Calculating Emagineering's Return on Investment

Introduction

This document describes a procedure that can help executives assess the ROI for Enterprise Initiative Management (EIM) and Emagineering.

The model employed closely aligns with the 5-level process maturity model developed by the University of California at Berkeley. The principal goals of this model are to provide a tool for measuring the financial benefits that organizations will obtain from implementing or enhancing existing initiative or project management tools, processes and practices. This process maturity model is then correlated with typical initiative cost and schedule performance results in order to predict the financial benefit of advancing the organization's maturity level.

This extensive research performed at Berkley has statistically demonstrated a quantitative relationship between the overall process maturity of an organization and its cost performance on large initiatives. Click on this link to learn more about the Berkeley Process Maturity Model. This relationship is fully embodied in the ROI calculator below and correlated with the use of Emagineering.

How Emagineering Improves Process Maturity

Emagineering provides the technical and business process foundation for structured communication, collaboration, and issue identification and resolution in large complex projects and initiatives. As such it provides the vehicle whereby companies will improve their process maturity and achieve the attendant performance improvements. Emagineering supports a 0.3 – 0.5 improvement in process maturity, even for companies that are at the typical 3.3 level. more……..

Calculating Emagineering ROI

SAMPLE

Enter the Budgeted Cost of your Initiatives	$5,000,000	
Enter your Current Process Maturity	3.3	Unsure? Just leave it at 3.3
Without Emagineering:		
The Berkeley Model predicts that you will be OVER BUDGET by	$774,000	
Most-likely Actual Initiative Cost	$5,774,000	
With Emagineering:		
Projected Cost Savings (range)	$640,100	$1,037,500
Projected ROI range	from 540%	to 940%

To **calculate your ROI** double-click on one of the templates below.

Summary ROI Detailed ROI

How Emagineering Improves an Organization's Process Maturity
Emagineering provides the technical and business process foundation for structured communication, collaboration, issue identification and resolution in large complex projects or initiatives. As such it provides the vehicle whereby companies will improve their process maturity and achieve the attendant performance improvements. Emagineering supports a 0.3 – 0.5 improvement in process maturity.

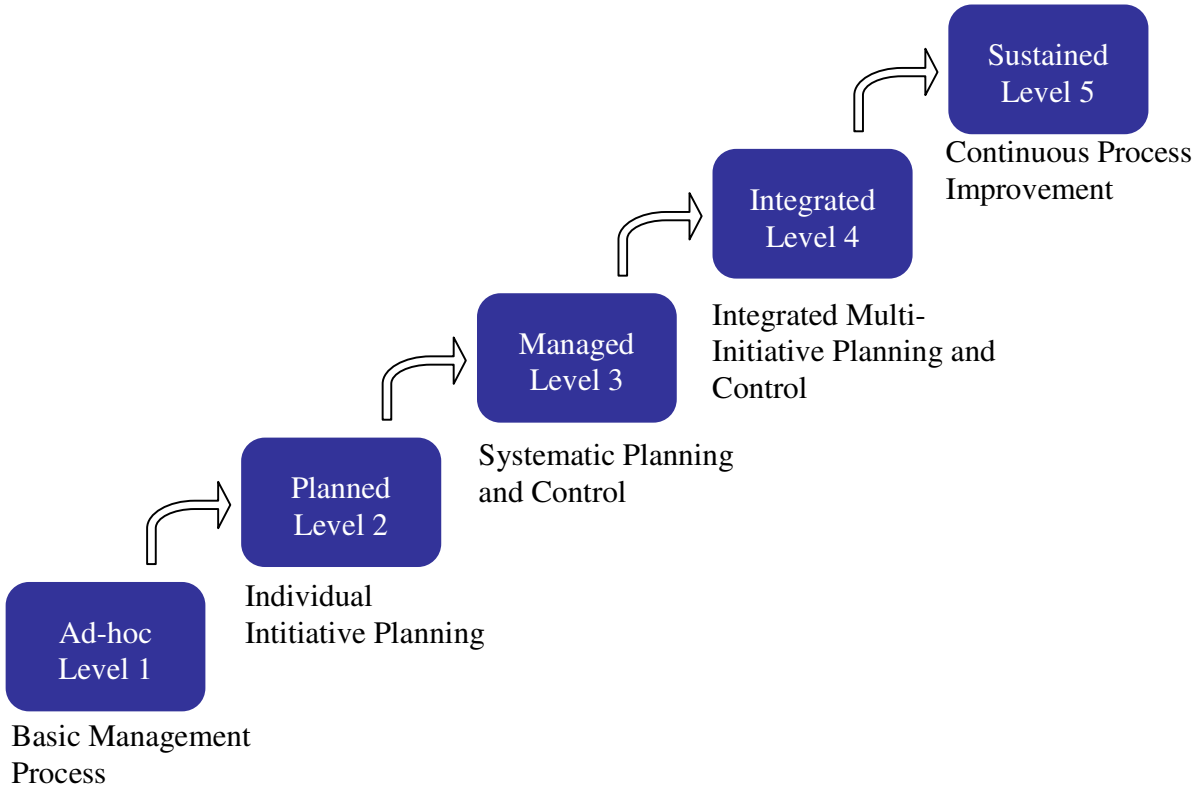
Specifically, Emagineering formalizes the issue resolution process, including escalation and decision-making. It formalizes roles and responsibilities. All information exchange and processes are documented in a database and may be evaluated and analyzed. This provides organizations with a foundation for fact-based decision-making. Emagineering dramatically enhances teamwork by facilitating the participation of initiative members across organizational and geographic boundaries.

Emagineering's impact on each of the primary Initiative Management processes is as follows:

Process	Typical Maturity	Maturity with Emagineering
Initiating Maturity	3.4	3.6 – 3.7
Planning Maturity	3.5	3.7 – 3.8
Executing Maturity	3.2	3.7 – 4.0
Controlling Maturity	3.3	3.8 – 4.1
Closing Maturity	3.2	3.4 – 3.5
Project-driven Organization Maturity	3.0	3.5 – 3.8
Overall Average Process Maturity	3.3	3.6 – 3.8

Berkeley Process Maturity Model

The Berkeley process maturity model was developed to help with assessing an organization's project and initiative management sophistication. It was developed by adapting work from Crosby ('79), SEI ('93), McCauley ('93), and Microframe ('97). The model evolves from a functionally driven organization to an initiative-driven organization. It consists of major characteristics, factors, and processes (click on model for details). It provides a roadmap to required process improvements needed to achieve a higher maturity level



Berkley Initiative/Project Management Process Maturity Model (C.W. Ibbs, Y.H. Kwak)

The full paper describing the Berkley Management Process Maturity Model can be found at http://www.ce.berkeley.edu/pmroi/calculating-PMROI.pdf. Please pay special attention to Figure 4 on page 8 which graphically shows the correlation between an organization's process maturity and the reported project/initiative cost variances. This correlation is the mathematical engine used for calculating the ROI that can be obtained from the use of Emagineering.

Berkeley Process Maturity Levels

Level 1: Ad-Hoc Stage
At the Ad-Hoc Stage, there are no formal procedures or plans to execute an initiative. The initiative activities are poorly defined and cost estimates are inferior. Initiative-related data collection and analyses are not conducted in a systematic manner. Processes are unpredictable and poorly controlled. There are no formal steps or guidelines to ensure initiative processes and practices. As a result, utilization of project/initiative management tools and techniques is inconsistent and applied irregularly, if at all, even though individual project managers may be very competent.

Level 2: Planned Stage
At the Planned Stage, informal and incomplete processes are used to manage an initiative. Some of the critical issues are identified, but these issues are not documented or reviewed objectively by others. Initiative-related data collection and analyses are informally conducted but not documented. Project management processes are partially recognized and controlled by project managers. Planning and management of initiatives depend largely on the capabilities and skills of specific individuals.

An organization at Level 2 is more team oriented than at Level 1. The initiative team understands the initiative's basic commitments. This organization possesses strength in doing similar and repeatable work. However, when the organization is presented with new or unfamiliar initiatives, it confronts major chaos in managing and controlling the initiative. Level 2 processes are efficient for individual project planning, but not for controlling a complex initiative or a portfolio of initiatives.

Level 3: Managed Stage
At the Managed Stage, processes become more robust and demonstrate both systematic planning and control characteristics. Most of the issues are identified and informally documented for project control purposes. Initiative-related data are collected across the organization for initiative planning and control. Various types of analyzed trend data are shared by the initiative team to help it work together as an integrated unit throughout the duration of the initiative. This type of organization works hard to integrate cross-functional groups to form an initiative team.

Level 4: Integrated Stage
At the Integrated Stage processes are formal, with information and processes being documented. The Level 4 organization can plan, manage, integrate, and control multiple initiatives efficiently. Processes are well defined, quantitatively measured, understood, and executed. Process data are standardized, collected, and stored in a database to evaluate and analyze the process effectively. Also, collected data are used to anticipate and prevent adverse productivity or quality impacts. This allows an organization to establish a foundation for fact-based decision-making.

In addition to effectively conducting multiple-initiative planning and control, the organization exhibits a strong sense of teamwork within each initiative and across initiatives. Project management training is fully planned and is provided to the entire organization according to the respective role of each initiative team member. Integrated project and initiative management processes are fully implemented at this level.

Level 5: Sustained Stage
Companies at the Sustained Stage continuously improve their processes using sophisticated management techniques such as formal lessons-learned programs. Issues, including issues that were unanticipated during the planning stage, are fully understood and addressed on an ongoing basis to ensure initiative success. Data are collected automatically to identify the weakest process elements. These data are then rigorously analyzed and evaluated to select and improve the initiative/project management processes. These data and processes are stored in such a manner that they can easily be accessed by other initiative teams for learning reuse. Innovative ideas are vigorously pursued, tested, and organized to improve processes. Organizations at Level 5 are involved in the continuous improvement of processes and practices. Each initiative team member works diligently to maintain and sustain the project-driven environment. Initiative teams are dynamic, energetic, and fluid in a Level 5 project-centric organization.