



Whitemarsh
Information Systems Corporation

Return on Investment (ROI)

Enterprise Architecture Development

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Whitemarsh ROI Savings Summary

It is very important for an enterprise to have an overarching enterprise architecture. Creating such an architecture through traditional techniques has been very expensive, time consuming, and almost always not exhibiting the following information systems plan characteristics of: timeliness, usability, maintainability, quality, and reproducibility.

To achieve these characteristics, an enterprise architecture cannot just be a large document containing a myriad of diagrams. Rather, an enterprise architecture must be an overarching layer to the overall collection of IT work products that form the implementing mechanisms for the enterprise architecture. Because of this construction strategy, that is, bottom up and through complete integration with other IT work products, the ROI for this approach is the average of the four directly related ROI's. That is, 14.6

Supporting Links	
Link Area	Link
Enterprise Data Management Areas	http://www.wiscorp.com/inductiveenterprisearchitecturedevelopment.html
The Data Administration News Letter Articles	http://www.wiscorp.com/roi_enterprisearchitecturedevelopmenttdan.html
Short Papers	http://www.wiscorp.com/roi_enterprisearchitecturedevelopmentshort_papers.html
Clients	http://www.wiscorp.com/roi_enterprisearchitecturedevelopmentclients.html

1.0 Issue

An Enterprise Architecture is a short phrase to identify and describe all the IT work products described across all the previous ROI areas that dealt directly with the creation, deployment and evolution of all the databases and business information systems in the enterprise. Specifically, the four ROIs that deal directly with the development of an Enterprise Architecture are:

- Project Management
- Information Systems Planning
- Data Centered Development and Management
- Manufacturing Integrated, Interoperable, and Non Redundant Data Models

Each of these ROIs cause the construction of significant components of an Enterprise Architecture.



The key difference between a traditionally developed Enterprise Architecture and these four ROIs is that while a traditionally developed Enterprise Architecture is accomplished almost always top-down, these four ROIs can be accomplished somewhat independently.

Whitemarsh holds, however, that Enterprise Architectures are often impossible to achieve deductively, that is, top-down. Top-down efforts require knowledge from the distant past to far into the future about what was, what is, and what will likely be concerning business missions, organizations and functions, about trends, staff, finances, products, sales, logistics, and the like.

Experience shows sadly, that memories are notoriously bad and the future always seems be either too cloudy or too rosy. In short, undertaking the effort to traditionally accomplish the top-down construction of an Enterprise Architecture is risky proposition that has a high probability of becoming “shelf-ware” as opposed to a guiding operational blueprint that is consulted often, and is constantly updated to accommodate unfolding realities.

So what’s an enterprise to do when charged by the board of directors, or CEO, or CIO to develop an enterprise architecture? Blow everything up and start over because a top-down enterprise architecture is likely to “change and/or obviate everything?” Likely not a good choice. Staff and resource budgets for such efforts will range from way too little to beyond sight with all intermediate budgets equally invalid.

Rather, the approach Whitemarsh recommends is to create the enterprise architecture inductively. Sort of, bottom up. The Whitemarsh approach is based on products either already built, or reasonably easy to build, on bite-sized projects that have immediately useful results, that are founded on realistic objectives, time-lines, and resources, and that will enable the creation of an enterprise architecture environment that is understandable, relatable to existing enterprise environments, and constructed such that the enterprise architecture can be evolved and maintained.

2.0 Solution Approach

Accomplishment of an inductively created enterprise architecture consists of a number of discrete steps that cause the integration of an existing collection of IT work products. The steps are:

- Discerning and/or creating the Missions Model
- Discerning and/or creating the Resource Life Cycle Model
- Performing an inventory of Databases and Business Information Systems
- Cross-mapping Databases, DBMSs and Business Information Systems



- Cross-mapping Resource Life Cycle models and Database Objects and Business Information Systems
- Inventorying all IT Projects
- Inventorying and analyzing performance of IT Work Staff
- Cross mapping IT Projects with IT Projects, and Staff
- Creating an As-Is model of entire environment
- Creating a To-Be model of entire environment
- Creating projects to migration of the As-Is environment to the To-Be environment

3.0 Solution Engineering

Solution engineering is founded on a number of items. Most if not all will have already been accomplished if the construction of an Enterprise Architecture is required to exist after the ROIs identified at the outset of this ROI are accomplished.

If however, an Enterprise Architecture is required as the first accomplished ROI, the accomplishment of Enterprise Architecture will have then already accomplished the four ROIs list.

In short, this is a win-win strategy.

4.0 The ROI

4.1 Traditional Calculation

There is no operational traditional calculation for an enterprise architecture. That's because they are never successful. They are, in fact, always abandoned, or so quickly accomplished that their value is almost nil.



4.2 Changed Approach Calculation

Given there is a requirement to determine an ROI for determining the cost of a traditionally developed Enterprise Architecture as compared to the Whitemarsh recommended approach, the calculation is really to only come to the average ROI of the four cited ROIs. That would be:

ROI Title	Changed Approach ROI
Project Management	16
Information Systems Planning	5.9
Data Centered Development and Management	28
Manufacturing Integrated, Interoperable, and Non Redundant Data Models	8.6
Average ROI	14.625

The traditionally developed enterprise architecture would thus be 14.625 times greater than the strategy presented in this ROI.

