-adopters agree on as the most significant.

The area of Organizational issues is certainly a significant problem but no text-book answer exists, the right answer depends on the structure and the culture of your organization, many service providers exist to assist organizations with such issues. Human Inference is ideally suited to assist with the Data Quality issues and strategies and Alp-BSM Services coupled with BMC Technologies can help organizations implement the BSM philosophy and best practices required to ensure success.

## ***About Alp-BSM***

Alp-BSM’s multi-disciplined, seasoned staff have substantial experience in Business Applications, Process Modelling, Systems Management and Performance Management and a deep knowledge of IT Systems and implementations. **Alp-BSM assists their customers to optimize their IT investments to provide key *business services*.**

Alp-BSM helps customers...

- Optimize their IT Investments
- Implement best practices and proven ways to reduce TCO
- Provide infrastructure management solutions that can help customers reduce their infrastructure complexity and increase their ROI
- Maximize the probability of success in IT Projects.