

# **An IT Business Impact Management Framework**

J. P. Sauvé, J. A. B. Moura, M. C. Sampaio

## **Abstract**

Will be written at the end

## **1. Introduction**

This section introduces Business Impact Management (BIM) and its objectives. It indicates that BIM is sustained by a “service impact model” or “BIM model”. The difference between operational BIM and long-term (or strategic) BIM is discussed. Next, our objectives are briefly described (low-intrusion BIM through a framework). Finally, the structure of the paper is given.

## **2. Framework Requirements**

This section outlines the requirements that must be satisfied by the framework in order to accomplish its objectives.

## **3. Satisfying Framework Requirements**

This section discusses in general terms how our solution will be structured so as to satisfy the requirements outlined previously.

## **4. The Framework**

This section describes the framework. It is the main body of the paper and is organized through several subsections.

### ***4.1. A Layered Model***

This subsection introduces the general organization of the framework. It briefly describes the four layers involved. The notion of an abstract model (a framework) versus concrete instantiations of the framework (concrete BIM models) is discussed.

### ***4.2. General Layer Organization***

The framework’s four layers have many characteristics in common and these are described in this section. The notion of entity, relationships, dependencies between layers, mapping functions, types of metrics, drill-down operations, etc. are discussed here insofar as they are generic and applicable to all layers.

### ***4.3. The IT Component Layer***

Layer 1 is described in more detail. Characteristics particular to this layer are presented. Examples of entities, metrics, etc. are discussed.

### ***4.4. The IT Services Layer***

Layer 2 is described in more detail. Characteristics particular to this layer are presented. Examples of entities, metrics, etc. are discussed. Furthermore, examples of mapping functions between the lower layer and this one are given.

#### **4.5. The Business Process Layer**

Layer 3 is described in more detail. Characteristics particular to this layer are presented. Examples of entities, metrics, etc. are discussed. Furthermore, examples of mapping functions between the lower layer and this one are given.

#### **4.6. The Business Layer**

Layer 4 is described in more detail. Characteristics particular to this layer are presented. Examples of entities, metrics, etc. are discussed. Furthermore, examples of mapping functions between the lower layer and this one are given. Particular attention is given to discussing Business Impact Metrics couched in business language.

#### **4.7. Service-Level Agreements and Aggregate Business Impact Metrics**

This section discusses the introduction of SLAs in the model. It shows that SLAs may be included in any layer and may be based on any of a layer's metrics. It also shows how SLAs may be used in drill-down operations. Finally, several new aggregate metrics are proposed that can be used to measure business impact; these measures can be used to capture several aspects of the notion of impact, including cost, IT-business alignment, etc.

#### **4.8. Framework Formalization**

Space and time permitting, this section will be developed to formalize the model using appropriate notational syntax.

### **5. Instantiating the Framework: An Example**

The framework discussed previously is an abstract notion that must be instantiated in order to be applied to a concrete situation. The meaning of instantiating the framework is clarified. Finally, a small example showing a concrete BIM model using the framework is given.

## **6. Results and Validation**

This section discusses the methodology used to validate our work and discusses preliminary results obtained to that effect.

## **7. Conclusions**

What have we achieved?

What are the consequences?

What will we do in the future?

## **8. References**