

# “Real Time Business Impact Analysis” Understanding your Organization

Draft paper for BCM World Conference and Exhibition

## **Introduction**

This Paper aims at presenting innovative concept of real time Business Impact Analysis. As a major element of any BCM project, Business Impact Analysis plays a crucial role in understanding how the incidents and unplanned events can affect business activities. The author of this analysis presents a concept of integrated monitoring tools, business process management (BPM) and BCM for providing real-time information about company's business health and ad-hoc impact assessment. The presentation will show how to achieve more effective incident response, to minimize impact on business by implementing processes and mechanisms that are able to correlate assets and infrastructure statuses with business level consequences.

## **Role of Business Impact Analysis (BIA)**

Business Impact Analysis is a first step of the overall process of designing and embedding Business Continuity Plan in an Organization. Main objectives of the BIA are to understand the business context and define the scope of protection, in particular:

- Identify business processes that support vital business products and services.
- Identify impacts resulting from disruption to these processes and determine how they vary over time.
- Establish the maximum acceptable period of disruption for each process (RTO) as well as data loss (RPO).
- Identify the underlying assets required for handling the process (Minimum Acceptable Configuration – MAC).
- Identify if there is any contingency solution (business level) to use when assets are not available.
- Identify all dependencies relevant to the critical activities, including suppliers and outsourced partners (both internal and external).
- Categorize business processes according to their priority for recovery, and identify potential “bottlenecks”.

BIA provides information on how the critical business processes are mapped on assets, including the IT services, as well as what the business requirements are for assets availability and recovery times. BIA results, together with asset assessment process results, provide an initial gap analysis and allow identifying where the business requirements are not fulfilled. This is a first step to define the BCM scope and design technology and infrastructure protection plan.

## **How to use BIA results in real (right) time**

BIA results are crucial for understanding the business context and identifying the processes to be included into the scope of BCM protection. In addition to this, I would like to highlight another very important aspect - using the BIA model as a baseline for real-time analysis of the incidents impact. When the incident strikes, the first step is to understand how it impacts the

overall business condition, taking into account: the timescale, current business context and availability of resources. When we are dealing with incidents at the technology and infrastructure level, in many cases it is very difficult to identify the impact on availability of the IT services, and consequently what the business activities affected are. What can help, are the results of BIA where all the relations and constraints have been identified. Obviously, it requires a change of approach in structuring and modeling the BIA results, but the methodology process, data gathering and scope of BIA should not change. BIA results should be handled in analytical, accessible format, not just as a document deliverable. This will allow implementing the process of mapping incidents on the BIA model and identify the impact in an automated way.

The real-time Business Impact Analysis concept shows the combination of processes and analytical mechanisms required to synchronize business processes and the underlying assets, and in consequence, improve customer satisfaction, reduce downtime and reduce overall management costs. This is a special value-added approach for companies operating in the mission critical 24/7 environments.

Main challenges of using BIA in real-time:

- How to perform ad-hoc impact analysis based on your BIA outcomes and perform instant adjustments, without endless hours spent on analysis, or receiving information when it is already too late.
- How to get right people engaged immediately based on the automated incident management process?
- How to expose incidents that are occurring in IT environment, both to the people that fix the issues as well as to the people that are just interested in what's going on (business and customers)?
- How to improve and personalize communication - deliver unique information, instructions, requests, and procedures. Enable each person to understand their specific role during an incident?

Presented concept provides support for IT-related incidents, where dependencies and relations between IT infrastructure elements, IT services and business processes as defined during BIA workshops are used for an ad-hoc impact assessment. This allows business executives and managers to understand immediately how the IT failure will impact continuity of their processes, and IT staff to prioritize recovery actions based on the business urgent requirements. Moreover, this function can be used when handling standard incidents, in order to collect statistics. The statistics provide an analytical view on the infrastructure elements' vulnerabilities and a valuable input for BIA reconciliation. Prediction methods can be used for analysis of potential future failures as well. Role of the process can also be extended to other types of assets that are able to be monitored (facilities, on-line services, production infrastructure, etc.) and is not only limited to IT-based incidents.

### **From Business as Usual incidents to Business Continuity**

Additional advantage of using the presented mechanism is unification of the process for handling incidents and BCM emergency response. Both will use the same mechanisms for

analyzing impact, as well as escalation and communication paths. This provides an added value to BCM as early detection and response procedures will be tested on a daily basis.

### **Practical aspects, how to start**

At first glance the concept can be perceived as a very complex implementation requiring months of analysis and high cost tools. In fact, this is not the case. In almost all organizations many elements of the process already exist and this is just a matter of integration and synchronization as well as using the proper analytical tools. Crucial point to highlight here is that the approach taken should utilize the operational mechanisms and procedures aimed at dealing with Business as Usual events.

As a baseline, the first implementation step would be to use the existing Service Desk (SD) that would perform a first impact assessment of the incident and extend the SD process with escalation path to the BCM.

Second step is to integrate the systems that are in charge of monitoring the network and IT data center infrastructure with the BCM process. Those systems continuously monitor availability and performance of the IT infrastructure elements and are the first to alert if anything bad happens. The BCM process should collect those alerts and perform an ad-hoc impact analysis based on the mapping between: IT infrastructure, IT service, and a Business Process. Alerts from monitors are automatically translated into list of IT services and business process affected. Not only IT personnel can be notified, but also the business managers and users.

Third step: get the right people engaged immediately - automate the incident management process – no manual call outs or scheduling spreadsheets checks. Define the operational escalation criteria's with Service Desk and Call Center- in case of incident or disaster most of the clients, employees will contact them (not BCP team directly). Log of all decisions made during the incident. This log might be essential for improvements and later inspection by regulators or the judiciary.

Fourth step is to include monitoring of the online services like webpages, ecommerce websites. This should be performed as a transactional monitoring from a user perspective. For 24/7 it is important to detect the potential service downgrades as early as possible in order to manage the communication and avoid negative user experience (long response time, service unavailability).

Fifth step is to integrate with the Business Process Management. This will provide information regarding the current business key performance indicators such a transaction load, number of customers, financial position, margin level etc. Having the statistic shows how the processes are performing over the timeline. Using those information BCM can much better assess the financial impact metrics as well as provide better view on the impact for particular incidents as they happen. As an example let me point out the brokerage platform with high peak of transaction at the opening and closing the stock session or accounting processing running only at the end of the month. When we map the incident impact on the current business constrains (estimated by historical data) it will provide more indicative view on the real impacts.

### **Summary**

Main benefits for the audience are related to the following points:

1. BCM Managers will be able to analyze how they can start establishing the baseline cooperation with IT. Most of the IT departments are already using an IT infrastructure monitoring software. Taking into account that most of the business processes are now fully IT-dependent the possibility of having a real-time visibility of what is happening in the company becomes imperative.
2. Performing BIA assessment will have to be aligned when a BCM Manager decides to integrate the results with real-time monitoring. The Presentation will show the elements we should focus on, and will highlight the main differences when compared to a standard approach.
3. The presentation will show how to combine several elements available in the standard enterprise environment, such as: BCM, Business Process Management, IT monitoring and Service Support. This integration will help an organization to prepare for a more effective response in case of a serious IT failure (as shown in many research reports, this is a potential source for most of the critical BCM events)
4. For companies offering online services it will show how to monitor the transactions from a user perspective.