SEER Solutions: Estimation News from Galorath Incorporated

Included in this issue:

Estimating the Cost of a Service Oriented Architecture (SOA)

In a recent survey by AMR Research it was found that "Fifty three percent of companies had active SOA projects by the end of 2007." Companies that adopted SOA spent an average of $1.4 million to implement SOA on software and services in 2007. These findings were confirmed in a survey prepared by BEA Systems. The BEA survey reported that half of all enterprises with revenue exceeding $1 billion have shelled out over a million on their SOA efforts and expect to spend even more over the next 12 months.

So does that mean that most organizations will face such a large expense to implement SOA? What is the real cost for a SOA implementation?

In a traditional software estimate one would consider: Software size, Complexity, Technology, and Constraints. These individual factors are counted, weighted, and combined to identify an estimate of total effort. The total hours are then multiplied by cost factors for a total cost estimate.

Click here (http://www.galorath.net/newsletter/soa.pdf) to read the complete article. <Back to top>

Seeking SEER for Hardware, Electronics & Systems 7.1 Beta Test Participants

We are currently preparing SEER for Hardware, Electronics & Systems (SEER-H) version 7.1 for beta test. If you are interested in getting a preview of this major upgrade, please contact us (ktimko@galorath.com?subject=SEER-HBetaTestProgram).

SEER-H 7.1 includes many new features and reports to support improved cost profiling and scheduling. Development estimates are allocated into key phases, preliminary design, detailed design and system validation test. You can view development costs by month and see staffing requirements to support your project. You can view your time phased estimates and compare them to annual funding constraints to visually see when and by how much your estimates meet funding constraints. Using an interactive Gantt chart, you can adjust your work element schedules to better meet funding constraints. Cost profiles of individual elements can be set to a number of different profile types, and you can also evaluate how schedule constraints impact overall schedules and cost. SEER-H 7.1 includes new reports for development hours by phase, development cost by phase and development allocation by month.

All the new SEER-H 7.1 features are applicable to SEER-Electro-Optical Sensor (SEER-EOS), formerly known as SEER-Spyglass, and SEER-IC. SEER-EOS has several new estimation technologies including laser diode, diode pumped NdYAG laser, linear and area InGaAs detectors, Bicolor HgDcTe detectors, area microbolometer detectors, Joule_Thompson coolers and a Piezoelectric actuator mechanism. SEER-EOS has also been extended to include missile and airborne platforms. SEER-IC has been extended to include Mixed Signal and MMIC technologies. <Back to top>

SEER for Software Browser Edition Available for Trial Use

The browser edition of SEER for Software (SEER-SEM) will enable on-demand access to its essential estimating functionality, with no desktop installation required. You will be able to install the application on your server or access it through ours. If you feel this alternative access to SEER for Software will benefit your organization, contact us (info@galorath.com?subject=SEM Browser Edition - Trial Program Request) about a trial program. <Back to top>

Galorath Conducts 5th Worldwide Project Estimation Conference: Estimating United

On March 19th, 2009, Galorath conducted its 5th annual worldwide conference on project estimating. The conference title, Estimating United, was fitting both for its venue and content. The venue was Old Trafford, Manchester, United Kingdom, home of the world famous Manchester United Football Team. The content included presentations in two tracks from a variety of world class company participants, all united in their efforts to improve project estimation practices. Presentations covered a variety of topics in the area of project estimation, planning and control.

Read about the conference presentations and how you can obtain them, by clicking here (http://www.galorath.com/index.php/library/estimating-united-conference/).

Our next U.S. Annual User's Conference will be in held in Southern California on October 8-9, 2009. Further details will be released soon. We look forward to seeing you there! <Back to top>

Did You Know?

•Did you know that you can bring your SEER for Software (SEER-SEM) estimate into SEER-IT? The Copy for SEER-IT with Insert and Copy for SEER-IT feature is available in SEER-SEM to integrate your current SEER-SEM estimate with SEER-IT. It provides the same capabilities that exist for integrating your SEER-SEM estimate into a SEER-H project.

• Did you know SEER-SEM includes the repository based analysis tool, SEER Metrics Analysis & Benchmarking? SEER Metrics allows you to plot historical data (SEER-HD) and evaluate trends. SEER Metrics can be used to evaluate SEER-SEM estimates against historical data, as well as assist you in building SEER-SEM knowledge bases.

• Did you know that SEER for Manufacturing (SEER-MFG) has a library of over 260 manufacturing

processes to choose from? With every new build we keep adding more, ensuring that SEER-MFG remains the number one state of the art cost estimating application for manufacturing costs. <Back to top>

Notice: Windows 2000 No Longer Supported

As of March 2009, Galorath will no longer actively support the Windows 2000 operating system. What this means is that new versions of SEER will no longer be tested on the Windows 2000 platform.
SEER products will continue to support Windows XP, Vista and Windows Server 2003. If you need to run SEER products on a Windows 2000 system, please contact support@galorath.com to discuss your requirements.

We strive to offer the best estimation solutions and offer timely and meaningful support. We appreciate your business and want you to be successful with SEER. We encourage you to contact us (support@galorath.com?subject=SEER Support Question) if you have any SEER product questions. <Back to top>

Discover our Developer's Blog

Want to get the latest information on what is going on with SEER products? Looking for tips and tricks? Check out the SEER Developer's Blog (http://www.galorath.com/index.php/services/support), available to registered SEER users. The blog includes helpful information on recent updates, product announcements, installation issues as well as ideas and insight on how to best use the SEER estimating models. Check it out! Here's a sample of one of the recent entries in the blog:

How to Count a Big Database Using ILFs

(By Lee Fischman)

With 40 tables and 1400 fields, is this counted as one ILF or many? Complicating this is that SEM permits entry of a "table" or a "database file" under its ILF entry in the Function Based Sizing (FBS) View. The advice…

If no entity of the database is maintained separately, it is a single ILF. It could of course be quite large. The "superfiles" idea seems to have gone out of style, though my preference is to take particularly large databases and break them down, if possible. But since it doesn't seem possible in your case, I'd enter this into SEM as 1 database file of High complexity.
<Back to top>

Dan on Estimating Blog

Don't forget to visit Dan Galorath on Estimating (http://www.galorath.com/wp/), our other must-read blog with something for everyone.

Read one of Dan's latest entries:

Learning Curves and the Lore of The Slope

As I am editing the section of the ISPA parametric handbook course section I will be teaching in St. Louis, I reviewed the great work of Galorath's Evin Stump in learning curves. The following are some of Evin's guidelines on slope. Learning curve can be a huge driver in cost estimating. Evin also has a wonderful paper on learning curves. We can provide upon request.

- Fit learning curves to historical data when available
- This is usually the best source, but not always

Guidelines for use when historical data are not available:

- Operations that are fully automated tend to have slopes of 100%, or a value very close to that (no learning can happen)
- Operations that are entirely manual tend to have slopes in the vicinity of 70% (maximum learning can happen)
- If an operation is 75% manual and 25% automated, slopes in the vicinity of 80% are common.
- f it is 50% manual and 50% automated, expect about 85%.
- If it is 25% manual and 75% automated, expect about 90%.
- The average slope for the aircraft industry is about 85%.
- But there are departments in a typical aircraft factory that may depart substantially from that value.
- Shipbuilding slopes tend to run between 80 and 85%.

Subscribe to both blogs and receive the latest posts directly via email.

Receive the blogs via an RSS feed. When you subscribe to the feed, it is added to your Common Feed List. Updated information from the feed is automatically downloaded to your computer and can be viewed in Internet Explorer and other programs. <Back to top>

Previews from the Development Lab

For several months now Galorath have been working closely with its customers on updates to the **SEER for Manufacturing (SEER-MFG) machining models**. Together they developed a new data set related to machining various part sizes, across a spectrum of material types, and using commonly used machining feeds and speeds.

The SEER-MFG development team embarked on developing a new set of algorithms to mimic the new data set. The fruits of this labor are currently under test with our customers and will soon be ready for general use in our upcoming SEER-MFG 6.1 release, due out later this summer. The new algorithms are more sensitive to machining small parts, and light, hard to machine materials such as titanium.

Both the old and the new machining algorithms coexist in SEER-MFG6.1. A new Labor2-0 mapping database has been introduced to control the use of the new updates. The machining operations impacted by these changes are Radial Mill (Rough & Finish), End Mill (Rough & Finish), Turn (Rough & Finish), Bore (Rough & Finish), Shape (Rough & Finish), High Speed (Rough & Finish), Surface Grind (Rough & Finish), Chemical Mill, Centerless Grind, Cylindrical Grind, and Screw Machine. Further, machine detail options for the above operations are also based on the feeds and speeds used in the new data set, entering known feeds and speeds will factor the computed machining times accordingly, enabling users to fine tune and compute accurate machine times for known feeds and speeds.

The use of the **SEER Enterprise Database** is being expanded to include SEER-IT estimates. Also, new features are being added to better support multi-user collaboration on estimates.

New analytical features being added to **SEER-SEM** for staff constrained schedules and more maintenance estimation scenarios.

Agile-oriented lifecycle templates are being added to the **MS Project Integration of SEER for Software**. These templates are intended to capture the spirit of Agile-style development, in terms of its relatively lightweight upfront activities, and highly iterative method of development.

SEER Estimate by Comparison's functionality for selecting and creating custom variables has been upgraded. A huge range of SEER parameters are now at your fingertips, for rapid estimation. You also can create any sort of custom variable that you'd like to estimate, for estimating even outside of typical SEER domains.
<Back to top>

In the News

Read about Galorath in the news. See our most recent Press Releases (http://www.galorath.com/index.php/news/). <Back to top>

Upcoming SEER Workshops

SEER for Software (SEER-SEM) – Core Workshop
June 22-24, 2009 (El Segundo CA)
September 21-23, 2009 (El Segundo CA)
October 19-21, 2009 (Washington DC)

SEER for Software (SEER-SEM) - Advanced Workshop
September 24-25, 2009 (El Segundo CA)
October 22-23, 2009 (Washington DC)

SEER for Hardware, Electronics and Systems (SEER-H) – Core Workshop
July 20-22, 2009 (El Segundo CA)
October 19-21, 2009 (El Segundo CA)

SEER for Hardware, Electronics and Systems (SEER-H) - Advanced Workshop
October 22-23, 2009 (El Segundo CA)

SEER for IT – Core Workshop
June 15-17, 2009 (Washington DC)
September 14-16, 2009 (London UK)
November 9-11, 2009 (Dallas TX)

SEER for IT – Advanced Workshop
September 17-18, 2009 (London UK)

To register for a SEER public workshop, click here (http://www.galorath.com/index.php/services/register-workshop/).

Private SEER Workshops: The majority of SEER training takes place at private workshops arranged at customer locations. If you would like to bring SEER training to your organization's location, please contact us (info@galorath.com?subject=SEER Private Workshop Information) for details. <Back to top>

Consult our Archived SEER Webinars

Have you missed a SEER Webinar, our no-cost, web-based briefings hosted by one of our SEER experts? We've added several recent Webinars to our online archives. To access them, you'll need to register for our Corporate Library (http://www.galorath.com/index.php/library/). Here are just a few of the new Webinars you can view:

15 Years of Estimates Within 2 Percent - Northrop Grumman's Methods Revealed

Do your estimates need to:
• Decrease program risk?
• Reduce cost and schedule overruns during project execution?
• Increase accuracy?
An industry expert from Northrop Grumman reveals Grumman's methods for accurately and successfully

bidding software projects--with median cost underruns of 2% over 15 years.

To view, visit:
http://www.galorath.com/flash_presentations/15_years_estimates_ngc_webinar_020309_final/

Project Estimation is a Risky Business: Risk Analysis with SEER and Crystal Ball

The need to understand the lack of certainty surrounding an estimate is an integral part of effective cost and schedule management. It is imperative that those who make the ultimate organizational decisions have visibility of the most pessimistic forecast of outcome in order that they can effectively direct appropriate mitigation responses and deliver solutions to the required standards and costs within a timely manner.

This presentation will discuss the following aspects:
• How the SEER suite of models provide such visibility.
• The rationale for a SEER and Crystal Ball integration.
• How the Crystal Ball/SEER integration enhances a Risk Analysis capabilities by providing the user better definition and control of the Risk Analysis process.

To view, visit: http://www.galorath.com/flash_presentations/cr_ball_risk_webinar030309/

Six Truths You MUST Learn About IT Estimating

Revealed:
1. Valuable information on improving IT estimation performance.
2. Developing an early and accurate assessment of project costs, schedules, and risks as well as ongoing support.
3. Building a knowledge repository of your IT estimation best practices, helping you meet the challenges of improved performance.
4. Easily defining the work required, as well as patterns for typical organizational approaches.
5. Creating custom Knowledge Bases and perform analyses with metrics derived from company project histories and task labor standards.
6. Quickly summarizing and communicating project outcomes, alternatives, and work-in-progress.
Estimation for information technology projects often yield inconsistent performance. At the end of the presentation you will understand the challenge of IT estimation and how the SEER for IT application gives you an advantage in improving your IT project performance.

To view, visit: http://www.galorath.com/flash_presentations/seer_it_dcg_webinar_011309/
<Back to top>

Please forward to your colleagues!

SEER by GALORATH